



Producer: **Copeland**

Line: **ZR**

Model: **ZR144KCE-TFD**

Cooling capacity [kW]: **17.20**

Heat rejection [kW]: **24.80**

Displacement [m<sup>3</sup>/h]: **33.2**

Refrigerant: **R22, R134a, R407C**

Capacity control: **None**

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

## Data

### Technical data

Displacement	[m <sup>3</sup> /h]	33.2
Oil charge	[l]	3.25
Oil type		POE RL32-3MAF
Internal free volume	[dm <sup>3</sup> ]	13.3
Net weight	[kg]	61.20

### Electrical data and limits

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	22.3
Locked rotor amperage	[A]	118.0
Motor resistance main	[Ω]	1.23
Maximum suction pressure	[bar]	20.0
Maximum discharge pressure	[bar]	32.0
Maximum suction temperature	[°C]	52.0
Minimum suction temperature	[°C]	-35.0

### Dimensions

Suction tube diameter	[inch]	1 3/8
Discharge tube diameter	[inch]	7/8
Length	[mm]	281
Height	[mm]	533
Width	[mm]	285

### Other

Approved refrigerants	R22, R134a, R407C
Allowed oil types	POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC
Capacity control	None
Protection rating	IP21 (IEC34)

## Performance

Nominal conditions: refrigerant: R407C, 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	7	10	12.5	15	20
Condensation temperature [°C]	25	7.66	10.58	13.84	17.55	21.83	26.79	32.54	39.21	42.16	46.91			
	30	6.52	9.60	12.97	16.73	21.01	25.92	31.57	38.08	40.95	45.57	49.72	54.15	
	35		8.43	11.89	15.69	19.96	24.80	30.33	36.68	39.47	43.94	47.96	52.25	61.71
	40			10.62	14.45	18.68	23.44	28.85	35.00	37.70	42.03	45.91	50.05	59.16
	45				13.01	17.20	21.87	27.12	33.08	35.68	39.85	43.58	47.56	56.31
	50						20.08	25.17	30.91	33.42	37.42	40.99	44.80	53.18
	55							23.01	28.52	30.91	34.74	38.15	41.78	49.76
	60								25.91	28.19	31.82	35.06	38.51	46.08
	65									25.25	28.68	31.74	34.99	42.12

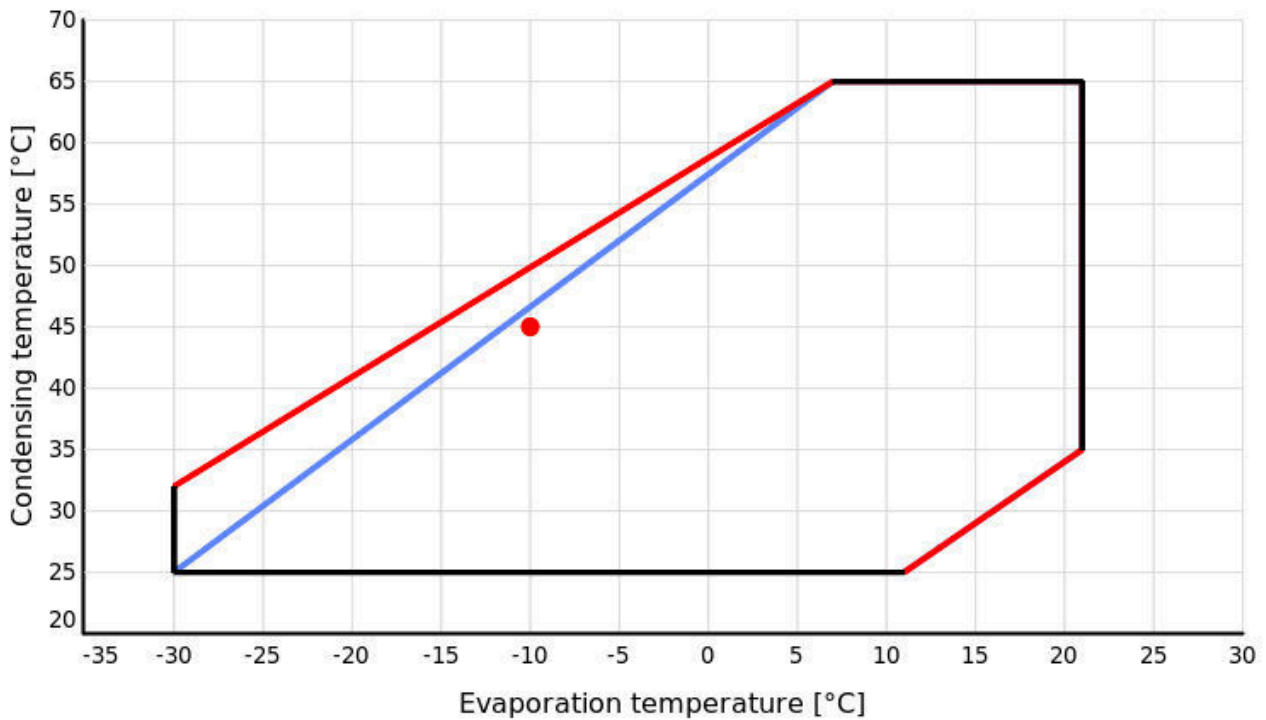
### Heat rejection

		Evaporation temperature [°C]												
		-30	-25	-20	-15	-10	-5	0	5	7	10	12.5	15	20
Condensation temperature [°C]	25	12.16	15.21	18.56	22.34	26.68	31.70	37.54	44.32	47.32	52.16			
	30	11.55	14.77	18.24	22.08	26.42	31.38	37.10	43.70	46.61	51.30	55.52	60.03	
	35		14.21	17.79	21.67	26.00	30.89	36.48	42.88	45.70	50.23	54.30	58.65	68.27
	40			17.22	21.15	25.45	30.26	35.71	41.91	44.63	48.99	52.90	57.08	66.32
	45				20.53	24.80	29.52	34.81	40.79	43.41	47.60	51.35	55.36	64.19
	50						28.69	33.81	39.57	42.08	46.10	49.68	53.51	61.93
	55							32.75	38.28	40.67	44.50	47.91	51.55	59.55
	60								36.93	39.21	42.84	46.07	49.51	57.07
	65									37.71	41.13	44.18	47.41	54.52

**Power consumption**

Condensation temperature [°C]	Evaporation temperature [°C]												
	-30	-25	-20	-15	-10	-5	0	5	7	10	12.5	15	20
25	4.74	4.87	4.96	5.04	5.10	5.18	5.26	5.38	5.44	5.54			
30	5.30	5.44	5.55	5.63	5.69	5.75	5.82	5.91	5.95	6.03	6.10	6.19	
35		6.08	6.21	6.30	6.36	6.42	6.47	6.53	6.56	6.62	6.67	6.74	6.91
40			6.95	7.05	7.13	7.18	7.22	7.27	7.29	7.32	7.36	7.41	7.53
45				7.92	<b>8.00</b>	8.06	8.09	8.12	8.14	8.16	8.18	8.21	8.29
50						9.06	9.10	9.12	9.13	9.14	9.15	9.16	9.21
55							10.26	10.27	10.28	10.28	10.28	10.28	10.30
60								11.60	11.60	11.59	11.59	11.58	11.57
65									13.11	13.10	13.09	13.08	13.05

**Application range**



**Legend**

- Suction gas superheating: 10 K
- Suction gas temperature: 25°C

## Dimensions

