

Technical Data Sheet

Compressor model **NX18FBa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

Application Low Back Pressure
 Refrigerant R290
 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 cm³
 Diameter 34,93 mm
 Stroke 19,20 mm
 Net Weight 16,41 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 650 cm³

MOTOR

Nominal Power 3/4 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-255 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	705 kCal/h	611 W
COP	1,44 W/W	1,11 W/W
EER	1,24 kCal/Wh	0,96 kCal/Wh
Input Power	569 W	548 W
Current	2,73 A	2,63 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	64- 77 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	T0268	MRA38138	
Current	15,00 A	15,30 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	299	341	1,72	1,02	0,88
40	-35	422	391	1,93	1,25	1,08
40	-30	564	438	2,14	1,50	1,29
40	-25	725	482	2,33	1,75	1,50
40	-23,3	784	497	2,40	1,83	1,58
40	-20	905	524	2,52	2,01	1,73
40	-15	1.104	563	2,70	2,28	1,96
40	-10	1.322	599	2,87	2,57	2,21

45	-40	285	345	1,74	0,96	0,83
45	-35	404	401	1,98	1,17	1,01
45	-30	543	454	2,21	1,39	1,20
45	-25	700	504	2,43	1,61	1,39
45	-23,3	758	521	2,51	1,69	1,45
45	-20	876	552	2,65	1,85	1,59
45	-15	1.071	597	2,86	2,09	1,79
45	-10	1.285	639	3,06	2,34	2,01

50	-40	272	349	1,75	0,90	0,78
50	-35	387	411	2,02	1,10	0,94
50	-30	521	470	2,28	1,29	1,11
50	-25	675	526	2,53	1,49	1,28
50	-23,3	731	545	2,62	1,56	1,34
50	-20	847	580	2,78	1,70	1,46
50	-15	1.038	631	3,02	1,91	1,65
50	-10	1.249	679	3,25	2,14	1,84

55	-40	258	353	1,77	0,85	0,73
55	-35	370	421	2,06	1,02	0,88
55	-30	500	486	2,35	1,20	1,03
55	-25	650	548	2,63	1,38	1,18
55	-23,3	705	569	2,73	1,44	1,24
55	-20	818	608	2,91	1,57	1,35
55	-15	1.006	665	3,19	1,76	1,51
55	-10	1.212	719	3,45	1,96	1,69

60	-40	245	357	1,79	0,80	0,68
60	-35	352	431	2,11	0,95	0,82
60	-30	479	502	2,42	1,11	0,95
60	-25	625	570	2,74	1,27	1,10
60	-23,3	679	593	2,84	1,33	1,14
60	-20	789	636	3,05	1,44	1,24
60	-15	973	699	3,35	1,62	1,39
60	-10	1.176	759	3,65	1,80	1,55

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	324	341	1,72	0,95	0,82
40	-35	465	391	1,93	1,19	1,03
40	-30	624	438	2,14	1,42	1,23
40	-25	800	482	2,33	1,66	1,43
40	-23,3	864	497	2,40	1,74	1,50
40	-20	994	524	2,52	1,90	1,64
40	-15	1.205	563	2,70	2,14	1,85
40	-10	1.434	599	2,87	2,39	2,07

45	-40	297	345	1,74	0,86	0,74
45	-35	426	401	1,98	1,06	0,92
45	-30	573	454	2,21	1,26	1,09
45	-25	737	504	2,43	1,46	1,26
45	-23,3	797	521	2,51	1,53	1,32
45	-20	919	552	2,65	1,66	1,44
45	-15	1.118	597	2,86	1,87	1,62
45	-10	1.335	639	3,06	2,09	1,80

50	-40	270	349	1,75	0,77	0,67
50	-35	387	411	2,02	0,94	0,81
50	-30	522	470	2,28	1,11	0,96
50	-25	674	526	2,53	1,28	1,11
50	-23,3	730	545	2,62	1,34	1,16
50	-20	844	580	2,78	1,45	1,26
50	-15	1.031	631	3,02	1,63	1,41
50	-10	1.236	679	3,25	1,82	1,57

55	-40	243	353	1,77	0,69	0,59
55	-35	348	421	2,06	0,83	0,71
55	-30	471	486	2,35	0,97	0,84
55	-25	611	548	2,63	1,11	0,96
55	-23,3	663	569	2,73	1,16	1,01
55	-20	769	608	2,91	1,26	1,09
55	-15	944	665	3,19	1,42	1,23
55	-10	1.137	719	3,45	1,58	1,37

60	-40	216	357	1,79	0,61	0,52
60	-35	309	431	2,11	0,72	0,62
60	-30	420	502	2,42	0,84	0,72
60	-25	548	570	2,74	0,96	0,83
60	-23,3	596	593	2,84	1,00	0,87
60	-20	694	636	3,05	1,09	0,94
60	-15	857	699	3,35	1,23	1,06
60	-10	1.038	759	3,65	1,37	1,18

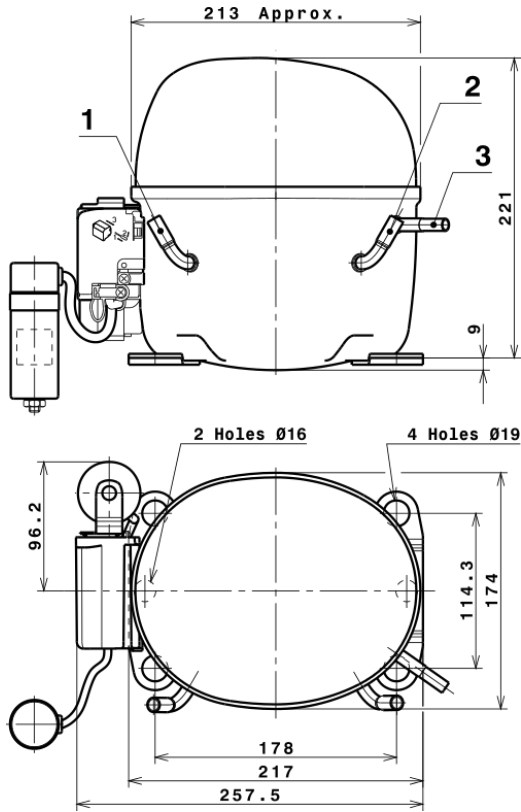
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.917,8163392484	254,2912980003	1,1941728086	27,342008014897
2	73,2598728273	-3,7022479948	-0,0144481825	0,76453257920659
3	-25,2248341880	10,6578662171	0,0524096077	-0,11116642141956
4	0,3413972610	-0,0541781206	-0,0001002008	0,0051291048066198
5	-0,4952374476	0,2460132428	0,0012235712	-0,0019534524469621

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

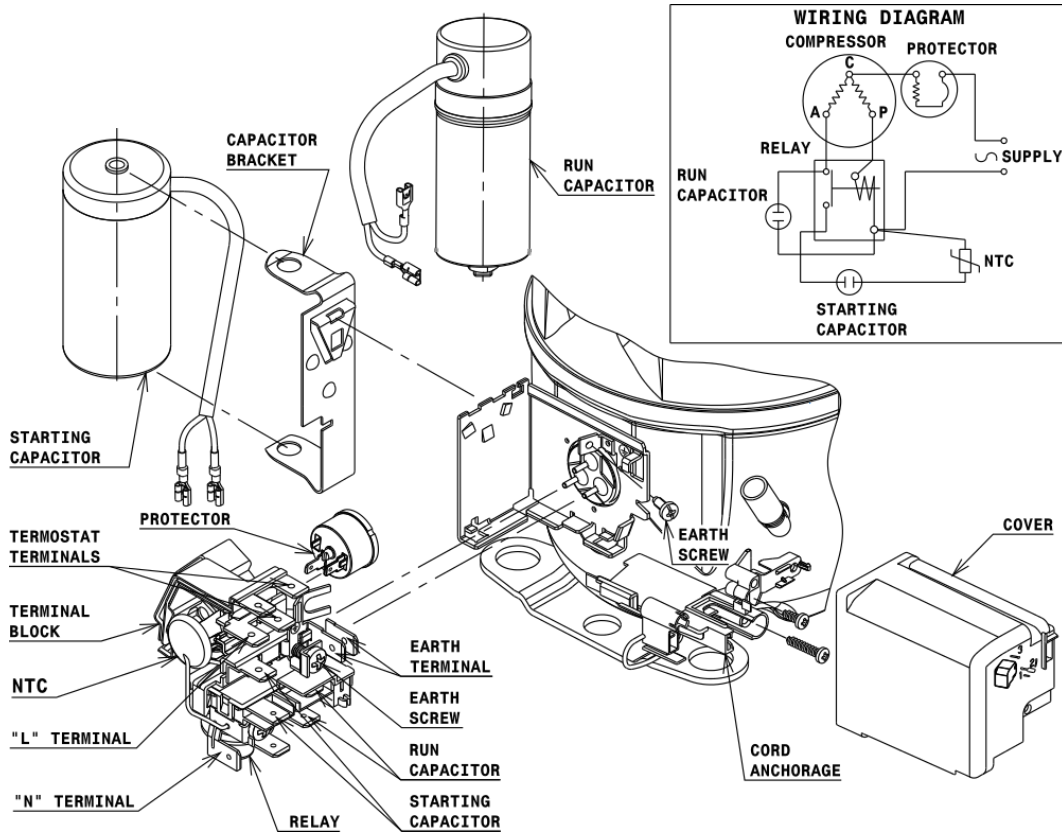
COMPRESSOR DIMENSIONS



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

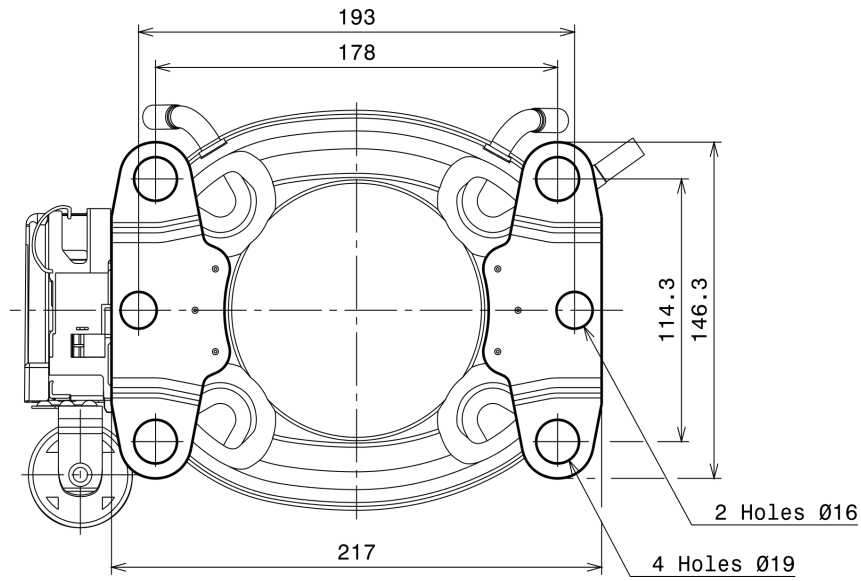
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



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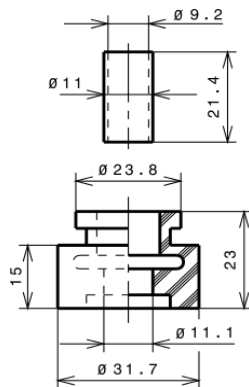
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (178x114.3 net)



SOA

SOA R290 LBP

