

# Technical Data Sheet

Compressor model **GL45TE**  
 Voltage **115V 60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	4,56 cm <sup>3</sup>	Nominal Power	1/6 hp
Refrigerant	R134a	Diameter	19,09 mm	Voltage/Frequency	115V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,93 mm	Voltage range	98-132 V
Expansion	Capillar/Valve	Net Weight	9,18 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	245 cm <sup>3</sup>	Locked Rotor Amps (LRA)	17,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	4,50 A
				Main W. resist. at 25°C	3,11 Ω
				Start W. resist. at 25°C	9,07 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	412 kCal/h	400 W
COP	1,84 W/W	1,59 W/W
EER	1,58 kCal/Wh	1,38 kCal/Wh
Input Power	260 W	251 W
Current	3,10 A	3,04 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

	Option 1	Option 2		
Starting capacitor	150 µF 160 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	MRP39ALK	T0113		
Current	12,30 A	12,50 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 °C	110,00 / 62,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	112	136	2,45	0,96	0,82
40	-20	152	147	2,49	1,21	1,04
40	-15	201	159	2,54	1,47	1,26
40	-10	258	173	2,60	1,73	1,49
40	-5	324	189	2,67	1,99	1,71
40	0	398	207	2,76	2,24	1,93
40	5	481	226	2,87	2,48	2,13
40	7,2	520	235	2,93	2,57	2,21
40	10	572	247	3,01	2,69	2,32

45	-25	103	136	2,45	0,88	0,75
45	-20	139	148	2,49	1,09	0,94
45	-15	183	162	2,55	1,32	1,13
45	-10	237	177	2,61	1,55	1,33
45	-5	298	194	2,70	1,78	1,53
45	0	368	213	2,80	2,01	1,73
45	5	447	234	2,92	2,22	1,91
45	7,2	484	243	2,98	2,31	1,99
45	10	534	256	3,07	2,43	2,09

50	-25	93	136	2,45	0,80	0,69
50	-20	125	149	2,50	0,98	0,84
50	-15	166	164	2,56	1,17	1,01
50	-10	215	181	2,63	1,38	1,19
50	-5	272	200	2,72	1,59	1,36
50	0	338	220	2,84	1,79	1,54
50	5	413	242	2,97	1,99	1,71
50	7,2	448	252	3,04	2,07	1,78
50	10	495	265	3,14	2,17	1,87

55	-25	84	136	2,45	0,72	0,62
55	-20	112	151	2,50	0,86	0,74
55	-15	148	167	2,57	1,03	0,89
55	-10	193	185	2,65	1,21	1,04
55	-5	246	205	2,75	1,40	1,20
55	0	308	226	2,88	1,58	1,36
55	5	378	249	3,03	1,77	1,52
55	7,2	412	260	3,10	1,84	1,58
55	10	457	274	3,20	1,94	1,67

60	-25	75	136	2,45	0,64	0,55
60	-20	98	152	2,51	0,75	0,65
60	-15	131	170	2,58	0,90	0,77
60	-10	171	189	2,67	1,05	0,91
60	-5	220	210	2,78	1,22	1,05
60	0	278	233	2,92	1,39	1,20
60	5	344	257	3,08	1,56	1,34
60	7,2	376	268	3,16	1,63	1,40
60	10	419	283	3,27	1,72	1,48

65	-25	65	136	2,45	0,56	0,48
65	-20	85	153	2,51	0,64	0,55
65	-15	113	172	2,59	0,76	0,66
65	-10	149	193	2,69	0,90	0,78
65	-5	195	215	2,81	1,05	0,90
65	0	248	239	2,96	1,21	1,04
65	5	310	265	3,13	1,36	1,17
65	7,2	340	277	3,22	1,43	1,23
65	10	381	292	3,35	1,51	1,30

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	121	137	2,45	0,88	0,76
40	-20	165	148	2,49	1,12	0,96
40	-15	217	160	2,54	1,36	1,17
40	-10	279	174	2,60	1,60	1,38
40	-5	350	190	2,68	1,84	1,59
40	0	429	208	2,77	2,06	1,78
40	5	518	227	2,88	2,28	1,97
40	7,2	560	237	2,94	2,37	2,04
40	10	615	249	3,02	2,48	2,14

45	-25	110	137	2,45	0,81	0,70
45	-20	149	149	2,50	1,00	0,87
45	-15	197	163	2,55	1,21	1,05
45	-10	254	178	2,62	1,43	1,23
45	-5	320	196	2,70	1,64	1,41
45	0	395	215	2,81	1,84	1,59
45	5	478	235	2,93	2,03	1,76
45	7,2	518	245	3,00	2,12	1,83
45	10	571	258	3,08	2,22	1,91

50	-25	99	137	2,45	0,73	0,63
50	-20	134	150	2,50	0,89	0,77
50	-15	177	165	2,56	1,07	0,93
50	-10	229	182	2,64	1,26	1,09
50	-5	290	201	2,73	1,45	1,25
50	0	360	221	2,84	1,63	1,41
50	5	439	243	2,98	1,81	1,56
50	7,2	477	253	3,05	1,88	1,63
50	10	527	267	3,15	1,97	1,71

55	-25	89	137	2,45	0,65	0,56
55	-20	118	151	2,50	0,78	0,68
55	-15	157	168	2,57	0,93	0,81
55	-10	204	186	2,66	1,10	0,95
55	-5	260	206	2,76	1,26	1,09
55	0	326	228	2,88	1,43	1,24
55	5	400	251	3,04	1,59	1,38
55	7,2	435	262	3,11	1,66	1,44
55	10	483	276	3,22	1,75	1,51

60	-25	78	137	2,45	0,57	0,49
60	-20	103	153	2,51	0,67	0,58
60	-15	137	170	2,58	0,80	0,69
60	-10	179	190	2,67	0,94	0,81
60	-5	231	211	2,79	1,09	0,94
60	0	291	234	2,92	1,24	1,07
60	5	360	259	3,09	1,39	1,20
60	7,2	394	270	3,17	1,46	1,26
60	10	439	285	3,29	1,54	1,33

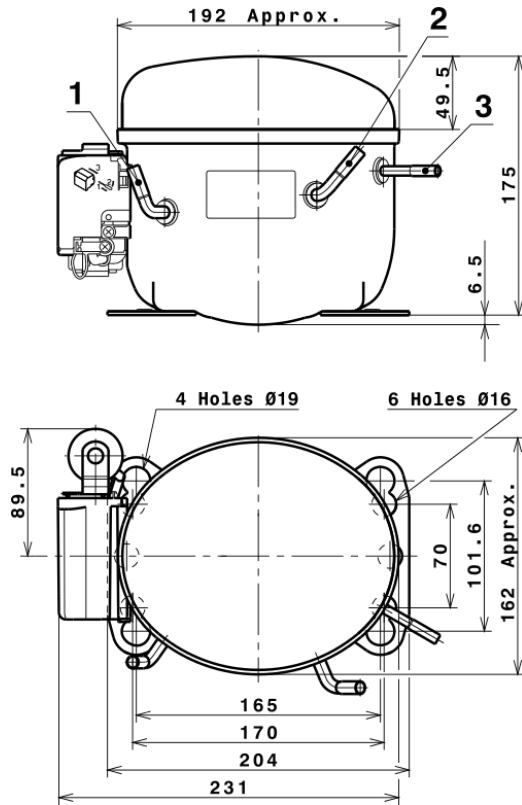
65	-25	68	137	2,45	0,50	0,43
65	-20	88	154	2,52	0,57	0,49
65	-15	116	173	2,59	0,67	0,58
65	-10	154	194	2,69	0,80	0,69
65	-5	201	216	2,82	0,93	0,80
65	0	256	241	2,97	1,07	0,92
65	5	321	266	3,15	1,20	1,04
65	7,2	352	278	3,24	1,26	1,09
65	10	394	294	3,36	1,34	1,16

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	707,1236799112	159,8765851747	2,4113553040	12,269206218876
2	24,5103530936	1,7212208695	0,0089039849	0,47076008268712
3	-7,0816910084	1,3388661791	0,0094243893	-0,07072575615604
4	0,1754645262	0,0366714520	0,0004383669	0,0050452822696131
5	-0,1978186945	0,0535546472	0,0003769756	-0,0017820211344545

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

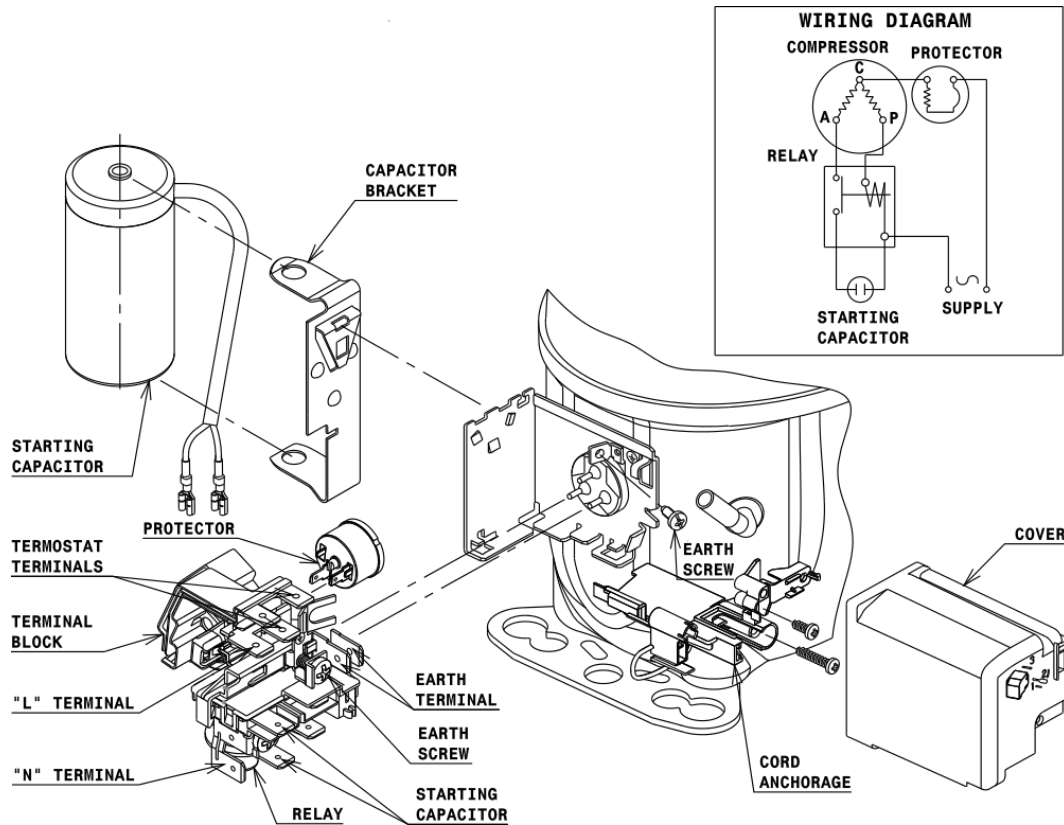


## DESIGNATION INTERNAL DIAM.

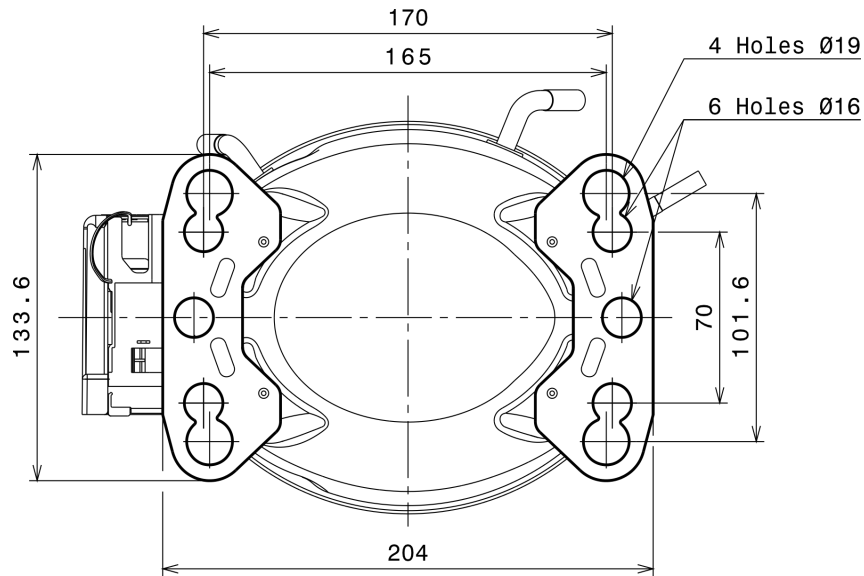
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)



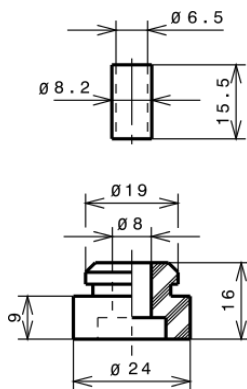
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

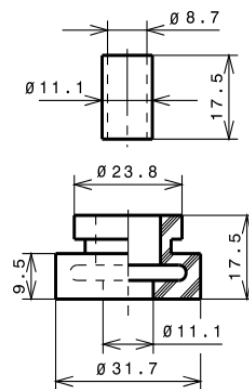
### STANDARD

Ø16 holes (170x70 net)



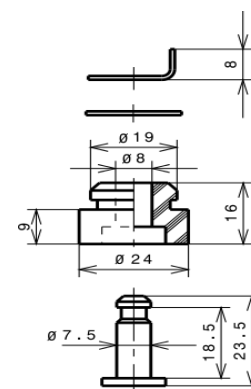
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a HMBP

