

# ***Flamingo Chillers***



**PROCESS WATER CHILLERS**

**PROCESS BRINE CHILLERS**



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TECHNICAL SPECIFICATIONS FOR FLAMINGO KUHLER SERIES AIR COOLED SCREW CHILLERS FOR  
PROCESS COOLING WITH HANBELL SCREW COMPRESSORS



**Technical Data Sheet (R 22) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLEH SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                              | Units   | KUHLEH<br>CACR-01-HB                                                                                                                       | KUHLEH<br>CACR-02-HB | KUHLEH<br>CACR-03-HB | KUHLEH<br>CACR-04-HB |
|----------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                               |         |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                 |         |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input**(KW) | TR/(KW) | 9.21TR / 20.4KW                                                                                                                            | 12.85TR / 27.6KW     | 18.40TR / 38.4KW     | 24.63TR / 50.9KW     |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input**(KW) | TR/(KW) | 11.52TR / 21.4KW                                                                                                                           | 16.07TR / 28.9KW     | 23.01TR / 40.1KW     | 30.78TR / 53.2KW     |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input**(KW) | TR/(KW) | 14.28TR / 22.3KW                                                                                                                           | 19.91TR / 30.1KW     | 28.47TR / 41.8KW     | 38.09TR / 55.5KW     |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input**(KW) | TR/(KW) | 17.52TR / 23.2KW                                                                                                                           | 24.40TR / 31.3KW     | 34.90TR / 43.5KW     | 46.68TR / 57.7KW     |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input**(KW)   | TR/(KW) | 21.30TR / 24.0KW                                                                                                                           | 29.72TR / 32.4KW     | 42.50TR / 45.1KW     | 56.84TR / 59.8KW     |
| <b>COMPRESSOR</b>                                        |         |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                          |         | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                         |         | RC2-100B                                                                                                                                   | RC2-140B             | RC2-200B             | RC2-260B             |
| Compressor Qty                                           |         | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                          |         | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                       |         | 33,66,100                                                                                                                                  | 33,66,100            | 25,50,75,100         | 25,50,75,100         |
| Oil Type                                                 |         | HBR-B10                                                                                                                                    | HBR-B10              | HBR-B10              | HBR-B10              |
| Oil Charge / Compr (Ltr.)                                | Ltrs    | 7L*                                                                                                                                        | 7L*                  | 8L*                  | 14L*                 |
| Sound Level at 1mtr Distance                             | dB (A)  | 73.1                                                                                                                                       | 73.7                 | 78.4                 | 79.2                 |
| Power Supply                                             |         | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                               | HP      | 31                                                                                                                                         | 41                   | 58                   | 75                   |
| <b>EVAPORATOR</b>                                        |         |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                          |         | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                      |                      |                      |
| Evaporator Model                                         |         | FMT-25TR                                                                                                                                   | FMT-32TR             | FMT-45TR             | FMT-60TR             |
| Evaporator Qty                                           | Nos.    | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                           | Nos.    | 2                                                                                                                                          | 2                    | 2                    | 2                    |
| Tube Details                                             | mm      | 12.7                                                                                                                                       | 12.7                 | 12.7                 | 12.7                 |
| Water Connection Size In/Out                             | Inch    | 2.5" NB***                                                                                                                                 | 2.5" NB***           | 3" NB***             | 3" NB***             |
| Water/Brine Flow Rate                                    | LPM     | 250                                                                                                                                        | 320                  | 450                  | 600                  |
| <b>CONDENSER</b>                                         |         |                                                                                                                                            |                      |                      |                      |
| Coil Type                                                |         | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
| Module                                                   |         | FMT-24RT-AC-2R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-2R       | FMT-24RT-AC-3R       |
| Module Qty.                                              | Nos.    | 1                                                                                                                                          | 1                    | 2                    | 2                    |
| Face Area                                                | Sq.ft.  | 107.85                                                                                                                                     | 161.78               | 215.71               | 323.56               |
| Rows                                                     | Nos.    | 2                                                                                                                                          | 3                    | 2                    | 3                    |
| Copper Tube Diameter (Ø)                                 | mm      | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                  | mm      | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan Qty.                                                 | Nos.    | 2                                                                                                                                          | 2                    | 4                    | 4                    |
| Power                                                    | kW      | 1.79                                                                                                                                       | 1.79                 | 1.79                 | 1.79                 |
| Dia(Ø)                                                   | mm      | 800                                                                                                                                        | 800                  | 800                  | 800                  |
| Airflow                                                  | CFM     | 23660                                                                                                                                      | 23660                | 47320                | 47320                |
| <b>OIL COOLER</b>                                        |         |                                                                                                                                            |                      |                      |                      |
| Type                                                     |         | Air Cooled                                                                                                                                 | Air Cooled           | Air Cooled           | Air Cooled           |
| Capacity                                                 | kW      | 9.91                                                                                                                                       | 12.89                | 17.3                 | 22.67                |
| Fans Qty                                                 | Nos.    | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Dia(Ø)                                                   | mm      | 450                                                                                                                                        | 450                  | 500                  | 500                  |
| Power                                                    | W       | 0.25                                                                                                                                       | 0.25                 | 0.45                 | 0.45                 |
| Airflow                                                  | CFM     | 3061                                                                                                                                       | 3061                 | 4591                 | 4591                 |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                      |         |                                                                                                                                            |                      |                      |                      |
| Length                                                   | mm      | 2434                                                                                                                                       | 2434                 | 3139                 | 3139                 |
| Width                                                    | mm      | 1391                                                                                                                                       | 1391                 | 2034                 | 2034                 |
| Height                                                   | mm      | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages      |         | 15                                                                                                                                         | 15                   | 15                   | 15                   |

**Rating Conditions:-**

- 1). Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2). Ambient Temperature= 35°C (95°F)
- 3). Specifications are subject to change due to continuous product development.
- 4). \*Oil charge to increase in case oil cooler used.
- 5). Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6). Evaporator capacity calculated at Evap. Temp. of 0 deg. C and may be lower for low temperature applications.
- 7). \*\*Power Input does not include the condenser and oil cooler axial fans.
- 8). \*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 22) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                              | Units       | KUHLER                                                                                                                                     | KUHLER           | KUHLER           | KUHLER           |
|----------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|
| Unit Model                                               |             | CACR-05-HB                                                                                                                                 | CACR-06-HB       | CACR-07-HB       | CACR-08-HB       |
| Nominal Cooling Capacity                                 |             |                                                                                                                                            |                  |                  |                  |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input**(KW) | TR/(KW)     | 29.10TR / 57.3KW                                                                                                                           | 33.68TR / 65.7KW | 36.44TR / 70.9KW | 40.05TR / 80.5KW |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input**(KW) | TR/(KW)     | 36.35TR / 59.9KW                                                                                                                           | 42.07TR / 68.6KW | 45.51TR / 74.1KW | 50.07TR / 84.1KW |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input**(KW) | TR/(KW)     | 44.95TR / 62.5KW                                                                                                                           | 52.00TR / 71.6KW | 56.27TR / 77.4KW | 61.90TR / 87.8KW |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input**(KW) | TR/(KW)     | 55.07TR / 65.0KW                                                                                                                           | 63.66TR / 74.5KW | 68.93TR / 80.5KW | 75.84TR / 91.3KW |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input**(KW)   | TR/(KW)     | 66.97TR / 67.3KW                                                                                                                           | 77.43TR / 77.2KW | 83.81TR / 83.3KW | 92.26TR / 94.5KW |
| <b>COMPRESSOR</b>                                        |             |                                                                                                                                            |                  |                  |                  |
| Compressor Type                                          |             | Semi-Hermatic Screw                                                                                                                        |                  |                  |                  |
| Compressor Model                                         |             | RC2-300B                                                                                                                                   | RC2-340B         | RC2-370B         | RC2-410B         |
| Compressor Qty                                           |             | 1                                                                                                                                          | 1                | 1                | 1                |
| Compressor Make                                          |             | Hanbell                                                                                                                                    |                  |                  |                  |
| Unit capacity reduction steps in %                       |             | 25,50,75,100                                                                                                                               | 35,50,75,100     | 35,50,75,100     | 25,50,75,100     |
| Oil Type                                                 |             | HBR-B10                                                                                                                                    | HBR-B10          | HBR-B10          | HBR-B10          |
| Oil Charge / Compr (Ltr.)                                | Ltrs        | 16L*                                                                                                                                       | 16L*             | 16L*             | 15L*             |
| Sound Level at 1mtr Distance                             | dB (A)      | 79.6                                                                                                                                       | 80.4             | 81.5             | 83.1             |
| Power Supply                                             |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                  |                  |                  |
| Nominal HP                                               | HP          | 89                                                                                                                                         | 101              | 108              | 121              |
| <b>EVAPORATOR</b>                                        |             |                                                                                                                                            |                  |                  |                  |
| Evaporator Type                                          |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                  |                  |                  |
| Evaporator Model                                         |             | FMT-70TR                                                                                                                                   | FMT-80TR         | FMT-85TR         | FMT-95TR         |
| Evaporator Qty                                           | Nos.        | 1                                                                                                                                          | 1                | 1                | 1                |
| No. Of Pass (Refrigerant Side)                           | Nos.        | 2                                                                                                                                          | 2                | 4                | 4                |
| Tube Details                                             | mm          | 12.7                                                                                                                                       | 12.7             | 19               | 19               |
| Water Connection Size In/Out                             | Inch        | 4" NB***                                                                                                                                   | 4" NB***         | 4" NB***         | 4" NB***         |
| Water/Brine Flow Rate                                    | LPM         | 700                                                                                                                                        | 800              | 850              | 950              |
| <b>CONDENSER</b>                                         |             |                                                                                                                                            |                  |                  |                  |
| Coil                                                     | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                  |                  |                  |
|                                                          | Module      | FMT-24RT-AC-4R                                                                                                                             | FMT-24RT-AC-3R   | FMT-24RT-AC-3R   | FMT-24RT-AC-3R   |
|                                                          | Module Qty. | Nos. 2                                                                                                                                     | 3                | 4                | 4                |
|                                                          | Face Area   | Sq.ft. 431.42                                                                                                                              | 485.34           | 647.13           | 647.13           |
|                                                          | Rows        | Nos. 4                                                                                                                                     | 3                | 3                | 3                |
| Copper Tube Diameter (Ø)                                 | mm          | 9.52                                                                                                                                       | 9.52             | 9.52             | 9.52             |
| Aluminium Fin Thickness                                  | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01    | 0.14 +/- 0.01    | 0.14 +/- 0.01    |
| Fan                                                      | Qty.        | Nos. 4                                                                                                                                     | 6                | 8                | 8                |
|                                                          | Power       | kW 2.24                                                                                                                                    | 1.79             | 1.79             | 1.79             |
|                                                          | Dia(Ø)      | mm 914                                                                                                                                     | 800              | 800              | 800              |
|                                                          | Airflow     | CFM 50000                                                                                                                                  | 70980            | 94640            | 94640            |
| <b>OIL COOLER</b>                                        |             |                                                                                                                                            |                  |                  |                  |
| Type                                                     |             | Air Cooled                                                                                                                                 | Air Cooled       | Air Cooled       | Air Cooled       |
| Capacity                                                 | kW          | 23.95                                                                                                                                      | 27.1             | 29.19            | 34.6             |
| Fans                                                     | Qty         | Nos. 1                                                                                                                                     | 1                | 1                | 1                |
|                                                          | Dia(Ø)      | mm 500                                                                                                                                     | 500              | 500              | 500              |
|                                                          | Power       | W 0.45                                                                                                                                     | 0.45             | 0.45             | 0.45             |
|                                                          | Airflow     | CFM 4591                                                                                                                                   | 4591             | 4591             | 4591             |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                      |             |                                                                                                                                            |                  |                  |                  |
| Length                                                   | mm          | 3139                                                                                                                                       | 4456             | 5772             | 5772             |
| Width                                                    | mm          | 2034                                                                                                                                       | 2034             | 2034             | 2034             |
| Height                                                   | mm          | 2628                                                                                                                                       | 2628             | 2628             | 2628             |
| Detailed Dimensions & GA Drawing On Following Pages      |             | 15                                                                                                                                         | 15               | 15               | 15               |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4). \*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 0 deg. C and may be lower for low temperature applications.
- 7). \*\*Power Input does not include the condenser and oil cooler axial fans.
- 8). \*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 22) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                               | Units       | KUHLER<br>CACR-09-2HB                                                                                                                         | KUHLER<br>CACR-10-2HB | KUHLER<br>CACR-11-2HB | KUHLER<br>CACR-12-2HB | KUHLER<br>CACR-13-2HB |
|-----------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Unit Model                                                |             |                                                                                                                                               |                       |                       |                       |                       |
| Nominal Cooling Capacity                                  |             |                                                                                                                                               |                       |                       |                       |                       |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input** (KW) | TR/(KW)     | 49.26TR / 101.8KW                                                                                                                             | 58.2TR / 114.6KW      | 67.36TR / 131.4KW     | 72.88TR / 141.8KW     | 80.10TR / 161.0KW     |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input** (KW) | TR/(KW)     | 61.56TR / 106.4KW                                                                                                                             | 72.7TR / 119.8KW      | 84.14TR / 137.2KW     | 91.02TR / 148.2KW     | 100.14TR / 168.2KW    |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input** (KW) | TR/(KW)     | 76.18TR / 111.0KW                                                                                                                             | 89.9TR / 125.0KW      | 104.0TR / 143.2KW     | 112.54TR / 154.8KW    | 123.8TR / 175.6KW     |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input** (KW) | TR/(KW)     | 93.36TR / 115.4KW                                                                                                                             | 110.14TR / 130.0KW    | 127.32TR / 149.0KW    | 137.86TR / 161.0KW    | 151.68TR / 182.6KW    |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input** (KW)   | TR/(KW)     | 113.68TR / 119.6KW                                                                                                                            | 133.94TR / 134.6KW    | 154.86TR / 154.4KW    | 167.62TR / 166.6KW    | 184.52TR / 189.0KW    |
| <b>COMPRESSOR</b>                                         |             |                                                                                                                                               |                       |                       |                       |                       |
| Compressor Type                                           |             | Semi-Hermatic Screw                                                                                                                           |                       |                       |                       |                       |
| Compressor Model                                          |             | RC2-260B                                                                                                                                      | RC2-300B              | RC2-340B              | RC2-370B              | RC2-410B              |
| Compressor Qty                                            |             | 2                                                                                                                                             | 2                     | 2                     | 2                     | 2                     |
| Compressor Make                                           |             | Hanbell                                                                                                                                       |                       |                       |                       |                       |
| Unit capacity reduction steps in %                        |             | 25,50,75,100                                                                                                                                  | 25,50,75,100          | 35,50,75,100          | 35,50,75,100          | 25,50,75,100          |
| Oil Type                                                  |             | HBR-B10                                                                                                                                       | HBR-B10               | HBR-B10               | HBR-B10               | HBR-B10               |
| Oil Charge / Compr (Ltr.)                                 | Ltrs        | 14L* X 2                                                                                                                                      | 16L* X 2              | 16L* X 2              | 16L* X 2              | 15L* X 2              |
| Sound Level at 1mtr Distance                              | dB (A)      | 79.2                                                                                                                                          | 79.6                  | 80.4                  | 81.5                  | 83.1                  |
| Power Supply                                              |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                      |                       |                       |                       |                       |
| Nominal HP                                                | HP          | 75 X 2                                                                                                                                        | 89 X 2                | 101 X 2               | 108 X 2               | 121 X 2               |
| <b>EVAPORATOR</b>                                         |             |                                                                                                                                               |                       |                       |                       |                       |
| Evaporator Type                                           |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators<br>Inserts for providing turbulence to the refrigerant |                       |                       |                       |                       |
| Evaporator Model                                          |             | FMT-120TR-2C                                                                                                                                  | FMT-140TR-2C          | FMT-160TR-2C          | FMT-170TR-2C          | FMT-190TR-2C          |
| Evaporator Qty                                            | Nos.        | 1                                                                                                                                             | 1                     | 1                     | 1                     | 1                     |
| No. Of Pass (Refrigerant Side)                            | Nos.        | 1                                                                                                                                             | 1                     | 1                     | 1                     | 1                     |
| Tube Details                                              | mm          | 19                                                                                                                                            | 19                    | 19                    | 19                    | 19                    |
| Water Connection Size In/Out                              | Inch        | 6" NB***                                                                                                                                      | 6" NB***              | 8" NB***              | 8" NB***              | 8" NB***              |
| Water/Brine Flow Rate                                     | LPM         | 1200                                                                                                                                          | 1400                  | 1600                  | 1700                  | 1900                  |
| <b>CONDENSER</b>                                          |             |                                                                                                                                               |                       |                       |                       |                       |
| Coil                                                      | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                                 |                       |                       |                       |                       |
|                                                           | Module      | FMT-24RT-AC-3R                                                                                                                                | FMT-24RT-AC-4R        | FMT-24RT-AC-3R        | FMT-24RT-AC-3R        | FMT-24RT-AC-3R        |
|                                                           | Module Qty. | Nos. 4                                                                                                                                        | 4                     | 6                     | 8                     | 8                     |
|                                                           | Face Area   | Sq.ft. 647.12                                                                                                                                 | 862.84                | 970.68                | 1294.26               | 1294.26               |
|                                                           | Rows        | Nos. 3                                                                                                                                        | 4                     | 3                     | 3                     | 3                     |
| Copper Tube Diameter (Ø)                                  | mm          | 9.52                                                                                                                                          | 9.52                  | 9.52                  | 9.52                  | 9.52                  |
| Aluminium Fin Thickness                                   | mm          | 0.14 +/- 0.01                                                                                                                                 | 0.14 +/- 0.01         | 0.14 +/- 0.01         | 0.14 +/- 0.01         | 0.14 +/- 0.01         |
| Fan                                                       | Qty.        | Nos. 8                                                                                                                                        | 8                     | 12                    | 16                    | 16                    |
|                                                           | Power       | kW 1.79                                                                                                                                       | 2.24                  | 1.79                  | 1.79                  | 1.79                  |
|                                                           | Dia(Ø)      | mm 800                                                                                                                                        | 914                   | 800                   | 800                   | 800                   |
|                                                           | Airflow     | CFM 94640                                                                                                                                     | 100000                | 141960                | 189280                | 189280                |
| <b>OIL COOLER</b>                                         |             |                                                                                                                                               |                       |                       |                       |                       |
| Type                                                      |             | Air Cooled                                                                                                                                    | Air Cooled            | Air Cooled            | Air Cooled            | Air Cooled            |
| Capacity                                                  | kW          | 22.67 X 2                                                                                                                                     | 23.95 X 2             | 27.1 X 2              | 29.19 X 2             | 34.6 X 2              |
| Fans                                                      | Qty         | Nos. 1                                                                                                                                        | 1                     | 1                     | 1                     | 1                     |
|                                                           | Dia(Ø)      | mm 500                                                                                                                                        | 500                   | 500                   | 500                   | 500                   |
|                                                           | Power       | W 0.45 X 2                                                                                                                                    | 0.45 X 2              | 0.45 X 2              | 0.45 X 2              | 0.45 X 2              |
|                                                           | Airflow     | CFM 4591 X 2                                                                                                                                  | 4591 X 2              | 4591 X 2              | 4591 X 2              | 4591 X 2              |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                       |             |                                                                                                                                               |                       |                       |                       |                       |
| Length                                                    | mm          | 5772                                                                                                                                          | 5772                  | 8386                  | 11020                 | 11020                 |
| Width                                                     | mm          | 2034                                                                                                                                          | 2034                  | 2034                  | 2034                  | 2034                  |
| Height                                                    | mm          | 2628                                                                                                                                          | 2628                  | 2628                  | 2628                  | 2628                  |
| Detailed Dimensions & GA Drawing On Following Pages       |             | 15                                                                                                                                            | 15                    | 15                    | 15                    | 15                    |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 0 deg. C and may be lower for low temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans.
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 407C) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                                       | Units       | KUHLER<br>BACR-01-HB                                                                                                                       | KUHLER<br>BACR-02-HB | KUHLER<br>BACR-03-HB | KUHLER<br>BACR-04-HB |
|-------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                                        |             |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                          |             |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 10.21TR / 21.8KW                                                                                                                           | 13.65TR / 28.7KW     | 19.82TR / 40.1KW     | 26.37TR / 53.2KW     |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 13.37TR / 22.7KW                                                                                                                           | 17.83TR / 29.8KW     | 25.88TR / 41.7KW     | 34.42TR / 55.3KW     |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 16.95TR / 23.5KW                                                                                                                           | 22.61TR / 30.9KW     | 32.80TR / 43.2KW     | 43.58TR / 57.2KW     |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input <b>**</b> (KW)   | TR/(KW)     | 20.99TR / 24.3KW                                                                                                                           | 27.99TR / 31.9KW     | 40.56TR / 44.6KW     | 53.94TR / 59.2KW     |
| <b>COMPRESSOR</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                                   |             | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                                  |             | RC2-100B                                                                                                                                   | RC2-140B             | RC2-200B             | RC2-260B             |
| Compressor Qty                                                    |             | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                                   |             | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                                |             | 33,66,100                                                                                                                                  | 33,66,100            | 25,50,75,100         | 25,50,75,100         |
| Oil Type                                                          |             | HBR-B05                                                                                                                                    | HBR-B05              | HBR-B05              | HBR-B05              |
| Oil Charge / Compr (Ltr.)                                         | Ltrs        | 7L*                                                                                                                                        | 7L*                  | 8L*                  | 14L*                 |
| Sound Level at 1mtr Distance                                      | dB (A)      | 73.1                                                                                                                                       | 73.7                 | 78.4                 | 79.2                 |
| Power Supply                                                      |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                                        | HP          | 31                                                                                                                                         | 41                   | 58                   | 75                   |
| <b>EVAPORATOR</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                                   |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                      |                      |                      |
| Evaporator Model                                                  |             | FMT-25TR                                                                                                                                   | FMT-32TR             | FMT-45TR             | FMT-60TR             |
| Evaporator Qty                                                    | Nos.        | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                                    | Nos.        | 2                                                                                                                                          | 2                    | 2                    | 2                    |
| Tube Details                                                      | mm          | 12.7                                                                                                                                       | 12.7                 | 12.7                 | 12.7                 |
| Water Connection Size In/Out                                      | Inch        | 2.5" NB***                                                                                                                                 | 2.5" NB***           | 3" NB***             | 3" NB***             |
| Water/Brine Flow Rate                                             | LPM         | 250                                                                                                                                        | 320                  | 450                  | 600                  |
| <b>CONDENSER</b>                                                  |             |                                                                                                                                            |                      |                      |                      |
| Coil                                                              | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
|                                                                   | Module      | FMT-24RT-AC-2R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-2R       | FMT-24RT-AC-3R       |
|                                                                   | Module Qty. | Nos. 1                                                                                                                                     | 1                    | 2                    | 2                    |
|                                                                   | Face Area   | Sq.ft. 107.85                                                                                                                              | 161.78               | 215.71               | 323.56               |
|                                                                   | Rows        | Nos. 2                                                                                                                                     | 3                    | 2                    | 3                    |
| Copper Tube Diameter (Ø)                                          | mm          | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                           | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan                                                               | Qty.        | Nos. 2                                                                                                                                     | 2                    | 4                    | 4                    |
|                                                                   | Power       | W 1.79                                                                                                                                     | 1.79                 | 1.79                 | 1.79                 |
|                                                                   | Dia(Ø)      | mm 800                                                                                                                                     | 800                  | 800                  | 800                  |
|                                                                   | Airflow     | CFM 23660                                                                                                                                  | 23660                | 47320                | 47320                |
| <b>OIL COOLER</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Type                                                              |             | Air Cooled                                                                                                                                 | Air Cooled           | Air Cooled           | Air Cooled           |
| Capacity                                                          | kW          | 7.5                                                                                                                                        | 9.5                  | 12.38                | 16.32                |
| Fans                                                              | Qty         | Nos. 1                                                                                                                                     | 1                    | 1                    | 1                    |
|                                                                   | Dia(Ø)      | mm 450                                                                                                                                     | 450                  | 500                  | 500                  |
|                                                                   | Power       | W 0.25                                                                                                                                     | 0.25                 | 0.45                 | 0.45                 |
|                                                                   | Airflow     | CFM 3061                                                                                                                                   | 3061                 | 4591                 | 4591                 |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                               |             |                                                                                                                                            |                      |                      |                      |
| Length                                                            | mm          | 2434                                                                                                                                       | 2434                 | 3139                 | 3139                 |
| Width                                                             | mm          | 1391                                                                                                                                       | 1391                 | 2034                 | 2034                 |
| Height                                                            | mm          | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages               |             | 15                                                                                                                                         | 15                   | 15                   | 15                   |

**Rating Conditions:-**

- 1). Evaporator shell side fouling factor= 0.000043 m<sup>2</sup>.K/W
- 2). Ambient Temperature= 35°C (95°F)
- 3). Specifications are subject to change due to continuous product development.
- 4). \*Oil charge to increase in case oil cooler used.
- 5). Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6). Evaporator capacity calculated at Evap. Temp. of 0 deg. C and may be lower for low temperature applications.
- 7). \*\*Power Input does not include the condenser and oil cooler axial fans
- 8). \*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 407C) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                                       | Units       | KUHLER                                                                                         | KUHLER           | KUHLER           | KUHLER           |
|-------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------|------------------|------------------|------------------|
| Unit Model                                                        |             | BACR-05-HB                                                                                     | BACR-06-HB       | BACR-07-HB       | BACR-08-HB       |
| Nominal Cooling Capacity                                          |             |                                                                                                |                  |                  |                  |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 31.32TR / 59.2KW                                                                               | 36.15TR / 69.1KW | 39.51TR / 75.6KW | 42.61TR / 82.8KW |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 40.93TR / 61.6KW                                                                               | 47.31TR / 71.9KW | 51.72TR / 78.6KW | 55.81TR / 86.2KW |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 51.60TR / 63.7KW                                                                               | 59.65TR / 74.4KW | 65.17TR / 81.4KW | 70.35TR / 89.1KW |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input <b>**</b> (KW)   | TR/(KW)     | 63.86TR / 65.9KW                                                                               | 73.79TR / 76.9KW | 80.65TR / 84.1KW | 87.05TR / 92.1KW |
| <b>COMPRESSOR</b>                                                 |             |                                                                                                |                  |                  |                  |
| Compressor Type                                                   |             | Semi-Hermatic Screw                                                                            |                  |                  |                  |
| Compressor Model                                                  |             | RC2-300B                                                                                       | RC2-340B         | RC2-370B         | RC2-410B         |
| Compressor Qty                                                    |             | 1                                                                                              | 1                | 1                | 1                |
| Compressor Make                                                   |             | Hanbell                                                                                        |                  |                  |                  |
| Unit capacity reduction steps in %                                |             | 25,50,75,100                                                                                   | 35,50,75,100     | 35,50,75,100     | 25,50,75,100     |
| Oil Type                                                          |             | HBR-B05                                                                                        | HBR-B05          | HBR-B05          | HBR-B05          |
| Oil Charge / Compr (Ltr.)                                         | Ltrs        | 16L*                                                                                           | 16L*             | 16L*             | 15L*             |
| Sound Level at 1mtr Distance                                      | dB (A)      | 79.6                                                                                           | 80.4             | 81.5             | 83.1             |
| Power Supply                                                      |             | 380-420 V/3 Ph, 50Hz, AC                                                                       |                  |                  |                  |
| Nominal HP                                                        | HP          | 89                                                                                             | 101              | 108              | 121              |
| <b>EVAPORATOR</b>                                                 |             |                                                                                                |                  |                  |                  |
| Evaporator Type                                                   |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts |                  |                  |                  |
| Evaporator Model                                                  |             | FMT-70TR                                                                                       | FMT-80TR         | FMT-85TR         | FMT-95TR         |
| Evaporator Qty                                                    | Nos.        | 1                                                                                              | 1                | 1                | 1                |
| No. Of Pass (Refrigerant Side)                                    | Nos.        | 2                                                                                              | 2                | 4                | 4                |
| Tube Details                                                      | mm          | 12.7                                                                                           | 12.7             | 19               | 19               |
| Water Connection Size In/Out                                      | Inch        | 4" NB***                                                                                       | 4" NB***         | 4" NB***         | 4" NB***         |
| Water/Brine Flow Rate                                             | LPM         | 700                                                                                            | 800              | 850              | 950              |
| <b>CONDENSER</b>                                                  |             |                                                                                                |                  |                  |                  |
| Coil                                                              | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                  |                  |                  |                  |
|                                                                   | Module      | FMT-24RT-AC-4R                                                                                 | FMT-24RT-AC-3R   | FMT-24RT-AC-3R   | FMT-24RT-AC-3R   |
|                                                                   | Module Qty. | Nos. 2                                                                                         | 3                | 4                | 4                |
|                                                                   | Face Area   | Sq.ft. 431.42                                                                                  | 485.34           | 647.13           | 647.13           |
|                                                                   | Rows        | Nos. 4                                                                                         | 3                | 3                | 3                |
| Copper Tube Diameter (Ø)                                          | mm          | 9.52                                                                                           | 9.52             | 9.52             | 9.52             |
| Aluminium Fin Thickness                                           | mm          | 0.14 +/- 0.01                                                                                  | 0.14 +/- 0.01    | 0.14 +/- 0.01    | 0.14 +/- 0.01    |
| Fan                                                               | Qty.        | Nos. 4                                                                                         | 6                | 8                | 8                |
|                                                                   | Power       | W 2.24                                                                                         | 1.79             | 1.79             | 1.79             |
|                                                                   | Dia(Ø)      | mm 914                                                                                         | 800              | 800              | 800              |
|                                                                   | Airflow     | CFM 50000                                                                                      | 70980            | 94640            | 94640            |
| <b>OIL COOLER</b>                                                 |             |                                                                                                |                  |                  |                  |
| Type                                                              |             | Air Cooled                                                                                     | Air Cooled       | Air Cooled       | Air Cooled       |
| Capacity                                                          | kW          | 15.46                                                                                          | 18.55            | 20.35            | 23.23            |
| Fans                                                              | Qty         | Nos. 1                                                                                         | 1                | 1                | 1                |
|                                                                   | Dia(Ø)      | mm 500                                                                                         | 500              | 500              | 500              |
|                                                                   | Power       | W 0.45                                                                                         | 0.45             | 0.45             | 0.45             |
|                                                                   | Airflow     | CFM 4591                                                                                       | 4591             | 4591             | 4591             |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                               |             |                                                                                                |                  |                  |                  |
| Length                                                            | mm          | 3139                                                                                           | 4456             | 5772             | 5772             |
| Width                                                             | mm          | 2034                                                                                           | 2034             | 2034             | 2034             |
| Height                                                            | mm          | 2628                                                                                           | 2628             | 2628             | 2628             |
| Detailed Dimensions & GA Drawing On Following Pages               |             | 15                                                                                             | 15               | 15               | 15               |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 0 deg. C and may be lower for low temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 407C) - For 35 deg. C Ambient Application**  
(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)

| Description                                                | Units       | KUHLER                                                                                                                                        | KUHLER            | KUHLER            | KUHLER             | KUHLER             |
|------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|--------------------|--------------------|
| Unit Model                                                 |             | BACR-09-2HB                                                                                                                                   | BACR-10-2HB       | BACR-11-2HB       | BACR-12-2HB        | BACR-13-2HB        |
| Nominal Cooling Capacity                                   |             |                                                                                                                                               |                   |                   |                    |                    |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 52.74TR / 106.4KW                                                                                                                             | 62.64TR / 118.4KW | 72.3TR / 138.2KW  | 79.02TR / 151.2KW  | 85.22TR / 165.6KW  |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 68.84TR / 110.6KW                                                                                                                             | 81.86TR / 123.2KW | 94.62TR / 143.8KW | 103.44TR / 157.2KW | 111.62TR / 172.4KW |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 87.16TR / 114.4KW                                                                                                                             | 103.2TR / 127.4KW | 119.3TR / 148.8KW | 130.34TR / 162.8KW | 140.70TR / 178.2KW |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input ** (KW)   | TR/(KW)     | 107.88TR / 118.4KW                                                                                                                            | 127.7TR / 131.8KW | 145.5TR / 153.8KW | 161.30TR / 168.2KW | 174.10TR / 184.2KW |
| <b>COMPRESSOR</b>                                          |             |                                                                                                                                               |                   |                   |                    |                    |
| Compressor Type                                            |             | Semi-Hermatic Screw                                                                                                                           |                   |                   |                    |                    |
| Compressor Model                                           |             | RC2-260B                                                                                                                                      | RC2-300B          | RC2-340B          | RC2-370B           | RC2-410B           |
| Compressor Qty                                             |             | 2                                                                                                                                             | 2                 | 2                 | 2                  | 2                  |
| Compressor Make                                            |             | Hanbell                                                                                                                                       |                   |                   |                    |                    |
| Unit capacity reduction steps in %                         |             | 25,50,75,100                                                                                                                                  | 25,50,75,100      | 35,50,75,100      | 35,50,75,100       | 25,50,75,100       |
| Oil Type                                                   |             | HBR-B05                                                                                                                                       | HBR-B05           | HBR-B05           | HBR-B05            | HBR-B05            |
| Oil Charge / Compr (Ltr.)                                  | Ltrs        | 14L* X 2                                                                                                                                      | 16L* X 2          | 16L* X 2          | 16L* X 2           | 15L* X 2           |
| Sound Level at 1mtr Distance                               | dB (A)      | 79.2                                                                                                                                          | 79.6              | 80.4              | 81.5               | 83.1               |
| Power Supply                                               |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                      |                   |                   |                    |                    |
| Nominal HP                                                 | HP          | 75 X 2                                                                                                                                        | 89 X 2            | 101 X 2           | 108 X 2            | 121 X 2            |
| <b>EVAPORATOR</b>                                          |             |                                                                                                                                               |                   |                   |                    |                    |
| Evaporator Type                                            |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators<br>Inserts for providing turbulence to the refrigerant |                   |                   |                    |                    |
| Evaporator Model                                           |             | FMT-120TR-2C                                                                                                                                  | FMT-140TR-2C      | FMT-160TR-2C      | FMT-170TR-2C       | FMT-190TR-2C       |
| Evaporator Qty                                             | Nos.        | 1                                                                                                                                             | 1                 | 1                 | 1                  | 1                  |
| No. Of Pass (Refrigerant Side)                             | Nos.        | 1                                                                                                                                             | 1                 | 1                 | 1                  | 1                  |
| Tube Details                                               | mm          | 19                                                                                                                                            | 19                | 19                | 19                 | 19                 |
| Water Connection Size In/Out                               | Inch        | 6" NB***                                                                                                                                      | 6" NB***          | 8" NB***          | 8" NB***           | 8" NB***           |
| Water/Brine Flow Rate                                      | LPM         | 1200                                                                                                                                          | 1400              | 1600              | 1700               | 1900               |
| <b>CONDENSER</b>                                           |             |                                                                                                                                               |                   |                   |                    |                    |
| Coil                                                       | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                                 |                   |                   |                    |                    |
|                                                            | Module      | FMT-24RT-AC-3R                                                                                                                                | FMT-24RT-AC-4R    | FMT-24RT-AC-3R    | FMT-24RT-AC-3R     | FMT-24RT-AC-3R     |
|                                                            | Module Qty. | Nos. 4                                                                                                                                        | 4                 | 6                 | 8                  | 8                  |
|                                                            | Face Area   | Sq.ft. 647.12                                                                                                                                 | 862.84            | 970.68            | 1294.26            | 1294.26            |
|                                                            | Rows        | Nos. 3                                                                                                                                        | 4                 | 3                 | 3                  | 3                  |
| Copper Tube Diameter (Ø)                                   | mm          | 9.52                                                                                                                                          | 9.52              | 9.52              | 9.52               | 9.52               |
| Aluminium Fin Thickness                                    | mm          | 0.14 +/- 0.01                                                                                                                                 | 0.14 +/- 0.01     | 0.14 +/- 0.01     | 0.14 +/- 0.01      | 0.14 +/- 0.01      |
| Fan                                                        | Qty.        | Nos. 8                                                                                                                                        | 8                 | 12                | 16                 | 16                 |
|                                                            | Power       | W 1.79                                                                                                                                        | 2.24              | 1.79              | 1.79               | 1.79               |
|                                                            | Dia(Ø)      | mm 800                                                                                                                                        | 914               | 800               | 800                | 800                |
|                                                            | Airflow     | CFM 94640                                                                                                                                     | 100000            | 141960            | 189280             | 189280             |
| <b>OIL COOLER</b>                                          |             |                                                                                                                                               |                   |                   |                    |                    |
| Type                                                       |             | Air Cooled                                                                                                                                    | Air Cooled        | Air Cooled        | Air Cooled         | Air Cooled         |
| Capacity                                                   | kW          | 16.32 X 2                                                                                                                                     | 15.46 X 2         | 18.55 X 2         | 20.35 X 2          | 23.23 X 2          |
| Fans                                                       | Qty         | Nos. 1                                                                                                                                        | 1                 | 1                 | 1                  | 1                  |
|                                                            | Dia(Ø)      | mm 500                                                                                                                                        | 500               | 500               | 500                | 500                |
|                                                            | Power       | W 0.45 X 2                                                                                                                                    | 0.45 X 2          | 0.45 X 2          | 0.45 X 2           | 0.45 X 2           |
|                                                            | Airflow     | CFM 4591 X 2                                                                                                                                  | 4591 X 2          | 4591 X 2          | 4591 X 2           | 4591 X 2           |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                        |             |                                                                                                                                               |                   |                   |                    |                    |
| Length                                                     | mm          | 5772                                                                                                                                          | 5772              | 8386              | 11020              | 11020              |
| Width                                                      | mm          | 2034                                                                                                                                          | 2034              | 2034              | 2034               | 2034               |
| Height                                                     | mm          | 2628                                                                                                                                          | 2628              | 2628              | 2628               | 2628               |
| Detailed Dimensions & GA Drawing On Following Pages        |             | 15                                                                                                                                            | 15                | 15                | 15                 | 15                 |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 0 deg. C and may be lower for low temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                                       | Units       | KUHLER<br>AACR-01-HB                                                                                                                       | KUHLER<br>AACR-02-HB | KUHLER<br>AACR-03-HB | KUHLER<br>AACR-04-HB |
|-------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                                        |             |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                          |             |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 6.54TR / 15.1KW                                                                                                                            | 9.13TR / 20.2KW      | 13.20TR / 28.6KW     | 17.29TR / 37.8KW     |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 8.59TR / 16.5KW                                                                                                                            | 12.0TR / 21.6KW      | 17.35TR / 30.2KW     | 22.73TR / 40.1KW     |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 10.78TR / 16.9KW                                                                                                                           | 15.0TR / 22.1KW      | 21.79TR / 30.9KW     | 28.53TR / 41.1KW     |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 13.20TR / 17.2KW                                                                                                                           | 18.5TR / 22.5KW      | 26.68TR / 31.5KW     | 34.93TR / 41.8KW     |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input <b>**</b> (KW)   | TR/(KW)     | 15.90TR / 17.4KW                                                                                                                           | 22.21TR / 22.7KW     | 32.11TR / 31.8KW     | 42.07TR / 42.2KW     |
| At Evap / Cond temp: 05 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 18.89TR / 17.5KW                                                                                                                           | 26.40TR / 22.8KW     | 38.17TR / 31.9KW     | 50.0TR / 42.4KW      |
| At Evap / Cond temp: 10 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 22.27TR / 17.4KW                                                                                                                           | 31.15TR / 22.8KW     | 45.00TR / 31.8KW     | 58.97TR / 42.3KW     |
| At Evap / Cond temp: 15 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 26.05TR / 17.4KW                                                                                                                           | 36.41TR / 22.7KW     | 52.66TR / 31.8KW     | 68.96TR / 42.2KW     |
| At Evap / Cond temp: 20 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 30.21TR / 17.4KW                                                                                                                           | 42.21TR / 22.8KW     | 61.02TR / 31.9KW     | 79.9TR / 42.3KW      |
| <b>COMPRESSOR</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                                   |             | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                                  |             | RC2-100B                                                                                                                                   | RC2-140B             | RC2-200B             | RC2-260B             |
| Compressor Qty                                                    |             | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                                   |             | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                                |             | 33,66,100                                                                                                                                  | 33,66,100            | 25,50,75,100         | 25,50,75,100         |
| Oil Type                                                          |             | HBR-B05                                                                                                                                    | HBR-B05              | HBR-B05              | HBR-B05              |
| Oil Charge / Compr (Ltr.)                                         | Ltrs        | 7L*                                                                                                                                        | 7L*                  | 8L*                  | 14L*                 |
| Sound Level at 1mtr Distance                                      | dB (A)      | 73.1                                                                                                                                       | 73.7                 | 78.4                 | 79.2                 |
| Power Supply                                                      |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                                        | HP          | 31                                                                                                                                         | 41                   | 58                   | 75                   |
| <b>EVAPORATOR</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                                   |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                      |                      |                      |
| Evaporator Model                                                  |             | FMT-31TR                                                                                                                                   | FMT-43TR             | FMT-62TR             | FMT-80TR             |
| Evaporator Qty                                                    | Nos.        | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                                    | Nos.        | 2                                                                                                                                          | 2                    | 2                    | 2                    |
| Tube Details                                                      | mm          | 12.7                                                                                                                                       | 12.7                 | 12.7                 | 12.7                 |
| Water Connection Size In/Out                                      | Inch        | 2.5" NB***                                                                                                                                 | 2.5" NB***           | 3" NB***             | 3" NB***             |
| Water/Brine Flow Rate                                             | LPM         | 310                                                                                                                                        | 430                  | 620                  | 800                  |
| <b>CONDENSER</b>                                                  |             |                                                                                                                                            |                      |                      |                      |
| Coil                                                              | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
|                                                                   | Module      | FMT-24RT-AC-2R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-2R       | FMT-24RT-AC-3R       |
|                                                                   | Module Qty. | Nos. 1                                                                                                                                     | 1                    | 2                    | 2                    |
|                                                                   | Face Area   | Sq.ft. 107.85                                                                                                                              | 161.78               | 215.71               | 323.56               |
|                                                                   | Rows        | Nos. 2                                                                                                                                     | 3                    | 2                    | 3                    |
| Copper Tube Diameter (Ø)                                          | mm          | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                           | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan                                                               | Qty.        | Nos. 2                                                                                                                                     | 2                    | 4                    | 4                    |
|                                                                   | Power       | W 1.79                                                                                                                                     | 1.79                 | 1.79                 | 1.79                 |
|                                                                   | Dia(Ø)      | mm 800                                                                                                                                     | 800                  | 800                  | 800                  |
|                                                                   | Airflow     | CFM 23660                                                                                                                                  | 23660                | 47320                | 47320                |
| <b>ECONOMISER</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Type                                                              |             | Shell & Tube Dx type                                                                                                                       |                      |                      |                      |
| Capacity                                                          | kW          | 9.32                                                                                                                                       | 13.03                | 18.83                | 24.66                |
| <b>OIL COOLER</b>                                                 |             |                                                                                                                                            |                      |                      |                      |
| Type                                                              |             | Air Cooled                                                                                                                                 | Air Cooled           | Air Cooled           | Air Cooled           |
| Capacity                                                          | kW          | 9.1                                                                                                                                        | 10.73                | 14.12                | 19.25                |
| Fans                                                              | Qty         | Nos. 1                                                                                                                                     | 1                    | 1                    | 1                    |
|                                                                   | Dia(Ø)      | mm 450                                                                                                                                     | 450                  | 500                  | 500                  |
|                                                                   | Power       | W 0.25                                                                                                                                     | 0.25                 | 0.45                 | 0.45                 |
|                                                                   | Airflow     | CFM 3061                                                                                                                                   | 3061                 | 4591                 | 4591                 |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                               |             |                                                                                                                                            |                      |                      |                      |
| Length                                                            | mm          | 2434                                                                                                                                       | 2434                 | 3139                 | 3139                 |
| Width                                                             | mm          | 1391                                                                                                                                       | 1391                 | 2034                 | 2034                 |
| Height                                                            | mm          | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages               |             | 15                                                                                                                                         | 15                   | 15                   | 15                   |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.



**Technical Data Sheet (R 134A) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                                       | Units       | KUHLER                                                                                                                                     | KUHLER            | KUHLER            | KUHLER            |
|-------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|
| Unit Model                                                        |             | AACR-05-HB                                                                                                                                 | AACR-06-HB        | AACR-07-HB        | AACR-08-HB        |
| Nominal Cooling Capacity                                          |             |                                                                                                                                            |                   |                   |                   |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 20.85TR / 44.3KW                                                                                                                           | 23.64TR / 51.0KW  | 26.25TR / 55.0KW  | 28.9TR / 62.1KW   |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 27.39TR / 45.9KW                                                                                                                           | 31.06TR / 52.8KW  | 34.5TR / 57.0KW   | 37.95TR / 64.3KW  |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 34.42TR / 47.0KW                                                                                                                           | 39.0TR / 54.1KW   | 43.3TR / 58.4KW   | 47.68TR / 65.9KW  |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW)     | 42.13TR / 47.8KW                                                                                                                           | 47.76TR / 55.0KW  | 53.0TR / 59.4KW   | 58.32TR / 67.0KW  |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input <b>**</b> (KW)   | TR/(KW)     | 50.72TR / 48.3KW                                                                                                                           | 57.5TR / 55.5KW   | 63.84TR / 59.9KW  | 70.27TR / 67.6KW  |
| At Evap / Cond temp: 05 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 60.31TR / 48.5KW                                                                                                                           | 68.3TR / 55.8KW   | 75.87TR / 60.2KW  | 83.52TR / 68.0KW  |
| At Evap / Cond temp: 10 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 71.11TR / 48.4KW                                                                                                                           | 80.62TR / 55.6KW  | 89.50TR / 60.0KW  | 98.52TR / 67.8KW  |
| At Evap / Cond temp: 15 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 83.15TR / 48.2KW                                                                                                                           | 94.25TR / 55.5KW  | 104.46TR / 59.9KW | 115.19TR / 67.6KW |
| At Evap / Cond temp: 20 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW)     | 96.38TR / 48.4KW                                                                                                                           | 109.24TR / 55.7KW | 121.28TR / 60.1KW | 133.51TR / 67.8KW |
| <b>COMPRESSOR</b>                                                 |             |                                                                                                                                            |                   |                   |                   |
| Compressor Type                                                   |             | Semi-Hermatic Screw                                                                                                                        |                   |                   |                   |
| Compressor Model                                                  |             | RC2-300B                                                                                                                                   | RC2-340B          | RC2-370B          | RC2-410B          |
| Compressor Qty                                                    |             | 1                                                                                                                                          | 1                 | 1                 | 1                 |
| Compressor Make                                                   |             | Hanbell                                                                                                                                    |                   |                   |                   |
| Unit capacity reduction steps in %                                |             | 25,50,75,100                                                                                                                               | 35,50,75,100      | 35,50,75,100      | 25,50,75,100      |
| Oil Type                                                          |             | HBR-B05                                                                                                                                    | HBR-B05           | HBR-B05           | HBR-B05           |
| Oil Charge / Compr (Ltr.)                                         | Ltrs        | 16L*                                                                                                                                       | 16L*              | 16L*              | 15L*              |
| Sound Level at 1mtr Distance                                      | dB (A)      | 79.6                                                                                                                                       | 80.4              | 81.5              | 83.1              |
| Power Supply                                                      |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                   |                   |                   |
| Nominal HP                                                        | HP          | 89                                                                                                                                         | 101               | 108               | 121               |
| <b>EVAPORATOR</b>                                                 |             |                                                                                                                                            |                   |                   |                   |
| Evaporator Type                                                   |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                   |                   |                   |
| Evaporator Model                                                  |             | FMT-97TR                                                                                                                                   | FMT-110TR         | FMT-122TR         | FMT-134TR         |
| Evaporator Qty                                                    | Nos.        | 1                                                                                                                                          | 1                 | 1                 | 1                 |
| No. Of Pass (Refrigerant Side)                                    | Nos.        | 2                                                                                                                                          | 2                 | 4                 | 4                 |
| Tube Details                                                      | mm          | 12.7                                                                                                                                       | 12.7              | 19                | 19                |
| Water Connection Size In/Out                                      | Inch        | 4" NB***                                                                                                                                   | 6" NB***          | 6" NB***          | 6" NB***          |
| Water/Brine Flow Rate                                             | LPM         | 970                                                                                                                                        | 1100              | 1220              | 1340              |
| <b>CONDENSER</b>                                                  |             |                                                                                                                                            |                   |                   |                   |
| Coil                                                              | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                   |                   |                   |
|                                                                   | Module      | FMT-24RT-AC-4R                                                                                                                             | FMT-24RT-AC-3R    | FMT-24RT-AC-3R    | FMT-24RT-AC-3R    |
|                                                                   | Module Qty. | Nos. 2                                                                                                                                     | 3                 | 4                 | 4                 |
|                                                                   | Face Area   | Sq.ft. 431.42                                                                                                                              | 485.34            | 647.13            | 647.13            |
|                                                                   | Rows        | Nos. 4                                                                                                                                     | 3                 | 3                 | 3                 |
| Copper Tube Diameter (Ø)                                          | mm          | 9.52                                                                                                                                       | 9.52              | 9.52              | 9.52              |
| Aluminium Fin Thickness                                           | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01     | 0.14 +/- 0.01     | 0.14 +/- 0.01     |
| Fan                                                               | Qty.        | Nos. 4                                                                                                                                     | 6                 | 8                 | 8                 |
|                                                                   | Power       | W 2.24                                                                                                                                     | 1.79              | 1.79              | 1.79              |
|                                                                   | Dia(Ø)      | mm 914                                                                                                                                     | 800               | 800               | 800               |
|                                                                   | Airflow     | CFM 50000                                                                                                                                  | 70980             | 94640             | 94640             |
| <b>ECONOMISER</b>                                                 |             |                                                                                                                                            |                   |                   |                   |
| Type                                                              |             | Shell & Tube Dx type                                                                                                                       |                   |                   |                   |
| Capacity                                                          | kW          | 29.74                                                                                                                                      | 33.71             | 37.42             | 41.19             |
| <b>OIL COOLER</b>                                                 |             |                                                                                                                                            |                   |                   |                   |
| Type                                                              |             | Air Cooled                                                                                                                                 | Air Cooled        | Air Cooled        | Air Cooled        |
| Capacity                                                          | kW          | 19.87                                                                                                                                      | 23.53             | 23.96             | 28.53             |
| Fans                                                              | Qty         | Nos. 1                                                                                                                                     | 1                 | 1                 | 1                 |
|                                                                   | Dia(Ø)      | mm 500                                                                                                                                     | 500               | 500               | 500               |
|                                                                   | Power       | W 0.45                                                                                                                                     | 0.45              | 0.45              | 0.45              |
|                                                                   | Airflow     | CFM 4591                                                                                                                                   | 4591              | 4591              | 4591              |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                               |             |                                                                                                                                            |                   |                   |                   |
| Length                                                            | mm          | 3139                                                                                                                                       | 4456              | 5772              | 5772              |
| Width                                                             | mm          | 2034                                                                                                                                       | 2034              | 2034              | 2034              |
| Height                                                            | mm          | 2628                                                                                                                                       | 2628              | 2628              | 2628              |
| Detailed Dimensions & GA Drawing On Following Pages               |             | 15                                                                                                                                         | 15                | 15                | 15                |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For 35 deg. C Ambient Application**  
**(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)**

| Description                                                | Units       | KUHLER                                                                                                                                     | KUHLER            | KUHLER             | KUHLER             | KUHLER             |
|------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|--------------------|--------------------|
| Unit Model                                                 |             | AACR-09-2HB                                                                                                                                | AACR-10-2HB       | AACR-11-2HB        | AACR-12-2HB        | AACR-13-2HB        |
| Nominal Cooling Capacity                                   |             |                                                                                                                                            |                   |                    |                    |                    |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 34.58TR / 75.6KW                                                                                                                           | 41.70TR / 88.6KW  | 47.28TR / 102.0KW  | 52.5TR / 110.0KW   | 57.80TR / 124.2KW  |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 45.46TR / 80.2KW                                                                                                                           | 54.78TR / 91.8KW  | 62.12TR / 105.6KW  | 69.0TR / 114.0KW   | 75.90TR / 128.6KW  |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 57.06TR / 82.2KW                                                                                                                           | 68.84TR / 94.0KW  | 78.00TR / 108.2KW  | 86.6TR / 116.8KW   | 95.36TR / 131.8KW  |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input ** (KW) | TR/(KW)     | 69.86TR / 83.6KW                                                                                                                           | 84.26TR / 95.6KW  | 95.52TR / 110.0KW  | 106.0TR / 118.8KW  | 116.64TR / 134.0KW |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input ** (KW)   | TR/(KW)     | 84.14TR / 84.4KW                                                                                                                           | 101.44TR / 96.6KW | 115.0TR / 111.0KW  | 127.68TR / 119.8KW | 140.54TR / 135.2KW |
| At Evap / Cond temp: 05 / 45 deg. C & Power Input ** (KW)  | TR/(KW)     | 100.0TR / 84.8KW                                                                                                                           | 120.62TR / 97.0KW | 136.6TR / 111.6KW  | 151.74TR / 120.4KW | 167.04TR / 136.0KW |
| At Evap / Cond temp: 10 / 45 deg. C & Power Input ** (KW)  | TR/(KW)     | 117.94TR / 84.6KW                                                                                                                          | 142.22TR / 96.8KW | 161.24TR / 111.2KW | 179.0TR / 120.0KW  | 197.04TR / 135.6KW |
| At Evap / Cond temp: 15 / 45 deg. C & Power Input ** (KW)  | TR/(KW)     | 137.92TR / 84.4KW                                                                                                                          | 166.3TR / 96.4KW  | 188.50TR / 111.0KW | 208.92TR / 119.8KW | 230.38TR / 135.2KW |
| At Evap / Cond temp: 20 / 45 deg. C & Power Input ** (KW)  | TR/(KW)     | 159.8TR / 84.6KW                                                                                                                           | 192.76TR / 96.8KW | 218.48TR / 111.4KW | 242.56TR / 120.2KW | 267.02TR / 135.6KW |
| <b>COMPRESSOR</b>                                          |             |                                                                                                                                            |                   |                    |                    |                    |
| Compressor Type                                            |             | Semi-Hermatic Screw                                                                                                                        |                   |                    |                    |                    |
| Compressor Model                                           |             | RC2-260B                                                                                                                                   | RC2-300B          | RC2-340B           | RC2-370B           | RC2-410B           |
| Compressor Qty                                             |             | 2                                                                                                                                          | 2                 | 2                  | 2                  | 2                  |
| Compressor Make                                            |             | Hanbell                                                                                                                                    |                   |                    |                    |                    |
| Unit capacity reduction steps in %                         |             | 25,50,75,100                                                                                                                               | 25,50,75,100      | 35,50,75,100       | 35,50,75,100       | 25,50,75,100       |
| Oil Type                                                   |             | HBR-B05                                                                                                                                    | HBR-B05           | HBR-B05            | HBR-B05            | HBR-B05            |
| Oil Charge / Compr (Ltr.)                                  | Ltrs        | 14L* X 2                                                                                                                                   | 16L* X 2          | 16L* X 2           | 16L* X 2           | 15L* X 2           |
| Sound Level at 1mtr Distance                               | dB (A)      | 79.2                                                                                                                                       | 79.6              | 80.4               | 81.5               | 83.1               |
| Power Supply                                               |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                   |                    |                    |                    |
| Nominal HP                                                 | HP          | 75 X 2                                                                                                                                     | 89 X 2            | 101 X 2            | 108 X 2            | 121 X 2            |
| <b>EVAPORATOR</b>                                          |             |                                                                                                                                            |                   |                    |                    |                    |
| Evaporator Type                                            |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                   |                    |                    |                    |
| Evaporator Model                                           |             | FMT-160TR-2C                                                                                                                               | FMT-193TR-2C      | FMT-219TR-2C       | FMT-243TR-2C       | FMT-268TR-2C       |
| Evaporator Qty                                             | Nos.        | 1                                                                                                                                          | 1                 | 1                  | 1                  | 1                  |
| No. Of Pass (Refrigerant Side)                             | Nos.        | 1                                                                                                                                          | 1                 | 1                  | 1                  | 1                  |
| Tube Details                                               | mm          | 19                                                                                                                                         | 19                | 19                 | 19                 | 19                 |
| Water Connection Size In/Out                               | Inch        | 8" NB***                                                                                                                                   | 8" NB***          | 8" NB***           | 10" NB***          | 10" NB***          |
| Water/Brine Flow Rate                                      | LPM         | 1600                                                                                                                                       | 1930              | 2190               | 2430               | 2680               |
| <b>CONDENSER</b>                                           |             |                                                                                                                                            |                   |                    |                    |                    |
| Coil                                                       | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                   |                    |                    |                    |
|                                                            | Module      | FMT-24RT-AC-3R                                                                                                                             | FMT-24RT-AC-4R    | FMT-24RT-AC-3R     | FMT-24RT-AC-3R     | FMT-24RT-AC-3R     |
|                                                            | Module Qty. | Nos. 4                                                                                                                                     | 4                 | 6                  | 8                  | 8                  |
|                                                            | Face Area   | Sq.ft. 647.12                                                                                                                              | 862.84            | 970.68             | 1294.26            | 1294.26            |
|                                                            | Rows        | Nos. 3                                                                                                                                     | 4                 | 3                  | 3                  | 3                  |
| Copper Tube Diameter (Ø)                                   | mm          | 9.52                                                                                                                                       | 9.52              | 9.52               | 9.52               | 9.52               |
| Aluminium Fin Thickness                                    | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01     | 0.14 +/- 0.01      | 0.14 +/- 0.01      | 0.14 +/- 0.01      |
| Fan                                                        | Qty.        | Nos. 8                                                                                                                                     | 8                 | 12                 | 16                 | 16                 |
|                                                            | Power       | W 1.79                                                                                                                                     | 2.24              | 1.79               | 1.79               | 1.79               |
|                                                            | Dia(Ø)      | mm 800                                                                                                                                     | 914               | 800                | 800                | 800                |
|                                                            | Airflow     | CFM 94640                                                                                                                                  | 100000            | 141960             | 189280             | 189280             |
| <b>ECONOMISER</b>                                          |             |                                                                                                                                            |                   |                    |                    |                    |
| Type                                                       |             | Shell & Tube Dx type                                                                                                                       |                   |                    |                    |                    |
| Capacity                                                   | kW          | 24.66 X 2                                                                                                                                  | 29.74 X 2         | 33.71 X 2          | 37.42 X 2          | 41.19 X 2          |
| <b>OIL COOLER</b>                                          |             |                                                                                                                                            |                   |                    |                    |                    |
| Type                                                       |             | Air Cooled                                                                                                                                 | Air Cooled        | Air Cooled         | Air Cooled         | Air Cooled         |
| Capacity                                                   | kW          | 19.25 X 2                                                                                                                                  | 19.87 X 2         | 23.53 X 2          | 23.96 X 2          | 28.53 X 2          |
| Fans                                                       | Qty         | Nos. 1                                                                                                                                     | 1                 | 1                  | 1                  | 1                  |
|                                                            | Dia(Ø)      | mm 500                                                                                                                                     | 500               | 500                | 500                | 500                |
|                                                            | Power       | W 0.45 X 2                                                                                                                                 | 0.45 X 2          | 0.45 X 2           | 0.45 X 2           | 0.45 X 2           |
|                                                            | Airflow     | CFM 4591 X 2                                                                                                                               | 4591 X 2          | 4591 X 2           | 4591 X 2           | 4591 X 2           |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                        |             |                                                                                                                                            |                   |                    |                    |                    |
| Length                                                     | mm          | 5772                                                                                                                                       | 5772              | 8386               | 11020              | 11020              |
| Width                                                      | mm          | 2034                                                                                                                                       | 2034              | 2034               | 2034               | 2034               |
| Height                                                     | mm          | 2628                                                                                                                                       | 2628              | 2628               | 2628               | 2628               |
| Detailed Dimensions & GA Drawing On Following Pages        |             | 15                                                                                                                                         | 15                | 15                 | 15                 | 15                 |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temprature= 35°C (95°F)
- 3).Specifications are subject to change due to continous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans.
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For 35 deg. C Ambient Application**  
(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)

| Description                                                       | Units   | KUHLER<br>AACR-14-HB                                                                                                                       | KUHLER<br>AACR-15-HB | KUHLER<br>AACR-16-HB | KUHLER<br>AACR-17-HB |
|-------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                                        |         |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                          |         |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -20 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW) | 59.63TR / 122.1KW                                                                                                                          | 69.04TR / 139.9KW    | 77.41TR / 161.8KW    | 87.11TR / 174.7KW    |
| At Evap / Cond temp: -15 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW) | 78.32TR / 126.4KW                                                                                                                          | 90.69TR / 144.8KW    | 101.67TR / 167.5KW   | 114.36TR / 180.9KW   |
| At Evap / Cond temp: -10 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW) | 98.37TR / 129.6KW                                                                                                                          | 113.9TR / 148.4KW    | 127.73TR / 171.6KW   | 143.66TR / 185.3KW   |
| At Evap / Cond temp: -05 / 45 deg. C & Power Input <b>**</b> (KW) | TR/(KW) | 120.42TR / 131.8KW                                                                                                                         | 139.45TR / 150.9KW   | 156.35TR / 174.6KW   | 175.87TR / 188.5KW   |
| At Evap / Cond temp: 0 / 45 deg. C & Power Input <b>**</b> (KW)   | TR/(KW) | 145.0TR / 133.0KW                                                                                                                          | 167.93TR / 152.3KW   | 188.27TR / 176.2KW   | 211.80TR / 190.2KW   |
| At Evap / Cond temp: 05 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW) | 172.34TR / 133.7KW                                                                                                                         | 199.57TR / 153.1KW   | 223.75TR / 177.1KW   | 251.72TR / 191.2KW   |
| At Evap / Cond temp: 10 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW) | 203.32TR / 133.3KW                                                                                                                         | 235.4TR / 152.6KW    | 263.95TR / 176.5KW   | 296.95TR / 190.6KW   |
| At Evap / Cond temp: 15 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW) | 237.69TR / 132.9KW                                                                                                                         | 275.24TR / 152.2KW   | 308.59TR / 176.1KW   | 347.14TR / 190.1KW   |
| At Evap / Cond temp: 20 / 45 deg. C & Power Input <b>**</b> (KW)  | TR/(KW) | 275.47TR / 133.4KW                                                                                                                         | 319.0TR / 152.7KW    | 357.66TR / 176.7KW   | 402.36TR / 190.7KW   |
| <b>COMPRESSOR</b>                                                 |         |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                                   |         | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                                  |         | RC2-830B                                                                                                                                   | RC2-930B             | RC2-1020B            | RC2-1130B            |
| Compressor Qty                                                    |         | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                                   |         | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                                |         | 30,50,75,100                                                                                                                               | 35,50,75,100         | 35,50,75,100         | 30,50,75,100         |
| Oil Type                                                          |         | HBR-B05                                                                                                                                    | HBR-B05              | HBR-B05              | HBR-B05              |
| Oil Charge / Compr (Ltr.)                                         | Ltrs    | 28L*                                                                                                                                       | 28L*                 | 32L*                 | 35L*                 |
| Sound Level at 1mtr Distance                                      | dB (A)  | 87.6                                                                                                                                       | 88.4                 | 90.1                 | 90.5                 |
| Power Supply                                                      |         | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                                        | HP      | 234                                                                                                                                        | 278                  | 335                  | 392                  |
| <b>EVAPORATOR</b>                                                 |         |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                                   |         | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                      |                      |                      |
| Evaporator Model                                                  |         | FMT-276TR                                                                                                                                  | FMT-320TR            | FMT-358TR            | FMT-403TR            |
| Evaporator Qty                                                    | Nos.    | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                                    | Nos.    | 2                                                                                                                                          | 2                    | 2                    | 1                    |
| Tube Details                                                      | mm      | 19                                                                                                                                         | 19                   | 19                   | 19                   |
| Water Connection Size In/Out                                      | Inch    | 8" NB***                                                                                                                                   | 8" NB***             | 8" NB***             | 8" NB***             |
| Water/Brine Flow Rate                                             | LPM     | 2760                                                                                                                                       | 3200                 | 3580                 | 4030                 |
| <b>CONDENSER</b>                                                  |         |                                                                                                                                            |                      |                      |                      |
| Coil Type                                                         |         | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
| Module                                                            |         | FMT-24RT-AC-3R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-3R       | FMT-24RT-AC-3R       |
| Module Qty.                                                       | Nos.    | 6                                                                                                                                          | 8                    | 8                    | 8                    |
| Face Area                                                         | Sq.ft.  | 970.69                                                                                                                                     | 1294.25              | 1294.25              | 1725.67              |
| Rows                                                              | Nos.    | 3                                                                                                                                          | 3                    | 3                    | 4                    |
| Copper Tube Diameter (Ø)                                          | mm      | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                           | mm      | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan Qty.                                                          | Nos.    | 12                                                                                                                                         | 16                   | 16                   | 16                   |
| Power                                                             | kW      | 1.79                                                                                                                                       | 1.79                 | 1.79                 | 1.79                 |
| Dia(Ø)                                                            | mm      | 800                                                                                                                                        | 800                  | 800                  | 914                  |
| Airflow                                                           | CFM     | 141960                                                                                                                                     | 189280               | 189280               | 200000               |
| <b>ECONOMISER</b>                                                 |         |                                                                                                                                            |                      |                      |                      |
| Type                                                              |         | Shell & Tube Dx type                                                                                                                       |                      |                      |                      |
| Capacity                                                          | kW      | 85                                                                                                                                         | 100                  | 112                  | 125                  |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                               |         |                                                                                                                                            |                      |                      |                      |
| Length                                                            | mm      | 8386                                                                                                                                       | 11020                | 11020                | 11020                |
| Width                                                             | mm      | 2034                                                                                                                                       | 2034                 | 2034                 | 2034                 |
| Height                                                            | mm      | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages               |         | 15                                                                                                                                         | 15                   | 15                   | 15                   |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 35°C (95°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans.
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For High Ambient Application**  
(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)

| Description                                                                | Units       | KUHLER<br>AACR-01-HB                                                                                                                       | KUHLER<br>AACR-02-HB | KUHLER<br>AACR-03-HB | KUHLER<br>AACR-04-HB |
|----------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                                                 |             |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                                   |             |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -20 / 60 deg. C & Power Input <b>**</b> (KW)          | TR/(KW)     | 5.94TR / 16.2KW                                                                                                                            | 8.30TR / 21.8KW      | 12.00TR / 30.8KW     | 15.73TR / 40.7KW     |
| At Evap / Cond temp: -15 / 60 deg. C & Power Input <b>**</b> (KW)          | TR/(KW)     | 7.28TR / 19.4KW                                                                                                                            | 10.24TR / 26.0KW     | 14.82TR / 36.9KW     | 19.40TR / 48.7KW     |
| At Evap / Cond temp: -10 / 60 deg. C & Power Input <b>**</b> (KW)          | TR/(KW)     | 8.64TR / 22.8KW                                                                                                                            | 12.09TR / 30.5KW     | 17.49TR / 43.2KW     | 22.90TR / 57.1KW     |
| At Evap / Cond temp: -05 / 60 deg. C & Power Input <b>**</b> (KW)          | TR/(KW)     | 8.10TR / 21.3KW                                                                                                                            | 11.40TR / 27.9KW     | 16.50TR / 39.0KW     | 21.59TR / 51.8KW     |
| At Evap / Cond temp: 0 / 60 deg. C & Power Input <b>**</b> (KW)            | TR/(KW)     | 10.44TR / 21.9KW                                                                                                                           | 14.62TR / 28.6KW     | 21.16TR / 40.0KW     | 27.70TR / 53.1KW     |
| At Evap / Cond temp: 05 / 60 deg. C & Power Input <b>**</b> (KW)           | TR/(KW)     | 13.11TR / 22.3KW                                                                                                                           | 18.43TR / 29.2KW     | 26.62TR / 40.8KW     | 34.87TR / 54.2KW     |
| At Evap / Cond temp: 10 / 60 deg. C & Power Input <b>**</b> (KW)           | TR/(KW)     | 16.27TR / 22.7KW                                                                                                                           | 22.75TR / 29.7KW     | 32.88TR / 41.5KW     | 43.10TR / 55.1KW     |
| At Evap / Cond temp: 15 / 60 deg. C & Power Input <b>**</b> (KW)           | TR/(KW)     | 19.91TR / 23.0KW                                                                                                                           | 27.85TR / 30.1KW     | 40.25TR / 42.0KW     | 52.71TR / 55.8KW     |
| At Evap / Cond temp: 20 / 60 deg. C & Power Input <b>**</b> (KW)           | TR/(KW)     | 24.18TR / 23.2KW                                                                                                                           | 33.82TR / 30.4KW     | 48.87TR / 42.5KW     | 64.00TR / 56.4KW     |
| <b>COMPRESSOR</b>                                                          |             |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                                            |             | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                                           |             | RC2-100B                                                                                                                                   | RC2-140B             | RC2-200B             | RC2-260B             |
| Compressor Qty                                                             |             | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                                            |             | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                                         |             | 33,66,100                                                                                                                                  | 33,66,100            | 25,50,75,100         | 25,50,75,100         |
| Oil Type                                                                   |             | HBR-B05                                                                                                                                    | HBR-B05              | HBR-B05              | HBR-B05              |
| Oil Charge / Compr (Ltr.)                                                  | Ltrs        | 7L*                                                                                                                                        | 7L*                  | 8L*                  | 14L*                 |
| Sound Level at 1mtr Distance                                               | dB (A)      | 73.1                                                                                                                                       | 73.7                 | 78.4                 | 79.2                 |
| Power Supply                                                               |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                                                 | HP          | 31                                                                                                                                         | 41                   | 58                   | 75                   |
| <b>EVAPORATOR</b>                                                          |             |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                                            |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                      |                      |                      |
| Evaporator Model                                                           |             | FMT-30TR                                                                                                                                   | FMT-40TR             | FMT-55TR             | FMT-70TR             |
| Evaporator Qty                                                             | Nos.        | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                                             | Nos.        | 2                                                                                                                                          | 2                    | 2                    | 2                    |
| Tube Details                                                               | mm          | 12.7                                                                                                                                       | 12.7                 | 12.7                 | 12.7                 |
| Water Connection Size In/Out                                               | Inch        | 2.5" NB***                                                                                                                                 | 2.5" NB***           | 3" NB***             | 3" NB***             |
| Water/Brine Flow Rate                                                      | LPM         | 300                                                                                                                                        | 400                  | 550                  | 700                  |
| <b>CONDENSER</b>                                                           |             |                                                                                                                                            |                      |                      |                      |
| Coil                                                                       | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
|                                                                            | Module      | FMT-24RT-AC-2R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-2R       | FMT-24RT-AC-3R       |
|                                                                            | Module Qty. | Nos. 1                                                                                                                                     | 1                    | 2                    | 2                    |
|                                                                            | Face Area   | Sq.ft. 107.85                                                                                                                              | 161.78               | 215.71               | 323.56               |
|                                                                            | Rows        | Nos. 2                                                                                                                                     | 3                    | 2                    | 3                    |
| Copper Tube Diameter (Ø)                                                   | mm          | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                                    | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan                                                                        | Qty.        | Nos. 2                                                                                                                                     | 2                    | 4                    | 4                    |
|                                                                            | Power       | W 1.79                                                                                                                                     | 1.79                 | 1.79                 | 1.79                 |
|                                                                            | Dia(Ø)      | mm 800                                                                                                                                     | 800                  | 800                  | 800                  |
|                                                                            | Airflow     | CFM 23660                                                                                                                                  | 23660                | 47320                | 47320                |
| <b>ECONOMISER FOR MINUS 10.0 DEG.C &amp; BELOW EVAPORATING TEMPERATURE</b> |             |                                                                                                                                            |                      |                      |                      |
| Type                                                                       |             | Shell & Tube Dx type                                                                                                                       |                      |                      |                      |
| Capacity                                                                   | kW          | 9.62                                                                                                                                       | 13.45                | 19.44                | 25.47                |
| <b>OIL COOLER</b>                                                          |             |                                                                                                                                            |                      |                      |                      |
| Type                                                                       |             | Air Cooled                                                                                                                                 | Air Cooled           | Air Cooled           | Air Cooled           |
| Capacity                                                                   | kW          | 9.1                                                                                                                                        | 10.73                | 14.12                | 19.25                |
| Fans                                                                       | Qty         | Nos. 1                                                                                                                                     | 1                    | 1                    | 1                    |
|                                                                            | Dia(Ø)      | mm 450                                                                                                                                     | 450                  | 500                  | 500                  |
|                                                                            | Power       | W 0.25                                                                                                                                     | 0.25                 | 0.45                 | 0.45                 |
|                                                                            | Airflow     | CFM 3061                                                                                                                                   | 3061                 | 4591                 | 4591                 |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                                        |             |                                                                                                                                            |                      |                      |                      |
| Length                                                                     | mm          | 2434                                                                                                                                       | 2434                 | 3139                 | 3139                 |
| Width                                                                      | mm          | 1391                                                                                                                                       | 1391                 | 2034                 | 2034                 |
| Height                                                                     | mm          | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages                        |             | 15                                                                                                                                         | 15                   | 15                   | 15                   |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 50°C (122°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For High Ambient Application**  
(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)

| Description                                                                | Units       | KUHLER<br>AACR-05-HB                                                                                                                       | KUHLER<br>AACR-06-HB | KUHLER<br>AACR-07-HB | KUHLER<br>AACR-08-HB |
|----------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                                                 |             |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                                   |             |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -20 / 60 deg. C & Power Input ** (KW)                 | TR/(KW)     | 18.97TR / 47.5KW                                                                                                                           | 21.50TR / 54.3KW     | 23.86TR / 59.3KW     | 26.28TR / 66.3KW     |
| At Evap / Cond temp: -15 / 60 deg. C & Power Input ** (KW)                 | TR/(KW)     | 23.41TR / 56.9KW                                                                                                                           | 26.54TR / 65.0KW     | 29.44TR / 71.0KW     | 32.43TR / 79.3KW     |
| At Evap / Cond temp: -10 / 60 deg. C & Power Input ** (KW)                 | TR/(KW)     | 27.82TR / 66.7KW                                                                                                                           | 31.52TR / 76.3KW     | 34.99TR / 83.2KW     | 38.52TR / 93.1KW     |
| At Evap / Cond temp: -05 / 60 deg. C & Power Input ** (KW)                 | TR/(KW)     | 26.14TR / 59.2KW                                                                                                                           | 29.58TR / 68.1KW     | 32.91TR / 73.5KW     | 36.18TR / 83.0KW     |
| At Evap / Cond temp: 0 / 60 deg. C & Power Input ** (KW)                   | TR/(KW)     | 33.45TR / 60.7KW                                                                                                                           | 37.92TR / 69.8KW     | 42.13TR / 75.3KW     | 46.34TR / 85.1KW     |
| At Evap / Cond temp: 05 / 60 deg. C & Power Input ** (KW)                  | TR/(KW)     | 42.07TR / 61.9KW                                                                                                                           | 47.68TR / 71.2KW     | 52.94TR / 76.9KW     | 58.29TR / 86.8KW     |
| At Evap / Cond temp: 10 / 60 deg. C & Power Input ** (KW)                  | TR/(KW)     | 51.97TR / 63.0KW                                                                                                                           | 58.89TR / 72.4KW     | 65.37TR / 78.2KW     | 71.97TR / 88.3KW     |
| At Evap / Cond temp: 15 / 60 deg. C & Power Input ** (KW)                  | TR/(KW)     | 63.58TR / 63.8KW                                                                                                                           | 72.06TR / 73.4KW     | 80.00TR / 79.2KW     | 88.07TR / 89.5KW     |
| At Evap / Cond temp: 20 / 60 deg. C & Power Input ** (KW)                  | TR/(KW)     | 77.21TR / 64.5KW                                                                                                                           | 87.51TR / 74.2KW     | 97.12TR / 80.1KW     | 106.94TR / 90.5KW    |
| <b>COMPRESSOR</b>                                                          |             |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                                            |             | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                                           |             | RC2-300B                                                                                                                                   | RC2-340B             | RC2-370B             | RC2-410B             |
| Compressor Qty                                                             |             | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                                            |             | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                                         |             | 25,50,75,100                                                                                                                               | 35,50,75,100         | 35,50,75,100         | 25,50,75,100         |
| Oil Type                                                                   |             | HBR-B05                                                                                                                                    | HBR-B05              | HBR-B05              | HBR-B05              |
| Oil Charge / Compr (Ltr.)                                                  | Ltrs        | 16L*                                                                                                                                       | 16L*                 | 16L*                 | 15L*                 |
| Sound Level at 1mtr Distance                                               | dB (A)      | 79.6                                                                                                                                       | 80.4                 | 81.5                 | 83.1                 |
| Power Supply                                                               |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                                                 | HP          | 89                                                                                                                                         | 101                  | 108                  | 121                  |
| <b>EVAPORATOR</b>                                                          |             |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                                            |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                      |                      |                      |
| Evaporator Model                                                           |             | FMT-82TR                                                                                                                                   | FMT-95TR             | FMT-105TR            | FMT-120TR            |
| Evaporator Qty                                                             | Nos.        | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                                             | Nos.        | 2                                                                                                                                          | 2                    | 4                    | 4                    |
| Tube Details                                                               | mm          | 12.7                                                                                                                                       | 12.7                 | 19                   | 19                   |
| Water Connection Size In/Out                                               | Inch        | 4" NB***                                                                                                                                   | 4" NB***             | 4" NB***             | 6" NB***             |
| Water/Brine Flow Rate                                                      | LPM         | 820                                                                                                                                        | 950                  | 1050                 | 1200                 |
| <b>CONDENSER</b>                                                           |             |                                                                                                                                            |                      |                      |                      |
| Coil                                                                       | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
|                                                                            | Module      | FMT-24RT-AC-4R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-3R       | FMT-24RT-AC-3R       |
|                                                                            | Module Qty. | Nos. 2                                                                                                                                     | 3                    | 4                    | 4                    |
|                                                                            | Face Area   | Sq.ft. 431.42                                                                                                                              | 485.34               | 647.13               | 647.13               |
|                                                                            | Rows        | Nos. 4                                                                                                                                     | 3                    | 3                    | 3                    |
| Copper Tube Diameter (Ø)                                                   | mm          | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                                    | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan                                                                        | Qty.        | Nos. 4                                                                                                                                     | 6                    | 8                    | 8                    |
|                                                                            | Power       | W 2.24                                                                                                                                     | 1.79                 | 1.79                 | 1.79                 |
|                                                                            | Dia(Ø)      | mm 914                                                                                                                                     | 800                  | 800                  | 800                  |
|                                                                            | Airflow     | CFM 50000                                                                                                                                  | 70980                | 94640                | 94640                |
| <b>ECONOMISER FOR MINUS 10.0 DEG.C &amp; BELOW EVAPORATING TEMPERATURE</b> |             |                                                                                                                                            |                      |                      |                      |
| Type                                                                       |             | Shell & Tube Dx type                                                                                                                       |                      |                      |                      |
| Capacity                                                                   | kW          | 30.71                                                                                                                                      | 34.81                | 38.64                | 42.54                |
| <b>OIL COOLER</b>                                                          |             |                                                                                                                                            |                      |                      |                      |
| Type                                                                       |             | Air Cooled                                                                                                                                 | Air Cooled           | Air Cooled           | Air Cooled           |
| Capacity                                                                   | kW          | 19.87                                                                                                                                      | 23.53                | 23.96                | 28.53                |
| Fans                                                                       | Qty         | Nos. 1                                                                                                                                     | 1                    | 1                    | 1                    |
|                                                                            | Dia(Ø)      | mm 500                                                                                                                                     | 500                  | 500                  | 500                  |
|                                                                            | Power       | W 0.45                                                                                                                                     | 0.45                 | 0.45                 | 0.45                 |
|                                                                            | Airflow     | CFM 4591                                                                                                                                   | 4591                 | 4591                 | 4591                 |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                                        |             |                                                                                                                                            |                      |                      |                      |
| Length                                                                     | mm          | 3139                                                                                                                                       | 4456                 | 5772                 | 5772                 |
| Width                                                                      | mm          | 2034                                                                                                                                       | 2034                 | 2034                 | 2034                 |
| Height                                                                     | mm          | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages                        |             | 15                                                                                                                                         | 15                   | 15                   | 15                   |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temprature= 50°C (122°F)
- 3).Specifications are subject to change due to continuos product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For High Ambient Application**  
(FLAMINGO KUHLE SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)

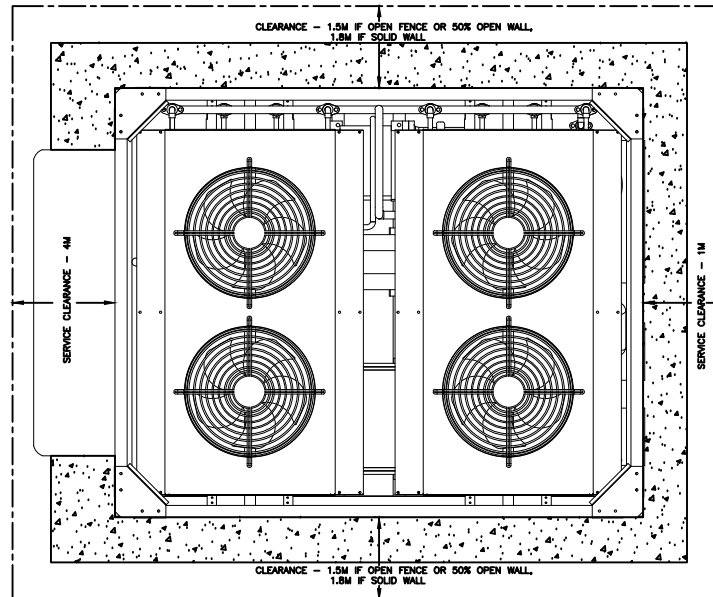
| Description                                                     |         | Units       | KUHLER                                                                                                                                     | KUHLER             | KUHLER             | KUHLER             | KUHLER             |
|-----------------------------------------------------------------|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                                                 |         |             | AACR-09-2HB                                                                                                                                | AACR-10-2HB        | AACR-11-2HB        | AACR-12-2HB        | AACR-13-2HB        |
| Unit Model                                                      |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Nominal Cooling Capacity                                        |         |             |                                                                                                                                            |                    |                    |                    |                    |
| At Evap / Cond temp: -20 / 60 deg. C & Power Input ** (KW)      | TR/(KW) |             | 31.46TR / 81.40KW                                                                                                                          | 37.94TR / 95.0KW.  | 43.00TR / 108.6KW  | 47.72TR / 118.6KW  | 52.56TR / 132.6KW  |
| At Evap / Cond temp: -15 / 60 deg. C & Power Input ** (KW)      | TR/(KW) |             | 38.80TR / 97.40KW                                                                                                                          | 46.82TR / 113.8KW  | 53.08TR / 130.0KW  | 58.88TR / 142.0KW  | 64.86TR / 158.6KW  |
| At Evap / Cond temp: -10 / 60 deg. C & Power Input ** (KW)      | TR/(KW) |             | 45.80TR / 114.2KW                                                                                                                          | 55.64TR / 133.4KW  | 63.04TR / 152.6KW  | 69.98TR / 166.4KW  | 77.04TR / 186.2KW  |
| At Evap / Cond temp: -05 / 60 deg. C & Power Input ** (KW)      | TR/(KW) |             | 43.18TR / 103.6KW                                                                                                                          | 52.28TR / 118.4KW  | 59.16TR / 136.2KW  | 65.82TR / 147.0KW  | 72.36TR / 166.0KW  |
| At Evap / Cond temp: 0 / 60 deg. C & Power Input ** (KW)        | TR/(KW) |             | 55.40TR / 106.2KW                                                                                                                          | 66.90TR / 121.4KW  | 75.84TR / 139.6KW  | 84.26TR / 150.6KW  | 92.68TR / 170.2KW  |
| At Evap / Cond temp: 05 / 60 deg. C & Power Input ** (KW)       | TR/(KW) |             | 69.74TR / 108.4KW                                                                                                                          | 84.14TR / 123.8KW  | 95.36TR / 142.4KW  | 105.88TR / 153.8KW | 116.58TR / 173.6KW |
| At Evap / Cond temp: 10 / 60 deg. C & Power Input ** (KW)       | TR/(KW) |             | 86.20TR / 110.2KW                                                                                                                          | 103.94TR / 126.0KW | 117.78TR / 144.8KW | 130.74TR / 156.4KW | 143.94TR / 176.6KW |
| At Evap / Cond temp: 15 / 60 deg. C & Power Input ** (KW)       | TR/(KW) |             | 105.42TR / 111.6KW                                                                                                                         | 127.16TR / 127.6KW | 144.12TR / 146.8KW | 160.0TR / 158.4KW  | 176.14TR / 179.0KW |
| At Evap / Cond temp: 20 / 60 deg. C & Power Input ** (KW)       | TR/(KW) |             | 128.00TR / 112.8KW                                                                                                                         | 154.42TR / 129.0KW | 175.02TR / 148.4KW | 194.24TR / 160.2KW | 213.88TR / 181.0KW |
| COMPRESSOR                                                      |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Compressor Type                                                 |         |             | Semi-Hermatic Screw                                                                                                                        |                    |                    |                    |                    |
| Compressor Model                                                |         |             | RC2-260B                                                                                                                                   | RC2-300B           | RC2-340B           | RC2-370B           | RC2-410B           |
| Compressor Qty                                                  |         |             | 2                                                                                                                                          | 2                  | 2                  | 2                  | 2                  |
| Compressor Make                                                 |         |             | Hanbell                                                                                                                                    |                    |                    |                    |                    |
| Unit capacity reduction steps in %                              |         |             | 25,50,75,100                                                                                                                               | 25,50,75,100       | 35,50,75,100       | 35,50,75,100       | 25,50,75,100       |
| Oil Type                                                        |         |             | HBR-B05                                                                                                                                    | HBR-B05            | HBR-B05            | HBR-B05            | HBR-B05            |
| Oil Charge / Compr (Ltr.)                                       |         | Ltrs        | 14L* X 2                                                                                                                                   | 16L* X 2           | 16L* X 2           | 16L* X 2           | 15L* X 2           |
| Sound Level at 1mtr Distance                                    |         | dB (A)      | 79.2                                                                                                                                       | 79.6               | 80.4               | 81.5               | 83.1               |
| Power Supply                                                    |         |             | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                    |                    |                    |                    |
| Nominal HP                                                      |         | HP          | 75 X 2                                                                                                                                     | 89 X 2             | 101 X 2            | 108 X 2            | 121 X 2            |
| EVAPORATOR                                                      |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Evaporator Type                                                 |         |             | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant |                    |                    |                    |                    |
| Evaporator Model                                                |         |             | FMT-140TR-2C                                                                                                                               | FMT-160TR-2C       | FMT-185TR-2C       | FMT-205TR-2C       | FMT-220TR-2C       |
| Evaporator Qty                                                  |         | Nos.        | 1                                                                                                                                          | 1                  | 1                  | 1                  | 1                  |
| No. Of Pass (Refrigerant Side)                                  |         | Nos.        | 1                                                                                                                                          | 1                  | 1                  | 1                  | 1                  |
| Tube Details                                                    |         | mm          | 19                                                                                                                                         | 19                 | 19                 | 19                 | 19                 |
| Water Connection Size In/Out                                    |         | Inch        | 6" NB***                                                                                                                                   | 8" NB***           | 8" NB***           | 8" NB***           | 8" NB***           |
| Water/Brine Flow Rate                                           |         | LPM         | 1400                                                                                                                                       | 1600               | 1850               | 2050               | 2200               |
| CONDENSER                                                       |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Coil                                                            |         | Type        | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                    |                    |                    |                    |
|                                                                 |         | Module      | FMT-24RT-AC-3R                                                                                                                             | FMT-24RT-AC-4R     | FMT-24RT-AC-3R     | FMT-24RT-AC-3R     | FMT-24RT-AC-3R     |
|                                                                 |         | Module Qty. | Nos. 4                                                                                                                                     | 4                  | 6                  | 8                  | 8                  |
|                                                                 |         | Face Area   | Sq.ft. 647.12                                                                                                                              | 862.84             | 970.68             | 1294.26            | 1294.26            |
|                                                                 |         | Rows        | Nos. 3                                                                                                                                     | 4                  | 3                  | 3                  | 3                  |
| Copper Tube Diameter (Ø)                                        |         | mm          | 9.52                                                                                                                                       | 9.52               | 9.52               | 9.52               | 9.52               |
| Aluminium Fin Thickness                                         |         | mm          | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01      | 0.14 +/- 0.01      | 0.14 +/- 0.01      | 0.14 +/- 0.01      |
| Fan                                                             |         | Qty.        | Nos. 8                                                                                                                                     | 8                  | 12                 | 16                 | 16                 |
|                                                                 |         | Power       | W 1.79                                                                                                                                     | 2.24               | 1.79               | 1.79               | 1.79               |
|                                                                 |         | Dia(Ø)      | mm 800                                                                                                                                     | 914                | 800                | 800                | 800                |
|                                                                 |         | Airflow     | CFM 94640                                                                                                                                  | 100000             | 141960             | 189280             | 189280             |
| ECONOMISER FOR MINUS 10.0 DEG.C & BELOW EVAPORATING TEMPERATURE |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Type                                                            |         |             | Shell & Tube Dx type                                                                                                                       |                    |                    |                    |                    |
| Capacity                                                        |         | kW          | 25.47 X 2                                                                                                                                  | 30.71 X 2          | 34.81 X 2          | 38.64 X 2          | 42.54 X 2          |
| OIL COOLER                                                      |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Type                                                            |         |             | Air Cooled                                                                                                                                 | Air Cooled         | Air Cooled         | Air Cooled         | Air Cooled         |
| Capacity                                                        |         | kW          | 19.25 X 2                                                                                                                                  | 19.87 X 2          | 23.53 X 2          | 23.96 X 2          | 28.53 X 2          |
| Fans                                                            |         | Qty         | Nos. 1                                                                                                                                     | 1                  | 1                  | 1                  | 1                  |
|                                                                 |         | Dia(Ø)      | mm 500                                                                                                                                     | 500                | 500                | 500                | 500                |
|                                                                 |         | Power       | W 0.45 X 2                                                                                                                                 | 0.45 X 2           | 0.45 X 2           | 0.45 X 2           | 0.45 X 2           |
|                                                                 |         | Airflow     | CFM 4591 X 2                                                                                                                               | 4591 X 2           | 4591 X 2           | 4591 X 2           | 4591 X 2           |
| UNIT DIMENSION & WEIGHTS                                        |         |             |                                                                                                                                            |                    |                    |                    |                    |
| Length                                                          |         | mm          | 5772                                                                                                                                       | 5772               | 8386               | 11020              | 11020              |
| Width                                                           |         | mm          | 2034                                                                                                                                       | 2034               | 2034               | 2034               | 2034               |
| Height                                                          |         | mm          | 2628                                                                                                                                       | 2628               | 2628               | 2628               | 2628               |
| Detailed Dimensions & GA Drawing On Following Pages             |         |             | 15                                                                                                                                         | 15                 | 15                 | 15                 | 15                 |

**Rating Conditions:-**

- 1).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 2).Ambient Temperature= 50°C (122°F)
- 3).Specifications are subject to change due to continuous product development.
- 4).\*Oil charge to increase in case oil cooler used.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.
- 6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.
- 7).\*\*Power Input does not include the condenser and oil cooler axial fans.
- 8).\*\*\*Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement.

**Technical Data Sheet (R 134A) - For High Ambient Application**  
(FLAMINGO KUHLER SERIES AIR-COOLED SCREW CHILLERS WITH HANBELL SEMI HERMETIC SCREW COMPRESSORS)

| Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Units   | KUHLER<br>AACR-14-HB                                                                                                                       | KUHLER<br>AACR-15-HB | KUHLER<br>AACR-16-HB | KUHLER<br>AACR-17-HB |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Unit Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |                                                                                                                                            |                      |                      |                      |
| Nominal Cooling Capacity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |                                                                                                                                            |                      |                      |                      |
| At Evap / Cond temp: -20 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TR/(KW) | NA                                                                                                                                         | NA                   | NA                   | NA                   |
| At Evap / Cond temp: -15 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TR/(KW) | NA                                                                                                                                         | NA                   | NA                   | NA                   |
| At Evap / Cond temp: -10 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TR/(KW) | 56.50TR / 158.6KW                                                                                                                          | 65.49TR / 181.6KW    | 73.22TR / 210.1KW    | 82.67TR / 226.8KW    |
| At Evap / Cond temp: -05 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TR/(KW) | 74.82TR / 163.2KW                                                                                                                          | 86.71TR / 187.0KW    | 97.06TR / 216.3KW    | 109.38TR / 233.5KW   |
| At Evap / Cond temp: 0 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | TR/(KW) | 95.76TR / 167.3KW                                                                                                                          | 110.92TR / 191.6KW   | 124.23TR / 221.6KW   | 140.54TR / 239.3KW   |
| At Evap / Cond temp: 05 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TR/(KW) | 120.25TR / 170.7KW                                                                                                                         | 139.26TR / 195.5KW   | 156.13TR / 226.1KW   | 175.64TR / 244.1KW   |
| At Evap / Cond temp: 10 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TR/(KW) | 148.53TR / 173.6KW                                                                                                                         | 171.97TR / 198.0KW   | 192.83TR / 229.9KW   | 216.92TR / 248.2KW   |
| At Evap / Cond temp: 15 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TR/(KW) | 181.73TR / 175.9KW                                                                                                                         | 210.46TR / 201.5KW   | 235.96TR / 233.1KW   | 265.43TR / 251.6KW   |
| At Evap / Cond temp: 20 / 60 deg. C & Power Input ** (KW)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TR/(KW) | 220.65TR / 177.9KW                                                                                                                         | 255.53TR / 203.7KW   | 286.48TR / 235.6KW   | 322.27TR / 254.4KW   |
| <b>COMPRESSOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                                                                                                                                            |                      |                      |                      |
| Compressor Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         | Semi-Hermatic Screw                                                                                                                        |                      |                      |                      |
| Compressor Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         | RC2-830B                                                                                                                                   | RC2-930B             | RC2-1020B            | RC2-1130B            |
| Compressor Qty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| Compressor Make                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         | Hanbell                                                                                                                                    |                      |                      |                      |
| Unit capacity reduction steps in %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         | 30,50,75,100                                                                                                                               | 35,50,75,100         | 35,50,75,100         | 30,50,75,100         |
| Oil Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         | HBR-B05                                                                                                                                    | HBR-B05              | HBR-B05              | HBR-B05              |
| Oil Charge / Compr (Ltr.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ltrs    | 28L *                                                                                                                                      | 28L *                | 32L *                | 35L *                |
| Sound Level at 1mtr Distance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | dB (A)  | 87.6                                                                                                                                       | 88.4                 | 90.1                 | 90.5                 |
| Power Supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         | 380-420 V/3 Ph, 50Hz, AC                                                                                                                   |                      |                      |                      |
| Nominal HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | HP      | 234                                                                                                                                        | 278                  | 335                  | 392                  |
| <b>EVAPORATOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                                                                                                                                            |                      |                      |                      |
| Evaporator Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         | Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulance to the refrigerant |                      |                      |                      |
| Evaporator Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         | FMT-221TR                                                                                                                                  | FMT-256TR            | FMT-287TR            | FMT-323TR            |
| Evaporator Qty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Nos.    | 1                                                                                                                                          | 1                    | 1                    | 1                    |
| No. Of Pass (Refrigerant Side)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Nos.    | 2                                                                                                                                          | 2                    | 2                    | 1                    |
| Tube Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | mm      | 19                                                                                                                                         | 19                   | 19                   | 19                   |
| Water Connection Size In/Out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Inch    | 8" NB***                                                                                                                                   | 8" NB***             | 8" NB***             | 8" NB***             |
| Water/Brine Flow Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LPM     | 2210                                                                                                                                       | 2560                 | 2870                 | 3230                 |
| <b>CONDENSER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                                                                                                                                            |                      |                      |                      |
| Coil Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         | Air Cooled with 3/8 inch internally grooved copper tube around Aluminium Fins                                                              |                      |                      |                      |
| Module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         | FMT-24RT-AC-3R                                                                                                                             | FMT-24RT-AC-3R       | FMT-24RT-AC-3R       | FMT-24RT-AC-3R       |
| Module Qty.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Nos.    | 6                                                                                                                                          | 8                    | 8                    | 8                    |
| Face Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Sq.ft.  | 970.69                                                                                                                                     | 1294.25              | 1294.25              | 1725.67              |
| Rows                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Nos.    | 3                                                                                                                                          | 3                    | 3                    | 4                    |
| Copper Tube Diameter (Ø)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | mm      | 9.52                                                                                                                                       | 9.52                 | 9.52                 | 9.52                 |
| Aluminium Fin Thickness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | mm      | 0.14 +/- 0.01                                                                                                                              | 0.14 +/- 0.01        | 0.14 +/- 0.01        | 0.14 +/- 0.01        |
| Fan Qty.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nos.    | 12                                                                                                                                         | 16                   | 16                   | 16                   |
| Power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | kW      | 1.79                                                                                                                                       | 1.79                 | 1.79                 | 1.79                 |
| Dia(Ø)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | mm      | 800                                                                                                                                        | 800                  | 800                  | 914                  |
| Airflow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CFM     | 141960                                                                                                                                     | 189280               | 189280               | 200000               |
| <b>OIL COOLER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                                                                                                                                            |                      |                      |                      |
| Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         | Shell & Tube Dx type                                                                                                                       |                      |                      |                      |
| Capacity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | kW      | 65                                                                                                                                         | 75                   | 90                   | 92                   |
| <b>UNIT DIMENSION &amp; WEIGHTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                                                                                                                            |                      |                      |                      |
| Length                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | mm      | 8386                                                                                                                                       | 11020                | 11020                | 11020                |
| Width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | mm      | 2034                                                                                                                                       | 2034                 | 2034                 | 2034                 |
| Height                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | mm      | 2628                                                                                                                                       | 2628                 | 2628                 | 2628                 |
| Detailed Dimensions & GA Drawing On Following Pages                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         | 15                                                                                                                                         | 15                   | 15                   | 15                   |
| <b>Rating Conditions:-</b><br>1).Evaporator shell side fouling factor= 0.000043 m2.K/W<br>2).Ambient Temperature= 50°C (122°F)<br>3).Specifications are subject to change due to continuos product development.<br>4).* Oil charge to increase in case oil cooler used.<br>5).Liquid injection for motor cooling is standard part of Air Cooled equipment.<br>6).Evaporator capacity calculated at Evap. Temp. of 20 deg. C and may be lower for lower temperature applications.<br>7).**Power Input does not include the condenser and oil cooler axial fans<br>8).***Evaporator water/brine in & out connection size indicated above is calculated based on chiller maximum capacity and this may vary according to the outlet temperature at which the chiller is to be designed. For final sizing please refer to the company at time of order placement. |         |                                                                                                                                            |                      |                      |                      |



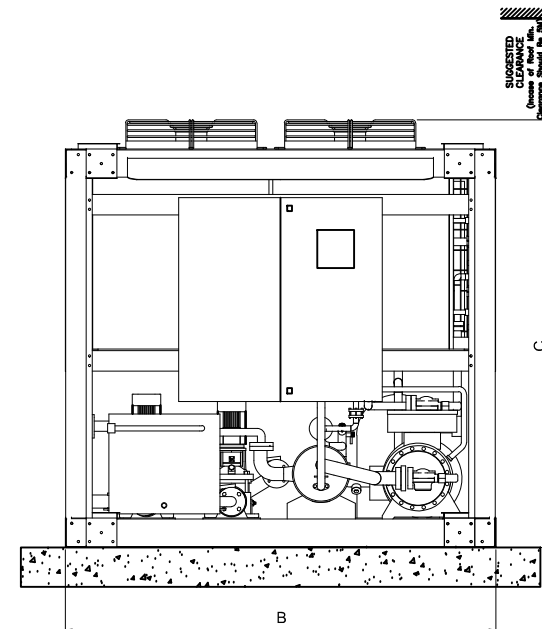
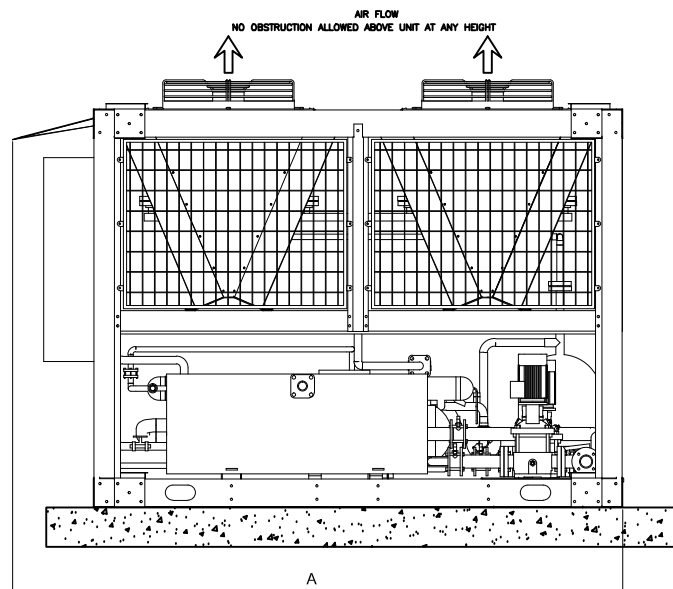
| dimensions & clearance                |       |      |      |
|---------------------------------------|-------|------|------|
| MODEL                                 | A     | B    | C    |
| AACR-01-HB, BACR-01-HB, CACR-01-HB    | 2434  | 1391 | 2628 |
| AACR-02-HB, BACR-02-HB, CACR-02-HB    | 2434  | 1391 | 2628 |
| AACR-03-HB, BACR-03-HB, CACR-03-HB    | 3139  | 2034 | 2628 |
| AACR-04-HB, BACR-04-HB, CACR-04-HB    | 3139  | 2034 | 2628 |
| AACR-05-HB, BACR-05-HB, CACR-05-HB    | 3139  | 2034 | 2628 |
| AACR-06-HB, BACR-06-HB, CACR-06-HB    | 4456  | 2034 | 2628 |
| AACR-07-HB, BACR-07-HB, CACR-07-HB    | 5772  | 2034 | 2628 |
| AACR-08-HB, BACR-08-HB, CACR-08-HB    | 5772  | 2034 | 2628 |
| AACR-09-2HB, BACR-09-2HB, CACR-09-2HB | 5772  | 2034 | 2628 |
| AACR-10-2HB, BACR-10-2HB, CACR-10-2HB | 5772  | 2034 | 2628 |
| AACR-11-2HB, BACR-11-2HB, CACR-11-2HB | 8386  | 2034 | 2628 |
| AACR-12-2HB, BACR-12-2HB, CACR-12-2HB | 11020 | 2034 | 2628 |
| AACR-13-2HB, BACR-13-2HB, CACR-13-2HB | 11020 | 2034 | 2628 |
| AACR-14-HB                            | 8386  | 2034 | 2628 |
| AACR-15-HB                            | 11020 | 2034 | 2628 |
| AACR-16-HB                            | 11020 | 2034 | 2628 |
| AACR-17-HB                            | 11020 | 2034 | 2628 |

**Nomenclature**

A-End to End Length

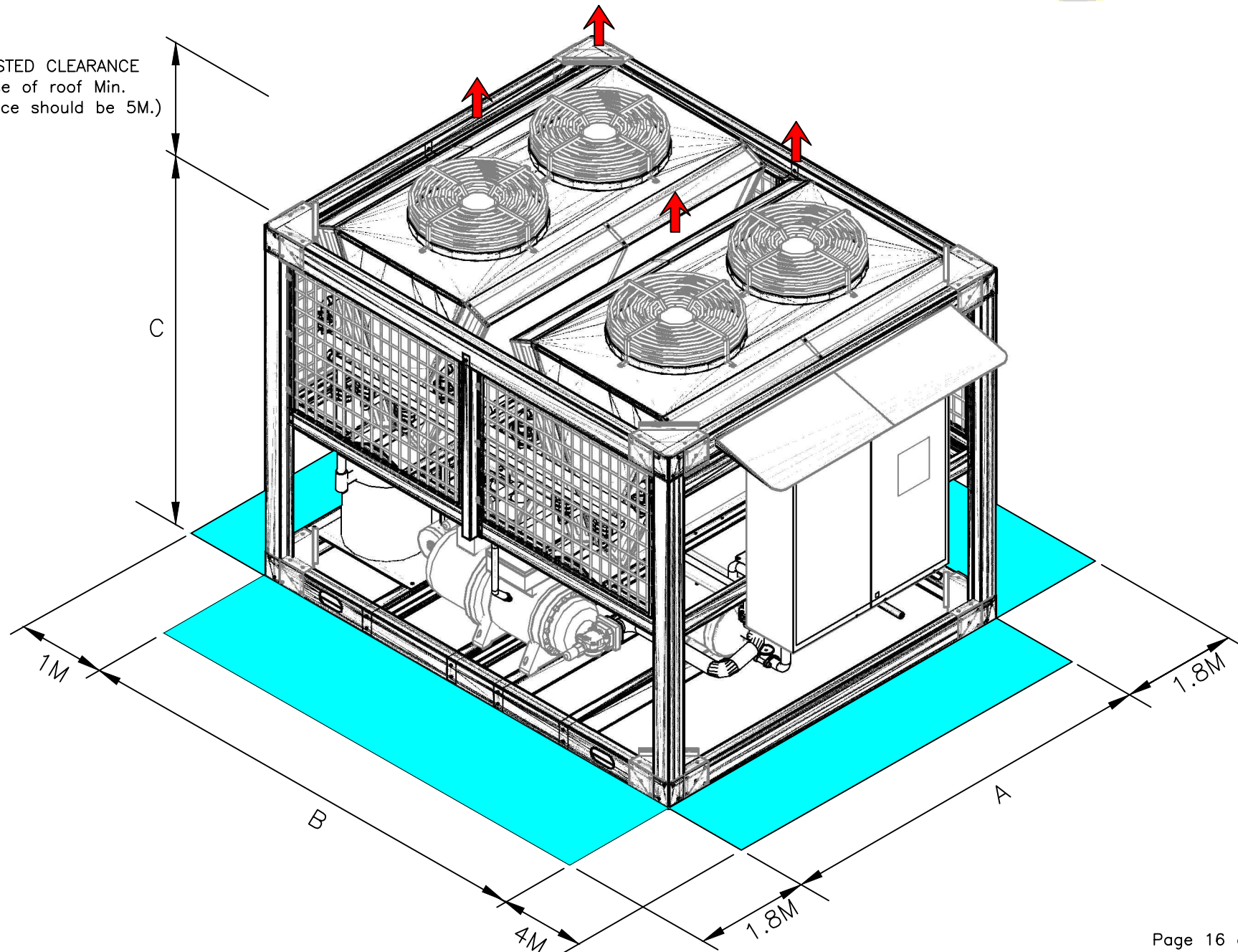
B-End to End Width

C-End to End Height



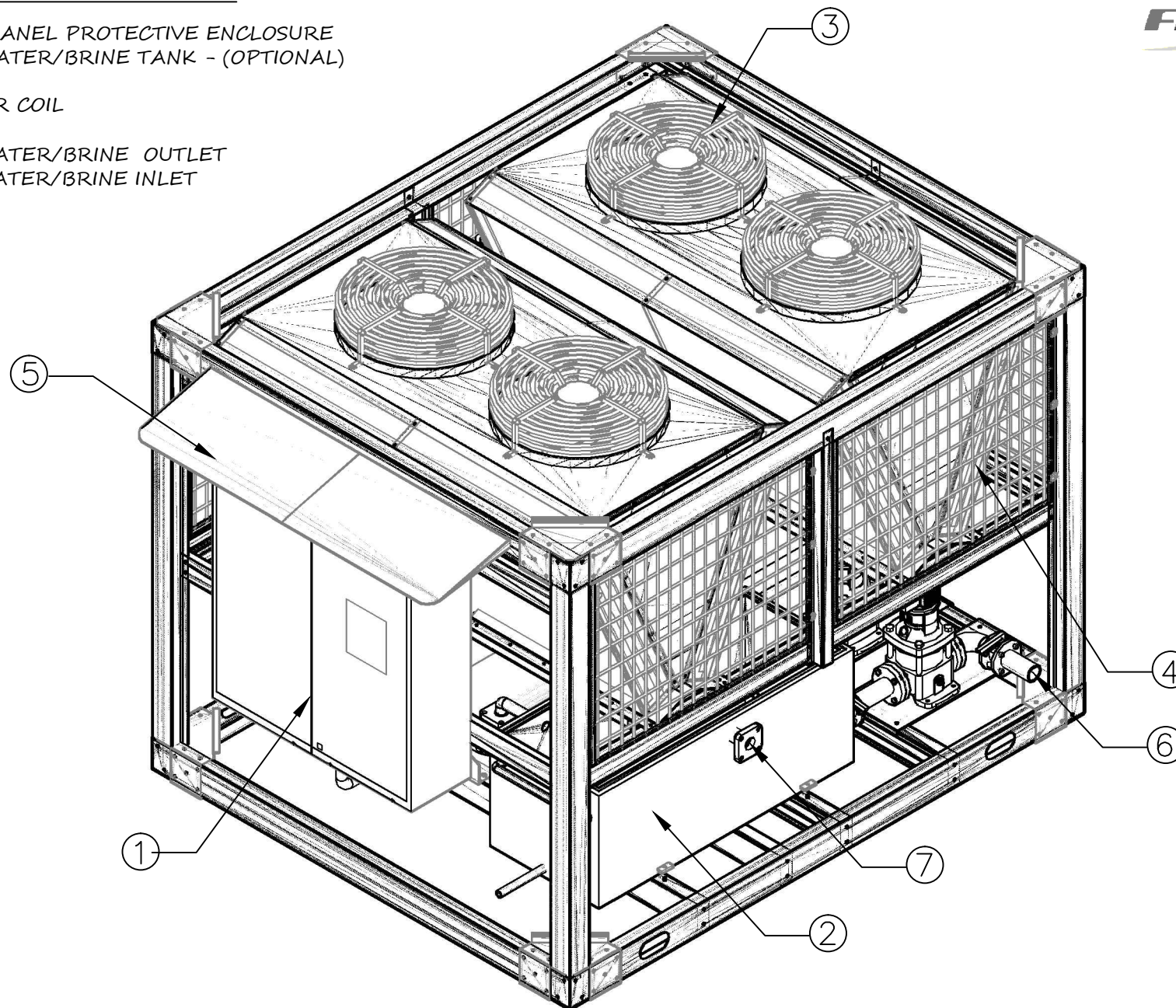


SUGGESTED CLEARANCE  
(In case of roof Min.  
clearance should be 5M.)



AIR COOLED SCREW CHILLER PARTS:-

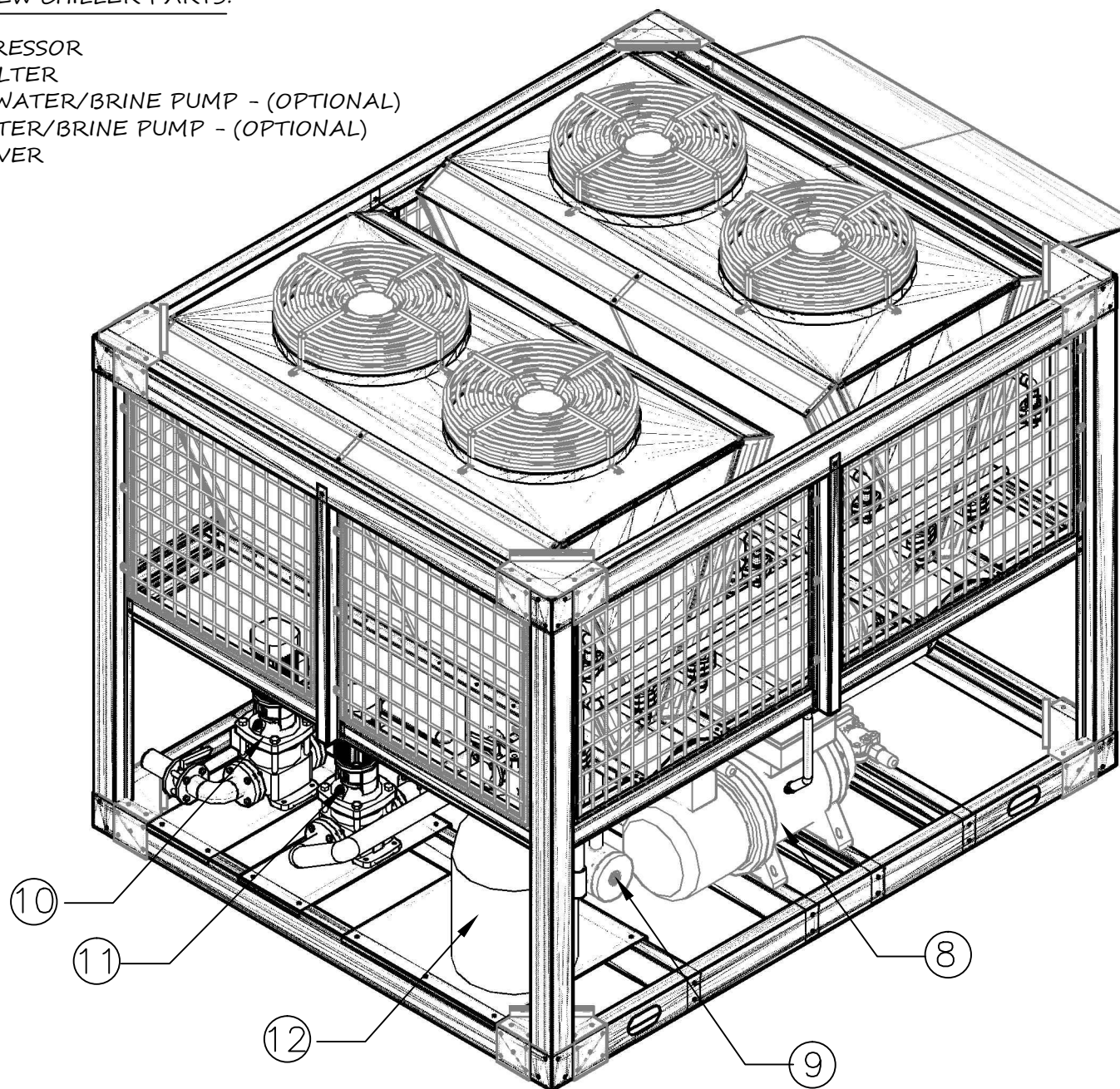
- 1- CONTROL PANEL PROTECTIVE ENCLOSURE
- 2- CHILLED WATER/BRINE TANK - (OPTIONAL)
- 3- AXIAL FAN
- 4- CONDENSER COIL
- 5- CANOPY
- 6- CHILLED WATER/BRINE OUTLET
- 7- CHILLED WATER/BRINE INLET





AIR COOLED SCREW CHILLER PARTS:-

- 8 - SCREW COMPRESSOR
- 9 - LIQUID LINE FILTER
- 10 - SECONDARY WATER/BRINE PUMP - (OPTIONAL)
- 11 - PRIMARY WATER/BRINE PUMP - (OPTIONAL)
- 12 - LIQUID RECEIVER





AIR COOLED SCREW CHILLER PARTS:-

- 13- EVAPORATOR
- 14- ECONOMIZER
- 15- EXPANSION VALVE
- 16- COMPRESSOR SUCTION VALVE
- 17- COMPRESSOR DISCHARGE VALVE

