

# Technical Data Sheet

Compressor model **MX16TE**  
 Voltage **115V 60Hz ~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	115V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,20 mm	Voltage range	98-127 V
Expansion	Capillar/Valve	Net Weight	17,20 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)	64,00 A
				Max. Cont. Current (MCC)	18,50 A
				Main W. resist. at 25°C	0,47 Ω
				Start W. resist. at 25°C	1,96 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	2.375 kCal/h	2.185 W
COP	2,00 W/W	1,62 W/W
EER	1,72 kCal/Wh	1,40 kCal/Wh
Input Power	1.381 W	1.348 W
Current	12,48 A	12,18 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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	200 µF 160 V			
Run capacitor	80 µF 250 V			
Relay	Option 1			
Reference	RVA 7AA..			
Pick-Up	111-124 V			
Drop-Out	20-45 V			
Protector	Option 1			
Reference	T1097			
Current	54,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	150,00 / 52,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	790	720	6,63	1,28	1,10
40	-20	1.028	796	7,28	1,50	1,29
40	-15	1.305	870	7,93	1,74	1,50
40	-10	1.622	944	8,57	2,00	1,72
40	-5	1.979	1.017	9,21	2,26	1,95
40	0	2.375	1.088	9,84	2,54	2,18
40	5	2.810	1.158	10,47	2,82	2,43
40	7,2	3.014	1.189	10,74	2,95	2,53
40	10	3.285	1.228	11,09	3,11	2,68

45	-25	713	721	6,64	1,15	0,99
45	-20	930	807	7,38	1,34	1,15
45	-15	1.186	891	8,11	1,55	1,33
45	-10	1.482	975	8,84	1,77	1,52
45	-5	1.817	1.057	9,57	2,00	1,72
45	0	2.192	1.138	10,29	2,24	1,93
45	5	2.606	1.218	11,00	2,49	2,14
45	7,2	2.801	1.253	11,32	2,60	2,24
45	10	3.060	1.297	11,72	2,74	2,36

50	-25	637	723	6,66	1,02	0,88
50	-20	832	818	7,48	1,18	1,02
50	-15	1.067	912	8,29	1,36	1,17
50	-10	1.342	1.005	9,11	1,55	1,33
50	-5	1.656	1.097	9,92	1,76	1,51
50	0	2.010	1.188	10,73	1,97	1,69
50	5	2.403	1.278	11,54	2,19	1,88
50	7,2	2.588	1.317	11,90	2,29	1,97
50	10	2.835	1.366	12,35	2,41	2,07

55	-25	560	724	6,67	0,90	0,77
55	-20	735	829	7,57	1,03	0,89
55	-15	949	933	8,48	1,18	1,02
55	-10	1.202	1.036	9,38	1,35	1,16
55	-5	1.495	1.138	10,28	1,53	1,31
55	0	1.827	1.238	11,18	1,72	1,48
55	5	2.199	1.338	12,08	1,91	1,64
55	7,2	2.375	1.381	12,48	2,00	1,72
55	10	2.610	1.436	12,98	2,11	1,82

60	-25	484	726	6,68	0,78	0,67
60	-20	637	840	7,67	0,88	0,76
60	-15	830	954	8,66	1,01	0,87
60	-10	1.062	1.067	9,65	1,16	1,00
60	-5	1.334	1.178	10,64	1,32	1,13
60	0	1.645	1.288	11,64	1,48	1,28
60	5	1.995	1.397	12,63	1,66	1,43
60	7,2	2.162	1.445	13,07	1,74	1,50
60	10	2.385	1.505	13,62	1,84	1,58

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	827	724	6,67	1,14	0,99
40	-20	1.083	800	7,32	1,35	1,17
40	-15	1.378	876	7,97	1,57	1,36
40	-10	1.711	950	8,62	1,80	1,56
40	-5	2.082	1.023	9,27	2,03	1,76
40	0	2.491	1.096	9,91	2,27	1,96
40	5	2.939	1.167	10,54	2,52	2,18
40	7,2	3.148	1.198	10,82	2,63	2,27
40	10	3.425	1.237	11,18	2,77	2,39

45	-25	738	725	6,68	1,02	0,88
45	-20	967	811	7,42	1,19	1,03
45	-15	1.235	897	8,16	1,38	1,19
45	-10	1.541	981	8,89	1,57	1,36
45	-5	1.885	1.064	9,63	1,77	1,53
45	0	2.267	1.146	10,36	1,98	1,71
45	5	2.688	1.227	11,09	2,19	1,89
45	7,2	2.885	1.263	11,40	2,28	1,97
45	10	3.147	1.307	11,81	2,41	2,08

50	-25	650	727	6,69	0,89	0,77
50	-20	852	823	7,52	1,04	0,89
50	-15	1.092	918	8,34	1,19	1,03
50	-10	1.371	1.012	9,17	1,35	1,17
50	-5	1.687	1.105	9,99	1,53	1,32
50	0	2.043	1.197	10,81	1,71	1,47
50	5	2.436	1.287	11,63	1,89	1,63
50	7,2	2.621	1.327	11,99	1,98	1,71
50	10	2.868	1.377	12,45	2,08	1,80

55	-25	561	728	6,70	0,77	0,67
55	-20	736	834	7,61	0,88	0,76
55	-15	949	939	8,53	1,01	0,87
55	-10	1.200	1.042	9,44	1,15	0,99
55	-5	1.490	1.145	10,35	1,30	1,12
55	0	1.818	1.247	11,26	1,46	1,26
55	5	2.185	1.348	12,18	1,62	1,40
55	7,2	2.358	1.392	12,58	1,69	1,46
55	10	2.589	1.447	13,09	1,79	1,55

60	-25	472	730	6,72	0,65	0,56
60	-20	620	845	7,71	0,73	0,63
60	-15	806	960	8,71	0,84	0,73
60	-10	1.030	1.073	9,71	0,96	0,83
60	-5	1.293	1.186	10,71	1,09	0,94
60	0	1.594	1.297	11,72	1,23	1,06
60	5	1.933	1.408	12,73	1,37	1,19
60	7,2	2.094	1.456	13,17	1,44	1,24
60	10	2.310	1.517	13,73	1,52	1,32

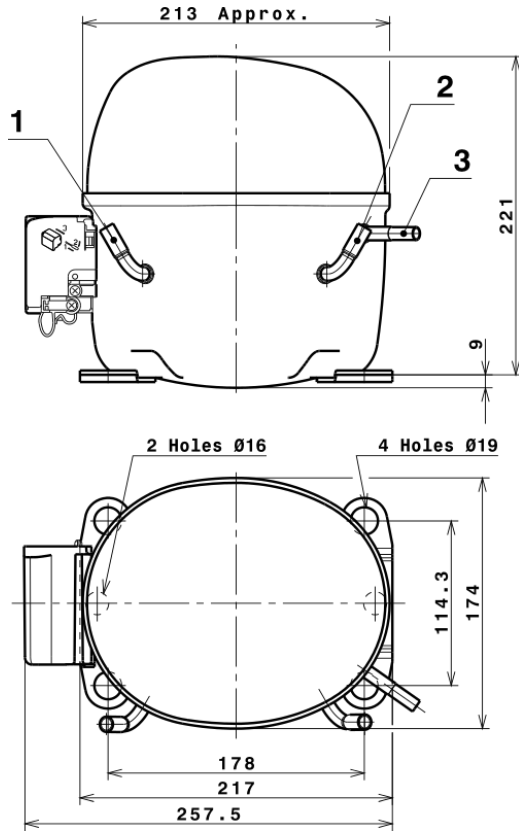
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.293,0189168602	712,0634770843	6,3744544698	82,963381939113
2	129,3149504425	-0,8425017945	-0,0097009685	2,878776552246
3	-46,6928531174	10,4270028350	0,0952135123	-0,35380411867488
4	0,7247346544	-0,0073861568	0,0001463229	0,033636523437443
5	-1,1546585828	0,4047237656	0,0037027477	-0,0041840610184766

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

## COMPRESSOR DIMENSIONS

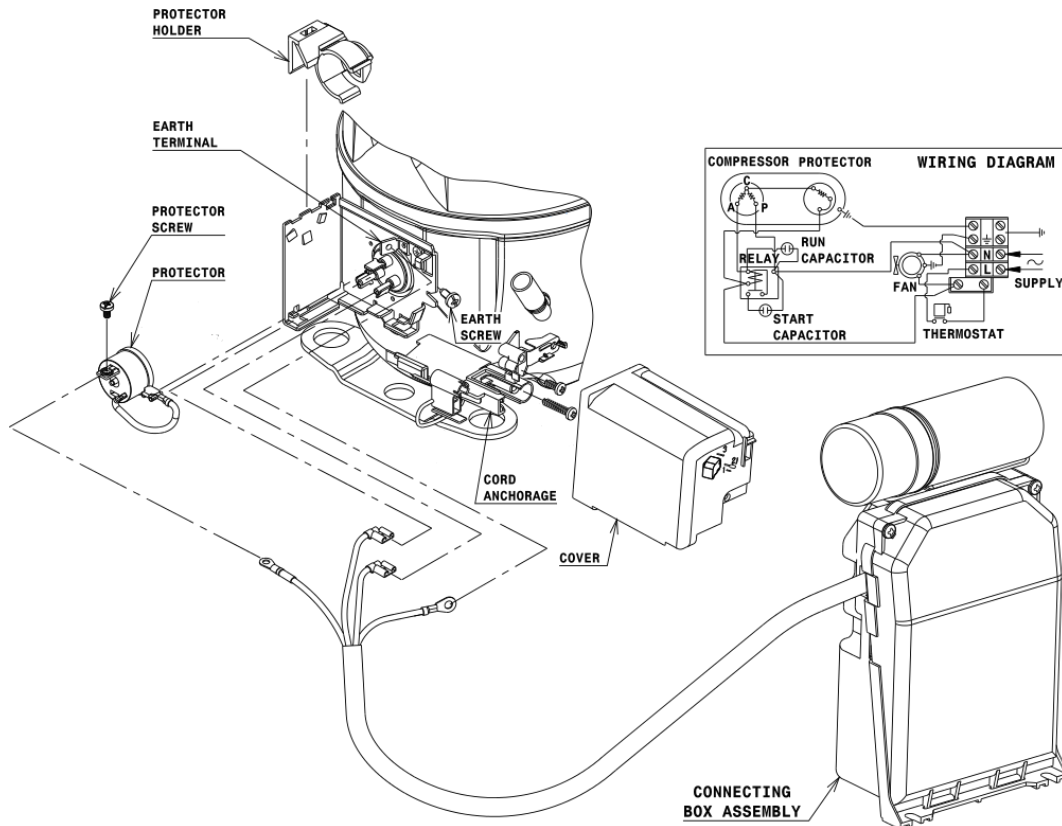


## DESIGNATION INTERNAL DIAM.

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

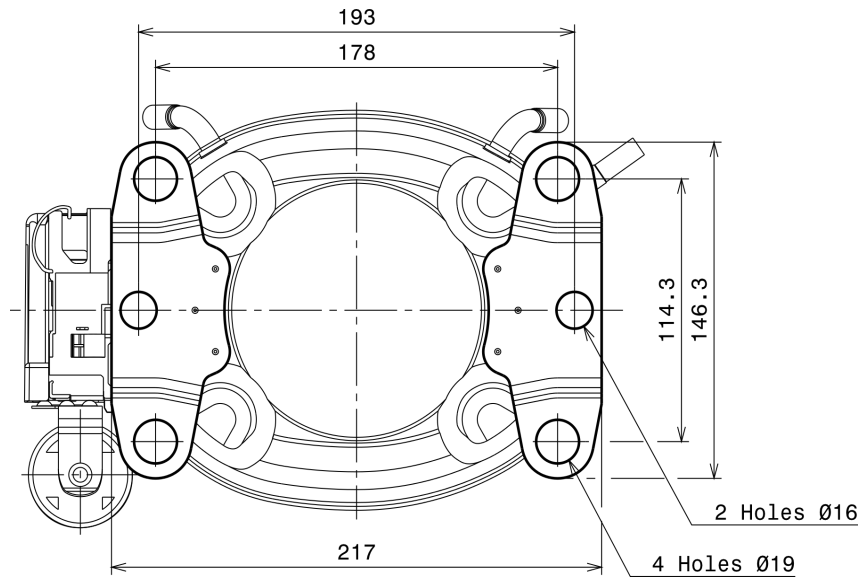
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (EXTERNAL CONNECTING BOX) (MX16/18TE)



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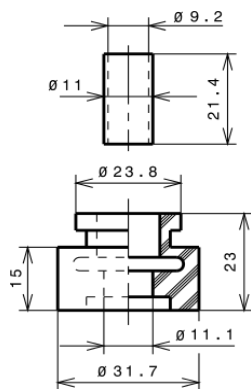
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø19 holes (178x114.3 net)



## SOA

SOA R404A HMBP

