
GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr

**Type: Hermetic scroll compressors****Producer: Copeland****Series: ZR****Model: ZR144KCE-TFD****Technical data**

Displacement [m ³ /h]:	33,2
Sound power [dBA]:	75
Sound pressure level [dB]:	64
Net Weight [kg]:	61,2
Gross Weight [kg]:	72
Oil charge [dm ³]:	3,3
Maximum high pressure [bar]:	32
Maximum standstill pressure [bar]:	20
Minimal lowside temperature [°C]:	-35
Maximum lowside temperature [°C]:	52
PED category:	2

Electrical data

Power supply [V/~ /Hz]:	380-420/3/50Hz
Locked rotor current [A]:	118
Max. operating current [A]:	22,3
Winding resistance [Ω]:	1,2

Connections

	<u>inches</u>
Suction connection with supplied sleeve:	1 3/8"
Discharge connection with supplied sleeve:	7/8"

R134a

Cooling capacity [kW]

t_c \ t_e	-15	-10	-5	0	5	10	15
25	13.02	15.78	19.04	22.73	26.75	31.04	-
30	12.49	15.17	18.35	21.97	25.93	30.16	34.57
35	11.83	14.41	17.50	21.03	24.91	29.06	33.41
40	11.07	13.53	16.51	19.94	23.72	27.79	32.05
45	10.22	12.55	15.41	18.72	22.40	26.35	30.52
50	-	11.50	14.23	17.40	20.95	24.79	28.84
55	-	10.41	12.98	16.01	19.42	23.12	27.04
60	-	-	11.70	14.56	17.81	21.37	25.14
65	-	-	10.40	13.09	16.17	19.56	23.17
70	-	-	-	11.62	14.51	17.72	21.16
75	-	-	-	10.18	12.87	15.88	19.13

Power input [kW]

t_c \ t_e	-15	-10	-5	0	5	10	15
25	3.36	3.41	3.48	3.64	3.96	4.51	-
30	3.75	3.81	3.86	3.96	4.17	4.57	5.22
35	4.21	4.31	4.36	4.41	4.54	4.81	5.29
40	4.73	4.88	4.94	4.97	5.03	5.20	5.54
45	5.26	5.50	5.59	5.62	5.63	5.71	5.92
50	-	6.13	6.28	6.32	6.31	6.33	6.43
55	-	6.74	6.97	7.05	7.04	7.01	7.02
60	-	-	7.65	7.78	7.79	7.73	7.68
65	-	-	8.29	8.50	8.54	8.48	8.38
70	-	-	-	9.16	9.25	9.21	9.09
75	-	-	-	9.74	9.92	9.91	9.78

GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr

**Current [A]**

t_c \ t_e	-15	-10	-5	0	5	10	15
25	9.14	9.07	9.12	9.29	9.58	9.99	-
30	9.57	9.48	9.49	9.61	9.83	10.16	10.60
35	10.13	10.02	10.00	10.08	10.25	10.51	10.87
40	10.81	10.69	10.65	10.69	10.81	11.02	11.31
45	11.60	11.48	11.43	11.45	11.54	11.69	11.91
50	-	12.39	12.34	12.34	12.40	12.51	12.68
55	-	13.42	13.37	13.37	13.41	13.49	13.61
60	-	-	14.52	14.52	14.55	14.61	14.70
65	-	-	15.78	15.79	15.82	15.86	15.93
70	-	-	-	17.17	17.21	17.25	17.30
75	-	-	-	18.67	18.72	18.77	18.81

Mass flow [kg/h]

t_c \ t_e	-15	-10	-5	0	5	10	15
25	288.11	341.92	404.74	474.34	548.48	624.94	-
30	289.71	344.09	407.84	478.73	554.55	633.05	712.01
35	288.00	342.85	407.45	479.56	556.96	637.41	718.69
40	283.26	338.51	403.86	477.10	556.00	638.32	721.84
45	275.78	331.34	397.37	471.65	551.96	636.07	721.74
50	-	321.63	388.26	463.50	545.14	630.95	718.69
55	-	309.69	376.82	452.94	535.83	623.24	712.97
60	-	-	363.34	440.25	524.30	613.25	704.87
65	-	-	348.11	425.73	510.85	601.25	694.68
70	-	-	-	409.67	495.78	587.53	682.70
75	-	-	-	392.35	479.37	572.40	669.21

GACO SARL

28, Rue Bencharif Madani

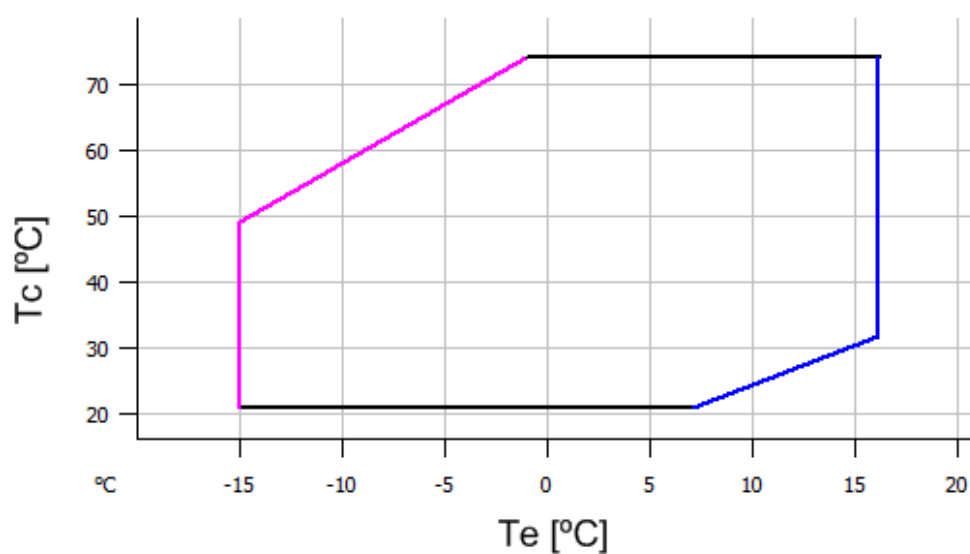
25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr

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

$t_c \setminus t_e$	-15	-10	-5	0	5	10	15
25	3.88	4.63	5.47	6.24	6.75	6.88	-
30	3.33	3.98	4.75	5.55	6.21	6.60	6.62
35	2.81	3.34	4.02	4.77	5.49	6.04	6.31
40	2.34	2.77	3.34	4.01	4.71	5.34	5.79
45	1.94	2.28	2.76	3.33	3.98	4.61	5.15
50	-	1.88	2.27	2.76	3.32	3.92	4.49
55	-	1.54	1.86	2.27	2.76	3.30	3.85
60	-	-	1.53	1.87	2.29	2.76	3.27
65	-	-	1.26	1.54	1.89	2.31	2.76
70	-	-	-	1.27	1.57	1.92	2.33
75	-	-	-	1.04	1.30	1.60	1.95

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]

R407C**Cooling capacity [kW]**

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15	20
25	10.60	13.85	17.56	21.83	26.79	32.55	39.22	46.92	-	-
30	9.61	12.97	16.73	21.01	25.92	31.58	38.09	45.58	54.17	-
35	8.43	11.89	15.69	19.96	24.80	30.34	36.69	43.96	52.26	61.72
40	-	10.62	14.45	18.69	23.45	28.86	35.02	42.04	50.06	59.17
45	-	-	13.01	17.21	21.88	27.13	33.09	39.86	47.57	56.33
50	-	-	-	15.53	20.09	25.18	30.92	37.43	44.81	53.19
55	-	-	-	-	18.11	23.02	28.53	34.74	41.79	49.77
60	-	-	-	-	-	20.65	25.91	31.83	38.52	46.09
65	-	-	-	-	-	-	-	28.69	35.01	42.16

Power input [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15	20
25	4.87	4.96	5.04	5.10	5.18	5.26	5.38	5.53	-	-
30	5.44	5.55	5.63	5.69	5.75	5.82	5.91	6.03	6.19	-
35	6.08	6.21	6.30	6.36	6.42	6.47	6.53	6.62	6.74	6.91
40	-	6.95	7.05	7.13	7.18	7.22	7.26	7.32	7.41	7.53
45	-	-	7.92	8.00	8.05	8.09	8.12	8.16	8.21	8.29
50	-	-	-	9.00	9.06	9.10	9.12	9.14	9.16	9.21
55	-	-	-	-	10.22	10.26	10.27	10.28	10.28	10.30
60	-	-	-	-	-	11.58	11.60	11.59	11.58	11.57
65	-	-	-	-	-	-	-	13.10	13.08	13.05

Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15	20
25	11.17	11.26	11.33	11.40	11.47	11.56	11.69	11.86	-	-
30	11.75	11.86	11.94	12.01	12.08	12.15	12.25	12.38	12.57	-
35	12.45	12.59	12.69	12.77	12.83	12.89	12.96	13.06	13.20	13.39
40	-	13.47	13.60	13.69	13.75	13.80	13.86	13.92	14.02	14.16
45	-	-	14.69	14.79	14.86	14.91	14.95	15.00	15.06	15.15
50	-	-	-	16.11	16.19	16.24	16.27	16.30	16.33	16.38
55	-	-	-	-	17.75	17.81	17.84	17.85	17.85	17.87
60	-	-	-	-	-	19.64	19.67	19.67	19.66	19.64
65	-	-	-	-	-	-	-	21.79	21.76	21.72

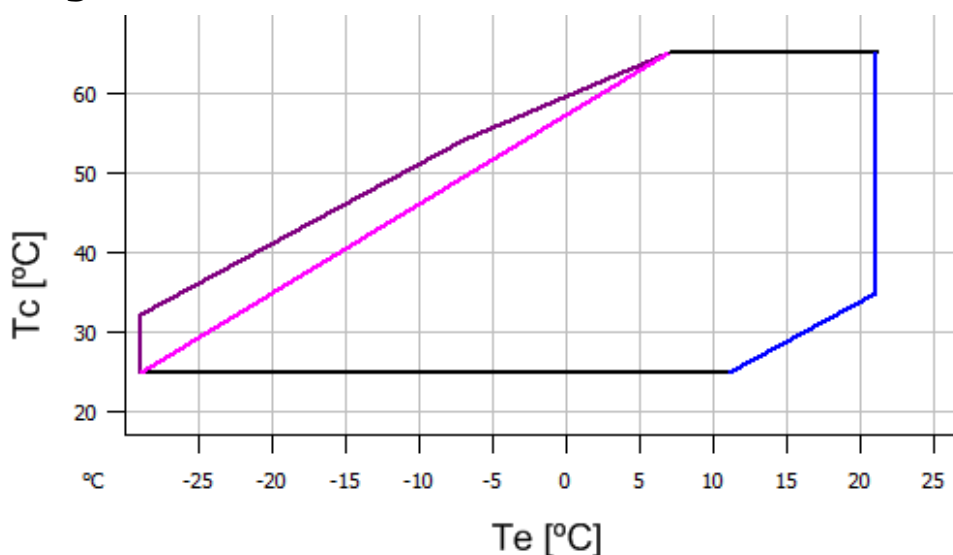
Mass flow [kg/h]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15	20
25	215.33	278.69	348.49	426.79	515.62	617.05	733.11	865.86	-	-
30	205.28	273.13	346.87	428.57	520.26	623.99	741.80	875.75	1 027.88	-
35	190.47	262.95	340.78	426.02	520.69	626.87	746.58	881.87	1 034.80	1 207.41
40	-	247.80	329.86	418.77	516.58	625.33	747.08	883.86	1 037.73	1 210.73
45	-	-	313.74	406.47	507.54	619.02	742.94	881.35	1 036.30	1 209.84
50	-	-	-	388.75	493.24	607.57	733.81	873.99	1 030.16	1 204.37
55	-	-	-	-	473.29	590.63	719.32	861.41	1 018.94	1 193.96
60	-	-	-	-	-	567.84	699.12	843.26	1 002.29	1 178.26
65	-	-	-	-	-	-	-	819.17	979.84	1 156.91

C.O.P. [W/W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15	20
25	2.18	2.79	3.49	4.28	5.18	6.18	7.29	8.48	-	-
30	1.77	2.34	2.97	3.69	4.50	5.42	6.45	7.56	8.75	-
35	1.39	1.92	2.49	3.14	3.87	4.69	5.62	6.64	7.75	8.94
40	-	1.53	2.05	2.62	3.27	4.00	4.82	5.74	6.76	7.86
45	-	-	1.64	2.15	2.72	3.35	4.07	4.89	5.79	6.79
50	-	-	-	1.73	2.22	2.77	3.39	4.10	4.89	5.77
55	-	-	-	-	1.77	2.24	2.78	3.38	4.06	4.83
60	-	-	-	-	-	1.78	2.23	2.75	3.33	3.98
65	-	-	-	-	-	-	-	2.19	2.68	3.23

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]

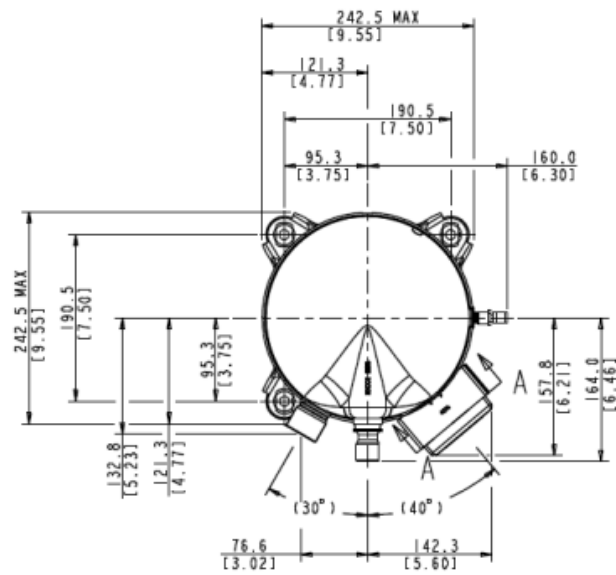
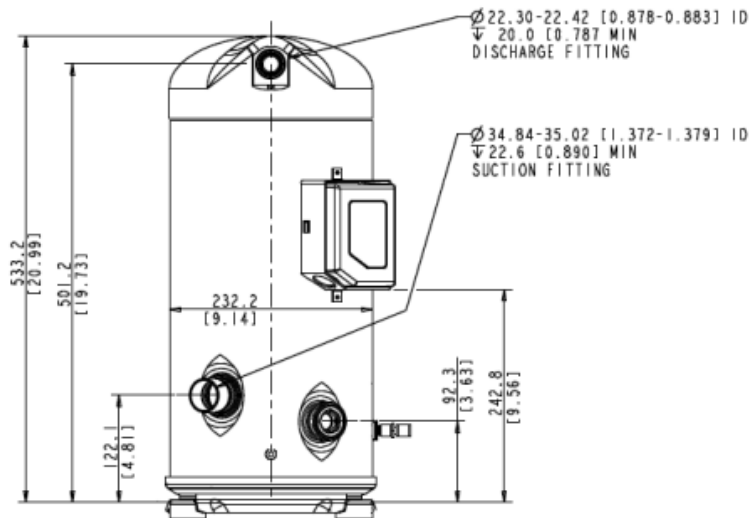
GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr



GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr

