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	400 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	200-220V 50Hz
Voltage range	180-242 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	1.450 kCal/h	1.337 W
COP	2,26 W/W	1,83 W/W
EER	1,94 kCal/Wh	1,58 kCal/Wh
Input Power	747 W	731 W
Current	3,54 A	3,47 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	72- 88 µF 330 V			
Run capacitor	20 µF 420 V			
Relay	Option 1			
Reference	2014 158. + NTC15Ω			
Pick-Up	9,05 A			
Drop-Out	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	481	425	2,09	1,32	1,13
40	-20	626	463	2,25	1,57	1,35
40	-15	794	501	2,42	1,84	1,58
40	-10	985	539	2,59	2,12	1,83
40	-5	1.198	577	2,76	2,41	2,08
40	0	1.434	615	2,93	2,71	2,33
40	5	1.692	652	3,10	3,02	2,59
40	7,2	1.813	669	3,18	3,15	2,71
40	10	1.973	690	3,27	3,33	2,86
45	-25	442	429	2,11	1,20	1,03
45	-20	574	471	2,29	1,42	1,22
45	-15	730	512	2,47	1,66	1,42
45	-10	907	554	2,65	1,91	1,64
45	-5	1.108	595	2,84	2,17	1,86
45	0	1.331	636	3,02	2,43	2,09
45	5	1.577	677	3,21	2,71	2,33
45	7,2	1.692	695	3,30	2,83	2,43
45	10	1.845	718	3,40	2,99	2,57
50	-25	403	433	2,12	1,08	0,93
50	-20	523	478	2,32	1,27	1,09
50	-15	665	523	2,52	1,48	1,27
50	-10	830	568	2,72	1,70	1,46
50	-5	1.018	612	2,92	1,93	1,66
50	0	1.228	657	3,12	2,17	1,87
50	5	1.461	701	3,33	2,42	2,08
50	7,2	1.571	721	3,42	2,53	2,18
50	10	1.717	746	3,53	2,68	2,30
55	-25	364	437	2,14	0,97	0,83
55	-20	471	485	2,35	1,13	0,97
55	-15	601	534	2,56	1,31	1,13
55	-10	753	582	2,78	1,50	1,29
55	-5	928	630	3,00	1,71	1,47
55	0	1.126	678	3,22	1,93	1,66
55	5	1.346	726	3,44	2,16	1,85
55	7,2	1.450	747	3,54	2,26	1,94
55	10	1.589	774	3,67	2,39	2,05
60	-25	325	441	2,16	0,86	0,74
60	-20	419	493	2,38	0,99	0,85
60	-15	536	545	2,61	1,15	0,98
60	-10	676	596	2,84	1,32	1,13
60	-5	838	648	3,08	1,50	1,29
60	0	1.023	699	3,32	1,70	1,46
60	5	1.230	750	3,56	1,91	1,64
60	7,2	1.329	773	3,66	2,00	1,72
60	10	1.461	802	3,80	2,12	1,82

CECOMAF

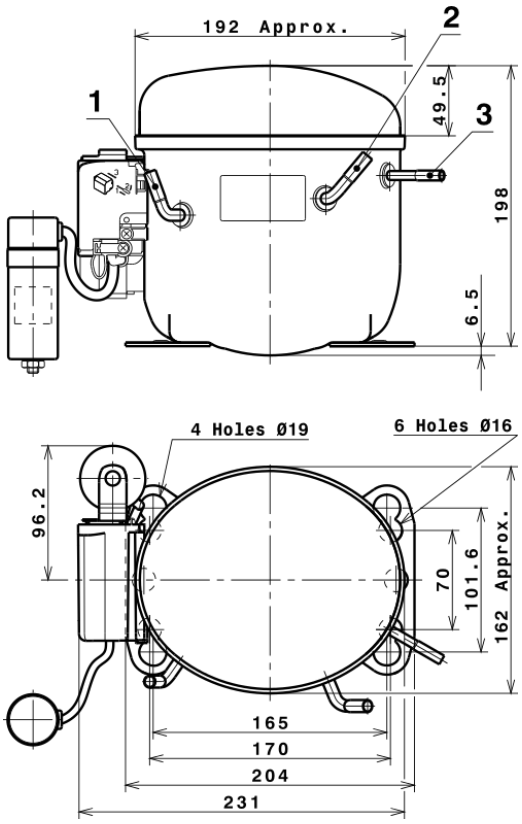
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	504	427	2,10	1,18	1,02
40	-20	660	466	2,27	1,42	1,22
40	-15	838	504	2,43	1,66	1,44
40	-10	1.038	543	2,60	1,91	1,65
40	-5	1.260	581	2,77	2,17	1,87
40	0	1.504	619	2,95	2,43	2,10
40	5	1.770	657	3,12	2,69	2,33
40	7,2	1.894	674	3,20	2,81	2,43
40	10	2.058	695	3,30	2,96	2,56
45	-25	458	431	2,12	1,06	0,92
45	-20	597	473	2,30	1,26	1,09
45	-15	759	515	2,48	1,47	1,27
45	-10	943	557	2,67	1,69	1,46
45	-5	1.149	599	2,86	1,92	1,66
45	0	1.376	640	3,05	2,15	1,86
45	5	1.626	682	3,24	2,38	2,06
45	7,2	1.743	700	3,32	2,49	2,15
45	10	1.897	724	3,43	2,62	2,27
50	-25	411	435	2,13	0,94	0,82
50	-20	535	481	2,33	1,11	0,96
50	-15	680	526	2,53	1,29	1,12
50	-10	847	571	2,73	1,48	1,28
50	-5	1.037	616	2,94	1,68	1,45
50	0	1.248	662	3,14	1,89	1,63
50	5	1.481	707	3,35	2,10	1,81
50	7,2	1.591	727	3,44	2,19	1,89
50	10	1.737	752	3,56	2,31	2,00
55	-25	365	439	2,15	0,83	0,72
55	-20	472	488	2,36	0,97	0,83
55	-15	601	537	2,58	1,12	0,97
55	-10	752	586	2,80	1,28	1,11
55	-5	925	634	3,02	1,46	1,26
55	0	1.120	683	3,24	1,64	1,42
55	5	1.337	731	3,47	1,83	1,58
55	7,2	1.440	753	3,57	1,91	1,65
55	10	1.576	780	3,70	2,02	1,75
60	-25	318	443	2,17	0,72	0,62
60	-20	409	496	2,40	0,83	0,71
60	-15	522	548	2,63	0,95	0,82
60	-10	657	600	2,86	1,09	0,95
60	-5	813	652	3,10	1,25	1,08
60	0	992	704	3,34	1,41	1,22
60	5	1.193	756	3,58	1,58	1,36
60	7,2	1.288	779	3,69	1,65	1,43
60	10	1.415	808	3,83	1,75	1,51

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.536,0603911065	462,4222375237	2,2038831648	47,913205865413
2	77,1983652046	2,4642951007	0,0104757782	1,7102542408906
3	-26,7896131001	4,3921031012	0,0206343122	-0,16002197559147
4	0,4156579693	0,0061688501	0,0000925266	0,019539195127538
5	-0,6936477402	0,1427338632	0,0006825381	-0,0024249353346885

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

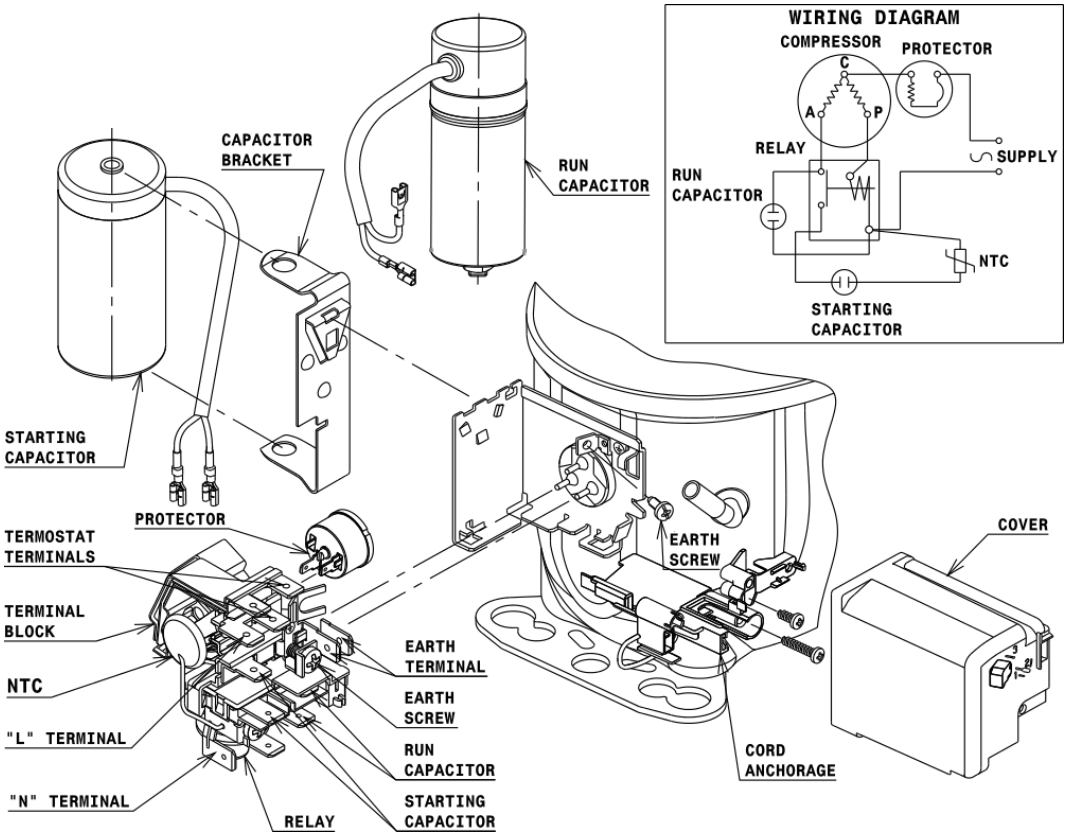
COMPRESSOR DIMENSIONS



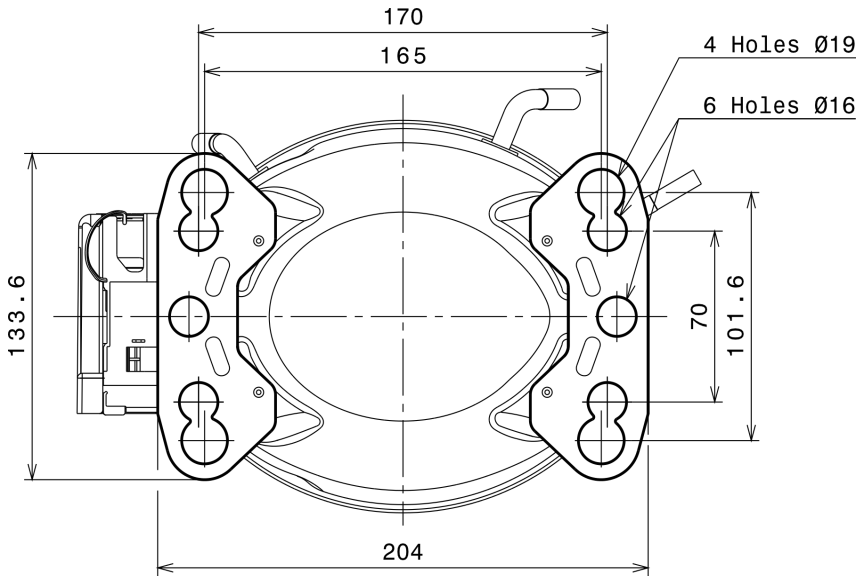
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



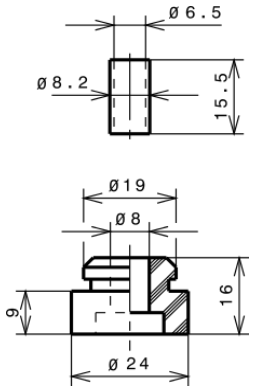
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

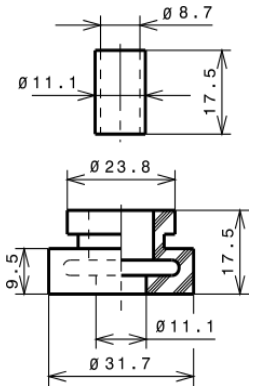
STANDARD

Ø16 holes (170x70 net)



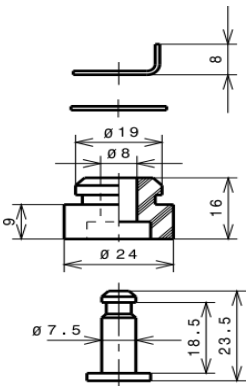
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A HMBP