



Producer: **Danfoss**  
 Line: **SZ**  
 Cooling capacity [kW]: **20.64**  
 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: R404A, evaporation: -10°C (dew point), condensation: 45°C (dew point), superheating: 10K, subcooling: 0K

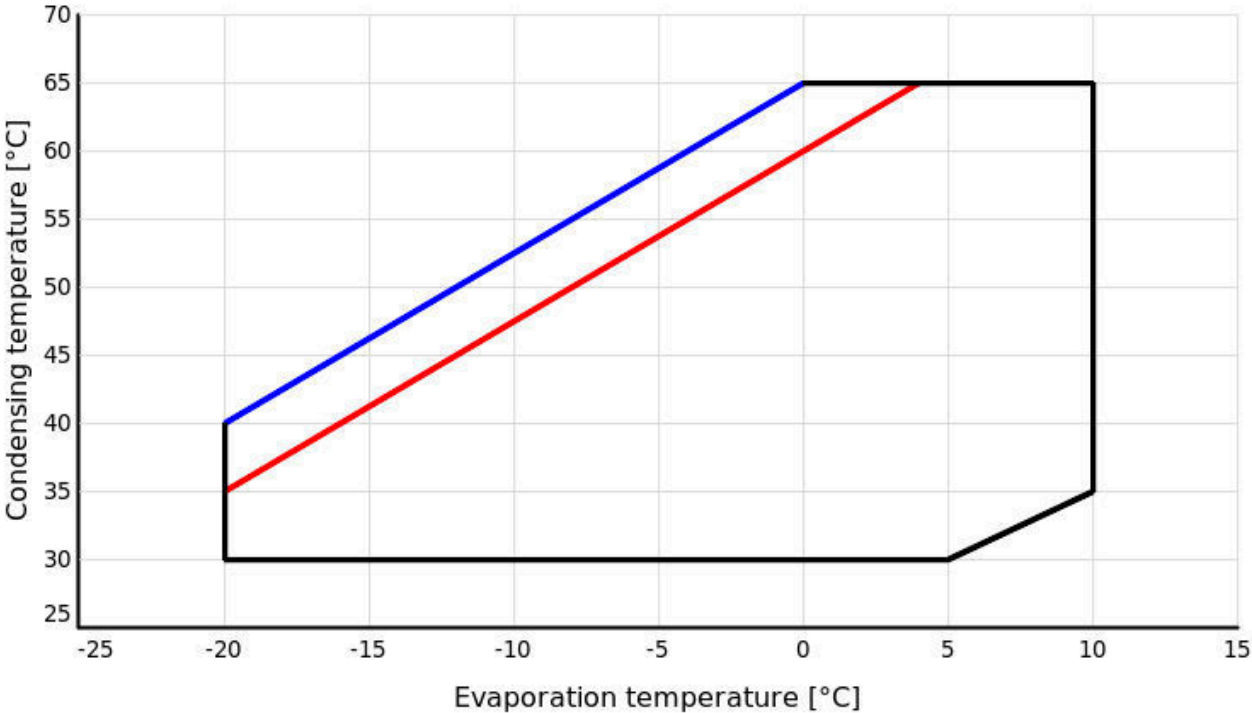
### Cooling capacity

		Evaporation temperature [°C]						
		-20	-15	-10	-5	0	5	10
Condensation temperature [°C]	30	17.37	21.63	26.73	32.75	39.79	47.94	
	35	15.93	19.99	24.83	30.56	37.26	45.03	53.97
	40	14.44	18.25	22.80	28.19	34.50	41.84	50.30
	45		16.43	<b>20.64</b>	25.64	31.52	38.38	46.31
	50			18.36	22.92	28.32	34.65	42.01
	55				20.05	24.92	30.68	37.41
	60					21.32	26.46	32.52
	65					17.54	22.00	27.35

### Power consumption

		Evaporation temperature [°C]						
		-20	-15	-10	-5	0	5	10
Condensation temperature [°C]	30	7.98	8.02	8.03	8.02	7.97	7.91	
	35	8.86	8.90	8.92	8.92	8.89	8.83	8.75
	40	9.82	9.88	9.90	9.90	9.88	9.83	9.76
	45		10.96	<b>10.99</b>	10.99	10.97	10.93	10.86
	50			12.20	12.20	12.18	12.14	12.07
	55				13.55	13.53	13.48	13.41
	60					15.03	14.98	14.90
	65					16.71	16.64	16.56

Application range



Legend

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

**Dimensions**

