

Technical Data Sheet

Compressor model **GPT18RG**
Voltage **200-220/230V 50/60Hz ~1**
Refrigerant **R134a**

APPLICATION

Application High Back Pressure
Refrigerant R134a
Evaporating Temp. -15,0 °C to 10,0 °C
Expansion Capillar/Valve
Comp. Cooling Fan cooled
Max. ambient temp. 43,0 °C
Compatible refriger. R1234yf

COMPRESSOR

Displacement 18,00 cm³
Diameter 32,60 mm
Stroke 21,11 mm
Net Weight 12,84 Kg
Oil type ISO VG 32 ESTER
Oil charge 400 cm³

MOTOR

Nominal Power 1/2 hp
Voltage/Frequency 230V 60Hz
Voltage range 207-253 V
Type CSR
Phase number 1 PH
Locked Rotor Amps (LRA) 19,50 A
Max. Cont. Current (MCC) 5,00 A
Main W. resist. at 25°C 3,08 Ω
Start W. resist. at 25°C 7,22 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.689 kCal/h	1.640 W
COP	2,20 W/W	1,90 W/W
EER	1,89 kCal/Wh	1,64 kCal/Wh
Input Power	893 W	862 W
Current	3,93 A	3,80 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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Run capacitor	20 µF 420 V			
Relay	Option 1			
Reference	2014 166. + NTC15Ω			
Pick-Up	11,00 A			
Drop-Out	9,35 A			
Protector	Option 1			
Reference	T0088			
Current	14,70 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	115,00 / 62,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	775	527	2,46	1,71	1,47
40	-10	999	590	2,71	1,97	1,69
40	-5	1.262	660	2,99	2,22	1,91
40	0	1.565	736	3,29	2,47	2,13
40	5	1.906	818	3,63	2,71	2,33
40	7,2	2.069	856	3,78	2,81	2,42
40	10	2.287	906	3,98	2,94	2,52

45	-15	735	544	2,53	1,57	1,35
45	-10	940	606	2,78	1,80	1,55
45	-5	1.183	675	3,05	2,04	1,75
45	0	1.466	750	3,35	2,28	1,96
45	5	1.788	831	3,68	2,50	2,15
45	7,2	1.942	868	3,83	2,60	2,24
45	10	2.149	918	4,03	2,72	2,34

50	-15	695	560	2,59	1,44	1,24
50	-10	880	622	2,84	1,65	1,42
50	-5	1.104	689	3,11	1,86	1,60
50	0	1.368	763	3,40	2,08	1,79
50	5	1.670	843	3,73	2,30	1,98
50	7,2	1.816	881	3,88	2,40	2,06
50	10	2.012	930	4,08	2,52	2,16

55	-15	655	577	2,66	1,32	1,14
55	-10	820	637	2,90	1,50	1,29
55	-5	1.025	704	3,17	1,69	1,46
55	0	1.269	777	3,46	1,90	1,63
55	5	1.552	856	3,78	2,11	1,81
55	7,2	1.689	893	3,93	2,20	1,89
55	10	1.874	942	4,13	2,32	1,99

60	-15	615	594	2,73	1,20	1,04
60	-10	761	653	2,96	1,36	1,17
60	-5	946	719	3,23	1,53	1,32
60	0	1.170	791	3,52	1,72	1,48
60	5	1.434	869	3,83	1,92	1,65
60	7,2	1.562	905	3,98	2,01	1,73
60	10	1.737	953	4,18	2,12	1,82

65	-15	575	610	2,79	1,10	0,94
65	-10	701	669	3,03	1,22	1,05
65	-5	867	734	3,28	1,37	1,18
65	0	1.072	804	3,57	1,55	1,33
65	5	1.316	882	3,88	1,74	1,49
65	7,2	1.436	918	4,03	1,82	1,56
65	10	1.599	965	4,22	1,93	1,66

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	835	530	2,47	1,58	1,36
40	-10	1.077	594	2,73	1,81	1,57
40	-5	1.361	664	3,01	2,05	1,77
40	0	1.686	740	3,31	2,28	1,97
40	5	2.052	823	3,65	2,49	2,15
40	7,2	2.227	862	3,80	2,58	2,23
40	10	2.460	912	4,01	2,70	2,33

45	-15	787	547	2,54	1,44	1,24
45	-10	1.008	609	2,79	1,65	1,43
45	-5	1.269	679	3,06	1,87	1,62
45	0	1.571	754	3,37	2,08	1,80
45	5	1.915	836	3,70	2,29	1,98
45	7,2	2.079	874	3,85	2,38	2,06
45	10	2.300	924	4,06	2,49	2,15

50	-15	740	563	2,61	1,31	1,14
50	-10	938	625	2,85	1,50	1,30
50	-5	1.176	693	3,12	1,70	1,47
50	0	1.456	768	3,42	1,90	1,64
50	5	1.777	849	3,75	2,09	1,81
50	7,2	1.931	886	3,90	2,18	1,88
50	10	2.139	936	4,11	2,29	1,97

55	-15	693	580	2,67	1,19	1,03
55	-10	868	641	2,91	1,35	1,17
55	-5	1.084	708	3,18	1,53	1,32
55	0	1.341	782	3,48	1,72	1,48
55	5	1.640	862	3,80	1,90	1,64
55	7,2	1.784	899	3,95	1,98	1,71
55	10	1.979	948	4,15	2,09	1,80

60	-15	646	597	2,74	1,08	0,93
60	-10	798	657	2,98	1,21	1,05
60	-5	991	723	3,24	1,37	1,18
60	0	1.226	796	3,53	1,54	1,33
60	5	1.502	874	3,85	1,72	1,48
60	7,2	1.636	911	4,00	1,80	1,55
60	10	1.819	960	4,20	1,90	1,64

65	-15	598	614	2,81	0,98	0,84
65	-10	728	673	3,04	1,08	0,94
65	-5	899	738	3,30	1,22	1,05
65	0	1.111	809	3,59	1,37	1,19
65	5	1.364	887	3,91	1,54	1,33
65	7,2	1.489	924	4,05	1,61	1,39
65	10	1.659	972	4,25	1,71	1,47

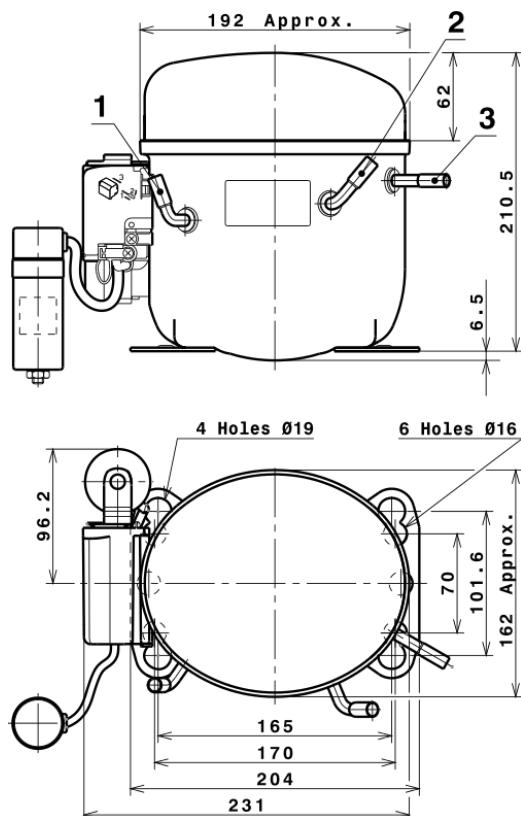
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.612,5530584106	645,9738838382	2,9319259961	44,273319279628
2	105,6311087178	18,1237230545	0,0724476542	1,9678251474074
3	-23,7181091012	2,8368377524	0,0114362648	-0,17966412137108
4	0,8117695486	0,1375341434	0,0005923246	0,02427476773004
5	-0,9316730574	-0,0395329843	-0,0001440437	-0,0085683205343311

Equation

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

COMPRESSOR DIMENSIONS

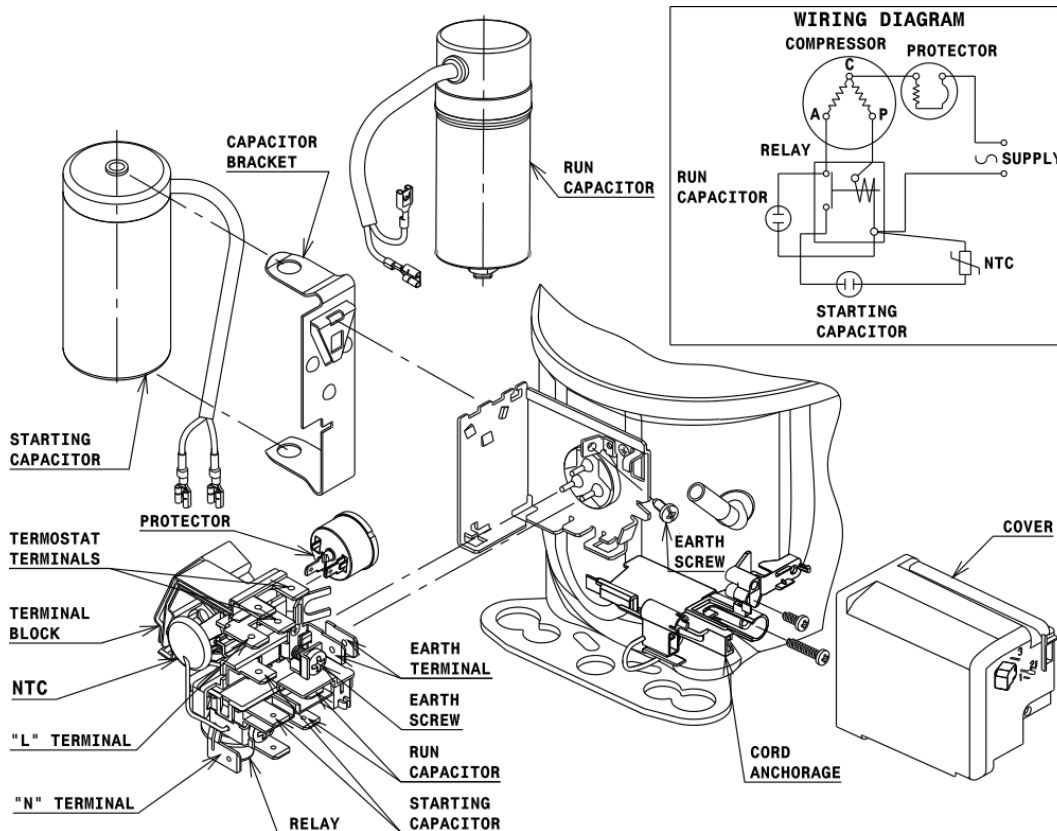


DESIGNATION INTERNAL DIAM.

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

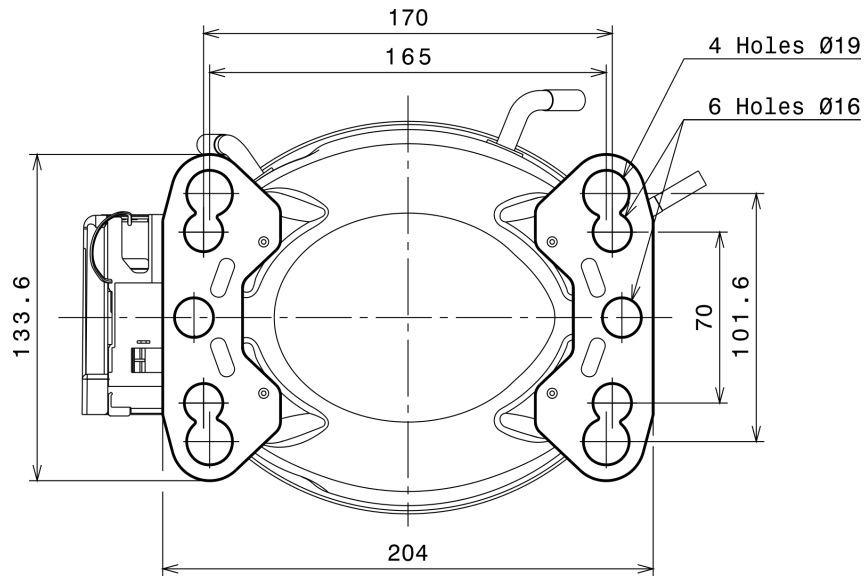
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



Technical Data Sheet

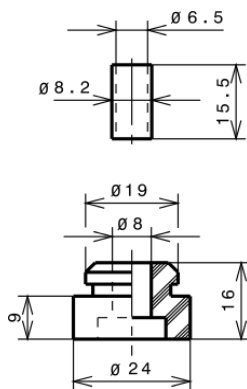
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

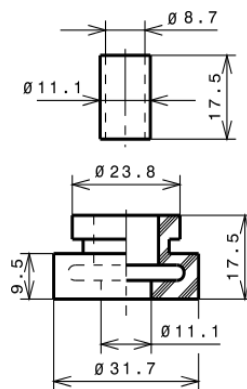
STANDARD

Ø16 holes (170x70 net)



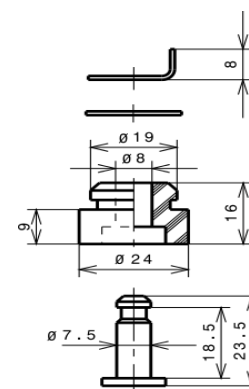
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HBP

