

# Technical Data Sheet

Compressor model **MLT12RA**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	10,70 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R404A	Diameter	25,40 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,11 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	11,59 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm <sup>3</sup>	Locked Rotor Amps (LRA)	18,50 A
				Max. Cont. Current (MCC)	5,50 A
				Main W. resist. at 25°C	5,45 Ω
				Start W. resist. at 25°C	8,72 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	1.494 kCal/h	1.379 W
COP	2,31 W/W	1,88 W/W
EER	1,98 kCal/Wh	1,62 kCal/Wh
Input Power	753 W	734 W
Current	3,47 A	3,38 A

## 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	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	64- 77 μF 330 V			
Run capacitor	16 μF 420 V			
Relay	Option 1			
Reference	2014 158. + NTC15Ω			
Pick-Up	9,05 A			
Drop-Out	7,70 A			
Protector	Option 1			
Reference	T0188			
Current	12,30 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	115,00 / 61,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	508	395	1,85	1,49	1,28
40	-20	644	433	2,01	1,73	1,49
40	-15	804	472	2,18	1,98	1,71
40	-10	988	511	2,35	2,25	1,93
40	-5	1.195	551	2,53	2,52	2,17
40	0	1.425	592	2,71	2,80	2,41
40	5	1.679	634	2,91	3,08	2,65
40	7,2	1.799	653	2,99	3,21	2,76
40	10	1.957	676	3,10	3,36	2,89

45	-25	470	402	1,88	1,36	1,17
45	-20	597	444	2,06	1,56	1,34
45	-15	747	487	2,24	1,78	1,53
45	-10	921	530	2,44	2,02	1,74
45	-5	1.118	575	2,64	2,26	1,95
45	0	1.338	620	2,84	2,51	2,16
45	5	1.582	666	3,05	2,76	2,38
45	7,2	1.697	686	3,15	2,88	2,47
45	10	1.850	712	3,27	3,02	2,60

50	-25	433	409	1,91	1,23	1,06
50	-20	549	455	2,11	1,40	1,21
50	-15	690	502	2,31	1,60	1,37
50	-10	853	550	2,52	1,81	1,55
50	-5	1.040	598	2,74	2,02	1,74
50	0	1.251	647	2,97	2,25	1,93
50	5	1.485	697	3,20	2,48	2,13
50	7,2	1.596	720	3,31	2,58	2,22
50	10	1.743	748	3,45	2,71	2,33

55	-25	395	416	1,94	1,10	0,95
55	-20	502	466	2,16	1,25	1,08
55	-15	632	517	2,38	1,42	1,22
55	-10	786	569	2,61	1,61	1,38
55	-5	963	622	2,85	1,80	1,55
55	0	1.164	675	3,10	2,01	1,72
55	5	1.388	729	3,35	2,21	1,90
55	7,2	1.494	753	3,47	2,31	1,98
55	10	1.636	784	3,62	2,43	2,09

60	-25	358	423	1,97	0,98	0,85
60	-20	454	477	2,20	1,11	0,95
60	-15	575	532	2,45	1,26	1,08
60	-10	719	588	2,70	1,42	1,22
60	-5	886	645	2,96	1,60	1,37
60	0	1.077	702	3,23	1,78	1,53
60	5	1.291	761	3,51	1,97	1,70
60	7,2	1.393	787	3,63	2,06	1,77
60	10	1.528	820	3,80	2,17	1,86

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	532	397	1,86	1,34	1,16
40	-20	680	435	2,02	1,56	1,35
40	-15	850	474	2,19	1,79	1,55
40	-10	1.043	514	2,36	2,03	1,75
40	-5	1.258	555	2,55	2,27	1,96
40	0	1.497	596	2,73	2,51	2,17
40	5	1.758	639	2,93	2,75	2,38
40	7,2	1.880	658	3,02	2,86	2,47
40	10	2.042	682	3,13	2,99	2,59

45	-25	487	404	1,89	1,20	1,04
45	-20	621	447	2,07	1,39	1,20
45	-15	777	490	2,26	1,59	1,37
45	-10	957	534	2,45	1,79	1,55
45	-5	1.159	578	2,65	2,00	1,73
45	0	1.384	624	2,86	2,22	1,92
45	5	1.632	671	3,08	2,43	2,10
45	7,2	1.748	691	3,17	2,53	2,18
45	10	1.902	718	3,30	2,65	2,29

50	-25	441	411	1,92	1,07	0,93
50	-20	562	458	2,12	1,23	1,06
50	-15	705	505	2,32	1,40	1,21
50	-10	871	553	2,54	1,57	1,36
50	-5	1.060	602	2,76	1,76	1,52
50	0	1.271	652	2,99	1,95	1,68
50	5	1.505	702	3,23	2,14	1,85
50	7,2	1.615	725	3,34	2,23	1,93
50	10	1.762	754	3,47	2,34	2,02

55	-25	396	418	1,95	0,95	0,82
55	-20	503	469	2,17	1,07	0,93
55	-15	632	520	2,39	1,22	1,05
55	-10	785	573	2,63	1,37	1,18
55	-5	960	626	2,87	1,53	1,33
55	0	1.158	680	3,12	1,70	1,47
55	5	1.379	734	3,38	1,88	1,62
55	7,2	1.483	759	3,50	1,95	1,69
55	10	1.622	790	3,65	2,05	1,77

60	-25	350	425	1,98	0,82	0,71
60	-20	444	480	2,22	0,92	0,80
60	-15	560	536	2,46	1,05	0,90
60	-10	699	592	2,71	1,18	1,02
60	-5	861	649	2,98	1,33	1,15
60	0	1.045	707	3,25	1,48	1,28
60	5	1.253	766	3,53	1,63	1,41
60	7,2	1.351	793	3,66	1,70	1,47
60	10	1.482	826	3,83	1,79	1,55

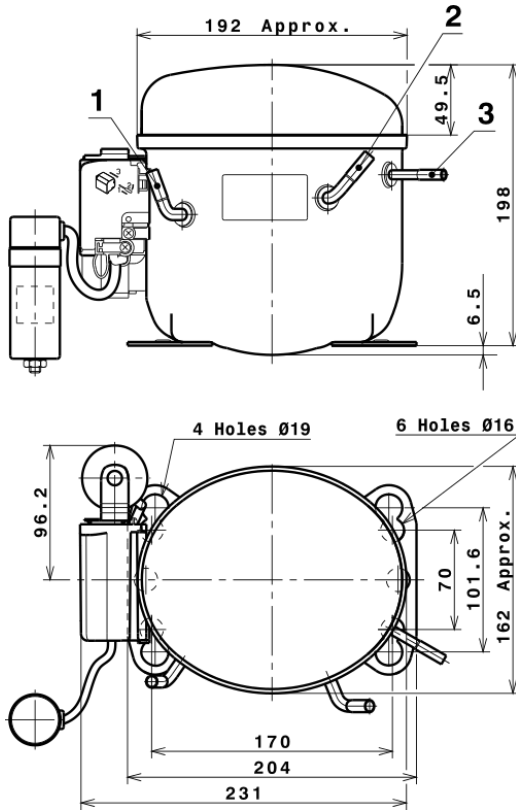
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2,414,5838565517	384,7373704489	1,7046651097	25,606308670768
2	71,8702837638	2,0458979200	0,0074741445	0,91230252900111
3	-23,9240710225	5,7440685364	0,0275554526	-0,027726357039318
4	0,4302770158	0,0247630459	0,0002199382	0,012005848175954
5	-0,5852978677	0,1720997849	0,0008569064	0,00079007657606697

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

## COMPRESSOR DIMENSIONS

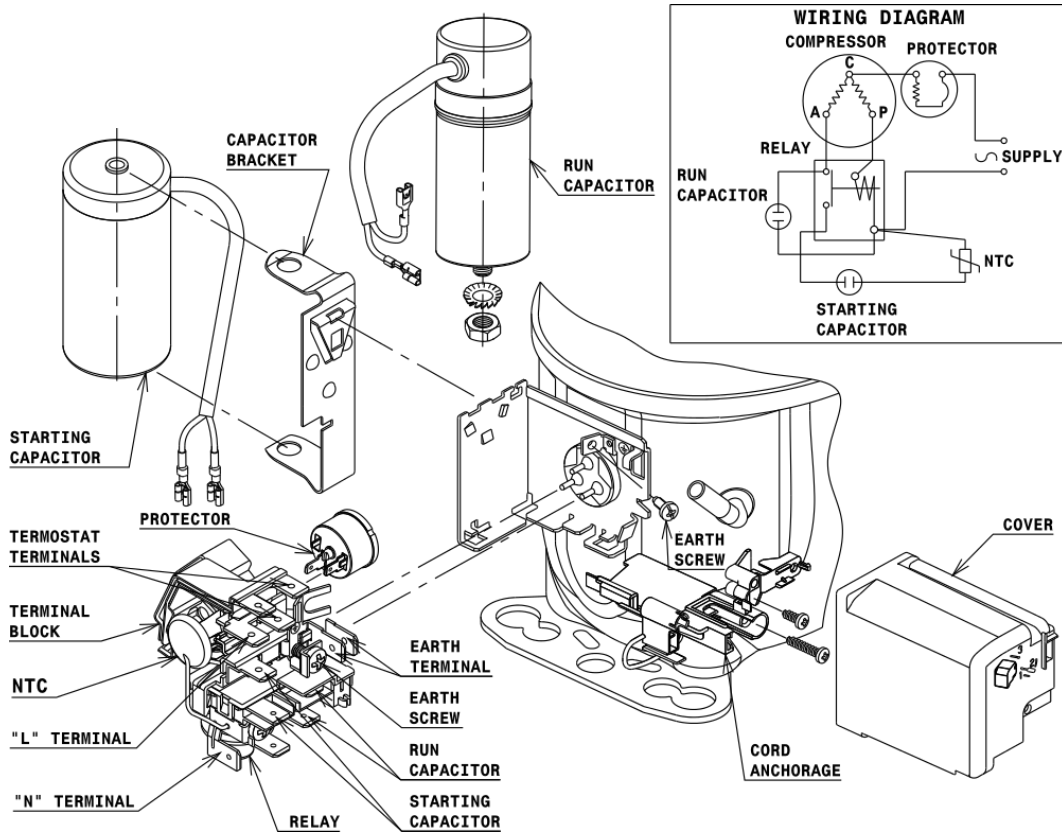


## DESIGNATION INTERNAL DIAM.

1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC)



# 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

