Technical Data Sheet

Compressor model **MLT12RG**

Voltage **200-220/220-230V 50/60Hz ~1**

Refrigerant **R404A**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R404A
Evaporating Temp.	-25,0 ºC to 10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	10,70 cm³
Diameter	25,40 mm
Stroke	21,11 mm
Net Weight	12,24 Kg
Oil type	ISO VG 32 ESTER
Oil charge	395 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	220-230V 60Hz
Voltage range	187-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	22,50 A
Max. Cont. Current (MCC)	6,30 A
Main W. resist. at 25ºC	2,87 Ω
Start W. resist. at 25ºC	7,59 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.685 kCal/h	1.553 W
COP	2,16 W/W	1,75 W/W
EER	1,85 kCal/Wh	1,51 kCal/Wh
Input Power	909 W	888 W
Current	4,04 A	3,96 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
Voltage/Frequency	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	72- 88 µF 330 V			
Run capacitor	20 µF 420 V			
Relay	Option 1	Option 2		
Reference	2014 158. + NTC15Î©	QLZ-9.05A + NTC15Î©		
Pick-Up	9,05 A	9,05 A		
Drop-Out	7,70 A	7,70 A		
Protector	Option 1			
Reference	T0253			
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	-25	557	517	2,50	1,25	1,08
40	-20	715	562	2,66	1,48	1,27
40	-15	901	607	2,84	1,73	1,48
40	-10	1.115	653	3,02	1,99	1,71
40	-5	1.357	700	3,20	2,25	1,94
40	0	1.627	748	3,39	2,53	2,17
40	5	1.926	797	3,59	2,81	2,42
40	7,2	2.066	819	3,67	2,93	2,52
40	10	2.252	847	3,79	3,09	2,66
45	-25	518	520	2,51	1,16	1,00
45	-20	662	569	2,69	1,35	1,16
45	-15	835	618	2,88	1,57	1,35
45	-10	1.035	669	3,08	1,80	1,55
45	-5	1.264	720	3,28	2,04	1,75
45	0	1.520	772	3,49	2,29	1,97
45	5	1.805	825	3,70	2,54	2,19
45	7,2	1.939	849	3,79	2,66	2,28
45	10	2.118	879	3,92	2,80	2,41
50	-25	479	523	2,52	1,07	0,92
50	-20	610	576	2,72	1,23	1,06
50	-15	768	630	2,93	1,42	1,22
50	-10	955	684	3,14	1,62	1,40
50	-5	1.170	740	3,36	1,84	1,58
50	0	1.413	796	3,58	2,06	1,77
50	5	1.684	854	3,81	2,29	1,97
50	7,2	1.812	879	3,92	2,40	2,06
50	10	1.983	912	4,05	2,53	2,18
55	-25	440	526	2,53	0,97	0,84
55	-20	557	583	2,75	1,11	0,96
55	-15	702	641	2,97	1,27	1,09
55	-10	875	700	3,20	1,45	1,25
55	-5	1.076	760	3,44	1,65	1,42
55	0	1.305	820	3,68	1,85	1,59
55	5	1.563	882	3,93	2,06	1,77
55	7,2	1.685	909	4,04	2,16	1,85
55	10	1.848	944	4,18	2,28	1,96
60	-25	401	529	2,54	0,88	0,76
60	-20	504	590	2,77	0,99	0,85
60	-15	636	653	3,01	1,13	0,97
60	-10	795	716	3,26	1,29	1,11
60	-5	983	779	3,51	1,47	1,26
60	0	1.198	844	3,78	1,65	1,42
60	5	1.442	910	4,04	1,84	1,58
60	7,2	1.558	939	4,16	1,93	1,66
60	10	1.714	976	4,32	2,04	1,76

CECOMAF

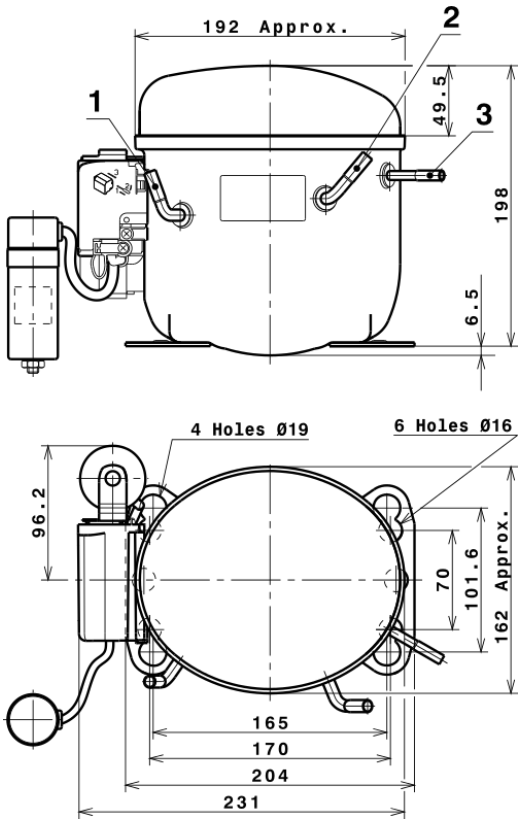
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	584	520	2,51	1,12	0,97
40	-20	754	565	2,68	1,34	1,15
40	-15	952	611	2,85	1,56	1,35
40	-10	1.177	657	3,03	1,79	1,55
40	-5	1.429	705	3,22	2,03	1,75
40	0	1.709	754	3,41	2,27	1,96
40	5	2.016	803	3,61	2,51	2,17
40	7,2	2.159	825	3,70	2,62	2,26
40	10	2.350	854	3,81	2,75	2,38
45	-25	536	523	2,52	1,03	0,89
45	-20	689	572	2,70	1,20	1,04
45	-15	869	622	2,90	1,40	1,21
45	-10	1.076	673	3,09	1,60	1,38
45	-5	1.310	725	3,30	1,81	1,56
45	0	1.572	778	3,51	2,02	1,75
45	5	1.861	832	3,72	2,24	1,93
45	7,2	1.997	856	3,82	2,33	2,02
45	10	2.178	886	3,95	2,46	2,12
50	-25	489	526	2,53	0,93	0,80
50	-20	623	579	2,73	1,08	0,93
50	-15	786	633	2,94	1,24	1,07
50	-10	975	689	3,16	1,42	1,22
50	-5	1.192	745	3,38	1,60	1,38
50	0	1.436	802	3,60	1,79	1,55
50	5	1.707	860	3,84	1,98	1,72
50	7,2	1.835	886	3,94	2,07	1,79
50	10	2.005	919	4,08	2,18	1,89
55	-25	441	529	2,54	0,83	0,72
55	-20	558	586	2,76	0,95	0,82
55	-15	702	645	2,99	1,09	0,94
55	-10	874	704	3,22	1,24	1,07
55	-5	1.073	765	3,46	1,40	1,21
55	0	1.299	826	3,70	1,57	1,36
55	5	1.553	888	3,96	1,75	1,51
55	7,2	1.673	916	4,07	1,83	1,58
55	10	1.833	951	4,22	1,93	1,66
60	-25	393	532	2,55	0,74	0,64
60	-20	492	594	2,79	0,83	0,72
60	-15	619	656	3,03	0,94	0,81
60	-10	773	720	3,28	1,07	0,93
60	-5	954	785	3,54	1,22	1,05
60	0	1.163	850	3,80	1,37	1,18
60	5	1.398	917	4,07	1,53	1,32
60	7,2	1.511	946	4,19	1,60	1,38
60	10	1.661	984	4,35	1,69	1,46

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.814,4695049377	576,9830678797	2,6778493805	51,409019769954
2	87,2004330366	3,4766385125	0,0132209869	1,9176364476043
3	-28,7646306880	4,9934252301	0,0205141031	-0,10985391413617
4	0,5166540494	0,0281165624	0,0001809875	0,023862145269705
5	-0,7586910952	0,1750243136	0,0007270260	-0,0014886962004282

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

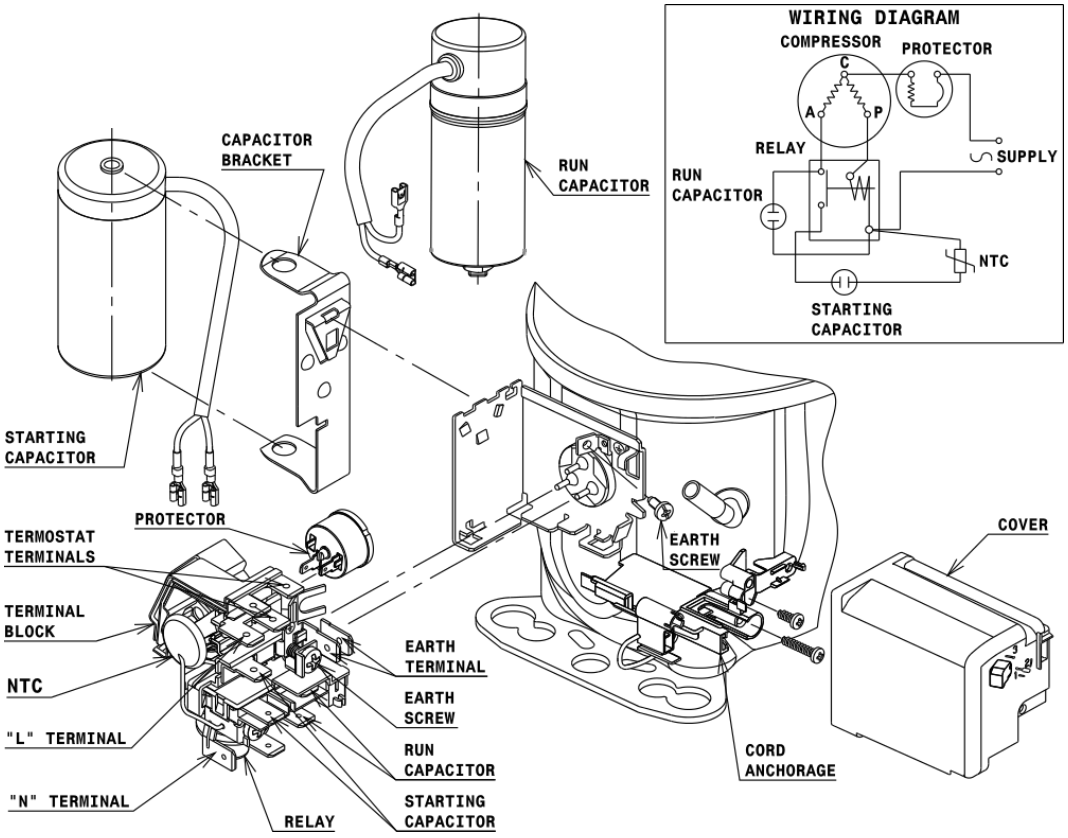
COMPRESSOR DIMENSIONS



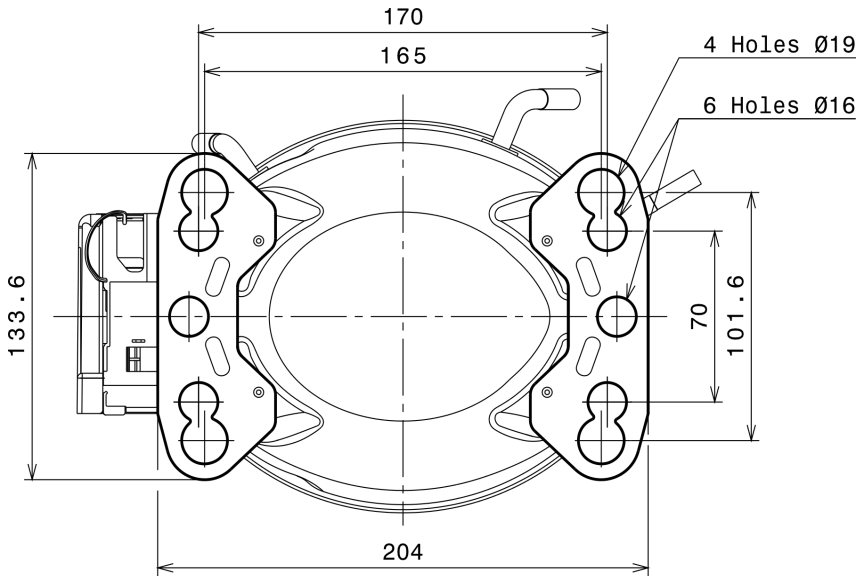
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



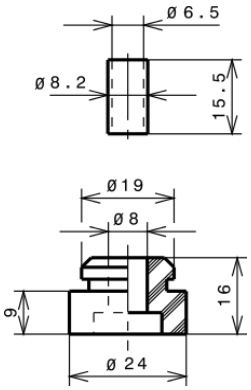
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

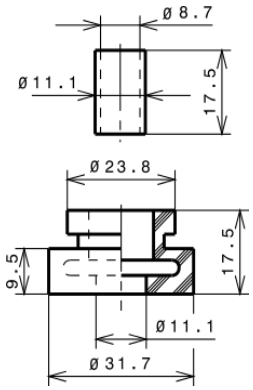
STANDARD

Ø16 holes (170x70 net)



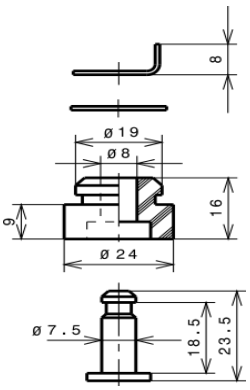
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A HMBP