



Producer: **Copeland**

Line: **Discus**

Model: **3DS-150X**

Cooling capacity [kW]: **25.53**

Displacement [m<sup>3</sup>/h]: **49.9**

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]	49.9
Cylinders quantity		3
Cylinder bore	[mm]	61.9
Cylinder stroke	[mm]	63.5
Oil charge	[l]	3.70
Oil type		POE RL32-3MAF
Type of lubrication		Oil pump
Net weight	[kg]	166.00
Gross weight	[kg]	178.00

### Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	29.0
Locked rotor amperage	[A]	128.0
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 5/8
Discharge connection thread diameter	[inch]	1 1/8
Length	[mm]	710
Height	[mm]	490
Width	[mm]	370

### 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 (dew point): -10 °C, condensation (dew point): 45 °C, superheating: 10 K, subcooling: 0 °C

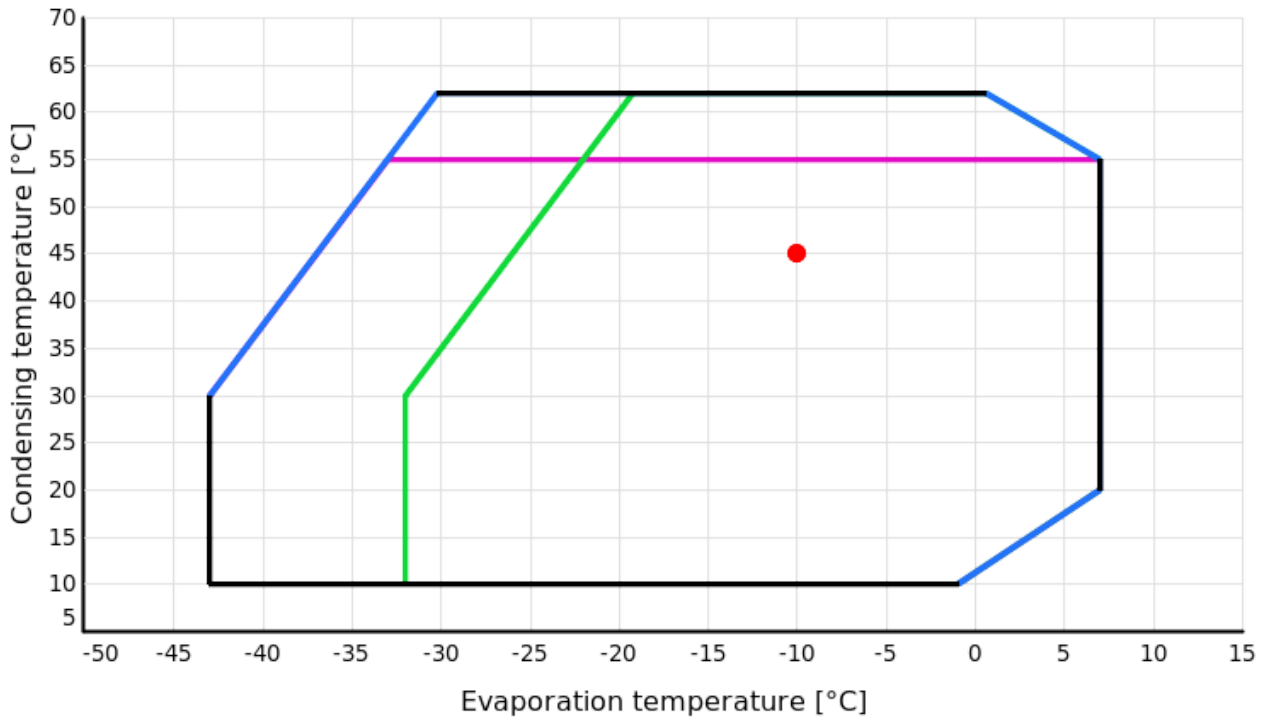
### Cooling capacity [kW]

		Evaporation temperature [°C]										
		-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
Condensation temperature [°C]	10	10.91	14.20	18.17	22.95	28.66	35.47	43.42	52.60			
	15	10.04	13.22	17.04	21.61	27.04	33.49	41.07	49.83	59.86		
	20	9.11	12.19	15.85	20.20	25.36	31.45	38.63	46.96	56.53	67.40	72.12
	25	8.13	11.11	14.61	18.74	23.62	29.38	36.13	44.01	53.10	63.47	67.98
	30	7.11	9.99	13.32	17.22	21.82	27.23	33.59	41.00	49.59	59.43	63.73
	35	6.06	8.82	11.98	15.64	19.95	25.02	30.98	37.93	46.01	55.32	59.40
	40		7.63	10.60	14.02	18.03	22.74	28.29	34.78	42.36	51.11	54.97
	45		6.42	9.18	12.36	16.06	20.41	25.53	31.56	38.62	46.82	50.46
	50		5.21	7.76	10.66	14.04	18.02	22.72	28.27	34.80	42.45	45.86
	55			6.33	8.94	11.99	15.58	19.84	24.90	30.91	38.00	41.18
	60			4.92	7.22	9.91	13.10	16.91	21.47	26.94		
	62			4.37	6.54	9.07	12.09	15.72	20.08	25.33		

### Power consumption [kW]

		Evaporation temperature [°C]										
		-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
Condensation temperature [°C]	10	4.66	5.15	5.58	5.92	6.13	6.17	6.01	5.61			
	15	4.85	5.43	5.96	6.41	6.73	6.90	6.88	6.63	6.11		
	20	5.01	5.69	6.32	6.89	7.33	7.64	7.75	7.65	7.30	6.65	6.31
	25	5.13	5.91	6.66	7.34	7.92	8.35	8.62	8.67	8.48	8.01	7.73
	30	5.21	6.09	6.95	7.76	8.47	9.04	9.46	9.67	9.65	9.35	9.15
	35	5.23	6.22	7.20	8.13	8.97	9.70	10.26	10.64	10.79	10.67	10.54
	40		6.28	7.38	8.45	9.43	10.30	11.03	11.57	11.89	11.96	11.91
	45		6.27	7.50	8.69	9.82	10.84	11.73	12.44	12.94	13.20	13.23
	50		6.17	7.52	8.86	10.13	11.31	12.37	13.25	13.94	14.39	14.50
	55			7.46	8.93	10.36	11.70	12.92	13.99	14.86	15.51	15.70
	60			7.28	8.91	10.49	11.99	13.39	14.64	15.70		
	62			7.18	8.86	10.51	12.08	13.55	14.87	16.01		

**Application range**



**Legend**

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

## Dimensions

