

# Technical Data Sheet

Compressor model **GPY14RAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	14,32 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	29,37 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	11,94 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 <sup>3</sup>	Locked Rotor Amps (LRA)	17,80 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	4,90 A
				Main W. resist. at 25°C	4,93 Ω
				Start W. resist. at 25°C	11,70 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.190 kCal/h	1.161 W
COP	2,27 W/W	1,97 W/W
EER	1,95 kCal/Wh	1,70 kCal/Wh
Input Power	610 W	589 W
Current	3,52 A	3,44 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	64- 77 μF 330 V			
Relay	Option 1	Option 2		
Reference	2014 149.	QLZ-7.8A		
Pick-Up	7,80 A	7,80 A		
Drop-Out	6,65 A	6,65 A		
Protector	Option 1			
Reference	T0252			
Current	11,50 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	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	340	275	2,39	1,44	1,24
40	-20	448	305	2,47	1,71	1,47
40	-15	577	338	2,56	1,99	1,71
40	-10	729	373	2,67	2,28	1,96
40	-5	903	410	2,78	2,56	2,20
40	0	1.099	449	2,91	2,85	2,45
40	5	1.317	491	3,06	3,12	2,68
40	7,2	1.420	510	3,13	3,24	2,78
40	10	1.557	535	3,22	3,39	2,91

45	-25	320	282	2,40	1,32	1,14
45	-20	419	316	2,50	1,54	1,33
45	-15	540	353	2,61	1,78	1,53
45	-10	683	392	2,73	2,03	1,74
45	-5	848	433	2,86	2,28	1,96
45	0	1.035	477	3,01	2,53	2,17
45	5	1.244	522	3,18	2,77	2,38
45	7,2	1.343	543	3,26	2,88	2,47
45	10	1.476	571	3,36	3,01	2,59

50	-25	300	288	2,42	1,21	1,04
50	-20	390	327	2,53	1,39	1,19
50	-15	502	368	2,65	1,59	1,37
50	-10	636	411	2,79	1,80	1,55
50	-5	793	456	2,94	2,02	1,74
50	0	971	504	3,11	2,24	1,93
50	5	1.171	554	3,30	2,46	2,11
50	7,2	1.267	577	3,39	2,55	2,20
50	10	1.394	606	3,50	2,67	2,30

55	-25	280	295	2,44	1,10	0,95
55	-20	361	338	2,56	1,24	1,07
55	-15	465	383	2,70	1,41	1,21
55	-10	590	430	2,85	1,60	1,37
55	-5	737	480	3,02	1,79	1,54
55	0	907	531	3,21	1,99	1,71
55	5	1.099	585	3,42	2,18	1,88
55	7,2	1.190	610	3,52	2,27	1,95
55	10	1.312	642	3,65	2,38	2,04

60	-25	260	302	2,46	1,00	0,86
60	-20	332	349	2,59	1,11	0,95
60	-15	427	398	2,74	1,25	1,07
60	-10	544	449	2,91	1,41	1,21
60	-5	682	503	3,10	1,58	1,36
60	0	843	559	3,31	1,75	1,51
60	5	1.026	617	3,55	1,93	1,66
60	7,2	1.113	643	3,66	2,01	1,73
60	10	1.231	678	3,81	2,11	1,82

65	-25	240	308	2,48	0,91	0,78
65	-20	304	359	2,63	0,98	0,85
65	-15	389	413	2,79	1,10	0,94
65	-10	497	468	2,98	1,24	1,06
65	-5	627	526	3,19	1,39	1,19
65	0	779	586	3,42	1,55	1,33
65	5	953	648	3,68	1,71	1,47
65	7,2	1.037	677	3,80	1,78	1,53
65	10	1.149	713	3,97	1,87	1,61

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	366	276	2,39	1,32	1,14
40	-20	484	307	2,47	1,58	1,36
40	-15	624	340	2,57	1,84	1,59
40	-10	788	375	2,67	2,10	1,82
40	-5	975	412	2,79	2,36	2,04
40	0	1.185	452	2,92	2,62	2,26
40	5	1.418	494	3,07	2,87	2,48
40	7,2	1.528	513	3,14	2,98	2,57
40	10	1.675	538	3,24	3,11	2,69

45	-25	343	283	2,41	1,21	1,05
45	-20	450	318	2,50	1,42	1,22
45	-15	580	355	2,61	1,63	1,41
45	-10	733	394	2,73	1,86	1,61
45	-5	910	436	2,87	2,09	1,80
45	0	1.109	480	3,02	2,31	2,00
45	5	1.332	526	3,19	2,53	2,19
45	7,2	1.438	547	3,27	2,63	2,27
45	10	1.578	574	3,38	2,75	2,37

50	-25	320	290	2,43	1,10	0,95
50	-20	416	329	2,53	1,27	1,09
50	-15	536	370	2,66	1,45	1,25
50	-10	679	413	2,79	1,64	1,42
50	-5	845	459	2,95	1,84	1,59
50	0	1.034	507	3,12	2,04	1,76
50	5	1.246	557	3,31	2,24	1,93
50	7,2	1.347	580	3,40	2,32	2,01
50	10	1.482	610	3,52	2,43	2,10

55	-25	296	297	2,44	1,00	0,86
55	-20	382	340	2,57	1,13	0,97
55	-15	492	385	2,70	1,28	1,10
55	-10	624	432	2,86	1,44	1,25
55	-5	780	482	3,03	1,62	1,40
55	0	958	535	3,22	1,79	1,55
55	5	1.161	589	3,44	1,97	1,70
55	7,2	1.257	614	3,54	2,05	1,77
55	10	1.386	646	3,67	2,15	1,85

60	-25	273	303	2,46	0,90	0,78
60	-20	349	350	2,60	0,99	0,86
60	-15	447	400	2,75	1,12	0,97
60	-10	569	452	2,92	1,26	1,09
60	-5	715	506	3,11	1,41	1,22
60	0	883	562	3,33	1,57	1,36
60	5	1.075	621	3,57	1,73	1,50
60	7,2	1.166	647	3,68	1,80	1,56
60	10	1.290	682	3,83	1,89	1,63

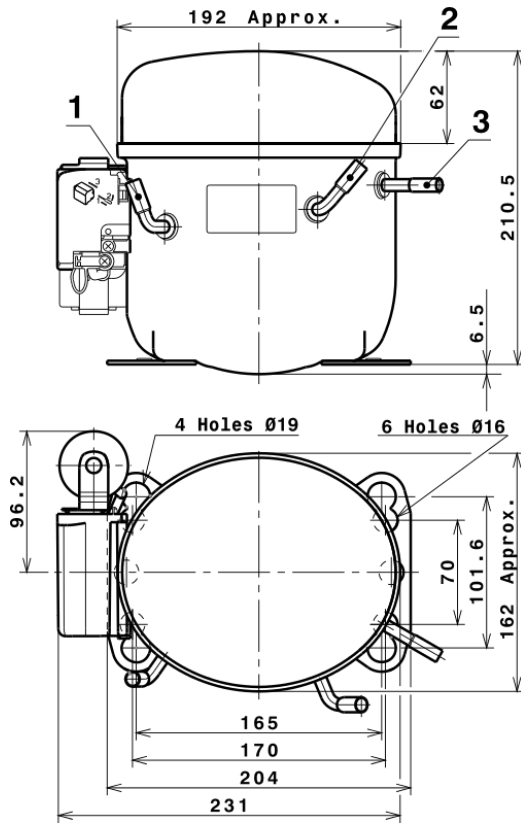
65	-25	250	310	2,48	0,81	0,70
65	-20	315	361	2,63	0,87	0,75
65	-15	403	415	2,80	0,97	0,84
65	-10	515	471	2,99	1,09	0,94
65	-5	650	529	3,20	1,23	1,06
65	0	808	590	3,44	1,37	1,18
65	5	989	653	3,70	1,52	1,31
65	7,2	1.076	681	3,82	1,58	1,37
65	10	1.193	718	3,99	1,66	1,44

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.795,0045465472	237,2451645787	2,0613412634	29,762369363262
2	61,1856429372	1,6508147397	0,0021838588	1,1481775940324
3	-15,6348555413	5,6618565052	0,0221563199	-0,092731156208819
4	0,4565328089	0,0509274025	0,0003995972	0,013241650258856
5	-0,4346764938	0,1716641736	0,0007363903	-0,0022878638586013

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)



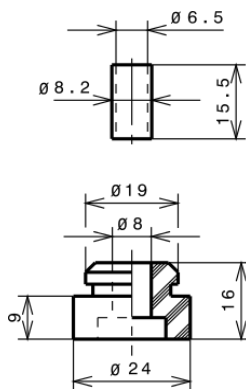
## FIXINGS



## 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

