

# Technical Data Sheet

Compressor model **MLT12RR**  
 Voltage **115-127V 60Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	10,70 cm <sup>3</sup>	Nominal Power	1/2 hp
Refrigerant	R404A	Diameter	27,00 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,13 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	11,96 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)	51,60 A
				Max. Cont. Current (MCC)	14,00 A
				Main W. resist. at 25°C	0,70 Ω
				Start W. resist. at 25°C	6,57 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	1.686 kCal/h	1.560 W
COP	2,15 W/W	1,75 W/W
EER	1,84 kCal/Wh	1,51 kCal/Wh
Input Power	914 W	893 W
Current	8,93 A	8,75 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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	125 µF 160 V			
Run capacitor	15 µF 250 V			
Relay	Option 1			
Reference	2014 191. + NTC3Ω			
Pick-Up	24,40 A			
Drop-Out	20,30 A			
Protector	Option 1			
Reference	T1115-L6			
Current	47,00 A			
Time check	2,8-5,2 seg			
Disc temp. (Open/Close)	120,00 / 52,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	600	487	5,49	1,43	1,23
40	-20	769	547	5,96	1,64	1,41
40	-15	963	606	6,43	1,85	1,59
40	-10	1.180	665	6,90	2,06	1,77
40	-5	1.422	724	7,37	2,29	1,96
40	0	1.687	781	7,83	2,51	2,16
40	5	1.977	838	8,30	2,74	2,36
40	7,2	2.112	863	8,51	2,85	2,45
40	10	2.291	894	8,77	2,98	2,56

45	-25	554	489	5,51	1,32	1,13
45	-20	708	551	6,00	1,49	1,28
45	-15	887	613	6,48	1,68	1,45
45	-10	1.089	674	6,97	1,88	1,62
45	-5	1.316	735	7,46	2,08	1,79
45	0	1.567	795	7,95	2,29	1,97
45	5	1.841	854	8,43	2,51	2,16
45	7,2	1.970	880	8,65	2,60	2,24
45	10	2.140	913	8,92	2,73	2,34

50	-25	508	492	5,53	1,20	1,03
50	-20	648	556	6,03	1,35	1,16
50	-15	811	620	6,54	1,52	1,31
50	-10	999	684	7,05	1,70	1,46
50	-5	1.210	747	7,55	1,89	1,62
50	0	1.446	809	8,06	2,08	1,79
50	5	1.706	870	8,57	2,28	1,96
50	7,2	1.828	897	8,79	2,37	2,04
50	10	1.990	931	9,07	2,49	2,14

55	-25	462	494	5,55	1,09	0,94
55	-20	587	561	6,07	1,22	1,05
55	-15	735	627	6,60	1,36	1,17
55	-10	908	693	7,12	1,52	1,31
55	-5	1.105	758	7,65	1,70	1,46
55	0	1.326	822	8,17	1,87	1,61
55	5	1.571	886	8,70	2,06	1,77
55	7,2	1.686	914	8,93	2,15	1,84
55	10	1.840	949	9,23	2,25	1,94

60	-25	416	497	5,57	0,97	0,84
60	-20	526	566	6,11	1,08	0,93
60	-15	659	634	6,65	1,21	1,04
60	-10	817	702	7,19	1,35	1,16
60	-5	999	770	7,74	1,51	1,30
60	0	1.205	836	8,28	1,68	1,44
60	5	1.435	902	8,83	1,85	1,59
60	7,2	1.544	931	9,07	1,93	1,66
60	10	1.689	968	9,38	2,03	1,75

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	629	489	5,51	1,29	1,11
40	-20	811	550	5,98	1,47	1,27
40	-15	1.016	610	6,46	1,67	1,44
40	-10	1.244	669	6,93	1,86	1,61
40	-5	1.495	728	7,40	2,05	1,77
40	0	1.770	787	7,88	2,25	1,94
40	5	2.068	844	8,35	2,45	2,12
40	7,2	2.207	870	8,56	2,54	2,19
40	10	2.389	902	8,83	2,65	2,29

45	-25	574	492	5,53	1,17	1,01
45	-20	736	555	6,02	1,33	1,15
45	-15	922	617	6,51	1,49	1,29
45	-10	1.131	679	7,01	1,67	1,44
45	-5	1.364	740	7,50	1,84	1,59
45	0	1.620	800	7,99	2,02	1,75
45	5	1.899	861	8,49	2,21	1,91
45	7,2	2.029	887	8,70	2,29	1,98
45	10	2.201	920	8,98	2,39	2,07

50	-25	518	494	5,55	1,05	0,91
50	-20	662	559	6,06	1,18	1,02
50	-15	829	624	6,57	1,33	1,15
50	-10	1.019	688	7,08	1,48	1,28
50	-5	1.233	751	7,59	1,64	1,42
50	0	1.469	814	8,11	1,80	1,56
50	5	1.730	877	8,62	1,97	1,70
50	7,2	1.851	904	8,85	2,05	1,77
50	10	2.013	938	9,13	2,15	1,85

55	-25	463	497	5,57	0,93	0,80
55	-20	588	564	6,10	1,04	0,90
55	-15	736	631	6,63	1,17	1,01
55	-10	907	697	7,15	1,30	1,12
55	-5	1.101	763	7,69	1,44	1,25
55	0	1.319	828	8,22	1,59	1,38
55	5	1.560	893	8,75	1,75	1,51
55	7,2	1.674	921	8,99	1,82	1,57
55	10	1.825	957	9,29	1,91	1,65

60	-25	407	499	5,59	0,82	0,70
60	-20	513	569	6,13	0,90	0,78
60	-15	642	638	6,68	1,01	0,87
60	-10	794	707	7,23	1,12	0,97
60	-5	970	775	7,78	1,25	1,08
60	0	1.169	842	8,33	1,39	1,20
60	5	1.391	909	8,89	1,53	1,32
60	7,2	1.496	938	9,13	1,59	1,38
60	10	1.637	975	9,44	1,68	1,45

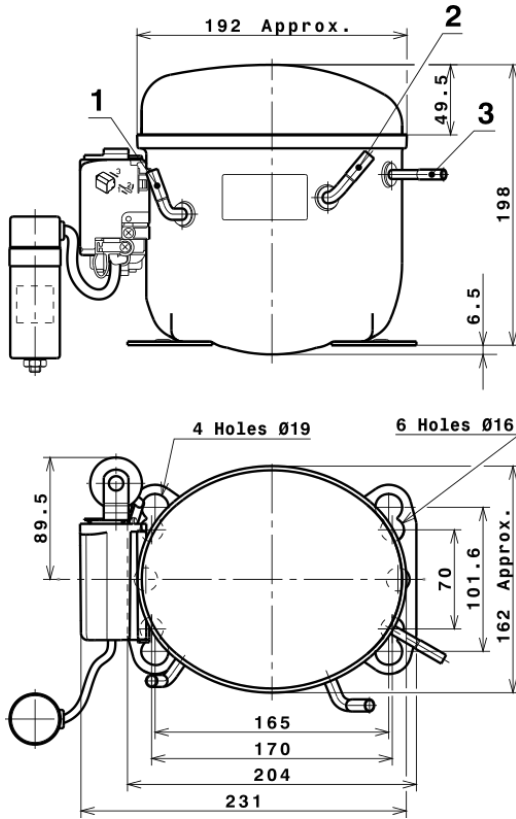
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2,979,6702284112	696,1841060038	7,1132888236	56,513084374509
2	87,7729615820	8,5668660470	0,0696400305	1,9516152081223
3	-31,4204994950	2,8664464314	0,0239448623	-0,19025033197234
4	0,4404437500	-0,0026550929	0,0001146436	0,021118534910874
5	-0,8050491775	0,0940639442	0,0007978965	-0,0033805586965974

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

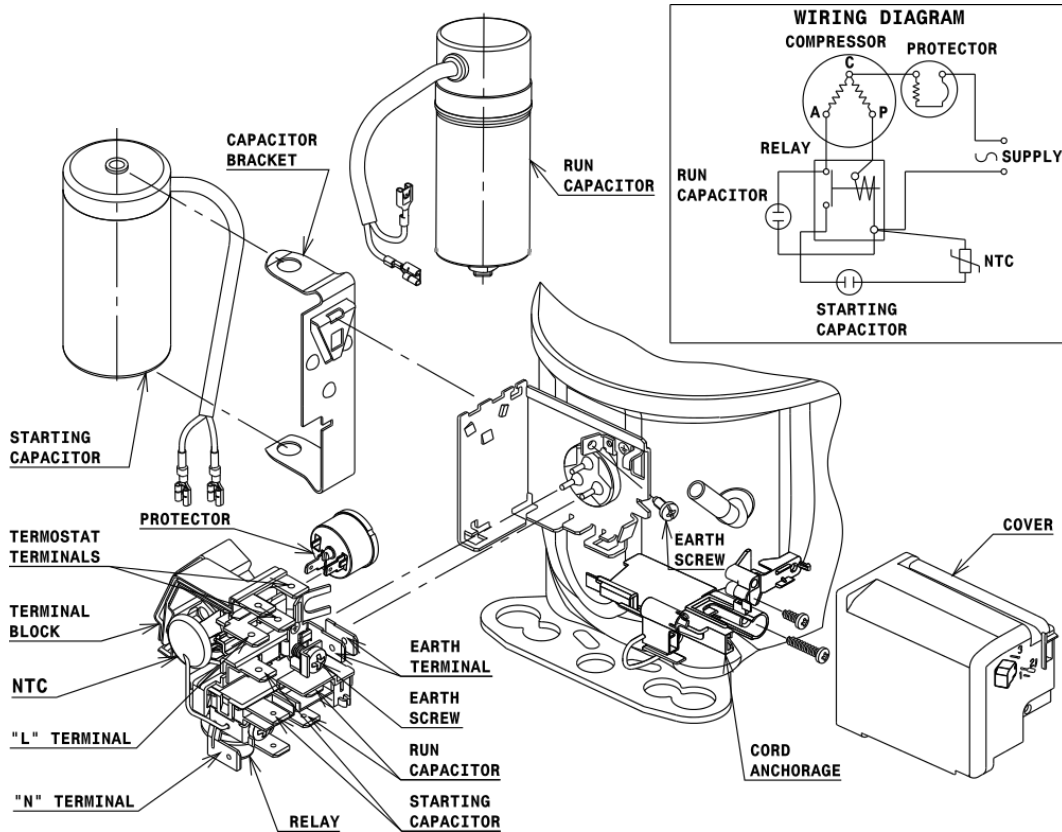
## COMPRESSOR DIMENSIONS



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) (L, P ranges)



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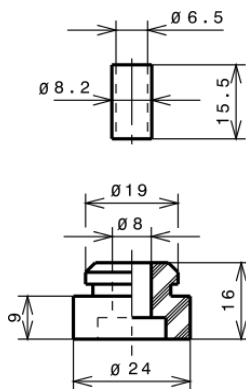
## FIXINGS



## 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

