

Technical Data Sheet

Compressor model **GPY12RDa**
 Voltage **115V 60Hz ~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	115V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	98-132 V
Expansion	Capillar/Valve	Net Weight	12,03 Kg	Type	CSIR
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)	39,50 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	11,00 A
				Main W. resist. at 25°C	1,00 Ω
				Start W. resist. at 25°C	6,50 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	1.180 kCal/h	1.150 W
COP	2,25 W/W	1,95 W/W
EER	1,93 kCal/Wh	1,68 kCal/Wh
Input Power	610 W	591 W
Current	6,70 A	6,55 A



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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V			
Relay	Option 1			
Reference	2014 184.			
Pick-Up	18,70 A			
Drop-Out	15,60 A			
Protector	Option 1	Option 2		
Reference	MRA38123	T0534		
Current	22,00 A	20,00 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	330	284	4,76	1,35	1,16
40	-20	438	319	4,91	1,60	1,37
40	-15	567	355	5,07	1,86	1,60
40	-10	717	392	5,26	2,13	1,83
40	-5	889	430	5,47	2,40	2,07
40	0	1.083	469	5,71	2,68	2,31
40	5	1.298	510	5,97	2,96	2,55
40	7,2	1.400	528	6,09	3,08	2,65
40	10	1.535	551	6,26	3,24	2,78

45	-25	308	287	4,78	1,25	1,07
45	-20	408	326	4,94	1,46	1,25
45	-15	529	365	5,13	1,68	1,45
45	-10	671	406	5,34	1,92	1,65
45	-5	836	448	5,58	2,17	1,86
45	0	1.021	491	5,85	2,42	2,08
45	5	1.229	536	6,14	2,67	2,29
45	7,2	1.327	555	6,29	2,78	2,39
45	10	1.457	581	6,47	2,92	2,51

50	-25	287	290	4,79	1,15	0,99
50	-20	378	332	4,97	1,32	1,14
50	-15	491	376	5,18	1,52	1,31
50	-10	626	421	5,42	1,73	1,49
50	-5	782	466	5,69	1,95	1,68
50	0	960	513	5,99	2,17	1,87
50	5	1.159	561	6,33	2,40	2,06
50	7,2	1.253	583	6,49	2,50	2,15
50	10	1.380	610	6,70	2,63	2,26

55	-25	265	293	4,80	1,05	0,90
55	-20	348	339	5,00	1,19	1,03
55	-15	453	387	5,23	1,36	1,17
55	-10	580	435	5,50	1,55	1,33
55	-5	728	485	5,80	1,75	1,50
55	0	898	535	6,14	1,95	1,68
55	5	1.089	587	6,52	2,16	1,86
55	7,2	1.180	610	6,70	2,25	1,93
55	10	1.302	640	6,94	2,37	2,03

60	-25	243	296	4,81	0,96	0,82
60	-20	319	346	5,03	1,07	0,92
60	-15	416	397	5,29	1,22	1,05
60	-10	534	449	5,58	1,38	1,19
60	-5	674	503	5,92	1,56	1,34
60	0	836	557	6,30	1,75	1,50
60	5	1.019	613	6,72	1,94	1,66
60	7,2	1.107	637	6,92	2,02	1,74
60	10	1.224	669	7,19	2,13	1,83

65	-25	222	299	4,82	0,86	0,74
65	-20	289	353	5,06	0,95	0,82
65	-15	378	408	5,35	1,08	0,93
65	-10	489	464	5,67	1,23	1,05
65	-5	621	521	6,04	1,39	1,19
65	0	774	579	6,46	1,56	1,34
65	5	949	638	6,93	1,73	1,49
65	7,2	1.033	665	7,15	1,81	1,55
65	10	1.146	699	7,45	1,91	1,64

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	355	285	4,77	1,25	1,08
40	-20	473	321	4,92	1,47	1,27
40	-15	612	357	5,08	1,72	1,48
40	-10	775	394	5,27	1,97	1,70
40	-5	960	433	5,49	2,22	1,92
40	0	1.168	472	5,72	2,47	2,14
40	5	1.398	513	5,99	2,72	2,35
40	7,2	1.507	531	6,11	2,84	2,45
40	10	1.651	555	6,28	2,97	2,57

45	-25	330	289	4,78	1,15	0,99
45	-20	438	327	4,95	1,34	1,16
45	-15	568	367	5,14	1,55	1,34
45	-10	721	409	5,35	1,76	1,52
45	-5	896	451	5,59	1,99	1,72
45	0	1.095	494	5,87	2,21	1,91
45	5	1.315	539	6,17	2,44	2,11
45	7,2	1.420	559	6,31	2,54	2,19
45	10	1.559	585	6,50	2,67	2,30

50	-25	305	292	4,79	1,05	0,91
50	-20	403	334	4,98	1,21	1,04
50	-15	524	378	5,19	1,39	1,20
50	-10	667	423	5,43	1,58	1,36
50	-5	833	469	5,70	1,78	1,53
50	0	1.022	516	6,01	1,98	1,71
50	5	1.233	565	6,35	2,18	1,89
50	7,2	1.333	586	6,52	2,27	1,96
50	10	1.467	614	6,73	2,39	2,06

55	-25	280	295	4,81	0,95	0,82
55	-20	369	341	5,01	1,08	0,93
55	-15	480	389	5,24	1,23	1,07
55	-10	613	437	5,51	1,40	1,21
55	-5	770	487	5,82	1,58	1,36
55	0	949	538	6,16	1,76	1,52
55	5	1.150	591	6,55	1,95	1,68
55	7,2	1.246	614	6,73	2,03	1,75
55	10	1.375	644	6,98	2,13	1,84

60	-25	255	298	4,82	0,86	0,74
60	-20	334	348	5,04	0,96	0,83
60	-15	436	399	5,30	1,09	0,94
60	-10	560	452	5,60	1,24	1,07
60	-5	706	506	5,94	1,40	1,21
60	0	876	560	6,32	1,56	1,35
60	5	1.068	616	6,75	1,73	1,50
60	7,2	1.159	641	6,96	1,81	1,56
60	10	1.283	674	7,23	1,90	1,65

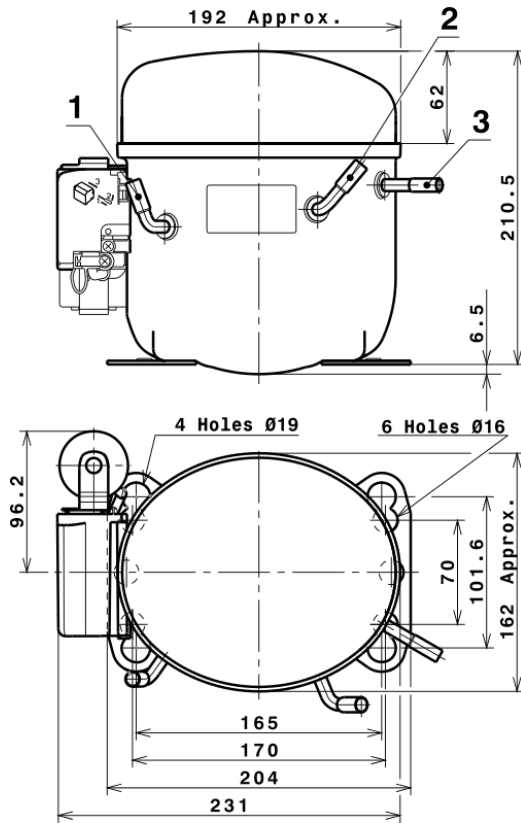
65	-25	230	301	4,83	0,77	0,66
65	-20	300	355	5,07	0,84	0,73
65	-15	391	410	5,36	0,95	0,82
65	-10	506	466	5,69	1,08	0,94
65	-5	643	524	6,06	1,23	1,06
65	0	803	582	6,49	1,38	1,19
65	5	985	642	6,96	1,53	1,33
65	7,2	1.073	669	7,19	1,60	1,39
65	10	1.190	703	7,49	1,69	1,46

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.758,3208123877	303,4313550978	4,3891061225	29,04946078411
2	59,3559418150	2,1171493276	0,0077745696	1,1046434818946
3	-15,1413401595	4,5293573724	0,0342165983	-0,084342610222156
4	0,4458583816	0,0267144808	0,0007988964	0,012962388434338
5	-0,4019609914	0,1565097559	0,0012673285	-0,0015186935370922

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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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

CSIR CONNECTION (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

