

Technical Data Sheet

Compressor model **ML45TG**
 Voltage **200-240/220-230V 50/60Hz ~1**
 Refrigerant **R404A**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	4,50 cm ³	Nominal Power	1/6 hp
Refrigerant	R404A	Diameter	22,00 mm	Voltage/Frequency	220-230V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	11,83 mm	Voltage range	207-244 V
Expansion	Capillar/Valve	Net Weight	9,14 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	295 cm ³	Locked Rotor Amps (LRA)	12,00 A
				Max. Cont. Current (MCC)	3,40 A
				Main W. resist. at 25°C	9,90 Ω
				Start W. resist. at 25°C	30,50 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	727 kCal/h	672 W
COP	1,89 W/W	1,55 W/W
EER	1,62 kCal/Wh	1,34 kCal/Wh
Input Power	448 W	435 W
Current	2,34 A	2,28 A



TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (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			
Relay	Option 1	Option 2		
Reference	2014 131.	QLZ-5.3A		
Pick-Up	5,30 A	5.30 A		
Drop-Out	4,50 A	4.50 A		
Protector	Option 1			
Reference	T0269			
Current	9,60 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	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	-25	253	232	1,54	1,27	1,09
40	-20	330	252	1,61	1,52	1,31
40	-15	418	274	1,68	1,78	1,53
40	-10	517	297	1,76	2,03	1,74
40	-5	626	321	1,84	2,27	1,95
40	0	745	346	1,93	2,50	2,15
40	5	875	373	2,04	2,73	2,35
40	7,2	936	385	2,08	2,83	2,43
40	10	1.015	401	2,15	2,95	2,53

45	-25	232	232	1,54	1,16	1,00
45	-20	302	256	1,62	1,37	1,18
45	-15	382	280	1,70	1,59	1,36
45	-10	473	306	1,79	1,80	1,54
45	-5	575	334	1,89	2,00	1,72
45	0	686	362	2,00	2,20	1,89
45	5	809	392	2,11	2,40	2,06
45	7,2	866	406	2,17	2,48	2,13
45	10	942	424	2,24	2,59	2,22

50	-25	211	232	1,54	1,06	0,91
50	-20	273	259	1,63	1,23	1,06
50	-15	346	287	1,72	1,40	1,21
50	-10	430	316	1,82	1,58	1,36
50	-5	523	347	1,94	1,76	1,51
50	0	628	379	2,06	1,93	1,66
50	5	743	412	2,19	2,10	1,80
50	7,2	797	427	2,25	2,17	1,87
50	10	868	446	2,33	2,26	1,94

55	-25	190	232	1,54	0,95	0,82
55	-20	245	262	1,64	1,09	0,93
55	-15	310	293	1,74	1,23	1,06
55	-10	386	326	1,86	1,38	1,18
55	-5	472	360	1,99	1,53	1,31
55	0	569	395	2,12	1,68	1,44
55	5	676	432	2,27	1,82	1,57
55	7,2	727	448	2,34	1,89	1,62
55	10	794	469	2,43	1,97	1,69

60	-25	169	232	1,54	0,85	0,73
60	-20	216	265	1,65	0,95	0,82
60	-15	274	300	1,77	1,06	0,91
60	-10	342	336	1,90	1,19	1,02
60	-5	421	373	2,04	1,31	1,13
60	0	510	411	2,19	1,44	1,24
60	5	610	451	2,35	1,57	1,35
60	7,2	658	469	2,43	1,63	1,40
60	10	721	492	2,53	1,70	1,46

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	265	233	1,54	1,14	0,98
40	-20	348	254	1,61	1,37	1,19
40	-15	441	275	1,68	1,60	1,38
40	-10	544	298	1,76	1,82	1,58
40	-5	658	323	1,85	2,04	1,76
40	0	781	349	1,94	2,24	1,94
40	5	915	376	2,05	2,44	2,10
40	7,2	977	388	2,09	2,52	2,18
40	10	1.059	404	2,16	2,62	2,26

45	-25	240	233	1,54	1,03	0,89
45	-20	314	257	1,62	1,22	1,06
45	-15	398	282	1,70	1,41	1,22
45	-10	491	308	1,80	1,59	1,38
45	-5	595	336	1,90	1,77	1,53
45	0	710	365	2,01	1,94	1,68
45	5	834	395	2,12	2,11	1,82
45	7,2	892	409	2,18	2,18	1,88
45	10	968	427	2,25	2,27	1,96

50	-25	215	233	1,54	0,92	0,80
50	-20	280	260	1,63	1,07	0,93
50	-15	354	289	1,73	1,23	1,06
50	-10	438	318	1,83	1,38	1,19
50	-5	533	349	1,95	1,53	1,32
50	0	638	381	2,07	1,67	1,45
50	5	753	415	2,20	1,81	1,57
50	7,2	807	430	2,27	1,88	1,62
50	10	878	450	2,35	1,95	1,69

55	-25	190	233	1,54	0,82	0,70
55	-20	245	264	1,64	0,93	0,80
55	-15	310	295	1,75	1,05	0,91
55	-10	386	328	1,87	1,18	1,02
55	-5	471	362	2,00	1,30	1,12
55	0	566	398	2,13	1,42	1,23
55	5	672	435	2,28	1,55	1,34
55	7,2	722	451	2,35	1,60	1,38
55	10	788	473	2,45	1,67	1,44

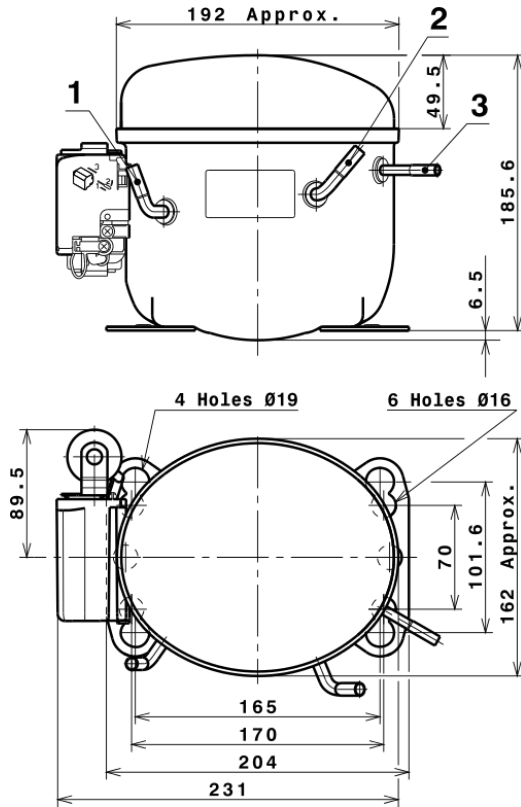
60	-25	165	233	1,54	0,71	0,61
60	-20	211	267	1,65	0,79	0,68
60	-15	267	302	1,77	0,88	0,76
60	-10	333	338	1,90	0,98	0,85
60	-5	409	375	2,05	1,09	0,94
60	0	495	414	2,20	1,19	1,03
60	5	591	454	2,37	1,30	1,12
60	7,2	637	473	2,45	1,35	1,16
60	10	698	496	2,55	1,41	1,22

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X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.355,0744771046	223,2787294548	1,3968025288	26,630081697489
2	40,6440446929	0,1723534420	-0,0005743507	0,92436303289127
3	-14,8683767199	3,3986958085	0,0143403984	-0,12469746118086
4	0,1920826375	0,0318711967	0,0002413103	0,009202349296944
5	-0,3923325427	0,1359478323	0,0005736159	-0,0027624938502702

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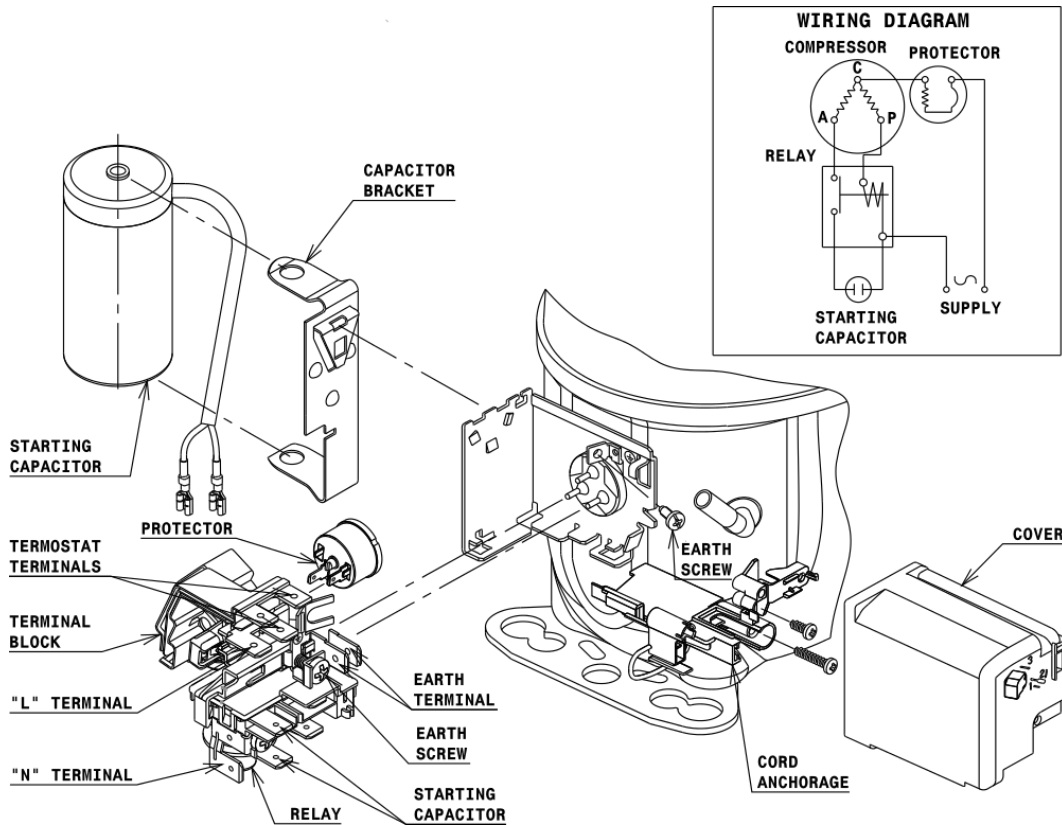
COMPRESSOR DIMENSIONS



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)



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 R404A HMBP

