

# Technical Data Sheet

Compressor model **MX16TBa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	16,03 cm <sup>3</sup>	Nominal Power	7/8 hp
Refrigerant	R404A	Diameter	32,60 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,20 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	16,33 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	500 cm <sup>3</sup>	Locked Rotor Amps (LRA)	34,50 A
				Max. Cont. Current (MCC)	9,00 A
				Main W. resist. at 25°C	2,34 Ω
				Start W. resist. at 25°C	7,22 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	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



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	88-108 μF 330 V			
Run capacitor	16 μF 420 V			
Relay	Option 1			
Reference	2014 180. + NTC15Ω			
Pick-Up	16.70 A			
Drop-Out	14.00 A			
Protector	Option 1			
Reference	T0260			
Current	22,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 °C			

## ASHRAE

Tc °C	Te °C	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 °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	699	579	3,11	1,21	1,04
40	-20	932	641	3,37	1,45	1,26
40	-15	1.196	701	3,63	1,71	1,47
40	-10	1.493	760	3,89	1,96	1,70
40	-5	1.822	819	4,14	2,23	1,92
40	0	2.184	876	4,39	2,49	2,15
40	5	2.578	933	4,65	2,76	2,39
40	7,2	2.762	957	4,75	2,89	2,49
40	10	3.005	988	4,89	3,04	2,63

45	-25	626	583	3,13	1,07	0,93
45	-20	831	652	3,42	1,28	1,10
45	-15	1.069	719	3,71	1,49	1,28
45	-10	1.338	786	4,00	1,70	1,47
45	-5	1.640	852	4,29	1,93	1,66
45	0	1.975	916	4,57	2,16	1,86
45	5	2.341	980	4,86	2,39	2,06
45	7,2	2.513	1.008	4,98	2,49	2,15
45	10	2.740	1.043	5,14	2,63	2,27

50	-25	554	587	3,15	0,94	0,81
50	-20	731	663	3,47	1,10	0,95
50	-15	941	738	3,79	1,28	1,10
50	-10	1.183	812	4,11	1,46	1,26
50	-5	1.458	884	4,43	1,65	1,42
50	0	1.765	956	4,75	1,85	1,59
50	5	2.105	1.027	5,07	2,05	1,77
50	7,2	2.264	1.058	5,21	2,14	1,85
50	10	2.476	1.097	5,39	2,26	1,95

55	-25	481	591	3,16	0,81	0,70
55	-20	631	674	3,52	0,94	0,81
55	-15	814	756	3,87	1,08	0,93
55	-10	1.029	837	4,22	1,23	1,06
55	-5	1.276	917	4,58	1,39	1,20
55	0	1.556	996	4,93	1,56	1,35
55	5	1.868	1.074	5,28	1,74	1,50
55	7,2	2.015	1.108	5,44	1,82	1,57
55	10	2.212	1.152	5,64	1,92	1,66

60	-25	408	595	3,18	0,69	0,59
60	-20	531	685	3,56	0,77	0,67
60	-15	686	775	3,95	0,89	0,77
60	-10	874	863	4,34	1,01	0,88
60	-5	1.094	950	4,72	1,15	0,99
60	0	1.346	1.036	5,11	1,30	1,12
60	5	1.631	1.122	5,50	1,45	1,26
60	7,2	1.766	1.159	5,67	1,52	1,32
60	10	1.948	1.206	5,89	1,62	1,40

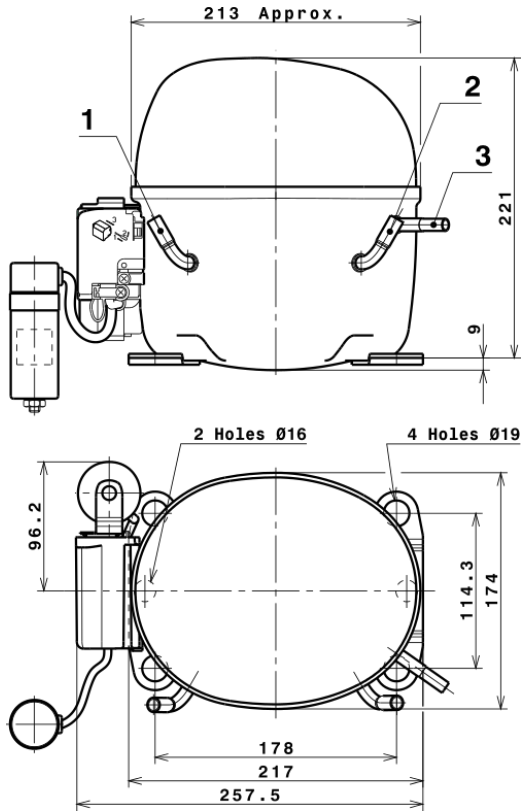
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.858,8306007493	571,9391022687	2,9941275436	76,919802906595
2	119,1362352478	0,2464046571	-0,0001097960	2,7310583391372
3	-43,3264055390	8,2763268823	0,0377198978	-0,41065347327799
4	0,6125357333	-0,0089992816	0,0000564895	0,028502211079764
5	-1,1463653954	0,2981028144	0,0013694399	-0,0085989525889686

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

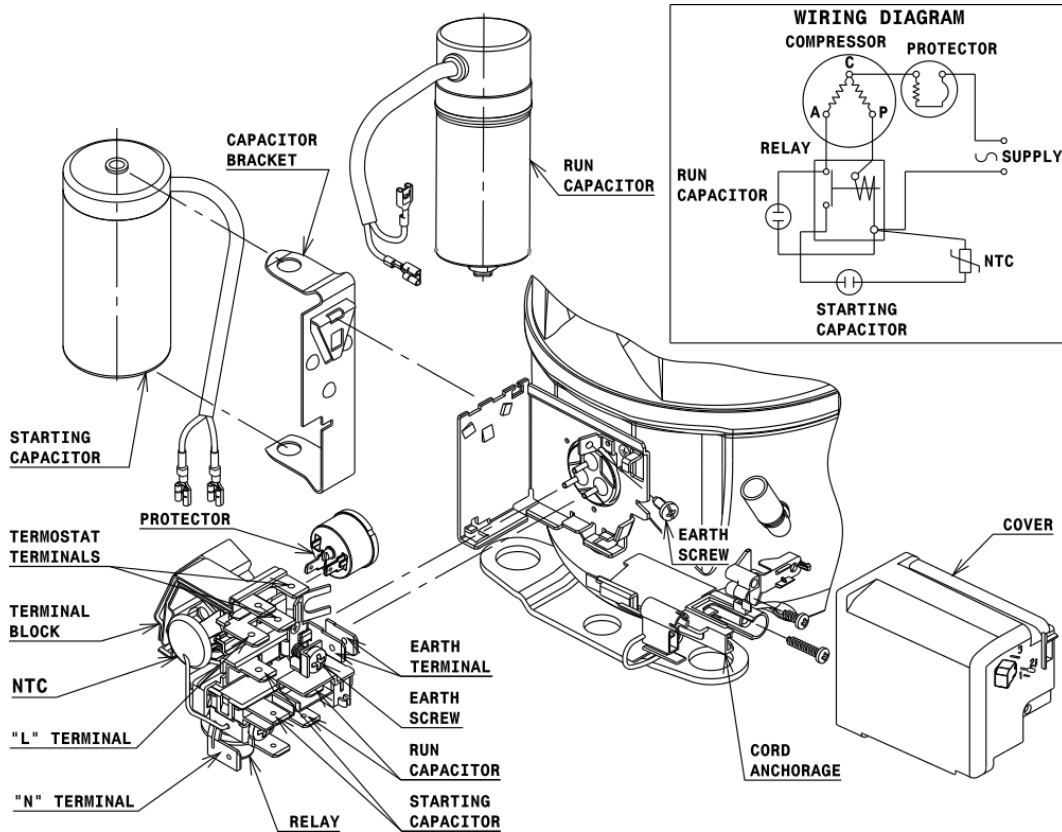
## COMPRESSOR DIMENSIONS



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 (CURRENT RELAY + NTC) (X range)



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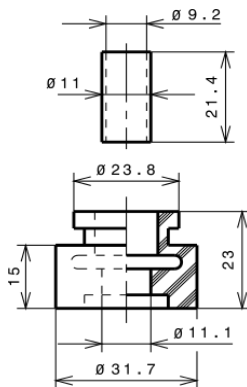
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 19$  holes (178x114.3 net)



## SOA

SOA R404A HMBP

