



Producer: **Copeland**

Line: **Discus**

Model: **3DA-50X**

Cooling capacity [kW]: **15.11**

Displacement [m³/h]: **32.2**

Refrigerant: **R134a, R404A, R407A, R407F, R448A, R449A, R450A, R513A**

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

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

Data

Technical data

Displacement	[m ³ /h]	32.2
Cylinders quantity		3
Cylinder bore	[mm]	55.6
Cylinder stroke	[mm]	50.8
Oil charge	[l]	3.70
Oil type		POE RL32-3MAF
Type of lubrication		Oil pump
Net weight	[kg]	146.00
Gross weight	[kg]	157.00

Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	15.9
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]	655
Height	[mm]	480
Width	[mm]	370

Other

Approved refrigerants	R134a, R404A, R407A, 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

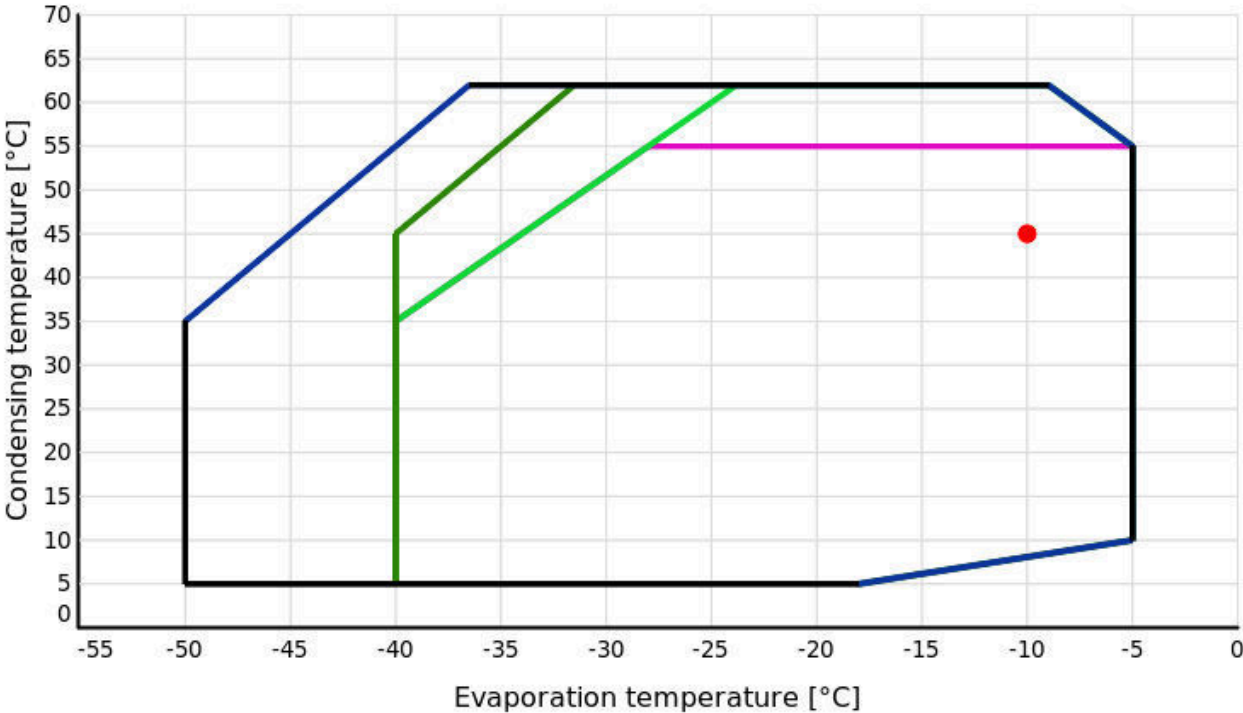
Cooling capacity

		Evaporation temperature [°C]										
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	
Condensation temperature [°C]	5	3.49	4.96	6.77	8.98	11.65	14.84	18.62				
	10	3.14	4.57	6.30	8.40	10.92	13.94	17.52	21.74	26.66	32.36	
	15	2.79	4.18	5.83	7.82	10.20	13.04	16.42	20.40	25.05	30.44	
	20	2.43	3.78	5.36	7.23	9.47	12.14	15.31	19.05	23.43	28.52	
	25	2.07	3.37	4.87	6.63	8.73	11.23	14.19	17.69	21.80	26.59	
	30	1.68	2.94	4.37	6.02	7.98	10.30	13.06	16.32	20.16	24.65	
	35	1.29	2.49	3.84	5.39	7.20	9.35	11.91	14.93	18.50	22.69	
	40		2.03	3.30	4.73	6.41	8.38	10.73	13.52	16.82	20.71	
	45		1.54	2.72	4.05	5.58	7.38	9.53	12.08	15.11	18.71	
	50			2.12	3.34	4.72	6.35	8.29	10.61	13.37	16.67	
	55			1.51	2.60	3.84	5.29	7.02	9.10	11.60	14.60	
	60				1.85	2.93	4.20	5.71	7.55	9.78		
	62				1.55	2.56	3.75	5.18	6.92	9.04		

Power consumption

		Evaporation temperature [°C]										
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	
Condensation temperature [°C]	5	2.11	2.46	2.78	3.06	3.28	3.42	3.49				
	10	2.17	2.56	2.93	3.25	3.53	3.75	3.89	3.94	3.90	3.74	
	15	2.20	2.64	3.06	3.44	3.78	4.06	4.27	4.40	4.45	4.38	
	20	2.22	2.70	3.17	3.60	4.00	4.35	4.64	4.86	4.98	5.01	
	25	2.21	2.73	3.25	3.75	4.21	4.63	4.99	5.29	5.50	5.62	
	30	2.17	2.74	3.31	3.86	4.39	4.88	5.32	5.70	6.00	6.22	
	35	2.09	2.71	3.34	3.95	4.54	5.11	5.62	6.08	6.47	6.79	
	40		2.65	3.33	4.00	4.66	5.30	5.89	6.44	6.92	7.33	
	45		2.54	3.28	4.01	4.74	5.45	6.12	6.75	7.33	7.83	
	50			3.18	3.98	4.78	5.56	6.31	7.03	7.70	8.30	
	55			3.03	3.90	4.76	5.62	6.46	7.27	8.03	8.73	
	60				3.76	4.70	5.64	6.56	7.45	8.31		
	62				3.69	4.66	5.63	6.58	7.51	8.41		

Application range



Legend

- Suction gas temperature: 20°C
- Suction gas temperature: 0°C
- Suction gas temperature: 0°C, additional head cooling
- Suction gas temperature: 20°C, ASERCOM certified

Dimensions

