

# Technical Data Sheet

Compressor model **MX18TBa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	18,40 cm <sup>3</sup>	Nominal Power	7/8 hp
Refrigerant	R404A	Diameter	34,93 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

	ASHRAE	CECOMAF
Cooling Capacity	2.330 kCal/h	2.143 W
COP	2,18 W/W	1,76 W/W
EER	1,87 kCal/Wh	1,52 kCal/Wh
Input Power	1.245 W	1.219 W
Current	6,50 A	6,37 A

## APPROVALS



## 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	775	684	4,04	1,32	1,13
40	-20	1.009	759	4,33	1,55	1,33
40	-15	1.282	832	4,63	1,79	1,54
40	-10	1.594	901	4,92	2,06	1,77
40	-5	1.944	968	5,21	2,34	2,01
40	0	2.332	1.031	5,49	2,63	2,26
40	5	2.760	1.092	5,77	2,94	2,53
40	7,2	2.960	1.118	5,89	3,08	2,65
40	10	3.226	1.149	6,04	3,26	2,81

45	-25	700	680	4,03	1,20	1,03
45	-20	913	763	4,35	1,39	1,20
45	-15	1.165	842	4,67	1,61	1,38
45	-10	1.456	919	4,99	1,84	1,58
45	-5	1.785	993	5,32	2,09	1,80
45	0	2.153	1.064	5,64	2,35	2,02
45	5	2.559	1.131	5,95	2,63	2,26
45	7,2	2.750	1.160	6,09	2,76	2,37
45	10	3.004	1.196	6,26	2,92	2,51

50	-25	625	677	4,01	1,07	0,92
50	-20	817	766	4,36	1,24	1,07
50	-15	1.048	853	4,72	1,43	1,23
50	-10	1.318	937	5,07	1,64	1,41
50	-5	1.626	1.018	5,43	1,86	1,60
50	0	1.973	1.096	5,78	2,09	1,80
50	5	2.358	1.171	6,14	2,34	2,01
50	7,2	2.540	1.203	6,29	2,46	2,11
50	10	2.782	1.242	6,49	2,60	2,24

55	-25	550	673	4,00	0,95	0,82
55	-20	721	770	4,38	1,09	0,94
55	-15	931	864	4,76	1,25	1,08
55	-10	1.180	955	5,15	1,44	1,24
55	-5	1.467	1.043	5,54	1,64	1,41
55	0	1.793	1.128	5,93	1,85	1,59
55	5	2.157	1.210	6,33	2,07	1,78
55	7,2	2.330	1.245	6,50	2,18	1,87
55	10	2.560	1.289	6,72	2,31	1,99

60	-25	475	670	3,99	0,83	0,71
60	-20	625	774	4,39	0,94	0,81
60	-15	814	875	4,81	1,08	0,93
60	-10	1.042	973	5,23	1,25	1,07
60	-5	1.308	1.068	5,66	1,42	1,22
60	0	1.613	1.160	6,09	1,62	1,39
60	5	1.957	1.249	6,52	1,82	1,57
60	7,2	2.120	1.288	6,71	1,92	1,65
60	10	2.339	1.335	6,96	2,04	1,75

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	812	687	4,05	1,18	1,02
40	-20	1.064	763	4,35	1,39	1,20
40	-15	1.353	837	4,65	1,62	1,40
40	-10	1.681	907	4,94	1,85	1,60
40	-5	2.045	974	5,23	2,10	1,81
40	0	2.447	1.038	5,52	2,36	2,04
40	5	2.887	1.100	5,80	2,62	2,27
40	7,2	3.092	1.126	5,93	2,75	2,37
40	10	3.364	1.159	6,08	2,90	2,51

45	-25	725	684	4,04	1,06	0,92
45	-20	950	767	4,37	1,24	1,07
45	-15	1.213	847	4,69	1,43	1,24
45	-10	1.513	925	5,02	1,64	1,41
45	-5	1.851	999	5,35	1,85	1,60
45	0	2.226	1.071	5,67	2,08	1,80
45	5	2.639	1.140	5,99	2,32	2,00
45	7,2	2.832	1.169	6,13	2,42	2,09
45	10	3.089	1.205	6,31	2,56	2,21

50	-25	638	680	4,03	0,94	0,81
50	-20	836	771	4,38	1,09	0,94
50	-15	1.072	858	4,74	1,25	1,08
50	-10	1.346	943	5,10	1,43	1,23
50	-5	1.657	1.025	5,46	1,62	1,40
50	0	2.005	1.103	5,82	1,82	1,57
50	5	2.391	1.179	6,18	2,03	1,75
50	7,2	2.573	1.212	6,34	2,12	1,83
50	10	2.814	1.252	6,54	2,25	1,94

55	-25	551	677	4,01	0,81	0,70
55	-20	723	774	4,40	0,93	0,81
55	-15	932	869	4,78	1,07	0,93
55	-10	1.178	961	5,18	1,23	1,06
55	-5	1.463	1.050	5,57	1,39	1,20
55	0	1.784	1.136	5,97	1,57	1,36
55	5	2.143	1.219	6,37	1,76	1,52
55	7,2	2.313	1.255	6,55	1,84	1,59
55	10	2.540	1.299	6,77	1,96	1,69

60	-25	464	673	4,00	0,69	0,60
60	-20	609	778	4,41	0,78	0,68
60	-15	791	880	4,83	0,90	0,78
60	-10	1.011	979	5,26	1,03	0,89
60	-5	1.268	1.075	5,69	1,18	1,02
60	0	1.563	1.168	6,13	1,34	1,16
60	5	1.896	1.259	6,57	1,51	1,30
60	7,2	2.054	1.297	6,76	1,58	1,37
60	10	2.265	1.346	7,01	1,68	1,45

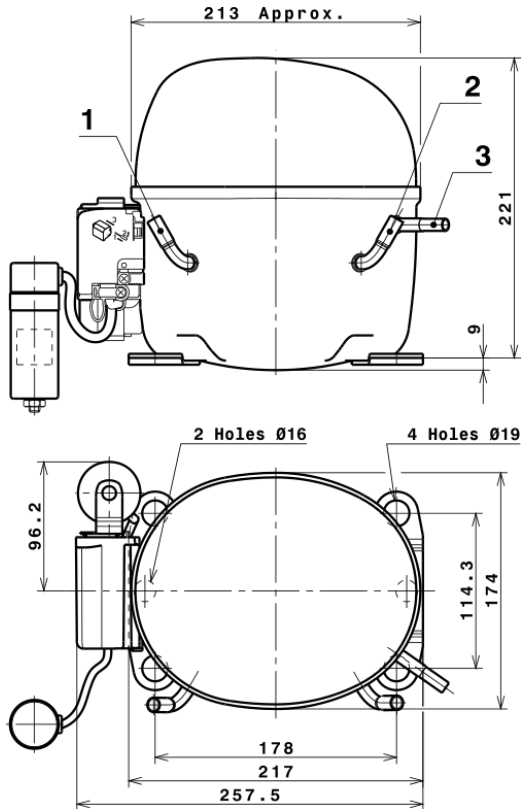
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.220,8136392240	801,5486945211	4,2920427539	81,678773219533
2	127,1818913887	1,5668344883	0,0061832816	2,8345588078294
3	-45,9665169863	6,7171431916	0,0335289331	-0,35204857527005
4	0,7093589286	-0,0475990012	0,0001456453	0,032939649402571
5	-1,1394065704	0,2975172059	0,0014519012	-0,0043231014209744

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

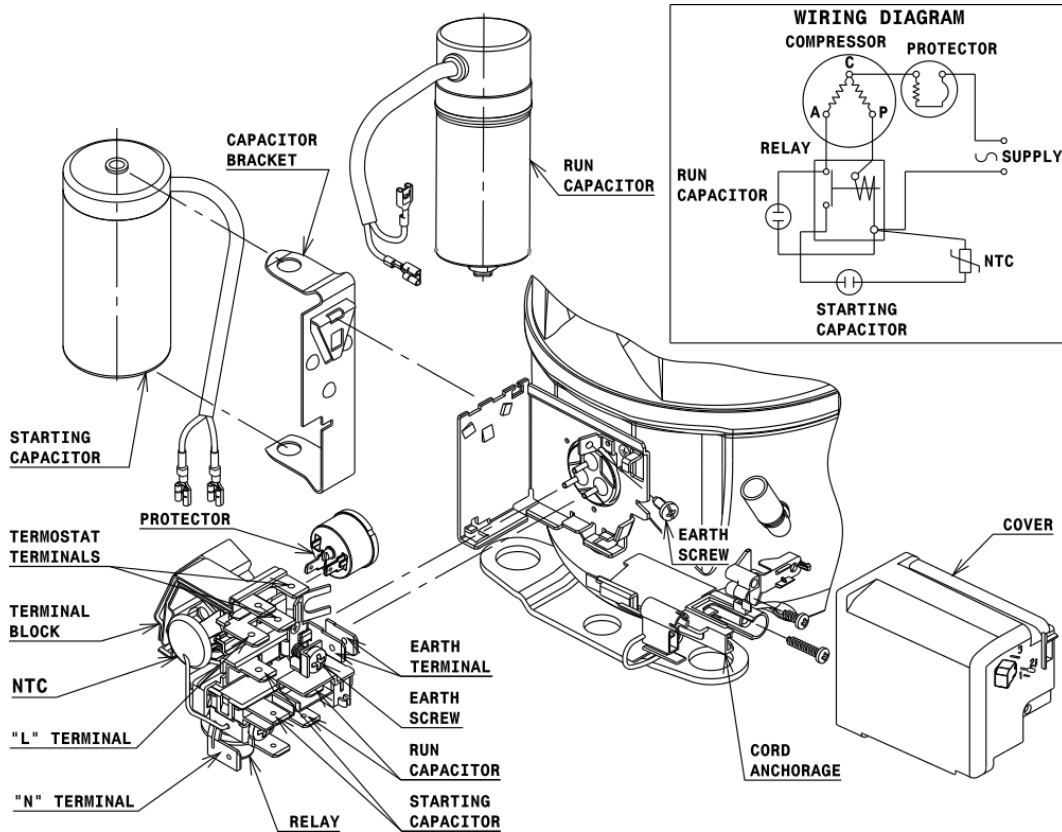
## COMPRESSOR DIMENSIONS



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)



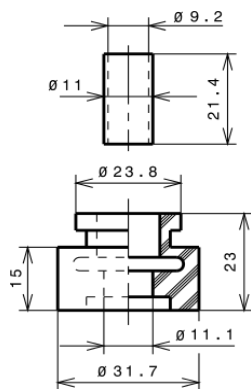
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

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



## SOA

SOA R404A HMBP

