Technical Data Sheet

Compressor model **ML80TG**

Voltage **200-240/220-230V 50/60Hz ~1**

Refrigerant **R404A**

APPLICATION		COMPRESSOR		MOTOR	
Application	High-Medium Back Pressure	Displacement	7,57 cm³	Nominal Power	3/8 hp
Refrigerant	R404A	Diameter	25,40 mm	Voltage/Frequency	220-230V 60Hz
Evaporating Temp.	-25,0 ºC to 10,0 ºC	Stroke	14,92 mm	Voltage range	187-253 V
Expansion	Capillar/Valve	Net Weight	11,81 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 ºC	Oil charge	295 cm³	Locked Rotor Amps (LRA)	15,00 A
				Max. Cont. Current (MCC)	5,50 A
				Main W. resist. at 25ºC	4,38 Ω
				Start W. resist. at 25ºC	21,00 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.110 kCal/h	1.022 W
COP	1,96 W/W	1,59 W/W
EER	1,68 kCal/Wh	1,37 kCal/Wh
Input Power	660 W	644 W
Current	3,50 A	3,43 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	47- 56 µF 330 V			
Relay	Option 1	Option 2		
Reference	2014 149.	QLZ-7.8A		
Pick-Up	7,80 A	7,80 A		
Drop-Out	6,65 A	6,65 A		
Protector	Option 1	Option 2		
Reference	MRP00AMK	T0425		
Current	11,70 A	11,50 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 ºC	105,00 / 61,00 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	368	336	2,23	1,28	1,10
40	-20	490	373	2,36	1,53	1,31
40	-15	630	411	2,50	1,78	1,53
40	-10	787	448	2,63	2,05	1,76
40	-5	962	484	2,77	2,31	1,99
40	0	1.155	520	2,91	2,58	2,22
40	5	1.365	555	3,05	2,86	2,46
40	7,2	1.463	570	3,11	2,98	2,57
40	10	1.592	589	3,19	3,14	2,70
45	-25	333	337	2,24	1,15	0,99
45	-20	442	379	2,38	1,36	1,17
45	-15	569	421	2,53	1,57	1,35
45	-10	714	462	2,69	1,80	1,54
45	-5	876	503	2,84	2,02	1,74
45	0	1.056	543	3,00	2,26	1,94
45	5	1.253	583	3,17	2,50	2,15
45	7,2	1.345	600	3,24	2,61	2,24
45	10	1.467	622	3,33	2,74	2,36
50	-25	298	339	2,24	1,02	0,88
50	-20	395	385	2,41	1,19	1,02
50	-15	509	432	2,57	1,37	1,18
50	-10	640	477	2,74	1,56	1,34
50	-5	790	522	2,92	1,76	1,51
50	0	956	567	3,10	1,96	1,69
50	5	1.141	611	3,29	2,17	1,87
50	7,2	1.228	630	3,37	2,27	1,95
50	10	1.343	654	3,47	2,39	2,05
55	-25	263	340	2,25	0,90	0,77
55	-20	347	391	2,43	1,03	0,89
55	-15	448	442	2,61	1,18	1,01
55	-10	567	492	2,80	1,34	1,15
55	-5	703	542	3,00	1,51	1,30
55	0	857	590	3,20	1,69	1,45
55	5	1.029	639	3,41	1,87	1,61
55	7,2	1.110	660	3,50	1,96	1,68
55	10	1.218	687	3,62	2,06	1,77
60	-25	228	342	2,26	0,78	0,67
60	-20	299	397	2,45	0,88	0,75
60	-15	387	452	2,65	1,00	0,86
60	-10	494	507	2,86	1,13	0,97
60	-5	617	561	3,07	1,28	1,10
60	0	758	614	3,30	1,44	1,23
60	5	917	667	3,53	1,60	1,38
60	7,2	993	690	3,64	1,67	1,44
60	10	1.093	719	3,77	1,77	1,52

CECOMAF

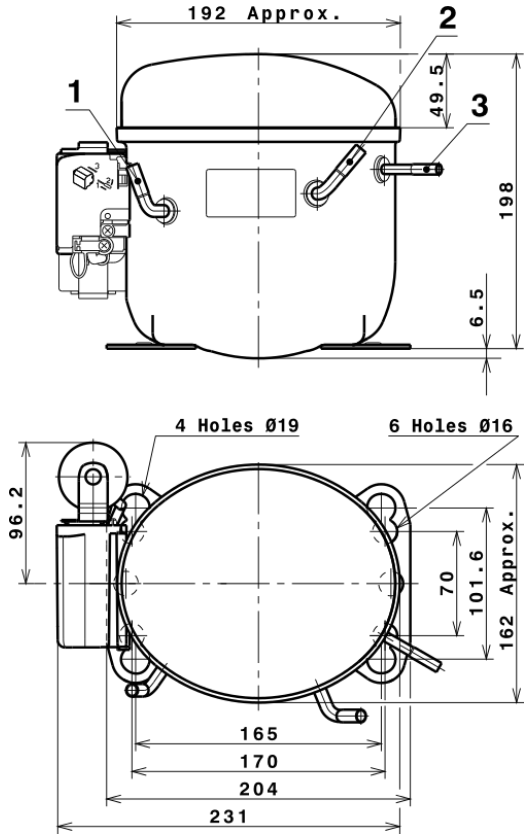
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	385	337	2,24	1,14	0,99
40	-20	516	376	2,37	1,38	1,19
40	-15	664	413	2,51	1,61	1,39
40	-10	829	450	2,64	1,84	1,59
40	-5	1.011	487	2,78	2,08	1,79
40	0	1.210	523	2,92	2,31	2,00
40	5	1.426	559	3,07	2,55	2,21
40	7,2	1.527	574	3,13	2,66	2,30
40	10	1.659	594	3,21	2,79	2,41
45	-25	345	339	2,25	1,02	0,88
45	-20	460	382	2,39	1,21	1,04
45	-15	592	424	2,54	1,40	1,21
45	-10	742	465	2,70	1,59	1,38
45	-5	908	506	2,86	1,79	1,55
45	0	1.091	547	3,02	2,00	1,72
45	5	1.292	587	3,18	2,20	1,90
45	7,2	1.385	605	3,26	2,29	1,98
45	10	1.509	627	3,35	2,41	2,08
50	-25	304	340	2,25	0,89	0,77
50	-20	404	388	2,41	1,04	0,90
50	-15	520	434	2,58	1,20	1,04
50	-10	654	480	2,75	1,36	1,18
50	-5	805	526	2,93	1,53	1,32
50	0	972	571	3,12	1,70	1,47
50	5	1.157	615	3,30	1,88	1,62
50	7,2	1.244	635	3,39	1,96	1,69
50	10	1.359	659	3,50	2,06	1,78
55	-25	263	342	2,26	0,77	0,67
55	-20	347	393	2,43	0,88	0,76
55	-15	448	445	2,62	1,01	0,87
55	-10	566	495	2,81	1,14	0,99
55	-5	701	545	3,01	1,29	1,11
55	0	853	595	3,22	1,43	1,24
55	5	1.022	644	3,43	1,59	1,37
55	7,2	1.102	665	3,52	1,66	1,43
55	10	1.208	692	3,65	1,75	1,51
60	-25	223	343	2,26	0,65	0,56
60	-20	291	399	2,46	0,73	0,63
60	-15	376	455	2,66	0,83	0,71
60	-10	479	510	2,87	0,94	0,81
60	-5	598	564	3,09	1,06	0,92
60	0	734	618	3,32	1,19	1,03
60	5	887	672	3,55	1,32	1,14
60	7,2	960	695	3,66	1,38	1,19
60	10	1.058	725	3,80	1,46	1,26

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.160,4218050774	342,2163980738	2,0951010494	43,656106974512
2	66,4500529858	0,2682049612	-0,0009216558	1,5348637341683
3	-24,5632551050	4,9243524783	0,0218056942	-0,25200101293409
4	0,3220376051	-0,0038475689	0,0001734177	0,015126747863224
5	-0,6550485076	0,1846177513	0,0008303730	-0,0056151213857732

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

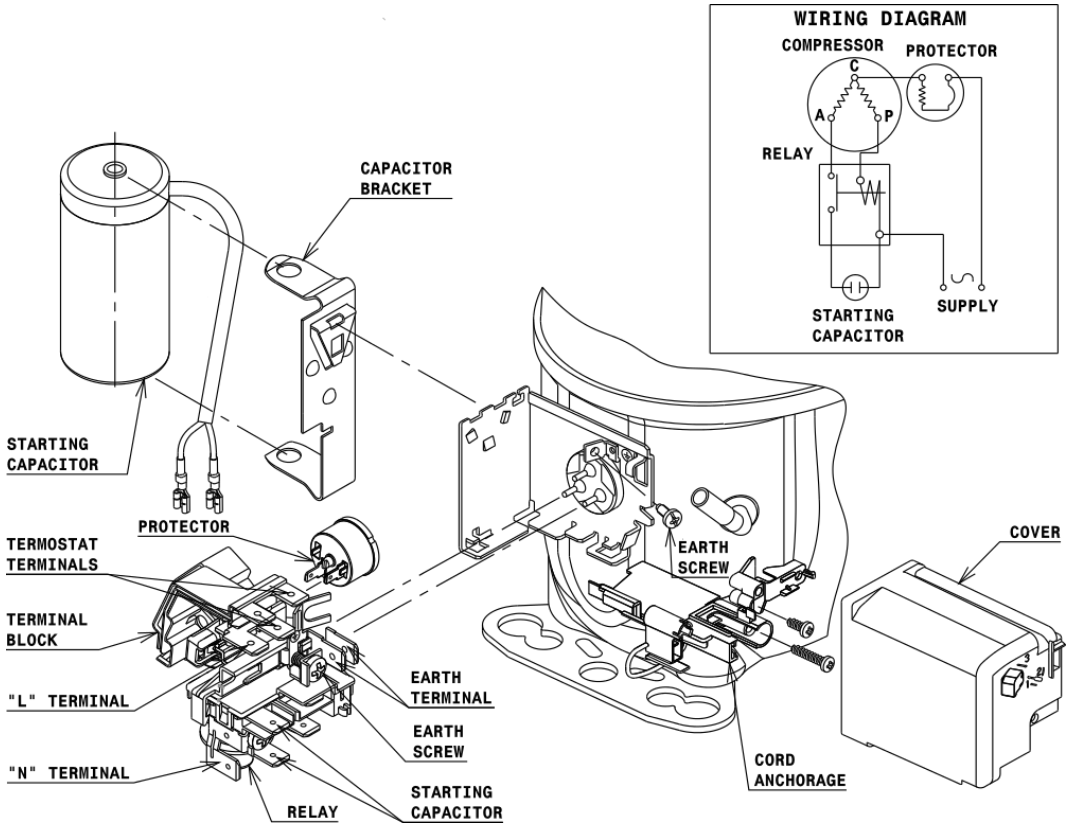
COMPRESSOR DIMENSIONS



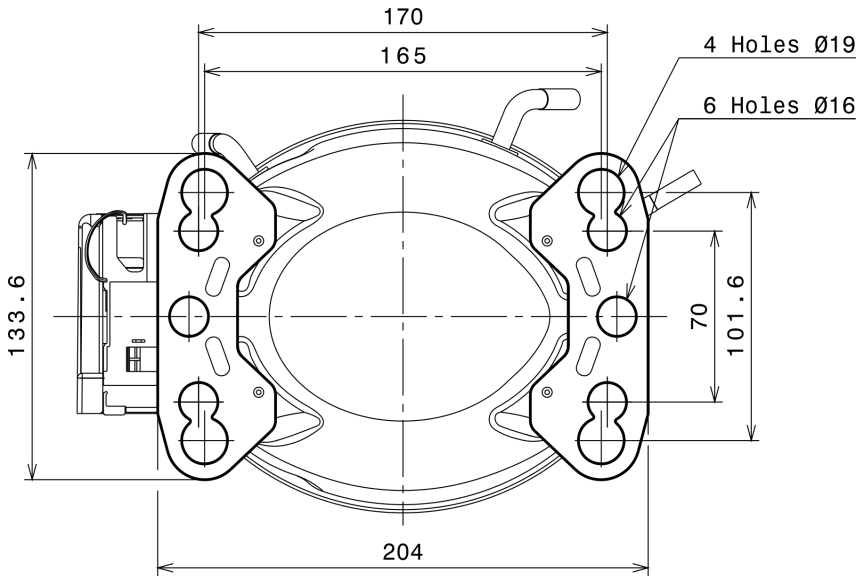
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



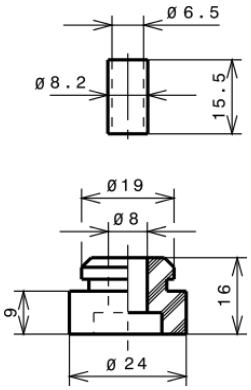
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

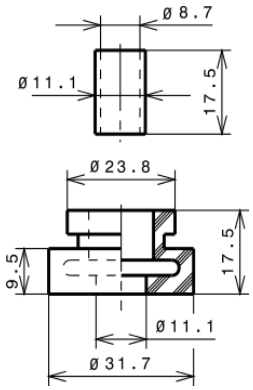
STANDARD

Ø16 holes (170x70 net)



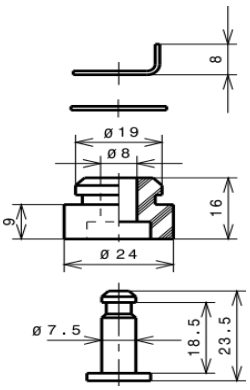
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A HMBP