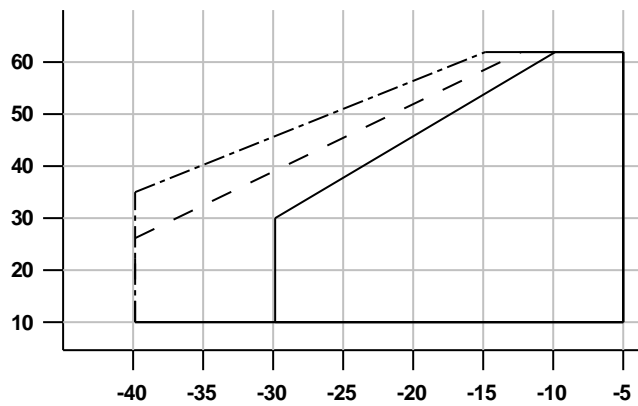


50Hz

D2SK-650

R22



Minimum evaporating temp. with:  
 ——— 25°C Suction Gas Return  
 - - - 20K Suction Superheat  
 - . - . 20K Suction Superheat + 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
10			9.39	11.90	14.90	18.40	22.50	27.20
20			8.24	10.60	13.35	16.60	20.40	24.70
30			7.09	9.25	11.80	14.75	18.25	22.20
40					10.25	12.95	16.10	19.75
45					9.48	12.05	15.05	18.50
50						11.15	14.00	17.30
55							12.95	16.05
60							11.95	14.85
62							11.50	14.35
	Power Input kW							
	-40	-35	-30	-25	-20	-15	-10	-5
10			3.48	3.68	3.78	3.73	3.52	3.10
20			3.88	4.24	4.54	4.74	4.81	4.72
30			4.11	4.61	5.08	5.49	5.82	6.03
40					5.47	6.08	6.64	7.13
45					5.65	6.34	7.01	7.62
50						6.58	7.35	8.09
55							7.69	8.54
60							8.04	9.00
62							8.18	9.18
	Current 400V, A							
	-40	-35	-30	-25	-20	-15	-10	-5
10			7.91	8.18	8.38	8.49	8.53	8.52
20			8.38	8.81	9.16	9.44	9.65	9.82
30			8.71	9.34	9.88	10.36	10.78	11.16
40					10.51	11.22	11.89	12.51
45					10.78	11.62	12.42	13.18
50						11.99	12.93	13.84
55							13.42	14.48
60							13.89	15.11
62							14.06	15.35
	Mass Flow g/s							
	-40	-35	-30	-25	-20	-15	-10	-5
10			43.90	55.90	70.20	87.00	107.00	130.00
20			40.90	52.70	66.70	83.50	102.50	125.50
30			37.50	49.10	62.90	79.00	98.00	120.50
40					58.70	74.50	93.00	115.00
45					56.50	72.10	90.50	112.00
50						69.60	88.00	109.00
55							85.00	106.00
60							82.00	103.00
62							81.00	102.00

**DWM Copeland - Compressor - Refrigeration - Standard**

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	2
Displacement @ 50 Hz, cu.m/h	31.2
Bore/Stroke, mm	65.1/54.0
Length/Width, mm	560/330
Height, mm	395
Net Weight, kg	92
Gross Weight, kg	97
Suction, inch	1 1/8
Discharge, inch	7/8
Oil Quantity, l	2.4
Frequency Range, Hz	25 - 60
Base mounting (hole dia), mm	295 x 279 (14.0)
High Side PS, bar(g)	28
Low Side PS, bar(g)	22.5

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

Maximum Operating Current, A	15.7
Locked Rotor Current, A	85.3
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
Oil Pressure Switch	OPS2 Electronic Switch
Unloaded start	Available
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	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
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
250-280 V/3~/60H	265	EWN	Y/DELTA	DELTA	1.73
440-480 V/3~/60H	460	EWN		Y	1.00
440-480 V/3~/60H	460	EWD	Y/DELTA	DELTA	1.00

Model: D2SK-650  
 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
	Capacity kW							
10.0			9.39	11.90	14.90	18.40	22.50	27.20
15.0			8.82	11.25	14.15	17.50	21.40	26.00
20.0			8.24	10.60	13.35	16.60	20.40	24.70
25.0			7.67	9.92	12.55	15.70	19.30	23.50
30.0			7.09	9.25	11.80	14.75	18.25	22.20
35.0				8.59	11.00	13.85	17.15	21.00
40.0					10.25	12.95	16.10	19.75
45.0					9.48	12.05	15.05	18.50
50.0						11.15	14.00	17.30
55.0							12.95	16.05
60.0							11.95	14.85
62.0							11.50	14.35

	Power Input kW							
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0			3.48	3.68	3.78	3.73	3.52	3.10
15.0			3.70	3.99	4.19	4.27	4.20	3.95
20.0			3.88	4.24	4.54	4.74	4.81	4.72
25.0			4.01	4.44	4.83	5.14	5.35	5.41
30.0			4.11	4.61	5.08	5.49	5.82	6.03
35.0				4.74	5.29	5.80	6.25	6.60
40.0					5.47	6.08	6.64	7.13
45.0					5.65	6.34	7.01	7.62
50.0						6.58	7.35	8.09
55.0							7.69	8.54
60.0							8.04	9.00
62.0							8.18	9.18

	COP							
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
10.0			2.70	3.23	3.94	4.93	6.40	8.80
15.0			2.38	2.82	3.37	4.10	5.10	6.58
20.0			2.13	2.49	2.94	3.50	4.24	5.24
25.0			1.91	2.23	2.60	3.05	3.61	4.34
30.0			1.73	2.01	2.32	2.69	3.13	3.69
35.0				1.81	2.08	2.39	2.75	3.18
40.0					1.87	2.13	2.42	2.77
45.0					1.68	1.90	2.15	2.43
50.0						1.70	1.90	2.14
55.0							1.68	1.88
60.0							1.48	1.65
62.0							1.41	1.57

Model: D2SK-650

Refrigerant: R22

	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
	Mass Flow g/s							
10.0			43.90	55.90	70.20	87.00	107.00	130.00
15.0			42.50	54.30	68.50	85.00	105.00	127.50
20.0			40.90	52.70	66.70	83.50	102.50	125.50
25.0			39.30	51.00	64.80	81.00	100.50	123.00
30.0			37.50	49.10	62.90	79.00	98.00	120.50
35.0				47.20	60.80	77.00	95.50	117.50
40.0					58.70	74.50	93.00	115.00
45.0					56.50	72.10	90.50	112.00
50.0						69.60	88.00	109.00
55.0							85.00	106.00
60.0							82.00	103.00
62.0							81.00	102.00

	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0
	Heat Rejection kW							
10.0			12.70	15.40	18.50	22.00	25.80	30.20
15.0			12.35	15.05	18.10	21.60	25.40	29.70
20.0			11.95	14.60	17.65	21.10	24.90	29.20
25.0			11.50	14.15	17.15	20.60	24.40	28.60
30.0			11.00	13.65	16.60	20.00	23.80	28.00
35.0				13.10	16.05	19.40	23.10	27.30
40.0					15.45	18.75	22.40	26.50
45.0					14.85	18.10	21.70	25.70
50.0						17.40	21.00	25.00
55.0							20.30	24.20
60.0							19.55	23.40
62.0							19.30	23.10

# 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: D2SK-650

### **PERFORMANCE AT SPECIFIED OPERATING POINT** **D2SK-650 Data at 50 Hz**

Capacity kW	15.05
Power Input kW	7.01
COP	2.15
Mass Flow g/s	90.50
Heat Rejection kW	21.70

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders 2	Bore/Stroke, mm 65.1/54.0
Length/Width, mm 560/330	Height, mm 395
Net Weight, kg 92	Gross Weight, kg 97
Suction, inch 1 1/8	Discharge, inch 7/8
Oil Quantity, l 2.4	Frequency Range, Hz 25 - 60
High Side PS, bar(g) 28	Low Side PS, bar(g) 22.5
Displacement @ 50 Hz, cu.m/h 31.2	
Base mounting (hole dia), mm 295 x 279 (14.0)	

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

Locked Rotor Current, A 85.3  
 Maximum Operating Current, A 15.7  
 Default Enclosure Class IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Pressure Switch	OPS2 Sensor
Mounting Springs	4

***ACCESSORIES OPTIONAL***

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

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