

Technical Data Sheet

Compressor model **MX21FGa**
 Voltage **200-220/220-230V 50/60Hz ~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 20,72 cm³
 Diameter 34,93 mm
 Stroke 21,62 mm
 Net Weight 16,76 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 650 cm³

MOTOR

Nominal Power 3/4 hp
 Voltage/Frequency 200-220V 50Hz
 Voltage range 170-242 V
 Type CSR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 29,60 A
 Max. Cont. Current (MCC) 6,50 A
 Main W. resist. at 25°C 2,50 Ω
 Start W. resist. at 25°C 5,98 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	805 kCal/h	630 W
COP	1,35 W/W	0,96 W/W
EER	1,16 kCal/Wh	0,83 kCal/Wh
Input Power	693 W	657 W
Current	4,00 A	3,82 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °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	20 μF 420 V			
Relay	Option 1	Option 2		
Reference	2014 180. + NTC15Ω	QLZ 16.7A + NTC15Ω		
Pick-Up	16.70 A	16.70 A		
Drop-Out	14.00 A	14.00 A		
Protector	Option 1			
Reference	T0535			
Current	18,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	135,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	358	447	2,76	0,93	0,80
40	-35	509	516	3,11	1,15	0,99
40	-30	693	593	3,50	1,36	1,17
40	-25	911	678	3,92	1,56	1,34
40	-23,3	993	708	4,08	1,63	1,40
40	-20	1.162	770	4,39	1,76	1,51
40	-15	1.446	870	4,90	1,93	1,66
40	-10	1.763	977	5,45	2,10	1,80

45	-40	320	423	2,64	0,88	0,76
45	-35	464	498	3,02	1,08	0,93
45	-30	641	581	3,43	1,28	1,10
45	-25	851	671	3,89	1,48	1,27
45	-23,3	930	703	4,05	1,54	1,32
45	-20	1.094	769	4,38	1,66	1,42
45	-15	1.371	874	4,92	1,82	1,57
45	-10	1.680	987	5,50	1,98	1,70

50	-40	283	399	2,52	0,82	0,71
50	-35	419	480	2,92	1,02	0,87
50	-30	588	568	3,37	1,21	1,04
50	-25	791	664	3,85	1,39	1,19
50	-23,3	868	698	4,03	1,45	1,24
50	-20	1.027	767	4,38	1,56	1,34
50	-15	1.296	878	4,94	1,72	1,48
50	-10	1.598	997	5,55	1,86	1,60

55	-40	245	375	2,40	0,76	0,65
55	-35	374	461	2,83	0,94	0,81
55	-30	536	555	3,30	1,12	0,97
55	-25	731	657	3,82	1,29	1,11
55	-23,3	805	693	4,00	1,35	1,16
55	-20	959	766	4,37	1,46	1,25
55	-15	1.221	883	4,96	1,61	1,38
55	-10	1.515	1.007	5,60	1,75	1,50

60	-40	208	351	2,28	0,69	0,59
60	-35	329	443	2,74	0,86	0,74
60	-30	483	543	3,24	1,04	0,89
60	-25	671	650	3,78	1,20	1,03
60	-23,3	742	688	3,97	1,26	1,08
60	-20	892	765	4,36	1,36	1,17
60	-15	1.146	887	4,99	1,50	1,29
60	-10	1.433	1.017	5,65	1,64	1,41

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	375	447	2,76	0,84	0,72
40	-35	554	516	3,11	1,07	0,93
40	-30	760	593	3,50	1,28	1,11
40	-25	995	678	3,92	1,47	1,27
40	-23,3	1.081	708	4,08	1,53	1,32
40	-20	1.257	770	4,39	1,63	1,41
40	-15	1.546	870	4,90	1,78	1,54
40	-10	1.863	977	5,45	1,91	1,65

45	-40	320	423	2,64	0,76	0,65
45	-35	477	498	3,02	0,96	0,83
45	-30	661	581	3,43	1,14	0,98
45	-25	873	671	3,89	1,30	1,12
45	-23,3	951	703	4,05	1,35	1,17
45	-20	1.113	769	4,38	1,45	1,25
45	-15	1.380	874	4,92	1,58	1,36
45	-10	1.674	987	5,50	1,70	1,47

50	-40	266	399	2,52	0,67	0,58
50	-35	400	480	2,92	0,83	0,72
50	-30	562	568	3,37	0,99	0,86
50	-25	751	664	3,85	1,13	0,98
50	-23,3	822	698	4,03	1,18	1,02
50	-20	968	767	4,38	1,26	1,09
50	-15	1.213	878	4,94	1,38	1,19
50	-10	1.485	997	5,55	1,49	1,29

55	-40	212	375	2,40	0,56	0,49
55	-35	324	461	2,83	0,70	0,61
55	-30	463	555	3,30	0,83	0,72
55	-25	630	657	3,82	0,96	0,83
55	-23,3	693	693	4,00	1,00	0,86
55	-20	824	766	4,37	1,08	0,93
55	-15	1.047	883	4,96	1,19	1,02
55	-10	1.296	1.007	5,60	1,29	1,11

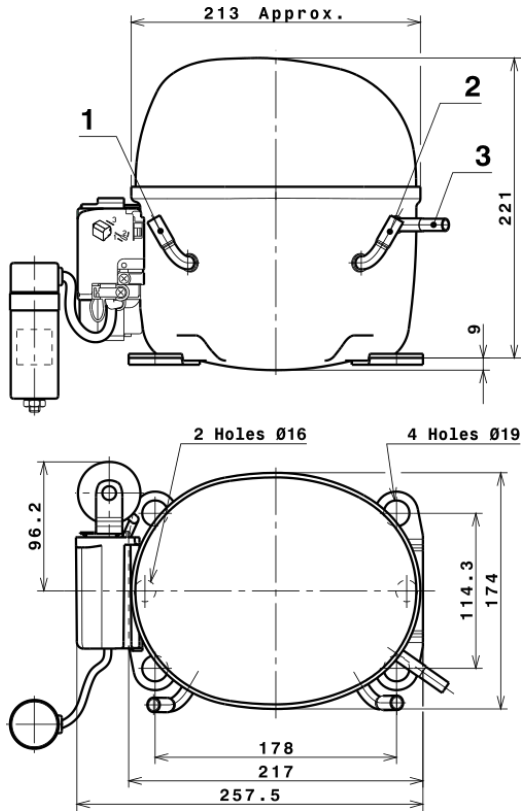
60	-40	157	351	2,28	0,45	0,39
60	-35	247	443	2,74	0,56	0,48
60	-30	364	543	3,24	0,67	0,58
60	-25	508	650	3,78	0,78	0,68
60	-23,3	564	688	3,97	0,82	0,71
60	-20	680	765	4,36	0,89	0,77
60	-15	880	887	4,99	0,99	0,86
60	-10	1.107	1.017	5,65	1,09	0,94

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.395,9487453346	1.074,9832872091	5,9613704769	95,89251285007
2	111,0511619266	17,0051885048	0,0888882036	2,7695655680726
3	-47,5109628787	4,3736781247	0,0222360938	-0,57645950401137
4	0,5233556543	0,1614827330	0,0008665493	0,020757610985128
5	-0,9195471692	0,2319988770	0,0011699053	-0,0091703189235223

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

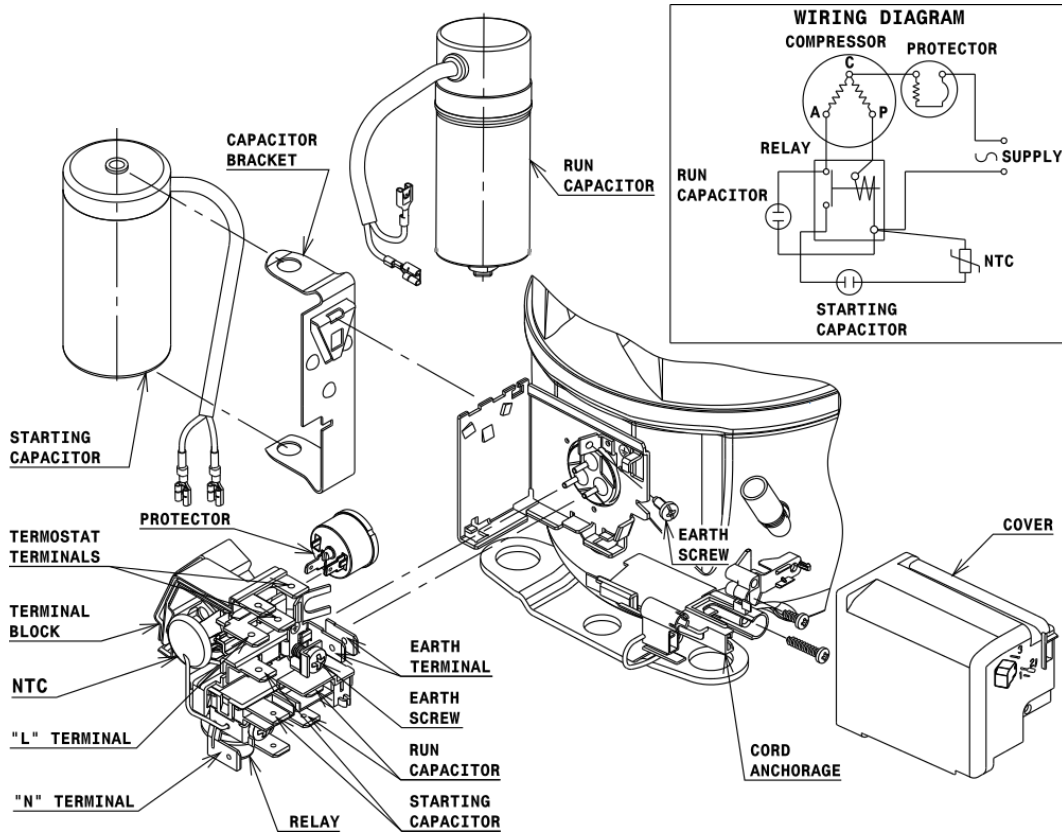


DESIGNATION INTERNAL DIAM.

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

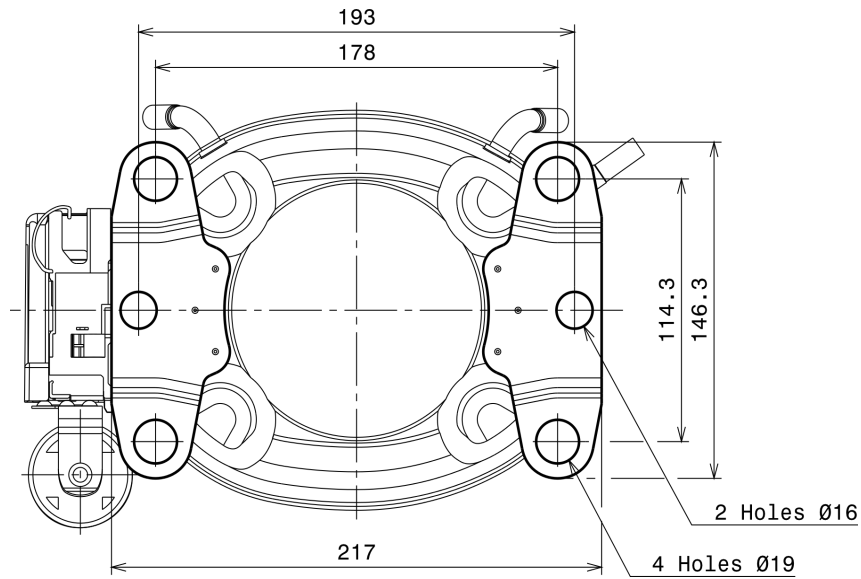
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



Technical Data Sheet

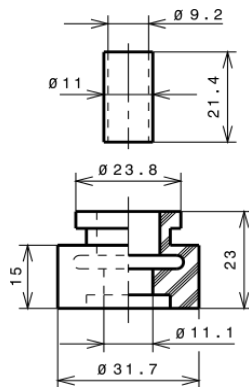
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

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



SOA

SOA R404A LBP

