

Technical Data Sheet

Compressor model **GPM16RA**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R134a**

APPLICATION		COMPRESSOR		MOTOR	
Application	High Back Pressure	Displacement	16,15 cm ³	Nominal Power	1/2 hp
Refrigerant	R134a	Diameter	31,19 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	12,29 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	450 cm ³	Locked Rotor Amps (LRA)	21,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	5,50 A
				Main W. resist. at 25°C	4,52 Ω
				Start W. resist. at 25°C	9,57 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.351 kCal/h	1.317 W
COP	2,09 W/W	1,79 W/W
EER	1,80 kCal/Wh	1,55 kCal/Wh
Input Power	752 W	734 W
Current	4,28 A	4,18 A

APPROVALS

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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	64- 77 μF 330 V			
Relay	Option 1	Option 2		
Reference	2014 166.	QLZ-11.0A		
Pick-Up	11,00 A	11 A		
Drop-Out	9,35 A	9.35 A		
Protector	Option 1			
Reference	T0425			
Current	11,50 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 61,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	661	472	3,29	1,63	1,40
40	-10	842	516	3,38	1,90	1,63
40	-5	1.048	557	3,48	2,19	1,88
40	0	1.277	594	3,59	2,50	2,15
40	5	1.531	627	3,70	2,84	2,44
40	7,2	1.650	640	3,75	3,00	2,58
40	10	1.809	656	3,82	3,21	2,76

45	-15	612	478	3,30	1,49	1,28
45	-10	781	529	3,40	1,72	1,48
45	-5	976	577	3,53	1,97	1,69
45	0	1.194	621	3,68	2,24	1,92
45	5	1.436	661	3,84	2,53	2,17
45	7,2	1.550	677	3,91	2,66	2,29
45	10	1.703	697	4,00	2,84	2,44

50	-15	562	483	3,31	1,35	1,16
50	-10	721	542	3,44	1,55	1,33
50	-5	903	597	3,60	1,76	1,51
50	0	1.110	648	3,79	1,99	1,71
50	5	1.341	695	3,99	2,24	1,93
50	7,2	1.451	715	4,09	2,36	2,03
50	10	1.597	738	4,21	2,51	2,16

55	-15	513	489	3,32	1,22	1,05
55	-10	660	555	3,47	1,38	1,19
55	-5	831	617	3,67	1,57	1,35
55	0	1.027	675	3,90	1,77	1,52
55	5	1.247	729	4,16	1,99	1,71
55	7,2	1.351	752	4,28	2,09	1,80
55	10	1.491	780	4,44	2,22	1,91

60	-15	464	495	3,33	1,09	0,94
60	-10	599	568	3,51	1,23	1,06
60	-5	759	637	3,74	1,39	1,19
60	0	944	702	4,02	1,56	1,34
60	5	1.152	764	4,34	1,75	1,51
60	7,2	1.251	789	4,49	1,84	1,59
60	10	1.385	821	4,69	1,96	1,69

65	-15	414	500	3,34	0,96	0,83
65	-10	539	580	3,55	1,08	0,93
65	-5	687	657	3,82	1,22	1,05
65	0	860	729	4,16	1,37	1,18
65	5	1.057	798	4,54	1,54	1,33
65	7,2	1.152	827	4,73	1,62	1,39
65	10	1.279	862	4,97	1,72	1,48

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	712	475	3,30	1,50	1,30
40	-10	908	519	3,38	1,75	1,51
40	-5	1.129	560	3,49	2,02	1,74
40	0	1.376	597	3,60	2,30	1,99
40	5	1.648	631	3,72	2,61	2,26
40	7,2	1.776	644	3,77	2,76	2,38
40	10	1.945	660	3,84	2,95	2,55

45	-15	655	480	3,30	1,36	1,18
45	-10	838	532	3,41	1,57	1,36
45	-5	1.046	580	3,54	1,80	1,56
45	0	1.279	625	3,70	2,05	1,77
45	5	1.538	665	3,86	2,31	2,00
45	7,2	1.659	682	3,93	2,43	2,10
45	10	1.822	702	4,02	2,60	2,24

50	-15	599	486	3,31	1,23	1,07
50	-10	768	545	3,44	1,41	1,22
50	-5	963	600	3,61	1,60	1,39
50	0	1.182	652	3,80	1,81	1,57
50	5	1.427	700	4,01	2,04	1,76
50	7,2	1.543	719	4,11	2,15	1,85
50	10	1.698	743	4,23	2,28	1,97

55	-15	543	492	3,32	1,10	0,95
55	-10	698	558	3,48	1,25	1,08
55	-5	879	620	3,68	1,42	1,22
55	0	1.085	679	3,92	1,60	1,38
55	5	1.317	734	4,18	1,79	1,55
55	7,2	1.427	757	4,31	1,89	1,63
55	10	1.574	785	4,47	2,01	1,73

60	-15	486	497	3,34	0,98	0,84
60	-10	628	571	3,52	1,10	0,95
60	-5	796	640	3,76	1,24	1,07
60	0	989	706	4,04	1,40	1,21
60	5	1.207	768	4,37	1,57	1,36
60	7,2	1.311	794	4,52	1,65	1,43
60	10	1.450	827	4,73	1,75	1,52

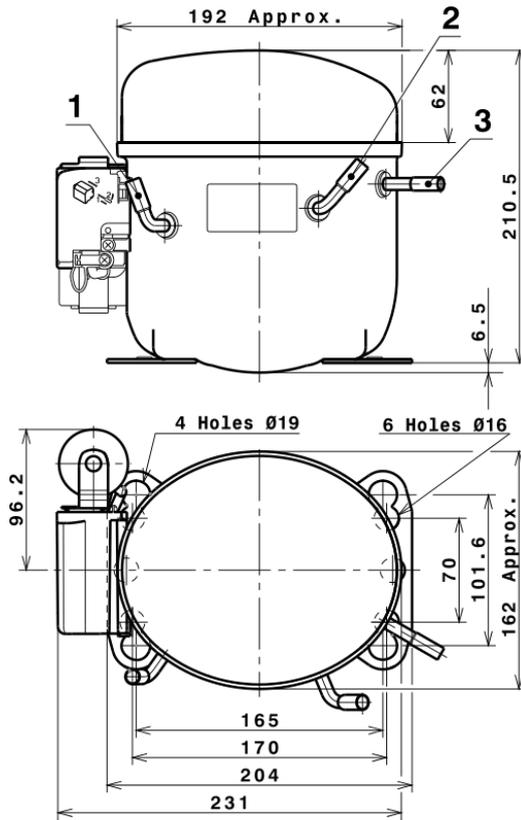
65	-15	430	503	3,35	0,85	0,74
65	-10	558	584	3,56	0,96	0,83
65	-5	712	661	3,84	1,08	0,93
65	0	892	734	4,18	1,22	1,05
65	5	1.096	803	4,58	1,37	1,18
65	7,2	1.194	832	4,76	1,44	1,24
65	10	1.326	868	5,01	1,53	1,32

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.154,1591216909	388,8174150996	2,5160255072	36,931303490046
2	73,9279740310	-4,4307831633	-0,0364111391	1,3300391413074
3	-19,9190963109	5,5981944920	0,0269611091	-0,16541948741795
4	0,5014682337	-0,0722693349	0,0007233838	0,015546556135209
5	-0,5648991955	0,2954700957	0,0016490619	-0,0027286823432187

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

COMPRESSOR DIMENSIONS

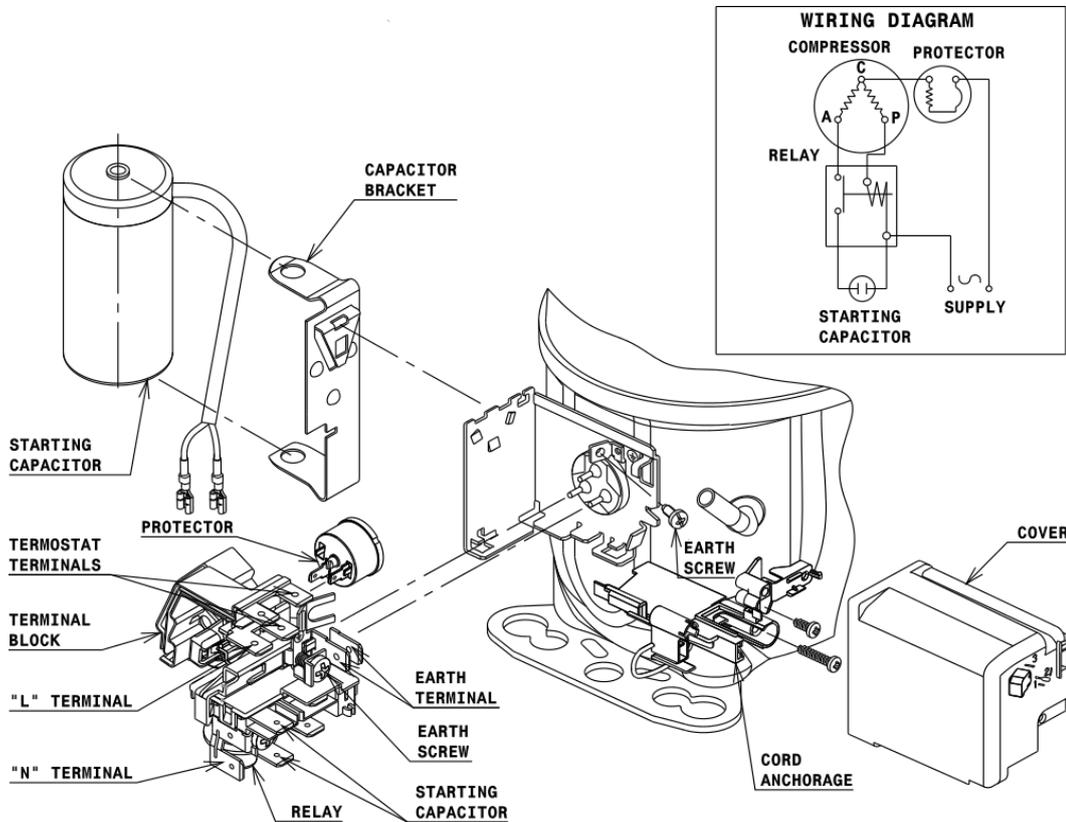


DESIGNATION INTERNAL DIAM.

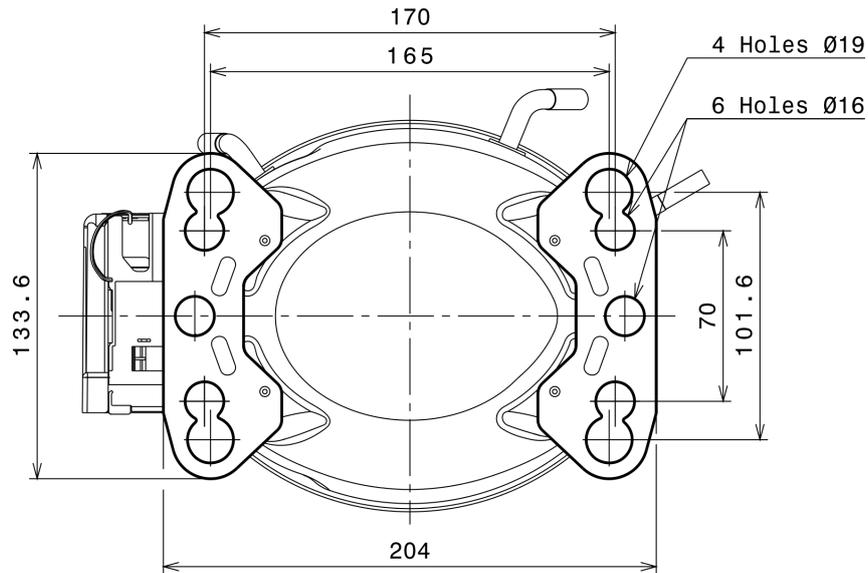
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



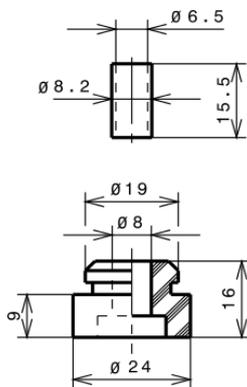
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

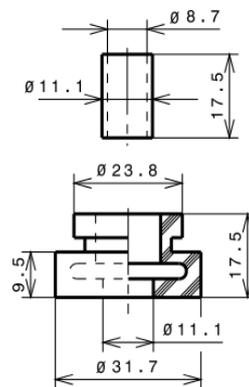
STANDARD

$\varnothing 16$ holes (170x70 net)



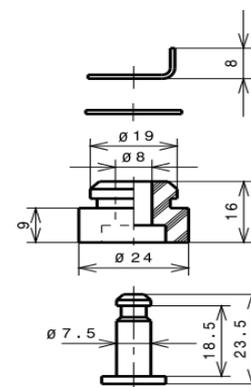
AMERICAN FEET

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



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HBP

