

Flamingo Chillers



AIR COOLED SCREW CHILLER

AIRCON SERIES



TECHNICAL SPECIFICATIONS FOR FLAMINGO KUHLER SERIES AIR COOLED SCREW CHILLERS FOR AIR CONDITIONING APPLICATIONS WITH HANBELL SCREW COMPRESSORS



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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		CACR-01-HB	CACR-02-HB	CACR-03-HB	CACR-04-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	81	112.7	161	215.3
At Evap / Cond temp: 2 / 45 deg. C	TR	23.04	32.06	45.80	61.25
Power Input	KW	27.03	35.23	51.21	65.41
COP (including axial fans and oil cooler fan)		3.00	3.20	3.14	3.29
IKW (including axial fans and oil cooler fan)		1.17	1.10	1.12	1.07
COMPRESSOR					
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
EVAPORATOR					
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-35TR	FMT-50TR	FMT-65TR
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 Flow Rate	LPM	250	330	480	620
CONDENSER					
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
OIL COOLER					
Type		Air Cooled	Air Cooled	Air Cooled	Air Cooled
Capacity	kW	8.42	10.59	13.71	17.75
Fans	Qty	Nos. 1	1	1	1
	Dia(Ø)	mm 450	450	500	500
	Power	kW 0.25	0.25	0.45	0.45
	Airflow	CFM 3061	3061	4591	4591
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5). *Oil charge to increase in case oil cooler used.
- 6).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		CACR-05-HB	CACR-06-HB	CACR-07-HB	CACR-08-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	253.7	293.3	317.5	349.6
At Evap / Cond temp: 2 / 45 deg. C	TR	72.18	83.44	90.33	99.46
Power Input	KW	73.51	85.79	95.37	106.27
COP (including axial fans and oil cooler fan)		3.45	3.42	3.33	3.29
IKW (including axial fans and oil cooler fan)		1.02	1.03	1.06	1.07
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts			
Evaporator Model		FMT-75TR	FMT-85TR	FMT-95TR	FMT-105TR
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 Flow Rate	LPM	720	840	910	1000
CONDENSER					
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
OIL COOLER					
Type		Air Cooled	Air Cooled	Air Cooled	Air Cooled
Capacity	kW	17.39	19.37	20.78	26.01
Fans	Qty	Nos. 1	1	1	1
	Dia(Ø)	mm 500	500	500	500
	Power	kW 0.45	0.45	0.45	0.45
	Airflow	CFM 4591	4591	4591	4591
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).*Oil charge to increase in case oil cooler used.
- 6).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		CA CR-09-2HB	CA CR-10-2HB	CA CR-11-2HB	CA CR-12-2HB	CA CR-13-2HB
Nominal Cooling Capacity						
At Evap / Cond temp: 2 / 45 deg. C	KW	430.6	507.4	586.6	635	699.2
At Evap / Cond temp: 2 / 45 deg. C	TR	122.50	144.35	166.88	180.65	198.92
Power Input	KW	146.04	165.84	193.96	220.28	242.08
COP (including axial fans and oil cooler fan)		2.95	3.06	3.02	2.88	2.89
IKW (including axial fans and oil cooler fan)		1.19	1.15	1.16	1.22	1.22
COMPRESSOR						
Compressor Type		Semi-Hermetic 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
EVAPORATOR						
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant				
Evaporator Model		FMT-125TR-2C	FMT-150TR-2C	FMT-170TR-2C	FMT-185TR-2C	FMT-210TR-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	4" NB	5" NB	5" NB	5" NB	6" NB
Water Flow Rate	LPM	1250	1500	1700	2250	2500
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	Nos. 4	Nos. 6	Nos. 8	Nos. 8
	Face Area	Sq.ft. 647.12	Sq.ft. 862.84	Sq.ft. 970.68	Sq.ft. 1294.26	Sq.ft. 1294.26
	Rows	Nos. 3	Nos. 4	Nos. 3	Nos. 3	Nos. 3
	Copper Tube Diameter (Ø)	mm 9.52	mm 9.52	mm 9.52	mm 9.52	mm 9.52
	Aluminium Fin Thickness	mm 0.14 +/- 0.01	mm 0.14 +/- 0.01	mm 0.14 +/- 0.01	mm 0.14 +/- 0.01	mm 0.14 +/- 0.01
	Fan Qty.	Nos. 8	Nos. 8	Nos. 12	Nos. 16	Nos. 16
	Power	kW 1.79	kW 2.24	kW 1.79	kW 1.79	kW 1.79
	Dia(Ø)	mm 800	mm 914	mm 800	mm 800	mm 800
	Airflow	CFM 94640	CFM 100000	CFM 141960	CFM 189280	CFM 189280
OIL COOLER						
Type		Air Cooled	Air Cooled	Air Cooled	Air Cooled	Air Cooled
Capacity	kW	17.75 x 2	17.39 x 2	19.37 x 2	20.78 x 2	26.01 x 2
Fans Qty	Nos.	1	1	1	1	1
	Dia(Ø)	mm 500	mm 500	mm 500	mm 500	mm 500
	Power	kW 0.45 X 2	kW 0.45 X 2	kW 0.45 X 2	kW 0.45 X 2	kW 0.45 X 2
	Airflow	CFM 4591 X 2	CFM 4591 X 2	CFM 4591 X 2	CFM 4591 X 2	CFM 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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).*Oil charge to increase in case oil cooler used.
- 6).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
		BACR-01-HB	BACR-02-HB	BACR-03-HB	BACR-04-HB
Unit Model					
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	80	106.7	154.7	205.6
At Evap / Cond temp: 2 / 45 deg. C	TR	22.76	30.36	44.01	58.49
Power Input	KW	27.23	34.63	50.61	58.71
COP (including axial fans and oil cooler fan)		2.94	3.08	3.06	3.50
IKW (including axial fans and oil cooler fan)		1.20	1.14	1.15	1.00
COMPRESSOR					
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
EVAPORATOR					
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-35TR	FMT-50TR	FMT-65TR
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 Flow Rate	LPM	250	330	480	620
CONDENSER					
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
OIL COOLER					
Type		Air Cooled	Air Cooled	Air Cooled	Air Cooled
Capacity	kW	8.42	10.59	13.71	17.75
Fans	Qty	Nos. 1	1	1	1
	Dia(Ø)	mm 450	450	500	500
	Power	kW 0.25	0.25	0.45	0.45
	Airflow	CFM 3061	3061	4591	4591
UNIT DIMENSION & WEIGHTS					
Length	mm	2434	2434	3139	3139
Width	mm	1391	1391	2034	2034
Height	mm	2628	2628	2628	2628
Detailed Dimensions & GA Drawing On Follwing Pages		15	15	15	15

Rating Conditions:-

- 1).Evaporator Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).*Oil charge to increase in case oil cooler used.
- 6).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		BACR-05-HB	BACR-06-HB	BACR-07-HB	BACR-08-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	243.4	281.3	307.4	331.8
At Evap / Cond temp: 2 / 45 deg. C	TR	69.25	80.03	87.45	94.40
Power Input	KW	73.01	85.39	95.87	103.67
COP (including axial fans and oil cooler fan)		3.33	3.29	3.21	3.20
IKW (including axial fans and oil cooler fan)		1.05	1.07	1.10	1.10
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts			
Evaporator Model		FMT-75TR	FMT-85TR	FMT-95TR	FMT-100TR
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 Flow Rate	LPM	720	840	910	1000
CONDENSER					
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 (∅)	mm	9.52	9.52	9.52	9.52
Aliminium 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(∅)	mm 914	800	800	800
	Airflow	CFM 50000	70980	94640	94640
OIL COOLER					
Type		Air Cooled	Air Cooled	Air Cooled	Air Cooled
Capacity	kW	17.39	19.37	20.78	26.01
Fans	Qty	Nos. 1	1	1	1
	Dia(∅)	mm 500	500	500	500
	Power	kW 0.45	0.45	0.45	0.45
	Airflow	CFM 4591	4591	4591	4591
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).*Oil charge to increase in case oil cooler used.
- 6).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		BACR-09-2HB	BACR-10-2HB	BACR-11-2HB	BACR-12-2HB	BACR-13-2HB
Nominal Cooling Capacity						
At Evap / Cond temp: 2 / 45 deg. C	KW	411.2	486.8	562.6	614.8	663.6
At Evap / Cond temp: 2 / 45 deg. C	TR	116.98	138.49	160.06	174.91	188.79
Power Input	KW	132.64	164.84	193.16	221.28	236.88
COP (including axial fans and oil cooler fan)		3.10	2.95	2.91	2.78	2.80
IKW (including axial fans and oil cooler fan)		1.13	1.19	1.21	1.27	1.25
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-120TR-2C	FMT-145TR-2C	FMT-165TR-2C	FMT-180TR-2C	FMT-195TR-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	4" NB	5" NB	5" NB	5" NB	6" NB
Water Flow Rate	LPM	1250	1500	1700	2250	2500
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 (∅)	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(∅)	mm 800	914	800	800	800
	Airflow	CFM 94640	100000	141960	189280	189280
OIL COOLER						
Type		Air Cooled	Air Cooled	Air Cooled	Air Cooled	Air Cooled
Capacity	kW	17.75 X 2	17.39 X 2	19.37 X 2	20.78 X 2	26.01 X 2
Fans	Qty	Nos. 1	1	1	1	1
	Dia(∅)	mm 500	500	500	500	500
	Power	kW 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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2). Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3). Ambient Temperature= 35°C (95°F)
- 4). Specifications are subject to change due to continuous product development.
- 5). *Oil charge to increase in case oil cooler used.
- 6). Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-01-HB	AACR-02-HB	AACR-03-HB	AACR-04-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	60	83.8	121.2	158.7
At Evap / Cond temp: 2 / 45 deg. C	TR	17.07	23.84	34.48	45.15
Power Input	KW	20.98	26.28	38.96	49.36
COP (including axial fans and oil cooler fan)		2.86	3.19	3.11	3.22
IKW (including axial fans and oil cooler fan)		1.23	1.10	1.13	1.09
COMPRESSOR					
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
EVAPORATOR					
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-35TR	FMT-50TR	FMT-65TR
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 Flow Rate	LPM	221	288	395	501
CONDENSER					
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 (∅)	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(∅)	mm 800	800	800	800
	Airflow	CFM 23660	23660	47320	47320
ECONOMISER					
Type		Shell & Tube Dx type			
Capacity	kW	9.37	13.1	18.93	24.8
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-05-HB	AACR-06-HB	AACR-07-HB	AACR-08-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	191.4	216.9	240.8	265
At Evap / Cond temp: 2 / 45 deg. C	TR	54.45	61.71	68.51	75.39
Power Input	KW	57.26	66.24	74.22	82.02
COP (including axial fans and oil cooler fan)		3.34	3.27	3.24	3.23
IKW (including axial fans and oil cooler fan)		1.05	1.07	1.08	1.09
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant			
Evaporator Model		FMT-75TR	FMT-85TR	FMT-95TR	FMT-105TR
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	3" NB	3" NB	4" NB	4" NB
Water Flow Rate	LPM	595	667	735	804
CONDENSER					
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 (∅)	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(∅)	mm 914	800	800	800
	Airflow	CFM 50000	70980	94640	94640
ECONOMISER					
Type		Shell & Tube Dx type			
Capacity	kW	29.9	33.89	37.62	41.42
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-09-2HB	AACR-10-2HB	AACR-11-2HB	AACR-12-2HB	AACR-13-2HB
Nominal Cooling Capacity						
At Evap / Cond temp: 2 / 45 deg. C	KW	317.4	382.8	433.8	481.6	530
At Evap / Cond temp: 2 / 45 deg. C	TR	90.30	108.90	123.41	137.01	150.78
Power Input	KW	98.72	114.52	132.48	148.44	164.04
COP (including axial fans and oil cooler fan)		3.22	3.34	3.27	3.24	3.23
IKW (including axial fans and oil cooler fan)		1.09	1.05	1.07	1.08	1.09
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 turbulance to the refrigerant				
Evaporator Model		FMT-125TR-2C	FMT-150TR-2C	FMT-170TR-2C	FMT-185TR-2C	FMT-210TR-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	4" NB	4" NB	4" NB	4" NB	5" NB
Water Flow Rate	LPM	953	1139	1284	1420	1558
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	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
ECONOMISER						
Type		Shell & Tube Dx type				
Capacity	kW	24.8 x 2	29.9 x 2	33.89 x 2	37.62 x 2	41.42 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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2). Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3). Ambient Temperature= 35°C (95°F)
- 4). Specifications are subject to change due to continuous product development.
- 5). Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-14-HB	AACR-15-HB	AACR-16-HB	AACR-17-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 45 deg. C	KW	546.9	633.3	710.1	798.8
At Evap / Cond temp: 2 / 45 deg. C	TR	155.59	180.17	202.02	227.25
Power Input	KW	154.58	181.04	204.94	218.94
COP (including axial fans and oil cooler fan)		3.54	3.50	3.46	3.65
IKW (including axial fans and oil cooler fan)		0.99	1.00	1.01	0.96
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant			
Evaporator Model		FMT-160TR	FMT-185TR	FMT-210TR	FMT-235TR
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	6" NB	6" NB	6" NB	6" NB
Water Flow Rate	LPM	1606	1852	2070	2323
CONDENSER					
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 (∅)	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(∅)	mm 800	800	800	914
	Airflow	CFM 141960	189280	189280	200000
ECONOMISER					
Type		Shell & Tube Dx type			
Capacity	kW	85.47	98.97	110.96	124.82
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 35°C (95°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-01-HB	AACR-02-HB	AACR-03-HB	AACR-04-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 60 deg. C	KW	55.1	77	111.4	145.9
At Evap / Cond temp: 2 / 60 deg. C	TR	15.68	21.91	31.69	41.51
Power Input	KW	25.98	32.98	48.16	61.66
COP (including axial fans and oil cooler fan)		2.12	2.33	2.31	2.37
IKW (including axial fans and oil cooler fan)		1.66	1.51	1.52	1.49
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant			
Evaporator Model		FMT-20TR	FMT-25TR	FMT-35TR	FMT-45TR
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 Flow Rate	LPM	207	269	367	465
CONDENSER					
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 (∅)	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(∅)	mm 800	800	800	800
	Airflow	CFM 23660	23660	47320	47320
ECONOMISER					
Type		Shell & Tube Dx type			
Capacity	kW	13.61	19.02	27.5	36.01
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 50°C (122°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-05-HB	AACR-06-HB	AACR-07-HB	AACR-08-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 60 deg. C	KW	175.9	199.4	221.3	243.6
At Evap / Cond temp: 2 / 60 deg. C	TR	50.04	56.73	62.96	69.30
Power Input	KW	71.26	82.44	91.72	101.72
COP (including axial fans and oil cooler fan)		2.47	2.42	2.41	2.39
IKW (including axial fans and oil cooler fan)		1.42	1.45	1.46	1.47
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant			
Evaporator Model		FMT-55TR	FMT-60TR	FMT-65TR	FMT-75TR
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	3" NB	3" NB	4" NB	4" NB
Water Flow Rate	LPM	550	617	680	743
CONDENSER					
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 (∅)	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(∅)	mm 914	800	800	800
	Airflow	CFM 50000	70980	94640	94640
ECONOMISER					
Type		Shell & Tube Dx type			
Capacity	kW	43.43	49.23	54.64	60.15
UNIT DIMENSION & WEIGHTS					
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 Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 50°C (122°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-09-2HB	AACR-10-2HB	AACR-11-2HB	AACR-12-2HB	AACR-13-2HB
Nominal Cooling Capacity						
At Evap / Cond temp: 2 / 60 deg. C	KW	291.8	351.8	398.8	442.6	487.2
At Evap / Cond temp: 2 / 60 deg. C	TR	83.02	100.09	113.46	125.92	138.61
Power Input	KW	137.64	160.44	186.36	212.08	232.08
COP (including axial fans and oil cooler fan)		2.12	2.19	2.14	2.09	2.10
IKW (including axial fans and oil cooler fan)		1.66	1.60	1.64	1.68	1.67
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 turbulance to the refrigerant				
Evaporator Model		FMT-90TR-2C	FMT-105TR-2C	FMT-115TR-2C	FMT-130TR-2C	FMT-145TR-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	4" NB	4" NB	4" NB	4" NB	5" NB
Water Flow Rate	LPM	880	1051	1185	1309	1436
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	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
ECONOMISER						
Type		Shell & Tube Dx type				
Capacity	kW	36.01 x 2	43.43 x 2	49.23 x 2	54.64 x 2	60.15 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:-

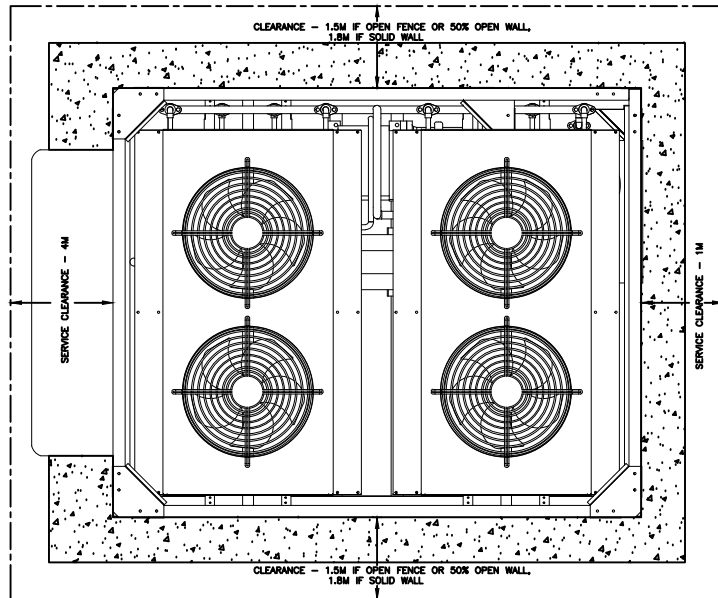
- 1). Evaporator Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2). Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3). Ambient Temperature= 50°C (122°F)
- 4). Specifications are subject to change due to continuous product development.
- 5). Liquid injection for motor cooling is standard part of Air Cooled equipment.

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

Description	Units	AIRCON	AIRCON	AIRCON	AIRCON
Unit Model		AACR-14-HB	AACR-15-HB	AACR-16-HB	AACR-17-HB
Nominal Cooling Capacity					
At Evap / Cond temp: 2 / 60 deg. C	KW	474.4	549.4	616	692.9
At Evap / Cond temp: 2 / 60 deg. C	TR	134.96	156.30	175.25	197.13
Power Input	KW	216.88	252.34	287.44	308.04
COP (including axial fans and oil cooler fan)		2.19	2.18	2.14	2.25
IKW (including axial fans and oil cooler fan)		1.61	1.61	1.64	1.56
COMPRESSOR					
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
EVAPORATOR					
Evaporator Type		Shell & Tube Direct Expansion Type With Mechanically Bonded Aluminium Star Turbulators Inserts for providing turbulence to the refrigerant			
Evaporator Model		FMT-160TR	FMT-185TR	FMT-210TR	FMT-235TR
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	6" NB	6" NB	6" NB	6" NB
Water Flow Rate	LPM	1400	1613	1802	2021
CONDENSER					
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
ECONOMISER					
Type		Shell & Tube Dx type			
Capacity	kW	124.13	143.74	161.16	181.29
UNIT DIMENSION & WEIGHTS					
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:-

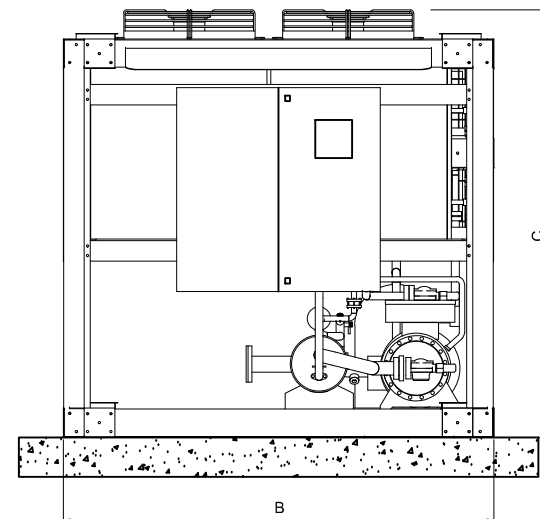
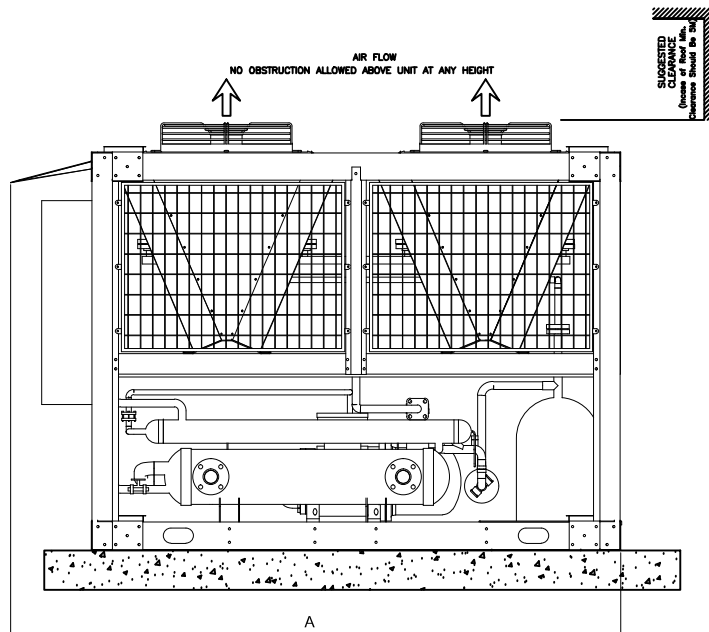
- 1).Evaporator Leaving Water Temp 7°C (44.6°F) & Evaporator Entering Temp. 12°C (53.6°F).
- 2).Evaporator shell side fouling factor= 0.000043 m2.K/W
- 3).Ambient Temperature= 50°C (122°F)
- 4).Specifications are subject to change due to continuous product development.
- 5).Liquid injection for motor cooling is standard part of Air Cooled equipment.



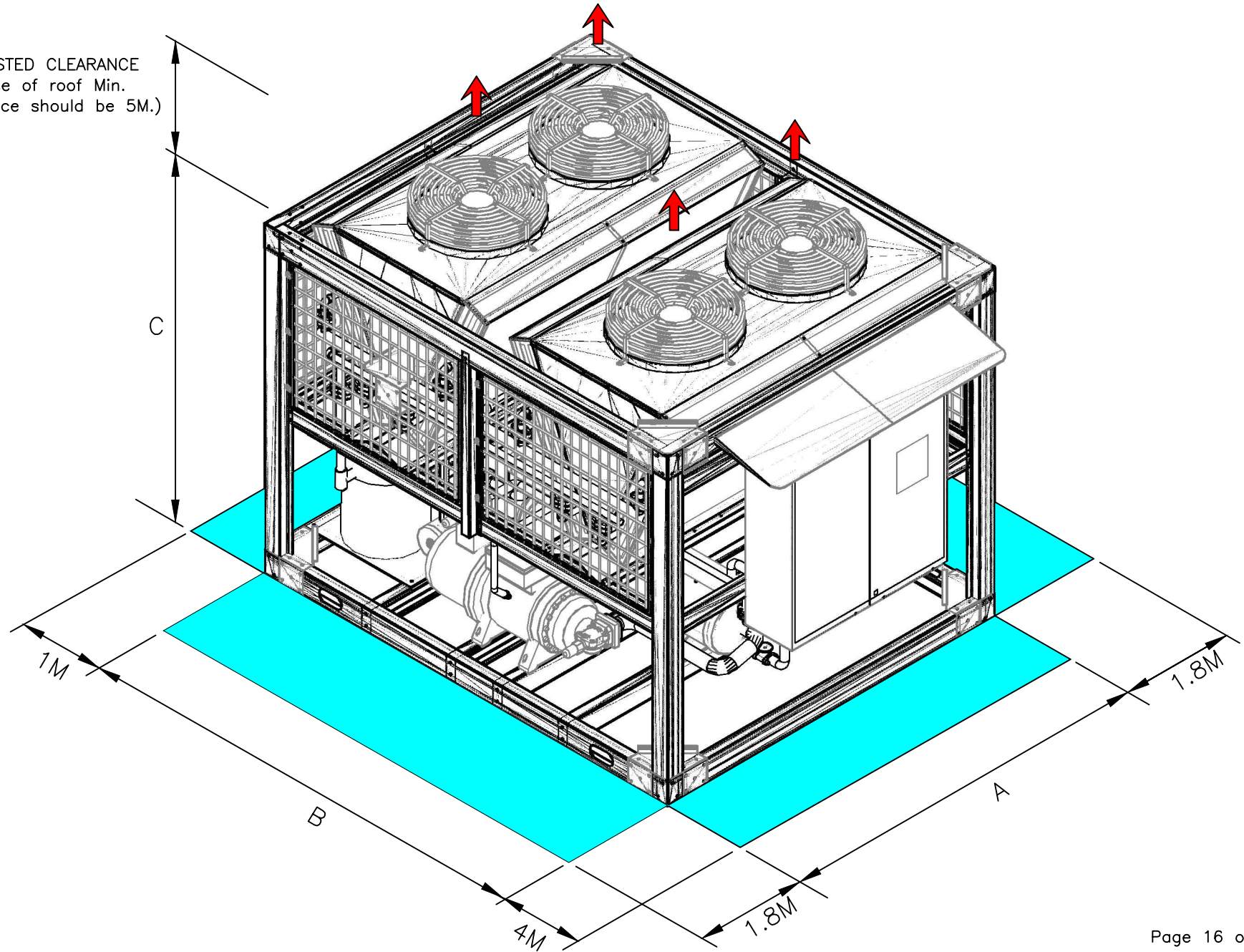
dimensions & clearance			
MODEL	A	B	C
AACR-01-HB, BACR-01-HB, CACR-01-HB	2434	1391	2628
AACR-02-HB, BACR-02-HB, CACR-02-HB	2434	1391	2628
AACR-03-HB, BACR-03-HB, CACR-03-HB	3139	2034	2628
AACR-04-HB, BACR-04-HB, CACR-04-HB	3139	2034	2628
AACR-05-HB, BACR-05-HB, CACR-05-HB	3139	2034	2628
AACR-06-HB, BACR-06-HB, 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

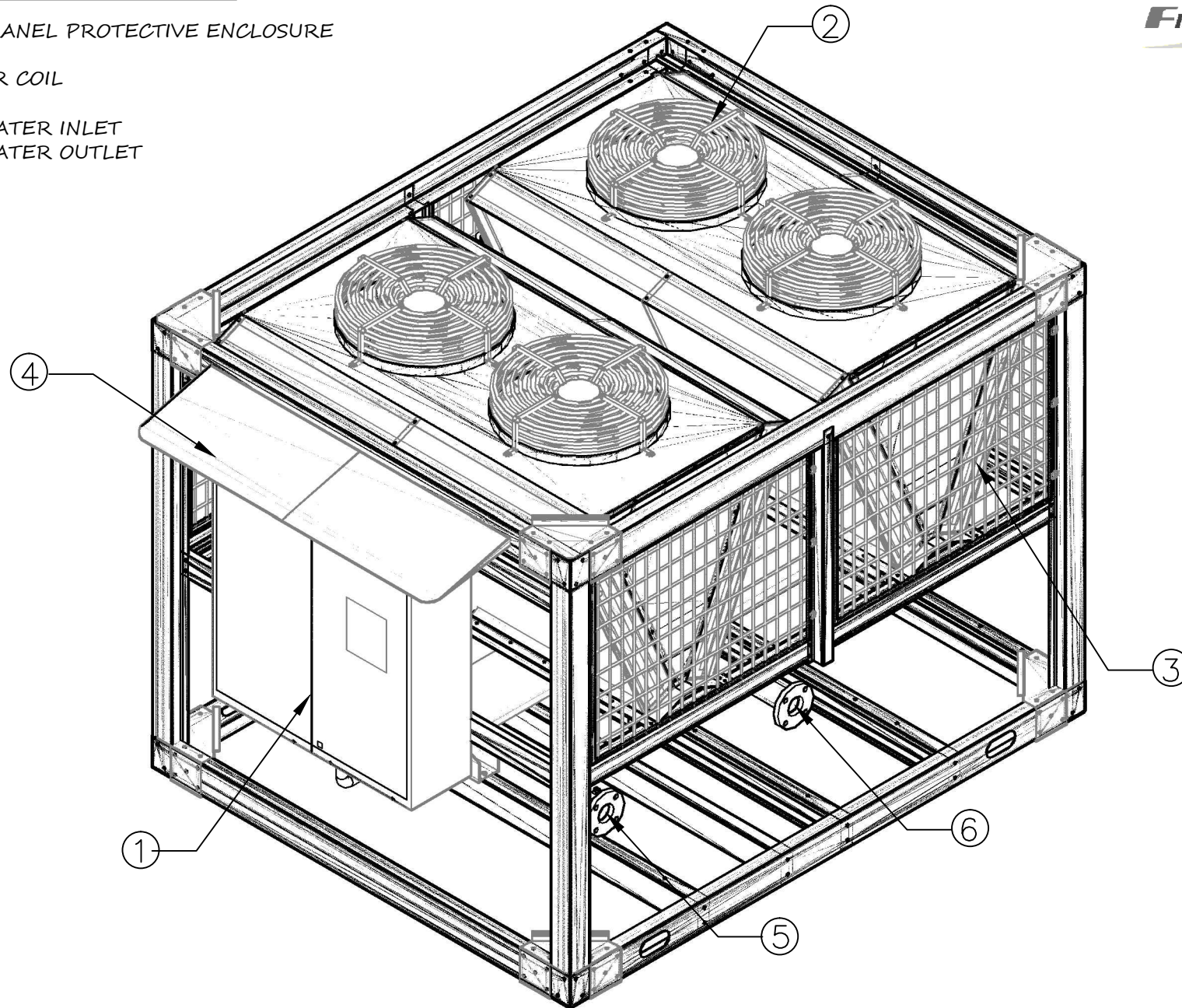


SUGGESTED CLEARANCE
(In case of roof Min.
clearance should be 5M.)



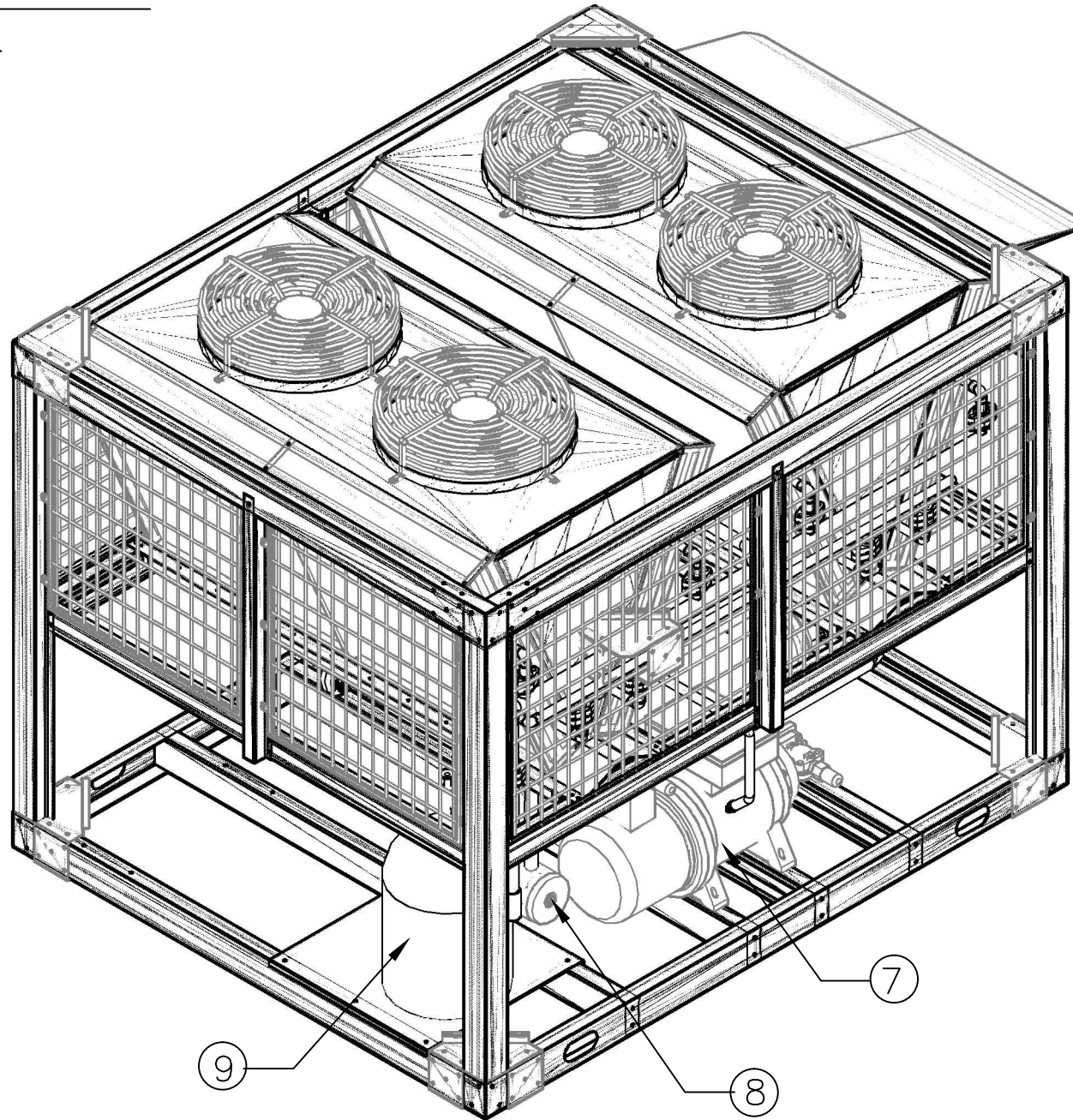
AIR COOLED SCREW CHILLER PARTS:-

- 1- CONTROL PANEL PROTECTIVE ENCLOSURE
- 2- AXIAL FAN
- 3- CONDENSER COIL
- 4- CANOPY
- 5- CHILLED WATER INLET
- 6- CHILLED WATER OUTLET



AIR COOLED SCREW CHILLER PARTS:-

- 7- SCREW COMPRESSOR
- 8- LIQUID LINE FILTER
- 9- LIQUID RECEIVER



AIR COOLED SCREW CHILLER PARTS:-

- 10- EVAPORATOR
- 11- ECONOMIZER
- 12- EXPANSION VALVE
- 13- COMPRESSOR SUCTION VALVE
- 14- COMPRESSOR DISCHARGE VALVE

