

Typ: Sprężarki hermetyczne tłokowe

Producent: Copeland

Typszereg: ZF

Model: ZF24K4E-TWD

Dane techniczne

Znamionowa moc silnika [KM]:	7,5
Wydajność objętościowa [m ³ /h]:	20,9
Masa [kg]:	100
Napełnienie olejem [dm ³]:	4

Dane elektryczne

Zasilanie [V/~/Hz]:	380-420V/3/50Hz
Prąd zwarcia [A]:	99
Max. pobór prądu [A]:	16,1
Oporność uzwojenia [Ω]:	1,41

Przyłącza

	<u>milimetry</u>	<u>cale</u>
Króciec ssawny:		1 3/4"
Króciec tłoczny:		1 1/4"

R22

Wydajność chłodnicza [kW]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	4.58	5.81	7.27	9.01	11.06	13.44	-	-	-	-
15	4.46	5.65	7.08	8.77	10.76	13.07	15.76	-	-	-
20	4.33	5.49	6.87	8.51	10.43	12.67	15.27	18.26	-	-
25	4.20	5.32	6.65	8.23	10.08	12.24	14.76	17.65	-	-
30	4.07	5.15	6.42	7.93	9.71	11.79	14.21	17.00	20.19	-
35	3.95	4.97	6.18	7.62	9.32	11.31	13.63	16.31	19.39	22.90
40	3.83	4.80	5.94	7.30	8.92	10.81	13.03	15.60	18.55	21.93
45	3.73	4.63	5.70	6.98	8.51	10.30	12.41	14.86	17.68	20.92
50	3.64	4.47	5.47	6.66	8.09	9.78	11.77	14.09	16.79	19.88
55	3.57	4.33	5.24	6.34	7.67	9.25	11.12	13.31	15.87	18.81
60	-	-	-	-	-	-	-	-	14.92	17.72

Pobór mocy [kW]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.74	2.88	2.99	3.10	3.23	3.40	-	-	-	-
15	2.96	3.12	3.25	3.36	3.48	3.63	3.83	-	-	-
20	3.17	3.36	3.51	3.64	3.76	3.90	4.08	4.32	-	-
25	3.38	3.61	3.79	3.93	4.06	4.19	4.36	4.57	-	-
30	3.58	3.86	4.07	4.24	4.38	4.52	4.67	4.87	5.12	-
35	3.79	4.12	4.37	4.57	4.73	4.87	5.03	5.21	5.44	5.74
40	3.99	4.38	4.68	4.91	5.10	5.26	5.42	5.59	5.81	6.08
45	4.19	4.65	5.00	5.28	5.50	5.68	5.85	6.02	6.22	6.48
50	4.39	4.92	5.34	5.66	5.92	6.13	6.31	6.50	6.69	6.93
55	4.60	5.20	5.68	6.06	6.37	6.61	6.82	7.02	7.22	7.44
60	-	-	-	-	-	-	-	-	7.79	8.01

Prad [A]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	8.92	9.00	9.06	9.11	9.20	9.33	-	-	-	-
15	9.05	9.16	9.24	9.31	9.40	9.52	9.70	-	-	-
20	9.18	9.34	9.45	9.53	9.62	9.74	9.90	10.13	-	-
25	9.31	9.52	9.66	9.78	9.88	9.99	10.15	10.36	-	-
30	9.46	9.71	9.90	10.05	10.17	10.29	10.44	10.64	10.91	-
35	9.61	9.93	10.17	10.35	10.50	10.64	10.79	10.98	11.23	11.56
40	9.79	10.17	10.47	10.69	10.87	11.04	11.20	11.39	11.62	11.93
45	9.98	10.44	10.80	11.08	11.30	11.49	11.67	11.87	12.10	12.39
50	10.21	10.75	11.18	11.52	11.79	12.01	12.22	12.42	12.65	12.94
55	10.47	11.11	11.61	12.01	12.34	12.60	12.84	13.06	13.30	13.58
60	-	-	-	-	-	-	-	-	14.04	14.32

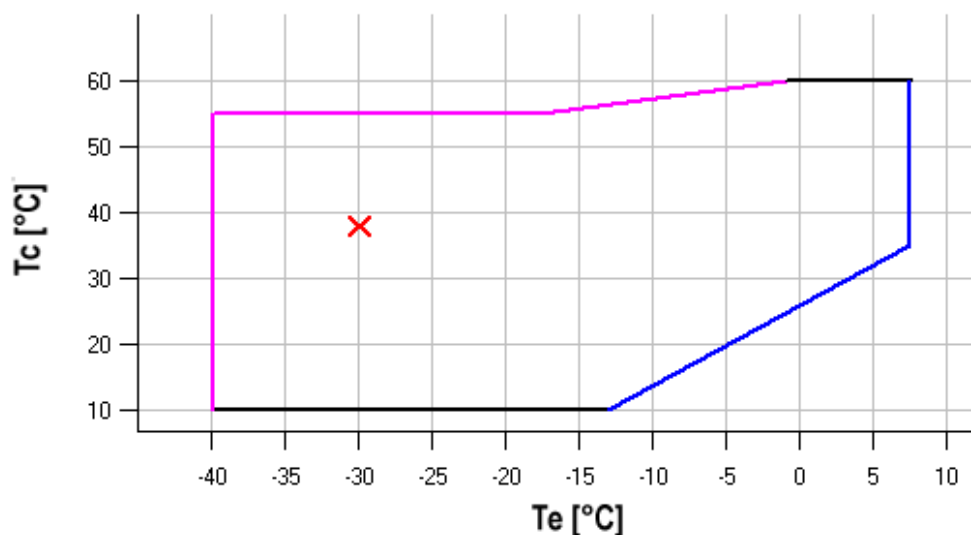
Przepływ masowy [kg/s]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	75.73	97.79	123.15	152.75	187.54	228.45	-	-	-	-
15	76.17	98.11	123.40	152.99	187.82	228.84	276.99	-	-	-
20	76.49	98.21	123.34	152.82	187.61	228.63	276.85	333.19	-	-
25	76.77	98.18	123.05	152.34	186.97	227.91	276.09	332.46	-	-
30	77.11	98.10	122.62	151.60	186.00	226.76	274.81	331.11	396.60	-
35	77.56	98.05	122.11	150.71	184.77	225.24	273.08	329.21	394.59	470.16
40	78.22	98.10	121.62	149.73	183.36	223.46	270.97	326.84	392.02	467.44
45	79.16	98.34	121.22	148.74	181.84	221.47	268.57	324.09	388.96	464.14
50	80.46	98.85	121.00	147.83	180.31	219.37	265.96	321.03	385.50	460.34
55	82.21	99.71	121.02	147.08	178.84	217.24	263.22	317.74	381.72	456.12
60	-	-	-	-	-	-	-	-	377.69	451.57

C.O.P. [W/W]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	1.67	2.02	2.43	2.91	3.43	3.96	-	-	-	-
15	1.51	1.81	2.18	2.61	3.09	3.60	4.11	-	-	-
20	1.37	1.63	1.96	2.34	2.78	3.25	3.75	4.23	-	-
25	1.24	1.47	1.76	2.09	2.48	2.92	3.39	3.86	-	-
30	1.14	1.33	1.58	1.87	2.22	2.61	3.04	3.49	3.94	-
35	1.04	1.21	1.41	1.67	1.97	2.32	2.71	3.13	3.57	3.99
40	0.96	1.10	1.27	1.49	1.75	2.06	2.41	2.79	3.20	3.61
45	0.89	1.00	1.14	1.32	1.55	1.81	2.12	2.47	2.84	3.23
50	0.83	0.91	1.02	1.18	1.37	1.60	1.86	2.17	2.51	2.87
55	0.78	0.83	0.92	1.05	1.20	1.40	1.63	1.90	2.20	2.53
60	-	-	-	-	-	-	-	-	1.92	2.21

Zakres zastosowania



- Maksymalna temperatura parowania
- Temperatura gazu zasysanego 25°C + wtrysk cieczy

Warunki robocze: temperatura gazu zasysanego 20°C, dochłodzenie 0K

t_c - Temperatura skraplania [°C]

t_e - Temperatura odparowania [°C]

R404A/R507

Wydajność chłodnicza [kW]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	5.38	6.85	8.60	10.69	13.15	16.03	-	-	-	-
15	5.17	6.59	8.27	10.25	12.58	15.31	18.49	-	-	-
20	4.96	6.33	7.94	9.82	12.02	14.60	17.59	21.05	-	-
25	4.75	6.07	7.60	9.37	11.45	13.87	16.69	19.94	23.68	-
30	4.53	5.79	7.24	8.91	10.86	13.12	15.76	18.80	22.31	26.32
35	4.28	5.49	6.86	8.42	10.24	12.34	14.79	17.63	20.91	24.66
40	4.01	5.16	6.44	7.90	9.58	11.53	13.79	16.42	19.46	22.95
45	3.69	4.78	5.98	7.33	8.87	10.66	12.74	15.16	17.96	21.19
50	3.32	4.36	5.47	6.71	8.12	9.74	11.64	13.84	16.40	19.37
55	2.90	3.87	4.90	6.02	7.29	8.76	10.46	12.45	14.78	17.48
60	-	-	-	-	-	7.70	9.21	10.99	13.07	15.50

Pobór mocy [kW]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.64	2.75	2.89	3.06	3.26	3.51	-	-	-	-
15	2.87	2.99	3.13	3.29	3.48	3.72	3.99	-	-	-
20	3.12	3.25	3.40	3.56	3.75	3.96	4.22	4.53	-	-
25	3.39	3.54	3.70	3.86	4.05	4.25	4.50	4.78	5.11	-
30	3.68	3.85	4.02	4.19	4.38	4.59	4.82	5.09	5.39	5.75
35	3.98	4.18	4.37	4.56	4.75	4.96	5.18	5.44	5.73	6.06
40	4.29	4.52	4.74	4.95	5.15	5.36	5.59	5.84	6.11	6.43
45	4.62	4.88	5.13	5.36	5.58	5.80	6.03	6.28	6.55	6.84
50	4.95	5.25	5.53	5.79	6.04	6.27	6.51	6.76	7.03	7.31
55	5.28	5.63	5.95	6.25	6.52	6.77	7.03	7.28	7.55	7.83
60	-	-	-	-	-	7.30	7.57	7.84	8.11	8.39

Prad [A]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	8.76	8.82	8.91	9.04	9.21	9.44	-	-	-	-
15	8.92	9.00	9.10	9.23	9.39	9.61	9.88	-	-	-
20	9.12	9.21	9.32	9.46	9.63	9.84	10.10	10.41	-	-
25	9.34	9.46	9.59	9.74	9.91	10.12	10.37	10.67	11.03	-
30	9.59	9.74	9.89	10.06	10.24	10.46	10.71	11.00	11.34	11.74
35	9.86	10.04	10.23	10.42	10.62	10.84	11.10	11.39	11.72	12.11
40	10.16	10.38	10.60	10.82	11.04	11.29	11.55	11.84	12.18	12.55
45	10.48	10.75	11.01	11.26	11.52	11.78	12.06	12.36	12.70	13.07
50	10.82	11.15	11.45	11.74	12.03	12.32	12.62	12.94	13.28	13.66
55	11.18	11.57	11.92	12.26	12.59	12.91	13.24	13.58	13.94	14.32
60	-	-	-	-	-	13.55	13.91	14.28	14.65	15.05

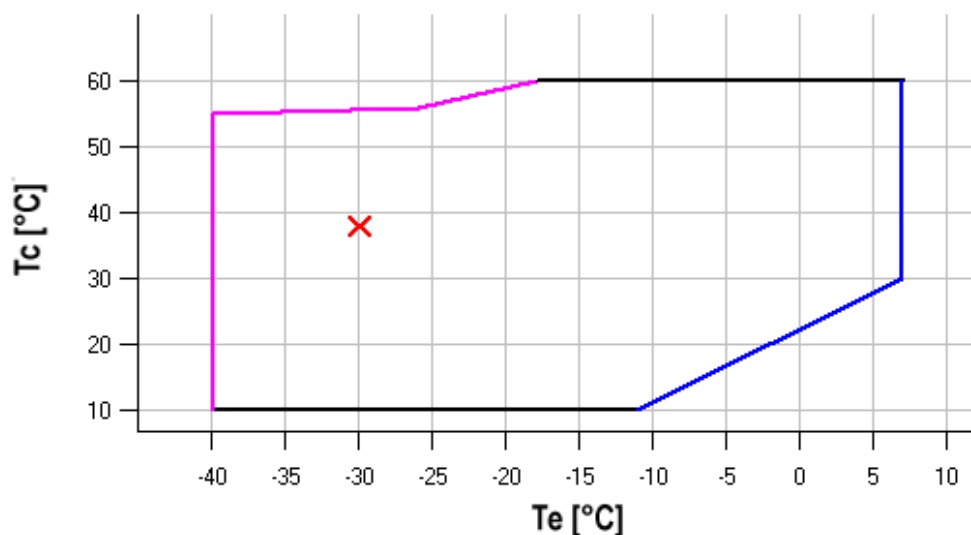
Przepływ masowy [kg/s]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	104.06	138.13	175.77	218.90	269.48	329.46	-	-	-	-
15	105.64	139.22	176.28	218.77	268.64	327.83	398.28	-	-	-
20	107.19	140.34	176.89	218.81	268.03	326.49	396.14	478.93	-	-
25	108.50	141.28	177.40	218.80	267.43	325.23	394.15	476.14	573.13	-
30	109.37	141.84	177.57	218.52	266.63	323.84	392.09	473.34	569.52	682.58
35	109.57	141.80	177.22	217.78	265.43	322.11	389.76	470.33	565.76	678.00
40	108.89	140.95	176.12	216.36	263.61	319.82	386.93	466.89	561.64	673.12
45	107.14	139.08	174.07	214.05	260.97	316.78	383.41	462.82	556.94	667.73
50	104.09	135.98	170.85	210.63	257.29	312.75	378.98	457.90	551.47	661.63
55	99.54	131.44	166.25	205.91	252.36	307.55	373.42	451.92	545.00	654.59
60	-	-	-	-	-	300.95	366.54	444.68	537.33	646.42

C.O.P. [W/W]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.04	2.49	2.98	3.50	4.03	4.56	-	-	-	-
15	1.80	2.20	2.64	3.12	3.61	4.12	4.63	-	-	-
20	1.59	1.95	2.34	2.76	3.21	3.68	4.17	4.65	-	-
25	1.40	1.71	2.05	2.43	2.83	3.26	3.71	4.17	4.63	-
30	1.23	1.50	1.80	2.12	2.48	2.86	3.27	3.70	4.14	4.58
35	1.08	1.31	1.57	1.85	2.15	2.49	2.85	3.24	3.65	4.07
40	0.93	1.14	1.36	1.60	1.86	2.15	2.47	2.81	3.18	3.57
45	0.80	0.98	1.17	1.37	1.59	1.84	2.11	2.41	2.74	3.10
50	0.67	0.83	0.99	1.16	1.34	1.55	1.79	2.05	2.33	2.65
55	0.55	0.69	0.82	0.96	1.12	1.29	1.49	1.71	1.96	2.23
60	-	-	-	-	-	1.05	1.22	1.40	1.61	1.85

Zakres zastosowania

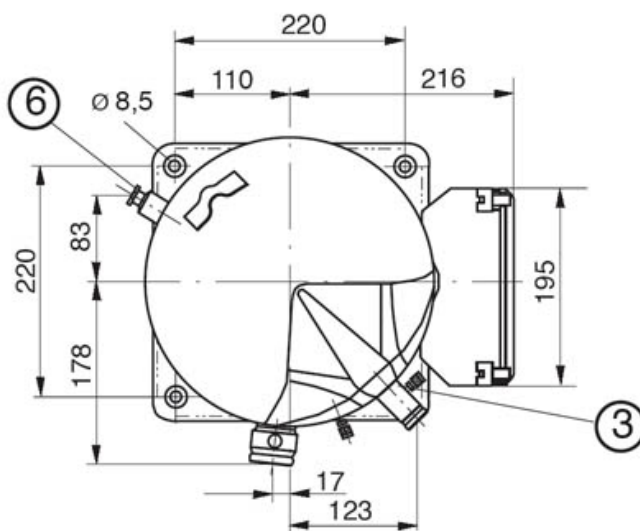
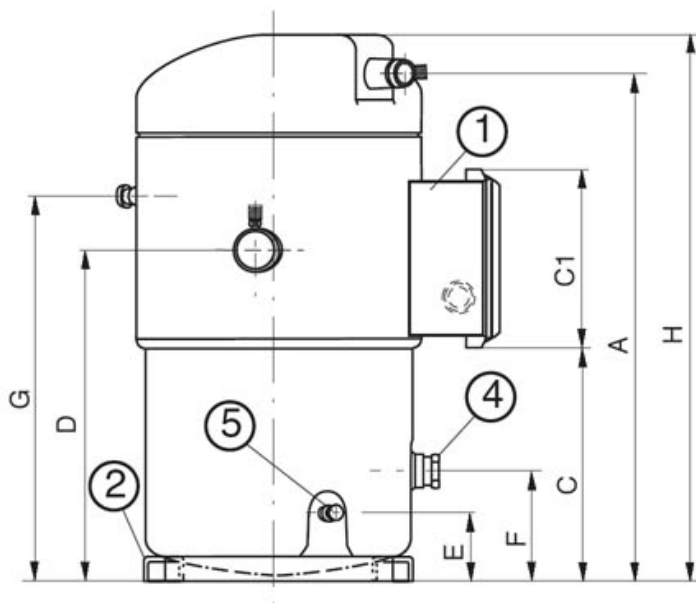


- Maksymalna temperatura parowania
- Temperatura gazu zasysanego 25°C + wtrysk cieczy

Warunki robocze: temperatura gazu zasysanego 20°C, dochłodzenie 0K

t_c - Temperatura skraplania [°C]

t_e - Temperatura odparowania [°C]



A	497,34 mm
C	221,59 mm
C1	175,7 mm
D	314,82 mm
E	63,52 mm
F	97,79 mm
G	368,54 mm

