



Producer: **Copeland**

Line: **Discus**

Model: **2DD-50X**

Cooling capacity [kW]: **8.99**

Displacement [m³/h]: **19.3**

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 ³ /h]	19.3
Cylinders quantity		2
Cylinder bore	[mm]	63.6
Cylinder stroke	[mm]	35.0
Oil charge	[l]	2.30
Oil type		POE RL32-3MAF
Type of lubrication		Oil pump
Net weight	[kg]	132.00
Gross weight	[kg]	141.00

Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	10.3
Locked rotor amperage	[A]	55.0
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]	7/8
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: 0°C

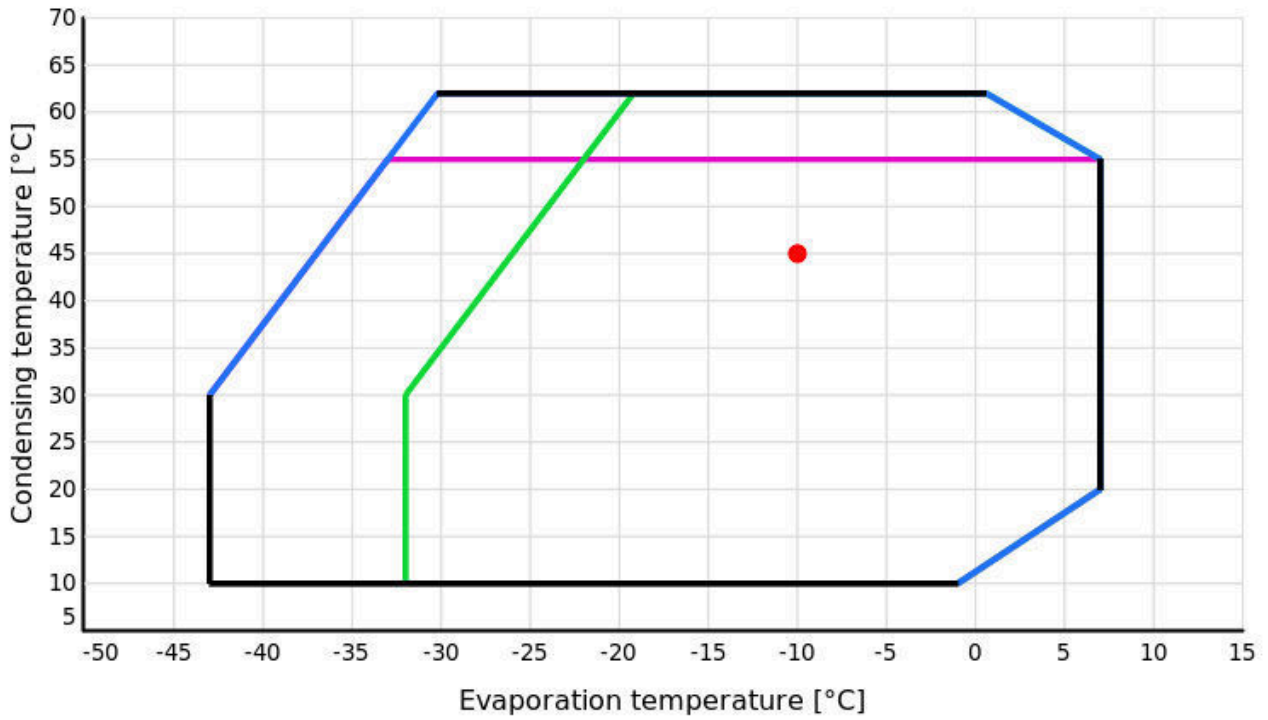
Cooling capacity

		Evaporation temperature [°C]											
		-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	
Condensation temperature [°C]	10	3.58	4.87	6.43	8.32	10.58	13.24	16.36	20.03				
	15	3.20	4.43	5.93	7.73	9.87	12.40	15.36	18.82	22.82			
	20	2.81	3.99	5.42	7.12	9.14	11.53	14.34	17.61	21.39	25.72	27.61	
	25	2.42	3.54	4.89	6.50	8.40	10.66	13.30	16.39	19.97	24.07	25.87	
	30	2.03	3.09	4.35	5.86	7.65	9.76	12.24	15.15	18.52	22.40	24.10	
	35	1.64	2.63	3.82	5.22	6.88	8.85	11.17	13.89	17.06	20.72	22.33	
	40		2.19	3.28	4.57	6.11	7.93	10.09	12.62	15.58	19.02	20.54	
	45		1.75	2.75	3.93	5.34	7.01	8.99	11.34	14.09	17.31	18.73	
	50		1.34	2.23	3.29	4.56	6.08	7.89	10.05	12.59	15.58	16.92	
	55			1.73	2.67	3.80	5.16	6.79	8.75	11.08	13.85	15.09	
	60			1.27	2.07	3.05	4.24	5.69	7.45	9.57			
	62			1.09	1.84	2.75	3.88	5.25	6.93	8.96			

Power consumption

		Evaporation temperature [°C]											
		-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	
Condensation temperature [°C]	10	1.74	1.93	2.09	2.21	2.28	2.29	2.22	2.06				
	15	1.79	2.01	2.21	2.37	2.49	2.55	2.54	2.44	2.25			
	20	1.82	2.07	2.31	2.52	2.68	2.80	2.85	2.81	2.69	2.46	2.34	
	25	1.83	2.12	2.39	2.64	2.86	3.03	3.13	3.17	3.11	2.96	2.87	
	30	1.83	2.15	2.46	2.75	3.02	3.24	3.40	3.50	3.52	3.44	3.38	
	35	1.82	2.16	2.51	2.84	3.15	3.43	3.65	3.81	3.90	3.90	3.87	
	40		2.15	2.54	2.92	3.27	3.60	3.88	4.11	4.27	4.34	4.34	
	45		2.13	2.55	2.97	3.37	3.75	4.09	4.38	4.61	4.76	4.80	
	50		2.08	2.54	3.00	3.45	3.88	4.28	4.64	4.93	5.16	5.22	
	55			2.51	3.01	3.51	3.99	4.45	4.87	5.23	5.53	5.63	
	60			2.45	3.00	3.54	4.08	4.60	5.08	5.51			
	62			2.43	2.99	3.55	4.11	4.65	5.15	5.61			

Application range



Legend

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

Dimensions

