Technical Data Sheet

Compressor model **MLY80RDb**

Voltage **115V 60Hz ~1**

Refrigerant **R404A**

APPLICATION		COMPRESSOR		MOTOR	
Application	High-Medium Back Pressure	Displacement	8,10 cm³	Nominal Power	3/8 hp
Refrigerant	R404A	Diameter	24,29 mm	Voltage/Frequency	115V 60Hz
Evaporating Temp.	-25,0 ºC to 10,0 ºC	Stroke	17,47 mm	Voltage range	98-132 V
Expansion	Capillar/Valve	Net Weight	11,31 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 ºC	Oil charge	350 cm³	Locked Rotor Amps (LRA)	40,00 A
				Max. Cont. Current (MCC)	10,00 A
				Main W. resist. at 25ºC	1,04 Ω
				Start W. resist. at 25ºC	6,66 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.330 kCal/h	1.224 W
COP	2,22 W/W	1,81 W/W
EER	1,91 kCal/Wh	1,56 kCal/Wh
Input Power	697 W	677 W
Current	6,65 A	6,50 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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V			
Run capacitor	15 µF 250 V			
Relay	Option 1			
Reference	2014 184. + NTC3Ω			
Pick-Up	18,70 A			
Drop-Out	15,60 A			
Protector	Option 1	Option 2		
Reference	MRA38152	T0260		
Current	27,50 A	22,00 A		
Time check	2,8-5,2 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 ºC	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	436	364	4,26	1,40	1,20
40	-20	575	401	4,52	1,67	1,43
40	-15	736	440	4,78	1,95	1,67
40	-10	919	479	5,05	2,23	1,92
40	-5	1.125	518	5,33	2,52	2,17
40	0	1.353	559	5,62	2,82	2,42
40	5	1.603	599	5,92	3,11	2,67
40	7,2	1.720	618	6,05	3,24	2,79
40	10	1.875	641	6,22	3,40	2,93
45	-25	400	358	4,22	1,30	1,12
45	-20	524	401	4,51	1,52	1,31
45	-15	671	444	4,81	1,76	1,51
45	-10	840	488	5,12	2,00	1,72
45	-5	1.031	533	5,43	2,25	1,93
45	0	1.244	578	5,76	2,50	2,15
45	5	1.479	624	6,10	2,76	2,37
45	7,2	1.590	644	6,25	2,87	2,47
45	10	1.737	670	6,45	3,02	2,59
50	-25	364	353	4,19	1,20	1,03
50	-20	474	400	4,51	1,38	1,18
50	-15	606	449	4,84	1,57	1,35
50	-10	760	498	5,18	1,78	1,53
50	-5	936	547	5,54	1,99	1,71
50	0	1.135	597	5,90	2,21	1,90
50	5	1.356	648	6,28	2,43	2,09
50	7,2	1.460	671	6,45	2,53	2,18
50	10	1.599	699	6,67	2,66	2,29
55	-25	328	347	4,15	1,10	0,95
55	-20	423	400	4,50	1,23	1,06
55	-15	540	453	4,87	1,39	1,19
55	-10	680	507	5,25	1,56	1,34
55	-5	842	562	5,64	1,74	1,50
55	0	1.026	617	6,05	1,94	1,66
55	5	1.232	672	6,46	2,13	1,83
55	7,2	1.330	697	6,65	2,22	1,91
55	10	1.461	729	6,89	2,33	2,00
60	-25	292	342	4,11	0,99	0,86
60	-20	372	399	4,50	1,09	0,93
60	-15	475	458	4,90	1,21	1,04
60	-10	600	516	5,32	1,35	1,16
60	-5	747	576	5,75	1,51	1,30
60	0	917	636	6,19	1,68	1,44
60	5	1.109	697	6,65	1,85	1,59
60	7,2	1.200	724	6,85	1,93	1,66
60	10	1.323	758	7,12	2,03	1,75

CECOMAF

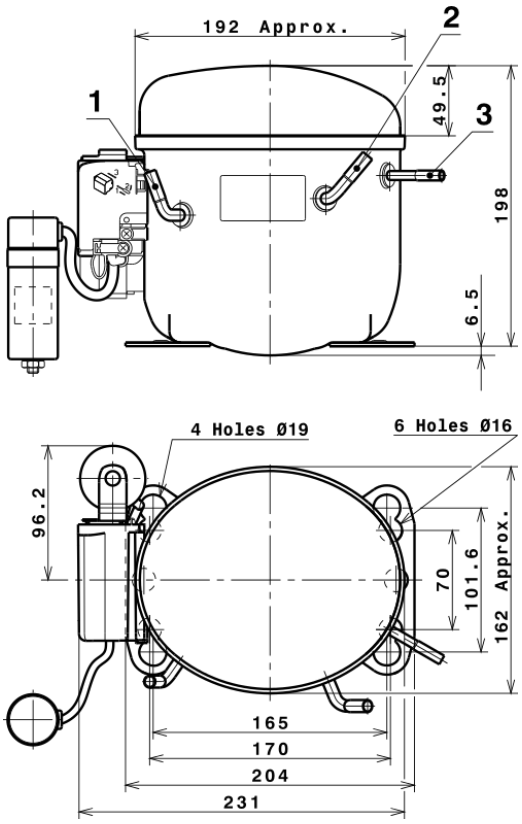
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	457	366	4,27	1,25	1,08
40	-20	606	404	4,53	1,50	1,30
40	-15	777	442	4,80	1,76	1,52
40	-10	969	482	5,07	2,01	1,74
40	-5	1.183	522	5,36	2,27	1,96
40	0	1.419	562	5,65	2,52	2,18
40	5	1.676	604	5,95	2,78	2,40
40	7,2	1.796	622	6,09	2,89	2,49
40	10	1.955	646	6,26	3,03	2,62
45	-25	414	360	4,24	1,15	0,99
45	-20	545	403	4,53	1,35	1,17
45	-15	698	447	4,83	1,56	1,35
45	-10	873	491	5,14	1,78	1,53
45	-5	1.069	536	5,46	1,99	1,72
45	0	1.286	582	5,79	2,21	1,91
45	5	1.525	628	6,13	2,43	2,10
45	7,2	1.638	649	6,29	2,52	2,18
45	10	1.786	675	6,49	2,64	2,29
50	-25	371	354	4,20	1,05	0,91
50	-20	485	403	4,52	1,20	1,04
50	-15	619	451	4,86	1,37	1,19
50	-10	776	501	5,21	1,55	1,34
50	-5	954	551	5,56	1,73	1,50
50	0	1.154	601	5,93	1,92	1,66
50	5	1.375	653	6,32	2,11	1,82
50	7,2	1.479	676	6,49	2,19	1,89
50	10	1.618	705	6,71	2,29	1,98
55	-25	329	349	4,16	0,94	0,81
55	-20	424	402	4,52	1,05	0,91
55	-15	541	456	4,89	1,19	1,02
55	-10	679	510	5,27	1,33	1,15
55	-5	839	565	5,67	1,48	1,28
55	0	1.021	621	6,08	1,64	1,42
55	5	1.224	677	6,50	1,81	1,56
55	7,2	1.320	702	6,69	1,88	1,62
55	10	1.449	734	6,94	1,97	1,70
60	-25	286	343	4,13	0,83	0,72
60	-20	363	402	4,52	0,90	0,78
60	-15	462	460	4,92	1,00	0,87
60	-10	582	520	5,34	1,12	0,97
60	-5	724	580	5,77	1,25	1,08
60	0	888	640	6,22	1,39	1,20
60	5	1.073	702	6,69	1,53	1,32
60	7,2	1.162	729	6,90	1,59	1,38
60	10	1.280	764	7,17	1,68	1,45

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.481,7113960806	418,2478130478	4,5127838137	48,878837935857
2	77,9057426523	0,4614284412	0,0034044922	1,7909934375156
3	-27,5136877481	4,0355636684	0,0310774669	-0,2404625943607
4	0,4089335385	0,0206222020	0,0003328615	0,018915419656354
5	-0,7531519810	0,2067291554	0,0015464019	-0,0058357194525332

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

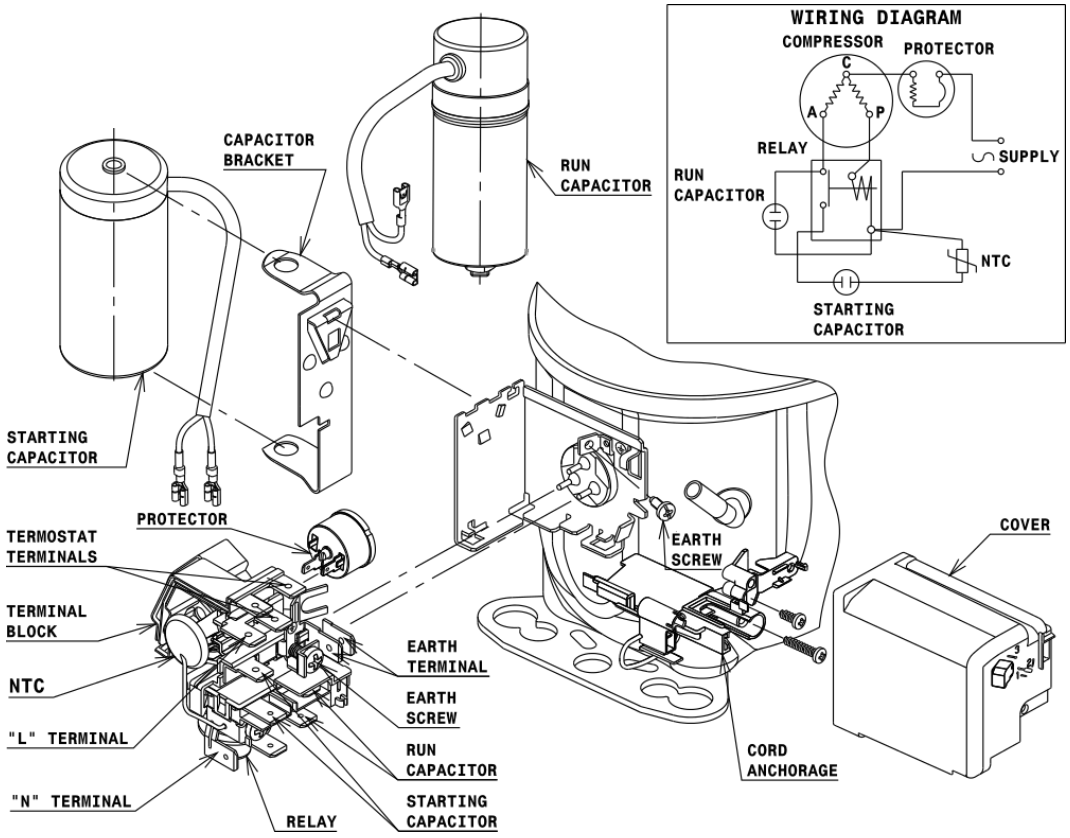
COMPRESSOR DIMENSIONS



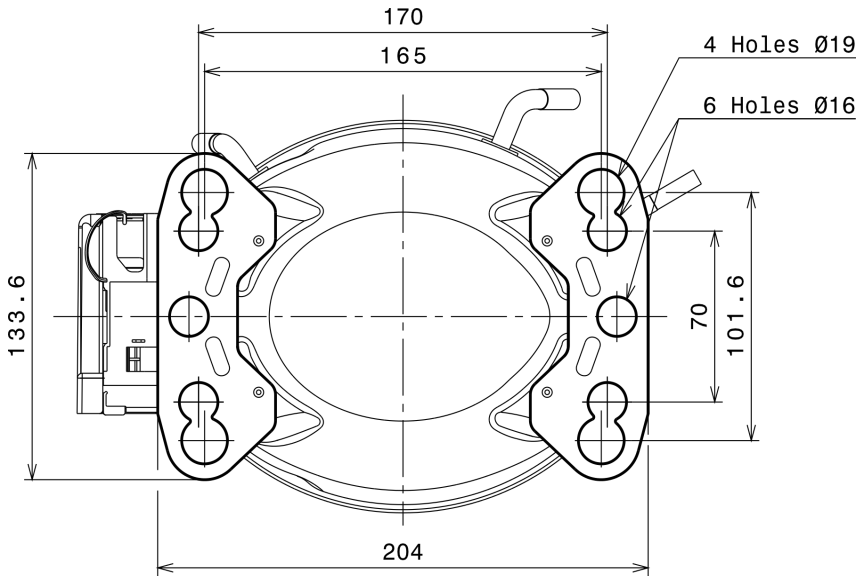
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



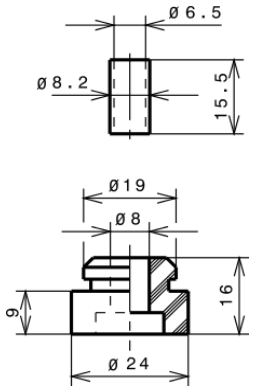
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

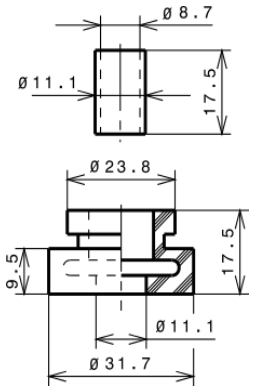
STANDARD

Ø16 holes (170x70 net)



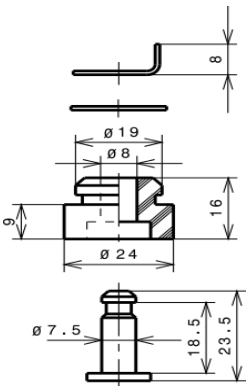
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A HMBP