Technical Data Sheet

Compressor model **MPT18LA**

Voltage **220-240V 50Hz ~1**

Refrigerant **R404A**

APPLICATION

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

COMPRESSOR

Displacement	18,00 cm³
Diameter	31,19 mm
Stroke	23,57 mm
Net Weight	12,81 Kg
Oil type	ISO VG 32 ESTER
Oil charge	400 cm³

MOTOR

Nominal Power	1/2 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	26,00 A
Max. Cont. Current (MCC)	5,90 A
Main W. resist. at 25ºC	3,24 Ω
Start W. resist. at 25ºC	9,48 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	830 kCal/h	657 W
COP	1,35 W/W	0,96 W/W
EER	1,16 kCal/Wh	0,83 kCal/Wh
Input Power	715 W	684 W
Current	3,34 A	3,20 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	72- 88 µF 330 V			
Run capacitor	16 µF 420 V			
Relay	Option 1	Option 2		
Reference	2014 166. + NTC15Ω	QLZ-11.0A+NTC15		
Pick-Up	11,00 A	11,00 A		
Drop-Out	9,35 A	9,35 A		
Protector	Option 1			
Reference	T0268			
Current	15,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 ºC			

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	362	418	2,03	1,01	0,87
40	-35	498	482	2,30	1,20	1,03
40	-30	662	551	2,60	1,40	1,20
40	-25	855	624	2,93	1,59	1,37
40	-23,3	927	651	3,05	1,66	1,42
40	-20	1.076	703	3,28	1,78	1,53
40	-15	1.327	786	3,67	1,96	1,69
40	-10	1.606	873	4,09	2,14	1,84
45	-40	345	422	2,05	0,95	0,82
45	-35	476	491	2,35	1,13	0,97
45	-30	636	566	2,67	1,31	1,12
45	-25	824	644	3,02	1,49	1,28
45	-23,3	895	672	3,14	1,55	1,33
45	-20	1.041	728	3,40	1,66	1,43
45	-15	1.287	815	3,81	1,84	1,58
45	-10	1.561	908	4,26	2,00	1,72
50	-40	328	427	2,07	0,89	0,77
50	-35	454	501	2,39	1,05	0,91
50	-30	610	580	2,73	1,22	1,05
50	-25	793	664	3,11	1,39	1,19
50	-23,3	862	694	3,24	1,45	1,24
50	-20	1.006	752	3,51	1,55	1,34
50	-15	1.247	845	3,96	1,72	1,47
50	-10	1.517	943	4,43	1,87	1,61
55	-40	311	431	2,09	0,84	0,72
55	-35	433	511	2,43	0,99	0,85
55	-30	583	595	2,80	1,14	0,98
55	-25	763	684	3,20	1,30	1,12
55	-23,3	830	715	3,34	1,35	1,16
55	-20	970	777	3,63	1,45	1,25
55	-15	1.207	875	4,10	1,60	1,38
55	-10	1.472	978	4,61	1,75	1,51
60	-40	294	436	2,11	0,79	0,68
60	-35	411	520	2,47	0,92	0,79
60	-30	557	610	2,86	1,06	0,91
60	-25	732	703	3,29	1,21	1,04
60	-23,3	798	736	3,44	1,26	1,08
60	-20	935	802	3,75	1,36	1,17
60	-15	1.167	905	4,25	1,50	1,29
60	-10	1.428	1.013	4,79	1,64	1,41

CECOMAF

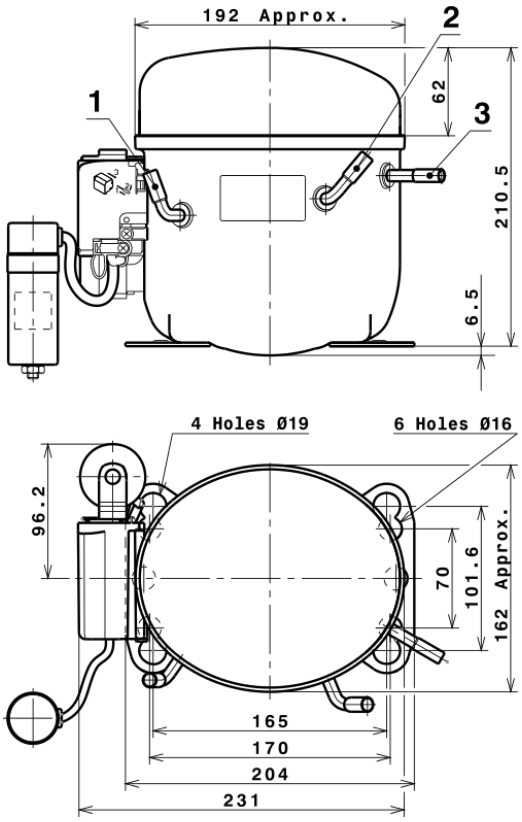
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	384	418	2,03	0,92	0,79
40	-35	544	482	2,30	1,13	0,98
40	-30	728	551	2,60	1,32	1,14
40	-25	936	624	2,93	1,50	1,30
40	-23,3	1.013	651	3,05	1,56	1,34
40	-20	1.168	703	3,28	1,66	1,44
40	-15	1.424	786	3,67	1,81	1,57
40	-10	1.704	873	4,09	1,95	1,69
45	-40	345	422	2,05	0,82	0,71
45	-35	488	491	2,35	0,99	0,86
45	-30	653	566	2,67	1,16	1,00
45	-25	843	644	3,02	1,31	1,13
45	-23,3	913	672	3,14	1,36	1,17
45	-20	1.057	728	3,40	1,45	1,26
45	-15	1.294	815	3,81	1,59	1,37
45	-10	1.556	908	4,26	1,71	1,48
50	-40	307	427	2,07	0,72	0,62
50	-35	431	501	2,39	0,86	0,74
50	-30	579	580	2,73	1,00	0,86
50	-25	750	664	3,11	1,13	0,98
50	-23,3	814	694	3,24	1,17	1,01
50	-20	945	752	3,51	1,26	1,09
50	-15	1.165	845	3,96	1,38	1,19
50	-10	1.408	943	4,43	1,49	1,29
55	-40	269	431	2,09	0,62	0,54
55	-35	374	511	2,43	0,73	0,63
55	-30	504	595	2,80	0,85	0,73
55	-25	657	684	3,20	0,96	0,83
55	-23,3	714	715	3,34	1,00	0,86
55	-20	834	777	3,63	1,07	0,93
55	-15	1.035	875	4,10	1,18	1,02
55	-10	1.260	978	4,61	1,29	1,11
60	-40	231	436	2,11	0,53	0,46
60	-35	318	520	2,47	0,61	0,53
60	-30	429	610	2,86	0,70	0,61
60	-25	564	703	3,29	0,80	0,69
60	-23,3	615	736	3,44	0,84	0,72
60	-20	722	802	3,75	0,90	0,78
60	-15	905	905	4,25	1,00	0,86
60	-10	1.112	1.013	4,79	1,10	0,95

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.775,8953220684	721,7766972974	3,3349673133	78,570598313213
2	95,4793458751	12,2824580498	0,0650672987	2,3420151638873
3	-37,9311701887	9,2772413442	0,0468203924	-0,32167483370343
4	0,4520141182	0,0996677679	0,0007411405	0,018136353683175
5	-0,7552889644	0,2089328604	0,0010742122	-0,005638636747338

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

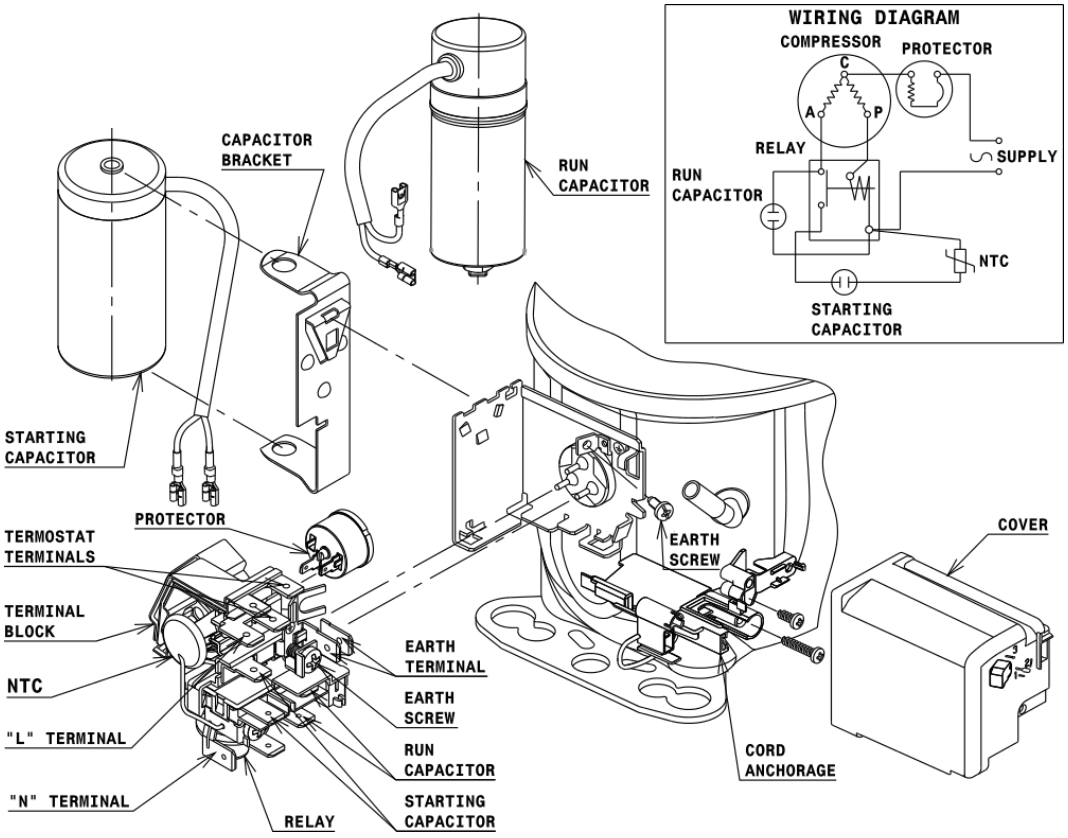
COMPRESSOR DIMENSIONS



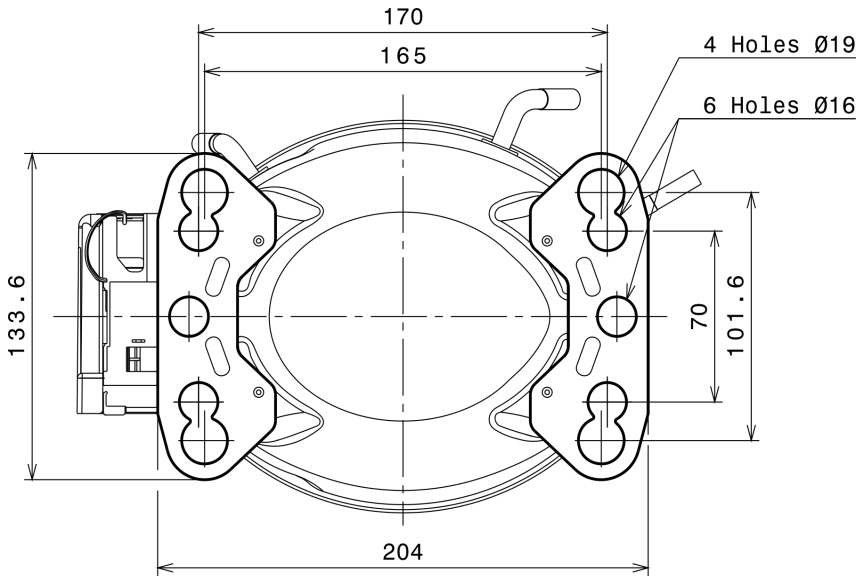
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



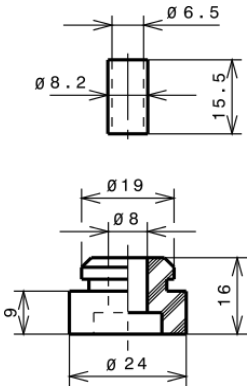
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

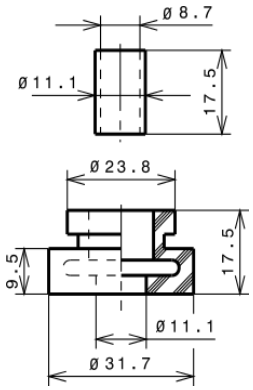
STANDARD

Ø16 holes (170x70 net)



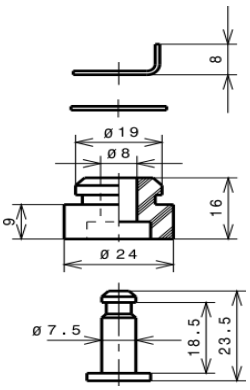
AMERICAN FEET

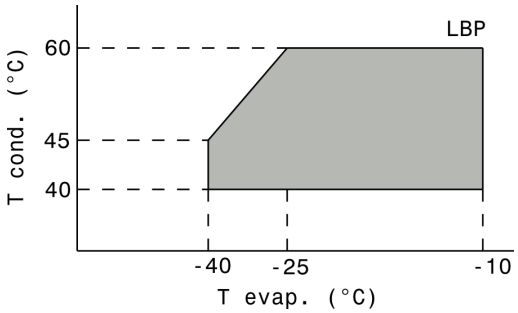
Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A LBP