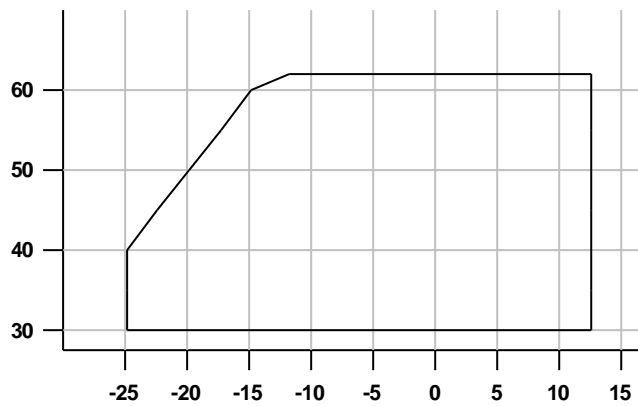


50Hz

D2DB-750

R22



Minimum evaporating temp. with:
 ——— 25°C Suction Gas Return

Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond °C	Capacity kW									
	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	8.47	10.85	13.60	16.80	20.50	24.80	29.70	31.90	35.40	38.50
35	7.89	10.15	12.80	15.85	19.45	23.50	28.20	30.30	33.70	36.70
40	7.31	9.47	12.00	14.95	18.35	22.20	26.70	28.70	31.90	34.80
45		8.81	11.20	14.00	17.25	21.00	25.20	27.10	30.10	32.80
50		8.16	10.45	13.10	16.15	19.70	23.70	25.50	28.40	30.90
55			9.69	12.20	15.10	18.40	22.20	23.90	26.60	29.00
60			8.95	11.30	14.00	17.15	20.70	22.30	24.80	27.00
62				10.95	13.60	16.65	20.10	21.60	24.10	26.30
	Power Input kW									
	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	3.56	3.89	4.18	4.41	4.57	4.65	4.61	4.57	4.46	4.33
35	3.73	4.12	4.47	4.77	5.01	5.16	5.22	5.22	5.17	5.10
40	3.88	4.33	4.74	5.11	5.42	5.66	5.81	5.84	5.86	5.84
45		4.52	4.99	5.43	5.81	6.13	6.37	6.44	6.52	6.55
50		4.70	5.23	5.73	6.18	6.58	6.91	7.01	7.15	7.23
55			5.46	6.02	6.54	7.01	7.42	7.56	7.75	7.89
60			5.68	6.30	6.88	7.43	7.92	8.09	8.34	8.52
62				6.41	7.02	7.59	8.11	8.30	8.56	8.76
	Current 400V, A									
	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	7.94	8.38	8.78	9.10	9.32	9.42	9.37	9.31	9.16	8.98
35	8.16	8.69	9.17	9.59	9.93	10.15	10.24	10.23	10.16	10.06
40	8.36	8.97	9.55	10.07	10.51	10.86	11.08	11.12	11.15	11.12
45		9.24	9.90	10.52	11.08	11.54	11.89	12.00	12.11	12.16
50		9.50	10.24	10.96	11.62	12.20	12.68	12.84	13.04	13.16
55			10.57	11.38	12.14	12.84	13.45	13.66	13.94	14.14
60			10.89	11.79	12.65	13.46	14.19	14.45	14.82	15.09
62				11.95	12.85	13.70	14.48	14.76	15.16	15.46
	Mass Flow g/s									
	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	45.00	57.70	72.70	90.50	111.00	135.50	164.00	176.00	197.00	215.00
35	43.30	56.00	70.90	88.50	109.00	133.00	161.00	173.00	194.00	212.00
40	41.70	54.20	69.00	86.50	107.00	130.50	158.00	171.00	191.00	209.00
45		52.40	67.10	84.50	104.50	128.00	156.00	168.00	188.00	206.00
50		50.60	65.10	82.00	102.00	125.50	153.00	165.00	185.00	202.00
55			63.20	80.00	100.00	123.00	149.50	162.00	181.00	199.00
60			61.30	78.00	97.50	120.00	147.00	159.00	178.00	195.00
62				77.00	96.50	119.00	145.50	157.00	177.00	194.00

DWM Copeland - Compressor - Refrigeration - Discus

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders	2
Displacement @ 50 Hz, cu.m/h	28
Bore/Stroke, mm	66.7/46.1
Length/Width, mm	590/330
Height, mm	470
Net Weight, kg	136
Gross Weight, kg	145
Rotalock Discharge, inch	1 1/8
Suction, inch	1 3/8
Oil Quantity, l	2.3
Frequency Range, Hz	25 - 60
Base mounting (hole dia), mm	295 x 279 (14.0)
Sound Pressure @ 1m, dBA	65
High Side PS, bar(g)	28
Low Side PS, bar(g)	22.5

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

Maximum Operating Current, A	15.6
Locked Rotor Current, A	70
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

ACCESSORIES OPTIONAL

Additional Cooling	70W Vertical Air Flow Fan
Crankcase Heater	70W 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 (NRV)	For unloaded start operation

MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380-420 V/3~/50H	400	AWM	YY/Y	Y	1.00
220-240 V/3~/50H	230	EWL	Y/DELTA	DELTA	1.73
380-420 V/3~/50H	400	EWL		Y	1.00
380-420 V/3~/50H	400	EWM	Y/DELTA	DELTA	1.00
500-550 V/3~/50H	525	EWY	Y/DELTA	DELTA	0.76
220-240 V/3~/50H	230	AWR	YY/Y	Y	1.73
500-550 V/3~/50H	525	AWY	YY/Y	Y	0.76
500-550 V/3~/50H	525	TWY		DELTA	0.76
220-240 V/3~/60H	230	EWK	Y/DELTA	DELTA	2.09
380-420 V/3~/60H	380	EWK		Y	1.26
440-480 V/3~/60H	460	EWD	Y/DELTA	DELTA	1.00
380 V/3~/60Hz	380	AWX	YY/Y	Y	1.26
440-480 V/3~/60H	460	AWD	YY/Y	Y	1.00

Model: D2DB-750
 Suction Return Temperature 20.0°C

Refrigerant: R22
 Liquid subcooling 0.0K

S.I.
 50Hz

	Evaporating Temperature °C									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
	Capacity kW									
30.0	8.47	10.85	13.60	16.80	20.50	24.80	29.70	31.90	35.40	38.50
35.0	7.89	10.15	12.80	15.85	19.45	23.50	28.20	30.30	33.70	36.70
40.0	7.31	9.47	12.00	14.95	18.35	22.20	26.70	28.70	31.90	34.80
45.0		8.81	11.20	14.00	17.25	21.00	25.20	27.10	30.10	32.80
50.0		8.16	10.45	13.10	16.15	19.70	23.70	25.50	28.40	30.90
55.0			9.69	12.20	15.10	18.40	22.20	23.90	26.60	29.00
60.0			8.95	11.30	14.00	17.15	20.70	22.30	24.80	27.00
62.0				10.95	13.60	16.65	20.10	21.60	24.10	26.30

	Power Input kW									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
30.0	3.56	3.89	4.18	4.41	4.57	4.65	4.61	4.57	4.46	4.33
35.0	3.73	4.12	4.47	4.77	5.01	5.16	5.22	5.22	5.17	5.10
40.0	3.88	4.33	4.74	5.11	5.42	5.66	5.81	5.84	5.86	5.84
45.0		4.52	4.99	5.43	5.81	6.13	6.37	6.44	6.52	6.55
50.0		4.70	5.23	5.73	6.18	6.58	6.91	7.01	7.15	7.23
55.0			5.46	6.02	6.54	7.01	7.42	7.56	7.75	7.89
60.0			5.68	6.30	6.88	7.43	7.92	8.09	8.34	8.52
62.0				6.41	7.02	7.59	8.11	8.30	8.56	8.76

	COP									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
30.0	2.38	2.78	3.25	3.81	4.49	5.34	6.45	6.99	7.94	8.91
35.0	2.12	2.46	2.86	3.33	3.88	4.56	5.41	5.81	6.51	7.19
40.0	1.88	2.19	2.53	2.93	3.38	3.93	4.60	4.92	5.45	5.95
45.0		1.95	2.25	2.58	2.97	3.42	3.96	4.21	4.62	5.01
50.0		1.74	2.00	2.29	2.61	2.99	3.44	3.64	3.97	4.27
55.0			1.77	2.03	2.31	2.63	2.99	3.16	3.43	3.67
60.0			1.58	1.80	2.04	2.31	2.62	2.75	2.97	3.17
62.0				1.71	1.94	2.19	2.48	2.61	2.81	3.00

	Mass Flow g/s									
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
30.0	45.00	57.70	72.70	90.50	111.00	135.50	164.00	176.00	197.00	215.00
35.0	43.30	56.00	70.90	88.50	109.00	133.00	161.00	173.00	194.00	212.00
40.0	41.70	54.20	69.00	86.50	107.00	130.50	158.00	171.00	191.00	209.00
45.0		52.40	67.10	84.50	104.50	128.00	156.00	168.00	188.00	206.00
50.0		50.60	65.10	82.00	102.00	125.50	153.00	165.00	185.00	202.00
55.0			63.20	80.00	100.00	123.00	149.50	162.00	181.00	199.00
60.0			61.30	78.00	97.50	120.00	147.00	159.00	178.00	195.00
62.0				77.00	96.50	119.00	145.50	157.00	177.00	194.00

Model: D2DB-750

Refrigerant: R22

	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
	Heat Rejection kW									
30.0	11.85	14.55	17.55	21.00	24.90	29.20	34.10	36.30	39.60	42.70
35.0	11.45	14.05	17.05	20.40	24.20	28.40	33.20	35.30	38.60	41.50
40.0	11.00	13.60	16.50	19.80	23.50	27.60	32.30	34.30	37.50	40.30
45.0		13.10	15.95	19.15	22.80	26.80	31.30	33.20	36.30	39.10
50.0		12.60	15.40	18.55	22.00	25.90	30.30	32.20	35.10	37.80
55.0			14.85	17.90	21.30	25.10	29.30	31.10	33.90	36.50
60.0			14.35	17.30	20.60	24.20	28.20	30.00	32.70	35.10
62.0				17.05	20.30	23.90	27.80	29.50	32.20	34.60

Copeland Selection Software

REFRIGERANT R22

Operating Conditions:

Evaporating Temperature: -10.0°C
 Condensing Temperature: 45.0°C
 Liquid subcooling: 0.0K
 Suction Return Temperature: 20.0°C

Required Capacity: 20.0 kW
 Compressor Selected: D2DB-750

PERFORMANCE AT SPECIFIED OPERATING POINT D2DB-750 Data at 50 Hz

Capacity kW	14.00
Power Input kW	5.43
COP	2.58
Mass Flow g/s	84.50
Heat Rejection kW	19.15

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders 2	Bore/Stroke, mm 66.7/46.1
Length/Width, mm 590/330	Height, mm 470
Net Weight, kg 136	Gross Weight, kg 145
Suction, inch 1 3/8	Oil Quantity, l 2.3
Frequency Range, Hz 25 - 60	High Side PS, bar(g) 28
Low Side PS, bar(g) 22.5	
Displacement @ 50 Hz, cu.m/h 28	
Rotalock Discharge, inch 1 1/8	
Base mounting (hole dia), mm 295 x 279 (14.0)	
Sound Pressure @ 1m, dBA 65	

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

Locked Rotor Current, A 70
 Maximum Operating Current, A 15.6
 Default Enclosure Class IP 54 (IEC 34)

ACCESSORIES INCLUDED

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

ACCESSORIES OPTIONAL

Additional Cooling
Crankcase Heater
Enclosure Class
Oil Pressure Switch
Unloaded start
Deep Oil Sump
Adapter Kit
Check Valve (NRV)

70W Vertical Air Flow Fan
70W Internal
IP 56
OPS2 Electronic Switch
Available
Mounted
For Parallel Operation
For unloaded start operation