

Technical Data Sheet

Compressor model **GPY12RAb**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	12,10 cm ³	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	27,00 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	13,42 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)	14,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	4,10 A
				Main W. resist. at 25°C	5,30 Ω
				Start W. resist. at 25°C	16,75 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.020 kCal/h	992 W
COP	2,58 W/W	2,23 W/W
EER	2,22 kCal/Wh	1,92 kCal/Wh
Input Power	460 W	445 W
Current	2,35 A	2,28 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 μF 330 V		
Run capacitor	6 μF 400 V		
Relay	Option 1		
Reference	2014 149. + NTC15Ω		
Pick-Up	7,70 A		
Drop-Out	6,50 A		
Protector	Option 1	Option 2	
Reference	MRA38139	T0269	
Current	10,30 A	9,60 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 52,00 °C	105,00 / 52,00 °C	

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	280	220	1,27	1,48	1,27
40	-20	375	245	1,38	1,78	1,53
40	-15	489	270	1,49	2,10	1,81
40	-10	623	297	1,60	2,44	2,10
40	-5	775	325	1,73	2,78	2,39
40	0	948	354	1,86	3,12	2,68
40	5	1.140	383	1,99	3,46	2,97
40	7,2	1.230	397	2,05	3,60	3,10
40	10	1.351	414	2,14	3,79	3,26

45	-25	258	222	1,28	1,35	1,16
45	-20	346	250	1,40	1,61	1,38
45	-15	452	278	1,52	1,89	1,63
45	-10	578	308	1,65	2,18	1,88
45	-5	724	339	1,79	2,49	2,14
45	0	889	370	1,93	2,79	2,40
45	5	1.073	403	2,08	3,09	2,66
45	7,2	1.160	418	2,15	3,23	2,78
45	10	1.276	437	2,24	3,40	2,92

50	-25	237	225	1,29	1,23	1,05
50	-20	316	255	1,42	1,44	1,24
50	-15	416	286	1,56	1,69	1,45
50	-10	534	319	1,70	1,95	1,67
50	-5	672	353	1,85	2,22	1,91
50	0	829	387	2,01	2,49	2,14
50	5	1.006	423	2,18	2,77	2,38
50	7,2	1.090	439	2,25	2,89	2,48
50	10	1.202	460	2,35	3,04	2,61

55	-25	215	227	1,30	1,10	0,95
55	-20	287	260	1,44	1,28	1,10
55	-15	379	295	1,59	1,50	1,29
55	-10	490	330	1,75	1,73	1,48
55	-5	620	366	1,91	1,97	1,69
55	0	770	404	2,09	2,22	1,91
55	5	939	443	2,27	2,47	2,12
55	7,2	1.020	460	2,35	2,58	2,22
55	10	1.128	482	2,46	2,72	2,34

60	-25	193	229	1,31	0,98	0,84
60	-20	258	265	1,47	1,13	0,97
60	-15	342	303	1,63	1,32	1,13
60	-10	446	341	1,80	1,52	1,31
60	-5	569	380	1,98	1,74	1,50
60	0	711	421	2,17	1,96	1,69
60	5	873	462	2,36	2,20	1,89
60	7,2	950	481	2,45	2,30	1,98
60	10	1.054	505	2,57	2,43	2,09

65	-25	172	232	1,32	0,86	0,74
65	-20	229	271	1,49	0,98	0,85
65	-15	306	311	1,66	1,14	0,98
65	-10	402	352	1,85	1,33	1,14
65	-5	517	394	2,04	1,52	1,31
65	0	652	438	2,24	1,73	1,49
65	5	806	482	2,46	1,94	1,67
65	7,2	880	502	2,55	2,04	1,75
65	10	980	528	2,68	2,16	1,86

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	302	221	1,28	1,36	1,18
40	-20	405	246	1,38	1,65	1,42
40	-15	529	272	1,49	1,95	1,68
40	-10	673	299	1,61	2,25	1,95
40	-5	837	327	1,73	2,56	2,21
40	0	1.022	356	1,87	2,87	2,48
40	5	1.227	386	2,00	3,18	2,75
40	7,2	1.324	400	2,07	3,31	2,86
40	10	1.453	417	2,15	3,48	3,01

45	-25	277	224	1,29	1,24	1,07
45	-20	371	251	1,40	1,48	1,28
45	-15	486	280	1,53	1,74	1,50
45	-10	621	310	1,66	2,01	1,73
45	-5	777	341	1,80	2,28	1,97
45	0	952	373	1,94	2,56	2,21
45	5	1.149	406	2,10	2,83	2,45
45	7,2	1.242	421	2,16	2,95	2,55
45	10	1.365	440	2,26	3,10	2,68

50	-25	252	226	1,30	1,12	0,96
50	-20	338	256	1,43	1,32	1,14
50	-15	443	288	1,56	1,54	1,33
50	-10	570	321	1,71	1,78	1,53
50	-5	716	355	1,86	2,02	1,75
50	0	883	390	2,02	2,27	1,96
50	5	1.071	426	2,19	2,52	2,17
50	7,2	1.159	442	2,26	2,62	2,27
50	10	1.278	463	2,36	2,76	2,39

55	-25	228	228	1,31	1,00	0,86
55	-20	304	262	1,45	1,16	1,00
55	-15	401	296	1,60	1,35	1,17
55	-10	518	332	1,76	1,56	1,35
55	-5	656	369	1,92	1,78	1,54
55	0	814	406	2,10	2,00	1,73
55	5	992	445	2,28	2,23	1,92
55	7,2	1.077	463	2,36	2,33	2,01
55	10	1.191	486	2,47	2,45	2,12

60	-25	203	231	1,32	0,88	0,76
60	-20	270	267	1,47	1,01	0,88
60	-15	358	304	1,64	1,18	1,02
60	-10	467	343	1,81	1,36	1,18
60	-5	595	383	1,99	1,56	1,34
60	0	745	423	2,18	1,76	1,52
60	5	914	465	2,38	1,96	1,70
60	7,2	995	484	2,47	2,06	1,78
60	10	1.104	508	2,58	2,17	1,88

65	-25	178	233	1,33	0,76	0,66
65	-20	237	272	1,49	0,87	0,75
65	-15	316	313	1,67	1,01	0,87
65	-10	415	354	1,86	1,17	1,01
65	-5	535	397	2,05	1,35	1,17
65	0	675	440	2,26	1,53	1,32
65	5	836	485	2,47	1,72	1,49
65	7,2	913	505	2,57	1,81	1,56
65	10	1.017	531	2,69	1,91	1,65

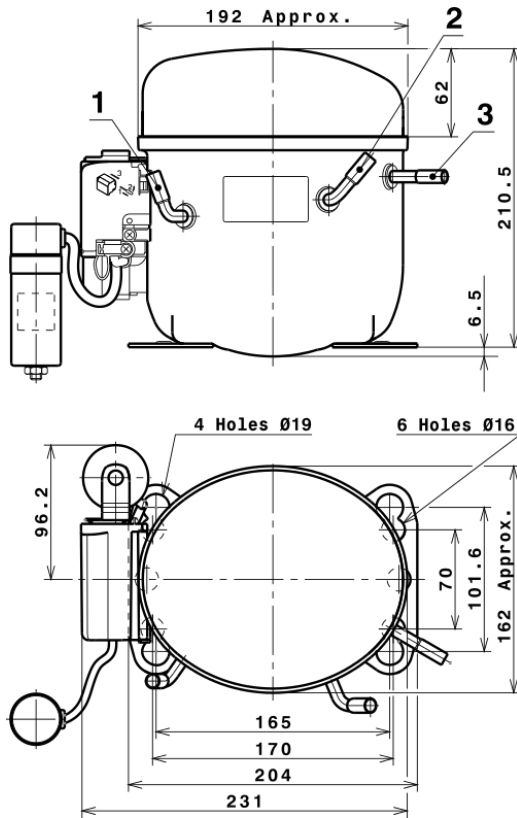
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.581,1990897983	225,6958190187	1,2484570319	26,523394478211
2	53,4131919670	1,3806144112	0,0057025602	0,99996879372849
3	-14,3118790244	3,4811798974	0,0163746406	-0,10143803548552
4	0,4007519862	0,0251641894	0,0001734519	0,011613090663811
5	-0,3725889679	0,1200636656	0,0005731550	-0,0017914062655879

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

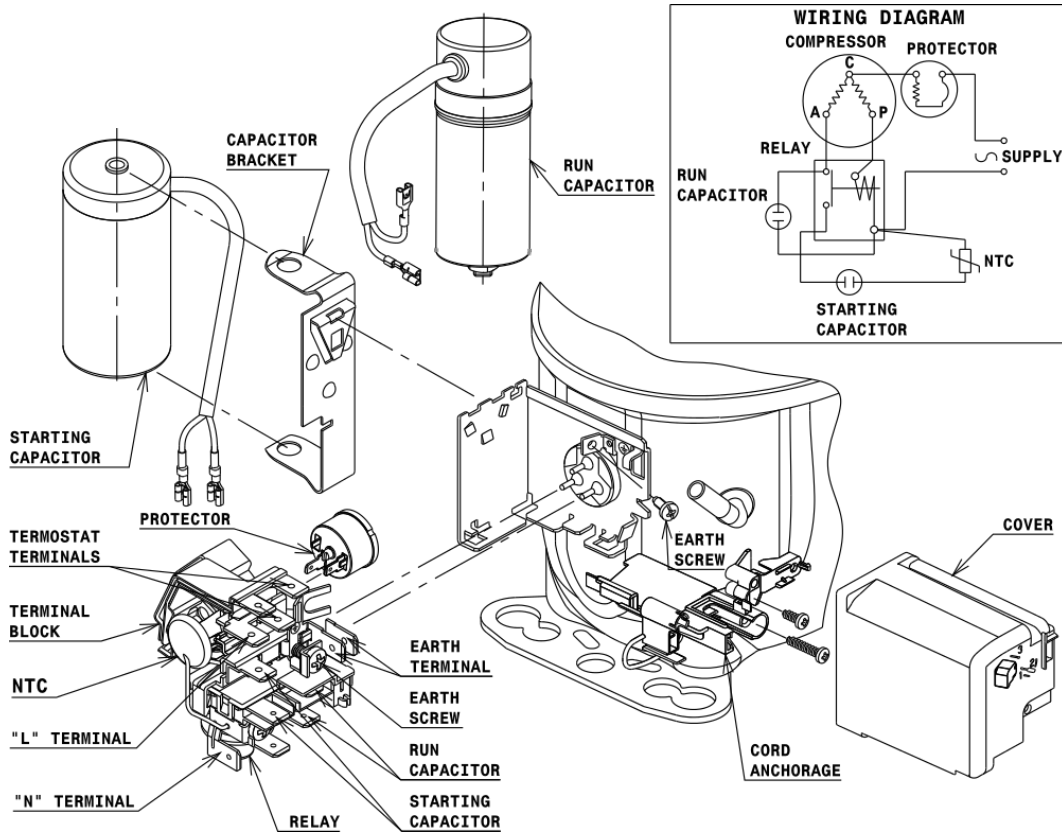
COMPRESSOR DIMENSIONS



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)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP

