



Producer: **Copeland**  
 Line: **Discus**  
 Cooling capacity [kW]: **13.64**  
 Displacement [m<sup>3</sup>/h]: **28.0**  
 Refrigerant: **R22, R134a, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R513A**  
 Capacity control: **None, Step (option), Inverter (option)**  
 Power supply: **400V/3Ph/50Hz**

## Data

### Technical data

Displacement	[m <sup>3</sup> /h]	28.0
Cylinders quantity		2
Cylinder bore	[mm]	66.7
Cylinder stroke	[mm]	46.1
Oil charge	[l]	2.30
Oil type		POE RL32-3MAF
Type of lubrication		Oil pump
Net weight	[kg]	136.00
Gross weight	[kg]	145.00

### Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	16.1
Locked rotor amperage	[A]	82.0
Maximum motor frequency	[Hz]	60
Minimum motor frequency	[Hz]	25
Maximum suction pressure	[bar]	22.5
Maximum discharge pressure	[bar]	32.5

### Dimensions

Suction valve diameter	[inch]	1 3/8
Discharge connection thread diameter	[inch]	1 1/8
Length	[mm]	590
Height	[mm]	470
Width	[mm]	330

### Other

Approved refrigerants	R22, R134a, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R513A
Allowed oil types	POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC
Capacity control	None, Step (option), Inverter (option)
Protection rating	IP54 (IEC34)

## Performance

Nominal conditions: refrigerant: R404A, evaporation: -10°C (dew point), condensation: 45°C (dew point), superheating: 10K, subcooling: 0K

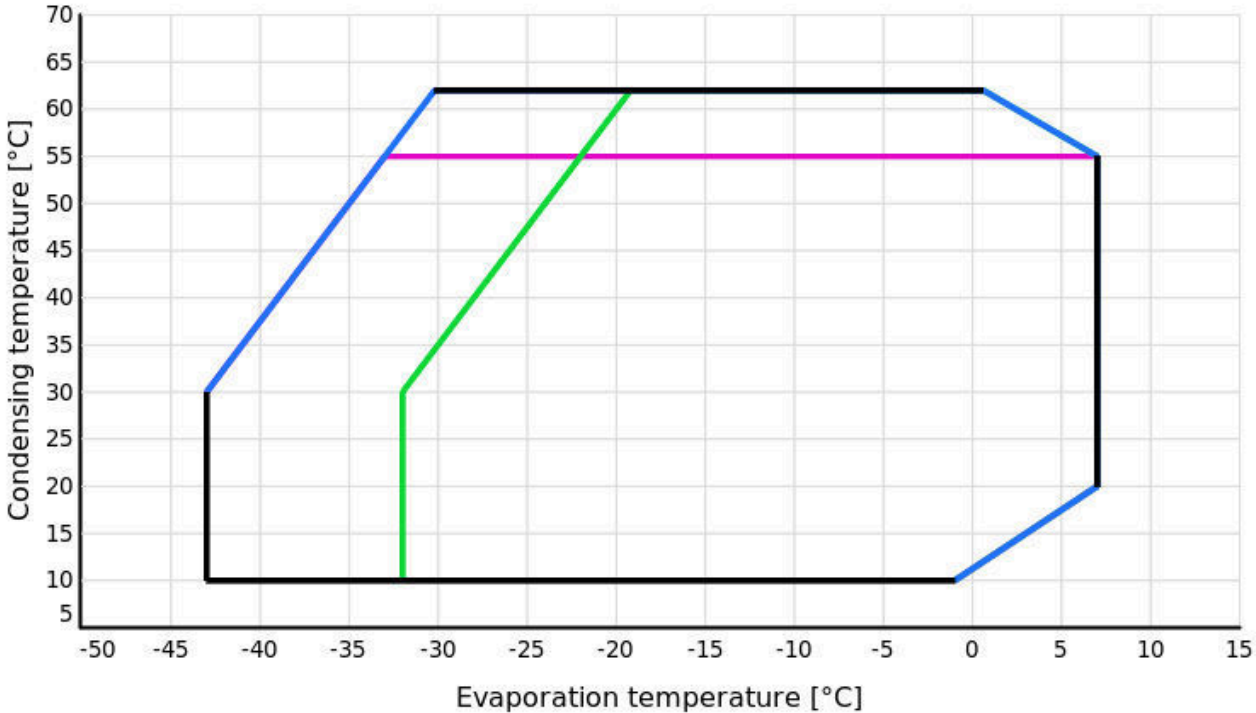
### Cooling capacity

		Evaporation temperature [°C]										
		-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
Condensation temperature [°C]	10	5.61	7.36	9.53	12.16	15.33	19.09	23.51	28.65			
	15	5.20	6.87	8.95	11.46	14.48	18.07	22.28	27.20	32.88		
	20	4.75	6.36	8.33	10.72	13.58	16.99	20.99	25.67	31.09	37.28	39.98
	25	4.29	5.82	7.68	9.93	12.63	15.85	19.64	24.08	29.22	35.13	37.71
	30	3.82	5.25	6.99	9.10	11.64	14.65	18.22	22.41	27.28	32.89	35.35
	35	3.34	4.67	6.29	8.24	10.60	13.41	16.75	20.67	25.26	30.57	32.91
	40		4.08	5.56	7.36	9.52	12.12	15.22	18.88	23.17	28.17	30.38
	45		3.50	4.83	6.45	8.42	10.79	<b>13.64</b>	17.03	21.02	25.71	27.79
	50		2.92	4.09	5.53	7.29	9.43	12.02	15.12	18.81	23.17	25.12
	55			3.36	4.61	6.15	8.04	10.36	13.17	16.55	20.57	22.39
	60			2.66	3.69	5.00	6.64	8.67	11.18	14.23		
	62			2.38	3.33	4.54	6.07	7.99	10.37	13.29		

### Power consumption

		Evaporation temperature [°C]										
		-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
Condensation temperature [°C]	10	2.59	2.90	3.18	3.40	3.54	3.55	3.41	3.10			
	15	2.68	3.03	3.38	3.67	3.90	4.03	4.02	3.85	3.50		
	20	2.76	3.15	3.54	3.90	4.22	4.44	4.56	4.53	4.32	3.92	3.70
	25	2.83	3.24	3.67	4.10	4.48	4.80	5.03	5.12	5.07	4.83	4.67
	30	2.90	3.33	3.79	4.26	4.71	5.11	5.44	5.65	5.73	5.64	5.55
	35	2.97	3.40	3.88	4.39	4.90	5.38	5.79	6.11	6.32	6.37	6.35
	40		3.47	3.96	4.50	5.06	5.60	6.09	6.52	6.84	7.02	7.06
	45		3.54	4.03	4.59	5.18	5.78	<b>6.35</b>	6.86	7.29	7.60	7.68
	50		3.61	4.10	4.67	5.29	5.93	6.56	7.15	7.67	8.10	8.24
	55			4.17	4.74	5.37	6.05	6.73	7.39	8.00	8.54	8.72
	60			4.24	4.80	5.44	6.14	6.87	7.59	8.28		
	62			4.27	4.82	5.47	6.17	6.92	7.66	8.38		

Application range



Legend

- Suction gas temperature: 20°C
- Suction gas temperature: 20°C, additional head cooling
- Suction gas temperature: 20°C, ASERCOM certified