Technical Data Sheet

Compressor model **MX16TB**

Voltage **220-240V 50Hz ~1**

Refrigerant **R404A**

APPLICATION		COMPRESSOR		MOTOR	
Application	High-Medium Back Pressure	Displacement	16,03 cm³	Nominal Power	3/4 hp
Refrigerant	R404A	Diameter	34,93 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 ºC to 10,0 ºC	Stroke	19,20 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	16,00 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	500 cm³	Locked Rotor Amps (LRA)	27,00 A
				Main W. resist. at 25ºC	2,09 Ω
				Start W. resist. at 25ºC	7,95 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	2.030 kCal/h	1.868 W
COP	2,15 W/W	1,74 W/W
EER	1,85 kCal/Wh	1,50 kCal/Wh
Input Power	1.100 W	1.074 W
Current	5,40 A	5,28 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	47- 56 µF 330 V			
Run capacitor	16 µF 420 V			
Relay	Option 1	Option 2		
Reference	3ARR3 10AS3	RVA 3G..		
Pick-Up	180-195 V	180-195 V		
Drop-Out	40-105 V	40-105 V		
Protector	Option 1	Option 2		
Reference	MRA38128	T0535		
Current	17,00 A	17,00 A		
Time check	7,5-14 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 ºC	Te ºC	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	668	576	3,10	1,35	1,16
40	-20	884	637	3,36	1,61	1,39
40	-15	1.134	697	3,61	1,89	1,63
40	-10	1.417	756	3,87	2,18	1,87
40	-5	1.733	813	4,12	2,48	2,13
40	0	2.083	870	4,37	2,78	2,39
40	5	2.466	926	4,61	3,10	2,66
40	7,2	2.645	950	4,72	3,24	2,78
40	10	2.882	980	4,86	3,42	2,94
45	-25	605	580	3,12	1,21	1,04
45	-20	799	648	3,40	1,43	1,23
45	-15	1.027	715	3,69	1,67	1,44
45	-10	1.288	781	3,98	1,92	1,65
45	-5	1.582	846	4,26	2,17	1,87
45	0	1.910	910	4,54	2,44	2,10
45	5	2.271	973	4,82	2,71	2,33
45	7,2	2.440	1.000	4,95	2,84	2,44
45	10	2.665	1.034	5,10	3,00	2,58
50	-25	543	584	3,13	1,08	0,93
50	-20	715	659	3,45	1,26	1,08
50	-15	920	733	3,77	1,46	1,25
50	-10	1.159	807	4,09	1,67	1,44
50	-5	1.431	879	4,41	1,89	1,63
50	0	1.737	950	4,72	2,13	1,83
50	5	2.075	1.020	5,03	2,37	2,04
50	7,2	2.235	1.050	5,17	2,48	2,13
50	10	2.448	1.088	5,35	2,62	2,25
55	-25	480	588	3,15	0,95	0,82
55	-20	630	670	3,50	1,09	0,94
55	-15	813	752	3,85	1,26	1,08
55	-10	1.030	832	4,20	1,44	1,24
55	-5	1.280	911	4,55	1,63	1,40
55	0	1.563	989	4,90	1,84	1,58
55	5	1.880	1.066	5,25	2,05	1,76
55	7,2	2.030	1.100	5,40	2,15	1,85
55	10	2.230	1.142	5,59	2,27	1,95
60	-25	418	592	3,17	0,82	0,71
60	-20	545	682	3,55	0,93	0,80
60	-15	707	770	3,93	1,07	0,92
60	-10	901	857	4,31	1,22	1,05
60	-5	1.129	944	4,69	1,39	1,20
60	0	1.390	1.029	5,08	1,57	1,35
60	5	1.685	1.113	5,46	1,76	1,51
60	7,2	1.825	1.150	5,63	1,85	1,59
60	10	2.013	1.196	5,84	1,96	1,68

CECOMAF

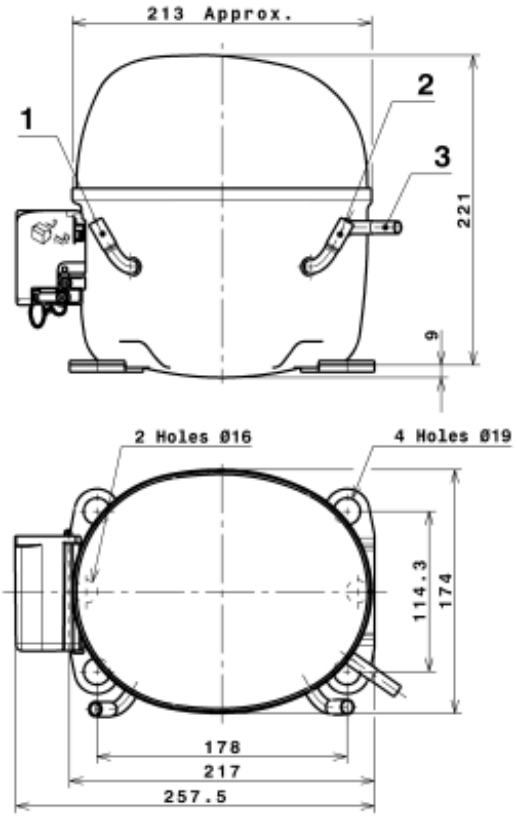
Tc ºC	Te ºC	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	699	576	3,10	1,21	1,05
40	-20	932	637	3,36	1,46	1,26
40	-15	1.196	697	3,61	1,72	1,48
40	-10	1.493	756	3,87	1,98	1,71
40	-5	1.822	813	4,12	2,24	1,94
40	0	2.184	870	4,37	2,51	2,17
40	5	2.578	926	4,61	2,78	2,41
40	7,2	2.762	950	4,72	2,91	2,51
40	10	3.005	980	4,86	3,06	2,65
45	-25	626	580	3,12	1,08	0,93
45	-20	831	648	3,40	1,28	1,11
45	-15	1.069	715	3,69	1,49	1,29
45	-10	1.338	781	3,98	1,71	1,48
45	-5	1.640	846	4,26	1,94	1,68
45	0	1.975	910	4,54	2,17	1,88
45	5	2.341	973	4,82	2,41	2,08
45	7,2	2.513	1.000	4,95	2,51	2,17
45	10	2.740	1.034	5,10	2,65	2,29
50	-25	554	584	3,13	0,95	0,82
50	-20	731	659	3,45	1,11	0,96
50	-15	941	733	3,77	1,28	1,11
50	-10	1.183	807	4,09	1,47	1,27
50	-5	1.458	879	4,41	1,66	1,43
50	0	1.765	950	4,72	1,86	1,61
50	5	2.105	1.020	5,03	2,06	1,78
50	7,2	2.264	1.050	5,17	2,16	1,86
50	10	2.476	1.088	5,35	2,28	1,97
55	-25	481	588	3,15	0,82	0,71
55	-20	631	670	3,50	0,94	0,81
55	-15	814	752	3,85	1,08	0,94
55	-10	1.029	832	4,20	1,24	1,07
55	-5	1.276	911	4,55	1,40	1,21
55	0	1.556	989	4,90	1,57	1,36
55	5	1.868	1.066	5,25	1,75	1,51
55	7,2	2.015	1.100	5,40	1,83	1,58
55	10	2.212	1.142	5,59	1,94	1,67
60	-25	408	592	3,17	0,69	0,60
60	-20	531	682	3,55	0,78	0,67
60	-15	686	770	3,93	0,89	0,77
60	-10	874	857	4,31	1,02	0,88
60	-5	1.094	944	4,69	1,16	1,00
60	0	1.346	1.029	5,08	1,31	1,13
60	5	1.631	1.113	5,46	1,46	1,27
60	7,2	1.766	1.150	5,63	1,54	1,33
60	10	1.948	1.196	5,84	1,63	1,41

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.858,8306007493	552,4890943233	2,7631012567	45,805062594875
2	119,1362352478	-0,1924791757	-0,0156565073	1,6263210960946
3	-43,3264055390	7,9428571429	0,0388198758	-0,24454051281362
4	0,6125357333	-0,0212817179	-0,0000072223	0,016972814714389
5	-1,1463653954	0,2857142857	0,0015527950	-0,0051206002447298

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

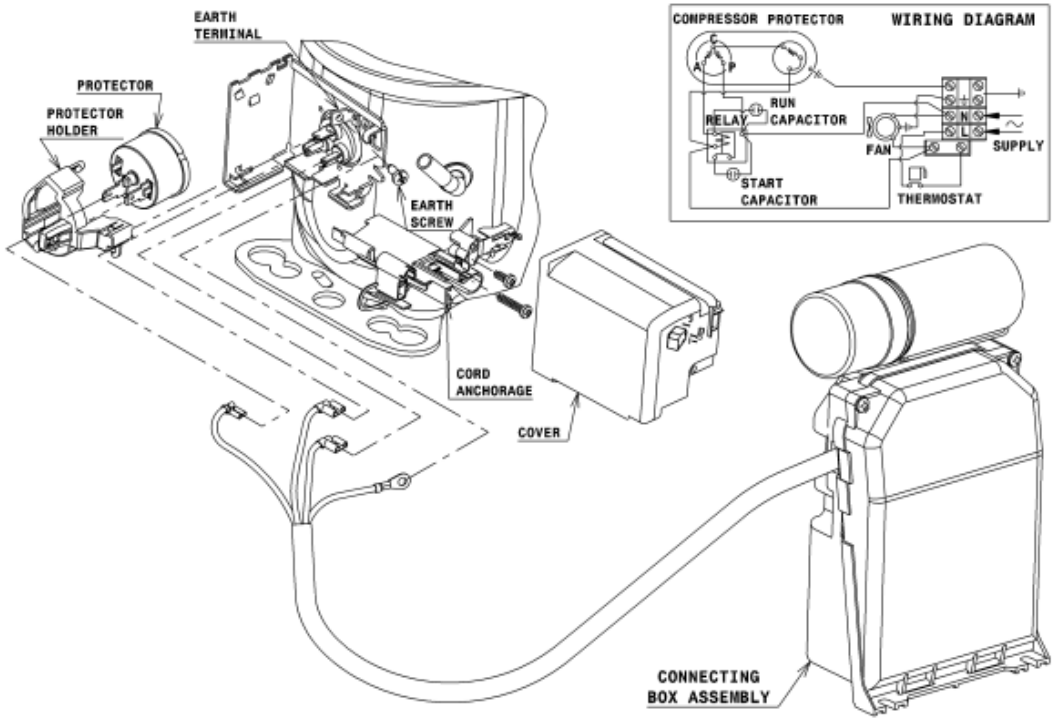
COMPRESSOR DIMENSIONS



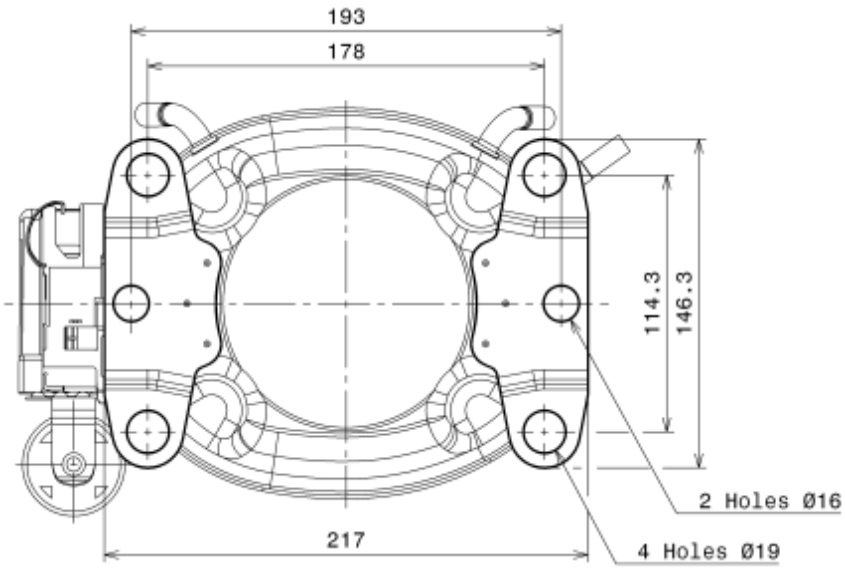
	DESIGNATION	INTERNAL DIAM.
1	Service	9,7 mm
2	Suction	9,7 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (P, X ranges)



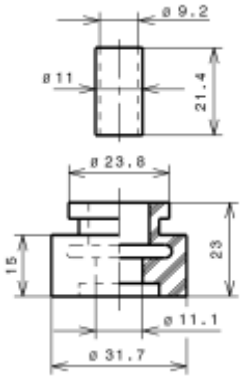
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (178x114.3 net)



SOA

SOA R404A HMBP