

# Model: ZR61KC-TFD

## Data

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Type: Hermetic piston compressors

Producer: Copeland

Series: ZR

## Model: ZR61KC-TFD

### Technical data

Nominal motor power [HP]:	5
Displacement [m <sup>3</sup> /h]:	14,4
Sound pressure level :	60
Gross/Net weight [kg]:	41/38
Oil charge [dm <sup>3</sup> ]:	1,9

### Electrical data

Power supply [V/~/Hz]:	7/8"
Locked rotor current [A]:	1/2"
Max. operating current [A]:	-
Winding resistance [ $\Omega$ ]:	242/242

### Connections

	<u>milimeters</u>	<u>inches</u>
Suction Rotolock valve connection:		-
Discharge Rotolock valve connection:		-
Suction connection with supplied sleeve:		7/8"
Discharge connection with supplied sleeve:		1/2"

**Model: ZR61KC-TFD****Capacity**

R22

**Cooling capacity [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>30</b>	5.54	7.09	8.94	11.07	13.44	16.02	18.80
<b>35</b>	5.22	6.70	8.48	10.55	12.86	15.40	18.13
<b>40</b>	4.86	6.26	7.97	9.96	12.21	14.68	17.35
<b>45</b>	-	5.80	7.42	9.33	11.50	13.90	16.50
<b>50</b>	-	-	6.88	8.70	10.78	13.09	15.61
<b>55</b>	-	-	-	8.09	10.07	12.28	14.71
<b>60</b>	-	-	-	-	9.41	11.52	13.84
<b>65</b>	-	-	-	-	8.84	10.82	13.03

**Power input [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>30</b>	2.42	2.47	2.51	2.54	2.59	2.68	2.82
<b>35</b>	2.70	2.76	2.80	2.83	2.89	2.98	3.12
<b>40</b>	3.02	3.08	3.12	3.15	3.20	3.29	3.43
<b>45</b>	-	3.45	3.47	3.50	3.55	3.63	3.76
<b>50</b>	-	-	3.89	3.90	3.94	4.01	4.13
<b>55</b>	-	-	-	4.37	4.39	4.44	4.55
<b>60</b>	-	-	-	-	4.91	4.95	5.04
<b>65</b>	-	-	-	-	5.53	5.54	5.61

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**Current [A]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>30</b>	6.10	6.15	6.18	6.21	6.27	6.36	6.52
<b>35</b>	6.37	6.41	6.44	6.48	6.54	6.65	6.82
<b>40</b>	6.71	6.74	6.76	6.79	6.85	6.96	7.15
<b>45</b>	-	7.15	7.15	7.17	7.22	7.32	7.51
<b>50</b>	-	-	7.63	7.63	7.66	7.75	7.92
<b>55</b>	-	-	-	8.19	8.20	8.26	8.41
<b>60</b>	-	-	-	-	8.84	8.88	9.00
<b>65</b>	-	-	-	-	9.62	9.61	9.69

**Mass flow [kg/s]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>30</b>	118.99	150.28	187.11	228.78	274.58	323.82	375.80
<b>35</b>	116.58	147.63	184.48	226.41	272.74	322.77	375.80
<b>40</b>	112.95	143.59	180.29	222.34	269.03	319.68	373.59
<b>45</b>	-	138.91	175.30	217.29	264.19	315.30	369.92
<b>50</b>	-	-	170.24	212.02	258.96	310.36	365.54
<b>55</b>	-	-	-	207.26	254.08	305.62	361.19
<b>60</b>	-	-	-	-	250.31	301.82	357.61
<b>65</b>	-	-	-	-	248.38	299.70	355.55

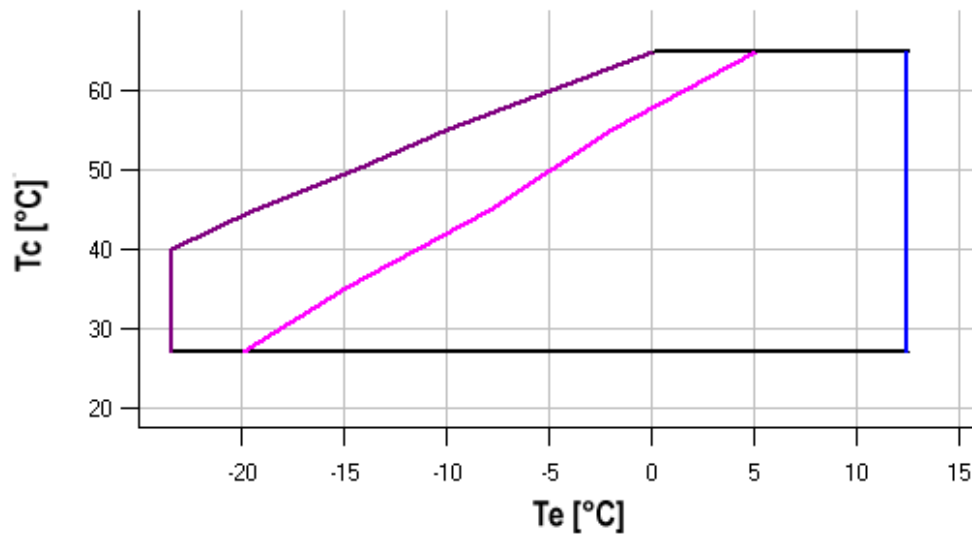
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Capacity

## C.O.P. [W/W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10
30	2.29	2.87	3.56	4.35	5.18	5.99	6.68
35	1.93	2.43	3.03	3.72	4.45	5.17	5.81
40	1.61	2.03	2.56	3.16	3.81	4.46	5.06
45	-	1.68	2.14	2.67	3.24	3.83	4.39
50	-	-	1.77	2.23	2.74	3.27	3.78
55	-	-	-	1.85	2.29	2.77	3.23
60	-	-	-	-	1.92	2.33	2.75
65	-	-	-	-	1.60	1.95	2.32

## Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

Operating conditions: 10K suction superheat, 0K subcooling

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]