

# Technical Data Sheet

Compressor model **ML45FG**  
 Voltage **200-240/220-230V 50/60Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

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

## COMPRESSOR

Displacement 4,56 cm<sup>3</sup>  
 Diameter 19,09 mm  
 Stroke 15,93 mm  
 Net Weight 10,87 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 295 cm<sup>3</sup>

## MOTOR

Nominal Power 1/6 hp  
 Voltage/Frequency 220-230V 60Hz  
 Voltage range 187-253 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 9,50 A  
 Max. Cont. Current (MCC) 2,30 A  
 Main W. resist. at 25°C 8,41 Ω  
 Start W. resist. at 25°C 18,00 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	200 kCal/h	157 W
COP	0,97 W/W	0,68 W/W
EER	0,83 kCal/Wh	0,59 kCal/Wh
Input Power	240 W	229 W
Current	1,40 A	1,36 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	230 V 60 Hz	230 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1	Option 2		
Reference	2014 127.	QLZ-4.8A		
Pick-Up	4,80 A	4,8 A		
Drop-Out	4,10 A	4,1 A		
Protector	Option 1	Option 2		
Reference	MRP61AMJ	T0073		
Current	6,90 A	6,20 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	90,00 / 57,00 °C	110,00 / 62,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	97	158	1,12	0,72	0,62
40	-35	132	176	1,17	0,87	0,75
40	-30	176	197	1,24	1,04	0,89
40	-25	229	222	1,33	1,20	1,03
40	-23,3	250	231	1,36	1,26	1,08
40	-20	292	249	1,44	1,36	1,17
40	-15	363	279	1,57	1,51	1,30
40	-10	443	313	1,73	1,65	1,42

45	-40	88	155	1,11	0,66	0,57
45	-35	121	175	1,17	0,80	0,69
45	-30	163	198	1,25	0,96	0,82
45	-25	214	224	1,34	1,11	0,95
45	-23,3	233	234	1,38	1,16	1,00
45	-20	274	253	1,45	1,26	1,08
45	-15	342	285	1,60	1,40	1,20
45	-10	420	320	1,77	1,53	1,31

50	-40	79	153	1,11	0,60	0,52
50	-35	110	174	1,17	0,73	0,63
50	-30	149	199	1,25	0,87	0,75
50	-25	198	227	1,35	1,01	0,87
50	-23,3	217	237	1,39	1,06	0,91
50	-20	256	257	1,47	1,15	0,99
50	-15	322	291	1,62	1,29	1,11
50	-10	398	328	1,81	1,41	1,21

55	-40	70	150	1,10	0,54	0,47
55	-35	98	174	1,17	0,66	0,57
55	-30	136	200	1,25	0,79	0,68
55	-25	182	229	1,36	0,92	0,79
55	-23,3	200	240	1,40	0,97	0,83
55	-20	238	262	1,49	1,06	0,91
55	-15	302	297	1,65	1,18	1,02
55	-10	375	335	1,85	1,30	1,12

60	-40	61	148	1,09	0,48	0,41
60	-35	87	173	1,16	0,59	0,50
60	-30	122	201	1,25	0,71	0,61
60	-25	166	232	1,37	0,83	0,72
60	-23,3	183	243	1,41	0,88	0,75
60	-20	220	266	1,51	0,96	0,83
60	-15	282	303	1,68	1,08	0,93
60	-10	353	343	1,89	1,20	1,03

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	102	158	1,12	0,65	0,56
40	-35	144	176	1,17	0,82	0,71
40	-30	194	197	1,24	0,98	0,85
40	-25	251	222	1,33	1,13	0,98
40	-23,3	272	231	1,36	1,18	1,02
40	-20	316	249	1,44	1,27	1,09
40	-15	388	279	1,57	1,39	1,20
40	-10	467	313	1,73	1,50	1,29

45	-40	88	155	1,11	0,57	0,49
45	-35	124	175	1,17	0,71	0,61
45	-30	168	198	1,25	0,85	0,73
45	-25	220	224	1,34	0,98	0,85
45	-23,3	239	234	1,38	1,02	0,88
45	-20	278	253	1,45	1,10	0,95
45	-15	345	285	1,60	1,21	1,04
45	-10	419	320	1,77	1,31	1,13

50	-40	74	153	1,11	0,49	0,42
50	-35	105	174	1,17	0,60	0,52
50	-30	143	199	1,25	0,72	0,62
50	-25	188	227	1,35	0,83	0,72
50	-23,3	205	237	1,39	0,87	0,75
50	-20	241	257	1,47	0,94	0,81
50	-15	302	291	1,62	1,04	0,90
50	-10	370	328	1,81	1,13	0,98

55	-40	61	150	1,10	0,40	0,35
55	-35	85	174	1,17	0,49	0,42
55	-30	117	200	1,25	0,59	0,51
55	-25	157	229	1,36	0,68	0,59
55	-23,3	172	240	1,40	0,72	0,62
55	-20	204	262	1,49	0,78	0,67
55	-15	259	297	1,65	0,87	0,75
55	-10	321	335	1,85	0,96	0,83

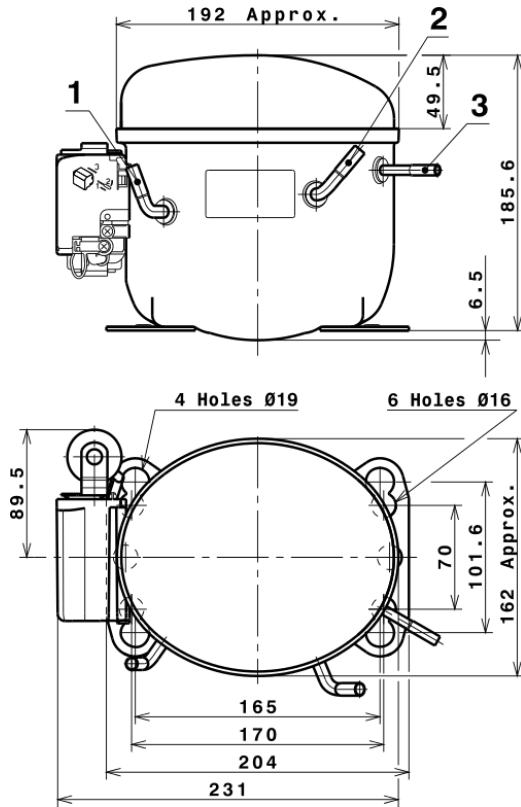
60	-40	47	148	1,09	0,32	0,27
60	-35	66	173	1,16	0,38	0,33
60	-30	92	201	1,25	0,46	0,40
60	-25	126	232	1,37	0,54	0,47
60	-23,3	139	243	1,41	0,57	0,49
60	-20	167	266	1,51	0,63	0,54
60	-15	216	303	1,68	0,71	0,62
60	-10	272	343	1,89	0,79	0,69

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.118,4227487155	309,8762669861	1,7452590146	24,726134203507
2	28,4488984424	5,6760128511	0,0366135468	0,72283666900905
3	-12,2662583722	2,2240461932	0,0117151152	-0,15918643050526
4	0,1421458938	0,0616214252	0,0005657372	0,0055615337606768
5	-0,2382826002	0,0683779177	0,0003278825	-0,0027202544644102

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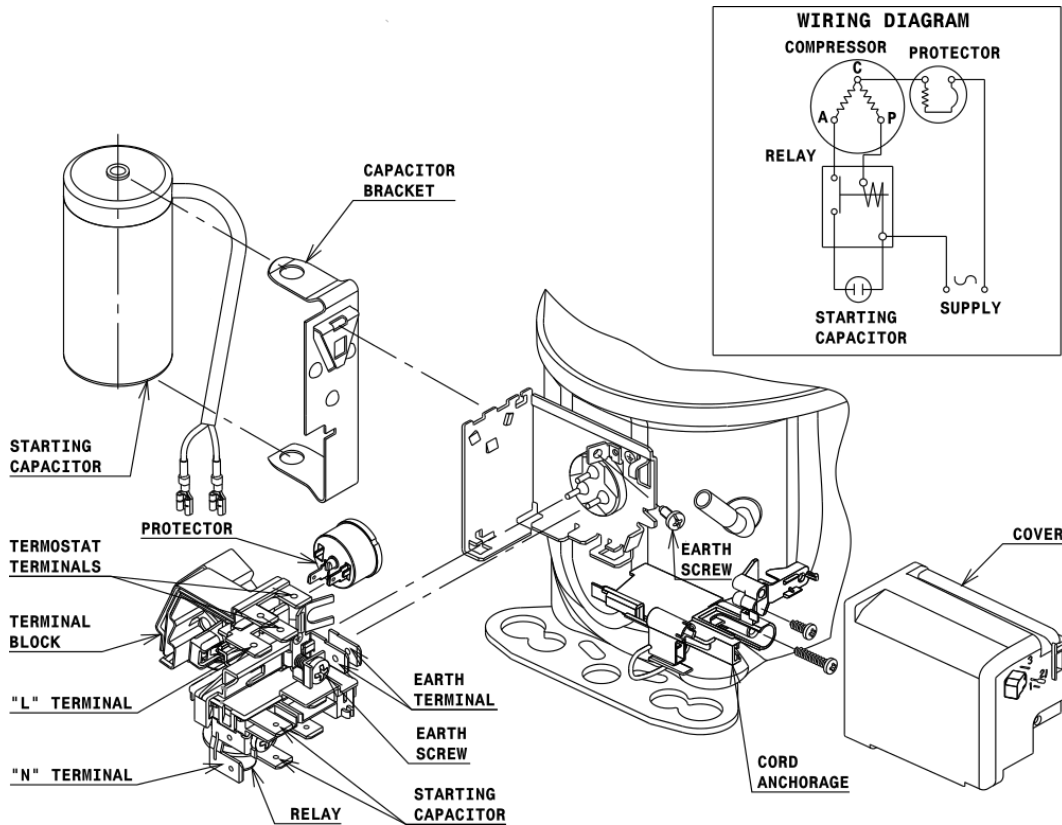
## COMPRESSOR DIMENSIONS



DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

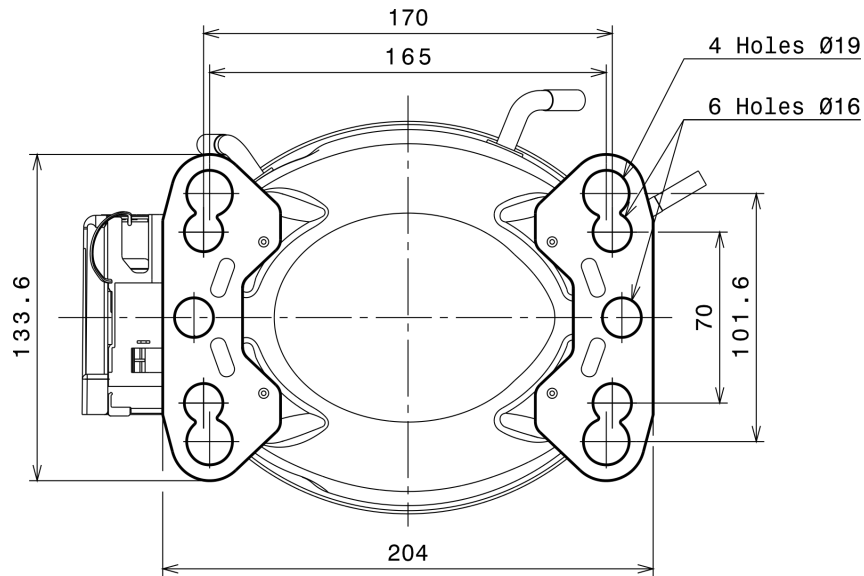
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)



# Technical Data Sheet

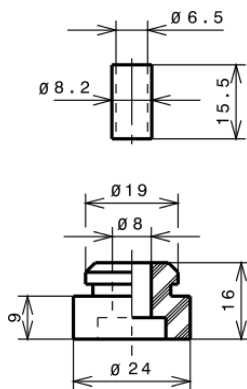
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

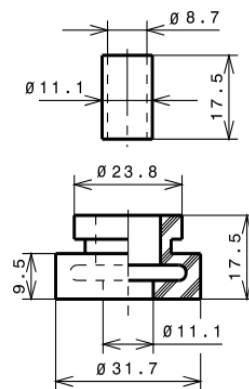
### STANDARD

Ø16 holes (170x70 net)



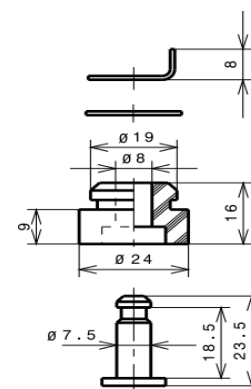
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R404A LBP

