

# Technical Data Sheet

Compressor model **MLT90CDc**  
 Voltage **115V 60Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

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

## COMPRESSOR

Displacement	9,09 cm <sup>3</sup>
Diameter	24,29 mm
Stroke	19,62 mm
Net Weight	11,55 Kg
Oil type	ISO VG 32 ESTER
Oil charge	400 cm <sup>3</sup>

## MOTOR

Nominal Power	1/3 hp
Voltage/Frequency	115V 60Hz
Voltage range	98-132 V
Type	CSR
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	474 kCal/h	373 W
COP	1,40 W/W	0,99 W/W
EER	1,20 kCal/Wh	0,86 kCal/Wh
Input Power	394 W	377 W
Current	4,10 A	3,96 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	200 µF 160 V		
Run capacitor	15 µF 250 V		
Relay	Option 1		
Reference	2014 180. + NTC3Ω		
Pick-Up	16,70 A		
Drop-Out	14,00 A		
Protector	Option 1	Option 2	
Reference	MRA38142	T0258	
Current	24,00 A	23,50 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	120,00 / 52,00 °C	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	-40	223	252	2,95	1,03	0,88
40	-35	299	286	3,22	1,22	1,05
40	-30	397	325	3,53	1,42	1,22
40	-25	516	368	3,88	1,63	1,40
40	-23,3	561	383	4,01	1,70	1,46
40	-20	657	415	4,28	1,84	1,58
40	-15	819	467	4,71	2,04	1,75
40	-10	1.002	524	5,19	2,22	1,91

45	-40	210	250	2,93	0,98	0,84
45	-35	281	286	3,22	1,15	0,99
45	-30	374	326	3,54	1,34	1,15
45	-25	489	371	3,91	1,53	1,32
45	-23,3	532	387	4,04	1,60	1,38
45	-20	624	420	4,31	1,73	1,49
45	-15	781	474	4,77	1,92	1,65
45	-10	960	532	5,26	2,10	1,80

50	-40	197	248	2,92	0,92	0,79
50	-35	264	285	3,21	1,07	0,92
50	-30	352	327	3,55	1,25	1,07
50	-25	461	374	3,93	1,44	1,23
50	-23,3	503	390	4,07	1,50	1,29
50	-20	592	425	4,35	1,62	1,39
50	-15	744	480	4,82	1,80	1,55
50	-10	918	540	5,33	1,98	1,70

55	-40	184	246	2,90	0,87	0,75
55	-35	246	285	3,21	1,00	0,86
55	-30	329	329	3,56	1,16	1,00
55	-25	434	377	3,96	1,34	1,15
55	-23,3	474	394	4,10	1,40	1,20
55	-20	560	429	4,39	1,52	1,30
55	-15	707	486	4,87	1,69	1,45
55	-10	876	548	5,40	1,86	1,60

60	-40	171	244	2,88	0,82	0,70
60	-35	228	285	3,21	0,93	0,80
60	-30	306	330	3,57	1,08	0,93
60	-25	406	380	3,98	1,24	1,07
60	-23,3	445	398	4,13	1,30	1,12
60	-20	527	434	4,43	1,41	1,22
60	-15	670	493	4,93	1,58	1,36
60	-10	834	556	5,47	1,74	1,50

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	236	252	2,95	0,94	0,81
40	-35	328	286	3,22	1,15	0,99
40	-30	439	325	3,53	1,35	1,17
40	-25	567	368	3,88	1,54	1,33
40	-23,3	615	383	4,01	1,60	1,39
40	-20	714	415	4,28	1,72	1,49
40	-15	878	467	4,71	1,88	1,62
40	-10	1.060	524	5,19	2,02	1,75

45	-40	210	250	2,93	0,84	0,73
45	-35	290	286	3,22	1,01	0,88
45	-30	387	326	3,54	1,19	1,03
45	-25	503	371	3,91	1,36	1,17
45	-23,3	546	387	4,04	1,41	1,22
45	-20	636	420	4,31	1,51	1,31
45	-15	787	474	4,77	1,66	1,44
45	-10	957	532	5,26	1,80	1,55

50	-40	185	248	2,92	0,74	0,64
50	-35	251	285	3,21	0,88	0,76
50	-30	336	327	3,55	1,03	0,89
50	-25	438	374	3,93	1,17	1,01
50	-23,3	477	390	4,07	1,22	1,06
50	-20	558	425	4,35	1,32	1,14
50	-15	697	480	4,82	1,45	1,25
50	-10	853	540	5,33	1,58	1,37

55	-40	159	246	2,90	0,65	0,56
55	-35	213	285	3,21	0,75	0,64
55	-30	284	329	3,56	0,86	0,75
55	-25	373	377	3,96	0,99	0,86
55	-23,3	408	394	4,10	1,04	0,89
55	-20	481	429	4,39	1,12	0,97
55	-15	606	486	4,87	1,25	1,08
55	-10	750	548	5,40	1,37	1,18

60	-40	133	244	2,88	0,55	0,47
60	-35	174	285	3,21	0,61	0,53
60	-30	232	330	3,57	0,70	0,61
60	-25	309	380	3,98	0,81	0,70
60	-23,3	339	398	4,13	0,85	0,74
60	-20	403	434	4,43	0,93	0,80
60	-15	516	493	4,93	1,05	0,90
60	-10	646	556	5,47	1,16	1,00

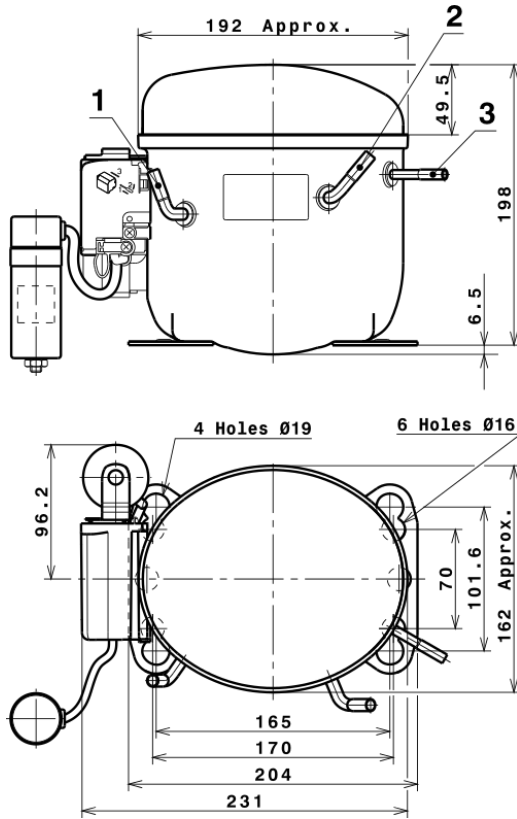
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.484,6895316453	576,7315748177	5,6547582208	54,027003535368
2	64,9042024066	11,3944216225	0,0998691347	1,6529854503766
3	-26,3674574156	2,3268874491	0,0199810051	-0,30545419695072
4	0,3405982023	0,0956119293	0,0009139609	0,013262452082597
5	-0,5308254425	0,0683935966	0,0005809002	-0,0058059202451308

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	6,5 mm
3	Discharge	6,5 mm

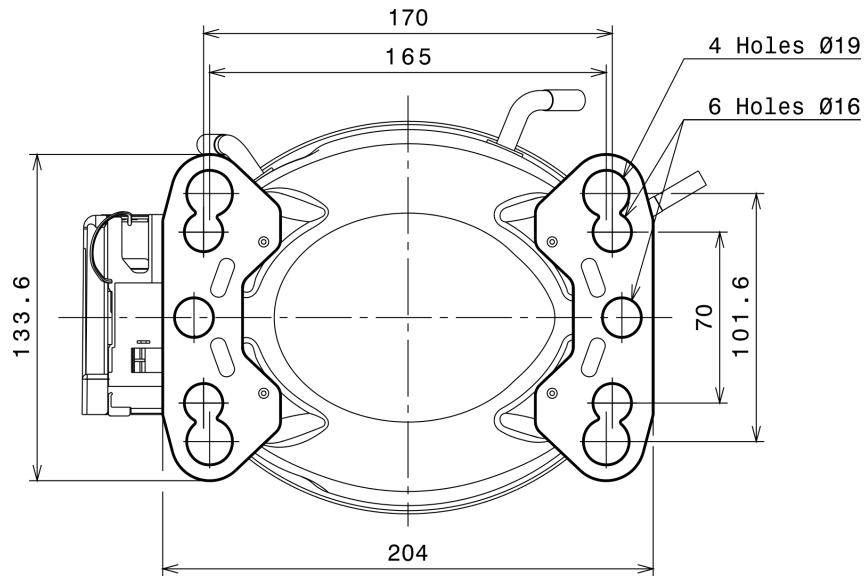
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



# Technical Data Sheet

## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

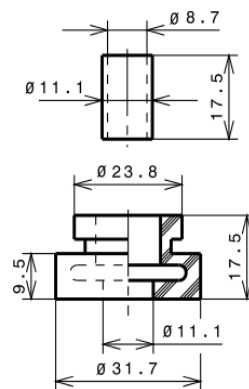
### STANDARD

$\varnothing 16$  holes (170x70 net)



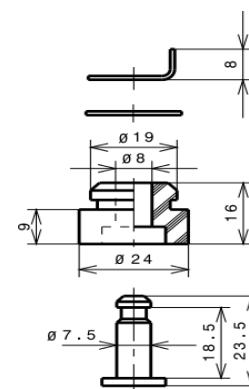
### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R404A LBP

