

Technical Data Sheet

Compressor model **MPT14LF**
Voltage **208-230V 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 14,32 cm³
Diameter 29,37 mm
Stroke 21,13 mm
Net Weight 12,30 Kg
Oil type ISO VG 32 ESTER
Oil charge 400 cm³

MOTOR

Nominal Power 1/2 hp
Voltage/Frequency 208-230V 60Hz
Voltage range 177-253 V
Type CSR
Phase number 1 PH
Locked Rotor Amps (LRA) 18,00 A
Max. Cont. Current (MCC) 5,00 A
Main W. resist. at 25°C 3,90 Ω
Start W. resist. at 25°C 7,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	786 kCal/h	621 W
COP	1,36 W/W	0,96 W/W
EER	1,17 kCal/Wh	0,83 kCal/Wh
Input Power	672 W	644 W
Current	2,97 A	2,85 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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	64- 77 µF 330 V			
Run capacitor	16 µF 420 V			
Relay	Option 1	Option 2		
Reference	2014 166. + NTC15Î©	QLZ-11.0A+NTC15		
Pick-Up	11,00 A	11,00 A		
Drop-Out	9,35 A	9,35 A		
Protector	Option 1			
Reference	T0267			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	354	424	1,89	0,97	0,83
40	-35	471	483	2,15	1,13	0,97
40	-30	620	545	2,42	1,32	1,14
40	-25	802	609	2,70	1,53	1,32
40	-23,3	871	632	2,79	1,60	1,38
40	-20	1.016	676	2,99	1,75	1,50
40	-15	1.263	746	3,29	1,97	1,69
40	-10	1.542	819	3,61	2,19	1,88

45	-40	337	421	1,88	0,93	0,80
45	-35	451	485	2,16	1,08	0,93
45	-30	597	552	2,45	1,26	1,08
45	-25	775	621	2,75	1,45	1,25
45	-23,3	843	645	2,85	1,52	1,31
45	-20	986	693	3,06	1,65	1,42
45	-15	1.229	768	3,39	1,86	1,60
45	-10	1.504	845	3,72	2,07	1,78

50	-40	320	418	1,86	0,89	0,77
50	-35	430	487	2,16	1,03	0,88
50	-30	573	558	2,48	1,19	1,03
50	-25	748	633	2,80	1,37	1,18
50	-23,3	814	659	2,91	1,44	1,24
50	-20	955	710	3,13	1,56	1,35
50	-15	1.194	789	3,48	1,76	1,51
50	-10	1.467	872	3,84	1,96	1,68

55	-40	303	415	1,85	0,85	0,73
55	-35	410	489	2,17	0,97	0,84
55	-30	549	565	2,51	1,13	0,97
55	-25	720	644	2,85	1,30	1,12
55	-23,3	786	672	2,97	1,36	1,17
55	-20	924	726	3,21	1,48	1,27
55	-15	1.160	811	3,57	1,66	1,43
55	-10	1.429	898	3,95	1,85	1,59

60	-40	286	412	1,84	0,81	0,69
60	-35	389	491	2,18	0,92	0,79
60	-30	525	572	2,54	1,07	0,92
60	-25	693	656	2,90	1,23	1,06
60	-23,3	758	685	3,03	1,29	1,11
60	-20	894	743	3,28	1,40	1,20
60	-15	1.126	832	3,67	1,57	1,35
60	-10	1.392	925	4,06	1,75	1,51

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	375	424	1,89	0,88	0,76
40	-35	518	483	2,15	1,07	0,93
40	-30	687	545	2,42	1,26	1,09
40	-25	884	609	2,70	1,45	1,25
40	-23,3	957	632	2,79	1,52	1,31
40	-20	1.108	676	2,99	1,64	1,42
40	-15	1.359	746	3,29	1,82	1,57
40	-10	1.637	819	3,61	2,00	1,73

45	-40	337	421	1,88	0,80	0,69
45	-35	463	485	2,16	0,96	0,83
45	-30	616	552	2,45	1,12	0,97
45	-25	796	621	2,75	1,28	1,11
45	-23,3	864	645	2,85	1,34	1,16
45	-20	1.003	693	3,06	1,45	1,25
45	-15	1.238	768	3,39	1,61	1,39
45	-10	1.499	845	3,72	1,77	1,53

50	-40	300	418	1,86	0,72	0,62
50	-35	409	487	2,16	0,84	0,73
50	-30	545	558	2,48	0,98	0,84
50	-25	708	633	2,80	1,12	0,97
50	-23,3	770	659	2,91	1,17	1,01
50	-20	899	710	3,13	1,27	1,09
50	-15	1.116	789	3,48	1,41	1,22
50	-10	1.361	872	3,84	1,56	1,35

55	-40	262	415	1,85	0,63	0,55
55	-35	354	489	2,17	0,72	0,63
55	-30	474	565	2,51	0,84	0,72
55	-25	621	644	2,85	0,96	0,83
55	-23,3	677	672	2,97	1,01	0,87
55	-20	794	726	3,21	1,09	0,94
55	-15	995	811	3,57	1,23	1,06
55	-10	1.223	898	3,95	1,36	1,18

60	-40	224	412	1,84	0,54	0,47
60	-35	300	491	2,18	0,61	0,53
60	-30	403	572	2,54	0,70	0,61
60	-25	533	656	2,90	0,81	0,70
60	-23,3	583	685	3,03	0,85	0,73
60	-20	690	743	3,28	0,93	0,80
60	-15	874	832	3,67	1,05	0,91
60	-10	1.085	925	4,06	1,17	1,01

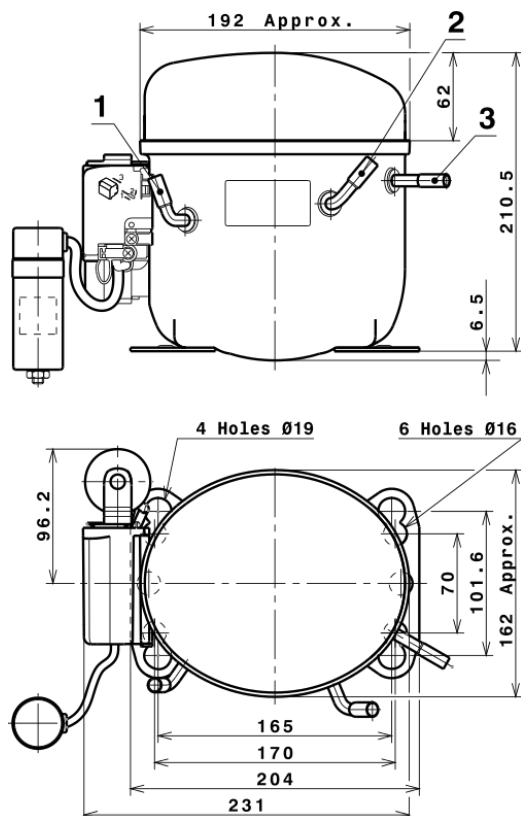
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.612,7469995793	701,4941987785	3,0981140827	74,829453685264
2	94,1722904475	8,4652618049	0,0363423468	2,3355170685982
3	-35,3261285994	7,4607972588	0,0322870667	-0,2675125683624
4	0,5132718958	0,0593971600	0,0002456719	0,020172016152604
5	-0,6930196407	0,2018520470	0,0008741538	-0,0042856699822396

Equation

$$x_1 + x_2 Te + x_3 Tc + x_4 Te^2 + x_5 Te Tc$$

COMPRESSOR DIMENSIONS

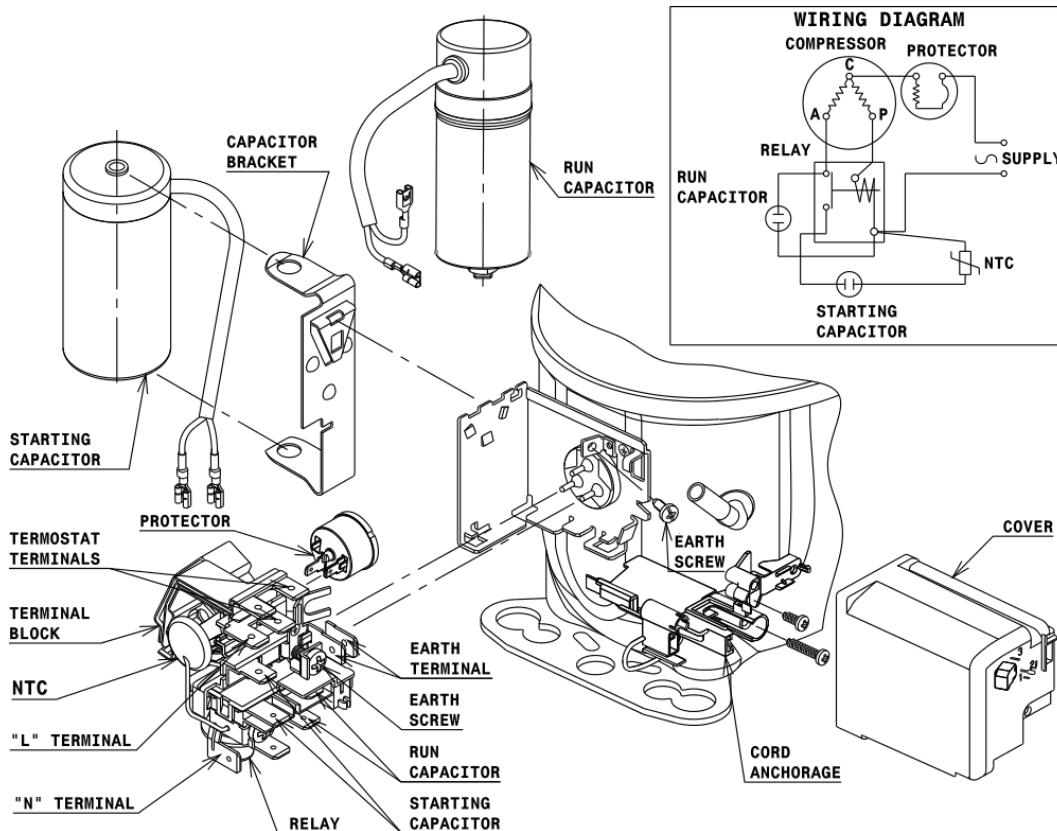


DESIGNATION INTERNAL DIAM.

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

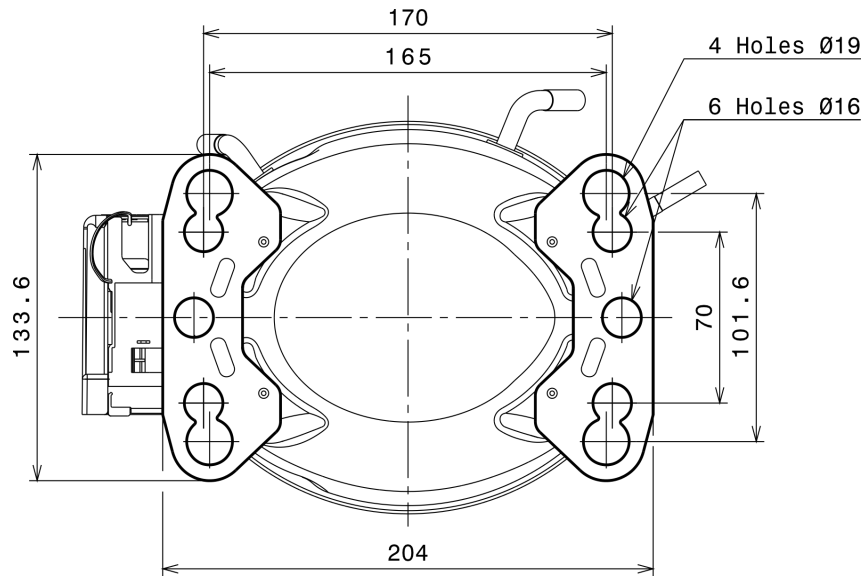
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



Technical Data Sheet

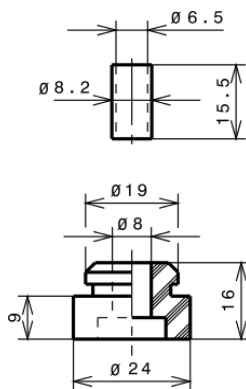
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

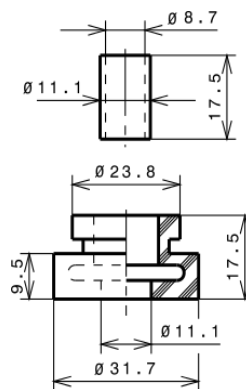
STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A LBP

