

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **GP14TB**
Voltage **220-240V 50Hz ~1**
Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High Back Pressure	Displacement	14,17 cm ³	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	31,19 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	18,54 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	11,29 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	400 cm ³	Locked Rotor Amps (LRA)	18,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	5,20 A
				Main W. resist. at 25°C	6,00 Ω
				Start W. resist. at 25°C	24,00 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.030 kCal/h	998 W
COP	2,03 W/W	1,76 W/W
EER	1,75 kCal/Wh	1,52 kCal/Wh
Input Power	590 W	568 W
Current	3,40 A	3,29 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	47- 56 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	Option 2		
Reference	MRP00AMK	T0425		
Current	11,70 A	11,50 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 °C	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	489	328	2,40	1,73	1,49
40	-10	634	366	2,50	2,01	1,73
40	-5	800	406	2,62	2,29	1,97
40	0	986	448	2,77	2,56	2,20
40	5	1.193	491	2,94	2,82	2,43
40	7,2	1.291	511	3,02	2,94	2,53
40	10	1.421	536	3,14	3,08	2,65

45	-15	444	335	2,42	1,54	1,33
45	-10	580	378	2,53	1,79	1,54
45	-5	736	422	2,68	2,03	1,74
45	0	913	468	2,85	2,27	1,95
45	5	1.111	516	3,04	2,50	2,15
45	7,2	1.204	537	3,14	2,61	2,24
45	10	1.329	565	3,27	2,73	2,35

50	-15	398	341	2,43	1,36	1,17
50	-10	525	389	2,57	1,57	1,35
50	-5	672	438	2,73	1,79	1,54
50	0	839	488	2,93	2,00	1,72
50	5	1.028	540	3,15	2,21	1,90
50	7,2	1.117	564	3,27	2,30	1,98
50	10	1.236	594	3,42	2,42	2,08

55	-15	353	348	2,45	1,18	1,01
55	-10	470	400	2,60	1,37	1,18
55	-5	608	453	2,79	1,56	1,34
55	0	766	508	3,01	1,75	1,51
55	5	945	565	3,27	1,95	1,67
55	7,2	1.030	590	3,40	2,03	1,75
55	10	1.144	623	3,58	2,14	1,84

60	-15	308	355	2,47	1,01	0,87
60	-10	415	411	2,64	1,18	1,01
60	-5	544	469	2,85	1,35	1,16
60	0	693	528	3,10	1,53	1,31
60	5	862	589	3,39	1,70	1,46
60	7,2	943	616	3,54	1,78	1,53
60	10	1.052	652	3,74	1,88	1,61

65	-15	262	361	2,49	0,84	0,73
65	-10	361	422	2,68	0,99	0,85
65	-5	480	484	2,91	1,15	0,99
65	0	619	548	3,19	1,31	1,13
65	5	779	613	3,52	1,48	1,27
65	7,2	856	643	3,69	1,55	1,33
65	10	960	680	3,91	1,64	1,41

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	527	330	2,40	1,60	1,38
40	-10	684	368	2,51	1,86	1,60
40	-5	863	409	2,63	2,11	1,82
40	0	1.063	451	2,78	2,36	2,04
40	5	1.285	495	2,95	2,60	2,24
40	7,2	1.389	514	3,04	2,70	2,33
40	10	1.528	540	3,15	2,83	2,45

45	-15	476	337	2,42	1,41	1,22
45	-10	622	380	2,54	1,64	1,41
45	-5	789	424	2,68	1,86	1,61
45	0	978	471	2,86	2,08	1,80
45	5	1.189	519	3,06	2,29	1,98
45	7,2	1.289	541	3,16	2,38	2,06
45	10	1.422	569	3,29	2,50	2,16

50	-15	424	343	2,44	1,24	1,07
50	-10	559	391	2,57	1,43	1,24
50	-5	716	440	2,74	1,63	1,41
50	0	894	491	2,94	1,82	1,57
50	5	1.094	544	3,17	2,01	1,74
50	7,2	1.188	567	3,29	2,09	1,81
50	10	1.315	598	3,44	2,20	1,90

55	-15	373	350	2,46	1,07	0,92
55	-10	497	402	2,61	1,24	1,07
55	-5	643	456	2,80	1,41	1,22
55	0	810	511	3,02	1,58	1,37
55	5	998	568	3,29	1,76	1,52
55	7,2	1.088	594	3,42	1,83	1,58
55	10	1.208	627	3,60	1,93	1,67

60	-15	322	357	2,47	0,90	0,78
60	-10	435	413	2,65	1,05	0,91
60	-5	569	471	2,86	1,21	1,04
60	0	725	531	3,11	1,37	1,18
60	5	902	593	3,41	1,52	1,32
60	7,2	987	620	3,56	1,59	1,38
60	10	1.101	656	3,76	1,68	1,45

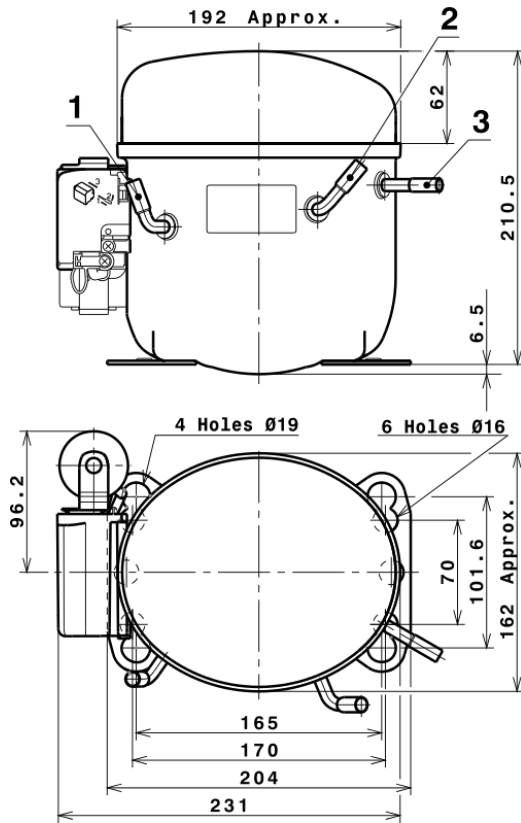
65	-15	271	363	2,49	0,75	0,65
65	-10	373	424	2,68	0,88	0,76
65	-5	496	487	2,92	1,02	0,88
65	0	641	551	3,21	1,16	1,00
65	5	807	617	3,54	1,31	1,13
65	7,2	887	647	3,71	1,37	1,18
65	10	995	685	3,94	1,45	1,25

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.739,6610493759	297,3650818317	2,0104649476	30,463783645914
2	60,4035792144	1,5747209806	-0,0049746840	1,0917843070926
3	-17,2742770306	4,1269056092	0,0194855073	-0,17643711314326
4	0,4264911611	0,0394396991	0,0008492081	0,013073252033181
5	-0,4657276463	0,1836648402	0,0010550776	-0,0024917515059774

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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COMPRESSOR DIMENSIONS

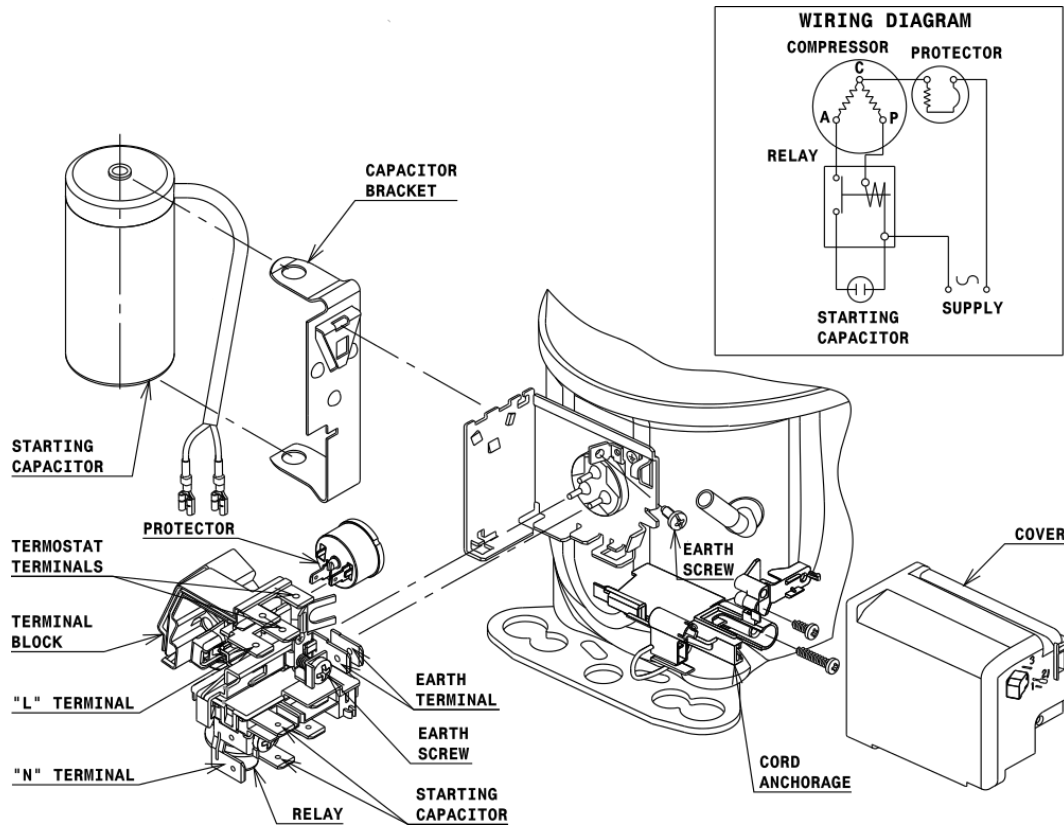


DESIGNATION INTERNAL DIAM.

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)



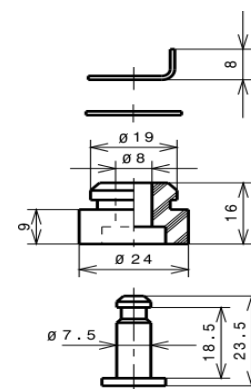
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HBP

