



Producer: **Danfoss**

Line: **SZ**

Model: **SZ090-4**

Cooling capacity [kW]: **11.44**

Displacement [m³/h]: **21.0**

Refrigerant: **R134a, R404A, R407C**

Capacity control: **None**

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

Data

Technical data

Displacement	[m ³ /h]	21.0
Swept volume	[cm ³]	120.50
Oil charge	[l]	3.25
Oil type		POE 160SZ
Internal free volume (suction)	[dm ³]	13.0
Internal free volume (discharge)	[dm ³]	1.1
Net weight	[kg]	65.00
Gross weight	[kg]	70.53

Electrical data

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	18.5
Maximum operating current	[A]	17.0
Locked rotor amperage	[A]	98.0
Revolutions per minute	[RPM]	2900
Motor resistance main	[Ω]	1.48

Limits

Maximum suction pressure	[bar]	25.0
Maximum discharge pressure	[bar]	34.3
Maximum suction temperature	[°C]	54.0
Minimum suction temperature	[°C]	-35.0
Maximum discharge temperature	[°C]	150.0
Minimal discharge temperature	[°C]	-35.0

Dimensions

Suction tube diameter ¹	[inch]	1 1/8
Discharge tube diameter ¹	[inch]	3/4
Diameter	[mm]	254
Height	[mm]	508
Oil equalization		3/8" Flare SAE

¹ For version with brazed connection type.

² For version with Rotolock connection type.

Other

Product codes	SZ090-4VI, SZ090-4VM
Approved refrigerants	R134a, R404A, R407C
Capacity control	None
Protection rating ³	IP54
Glass mounting	Threaded

Shipped equipment

Motor protection	Internal overload protector
Shipped mounting	Mounting kit with grommets, bolts, nuts, sleeves and washers

³ With cable gland.

Performance

Nominal conditions: refrigerant: R404A, evaporation: -10°C (dew point), condensation: 45°C (dew point), superheating: 10K, subcooling: 0°C

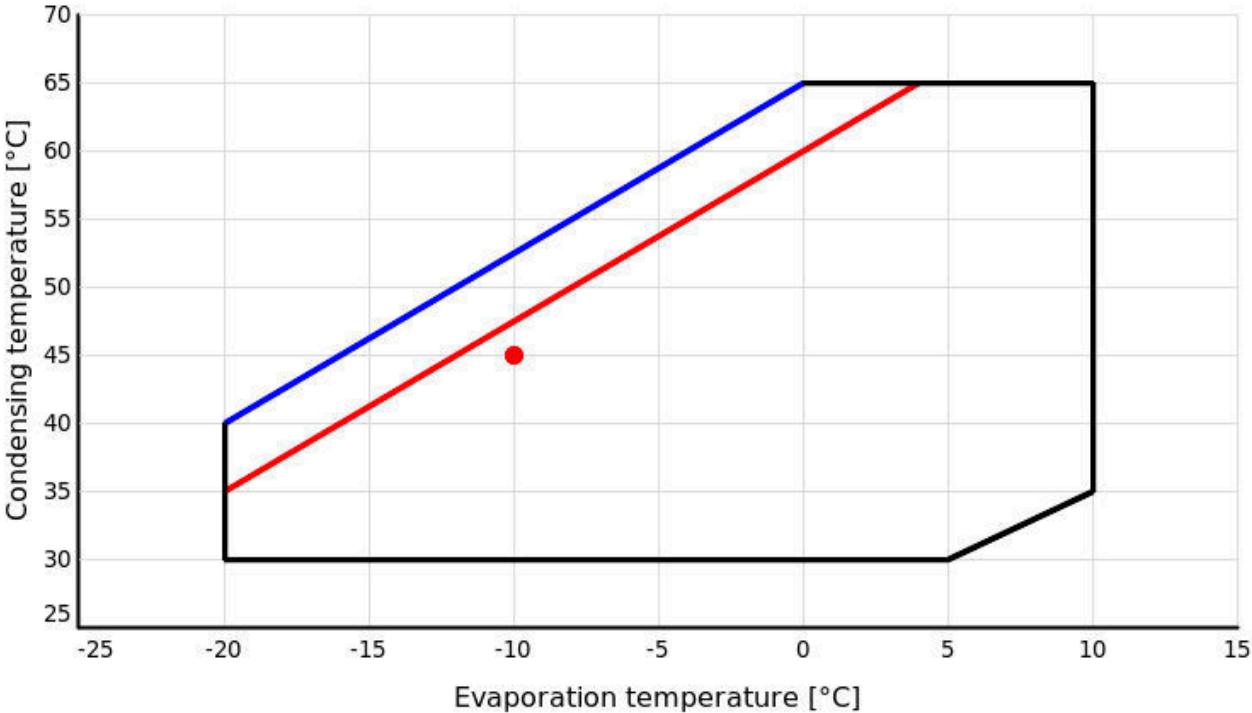
Cooling capacity

		Evaporation temperature [°C]						
		-20	-15	-10	-5	0	5	10
Condensation temperature [°C]	30	9.20	11.73	14.71	18.18	22.19	26.78	
	35	8.45	10.85	13.67	16.95	20.74	25.08	29.99
	40	7.68	9.93	12.58	15.66	19.22	23.28	27.90
	45		8.98	11.44	14.30	17.61	21.39	25.70
	50			10.23	12.87	15.91	19.40	23.39
	55				11.35	14.12	17.31	20.95
	60					12.22	15.09	18.39
	65					10.23	12.76	15.69

Power consumption

		Evaporation temperature [°C]						
		-20	-15	-10	-5	0	5	10
Condensation temperature [°C]	30	4.57	4.53	4.47	4.42	4.36	4.33	
	35	5.10	5.06	5.01	4.94	4.88	4.82	4.79
	40	5.68	5.65	5.60	5.53	5.46	5.39	5.33
	45		6.30	6.26	6.19	6.11	6.02	5.95
	50			6.99	6.92	6.84	6.75	6.65
	55				7.74	7.66	7.56	7.46
	60					8.57	8.47	8.36
	65					9.59	9.49	9.38

Application range



Legend

- Suction gas superheating: 11 K
- Suction gas superheating: 30 K

Dimensions

