

Technical Data Sheet

Compressor model **MLT90CD**
 Voltage **115V 60Hz ~1**
 Refrigerant **R404A**

APPLICATION

Application Low Back Pressure
 Refrigerant R404A
 Evaporating Temp. -40,0 °C to -10,0 °C
 Expansion Capillar
 Comp. Cooling Fan cooled
 Max. ambient temp. 43,0 °C

COMPRESSOR

Displacement 9,09 cm³
 Diameter 24,29 mm
 Stroke 19,62 mm
 Net Weight 11,40 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 400 cm³

MOTOR

Nominal Power 1/3 hp
 Voltage/Frequency 115V 60Hz
 Voltage range 98-132 V
 Type RSCR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 36,00 A
 Max. Cont. Current (MCC) 6,50 A
 Main W. resist. at 25°C 1,24 Ω
 Start W. resist. at 25°C 6,95 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	485 kCal/h	382 W
COP	1,45 W/W	1,03 W/W
EER	1,24 kCal/Wh	0,89 kCal/Wh
Input Power	390 W	372 W
Current	4,00 A	3,85 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Run capacitor	15 µF 250 V		
Relay	Option 1		
Reference	PTC K115		
Voltage	100 - 115 V		
Resistance	4,70 Ω		
Protector	Option 1	Option 2	
Reference	4TM783NFBZZ	T0315	
Current	20,50 A	22,00 A	
Time check	5-15 seg	7,5-14 seg	
Disc temp. (Open/Close)	120,00 / 61,00 °C	125,00 / 62,00 °C	

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	250	248	2,86	1,17	1,01
40	-35	317	277	3,09	1,33	1,14
40	-30	406	312	3,36	1,51	1,30
40	-25	518	352	3,68	1,71	1,47
40	-23,3	562	367	3,81	1,78	1,53
40	-20	653	397	4,06	1,91	1,65
40	-15	810	447	4,48	2,11	1,81
40	-10	990	502	4,97	2,29	1,97

45	-40	230	245	2,84	1,09	0,94
45	-35	295	278	3,09	1,24	1,06
45	-30	383	316	3,39	1,41	1,21
45	-25	493	359	3,74	1,60	1,38
45	-23,3	536	374	3,87	1,67	1,43
45	-20	626	407	4,14	1,79	1,54
45	-15	782	460	4,60	1,98	1,70
45	-10	960	518	5,11	2,16	1,85

50	-40	210	243	2,82	1,01	0,87
50	-35	274	278	3,10	1,14	0,98
50	-30	360	319	3,42	1,31	1,13
50	-25	468	365	3,80	1,49	1,28
50	-23,3	511	382	3,93	1,55	1,34
50	-20	600	417	4,22	1,67	1,44
50	-15	754	473	4,71	1,85	1,59
50	-10	930	534	5,25	2,03	1,74

55	-40	190	240	2,80	0,92	0,79
55	-35	252	279	3,10	1,05	0,90
55	-30	336	323	3,45	1,21	1,04
55	-25	443	372	3,85	1,39	1,19
55	-23,3	485	390	4,00	1,45	1,24
55	-20	573	426	4,31	1,56	1,34
55	-15	725	486	4,82	1,74	1,49
55	-10	900	550	5,40	1,90	1,64

60	-40	170	238	2,78	0,83	0,72
60	-35	230	280	3,11	0,96	0,82
60	-30	313	327	3,48	1,11	0,96
60	-25	418	379	3,91	1,28	1,10
60	-23,3	459	398	4,07	1,34	1,15
60	-20	546	436	4,39	1,46	1,25
60	-15	697	499	4,94	1,63	1,40
60	-10	870	566	5,55	1,79	1,54

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	263	248	2,86	1,06	0,92
40	-35	347	277	3,09	1,25	1,08
40	-30	450	312	3,36	1,44	1,25
40	-25	572	352	3,68	1,62	1,40
40	-23,3	617	367	3,81	1,68	1,45
40	-20	712	397	4,06	1,79	1,55
40	-15	872	447	4,48	1,95	1,69
40	-10	1.050	502	4,97	2,09	1,81

45	-40	230	245	2,84	0,94	0,81
45	-35	304	278	3,09	1,09	0,95
45	-30	397	316	3,39	1,26	1,09
45	-25	508	359	3,74	1,42	1,22
45	-23,3	551	374	3,87	1,47	1,27
45	-20	639	407	4,14	1,57	1,36
45	-15	788	460	4,60	1,71	1,48
45	-10	957	518	5,11	1,85	1,60

50	-40	197	243	2,82	0,81	0,70
50	-35	261	278	3,10	0,94	0,81
50	-30	344	319	3,42	1,08	0,93
50	-25	445	365	3,80	1,22	1,05
50	-23,3	484	382	3,93	1,27	1,09
50	-20	566	417	4,22	1,36	1,17
50	-15	705	473	4,71	1,49	1,29
50	-10	863	534	5,25	1,62	1,40

55	-40	164	240	2,80	0,68	0,59
55	-35	218	279	3,10	0,78	0,67
55	-30	290	323	3,45	0,90	0,78
55	-25	382	372	3,85	1,03	0,89
55	-23,3	417	390	4,00	1,07	0,92
55	-20	492	426	4,31	1,16	1,00
55	-15	622	486	4,82	1,28	1,11
55	-10	770	550	5,40	1,40	1,21

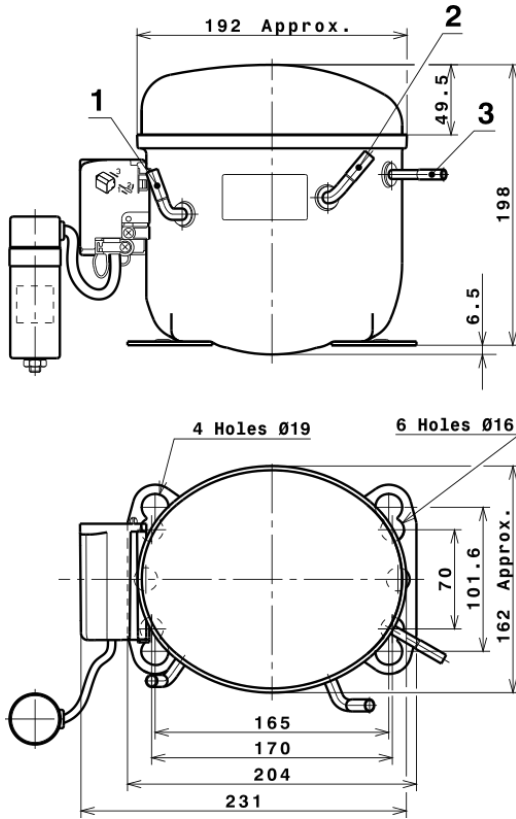
60	-40	131	238	2,78	0,55	0,48
60	-35	175	280	3,11	0,63	0,54
60	-30	237	327	3,48	0,73	0,63
60	-25	319	379	3,91	0,84	0,73
60	-23,3	351	398	4,07	0,88	0,76
60	-20	419	436	4,39	0,96	0,83
60	-15	539	499	4,94	1,08	0,93
60	-10	677	566	5,55	1,20	1,03

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.347,0685529556	463,6964050308	4,6339205265	49,380202990451
2	60,0955354262	9,0352521102	0,0866313337	1,5058792025375
3	-23,2901401814	4,5515607949	0,0413037071	-0,20036599614943
4	0,3588097199	0,1069602535	0,0011798275	0,013930788106552
5	-0,4180118460	0,1265657828	0,0011306566	-0,0022057767519592

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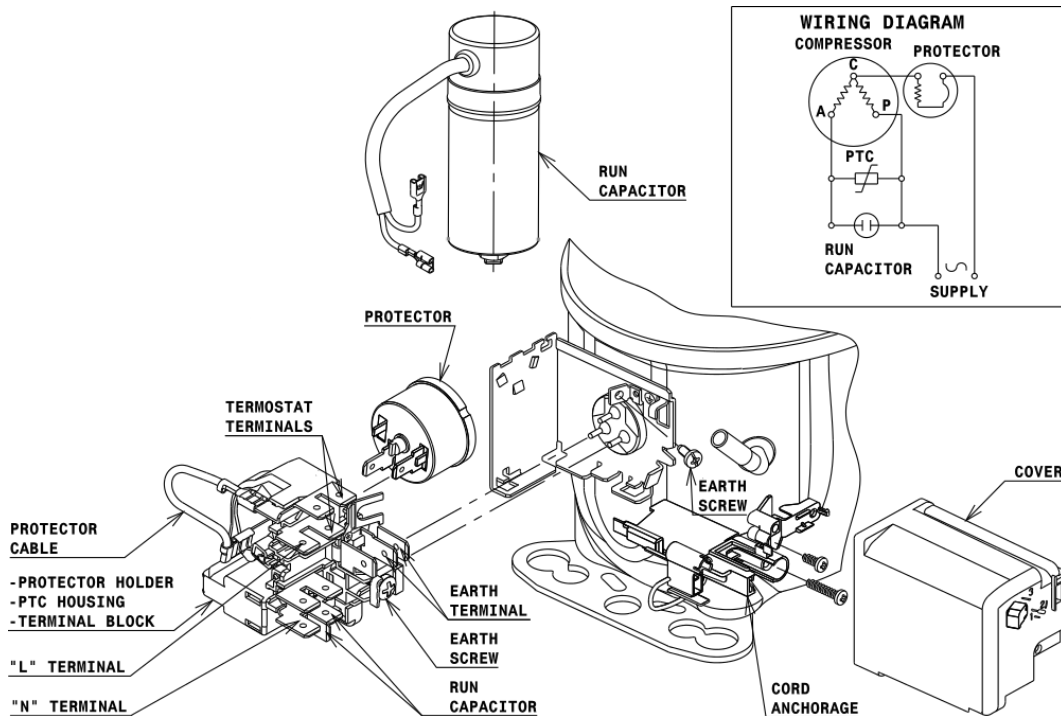
COMPRESSOR DIMENSIONS



DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	6,5 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR 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 LBP

