



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

8DT-450

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	37.10	48.00	61.70	78.40	98.30			
15.0	34.70	45.20	58.20	74.20	93.20	115.50		
20.0	32.50	42.50	54.90	70.00	88.10	109.50	134.50	163.00
25.0	30.30	39.80	51.60	65.90	83.10	103.00	127.00	154.00
30.0	28.20	37.30	48.40	61.90	78.00	97.10	119.50	145.00
35.0	26.20	34.70	45.20	57.80	73.00	90.90	112.00	136.00
40.0		32.20	42.00	53.80	68.00	84.70	104.50	127.00
45.0		29.80	38.80	49.80	62.90	78.50	96.70	118.00
50.0			35.70	45.80	57.80	72.20	89.10	108.50
55.0				41.70	52.70	65.90	81.40	99.50
60.0				37.60	47.50	59.50	73.60	90.20
65.0					42.30	53.00	65.70	80.70
70.0						46.40	57.70	

Cond °C	Power, kW							
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
10.0	13.75	15.20	16.45	17.55	18.40			
15.0	14.80	16.45	17.95	19.30	20.40	21.20		
20.0	15.75	17.55	19.30	20.90	22.30	23.40	24.20	24.60
25.0	16.50	18.55	20.60	22.40	24.10	25.50	26.70	27.50
30.0	17.15	19.45	21.70	23.80	25.80	27.60	29.10	30.20
35.0	17.70	20.20	22.70	25.20	27.50	29.50	31.40	32.90
40.0		20.90	23.60	26.40	29.00	31.40	33.60	35.50
45.0		21.40	24.40	27.50	30.40	33.20	35.80	38.10
50.0			25.10	28.50	31.80	34.90	37.90	40.60
55.0				29.40	33.00	36.50	39.90	43.00
60.0				30.20	34.20	38.10	41.90	45.40
65.0					35.30	39.60	43.70	47.70
70.0						40.90	45.60	

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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	40.40	41.77	43.06	44.16	44.97			
15.0	41.37	42.94	44.48	45.88	47.05	47.89		
20.0	42.24	44.03	45.85	47.57	49.12	50.38	51.25	51.64
25.0	43.00	45.04	47.15	49.22	51.16	52.86	54.23	55.16
30.0	43.66	45.96	48.38	50.82	53.17	55.34	57.22	58.71
35.0	44.19	46.77	49.53	52.35	55.13	57.78	60.20	62.28
40.0		47.47	50.58	53.80	57.04	60.20	63.17	65.85
45.0		48.05	51.53	55.18	58.89	62.57	66.11	69.42
50.0			52.37	56.46	60.66	64.89	69.02	72.97
55.0				57.64	62.35	67.14	71.89	76.50
60.0				58.70	63.95	69.32	74.70	80.00
65.0					65.45	71.42	77.45	83.45
70.0						73.42	80.13	

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	176.50	229.00	295.00	376.00	474.00			
15.0	171.00	223.00	289.00	369.00	466.00	581.00		
20.0	166.00	218.00	283.00	362.00	457.00	571.00	705.00	862.00
25.0	161.50	213.00	276.00	354.00	449.00	561.00	694.00	849.00
30.0	156.50	207.00	270.00	347.00	440.00	551.00	681.00	835.00
35.0	152.00	202.00	264.00	340.00	431.00	540.00	669.00	821.00
40.0		197.00	258.00	332.00	421.00	528.00	656.00	806.00
45.0		191.50	251.00	324.00	411.00	516.00	642.00	790.00
50.0			244.00	315.00	401.00	504.00	627.00	773.00
55.0				306.00	389.00	490.00	611.00	756.00
60.0				296.00	377.00	476.00	595.00	737.00
65.0					364.00	460.00	577.00	719.00
70.0						445.00	560.00	

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COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	8
Displacement @ 50 Hz, m ³ /h	181
Bore/Stroke, mm	74.7/59.2
Length/Width, mm	835/475
Height, mm	610
Net Weight, kg	335
Gross Weight, kg	356
Suction, inch	3 1/8
Discharge, inch	1 5/8
Drive Frequency Range, Hz	25 - 60
Oil Quantity, l	7.6
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	457 x 305 (18)
Sound Pressure @ 1m, dBA	78.2
Sound Power, dBA	89.2
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	90.7
Locked Rotor Current, A	441
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4
Deep Oil Sump	Mounted

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ACCESSORIES OPTIONAL

Additional Cooling	70 W Vertical Air Flow Fan
Capacity Control	Capacity Steps 75%
Crankcase Heater	200 W Internal
Enclosure Class	IP 56
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
Adapter Kit	For Parallel Operation
Check Valve	For unloaded start operation
Oil Control System	ALCO Trax-Oil OM3

MOTOR OPTIONS

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
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
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
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
AWC	208-230 V / 3~ / 60 Hz	230	YY/Y	Y	2.19
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

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