

# Model: ZF15K4E-TFD

## Data

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**Type:** Hermetic scroll compressors

**Producer:** Copeland

**Series:** ZF

## Model: ZF15K4E-TFD

### Technical data

Displacement [m <sup>3</sup> /h]:	14,5
Sound power [dBA]:	76
Sound pressure level [dB]:	65
Net Weight [kg]:	39
Gross Weight [kg]:	42
Oil charge [dm <sup>3</sup> ]:	1,9
Maximum high pressure [bar]:	28,8
Maximum standstill pressure [bar]:	21
Maximum lowside temperature [°C]:	50
PED category:	1

### Electrical data

Power supply [V/~ /Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	64
Max. operating current [A]:	10
Winding resistance [Ω]:	2,8

### Connections

Suction Rotolock valve connection:	<u>inches</u> 1 1/4"
Discharge Rotolock valve connection:	1"

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## Capacity

R404A/R507

### Cooling capacity [kW]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>10</b>	3.77	4.75	5.95	7.39	9.10	11.09	-	-	-	-
<b>15</b>	3.61	4.55	5.70	7.07	8.69	10.58	12.76	-	-	-
<b>20</b>	3.43	4.34	5.43	6.74	8.27	10.06	12.13	14.49	-	-
<b>25</b>	3.26	4.12	5.16	6.39	7.84	9.52	11.47	13.69	16.22	-
<b>30</b>	3.07	3.89	4.87	6.03	7.38	8.96	10.79	12.88	15.25	17.94
<b>35</b>	2.89	3.66	4.58	5.65	6.92	8.39	10.08	12.03	14.25	16.77
<b>40</b>	2.70	3.42	4.27	5.27	6.43	7.79	9.36	11.16	13.23	15.56
<b>45</b>	2.51	3.18	3.96	4.87	5.93	7.18	8.61	10.27	12.17	14.33
<b>50</b>	2.31	2.92	3.63	4.46	5.42	6.55	7.85	9.36	11.09	13.07
<b>55</b>	2.11	2.67	3.30	4.04	4.90	5.90	7.07	8.42	9.99	11.79
<b>60</b>	-	-	-	-	-	5.23	6.26	7.46	8.86	10.47

### Power input [kW]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>10</b>	1.56	1.64	1.74	1.88	2.05	2.27	-	-	-	-
<b>15</b>	1.70	1.78	1.88	2.01	2.17	2.37	2.62	-	-	-
<b>20</b>	1.86	1.94	2.04	2.17	2.31	2.50	2.73	3.00	-	-
<b>25</b>	2.03	2.13	2.23	2.35	2.49	2.66	2.87	3.13	3.44	-
<b>30</b>	2.23	2.34	2.44	2.56	2.70	2.86	3.06	3.30	3.59	3.93
<b>35</b>	2.45	2.57	2.69	2.81	2.95	3.10	3.29	3.51	3.78	4.10
<b>40</b>	2.69	2.83	2.96	3.09	3.23	3.38	3.56	3.77	4.03	4.32
<b>45</b>	2.95	3.11	3.25	3.40	3.54	3.70	3.88	4.08	4.32	4.60
<b>50</b>	3.24	3.42	3.59	3.74	3.90	4.06	4.24	4.44	4.67	4.93
<b>55</b>	3.55	3.76	3.95	4.12	4.29	4.46	4.65	4.84	5.07	5.32
<b>60</b>	-	-	-	-	-	4.91	5.10	5.30	5.52	5.77

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## Capacity

### Current [A]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>10</b>	5.49	5.55	5.63	5.73	5.85	6.01	-	-	-	-
<b>15</b>	5.56	5.63	5.71	5.82	5.95	6.11	6.31	-	-	-
<b>20</b>	5.65	5.73	5.82	5.93	6.07	6.23	6.43	6.67	-	-
<b>25</b>	5.76	5.86	5.96	6.08	6.22	6.39	6.59	6.83	7.11	-
<b>30</b>	5.90	6.01	6.13	6.26	6.41	6.59	6.79	7.03	7.30	7.63
<b>35</b>	6.08	6.21	6.34	6.49	6.65	6.83	7.03	7.27	7.55	7.87
<b>40</b>	6.30	6.45	6.60	6.75	6.93	7.11	7.33	7.57	7.85	8.17
<b>45</b>	6.57	6.73	6.90	7.07	7.26	7.46	7.68	7.93	8.21	8.54
<b>50</b>	6.89	7.07	7.26	7.45	7.65	7.86	8.09	8.35	8.64	8.96
<b>55</b>	7.26	7.47	7.68	7.89	8.10	8.33	8.57	8.84	9.13	9.46
<b>60</b>	-	-	-	-	-	8.86	9.12	9.40	9.70	10.04

### Mass flow [kg/h]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>10</b>	73.37	95.76	121.34	151.15	186.23	227.62	-	-	-	-
<b>15</b>	74.08	96.15	121.41	150.89	185.65	226.72	275.14	-	-	-
<b>20</b>	74.41	96.13	121.04	150.18	184.59	225.31	273.38	329.85	-	-
<b>25</b>	74.43	95.78	120.32	149.08	183.12	223.47	271.17	327.27	392.80	-
<b>30</b>	74.20	95.16	119.30	147.67	181.31	221.26	268.57	324.27	389.41	465.03
<b>35</b>	73.80	94.34	118.06	146.01	179.23	218.77	265.65	320.93	385.65	460.85
<b>40</b>	73.31	93.40	116.68	144.19	176.96	216.05	262.49	317.32	381.60	456.35
<b>45</b>	72.79	92.41	115.22	142.26	174.56	213.18	259.15	313.52	377.32	451.60
<b>50</b>	72.31	91.44	113.75	140.30	172.11	210.24	255.71	309.58	372.89	446.68
<b>55</b>	71.94	90.56	112.36	138.38	169.68	207.28	252.24	305.60	368.39	441.66
<b>60</b>	-	-	-	-	-	204.40	248.81	301.62	363.87	436.60

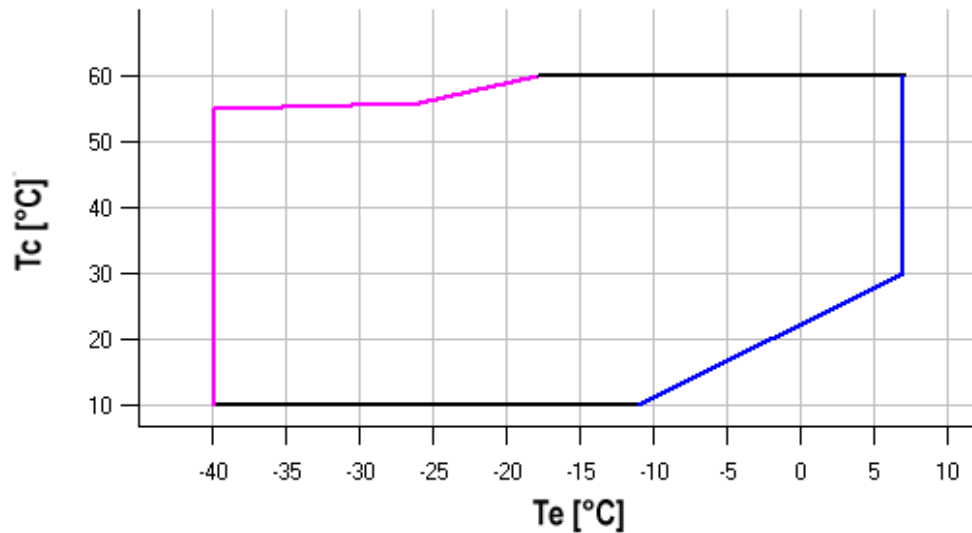
# Model: ZF15K4E-TFD

Capacity

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

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.43	2.90	3.41	3.93	4.43	4.88	-	-	-	-
15	2.12	2.55	3.03	3.52	4.01	4.47	4.88	-	-	-
20	1.85	2.23	2.66	3.11	3.58	4.03	4.45	4.82	-	-
25	1.60	1.94	2.31	2.72	3.15	3.58	3.99	4.38	4.72	-
30	1.38	1.67	1.99	2.35	2.73	3.13	3.52	3.90	4.25	4.56
35	1.18	1.43	1.70	2.01	2.35	2.70	3.06	3.42	3.77	4.09
40	1.00	1.21	1.45	1.71	1.99	2.30	2.63	2.96	3.29	3.60
45	0.85	1.02	1.22	1.43	1.67	1.94	2.22	2.52	2.82	3.12
50	0.71	0.85	1.01	1.19	1.39	1.61	1.85	2.11	2.38	2.65
55	0.59	0.71	0.84	0.98	1.14	1.32	1.52	1.74	1.97	2.22
60	-	-	-	-	-	1.07	1.23	1.41	1.60	1.82

## Application range



- Maximum evaporating temperature
- 25°C suction gas return + liquid injection

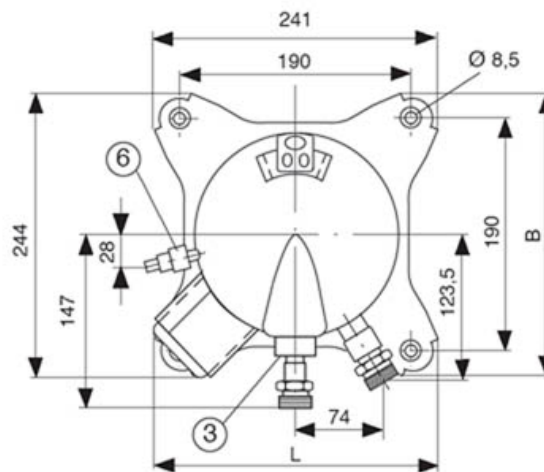
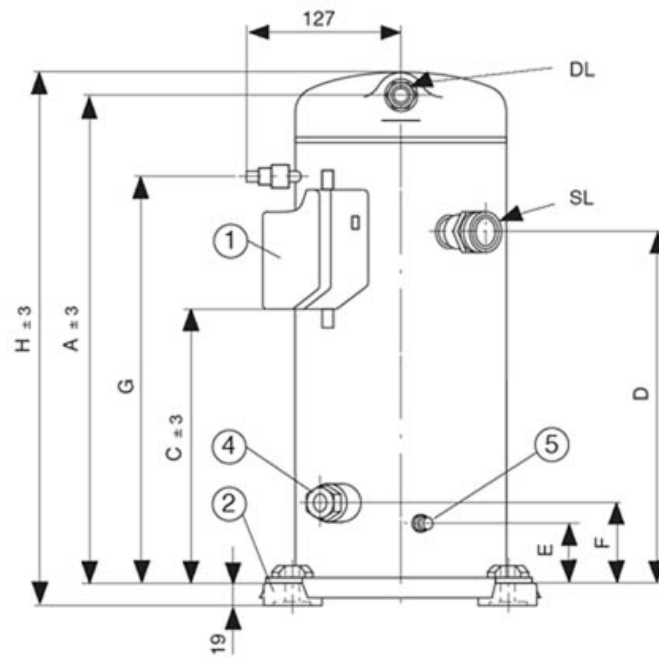
Operating conditions: suction gas temperature 20°C, 0K subcooling

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

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## Dimensions



A	409,8 mm
C	233,4 mm
C1	-- mm
D	296,9 mm
E	47,5 mm
F	81,3 mm
G	341 mm

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Image

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