

# 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 <sup>3</sup>	Nominal Power	1/6 hp
Refrigerant	R404A	Diameter	22,00 mm	Voltage/Frequency	200-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	11,83 mm	Voltage range	180-255 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 <sup>3</sup>	Locked Rotor Amps (LRA)	12,00 A
				Max. Cont. Current (MCC)	3,20 A
				Main W. resist. at 25°C	9,90 Ω
				Start W. resist. at 25°C	30,50 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	620 kCal/h	572 W
COP	1,95 W/W	1,59 W/W
EER	1,68 kCal/Wh	1,37 kCal/Wh
Input Power	369 W	361 W
Current	2,22 A	2,19 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	200 V 50 Hz	200 V 50 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	217	208	1,78	1,21	1,04
40	-20	280	225	1,81	1,45	1,25
40	-15	353	242	1,84	1,70	1,46
40	-10	435	259	1,88	1,96	1,68
40	-5	527	276	1,92	2,22	1,91
40	0	628	294	1,96	2,49	2,14
40	5	739	312	2,02	2,76	2,37
40	7,2	791	320	2,04	2,88	2,48
40	10	860	330	2,08	3,03	2,61

45	-25	198	210	1,78	1,10	0,94
45	-20	255	229	1,81	1,30	1,11
45	-15	322	248	1,85	1,51	1,30
45	-10	398	267	1,90	1,73	1,49
45	-5	484	287	1,95	1,96	1,69
45	0	580	307	2,00	2,20	1,89
45	5	685	327	2,07	2,43	2,09
45	7,2	734	336	2,10	2,54	2,18
45	10	799	347	2,14	2,68	2,30

50	-25	179	212	1,79	0,98	0,84
50	-20	230	233	1,82	1,15	0,99
50	-15	291	255	1,87	1,33	1,14
50	-10	362	276	1,92	1,52	1,31
50	-5	442	298	1,98	1,72	1,48
50	0	531	320	2,04	1,93	1,66
50	5	630	343	2,12	2,14	1,84
50	7,2	677	353	2,16	2,23	1,92
50	10	739	365	2,20	2,35	2,02

55	-25	160	214	1,79	0,87	0,75
55	-20	205	237	1,83	1,01	0,87
55	-15	260	261	1,88	1,16	1,00
55	-10	325	285	1,94	1,33	1,14
55	-5	399	309	2,01	1,50	1,29
55	0	483	334	2,09	1,68	1,45
55	5	576	358	2,18	1,87	1,61
55	7,2	620	369	2,22	1,95	1,68
55	10	679	383	2,28	2,06	1,77

60	-25	141	216	1,79	0,76	0,65
60	-20	181	242	1,84	0,87	0,75
60	-15	230	268	1,90	1,00	0,86
60	-10	288	294	1,96	1,14	0,98
60	-5	357	320	2,04	1,30	1,11
60	0	434	347	2,14	1,46	1,25
60	5	522	374	2,24	1,62	1,40
60	7,2	563	386	2,29	1,70	1,46
60	10	618	401	2,35	1,80	1,54

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	227	209	1,78	1,09	0,94
40	-20	295	226	1,81	1,31	1,13
40	-15	372	243	1,84	1,53	1,32
40	-10	459	260	1,88	1,76	1,52
40	-5	554	278	1,92	1,99	1,72
40	0	659	296	1,97	2,23	1,93
40	5	773	314	2,02	2,46	2,13
40	7,2	826	322	2,05	2,57	2,22
40	10	896	332	2,08	2,70	2,33

45	-25	205	211	1,79	0,97	0,84
45	-20	265	230	1,82	1,15	1,00
45	-15	335	250	1,86	1,34	1,16
45	-10	414	269	1,90	1,54	1,33
45	-5	502	289	1,95	1,74	1,50
45	0	599	309	2,01	1,94	1,68
45	5	706	330	2,07	2,14	1,85
45	7,2	756	339	2,11	2,23	1,93
45	10	822	350	2,15	2,35	2,03

50	-25	183	213	1,79	0,86	0,74
50	-20	236	235	1,83	1,00	0,87
50	-15	298	256	1,87	1,16	1,00
50	-10	369	278	1,92	1,33	1,15
50	-5	450	300	1,98	1,50	1,30
50	0	540	322	2,05	1,67	1,45
50	5	639	345	2,13	1,85	1,60
50	7,2	686	355	2,17	1,93	1,67
50	10	748	368	2,22	2,03	1,75

55	-25	160	215	1,79	0,74	0,64
55	-20	206	239	1,83	0,86	0,74
55	-15	261	263	1,88	0,99	0,86
55	-10	325	287	1,94	1,13	0,98
55	-5	398	311	2,02	1,28	1,10
55	0	480	336	2,10	1,43	1,24
55	5	572	361	2,19	1,59	1,37
55	7,2	616	372	2,23	1,66	1,43
55	10	673	386	2,29	1,74	1,51

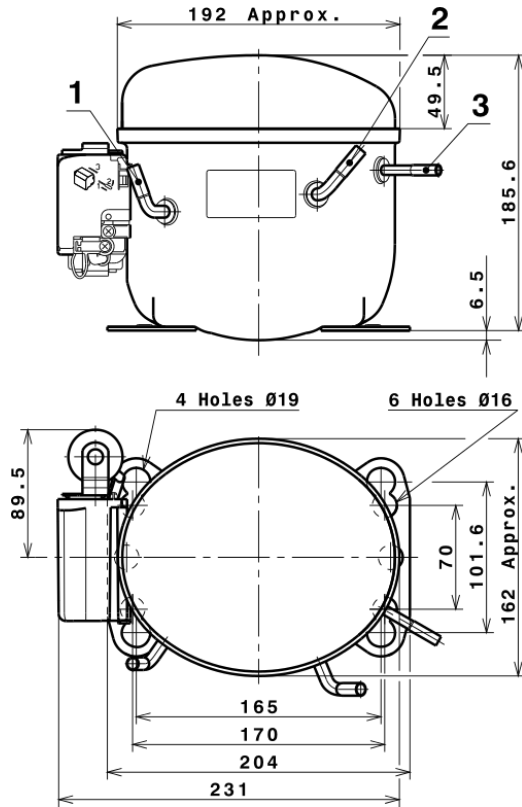
60	-25	138	217	1,80	0,63	0,55
60	-20	176	243	1,84	0,72	0,63
60	-15	223	269	1,90	0,83	0,72
60	-10	280	296	1,97	0,95	0,82
60	-5	346	322	2,05	1,07	0,93
60	0	421	349	2,14	1,21	1,04
60	5	505	376	2,25	1,34	1,16
60	7,2	545	388	2,30	1,40	1,21
60	10	599	404	2,37	1,48	1,28

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.136,4197250330	194,3040067894	1,5432400451	22,099077472751
2	33,7973957502	0,0904929169	-0,0030437793	0,76112367568428
3	-12,3757999837	2,7625008520	0,0107498346	-0,096829268761252
4	0,1751903049	0,0090558102	0,0002306091	0,0082555229009467
5	-0,3140922057	0,0940249036	0,0004032840	-0,0016920272235052

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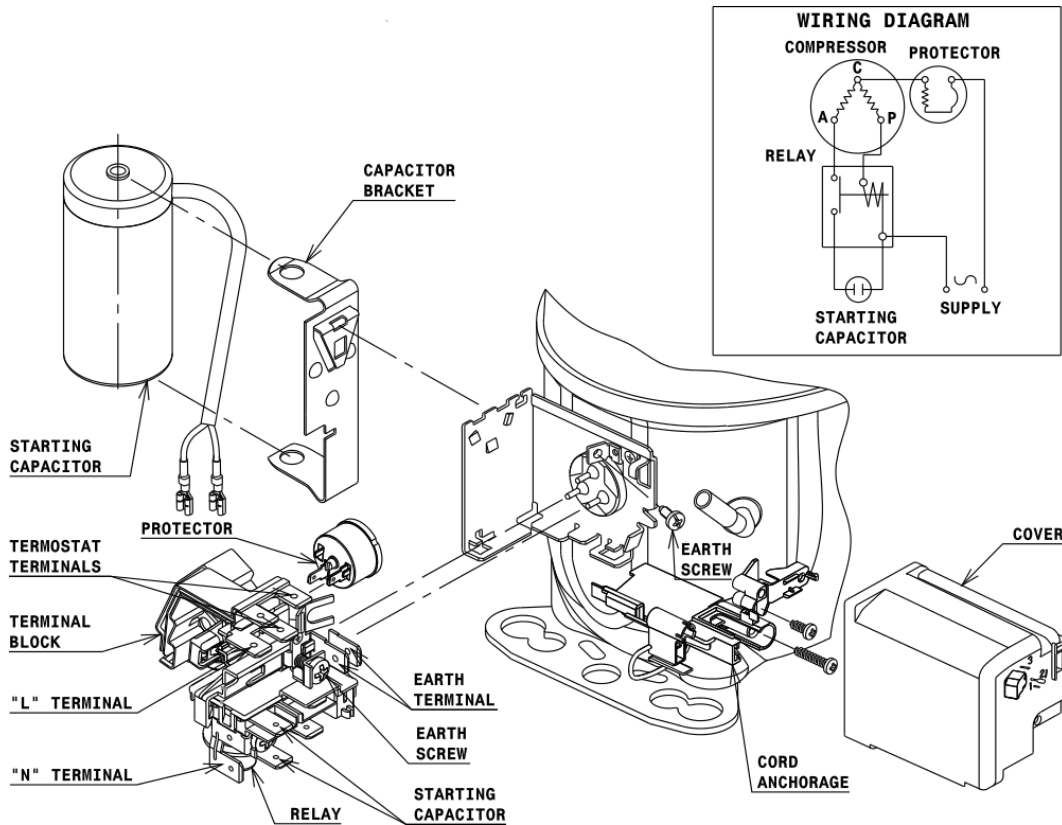
## COMPRESSOR DIMENSIONS



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

$\varnothing 16$  holes (170x70 net)



### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R404A HMBP

