Technical Data Sheet

Compressor model **ML60TG**

Voltage **200-220/230V 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	5,68 cm³
Diameter	22,00 mm
Stroke	14,92 mm
Net Weight	10,57 Kg
Oil type	ISO VG 32 ESTER
Oil charge	295 cm³

MOTOR

Nominal Power	1/4 hp
Voltage/Frequency	230V 60Hz
Voltage range	196-253 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	13,00 A
Max. Cont. Current (MCC)	5,10 A
Main W. resist. at 25ºC	6,50 Ω
Start W. resist. at 25ºC	33,20 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	820 kCal/h	753 W
COP	1,83 W/W	1,49 W/W
EER	1,58 kCal/Wh	1,28 kCal/Wh
Input Power	520 W	507 W
Current	2,80 A	2,74 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 138.	QLZ-6.1A		
Pick-Up	6,10 A	6.10 A		
Drop-Out	5,20 A	5.20 A		
Protector	Option 1	Option 2		
Reference	MRT26AMK	T0181		
Current	11,10 A	11,10 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	273	260	1,85	1,22	1,05
40	-20	356	293	1,95	1,41	1,21
40	-15	454	325	2,05	1,62	1,39
40	-10	566	357	2,15	1,84	1,59
40	-5	693	388	2,26	2,08	1,79
40	0	835	418	2,37	2,32	2,00
40	5	991	447	2,49	2,58	2,22
40	7,2	1.065	460	2,54	2,69	2,31
40	10	1.162	476	2,61	2,84	2,44
45	-25	246	260	1,85	1,10	0,95
45	-20	321	296	1,96	1,26	1,08
45	-15	410	332	2,07	1,44	1,24
45	-10	514	366	2,18	1,63	1,40
45	-5	633	400	2,31	1,84	1,58
45	0	766	434	2,43	2,05	1,77
45	5	913	466	2,57	2,28	1,96
45	7,2	983	480	2,62	2,38	2,05
45	10	1.076	498	2,70	2,51	2,16
50	-25	220	260	1,85	0,98	0,84
50	-20	286	299	1,96	1,11	0,95
50	-15	367	338	2,09	1,26	1,09
50	-10	462	376	2,22	1,43	1,23
50	-5	572	413	2,35	1,61	1,39
50	0	697	449	2,50	1,80	1,55
50	5	836	485	2,64	2,01	1,72
50	7,2	902	500	2,71	2,10	1,80
50	10	989	519	2,80	2,22	1,90
55	-25	193	260	1,85	0,86	0,74
55	-20	251	302	1,97	0,96	0,83
55	-15	323	344	2,11	1,09	0,94
55	-10	410	385	2,25	1,24	1,06
55	-5	511	425	2,40	1,40	1,20
55	0	627	465	2,56	1,57	1,35
55	5	758	503	2,73	1,75	1,51
55	7,2	820	520	2,80	1,83	1,58
55	10	903	541	2,90	1,94	1,67
60	-25	167	260	1,85	0,74	0,64
60	-20	216	306	1,98	0,82	0,71
60	-15	280	350	2,13	0,93	0,80
60	-10	358	394	2,28	1,06	0,91
60	-5	451	438	2,45	1,20	1,03
60	0	558	480	2,62	1,35	1,16
60	5	680	522	2,81	1,52	1,30
60	7,2	739	540	2,89	1,59	1,37
60	10	817	563	3,00	1,69	1,45

CECOMAF

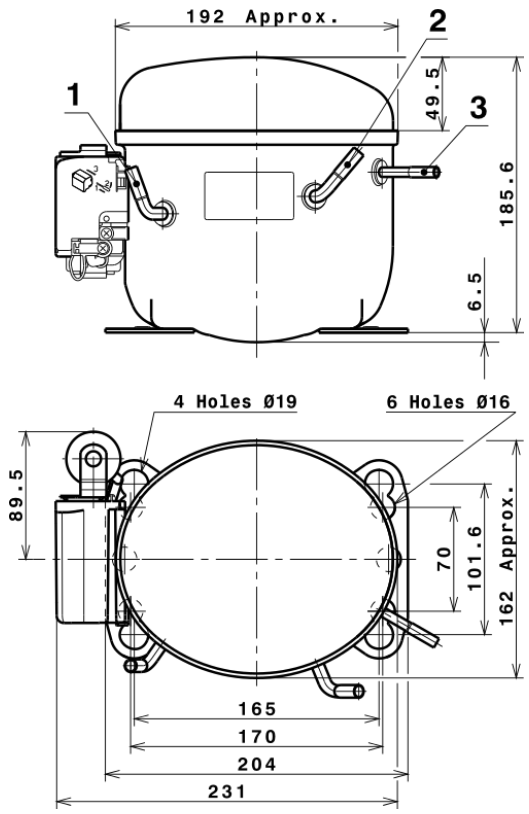
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	285	261	1,85	1,09	0,94
40	-20	375	295	1,95	1,27	1,10
40	-15	479	327	2,05	1,46	1,26
40	-10	597	359	2,16	1,66	1,44
40	-5	730	390	2,27	1,87	1,61
40	0	876	421	2,38	2,08	1,80
40	5	1.036	451	2,50	2,30	1,99
40	7,2	1.112	464	2,56	2,40	2,07
40	10	1.211	480	2,62	2,52	2,18
45	-25	255	261	1,85	0,97	0,84
45	-20	334	298	1,96	1,12	0,97
45	-15	427	334	2,07	1,28	1,11
45	-10	535	369	2,19	1,45	1,25
45	-5	656	403	2,32	1,63	1,41
45	0	792	437	2,45	1,81	1,57
45	5	942	469	2,58	2,01	1,73
45	7,2	1.012	484	2,64	2,09	1,81
45	10	1.106	502	2,72	2,20	1,91
50	-25	224	261	1,85	0,86	0,74
50	-20	293	301	1,97	0,97	0,84
50	-15	375	340	2,09	1,10	0,95
50	-10	472	378	2,22	1,25	1,08
50	-5	583	415	2,36	1,40	1,21
50	0	708	452	2,51	1,57	1,35
50	5	847	488	2,66	1,74	1,50
50	7,2	913	504	2,73	1,81	1,57
50	10	1.001	524	2,82	1,91	1,65
55	-25	193	261	1,85	0,74	0,64
55	-20	251	304	1,98	0,83	0,71
55	-15	323	346	2,11	0,93	0,81
55	-10	409	387	2,26	1,06	0,91
55	-5	510	428	2,41	1,19	1,03
55	0	624	468	2,57	1,33	1,15
55	5	753	507	2,74	1,49	1,28
55	7,2	814	524	2,82	1,55	1,34
55	10	896	545	2,92	1,64	1,42
60	-25	163	261	1,85	0,62	0,54
60	-20	210	307	1,99	0,68	0,59
60	-15	271	352	2,14	0,77	0,67
60	-10	347	397	2,29	0,87	0,76
60	-5	437	440	2,46	0,99	0,86
60	0	540	483	2,64	1,12	0,97
60	5	658	526	2,83	1,25	1,08
60	7,2	715	544	2,91	1,31	1,14
60	10	791	567	3,02	1,39	1,20

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.546,7719184088	304,2952613364	1,8257707420	30,675659682083
2	47,6508101935	1,2312779717	0,0034044051	1,0899668728103
3	-17,3542669455	3,2368531510	0,0146808786	-0,1611938445825
4	0,2679322134	-0,0092679079	0,0002096033	0,012241826219075
5	-0,4473457584	0,1294741260	0,0005872351	-0,002980849345702

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

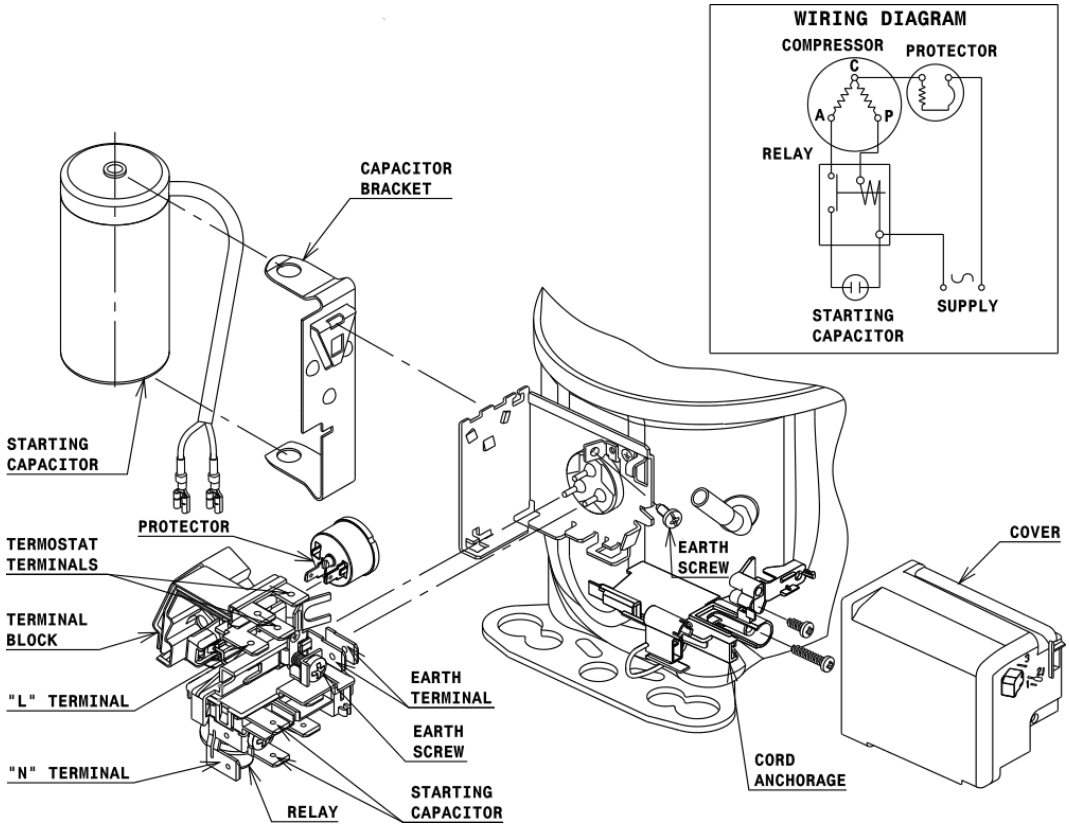
COMPRESSOR DIMENSIONS



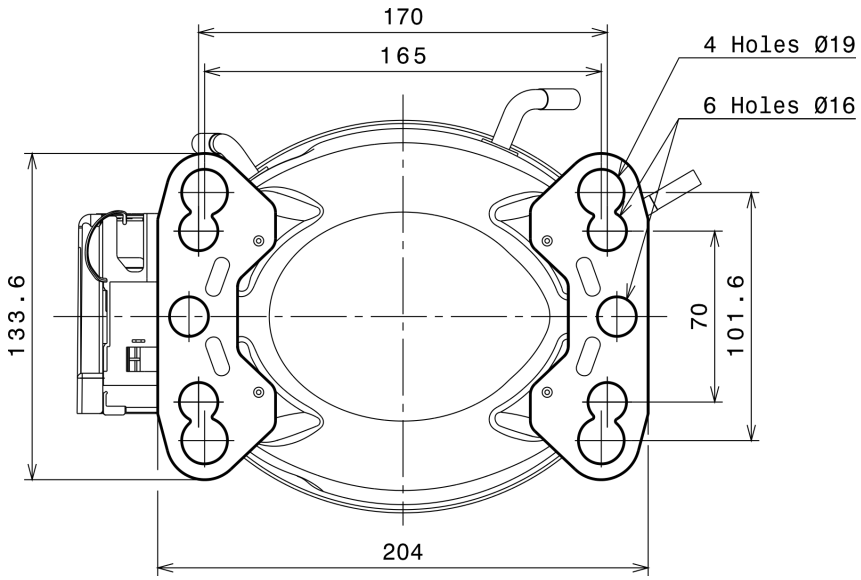
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



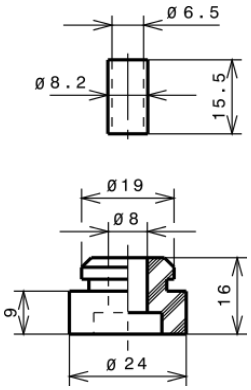
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

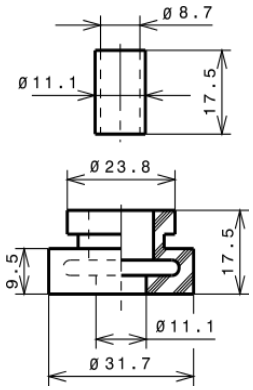
STANDARD

Ø16 holes (170x70 net)



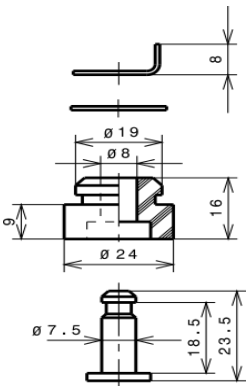
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A HMBP