



Producer: **Copeland**

Line: **Discus**

Model: **3DC-1000**

Cooling capacity [kW]: **18.94**

Displacement [m³/h]: **38.0**

Refrigerant: **R22**

Capacity control: **None, Step (option), Inverter (option)**

Power supply: **400V/3Ph/50Hz**

Data

Technical data

Displacement	[m ³ /h]	38.0
Cylinders quantity		3
Cylinder bore	[mm]	60.4
Cylinder stroke	[mm]	50.8
Oil charge	[l]	3.70
Oil type		Suniso 3GS
Type of lubrication		Oil pump
Net weight	[kg]	164.00
Gross weight	[kg]	175.00

Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	21.3
Locked rotor amperage	[A]	121.0
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]	680
Height	[mm]	480
Width	[mm]	370

Other

Approved refrigerants	R22
Allowed oil types	Suniso 3GS, TEXACO Capella WF 32, FUCHS Reniso KM
Capacity control	None, Step (option), Inverter (option)
Protection rating	IP54 (IEC34)

Performance

Nominal conditions: refrigerant: R22, evaporation: -10°C (dew point), condensation: 45°C (dew point), superheating: 10K, subcooling: 0°C

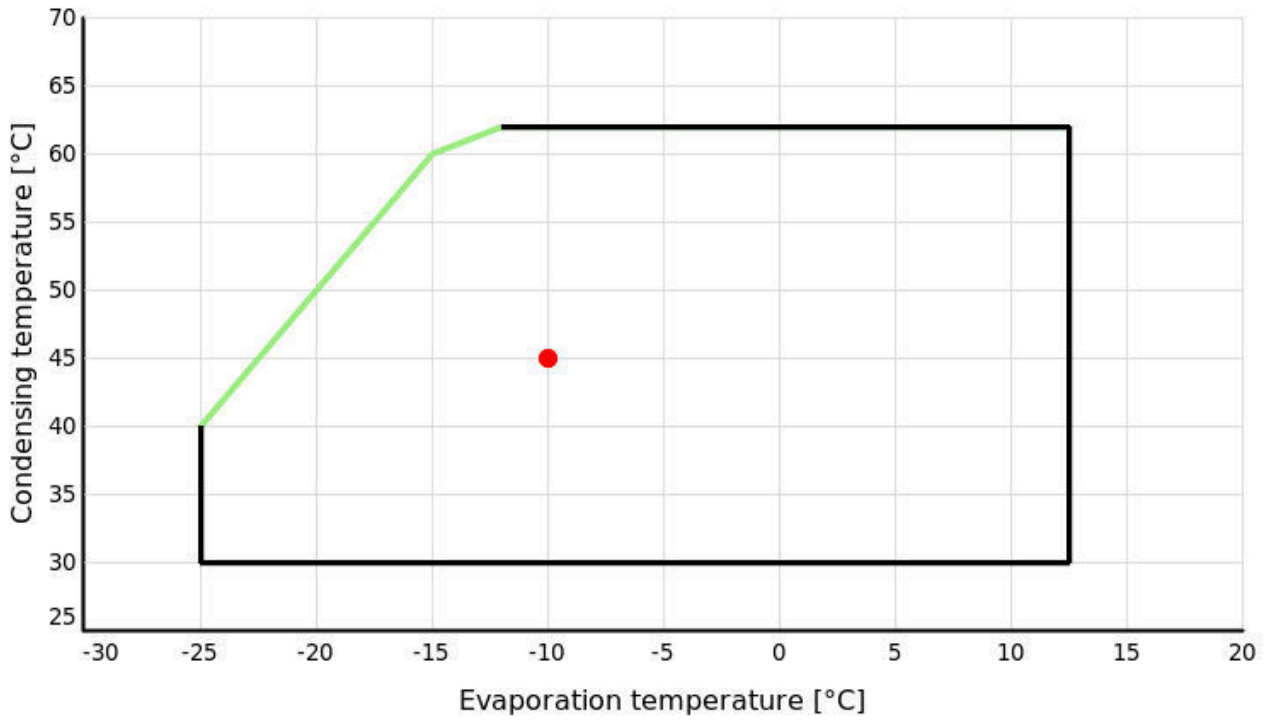
Cooling capacity

		Evaporation temperature [°C]									
		-25	-20	-15	-10	-5	0	5	7	10	12.5
Condensation temperature [°C]	30	11.32	14.78	18.78	23.42	28.78	34.92	41.91	44.96	49.81	54.12
	35	10.29	13.63	17.47	21.91	27.02	32.88	39.56	42.48	47.12	51.24
	40	9.29	12.50	16.18	20.41	25.28	30.85	37.22	40.00	44.43	48.37
	45		11.41	14.92	18.94	23.55	28.84	34.88	37.53	41.74	45.50
	50		10.38	13.70	17.50	21.86	26.86	32.58	35.08	39.08	42.65
	55			12.55	16.12	20.22	24.92	30.31	32.67	36.46	39.84
	60			11.47	14.81	18.64	23.04	28.09	30.32	33.88	37.07
	62				14.31	18.03	22.30	27.22	29.39	32.86	35.98


Power consumption

		Evaporation temperature [°C]									
		-25	-20	-15	-10	-5	0	5	7	10	12.5
Condensation temperature [°C]	30	4.92	5.38	5.76	6.06	6.24	6.28	6.17	6.08	5.89	5.67
	35	5.12	5.65	6.13	6.53	6.82	7.00	7.03	7.00	6.90	6.76
	40	5.30	5.91	6.47	6.97	7.37	7.67	7.84	7.86	7.85	7.80
	45		6.16	6.80	7.39	7.90	8.31	8.61	8.69	8.76	8.78
	50		6.40	7.11	7.79	8.40	8.92	9.34	9.48	9.64	9.73
	55			7.42	8.17	8.88	9.51	10.05	10.23	10.47	10.64
	60			7.73	8.56	9.35	10.08	10.73	10.97	11.29	11.52
	62				8.71	9.54	10.31	11.00	11.26	11.60	11.86

Application range



Legend

 Suction gas temperature: 25°C

Dimensions

