Technical Data Sheet

Compressor model **GP16TE**

Voltage **115V 60Hz ~1**

Refrigerant **R134a**

APPLICATION

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

COMPRESSOR

Displacement	16,15 cm³
Diameter	31,19 mm
Stroke	21,13 mm
Net Weight	12,20 Kg
Oil type	ISO VG 32 ESTER
Oil charge	400 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	115V 60Hz
Voltage range	98-132 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	45,00 A
Max. Cont. Current (MCC)	11,00 A
Main W. resist. at 25ºC	0,89 Ω
Start W. resist. at 25ºC	4,55 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.450 kCal/h	1.408 W
COP	1,96 W/W	1,69 W/W
EER	1,69 kCal/Wh	1,46 kCal/Wh
Input Power	860 W	831 W
Current	9,10 A	8,86 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HBP (D)	**HBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	170 µF 160 V			
Relay	Option 1	Option 2		
Reference	2014 187.	QLZ-20.3A		
Pick-Up	20,30 A	20.3 A		
Drop-Out	17,25 A	17.25 A		
Protector	Option 1	Option 2		
Reference	MRA38142	T0257		
Current	24,00 A	24,00 A		
Time check	7,5-14 seg	6,0-16 seg		
Disc temp. (Open/Close)	120,00 / 52,00 ºC	120,00 / 52,00 ºC		

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	655	470	6,36	1,62	1,39
40	-10	866	537	6,74	1,87	1,61
40	-5	1.107	606	7,17	2,12	1,83
40	0	1.376	676	7,65	2,37	2,03
40	5	1.674	748	8,19	2,60	2,24
40	7,2	1.814	780	8,44	2,70	2,33
40	10	2.001	821	8,77	2,83	2,44
45	-15	612	490	6,47	1,45	1,25
45	-10	806	559	6,87	1,68	1,44
45	-5	1.028	629	7,33	1,90	1,63
45	0	1.280	701	7,83	2,12	1,83
45	5	1.560	774	8,39	2,34	2,02
45	7,2	1.693	807	8,65	2,44	2,10
45	10	1.869	849	9,00	2,56	2,20
50	-15	569	510	6,58	1,30	1,12
50	-10	745	580	7,01	1,49	1,28
50	-5	950	652	7,48	1,69	1,46
50	0	1.184	725	8,01	1,90	1,63
50	5	1.447	800	8,60	2,10	1,81
50	7,2	1.571	833	8,87	2,19	1,89
50	10	1.738	876	9,24	2,31	1,98
55	-15	526	530	6,70	1,15	0,99
55	-10	684	602	7,15	1,32	1,14
55	-5	872	675	7,65	1,50	1,29
55	0	1.088	750	8,20	1,69	1,45
55	5	1.333	826	8,81	1,88	1,61
55	7,2	1.450	860	9,10	1,96	1,69
55	10	1.607	904	9,48	2,07	1,78
60	-15	483	550	6,82	1,02	0,88
60	-10	624	623	7,29	1,16	1,00
60	-5	794	698	7,81	1,32	1,14
60	0	992	775	8,39	1,49	1,28
60	5	1.219	852	9,03	1,66	1,43
60	7,2	1.329	887	9,33	1,74	1,50
60	10	1.476	931	9,73	1,84	1,58
65	-15	440	570	6,94	0,90	0,77
65	-10	563	645	7,43	1,02	0,87
65	-5	715	721	7,98	1,15	0,99
65	0	896	799	8,59	1,30	1,12
65	5	1.106	878	9,26	1,46	1,26
65	7,2	1.207	913	9,57	1,54	1,32
65	10	1.345	959	9,99	1,63	1,40

CECOMAF

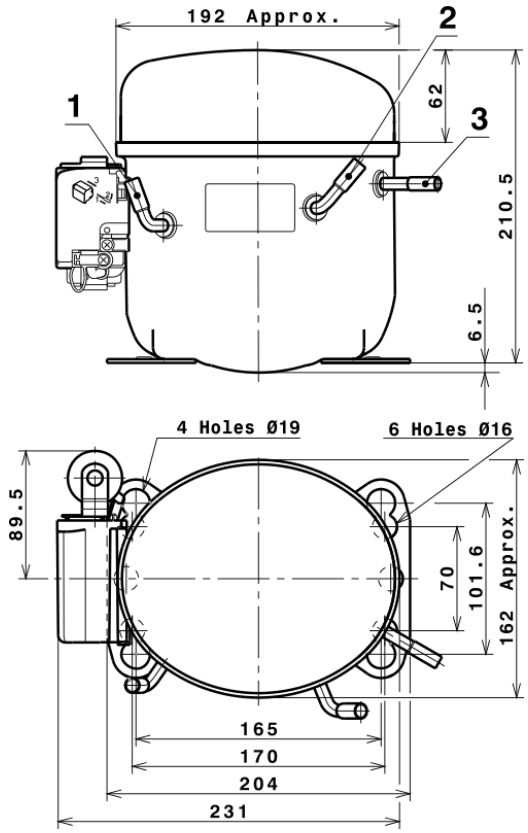
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	705	473	6,37	1,49	1,29
40	-10	934	540	6,76	1,73	1,49
40	-5	1.193	610	7,20	1,96	1,69
40	0	1.482	681	7,68	2,18	1,88
40	5	1.802	753	8,22	2,39	2,07
40	7,2	1.952	785	8,48	2,49	2,15
40	10	2.152	826	8,82	2,60	2,25
45	-15	656	493	6,49	1,33	1,15
45	-10	864	562	6,89	1,54	1,33
45	-5	1.103	633	7,35	1,74	1,51
45	0	1.372	705	7,86	1,94	1,68
45	5	1.671	779	8,43	2,14	1,85
45	7,2	1.812	812	8,69	2,23	1,93
45	10	2.000	854	9,05	2,34	2,02
50	-15	606	513	6,60	1,18	1,02
50	-10	794	584	7,03	1,36	1,18
50	-5	1.012	656	7,51	1,54	1,33
50	0	1.261	730	8,05	1,73	1,49
50	5	1.539	805	8,64	1,91	1,65
50	7,2	1.672	839	8,92	1,99	1,72
50	10	1.848	882	9,29	2,10	1,81
55	-15	556	533	6,72	1,04	0,90
55	-10	724	605	7,17	1,20	1,03
55	-5	922	679	7,67	1,36	1,17
55	0	1.150	755	8,24	1,52	1,32
55	5	1.408	831	8,86	1,69	1,46
55	7,2	1.531	866	9,15	1,77	1,53
55	10	1.697	910	9,54	1,87	1,61
60	-15	507	553	6,84	0,92	0,79
60	-10	654	627	7,31	1,04	0,90
60	-5	831	702	7,84	1,18	1,02
60	0	1.039	779	8,43	1,33	1,15
60	5	1.277	857	9,08	1,49	1,29
60	7,2	1.391	892	9,38	1,56	1,35
60	10	1.545	937	9,79	1,65	1,42
65	-15	457	573	6,96	0,80	0,69
65	-10	584	649	7,46	0,90	0,78
65	-5	741	725	8,01	1,02	0,88
65	0	928	804	8,63	1,15	1,00
65	5	1.146	884	9,31	1,30	1,12
65	7,2	1.251	919	9,63	1,36	1,18
65	10	1.393	965	10,05	1,44	1,25

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.372,2855163540	495,6434042763	6,2130025035	41,092559605437
2	93,8557139155	12,3289607651	0,0679647452	1,7445784812223
3	-22,7418044461	5,0634151174	0,0395613164	-0,21102067176604
4	0,5982026735	0,0367352502	0,0012867415	0,018301187745323
5	-0,8408600992	0,0631744064	0,0010512514	-0,007929351184547

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

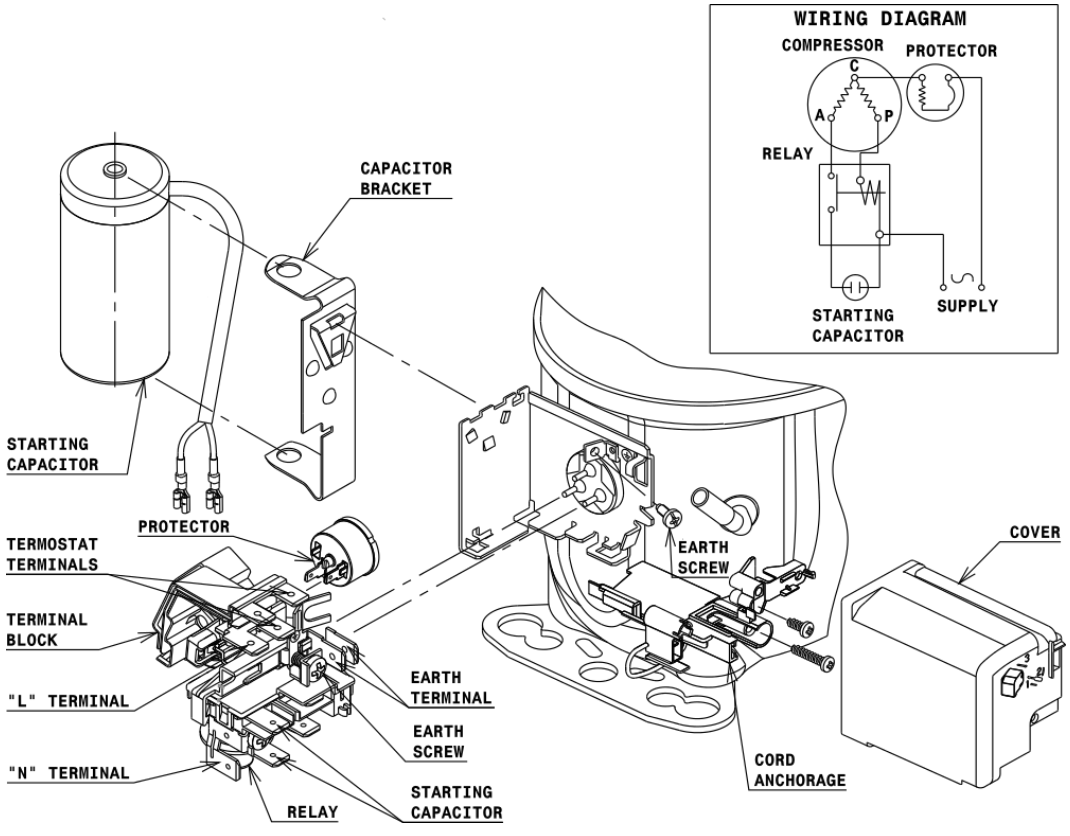
COMPRESSOR DIMENSIONS



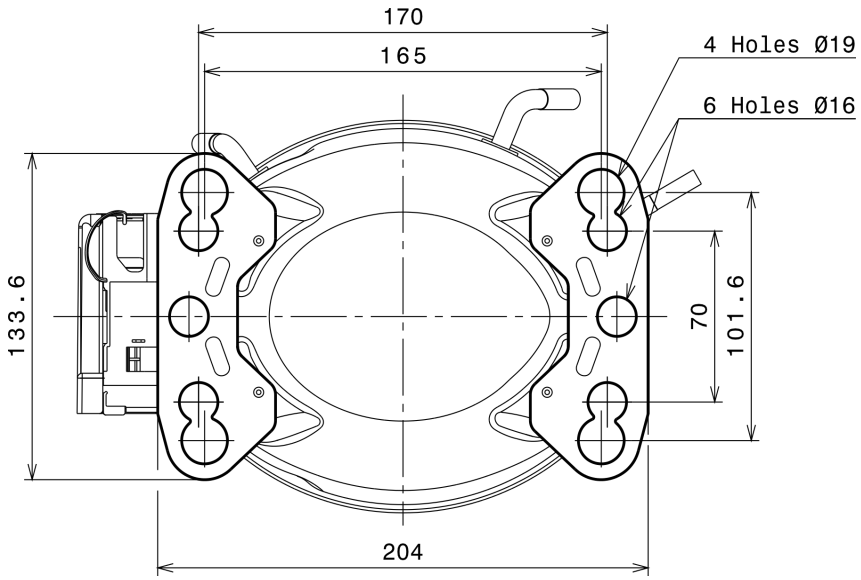
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



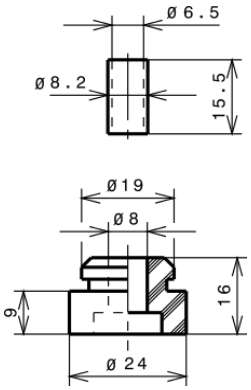
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

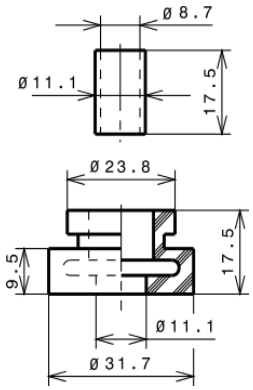
STANDARD

Ø16 holes (170x70 net)



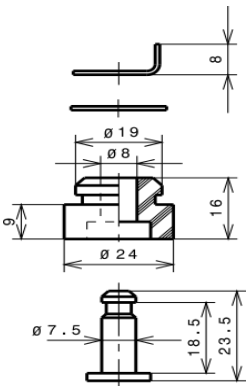
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HBP