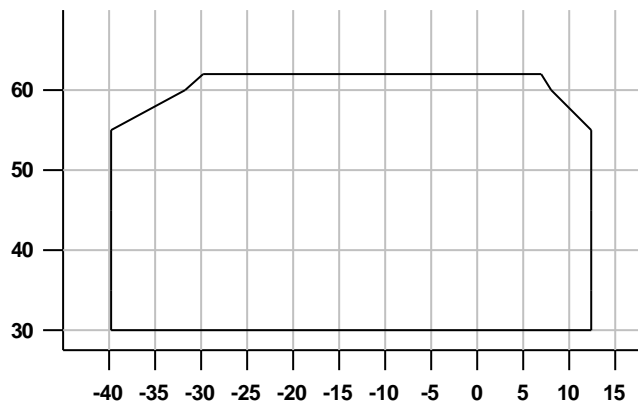


50Hz

DLF-301

R22



Minimum evaporating temp. with:

———— 25°C Suction Gas Return + Fan

Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond °C	Capacity kW												
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	1.39	1.97	2.74	3.70	4.85	6.20	7.77	9.55	11.55	13.75	14.75	16.25	17.55
35	1.22	1.76	2.49	3.40	4.49	5.77	7.26	8.94	10.85	12.95	13.85	15.30	16.55
40	1.06	1.57	2.25	3.10	4.14	5.35	6.75	8.35	10.15	12.15	13.05	14.40	15.60
45	0.91	1.38	2.02	2.82	3.80	4.94	6.27	7.78	9.48	11.40	12.20	13.50	14.65
50	0.77	1.21	1.80	2.56	3.47	4.55	5.79	7.22	8.83	10.60	11.40	12.60	13.70
55	0.63	1.05	1.60	2.30	3.16	4.16	5.34	6.67	8.19	9.88	10.60	11.75	12.75
60			1.41	2.06	2.86	3.80	4.89	6.15	7.56	9.15	9.84		
62			1.34	1.97	2.74	3.66	4.72	5.94	7.32	8.87	9.53		
	Power Input kW												
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	1.23	1.43	1.65	1.85	2.05	2.23	2.37	2.46	2.51	2.49	2.46	2.40	2.32
35	1.21	1.44	1.67	1.90	2.13	2.34	2.51	2.65	2.74	2.76	2.76	2.72	2.67
40	1.19	1.43	1.69	1.94	2.20	2.43	2.64	2.82	2.95	3.02	3.03	3.03	3.00
45	1.17	1.42	1.69	1.97	2.25	2.52	2.76	2.97	3.14	3.26	3.29	3.31	3.31
50	1.13	1.40	1.69	1.99	2.30	2.59	2.86	3.11	3.32	3.48	3.53	3.58	3.60
55	1.10	1.38	1.69	2.01	2.33	2.65	2.96	3.24	3.48	3.68	3.75	3.83	3.88
60			1.67	2.01	2.36	2.71	3.04	3.35	3.63	3.87	3.95		
62			1.67	2.02	2.37	2.72	3.07	3.39	3.69	3.94	4.03		
	Current 400V, A												
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	3.75	3.92	4.12	4.32	4.53	4.71	4.87	4.98	5.03	5.00	4.96	4.88	4.78
35	3.75	3.93	4.14	4.37	4.60	4.83	5.02	5.18	5.29	5.32	5.31	5.27	5.21
40	3.74	3.93	4.15	4.41	4.67	4.93	5.17	5.38	5.54	5.63	5.65	5.65	5.63
45	3.72	3.92	4.16	4.44	4.73	5.03	5.31	5.56	5.78	5.94	5.98	6.02	6.04
50	3.69	3.90	4.16	4.46	4.78	5.11	5.44	5.74	6.01	6.23	6.30	6.39	6.44
55	3.66	3.88	4.15	4.48	4.83	5.19	5.56	5.91	6.24	6.52	6.62	6.74	6.83
60			4.14	4.48	4.86	5.26	5.67	6.07	6.45	6.80	6.92		
62			4.13	4.48	4.87	5.29	5.71	6.14	6.54	6.91	7.04		
	Mass Flow g/s												
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	7.30	10.40	14.50	19.60	25.80	33.20	41.80	51.70	62.90	75.50	81.50	90.00	98.00
35	6.70	9.70	13.60	18.70	24.80	32.00	40.40	50.20	61.30	73.90	79.50	88.00	96.00
40	6.00	8.90	12.80	17.70	23.70	30.80	39.10	48.60	59.60	72.00	77.50	86.00	94.00
45	5.30	8.20	12.00	16.70	22.60	29.60	37.70	47.10	57.90	70.20	75.50	84.00	91.50
50	4.70	7.40	11.10	15.80	21.50	28.40	36.40	45.60	56.20	68.40	73.70	82.00	89.50
55	4.10	6.70	10.30	14.90	20.50	27.20	35.00	44.10	54.60	66.60	71.80	80.00	87.50
60			9.50	14.00	19.50	26.00	33.70	42.70	53.00	64.90	70.00		
62			9.20	13.60	19.10	25.60	33.20	42.10	52.40	64.20	69.40		

50Hz

DLF-301

R22

DWM Copeland - Compressor - Refrigeration - Standard**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	2
Displacement @ 50 Hz, cu.m/h	12.9
Bore/Stroke, mm	50.8/36.5
Length/Width, mm	460/330
Height, mm	385
Net Weight, kg	80
Gross Weight, kg	86
Suction, inch	7/8
Discharge, inch	5/8
Oil Quantity, l	2
Frequency Range, Hz	25 - 60
Base mounting (hole dia), mm	295 x 279 (14.0)
Sound Pressure @ 1m, dBA	51
High Side PS, bar(g)	28
Low Side PS, bar(g)	22.5

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

Maximum Operating Current, A	7.2
Locked Rotor Current, A	53
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Mounting Springs	4
------------------	---

ACCESSORIES OPTIONAL

Additional Cooling	1 or 2 ways water Coil
Additional Cooling	70W Vertical Air Flow Fan
Additional Cooling	25W Horizontal Air Flow Fan
Crankcase Heater	70W Internal
Adapter Kit	For Parallel Operation

MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380-420 V/3~/50H	400	EWL		Y	1.00
220-240 V/3~/50H	230	EWL	Y/DELTA	DELTA	1.73
380-420 V/3~/50H	400	EWM	Y/DELTA	DELTA	1.00
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

Model: DLF-301
 Suction Return Temperature 20.0°C

Refrigerant: R22
 Liquid subcooling 0.0K

S.I.
 50Hz

	Evaporating Temperature °C												
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
	Capacity kW												
30.0	*1.39	*1.97	*2.74	*3.70	*4.85	*6.20	*7.77	*9.55	*11.55	*13.75	*14.75	*16.25	*17.55
35.0	*1.22	*1.76	*2.49	*3.40	*4.49	*5.77	*7.26	*8.94	*10.85	*12.95	*13.85	*15.30	*16.55
40.0	*1.06	*1.57	*2.25	*3.10	*4.14	*5.35	*6.75	*8.35	*10.15	*12.15	*13.05	*14.40	*15.60
45.0	*0.91	*1.38	*2.02	*2.82	*3.80	*4.94	*6.27	*7.78	*9.48	*11.40	*12.20	*13.50	*14.65
50.0	*0.77	*1.21	*1.80	*2.56	*3.47	*4.55	*5.79	*7.22	*8.83	*10.60	*11.40	*12.60	*13.70
55.0	*0.63	*1.05	*1.60	*2.30	*3.16	*4.16	*5.34	*6.67	*8.19	*9.88	*10.60	*11.75	*12.75
60.0			*1.41	*2.06	*2.86	*3.80	*4.89	*6.15	*7.56	*9.15	*9.84		
62.0			*1.34	*1.97	*2.74	*3.66	*4.72	*5.94	*7.32	*8.87	*9.53		

	Power Input kW												
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
30.0	*1.23	*1.43	*1.65	*1.85	*2.05	*2.23	*2.37	*2.46	*2.51	*2.49	*2.46	*2.40	*2.32
35.0	*1.21	*1.44	*1.67	*1.90	*2.13	*2.34	*2.51	*2.65	*2.74	*2.76	*2.76	*2.72	*2.67
40.0	*1.19	*1.43	*1.69	*1.94	*2.20	*2.43	*2.64	*2.82	*2.95	*3.02	*3.03	*3.03	*3.00
45.0	*1.17	*1.42	*1.69	*1.97	*2.25	*2.52	*2.76	*2.97	*3.14	*3.26	*3.29	*3.31	*3.31
50.0	*1.13	*1.40	*1.69	*1.99	*2.30	*2.59	*2.86	*3.11	*3.32	*3.48	*3.53	*3.58	*3.60
55.0	*1.10	*1.38	*1.69	*2.01	*2.33	*2.65	*2.96	*3.24	*3.48	*3.68	*3.75	*3.83	*3.88
60.0			*1.67	*2.01	*2.36	*2.71	*3.04	*3.35	*3.63	*3.87	*3.95		
62.0			*1.67	*2.02	*2.37	*2.72	*3.07	*3.39	*3.69	*3.94	*4.03		

	COP												
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
30.0	*1.13	*1.37	*1.66	*1.99	*2.36	*2.79	*3.28	*3.88	*4.60	*5.53	*5.98	*6.77	*7.56
35.0	*1.00	*1.23	*1.49	*1.78	*2.11	*2.47	*2.89	*3.38	*3.96	*4.69	*5.03	*5.62	*6.19
40.0	*0.89	*1.10	*1.33	*1.60	*1.88	*2.20	*2.56	*2.97	*3.45	*4.03	*4.30	*4.75	*5.19
45.0	*0.78	*0.97	*1.19	*1.43	*1.69	*1.96	*2.27	*2.62	*3.02	*3.50	*3.71	*4.07	*4.41
50.0	*0.67	*0.86	*1.07	*1.28	*1.51	*1.76	*2.02	*2.32	*2.66	*3.05	*3.23	*3.53	*3.80
55.0	*0.57	*0.76	*0.95	*1.15	*1.35	*1.57	*1.80	*2.06	*2.35	*2.68	*2.83	*3.07	*3.29
60.0			*0.84	*1.02	*1.21	*1.40	*1.61	*1.83	*2.08	*2.36	*2.49		
62.0			*0.80	*0.98	*1.16	*1.34	*1.54	*1.75	*1.98	*2.25	*2.36		

	Mass Flow g/s												
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
30.0	*7.30	*10.40	*14.50	*19.60	*25.80	*33.20	*41.80	*51.70	*62.90	*75.50	*81.50	*90.00	*98.00
35.0	*6.70	*9.70	*13.60	*18.70	*24.80	*32.00	*40.40	*50.20	*61.30	*73.90	*79.50	*88.00	*96.00
40.0	*6.00	*8.90	*12.80	*17.70	*23.70	*30.80	*39.10	*48.60	*59.60	*72.00	*77.50	*86.00	*94.00
45.0	*5.30	*8.20	*12.00	*16.70	*22.60	*29.60	*37.70	*47.10	*57.90	*70.20	*75.50	*84.00	*91.50
50.0	*4.70	*7.40	*11.10	*15.80	*21.50	*28.40	*36.40	*45.60	*56.20	*68.40	*73.70	*82.00	*89.50
55.0	*4.10	*6.70	*10.30	*14.90	*20.50	*27.20	*35.00	*44.10	*54.60	*66.60	*71.80	*80.00	*87.50
60.0			*9.50	*14.00	*19.50	*26.00	*33.70	*42.70	*53.00	*64.90	*70.00		
62.0			*9.20	*13.60	*19.10	*25.60	*33.20	*42.10	*52.40	*64.20	*69.40		

Model: DLF-301

Refrigerant: R22

	-40.0	-35.0	-30.0	-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	*1.97	*2.70	*3.64	*4.77	*6.08	*7.56	*9.22	*11.05	*13.05	*15.20	*16.10	*17.55	*18.75
35.0	*1.78	*2.49	*3.40	*4.50	*5.77	*7.21	*8.82	*10.60	*12.55	*14.60	*15.50	*16.85	*18.05
40.0	*1.59	*2.28	*3.16	*4.22	*5.46	*6.86	*8.42	*10.15	*12.00	*14.05	*14.90	*16.20	*17.35
45.0	*1.40	*2.07	*2.93	*3.95	*5.15	*6.50	*8.01	*9.68	*11.50	*13.45	*14.25	*15.55	*16.65
50.0	*1.22	*1.87	*2.69	*3.69	*4.84	*6.15	*7.61	*9.22	*10.95	*12.85	*13.65	*14.90	*15.95
55.0	*1.05	*1.67	*2.47	*3.43	*4.54	*5.81	*7.21	*8.76	*10.45	*12.25	*13.05	*14.20	*15.25
60.0			*2.25	*3.18	*4.25	*5.47	*6.82	*8.31	*9.93	*11.70	*12.40		
62.0			*2.17	*3.08	*4.14	*5.34	*6.67	*8.14	*9.73	*11.45	*12.15		

[* . Please consult application envelope.]

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: DLF-301

PERFORMANCE AT SPECIFIED OPERATING POINT **DLF-301 Data at 50 Hz**

Capacity kW	6.27
Power Input kW	2.76
COP	2.27
Mass Flow g/s	37.70
Heat Rejection kW	8.01

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Number of cylinders 2	Bore/Stroke, mm 50.8/36.5
Length/Width, mm 460/330	Height, mm 385
Net Weight, kg 80	Gross Weight, kg 86
Suction, inch 7/8	Discharge, inch 5/8
Oil Quantity, l 2	Frequency Range, Hz 25 - 60
High Side PS, bar(g) 28	Low Side PS, bar(g) 22.5
Displacement @ 50 Hz, cu.m/h 12.9	
Base mounting (hole dia), mm 295 x 279 (14.0)	
Sound Pressure @ 1m, dBA 51	

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

Locked Rotor Current, A 53
 Maximum Operating Current, A 7.2
 Default Enclosure Class IP 54 (IEC 34)

ACCESSORIES INCLUDED

Mounting Springs	4
------------------	---

ACCESSORIES OPTIONAL

Additional Cooling
Additional Cooling
Additional Cooling
Crankcase Heater
Adapter Kit

1 or 2 ways water Coil
70W Vertical Air Flow Fan
25W Horizontal Air Flow Fan
70W Internal
For Parallel Operation