

# Technical Data Sheet

Compressor model **ML60TR**  
 Voltage **115-127V 60Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	5,68 cm <sup>3</sup>	Nominal Power	1/4 hp
Refrigerant	R404A	Diameter	22,00 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	14,92 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	10,58 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	300 cm <sup>3</sup>	Locked Rotor Amps (LRA)	28,00 A
				Max. Cont. Current (MCC)	8,70 A
				Main W. resist. at 25°C	1,38 Ω
				Start W. resist. at 25°C	7,36 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	820 kCal/h	753 W
COP	1,83 W/W	1,48 W/W
EER	1,58 kCal/Wh	1,28 kCal/Wh
Input Power	520 W	508 W
Current	5,90 A	5,81 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

Starting capacitor	170 µF 160 V			
Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1	Option 2		
Reference	MRA38128	T0535		
Current	17,00 A	17,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C	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	273	270	4,30	1,17	1,01
40	-20	356	299	4,46	1,38	1,19
40	-15	454	327	4,62	1,61	1,39
40	-10	566	355	4,78	1,86	1,60
40	-5	693	382	4,95	2,11	1,82
40	0	835	408	5,12	2,38	2,04
40	5	991	434	5,29	2,66	2,28
40	7,2	1.065	445	5,36	2,78	2,39
40	10	1.162	459	5,46	2,94	2,53

45	-25	246	270	4,30	1,06	0,91
45	-20	321	303	4,48	1,23	1,06
45	-15	410	335	4,66	1,42	1,22
45	-10	514	367	4,85	1,63	1,40
45	-5	633	398	5,05	1,85	1,59
45	0	766	428	5,25	2,08	1,79
45	5	913	457	5,45	2,32	2,00
45	7,2	983	470	5,54	2,43	2,09
45	10	1.076	486	5,65	2,57	2,21

50	-25	220	270	4,30	0,95	0,81
50	-20	286	307	4,50	1,08	0,93
50	-15	367	343	4,71	1,24	1,07
50	-10	462	378	4,93	1,42	1,22
50	-5	572	413	5,15	1,61	1,38
50	0	697	447	5,38	1,81	1,56
50	5	836	481	5,61	2,02	1,74
50	7,2	902	495	5,72	2,12	1,82
50	10	989	513	5,85	2,24	1,93

55	-25	193	270	4,30	0,83	0,71
55	-20	251	311	4,52	0,94	0,81
55	-15	323	351	4,76	1,07	0,92
55	-10	410	390	5,00	1,22	1,05
55	-5	511	429	5,25	1,39	1,19
55	0	627	467	5,51	1,56	1,34
55	5	758	504	5,78	1,75	1,50
55	7,2	820	520	5,90	1,83	1,58
55	10	903	540	6,05	1,94	1,67

60	-25	167	270	4,30	0,72	0,62
60	-20	216	315	4,55	0,80	0,69
60	-15	280	358	4,80	0,91	0,78
60	-10	358	402	5,07	1,04	0,89
60	-5	451	444	5,36	1,18	1,01
60	0	558	486	5,65	1,34	1,15
60	5	680	527	5,95	1,50	1,29
60	7,2	739	545	6,09	1,58	1,36
60	10	817	568	6,27	1,67	1,44

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	285	272	4,31	1,05	0,91
40	-20	375	301	4,47	1,25	1,08
40	-15	479	329	4,63	1,46	1,26
40	-10	597	357	4,80	1,67	1,44
40	-5	730	385	4,97	1,90	1,64
40	0	876	411	5,14	2,13	1,84
40	5	1.036	437	5,31	2,37	2,05
40	7,2	1.112	448	5,39	2,48	2,14
40	10	1.211	463	5,48	2,62	2,26

45	-25	255	272	4,31	0,94	0,81
45	-20	334	305	4,49	1,10	0,95
45	-15	427	337	4,68	1,27	1,09
45	-10	535	369	4,87	1,45	1,25
45	-5	656	400	5,07	1,64	1,42
45	0	792	431	5,27	1,84	1,59
45	5	942	461	5,47	2,04	1,77
45	7,2	1.012	474	5,56	2,14	1,85
45	10	1.106	490	5,68	2,26	1,95

50	-25	224	272	4,31	0,83	0,71
50	-20	293	309	4,51	0,95	0,82
50	-15	375	345	4,72	1,09	0,94
50	-10	472	381	4,94	1,24	1,07
50	-5	583	416	5,17	1,40	1,21
50	0	708	450	5,40	1,57	1,36
50	5	847	484	5,64	1,75	1,51
50	7,2	913	499	5,74	1,83	1,58
50	10	1.001	517	5,88	1,93	1,67

55	-25	193	272	4,31	0,71	0,62
55	-20	251	312	4,53	0,80	0,69
55	-15	323	353	4,77	0,92	0,79
55	-10	409	392	5,02	1,04	0,90
55	-5	510	431	5,27	1,18	1,02
55	0	624	470	5,54	1,33	1,15
55	5	753	508	5,81	1,48	1,28
55	7,2	814	524	5,93	1,55	1,34
55	10	896	545	6,09	1,64	1,42

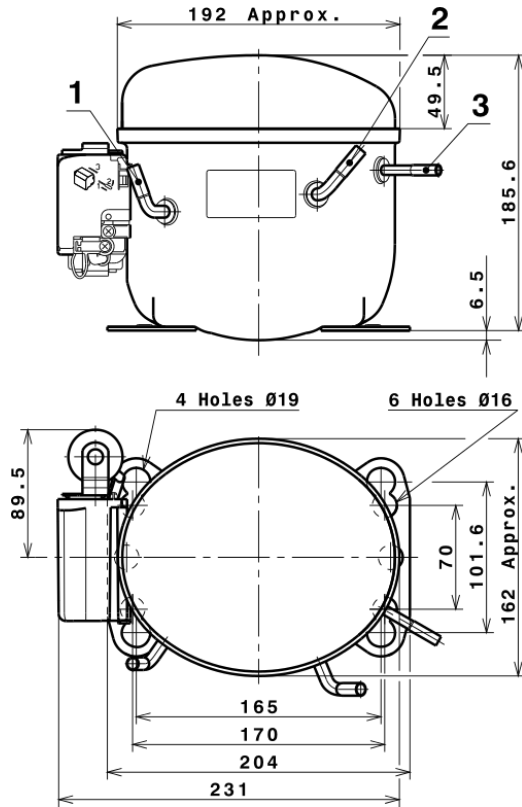
60	-25	163	272	4,31	0,60	0,52
60	-20	210	316	4,56	0,66	0,57
60	-15	271	361	4,82	0,75	0,65
60	-10	347	404	5,09	0,86	0,74
60	-5	437	447	5,38	0,98	0,84
60	0	540	489	5,67	1,10	0,95
60	5	658	531	5,98	1,24	1,07
60	7,2	715	549	6,12	1,30	1,12
60	10	791	572	6,30	1,38	1,19

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.546,7719184088	261,8585805738	3,9790029378	30,675659682083
2	47,6508101935	-0,8457932145	-0,0085196124	1,0899668728103
3	-17,3542669455	4,0460664387	0,0301601561	-0,1611938445825
4	0,2679322134	-0,0079769357	0,0002413819	0,012241826219075
5	-0,4473457584	0,1618426575	0,0012064062	-0,002980849345702

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	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

$\varnothing 16$  holes (170x70 net)



### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R404A HMBP

