



Producer: **Danfoss**

Line: **SZ**

Model: **SZ160-4**

Cooling capacity [kW]: **19.56**

Displacement [m<sup>3</sup>/h]: **37.7**

Refrigerant: **R134a, R404A, R407C**

Capacity control: **None**

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

## Data

### Technical data

Displacement	[m <sup>3</sup> /h]	37.7
Swept volume	[cm <sup>3</sup> ]	216.60
Oil charge	[l]	4.00
Oil type		POE 160SZ
Internal free volume (suction)	[dm <sup>3</sup> ]	16.5
Internal free volume (discharge)	[dm <sup>3</sup> ]	1.7
Net weight	[kg]	92.16
Gross weight	[kg]	107.50

### Electrical data

Power supply		400V/3Ph/50Hz
Maximum operating current	[A]	29.0
Locked rotor amperage	[A]	150.0
Revolutions per minute	[RPM]	2900
Motor resistance main	[Ω]	0.94

### 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 <sup>1</sup>	[inch]	1 5/8
Discharge tube diameter <sup>1</sup>	[inch]	1 1/8
Suction valve diameter <sup>2</sup>	[inch]	2 1/4
Discharge valve diameter <sup>2</sup>	[inch]	1 3/4
Suction connection thread diameter <sup>2</sup>	[inch]	2 1/4
Discharge connection thread diameter <sup>2</sup>	[inch]	1 3/4
Diameter	[mm]	266
Height	[mm]	631
Oil equalization		3/8" Flare SAE
Oil drain		1/4" Flare

<sup>1</sup> For version with brazed connection type.

<sup>2</sup> For version with Rotolock connection type.

## Other

Product codes	SZ160-4CBI, SZ160-4CBM, SZ160-4RAI, SZ160-4RAM
Approved refrigerants	R134a, R404A, R407C
Capacity control	None
Protection rating <sup>3</sup>	IP54
Glass mounting	Threaded

## Shipped equipment

Motor protection	Internal thermostat, ext. overload protector needed
Shipped fittings	Suction and discharge solder sleeves, rotolock nuts and gaskets
Shipped mounting	Mounting kit with grommets, bolts, nuts, sleeves and washers

<sup>3</sup> With cable gland.

## Performance

Nominal conditions: refrigerant: R407C , evaporation (dew point): -10 °C, condensation (dew point): 45 °C, superheating: 10 K, subcooling: 0 °C

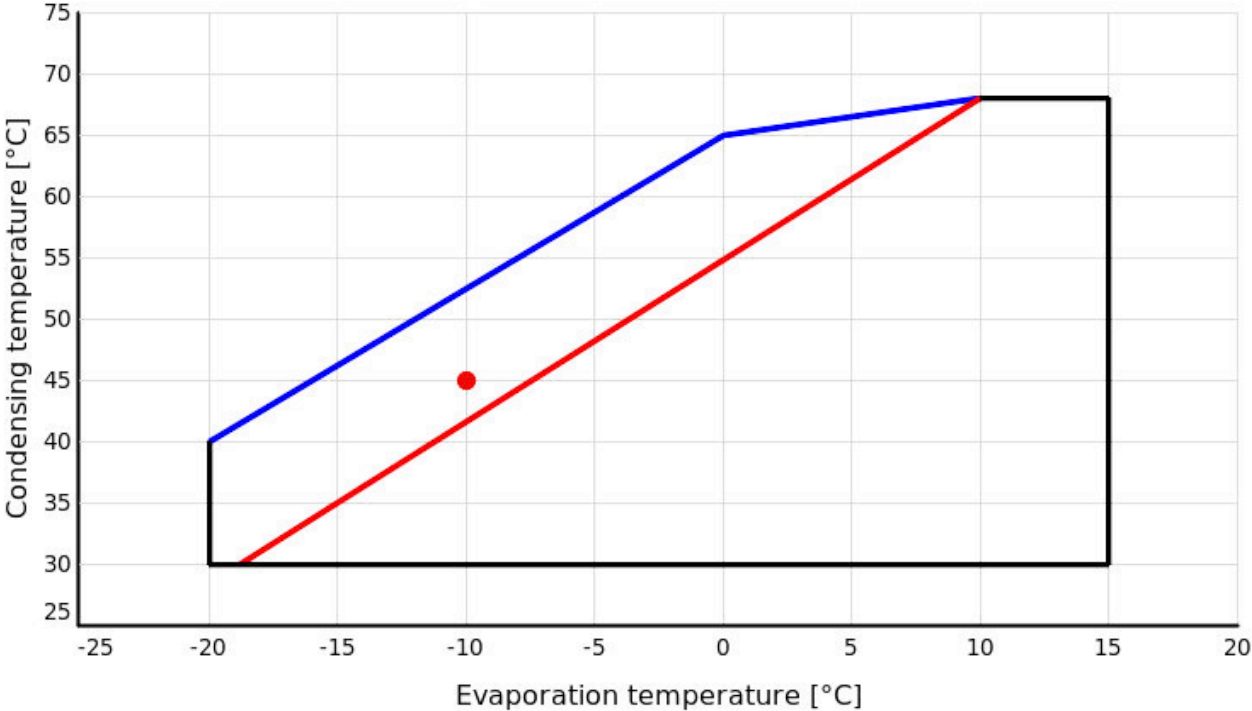
### Cooling capacity [kW]

		Evaporation temperature [°C]							
		-20	-15	-10	-5	0	5	10	15
Condensation temperature [°C]	30	14.56	18.54	23.28	28.88	35.44	43.07	51.86	61.91
	35	13.70	17.57	22.15	27.56	33.88	41.23	49.69	59.39
	40	12.78	16.51	20.91	26.08	32.14	39.17	47.29	56.58
	45		15.37	19.56	24.48	30.23	36.92	44.66	53.53
	50			18.13	22.76	28.19	34.51	41.82	50.24
	55				20.96	26.02	31.93	38.80	46.73
	60					23.75	29.23	35.62	43.03
	65					21.40	26.41	32.30	39.16

### Power consumption [kW]

		Evaporation temperature [°C]							
		-20	-15	-10	-5	0	5	10	15
Condensation temperature [°C]	30	6.58	6.67	6.73	6.77	6.79	6.80	6.79	6.76
	35	7.34	7.44	7.52	7.57	7.60	7.61	7.61	7.59
	40	8.19	8.30	8.39	8.45	8.49	8.51	8.52	8.51
	45		9.27	9.37	9.44	9.49	9.52	9.53	9.52
	50			10.47	10.55	10.61	10.64	10.66	10.66
	55				11.80	11.87	11.91	11.93	11.93
	60					13.28	13.33	13.36	13.37
	65					14.88	14.93	14.96	14.97

Application range



Legend

- Suction gas superheating: 11 K
- Suction gas superheating: 30 K
- Current operating conditions

**Dimensions**

