



Producer: **Danfoss**

Line: **MTZ**

Model: **MTZ144-4**

Cooling capacity [kW]: **18.49**

Displacement [m<sup>3</sup>/h]: **42.1**

Refrigerant: **R134a, R404A, R407A, R407C, R407F, R448A, R449A, R452A, R513A**

Capacity control: **None**

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

## Data

### Technical data

Displacement	[m <sup>3</sup> /h]	42.1
Swept volume	[cm <sup>3</sup> ]	241.87
Cylinders quantity		4
Oil charge	[l]	3.90
Oil type		175PZ
Internal free volume (suction)	[dm <sup>3</sup> ]	31.0
Internal free volume (discharge)	[dm <sup>3</sup> ]	1.2
Net weight	[kg]	69.00
Gross weight	[kg]	72.50

### Electrical data

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	36.0
Locked rotor amperage	[A]	130.0
Revolutions per minute	[RPM]	2900
Motor resistance main	[Ω]	1.15

### Limits

Maximum suction pressure	[bar]	22.6
Maximum discharge pressure	[bar]	29.4
Maximum suction temperature	[°C]	50.0
Minimum suction temperature	[°C]	-35.0
Maximum discharge temperature	[°C]	150.0
Minimal discharge temperature	[°C]	-35.0

## Dimensions

Suction valve diameter	[inch]	1 1/8
Discharge valve diameter	[inch]	3/4
Suction connection thread diameter	[inch]	1 3/4
Discharge connection thread diameter	[inch]	1 1/4
Diameter	[mm]	352
Height	[mm]	540
Oil equalization		3/8" Flare SAE

## Other

Product codes	MTZ144-4VI, MTZ144-4VM
Approved refrigerants	R134a, R404A, R407A, R407C, R407F, R448A, R449A, R452A, R513A
Capacity control	None
Protection rating <sup>1</sup>	IP54
Glass mounting	Threaded

## Shipped equipment

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

<sup>1</sup> With cable gland.

## Performance

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

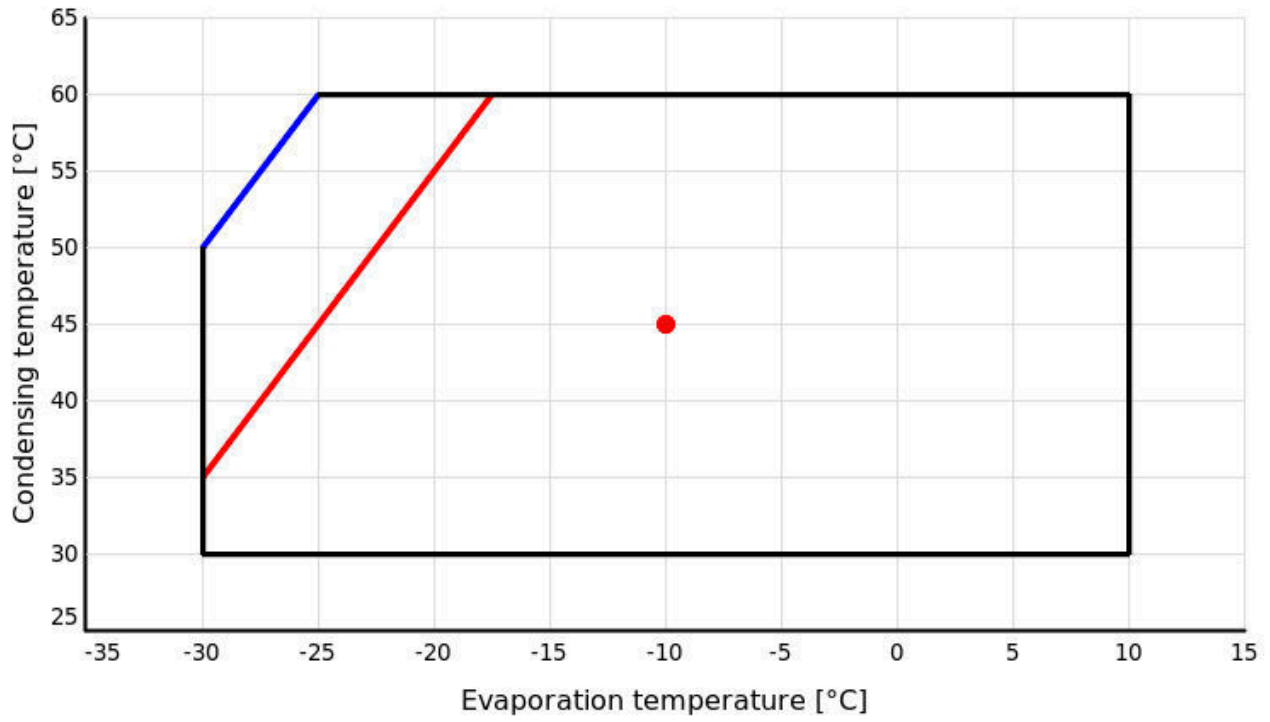
### Cooling capacity

		Evaporation temperature [°C]								
		-30	-25	-20	-15	-10	-5	0	5	10
Condensation temperature [°C]	30	8.78	11.83	15.55	20.05	25.38	31.65	38.94	47.34	56.92
	35	7.71	10.54	13.99	18.14	23.08	28.90	35.68	43.51	52.46
	40	6.69	9.28	12.44	16.25	20.79	26.14	32.40	39.65	47.97
	45	5.70	8.06	10.92	14.37	<b>18.49</b>	23.38	29.11	35.77	43.45
	50	4.76	6.87	9.42	12.51	16.21	20.61	25.81	31.87	38.90
	55		5.71	7.95	10.65	13.92	17.84	22.48	27.94	34.31
	60		4.58	6.49	8.81	11.64	15.06	19.14	23.99	29.68



### Power consumption

		Evaporation temperature [°C]								
		-30	-25	-20	-15	-10	-5	0	5	10
Condensation temperature [°C]	30	5.94	6.67	7.35	7.97	8.52	8.99	9.39	9.69	9.89
	35	6.03	6.84	7.61	8.32	8.98	9.57	10.09	10.52	10.87
	40	6.08	6.97	7.82	8.64	9.40	10.10	10.74	11.31	11.80
	45	6.08	7.05	8.00	8.91	<b>9.78</b>	10.60	11.36	12.06	12.69
	50	6.05	7.11	8.14	9.15	10.12	11.06	11.94	12.77	13.54
	55		7.12	8.25	9.35	10.43	11.48	12.49	13.46	14.36
	60		7.11	8.33	9.53	10.72	11.88	13.02	14.11	15.16

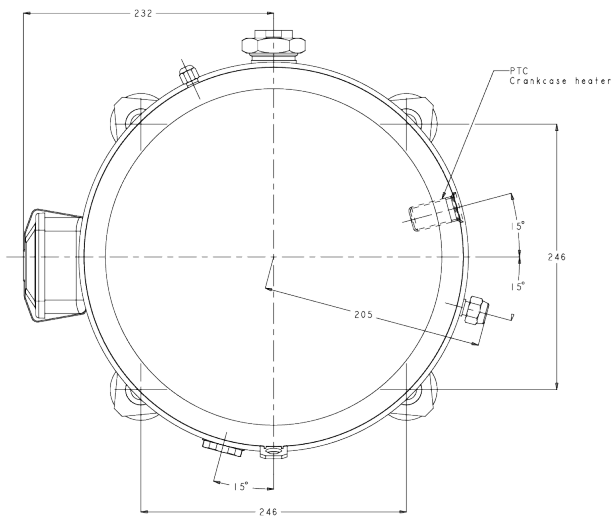
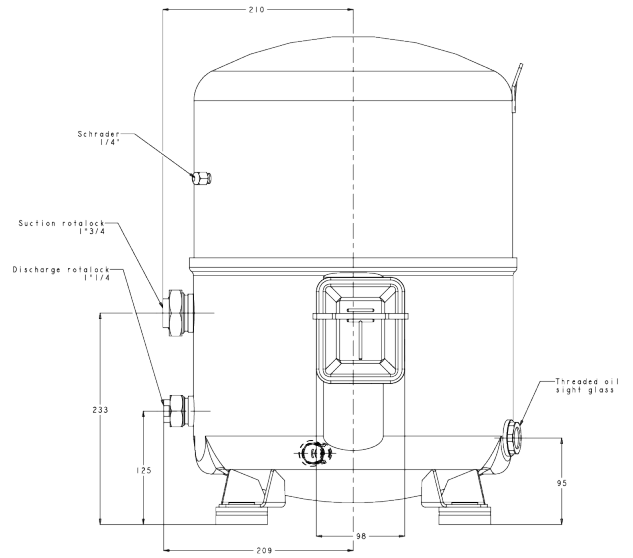
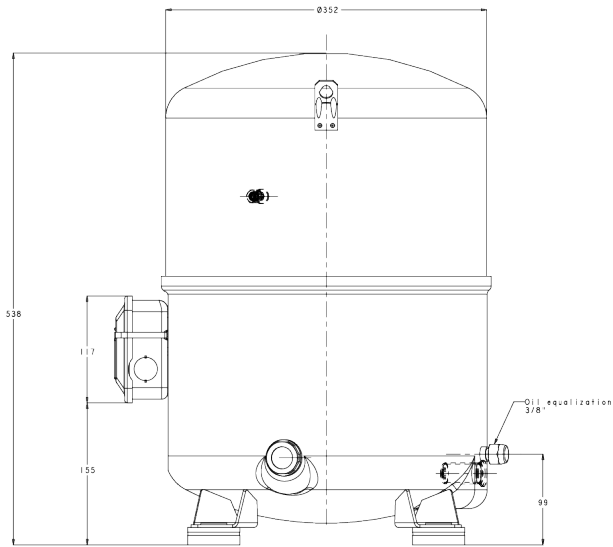
Application range



Legend

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

**Dimensions**



Silent bloc

Grommet compression not included  
around 1 mm.

