



Producer: **Copeland**

Line: **Discus**

Model: **3DC-75X**

Cooling capacity [kW]: **18.34**

Displacement [m<sup>3</sup>/h]: **38.0**

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 <sup>3</sup> /h]	38.0
Cylinders quantity		3
Cylinder bore	[mm]	60.4
Cylinder stroke	[mm]	50.8
Oil charge	[l]	3.70
Oil type		POE RL32-3MAF
Type of lubrication		Oil pump
Net weight	[kg]	150.00
Gross weight	[kg]	161.00

### Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	18.3
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]	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

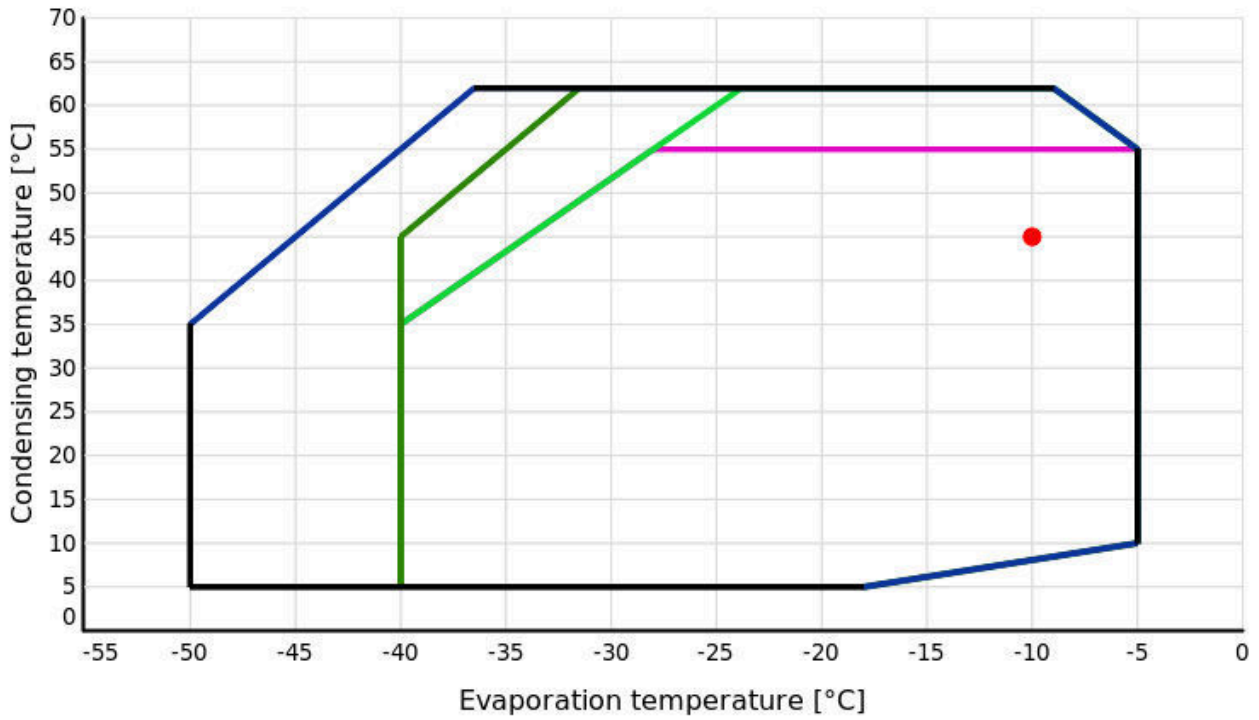
### Cooling capacity

		Evaporation temperature [°C]										
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	
Condensation temperature [°C]	5	4.31	6.09	8.27	10.92	14.09	17.85	22.28				
	10	3.86	5.57	7.66	10.18	13.19	16.76	20.97	25.87	31.54	38.04	
	15	3.46	5.10	7.08	9.47	12.32	15.69	19.67	24.32	29.70	35.88	
	20	3.10	4.65	6.52	8.77	11.45	14.63	18.39	22.77	27.87	33.73	
	25	2.75	4.21	5.97	8.08	10.59	13.57	17.09	21.22	26.03	31.57	
	30	2.40	3.78	5.42	7.38	9.72	12.50	15.79	19.65	24.17	29.39	
	35	2.04	3.32	4.85	6.66	8.82	11.40	14.45	18.05	22.27	27.17	
	40		2.84	4.24	5.90	7.89	10.26	13.08	16.41	20.34	24.92	
	45		2.33	3.60	5.10	6.91	9.07	11.65	14.71	<b>18.34</b>	22.60	
	50			2.90	4.25	5.87	7.81	10.15	12.95	16.28	20.21	
	55			2.16	3.34	4.76	6.49	8.58	11.10	14.12	17.73	
	60				2.37	3.59	5.09	6.93	9.16	11.88		
	62				1.98	3.11	4.51	6.24	8.36	10.95		

### Power consumption

		Evaporation temperature [°C]										
		-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	
Condensation temperature [°C]	5	2.56	2.98	3.35	3.68	3.95	4.13	4.21				
	10	2.62	3.07	3.50	3.88	4.21	4.47	4.63	4.69	4.63	4.42	
	15	2.68	3.17	3.65	4.09	4.48	4.81	5.06	5.21	5.25	5.16	
	20	2.73	3.27	3.79	4.29	4.76	5.16	5.49	5.74	5.88	5.89	
	25	2.77	3.35	3.92	4.48	5.01	5.50	5.91	6.25	6.49	6.62	
	30	2.78	3.40	4.03	4.65	5.25	5.81	6.31	6.75	7.09	7.34	
	35	2.75	3.41	4.10	4.78	5.45	6.09	6.69	7.22	7.67	8.02	
	40		3.38	4.12	4.87	5.61	6.33	7.02	7.65	8.20	8.67	
	45		3.30	4.09	4.91	5.72	6.53	7.30	8.03	<b>8.69</b>	9.28	
	50			4.00	4.88	5.77	6.66	7.52	8.35	9.12	9.83	
	55			3.84	4.78	5.75	6.72	7.67	8.60	9.49	10.31	
	60				4.60	5.64	6.70	7.75	8.78	9.77		
	62				4.50	5.57	6.66	7.75	8.83	9.86		

**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

