Technical Data Sheet

Compressor model **MX23FGa**

Voltage **200-220/220-230V 50/60Hz ~1**

Refrigerant **R404A**

APPLICATION

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

COMPRESSOR

Displacement	23,20 cm³
Diameter	34,93 mm
Stroke	24,20 mm
Net Weight	16,74 Kg
Oil type	ISO VG 32 ESTER
Oil charge	650 cm³

MOTOR

Nominal Power	7/8 hp
Voltage/Frequency	200-220V 50Hz
Voltage range	170-242 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	32,00 A
Max. Cont. Current (MCC)	7,20 A
Main W. resist. at 25ºC	2,27 Ω
Start W. resist. at 25ºC	6,49 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	915 kCal/h	718 W
COP	1,34 W/W	0,95 W/W
EER	1,15 kCal/Wh	0,82 kCal/Wh
Input Power	795 W	756 W
Current	4,70 A	4,53 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	88-108 µF 330 V			
Run capacitor	20 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 ºC			

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	413	503	3,46	0,95	0,82
40	-35	577	529	3,57	1,27	1,09
40	-30	779	565	3,72	1,60	1,38
40	-25	1.017	613	3,93	1,93	1,66
40	-23,3	1.107	632	4,01	2,04	1,75
40	-20	1.293	672	4,18	2,24	1,92
40	-15	1.605	742	4,47	2,52	2,16
40	-10	1.955	823	4,82	2,76	2,38
45	-40	375	490	3,41	0,89	0,77
45	-35	532	536	3,60	1,15	0,99
45	-30	725	593	3,84	1,42	1,22
45	-25	956	661	4,13	1,68	1,45
45	-23,3	1.043	686	4,24	1,77	1,52
45	-20	1.224	740	4,46	1,92	1,65
45	-15	1.528	829	4,85	2,14	1,84
45	-10	1.870	930	5,28	2,34	2,01
50	-40	338	478	3,35	0,82	0,71
50	-35	486	544	3,63	1,04	0,89
50	-30	672	620	3,96	1,26	1,08
50	-25	895	708	4,33	1,47	1,26
50	-23,3	979	741	4,47	1,54	1,32
50	-20	1.155	807	4,75	1,66	1,43
50	-15	1.451	917	5,22	1,84	1,58
50	-10	1.785	1.038	5,74	2,00	1,72
55	-40	300	465	3,30	0,75	0,65
55	-35	441	551	3,66	0,93	0,80
55	-30	619	648	4,07	1,11	0,95
55	-25	834	756	4,53	1,28	1,10
55	-23,3	915	795	4,70	1,34	1,15
55	-20	1.085	875	5,04	1,44	1,24
55	-15	1.374	1.004	5,60	1,59	1,37
55	-10	1.700	1.145	6,20	1,73	1,48
60	-40	263	453	3,25	0,67	0,58
60	-35	395	559	3,70	0,82	0,71
60	-30	565	675	4,19	0,97	0,84
60	-25	772	803	4,74	1,12	0,96
60	-23,3	851	849	4,93	1,17	1,00
60	-20	1.016	942	5,33	1,25	1,08
60	-15	1.297	1.092	5,97	1,38	1,19
60	-10	1.615	1.253	6,66	1,50	1,29

CECOMAF

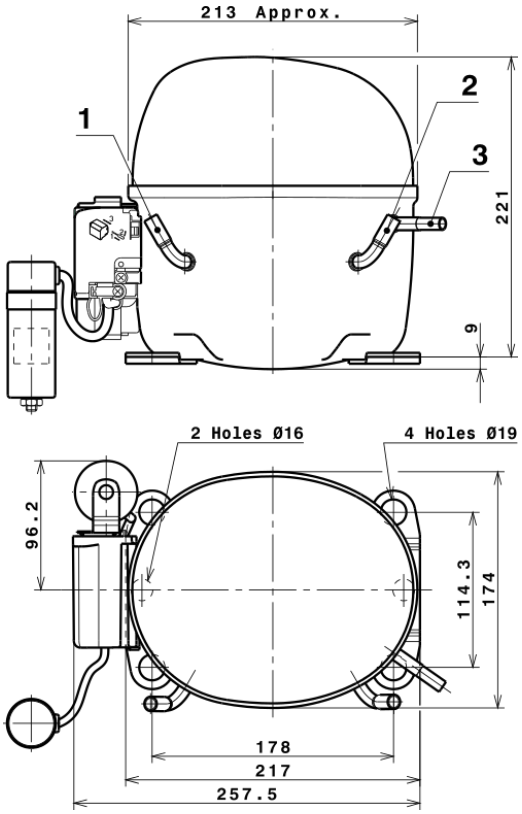
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	434	503	3,46	0,86	0,75
40	-35	629	529	3,57	1,19	1,03
40	-30	855	565	3,72	1,51	1,31
40	-25	1.112	613	3,93	1,81	1,57
40	-23,3	1.206	632	4,01	1,91	1,65
40	-20	1.400	672	4,18	2,08	1,80
40	-15	1.719	742	4,47	2,32	2,00
40	-10	2.068	823	4,82	2,51	2,17
45	-40	376	490	3,41	0,77	0,66
45	-35	546	536	3,60	1,02	0,88
45	-30	748	593	3,84	1,26	1,09
45	-25	981	661	4,13	1,48	1,28
45	-23,3	1.067	686	4,24	1,55	1,34
45	-20	1.244	740	4,46	1,68	1,45
45	-15	1.538	829	4,85	1,86	1,60
45	-10	1.864	930	5,28	2,00	1,73
50	-40	317	478	3,35	0,66	0,57
50	-35	464	544	3,63	0,85	0,74
50	-30	641	620	3,96	1,03	0,89
50	-25	849	708	4,33	1,20	1,04
50	-23,3	927	741	4,47	1,25	1,08
50	-20	1.088	807	4,75	1,35	1,17
50	-15	1.358	917	5,22	1,48	1,28
50	-10	1.659	1.038	5,74	1,60	1,38
55	-40	259	465	3,30	0,56	0,48
55	-35	381	551	3,66	0,69	0,60
55	-30	534	648	4,07	0,82	0,71
55	-25	718	756	4,53	0,95	0,82
55	-23,3	788	795	4,70	0,99	0,86
55	-20	933	875	5,04	1,07	0,92
55	-15	1.178	1.004	5,60	1,17	1,01
55	-10	1.455	1.145	6,20	1,27	1,10
60	-40	201	453	3,25	0,44	0,38
60	-35	299	559	3,70	0,54	0,46
60	-30	427	675	4,19	0,63	0,55
60	-25	587	803	4,74	0,73	0,63
60	-23,3	648	849	4,93	0,76	0,66
60	-20	777	942	5,33	0,82	0,71
60	-15	998	1.092	5,97	0,91	0,79
60	-10	1.250	1.253	6,66	1,00	0,86

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.828,0268416739	-164,6350763594	0,5793025834	104,5915165413
2	122,1226407710	-10,3131613912	-0,0432883012	3,0460607554745
3	-51,5475406858	30,2879982739	0,1301108106	-0,59702585332988
4	0,5853243902	0,2299678705	0,0010164645	0,023196304581239
5	-1,0008216918	0,8210837714	0,0035226381	-0,0096769848110464

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

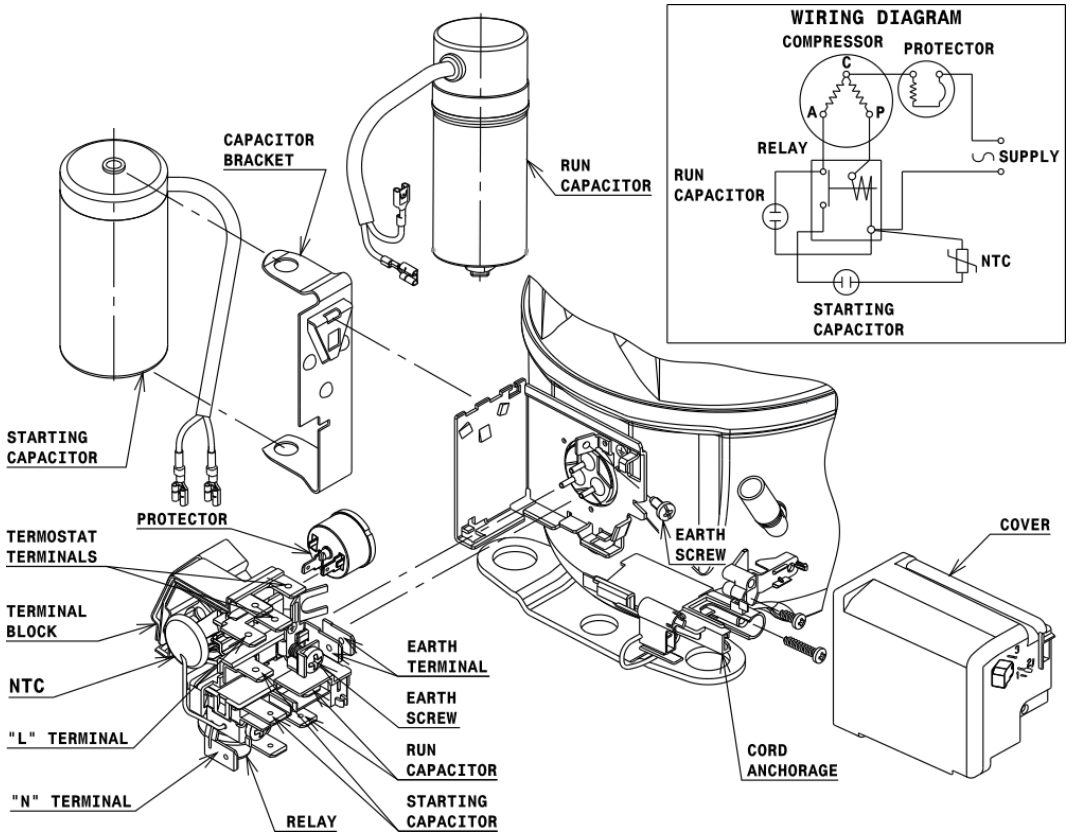
COMPRESSOR DIMENSIONS



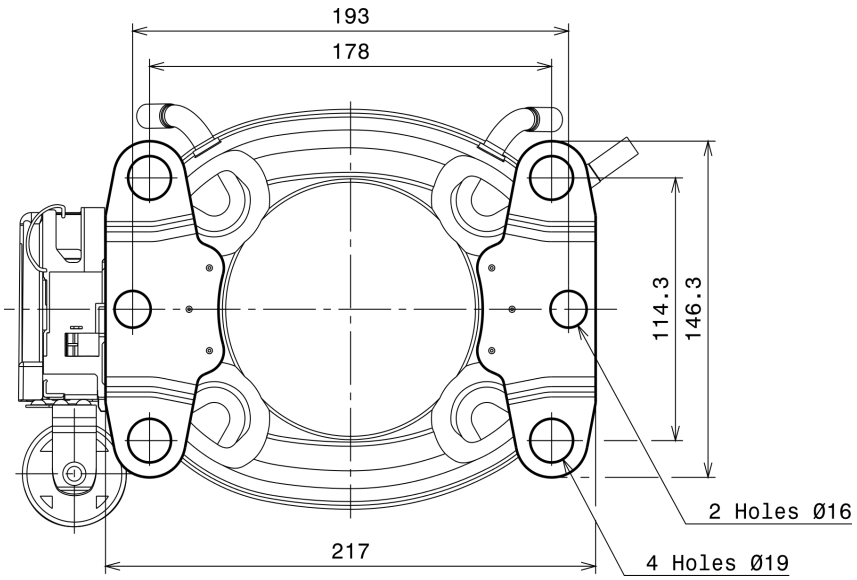
	DESIGNATION	INTERNAL DIAM.
1	Service	9,7 mm
2	Suction	9,7 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



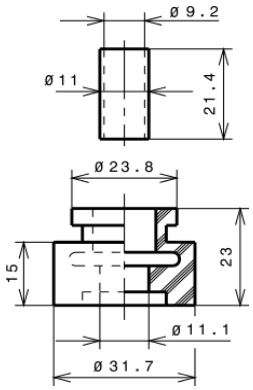
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (178x114.3 net)



SOA

SOA R404A LBP