

# Technical Data Sheet

Compressor model **MX18FBa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

Application	Low Back Pressure
Refrigerant	R404A
Evaporating Temp.	-40,0 °C to -10,0 °C
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 °C

## COMPRESSOR

Displacement	18,40 cm <sup>3</sup>
Diameter	34,93 mm
Stroke	19,20 mm
Net Weight	16,29 Kg
Oil type	ISO VG 32 ESTER
Oil charge	650 cm <sup>3</sup>

## MOTOR

Nominal Power	5/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-264 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	18,00 A
Max. Cont. Current (MCC)	4,60 A
Main W. resist. at 25°C	3,50 Ω
Start W. resist. at 25°C	7,35 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	700 kCal/h	546 W
COP	1,36 W/W	0,96 W/W
EER	1,17 kCal/Wh	0,83 kCal/Wh
Input Power	600 W	568 W
Current	3,00 A	2,85 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
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		
Reference	2014 166. + NTC15Ω		
Pick-Up	11,00 A		
Drop-Out	9,35 A		
Protector	Option 1	Option 2	
Reference	MRA38138	T0268	
Current	15,30 A	15,00 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 52,00 °C	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	-40	305	373	1,98	0,95	0,82
40	-35	442	436	2,26	1,18	1,01
40	-30	609	504	2,56	1,40	1,21
40	-25	806	576	2,89	1,63	1,40
40	-23,3	880	601	3,00	1,70	1,47
40	-20	1.034	651	3,24	1,85	1,59
40	-15	1.292	730	3,62	2,06	1,77
40	-10	1.580	813	4,03	2,26	1,94

45	-40	270	350	1,89	0,90	0,77
45	-35	399	421	2,19	1,10	0,95
45	-30	559	495	2,52	1,31	1,13
45	-25	749	573	2,87	1,52	1,31
45	-23,3	820	600	3,00	1,59	1,37
45	-20	969	655	3,26	1,72	1,48
45	-15	1.219	741	3,67	1,91	1,65
45	-10	1.500	830	4,12	2,10	1,81

50	-40	235	328	1,79	0,83	0,72
50	-35	357	405	2,12	1,03	0,88
50	-30	509	486	2,48	1,22	1,05
50	-25	691	571	2,86	1,41	1,21
50	-23,3	760	600	3,00	1,47	1,27
50	-20	904	659	3,28	1,59	1,37
50	-15	1.147	751	3,73	1,77	1,53
50	-10	1.420	848	4,21	1,95	1,68

55	-40	200	305	1,70	0,76	0,66
55	-35	314	389	2,05	0,94	0,81
55	-30	459	477	2,44	1,12	0,96
55	-25	634	568	2,85	1,30	1,12
55	-23,3	700	600	3,00	1,36	1,17
55	-20	839	663	3,30	1,47	1,26
55	-15	1.074	762	3,78	1,64	1,41
55	-10	1.340	865	4,30	1,80	1,55

60	-40	165	283	1,61	0,68	0,58
60	-35	272	373	1,99	0,85	0,73
60	-30	409	467	2,40	1,02	0,87
60	-25	576	566	2,84	1,18	1,02
60	-23,3	640	600	3,00	1,24	1,07
60	-20	774	667	3,32	1,35	1,16
60	-15	1.002	773	3,83	1,51	1,30
60	-10	1.260	883	4,39	1,66	1,43

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	319	373	1,98	0,86	0,74
40	-35	481	436	2,26	1,10	0,95
40	-30	668	504	2,56	1,32	1,14
40	-25	880	576	2,89	1,53	1,32
40	-23,3	958	601	3,00	1,60	1,38
40	-20	1.118	651	3,24	1,72	1,48
40	-15	1.381	730	3,62	1,89	1,63
40	-10	1.669	813	4,03	2,05	1,77

45	-40	270	350	1,89	0,77	0,67
45	-35	411	421	2,19	0,98	0,84
45	-30	577	495	2,52	1,17	1,01
45	-25	769	573	2,87	1,34	1,16
45	-23,3	840	600	3,00	1,40	1,21
45	-20	986	655	3,26	1,50	1,30
45	-15	1.228	741	3,67	1,66	1,43
45	-10	1.495	830	4,12	1,80	1,56

50	-40	222	328	1,79	0,68	0,58
50	-35	342	405	2,12	0,84	0,73
50	-30	487	486	2,48	1,00	0,87
50	-25	657	571	2,86	1,15	1,00
50	-23,3	721	600	3,00	1,20	1,04
50	-20	853	659	3,28	1,29	1,12
50	-15	1.074	751	3,73	1,43	1,24
50	-10	1.321	848	4,21	1,56	1,35

55	-40	173	305	1,70	0,57	0,49
55	-35	272	389	2,05	0,70	0,60
55	-30	396	477	2,44	0,83	0,72
55	-25	546	568	2,85	0,96	0,83
55	-23,3	603	600	3,00	1,00	0,87
55	-20	721	663	3,30	1,09	0,94
55	-15	921	762	3,78	1,21	1,04
55	-10	1.147	865	4,30	1,33	1,15

60	-40	124	283	1,61	0,44	0,38
60	-35	202	373	1,99	0,54	0,47
60	-30	306	467	2,40	0,65	0,57
60	-25	434	566	2,84	0,77	0,66
60	-23,3	484	600	3,00	0,81	0,70
60	-20	588	667	3,32	0,88	0,76
60	-15	768	773	3,83	0,99	0,86
60	-10	973	883	4,39	1,10	0,95

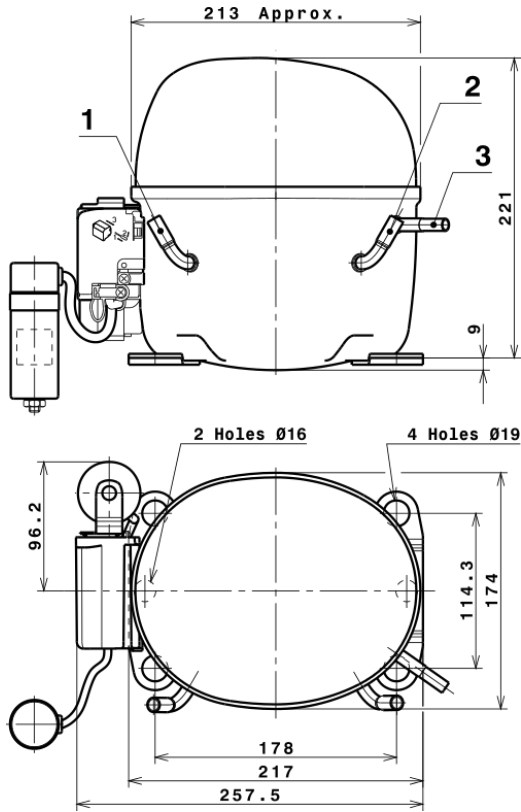
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.996,3943009308	765,2978668776	3,8917714676	87,999039642503
2	101,7876951331	8,2946016403	0,0561635080	2,5509229708415
3	-43,7851679566	6,3251533758	0,0311186053	-0,56058179531839
4	0,4797340290	0,0820119495	0,0007153416	0,018959520383529
5	-0,8545206554	0,2731197006	0,0012605800	-0,0091266928131803

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

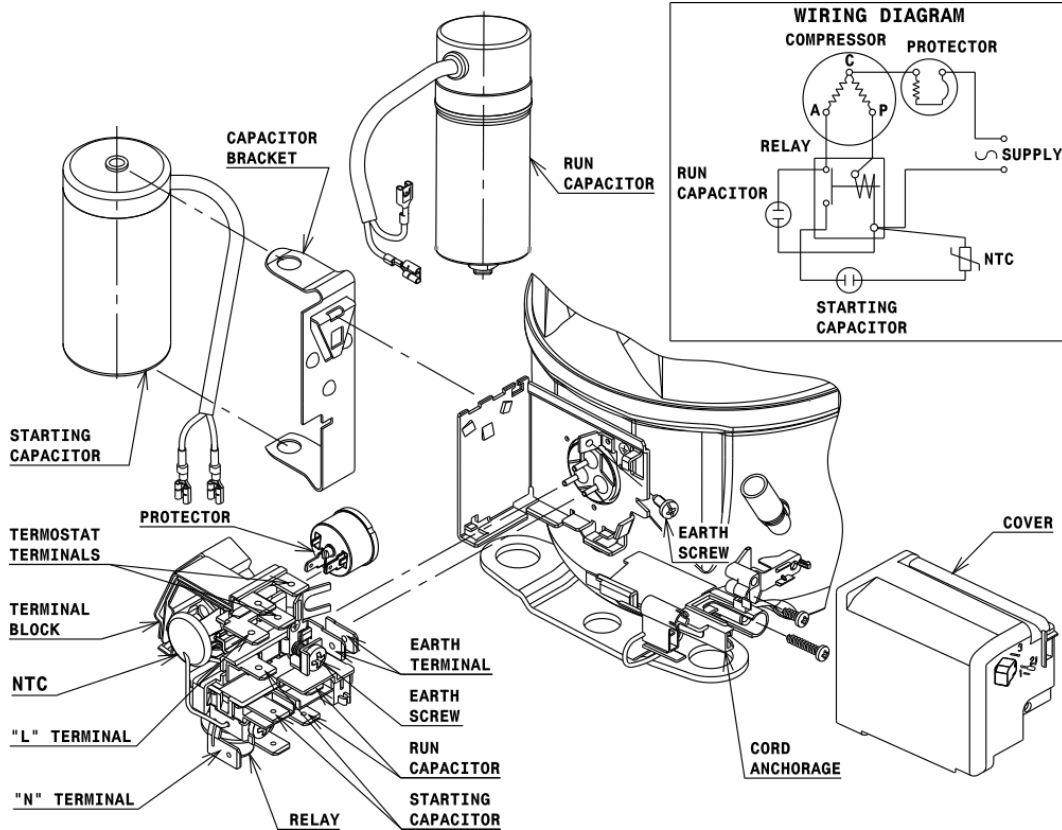
## COMPRESSOR DIMENSIONS



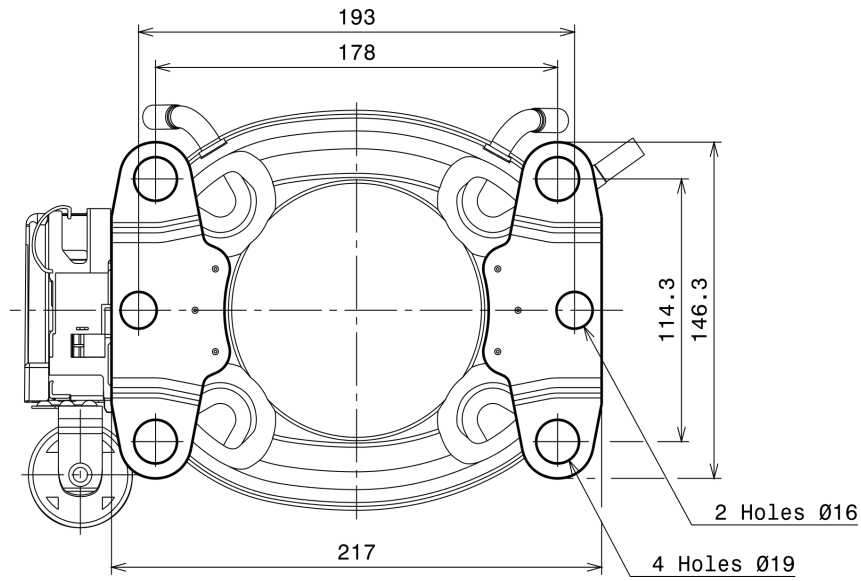
DESIGNATION	INTERNAL DIAM.
1 Service	9,7 mm
2 Suction	9,7 mm
3 Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC) (X range)



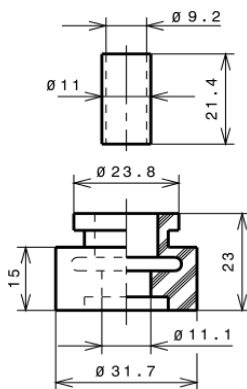
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

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



## SOA

SOA R404A LBP

