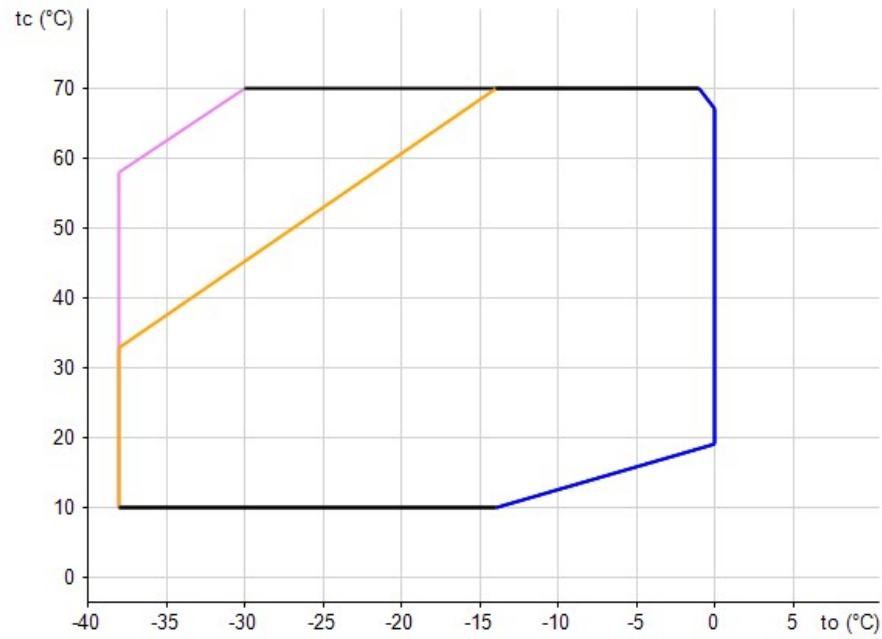


50 Hz

2DB-50

R454C Dew Point



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Compatibility with A2L refrigerants for manufacturing date after 02 2023 only

50 Hz	2DB-50	R454C Dew Point
Suction Return Temperature 18.3°C		Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW							
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0	5.71	7.47	9.66	12.30	15.45			
15.0	5.39	7.08	9.17	11.70	14.65	18.15		
20.0	5.07	6.68	8.67	11.05	13.90	17.20	21.00	25.40
25.0	4.74	6.28	8.16	10.45	13.10	16.25	19.90	24.00
30.0	4.41	5.87	7.65	9.79	12.30	15.30	18.70	22.60
35.0	4.08	5.45	7.12	9.13	11.50	14.30	17.50	21.20
40.0		5.03	6.59	8.47	10.70	13.30	16.30	19.75
45.0		4.60	6.06	7.80	9.86	12.30	15.10	18.30
50.0			5.51	7.11	9.02	11.25	13.85	16.85
55.0				6.42	8.16	10.20	12.60	15.35
60.0				5.72	7.29	9.15	11.30	13.85
65.0					6.41	8.08	10.05	12.30
70.0						6.99	8.73	

Cond °C	Power, kW							
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0	2.08	2.30	2.46	2.56	2.57			
15.0	2.20	2.45	2.67	2.83	2.92	2.91		
20.0	2.30	2.59	2.86	3.08	3.23	3.31	3.28	3.14
25.0	2.38	2.72	3.03	3.31	3.53	3.68	3.74	3.70
30.0	2.46	2.82	3.18	3.51	3.80	4.03	4.17	4.22
35.0	2.51	2.91	3.31	3.70	4.05	4.35	4.58	4.72
40.0		2.98	3.42	3.86	4.27	4.64	4.95	5.19
45.0		3.03	3.52	4.00	4.47	4.91	5.30	5.62
50.0			3.59	4.12	4.65	5.15	5.62	6.03
55.0				4.22	4.80	5.37	5.91	6.40
60.0				4.29	4.93	5.56	6.17	6.74
65.0					5.03	5.72	6.40	7.06
70.0						5.86	6.61	

Compatibility with A2L refrigerants for manufacturing date after 02 2023 only

50 Hz		2DB-50					R454C Dew Point	
Cond °C	Current at 400 V, A							
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0	5.49	5.72	5.91	6.02	6.03			
15.0	5.59	5.87	6.12	6.31	6.41	6.41		
20.0	5.69	6.01	6.32	6.59	6.78	6.88	6.86	6.69
25.0	5.78	6.15	6.51	6.85	7.14	7.34	7.44	7.41
30.0	5.86	6.27	6.69	7.10	7.47	7.78	8.00	8.10
35.0	5.93	6.38	6.85	7.33	7.79	8.20	8.54	8.77
40.0		6.47	7.00	7.55	8.09	8.60	9.06	9.42
45.0		6.54	7.12	7.74	8.37	8.98	9.54	10.04
50.0			7.22	7.91	8.62	9.33	10.01	10.63
55.0				8.05	8.84	9.64	10.44	11.19
60.0				8.16	9.03	9.93	10.83	11.71
65.0					9.19	10.18	11.20	12.20
70.0						10.40	11.52	

Cond °C	Suction Mass Flow, g/s							
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0	27.20	35.60	46.20	59.10	74.40			
15.0	26.60	35.00	45.40	58.20	73.30	91.20		
20.0	25.90	34.30	44.60	57.20	72.10	89.80	110.50	134.50
25.0	25.20	33.50	43.70	56.10	70.90	88.30	108.50	132.50
30.0	24.50	32.60	42.70	54.90	69.50	86.70	107.00	130.50
35.0	23.70	31.70	41.60	53.60	67.90	84.90	104.50	128.00
40.0		30.70	40.40	52.20	66.30	82.90	102.50	125.50
45.0		29.60	39.20	50.70	64.40	80.80	100.00	122.50
50.0			37.70	49.00	62.40	78.50	97.40	119.50
55.0				47.10	60.30	75.90	94.60	116.50
60.0				45.10	57.90	73.20	91.50	113.00
65.0					55.30	70.20	88.20	109.50
70.0						67.00	84.70	

Compatibility with A2L refrigerants for manufacturing date after 02 2023 only

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	2
Displacement @ 50 Hz, m ³ /h	28.0
Bore/Stroke, mm	66.7/46.1
Length/Width, mm	590/330
Height, mm	470
Net Weight, kg	131
Gross Weight, kg	140
Rotalock Discharge, inch	7/8
Suction, inch	1 3/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	2.3
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	295 x 279 (14)
Sound Pressure @ 1m, dBA	64
Sound Power, dBA	75
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	148
Refrigerant's classification	A2L

COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)

Maximum Operating Current, A	13.4
Locked Rotor Current, A	55
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

Compatibility with A2L refrigerants for manufacturing date after 02 2023 only

ACCESSORIES OPTIONAL

Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	70 W Internal
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Deep Oil Sump	Mounted
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Oil Control System	ALCO Trax-Oil OM3

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
AWM	380-420 V / 3~ / 50 Hz	400	YY/Y	Y	1.00
EWL	220-240 V / 3~ / 50 Hz	230	Y/DELTA	DELTA	1.73
EWL	380-420 V / 3~ / 50 Hz	400		Y	1.00
EWM	380-420 V / 3~ / 50 Hz	400	Y/DELTA	DELTA	1.00
EWY	500-550 V / 3~ / 50 Hz	525	Y/DELTA	DELTA	0.76
AWR	220-240 V / 3~ / 50 Hz	230	YY/Y	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YY/Y	Y	0.76
TWY	500-550 V / 3~ / 50 Hz	525		DELTA	0.76
EWK	220-240 V / 3~ / 60 Hz	230	Y/DELTA	DELTA	2.10
EWK	380-420 V / 3~ / 60 Hz	380		Y	1.20
EWD	440-480 V / 3~ / 60 Hz	460	Y/DELTA	DELTA	1.00
AWX	380 V / 3~ / 60 Hz	380	YY/Y	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YY/Y	Y	1.00

Compatibility with A2L refrigerants for manufacturing date after 02 2023 only