

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **GPY14RAb**
Voltage **220-240V 50Hz ~1**
Refrigerant **R134a**

APPLICATION

Application High-Medium Back Pressure
Refrigerant R134a
Evaporating Temp. -25,0 °C to 10,0 °C
Expansion Capillar/Valve
Comp. Cooling Fan cooled
Max. ambient temp. 43,0 °C
Compatible refriger. R1234yf

COMPRESSOR

Displacement 14,32 cm³
Diameter 29,37 mm
Stroke 21,13 mm
Net Weight 12,05 Kg
Oil type ISO VG 32 ESTER
Oil charge 400 cm³

MOTOR

Nominal Power 3/8 hp
Voltage/Frequency 220-240V 50Hz
Voltage range 187-264 V
Type CSR
Phase number 1 PH
Locked Rotor Amps (LRA) 20,40 A
Max. Cont. Current (MCC) 5,00 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	2,50 W/W	2,16 W/W
EER	2,15 kCal/Wh	1,87 kCal/Wh
Input Power	554 W	537 W
Current	2,80 A	2,72 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	64- 77 µF 330 V			
Run capacitor	10 µF 420 V			
Relay	Option 1	Option 2		
Reference	2014 149. + NTC15Ω	QLZ 7.8A + NTC15Ω		
Pick-Up	7,80 A	7,80 A		
Drop-Out	6,50 A	6,65 A		
Protector	Option 1	Option 2		
Reference	T0267	B113-105		
Current	11,00 A	11,50 A		
Time check	7,5-14 seg	7,5-16 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C	110,00 / 52,00 °C		

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	340	260	1,63	1,52	1,31
40	-20	448	295	1,75	1,77	1,52
40	-15	577	330	1,88	2,03	1,75
40	-10	729	367	2,02	2,31	1,99
40	-5	903	404	2,17	2,60	2,23
40	0	1.099	443	2,32	2,89	2,48
40	5	1.317	482	2,49	3,18	2,73
40	7,2	1.420	500	2,56	3,30	2,84
40	10	1.557	523	2,66	3,46	2,98

45	-25	320	265	1,64	1,40	1,21
45	-20	419	302	1,78	1,61	1,39
45	-15	540	339	1,92	1,85	1,59
45	-10	683	378	2,06	2,10	1,81
45	-5	848	417	2,22	2,36	2,03
45	0	1.035	458	2,39	2,63	2,26
45	5	1.244	499	2,56	2,90	2,49
45	7,2	1.343	518	2,64	3,02	2,59
45	10	1.476	542	2,75	3,17	2,72

50	-25	300	270	1,66	1,29	1,11
50	-20	390	309	1,80	1,47	1,26
50	-15	502	348	1,95	1,68	1,44
50	-10	636	389	2,11	1,90	1,64
50	-5	793	431	2,27	2,14	1,84
50	0	971	473	2,45	2,39	2,05
50	5	1.171	517	2,63	2,64	2,27
50	7,2	1.267	536	2,72	2,75	2,36
50	10	1.394	561	2,83	2,89	2,48

55	-25	280	275	1,68	1,18	1,02
55	-20	361	316	1,83	1,33	1,14
55	-15	465	357	1,98	1,51	1,30
55	-10	590	400	2,15	1,72	1,48
55	-5	737	444	2,33	1,93	1,66
55	0	907	488	2,51	2,16	1,86
55	5	1.099	534	2,71	2,39	2,06
55	7,2	1.190	554	2,80	2,50	2,15
55	10	1.312	580	2,92	2,63	2,26

60	-25	260	280	1,70	1,08	0,93
60	-20	332	323	1,85	1,20	1,03
60	-15	427	366	2,02	1,36	1,17
60	-10	544	411	2,19	1,54	1,32
60	-5	682	457	2,38	1,74	1,49
60	0	843	503	2,58	1,95	1,68
60	5	1.026	551	2,79	2,17	1,86
60	7,2	1.113	572	2,88	2,26	1,95
60	10	1.231	599	3,01	2,39	2,05

65	-25	240	285	1,72	0,98	0,84
65	-20	304	330	1,88	1,07	0,92
65	-15	389	375	2,05	1,21	1,04
65	-10	497	422	2,24	1,37	1,18
65	-5	627	470	2,43	1,55	1,33
65	0	779	518	2,64	1,75	1,50
65	5	953	568	2,86	1,95	1,68
65	7,2	1.037	590	2,96	2,04	1,76
65	10	1.149	618	3,10	2,16	1,86

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	366	261	1,63	1,40	1,21
40	-20	484	296	1,76	1,63	1,41
40	-15	624	332	1,89	1,88	1,62
40	-10	788	369	2,03	2,14	1,84
40	-5	975	407	2,18	2,40	2,07
40	0	1.185	446	2,33	2,66	2,30
40	5	1.418	485	2,50	2,92	2,52
40	7,2	1.528	503	2,58	3,04	2,62
40	10	1.675	526	2,68	3,18	2,75

45	-25	343	266	1,65	1,29	1,11
45	-20	450	303	1,78	1,48	1,28
45	-15	580	341	1,92	1,70	1,47
45	-10	733	380	2,07	1,93	1,67
45	-5	910	420	2,23	2,17	1,87
45	0	1.109	461	2,40	2,41	2,08
45	5	1.332	503	2,57	2,65	2,29
45	7,2	1.438	521	2,66	2,76	2,38
45	10	1.578	545	2,76	2,89	2,50

50	-25	320	271	1,67	1,18	1,02
50	-20	416	310	1,81	1,34	1,16
50	-15	536	350	1,96	1,53	1,32
50	-10	679	391	2,11	1,73	1,50
50	-5	845	433	2,28	1,95	1,69
50	0	1.034	476	2,46	2,17	1,88
50	5	1.246	520	2,65	2,40	2,07
50	7,2	1.347	539	2,74	2,50	2,16
50	10	1.482	565	2,85	2,62	2,27

55	-25	296	276	1,69	1,07	0,93
55	-20	382	317	1,83	1,20	1,04
55	-15	492	359	1,99	1,37	1,18
55	-10	624	402	2,16	1,55	1,34
55	-5	780	446	2,34	1,75	1,51
55	0	958	491	2,53	1,95	1,69
55	5	1.161	537	2,72	2,16	1,87
55	7,2	1.257	558	2,82	2,25	1,95
55	10	1.386	584	2,94	2,37	2,05

60	-25	273	281	1,70	0,97	0,84
60	-20	349	324	1,86	1,07	0,93
60	-15	447	368	2,03	1,21	1,05
60	-10	569	413	2,20	1,38	1,19
60	-5	715	459	2,39	1,56	1,34
60	0	883	506	2,59	1,74	1,51
60	5	1.075	554	2,80	1,94	1,68
60	7,2	1.166	576	2,90	2,03	1,75
60	10	1.290	603	3,02	2,14	1,85

65	-25	250	287	1,72	0,87	0,75
65	-20	315	332	1,89	0,95	0,82
65	-15	403	378	2,06	1,07	0,92
65	-10	515	425	2,25	1,21	1,05
65	-5	650	473	2,45	1,37	1,19
65	0	808	521	2,66	1,55	1,34
65	5	989	571	2,88	1,73	1,49
65	7,2	1.076	594	2,98	1,81	1,57
65	10	1.193	622	3,11	1,92	1,66



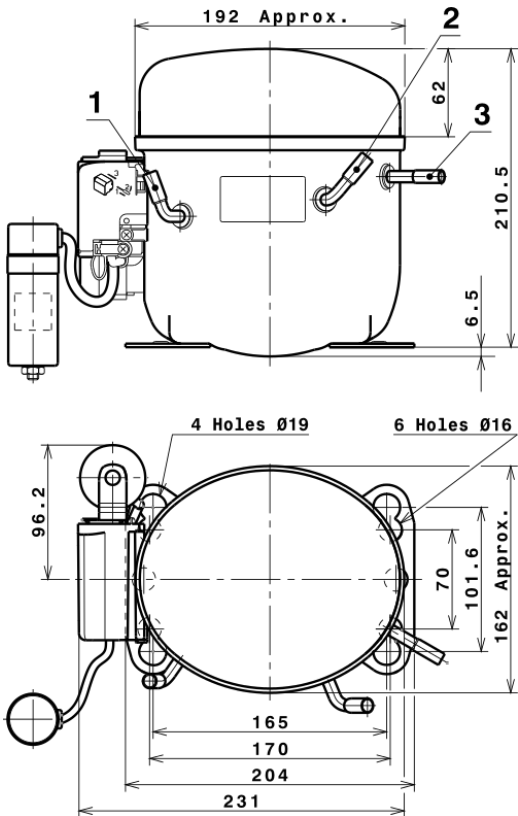
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.795,0045465472	332,3065531891	1,8295337554	29,762369363262
2	61,1856429372	4,8360850261	0,0186507879	1,1481775940324
3	-15,6348555413	3,1217447884	0,0136749789	-0,092731156208819
4	0,4565328089	0,0234994878	0,0002288805	0,013241650258856
5	-0,4346764938	0,0837622265	0,0004009337	-0,0022878638586013

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Air Con Parts Service

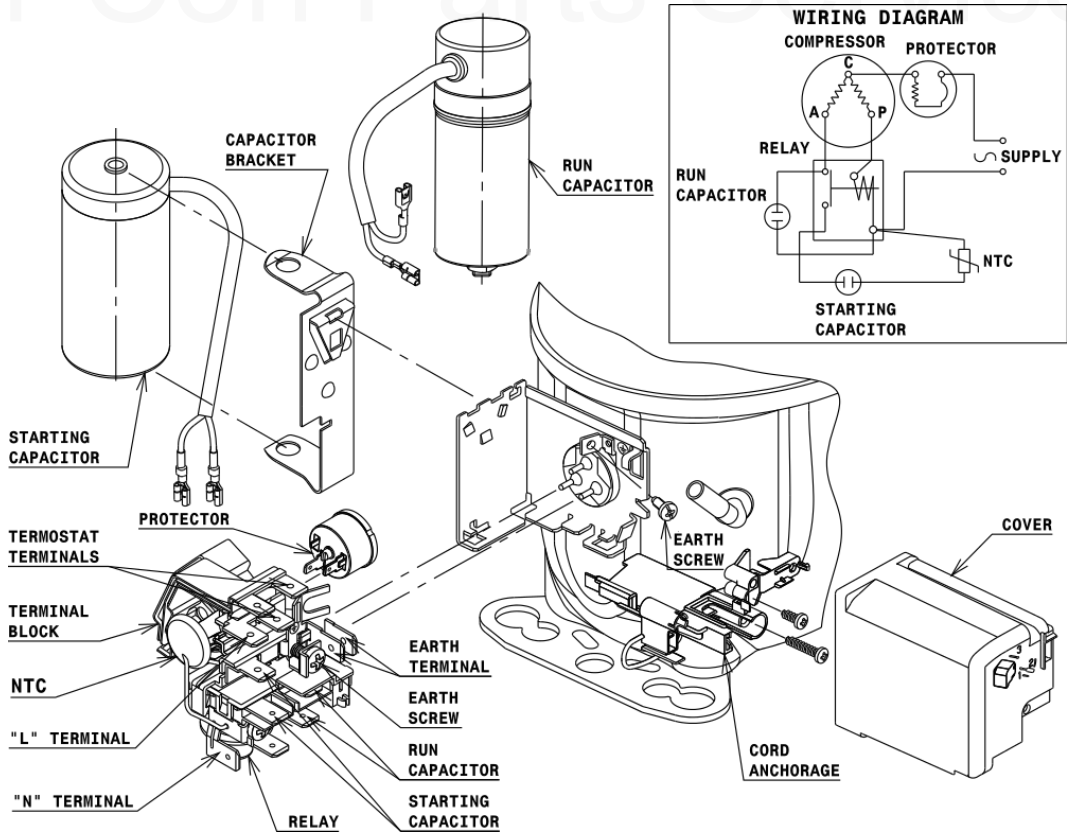
COMPRESSOR DIMENSIONS



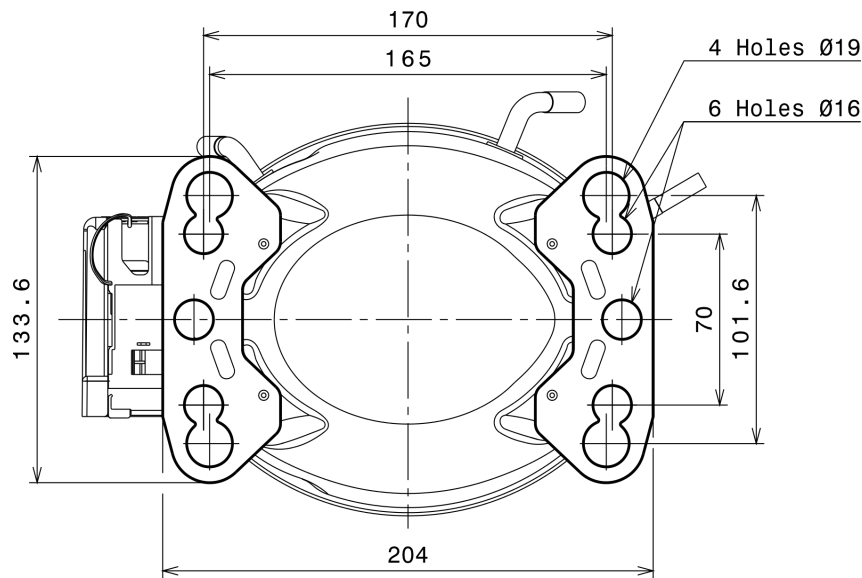
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



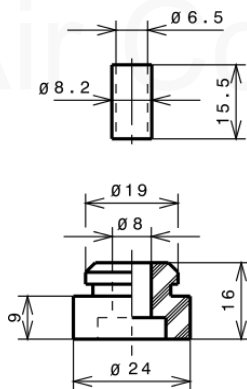
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

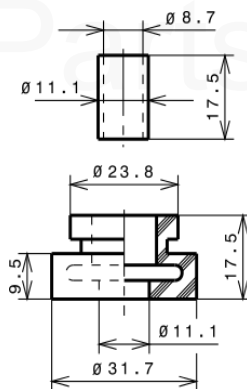
STANDARD

Ø16 holes (170x70 net)



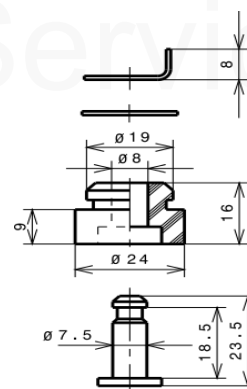
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP

