

Technical Data Sheet

Compressor model **NST26RA_T**
Voltage **220-240V 50Hz ~1**
Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	25,93 cm ³	Nominal Power	1 hp
Refrigerant	R290	Diameter	39,98 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	20,65 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	22,00 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	700 cm ³	Locked Rotor Amps (LRA)	44,80 A
				Max. Cont. Current (MCC)	9,00 A
				Main W. resist. at 25°C	1,65 Ω
				Start W. resist. at 25°C	4,90 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	3.008 kCal/h	2.931 W
COP	2,82 W/W	2,40 W/W
EER	2,42 kCal/Wh	2,07 kCal/Wh
Input Power	1.241 W	1.224 W
Current	6,42 A	6,34 A

TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	108-130 µF 330 V			
Run capacitor	20 µF 420 V			
Relay	Option 1			
Reference	3ARR3 10AS3			
Pick-Up	180-195 V			
Drop-Out	40-105 V			
Protector	Option 1			
Reference	T0260			
Current	22,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	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	-25	937	700	4,22	1,56	1,34
40	-20	1.238	772	4,49	1,87	1,60
40	-15	1.585	836	4,74	2,21	1,90
40	-10	1.980	892	4,96	2,58	2,22
40	-5	2.422	940	5,15	3,00	2,58
40	0	2.912	980	5,31	3,46	2,97
40	5	3.450	1.012	5,44	3,96	3,41
40	7,2	3.701	1.024	5,49	4,21	3,62
40	10	4.034	1.036	5,54	4,53	3,89

45	-25	855	705	4,24	1,41	1,21
45	-20	1.132	788	4,55	1,67	1,44
45	-15	1.456	862	4,84	1,96	1,69
45	-10	1.828	929	5,10	2,29	1,97
45	-5	2.248	987	5,34	2,65	2,28
45	0	2.714	1.037	5,55	3,04	2,62
45	5	3.229	1.080	5,72	3,48	2,99
45	7,2	3.470	1.096	5,79	3,68	3,17
45	10	3.790	1.114	5,87	3,96	3,40

50	-25	773	711	4,26	1,26	1,09
50	-20	1.026	803	4,61	1,49	1,28
50	-15	1.328	888	4,94	1,74	1,49
50	-10	1.677	965	5,25	2,02	1,74
50	-5	2.073	1.034	5,53	2,33	2,00
50	0	2.517	1.095	5,79	2,67	2,30
50	5	3.008	1.148	6,01	3,05	2,62
50	7,2	3.239	1.169	6,10	3,22	2,77
50	10	3.546	1.193	6,21	3,46	2,97

55	-25	690	716	4,28	1,12	0,96
55	-20	921	819	4,67	1,31	1,12
55	-15	1.199	915	5,05	1,52	1,31
55	-10	1.525	1.002	5,40	1,77	1,52
55	-5	1.898	1.081	5,73	2,04	1,76
55	0	2.319	1.153	6,03	2,34	2,01
55	5	2.787	1.216	6,31	2,67	2,29
55	7,2	3.008	1.241	6,42	2,82	2,42
55	10	3.303	1.271	6,55	3,02	2,60

60	-25	608	722	4,30	0,98	0,84
60	-20	815	835	4,73	1,14	0,98
60	-15	1.071	941	5,15	1,32	1,14
60	-10	1.373	1.039	5,55	1,54	1,32
60	-5	1.723	1.128	5,93	1,78	1,53
60	0	2.121	1.210	6,28	2,04	1,75
60	5	2.566	1.284	6,61	2,33	2,00
60	7,2	2.777	1.314	6,74	2,46	2,11
60	10	3.059	1.349	6,91	2,64	2,27

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	1.008	703	4,23	1,43	1,24
40	-20	1.334	776	4,51	1,72	1,49
40	-15	1.710	840	4,75	2,03	1,76
40	-10	2.135	897	4,98	2,38	2,06
40	-5	2.610	946	5,17	2,76	2,38
40	0	3.134	986	5,33	3,18	2,75
40	5	3.708	1.019	5,47	3,64	3,15
40	7,2	3.976	1.030	5,52	3,86	3,33
40	10	4.332	1.043	5,57	4,15	3,59

45	-25	915	709	4,25	1,29	1,11
45	-20	1.213	792	4,57	1,53	1,32
45	-15	1.561	867	4,86	1,80	1,56
45	-10	1.959	934	5,12	2,10	1,81
45	-5	2.406	993	5,36	2,42	2,09
45	0	2.903	1.044	5,57	2,78	2,40
45	5	3.449	1.087	5,75	3,17	2,74
45	7,2	3.705	1.103	5,82	3,36	2,90
45	10	4.045	1.122	5,90	3,61	3,11

50	-25	821	714	4,27	1,15	0,99
50	-20	1.092	808	4,63	1,35	1,17
50	-15	1.413	893	4,96	1,58	1,37
50	-10	1.783	971	5,27	1,84	1,59
50	-5	2.202	1.040	5,56	2,12	1,83
50	0	2.671	1.102	5,82	2,42	2,09
50	5	3.190	1.155	6,05	2,76	2,39
50	7,2	3.434	1.176	6,14	2,92	2,52
50	10	3.758	1.201	6,24	3,13	2,70

55	-25	728	720	4,29	1,01	0,87
55	-20	971	824	4,69	1,18	1,02
55	-15	1.264	920	5,07	1,37	1,19
55	-10	1.606	1.008	5,42	1,59	1,38
55	-5	1.998	1.088	5,76	1,84	1,59
55	0	2.440	1.160	6,06	2,10	1,82
55	5	2.931	1.224	6,34	2,40	2,07
55	7,2	3.163	1.249	6,46	2,53	2,19
55	10	3.472	1.280	6,59	2,71	2,34

60	-25	634	725	4,32	0,87	0,76
60	-20	850	840	4,75	1,01	0,87
60	-15	1.115	946	5,17	1,18	1,02
60	-10	1.430	1.045	5,58	1,37	1,18
60	-5	1.795	1.135	5,96	1,58	1,37
60	0	2.209	1.218	6,32	1,81	1,57
60	5	2.672	1.292	6,65	2,07	1,79
60	7,2	2.892	1.322	6,78	2,19	1,89
60	10	3.185	1.358	6,95	2,34	2,03

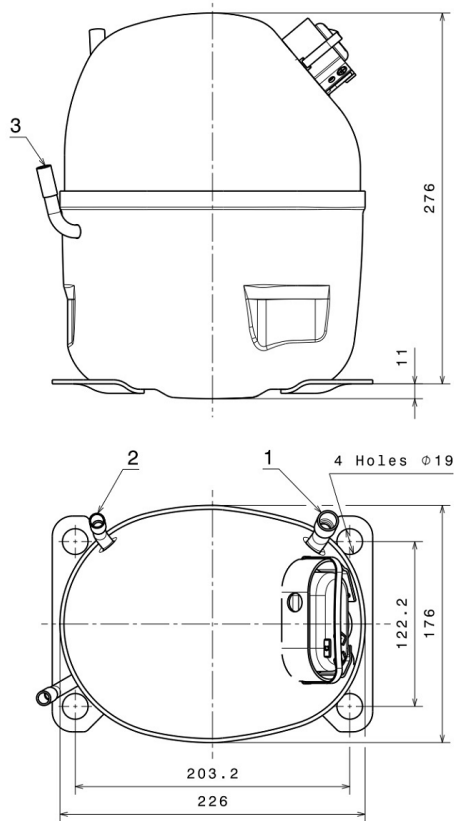
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.992,3541658346	535,8197450081	3,3286240956	45,121482596153
2	154,3824645798	-9,4706841739	-0,0431381677	1,5259750623948
3	-47,6116640077	11,9159886403	0,0521141414	-0,21555707665033
4	0,9729644618	-0,1575102116	-0,0004542764	0,015565072097399
5	-1,1520047992	0,4313881489	0,0019151355	-0,0034120568600469

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

COMPRESSOR DIMENSIONS

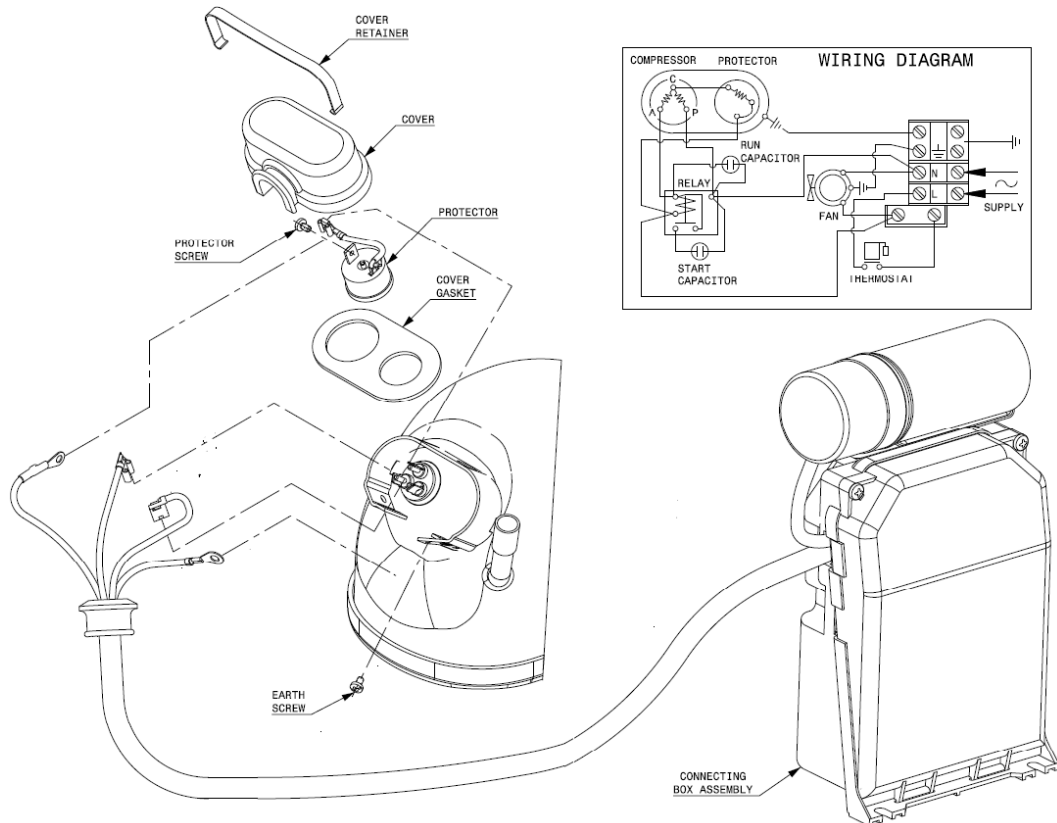


DESIGNATION INTERNAL DIAM.

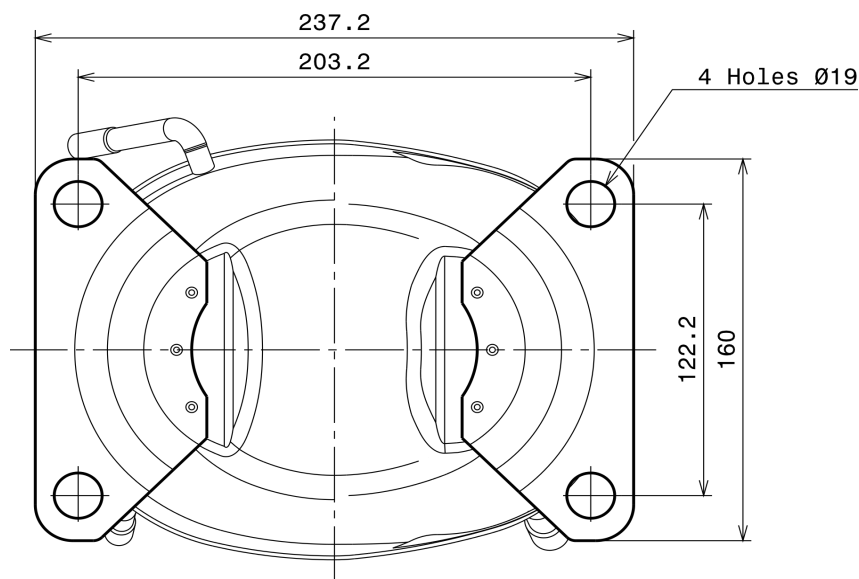
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (NS Range)



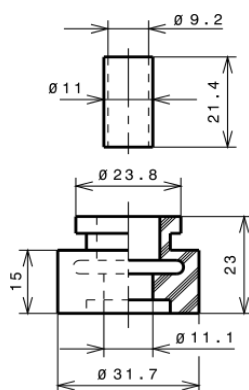
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R290 HMBP

