

# Technical Data Sheet

Compressor model **GPT16RG**  
 Voltage **200-220/220-230V 50/60Hz ~1**  
 Refrigerant **R134a**

APPLICATION		COMPRESSOR		MOTOR	
Application	High Back Pressure	Displacement	16,15 cm <sup>3</sup>	Nominal Power	1/2 hp
Refrigerant	R134a	Diameter	31,19 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	12,16 Kg	Type	CSR
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)	20,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	4,80 A
				Main W. resist. at 25°C	4,50 Ω
				Start W. resist. at 25°C	10,80 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.364 kCal/h	1.323 W
COP	2,50 W/W	2,13 W/W
EER	2,15 kCal/Wh	1,84 kCal/Wh
Input Power	635 W	623 W
Current	3,14 A	3,09 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	72- 88 μF 330 V		
Run capacitor	12 μF 420 V		
Relay	Option 1		
Reference	2014 166. + NTC15Ω		
Pick-Up	11,00 A		
Drop-Out	9,35 A		
Protector	Option 1	Option 2	
Reference	MRA38133	T0267	
Current	11,50 A	11,00 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	-15	631	408	2,20	1,80	1,55
40	-10	793	456	2,41	2,02	1,74
40	-5	986	499	2,60	2,30	1,98
40	0	1.212	538	2,76	2,62	2,25
40	5	1.470	572	2,89	2,99	2,57
40	7,2	1.593	585	2,95	3,17	2,72
40	10	1.759	601	3,01	3,41	2,93

45	-15	595	415	2,23	1,67	1,43
45	-10	747	465	2,45	1,87	1,61
45	-5	932	510	2,65	2,12	1,83
45	0	1.149	551	2,81	2,42	2,08
45	5	1.397	587	2,96	2,77	2,38
45	7,2	1.517	602	3,01	2,93	2,52
45	10	1.678	619	3,08	3,15	2,71

50	-15	558	421	2,26	1,54	1,33
50	-10	702	474	2,49	1,72	1,48
50	-5	878	522	2,69	1,96	1,68
50	0	1.085	565	2,87	2,24	1,92
50	5	1.325	603	3,02	2,56	2,20
50	7,2	1.440	618	3,08	2,71	2,33
50	10	1.596	637	3,15	2,92	2,51

55	-15	522	428	2,29	1,42	1,22
55	-10	657	483	2,53	1,58	1,36
55	-5	823	533	2,74	1,80	1,55
55	0	1.022	578	2,92	2,06	1,77
55	5	1.252	619	3,08	2,35	2,02
55	7,2	1.364	635	3,14	2,50	2,15
55	10	1.515	655	3,21	2,69	2,31

60	-15	486	435	2,32	1,30	1,12
60	-10	611	492	2,57	1,45	1,24
60	-5	769	544	2,78	1,64	1,41
60	0	959	591	2,97	1,89	1,62
60	5	1.180	634	3,14	2,16	1,86
60	7,2	1.288	652	3,20	2,30	1,98
60	10	1.433	672	3,28	2,48	2,13

65	-15	449	441	2,35	1,18	1,02
65	-10	566	501	2,60	1,32	1,13
65	-5	715	555	2,83	1,50	1,29
65	0	895	605	3,02	1,72	1,48
65	5	1.108	650	3,20	1,98	1,70
65	7,2	1.211	668	3,26	2,11	1,81
65	10	1.352	690	3,34	2,28	1,96

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	680	410	2,21	1,66	1,43
40	-10	855	458	2,42	1,86	1,61
40	-5	1.064	502	2,61	2,12	1,83
40	0	1.306	541	2,77	2,41	2,09
40	5	1.582	575	2,91	2,75	2,38
40	7,2	1.714	589	2,96	2,91	2,52
40	10	1.892	605	3,02	3,13	2,70

45	-15	637	417	2,24	1,53	1,32
45	-10	802	467	2,46	1,71	1,48
45	-5	999	513	2,66	1,95	1,68
45	0	1.231	554	2,83	2,22	1,92
45	5	1.496	591	2,97	2,53	2,19
45	7,2	1.623	606	3,03	2,68	2,32
45	10	1.794	623	3,09	2,88	2,49

50	-15	595	424	2,27	1,40	1,21
50	-10	748	476	2,50	1,57	1,36
50	-5	935	525	2,70	1,78	1,54
50	0	1.156	568	2,88	2,03	1,76
50	5	1.409	607	3,03	2,32	2,01
50	7,2	1.532	622	3,09	2,46	2,13
50	10	1.697	641	3,16	2,65	2,29

55	-15	552	430	2,30	1,28	1,11
55	-10	695	485	2,54	1,43	1,24
55	-5	871	536	2,75	1,62	1,40
55	0	1.080	581	2,93	1,86	1,60
55	5	1.323	623	3,09	2,13	1,84
55	7,2	1.441	639	3,16	2,25	1,95
55	10	1.600	659	3,23	2,43	2,10

60	-15	510	437	2,33	1,17	1,01
60	-10	641	494	2,58	1,30	1,12
60	-5	806	547	2,80	1,47	1,27
60	0	1.005	595	2,99	1,69	1,46
60	5	1.237	638	3,15	1,94	1,67
60	7,2	1.349	656	3,22	2,06	1,78
60	10	1.502	677	3,29	2,22	1,92

65	-15	467	444	2,36	1,05	0,91
65	-10	588	503	2,62	1,17	1,01
65	-5	742	558	2,84	1,33	1,15
65	0	929	609	3,04	1,53	1,32
65	5	1.150	654	3,21	1,76	1,52
65	7,2	1.258	673	3,28	1,87	1,62
65	10	1.405	695	3,36	2,02	1,75

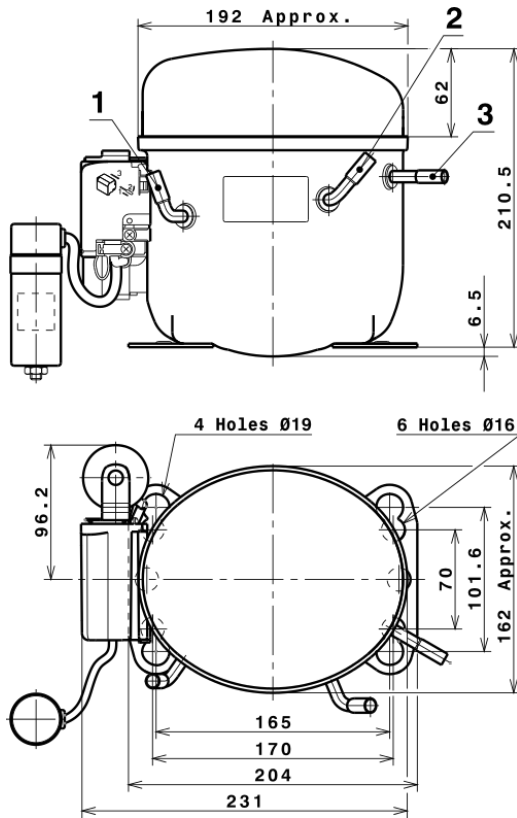
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.916,9411422489	443,9555230332	2,4000041531	31,3737994126
2	69,9222973765	3,9019854098	0,0183233756	1,2371335349736
3	-15,6997492141	2,7753021086	0,0107808826	-0,066837730683839
4	0,6609072773	-0,0910736091	-0,0005125114	0,019754986635989
5	-0,4660724822	0,0935579401	0,0003126588	-0,0003458709256967

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

## COMPRESSOR DIMENSIONS

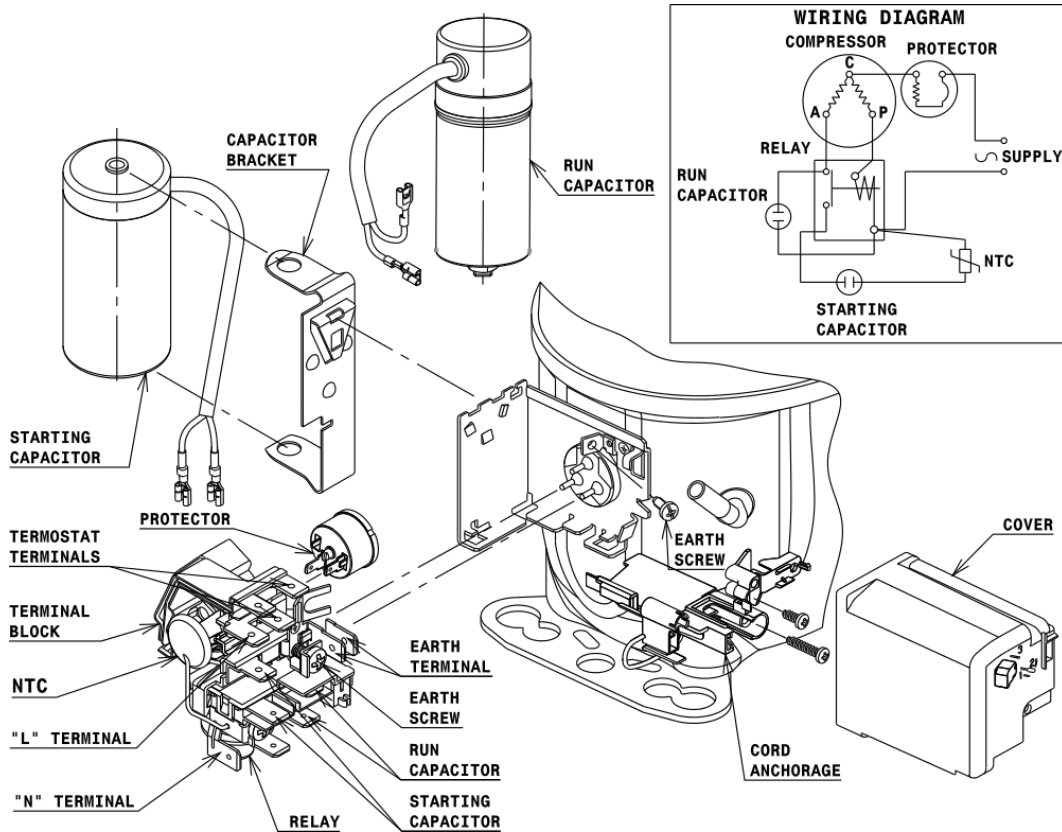


## DESIGNATION INTERNAL DIAM.

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

$\varnothing 16$  holes (170x70 net)



### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a HBP

