

Technical Data Sheet

Compressor model **NX21FBa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION		COMPRESSOR		MOTOR	
Application	Low Back Pressure	Displacement	20,72 cm ³	Nominal Power	3/4 hp
Refrigerant	R290	Diameter	34,93 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-40,0 °C to -10,0 °C	Stroke	21,62 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	16,00 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	650 cm ³	Locked Rotor Amps (LRA)	24,00 A
				Max. Cont. Current (MCC)	6,50 A
				Main W. resist. at 25°C	3,04 Ω
				Start W. resist. at 25°C	7,10 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	780 kCal/h	675 W
COP	1,44 W/W	1,11 W/W
EER	1,24 kCal/Wh	0,96 kCal/Wh
Input Power	631 W	608 W
Current	3,16 A	3,05 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	72- 88 µF 330 V		
Run capacitor	16 µF 420 V		
Relay	Option 1		
Reference	2014 170. + NTC15Ω		
Pick-Up	12,10 A		
Drop-Out	10,30 A		
Protector	Option 1	Option 2	
Reference	MRA38134	T0348	
Current	15,80 A	15,40 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	

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	338	392	2,07	1,00	0,86
40	-35	470	440	2,28	1,24	1,07
40	-30	624	488	2,50	1,49	1,28
40	-25	802	535	2,72	1,74	1,50
40	-23,3	867	551	2,79	1,83	1,57
40	-20	1.002	583	2,94	2,00	1,72
40	-15	1.226	630	3,16	2,26	1,95
40	-10	1.473	678	3,37	2,53	2,17

45	-40	320	396	2,08	0,94	0,81
45	-35	448	451	2,33	1,16	0,99
45	-30	599	505	2,58	1,38	1,19
45	-25	774	559	2,83	1,61	1,38
45	-23,3	838	578	2,92	1,69	1,45
45	-20	971	614	3,08	1,84	1,58
45	-15	1.191	668	3,33	2,07	1,78
45	-10	1.435	722	3,58	2,31	1,99

50	-40	302	400	2,10	0,88	0,75
50	-35	426	461	2,38	1,08	0,92
50	-30	575	523	2,66	1,28	1,10
50	-25	746	584	2,94	1,49	1,28
50	-23,3	809	604	3,04	1,56	1,34
50	-20	940	645	3,22	1,70	1,46
50	-15	1.157	706	3,50	1,91	1,64
50	-10	1.398	767	3,78	2,12	1,82

55	-40	283	404	2,12	0,81	0,70
55	-35	405	472	2,43	1,00	0,86
55	-30	550	540	2,74	1,18	1,02
55	-25	718	608	3,05	1,37	1,18
55	-23,3	780	631	3,16	1,44	1,24
55	-20	909	676	3,37	1,56	1,34
55	-15	1.123	743	3,68	1,76	1,51
55	-10	1.360	811	3,99	1,95	1,68

60	-40	265	408	2,14	0,75	0,65
60	-35	383	483	2,48	0,92	0,79
60	-30	525	558	2,82	1,09	0,94
60	-25	690	632	3,17	1,27	1,09
60	-23,3	751	658	3,28	1,33	1,14
60	-20	878	707	3,51	1,44	1,24
60	-15	1.088	781	3,85	1,62	1,39
60	-10	1.323	856	4,20	1,80	1,55

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	366	392	2,07	0,93	0,81
40	-35	518	440	2,28	1,18	1,02
40	-30	692	488	2,50	1,42	1,23
40	-25	886	535	2,72	1,66	1,43
40	-23,3	957	551	2,79	1,74	1,50
40	-20	1.102	583	2,94	1,89	1,63
40	-15	1.340	630	3,16	2,13	1,84
40	-10	1.598	678	3,37	2,36	2,04

45	-40	333	396	2,08	0,84	0,73
45	-35	473	451	2,33	1,05	0,91
45	-30	634	505	2,58	1,25	1,08
45	-25	816	559	2,83	1,46	1,26
45	-23,3	883	578	2,92	1,53	1,32
45	-20	1.019	614	3,08	1,66	1,44
45	-15	1.244	668	3,33	1,86	1,61
45	-10	1.491	722	3,58	2,06	1,78

50	-40	300	400	2,10	0,75	0,65
50	-35	427	461	2,38	0,93	0,80
50	-30	576	523	2,66	1,10	0,95
50	-25	745	584	2,94	1,28	1,10
50	-23,3	808	604	3,04	1,34	1,15
50	-20	937	645	3,22	1,45	1,26
50	-15	1.149	706	3,50	1,63	1,41
50	-10	1.383	767	3,78	1,80	1,56

55	-40	267	404	2,12	0,66	0,57
55	-35	381	472	2,43	0,81	0,70
55	-30	517	540	2,74	0,96	0,83
55	-25	675	608	3,05	1,11	0,96
55	-23,3	733	631	3,16	1,16	1,00
55	-20	854	676	3,37	1,26	1,09
55	-15	1.054	743	3,68	1,42	1,22
55	-10	1.275	811	3,99	1,57	1,36

60	-40	233	408	2,14	0,57	0,49
60	-35	336	483	2,48	0,70	0,60
60	-30	459	558	2,82	0,82	0,71
60	-25	604	632	3,17	0,96	0,83
60	-23,3	659	658	3,28	1,00	0,87
60	-20	771	707	3,51	1,09	0,94
60	-15	959	781	3,85	1,23	1,06
60	-10	1.168	856	4,20	1,37	1,18

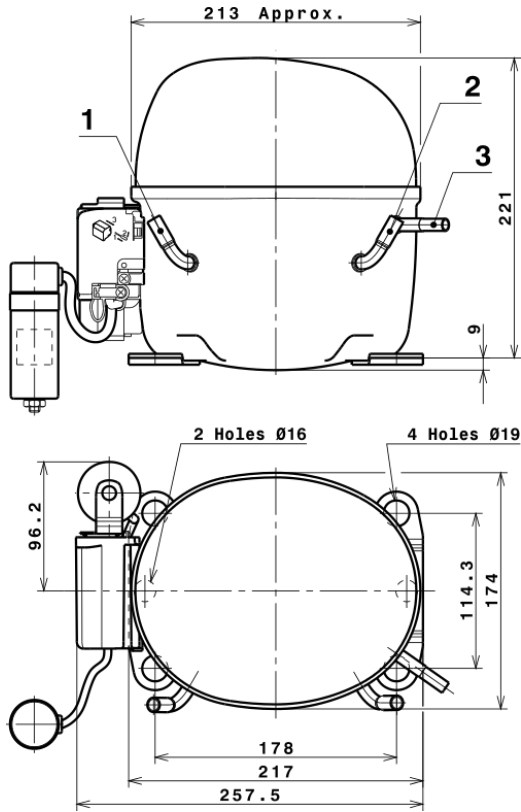
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.226,7346133022	316,8826404981	1,7085534976	30,105554596501
2	81,6727461626	-1,2508482651	-0,0054868284	0,8525487827921
3	-27,1624484173	11,8875262854	0,0549411246	-0,11047198928667
4	0,4167884034	0,0005530349	0,0000166891	0,0062131321677425
5	-0,5117782496	0,2767547445	0,0012802361	-0,0016306187346179

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

Technical Data Sheet

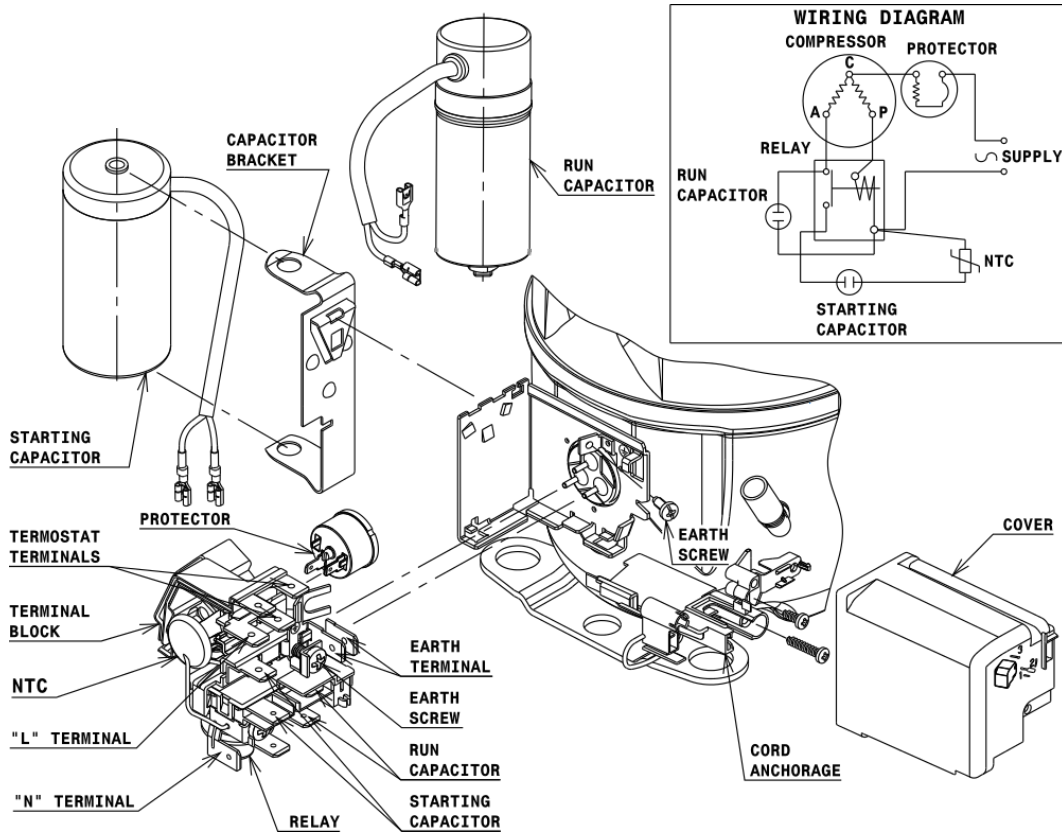
COMPRESSOR DIMENSIONS



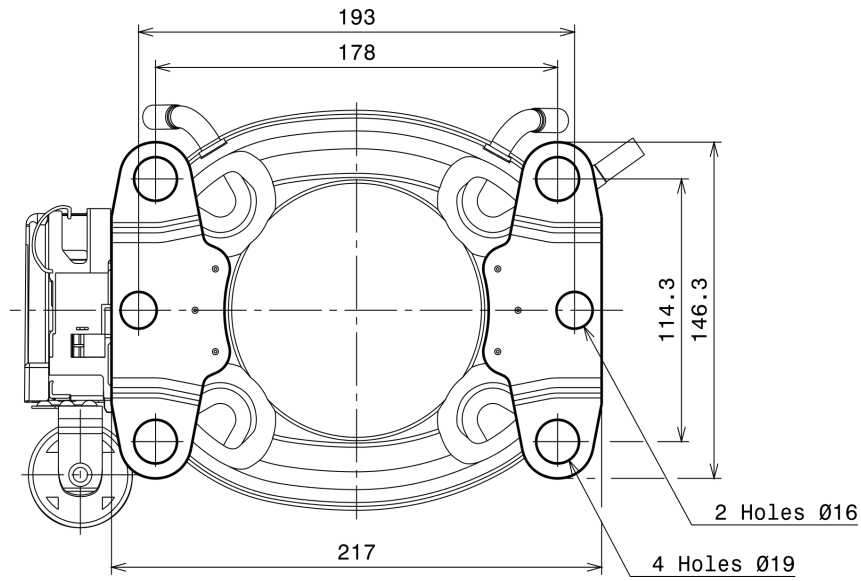
DESIGNATION	INTERNAL DIAM.
1 Service	9,7 mm
2 Suction	9,7 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



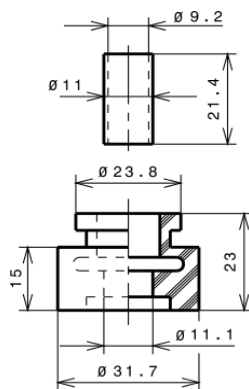
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

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



SOA

SOA R290 LBP

