

Technical Data Sheet

Compressor model **GPY14RDb**
 Voltage **115V 60Hz ~1**
 Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High Back Pressure	Displacement	14,32 cm ³	Nominal Power	1/2 hp
Refrigerant	R134a	Diameter	29,37 mm	Voltage/Frequency	115V 60Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	98-127 V
Expansion	Capillar/Valve	Net Weight	12,13 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm ³	Locked Rotor Amps (LRA)	44,50 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	10,90 A
				Main W. resist. at 25°C	0,89 Ω
				Start W. resist. at 25°C	4,55 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	1.467 kCal/h	1.410 W
COP	2,36 W/W	2,02 W/W
EER	2,03 kCal/Wh	1,75 kCal/Wh
Input Power	722 W	697 W
Current	7,00 A	6,89 A

TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °C	32,0 °C
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	250 μF 160 V			
Run capacitor	20 μF 250 V			
Relay	Option 1			
Reference	2014 191. + NTC3Ω			
Pick-Up	24,40 A			
Drop-Out	20,30 A			
Protector	Option 1			
Reference	T0257			
Current	24,00 A			
Time check	6,0-16 seg			
Disc temp. (Open/Close)	120,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	577	430	5,38	1,56	1,34
40	-10	739	474	5,67	1,81	1,56
40	-5	940	522	5,97	2,09	1,80
40	0	1.180	574	6,27	2,39	2,06
40	5	1.460	629	6,57	2,70	2,32
40	7,2	1.596	655	6,69	2,83	2,44
40	10	1.780	689	6,85	3,01	2,58

45	-15	547	439	5,45	1,45	1,25
45	-10	706	486	5,75	1,69	1,45
45	-5	904	537	6,06	1,96	1,68
45	0	1.142	592	6,37	2,24	1,93
45	5	1.419	650	6,67	2,54	2,18
45	7,2	1.553	677	6,80	2,67	2,29
45	10	1.735	713	6,96	2,83	2,43

50	-15	517	449	5,51	1,34	1,15
50	-10	673	499	5,83	1,57	1,35
50	-5	868	552	6,15	1,83	1,57
50	0	1.103	610	6,47	2,10	1,81
50	5	1.377	671	6,77	2,39	2,05
50	7,2	1.510	700	6,90	2,51	2,16
50	10	1.690	737	7,06	2,67	2,29

55	-15	487	458	5,57	1,24	1,06
55	-10	640	511	5,90	1,46	1,25
55	-5	832	567	6,24	1,71	1,47
55	0	1.064	628	6,56	1,97	1,69
55	5	1.335	692	6,87	2,24	1,93
55	7,2	1.467	722	7,00	2,36	2,03
55	10	1.646	761	7,16	2,52	2,16

60	-15	457	467	5,63	1,14	0,98
60	-10	607	523	5,98	1,35	1,16
60	-5	796	583	6,32	1,59	1,37
60	0	1.025	646	6,65	1,85	1,59
60	5	1.293	713	6,96	2,11	1,81
60	7,2	1.424	744	7,09	2,23	1,91
60	10	1.601	785	7,25	2,37	2,04

65	-15	427	477	5,69	1,04	0,90
65	-10	574	535	6,05	1,25	1,07
65	-5	761	598	6,40	1,48	1,27
65	0	986	664	6,74	1,73	1,49
65	5	1.252	735	7,05	1,98	1,70
65	7,2	1.381	767	7,18	2,10	1,80
65	10	1.557	809	7,34	2,24	1,92

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	621	432	5,40	1,44	1,24
40	-10	797	477	5,69	1,67	1,44
40	-5	1.014	525	5,99	1,93	1,67
40	0	1.273	577	6,29	2,21	1,91
40	5	1.572	633	6,59	2,48	2,15
40	7,2	1.718	659	6,71	2,61	2,25
40	10	1.914	693	6,87	2,76	2,38

45	-15	586	442	5,46	1,33	1,15
45	-10	757	489	5,77	1,55	1,34
45	-5	969	540	6,08	1,79	1,55
45	0	1.223	595	6,39	2,05	1,78
45	5	1.518	654	6,69	2,32	2,00
45	7,2	1.662	682	6,82	2,44	2,11
45	10	1.855	718	6,98	2,59	2,23

50	-15	551	451	5,52	1,22	1,05
50	-10	717	501	5,85	1,43	1,24
50	-5	925	555	6,17	1,66	1,44
50	0	1.174	614	6,49	1,91	1,65
50	5	1.464	676	6,79	2,17	1,87
50	7,2	1.605	704	6,92	2,28	1,97
50	10	1.796	742	7,08	2,42	2,09

55	-15	515	461	5,59	1,12	0,97
55	-10	677	514	5,92	1,32	1,14
55	-5	880	571	6,25	1,54	1,33
55	0	1.124	632	6,58	1,78	1,54
55	5	1.410	697	6,89	2,02	1,75
55	7,2	1.549	727	7,02	2,13	1,84
55	10	1.738	766	7,18	2,27	1,96

60	-15	480	470	5,65	1,02	0,88
60	-10	637	526	6,00	1,21	1,05
60	-5	835	586	6,34	1,43	1,23
60	0	1.075	650	6,67	1,65	1,43
60	5	1.356	718	6,98	1,89	1,63
60	7,2	1.493	749	7,11	1,99	1,72
60	10	1.679	790	7,27	2,13	1,84

65	-15	444	479	5,71	0,93	0,80
65	-10	597	538	6,07	1,11	0,96
65	-5	791	601	6,42	1,31	1,14
65	0	1.026	668	6,76	1,53	1,33
65	5	1.302	739	7,07	1,76	1,52
65	7,2	1.437	772	7,20	1,86	1,61
65	10	1.620	814	7,36	1,99	1,72

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.679,8369531450	442,1977835415	5,6876081598	25,277968939115
2	64,0185788269	6,4091843853	0,0446923240	1,0406180063396
3	-10,6016245289	3,7456019002	0,0176986628	0,064691235004674
4	0,8162720858	0,0869339048	-0,0002443726	0,024135039592264
5	-0,2201728181	0,1216597127	0,0003387352	0,0069287365082463

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS



DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



AMERICAN FEET

$\varnothing 19$ holes (165x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HBP

