

Technical Data Sheet

Compressor model **NUG100NA**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**
 Compressor status

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure	Displacement	10,50 cm ³	Voltage/Frequency	220-240V 50Hz
Refrigerant	R290	Diameter	0,00 mm	Voltage range	187-255 V
Evaporating Temp.	-35,0 °C to 0,0 °C	Stroke	0,00 mm	Type	CSR
Expansion	Capillar/Valve	Net Weight	12,40 Kg	Phase number	1 PH
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Locked Rotor Amps (LRA)	15,70 A
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Max. Cont. Current (MCC)	3,40 A
		HP	3/8 hp	Main W. resist. at 25°C	6,53 Ω
				Start W. resist. at 25°C	21,33 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	420 kCal/h	363 W
COP	1,56 W/W	1,20 W/W
EER	1,34 kCal/Wh	1,04 kCal/Wh
Input Power	314 W	303 W
Current	1,61 A	1,56 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (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	60-61 µF 330 V		
Run capacitor	6 µF 400 V		
Relay	Option 1		
Reference	QLZ 7.8A + NTC151©		
Pick-Up	7,80 A		
Drop-Out	6,65 A		
Protector	Option 1		
Reference	B96-105		
Current	9,60 A		
Time check	7,5-16 seg		
Disc temp. (Open/Close)	115,00 / 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	201	199	1,13	1,17	1,01
40	-35	265	224	1,23	1,38	1,19
40	-30	345	248	1,33	1,62	1,39
40	-25	441	273	1,44	1,88	1,62
40	-23,3	477	282	1,47	1,97	1,69
40	-20	552	298	1,54	2,16	1,85
40	-15	679	323	1,65	2,44	2,10
40	-10	822	348	1,76	2,74	2,36
40	-5	980	374	1,87	3,05	2,62
40	0	1.155	400	1,99	3,36	2,89

45	-40	188	200	1,13	1,09	0,94
45	-35	251	227	1,24	1,28	1,10
45	-30	329	255	1,36	1,50	1,29
45	-25	423	283	1,48	1,74	1,49
45	-23,3	458	292	1,52	1,82	1,57
45	-20	532	311	1,60	1,99	1,71
45	-15	657	339	1,72	2,26	1,94
45	-10	798	367	1,84	2,53	2,17
45	-5	955	395	1,97	2,81	2,41
45	0	1.127	424	2,10	3,09	2,66

50	-40	175	201	1,14	1,01	0,87
50	-35	236	231	1,26	1,18	1,02
50	-30	312	262	1,39	1,39	1,19
50	-25	404	293	1,52	1,61	1,38
50	-23,3	439	303	1,56	1,68	1,45
50	-20	512	324	1,65	1,84	1,58
50	-15	635	355	1,79	2,08	1,79
50	-10	774	386	1,92	2,33	2,01
50	-5	929	417	2,06	2,59	2,23
50	0	1.100	449	2,21	2,85	2,45

55	-40	162	202	1,14	0,93	0,80
55	-35	221	235	1,28	1,09	0,94
55	-30	295	269	1,42	1,28	1,10
55	-25	386	303	1,56	1,48	1,28
55	-23,3	420	314	1,61	1,56	1,34
55	-20	492	336	1,71	1,70	1,46
55	-15	613	370	1,86	1,93	1,66
55	-10	750	404	2,01	2,16	1,86
55	-5	903	439	2,16	2,40	2,06
55	0	1.072	473	2,32	2,64	2,27

60	-40	149	203	1,14	0,85	0,73
60	-35	206	239	1,29	1,00	0,86
60	-30	279	276	1,45	1,18	1,01
60	-25	367	312	1,60	1,37	1,18
60	-23,3	401	325	1,66	1,44	1,23
60	-20	471	349	1,76	1,57	1,35
60	-15	591	386	1,93	1,78	1,53
60	-10	727	423	2,09	2,00	1,72
60	-5	878	460	2,26	2,22	1,91
60	0	1.045	498	2,43	2,44	2,10

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	217	199	1,13	1,09	0,94
40	-35	296	224	1,23	1,32	1,14
40	-30	389	248	1,33	1,57	1,35
40	-25	497	273	1,44	1,82	1,57
40	-23,3	537	282	1,47	1,91	1,65
40	-20	619	298	1,54	2,08	1,79
40	-15	756	323	1,65	2,34	2,02
40	-10	907	348	1,76	2,60	2,25
40	-5	1.072	374	1,87	2,87	2,48
40	0	1.252	400	1,99	3,14	2,71

45	-40	196	200	1,13	0,98	0,85
45	-35	267	227	1,24	1,17	1,01
45	-30	352	255	1,36	1,38	1,19
45	-25	452	283	1,48	1,60	1,38
45	-23,3	490	292	1,52	1,67	1,45
45	-20	567	311	1,60	1,82	1,58
45	-15	696	339	1,72	2,05	1,77
45	-10	839	367	1,84	2,29	1,97
45	-5	997	395	1,97	2,52	2,18
45	0	1.169	424	2,10	2,76	2,38

50	-40	174	201	1,14	0,87	0,75
50	-35	237	231	1,26	1,03	0,89
50	-30	315	262	1,39	1,20	1,04
50	-25	408	293	1,52	1,39	1,20
50	-23,3	442	303	1,56	1,46	1,26
50	-20	514	324	1,65	1,59	1,37
50	-15	635	355	1,79	1,79	1,55
50	-10	771	386	1,92	2,00	1,73
50	-5	921	417	2,06	2,21	1,91
50	0	1.086	449	2,21	2,42	2,09

55	-40	153	202	1,14	0,76	0,65
55	-35	208	235	1,28	0,88	0,76
55	-30	278	269	1,42	1,04	0,89
55	-25	363	303	1,56	1,20	1,04
55	-23,3	395	314	1,61	1,26	1,09
55	-20	462	336	1,71	1,37	1,19
55	-15	575	370	1,86	1,55	1,34
55	-10	703	404	2,01	1,74	1,50
55	-5	846	439	2,16	1,93	1,67
55	0	1.003	473	2,32	2,12	1,83

60	-40	131	203	1,14	0,65	0,56
60	-35	179	239	1,29	0,75	0,65
60	-30	241	276	1,45	0,88	0,76
60	-25	318	312	1,60	1,02	0,88
60	-23,3	348	325	1,66	1,07	0,92
60	-20	409	349	1,76	1,17	1,01
60	-15	515	386	1,93	1,33	1,15
60	-10	635	423	2,09	1,50	1,30
60	-5	770	460	2,26	1,67	1,45
60	0	919	498	2,43	1,85	1,60

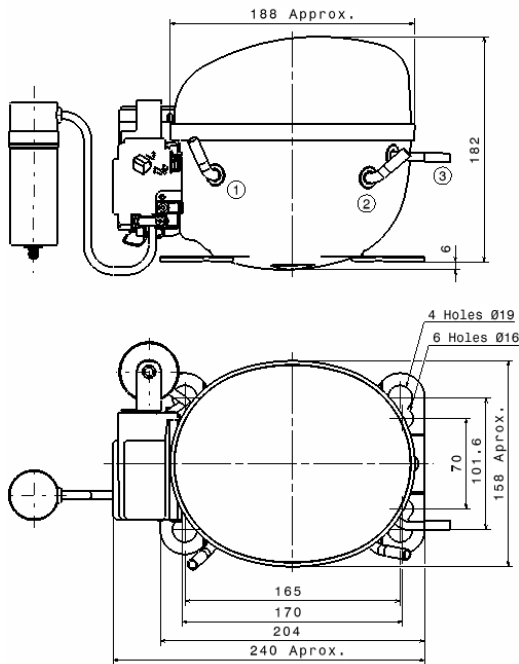
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.917,3738880896	208,9519968562	1,1062641337	17,479385767961
2	49,6018587076	0,5280219514	0,0025842494	0,51399904845201
3	-17,1313489766	5,0312765828	0,0231360311	-0,070127264417575
4	0,2827564922	0,0045674823	0,0000681384	0,004254550097533
5	-0,3202651085	0,1206735614	0,0005574978	-0,00095847787525381

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

COMPRESSOR DIMENSIONS

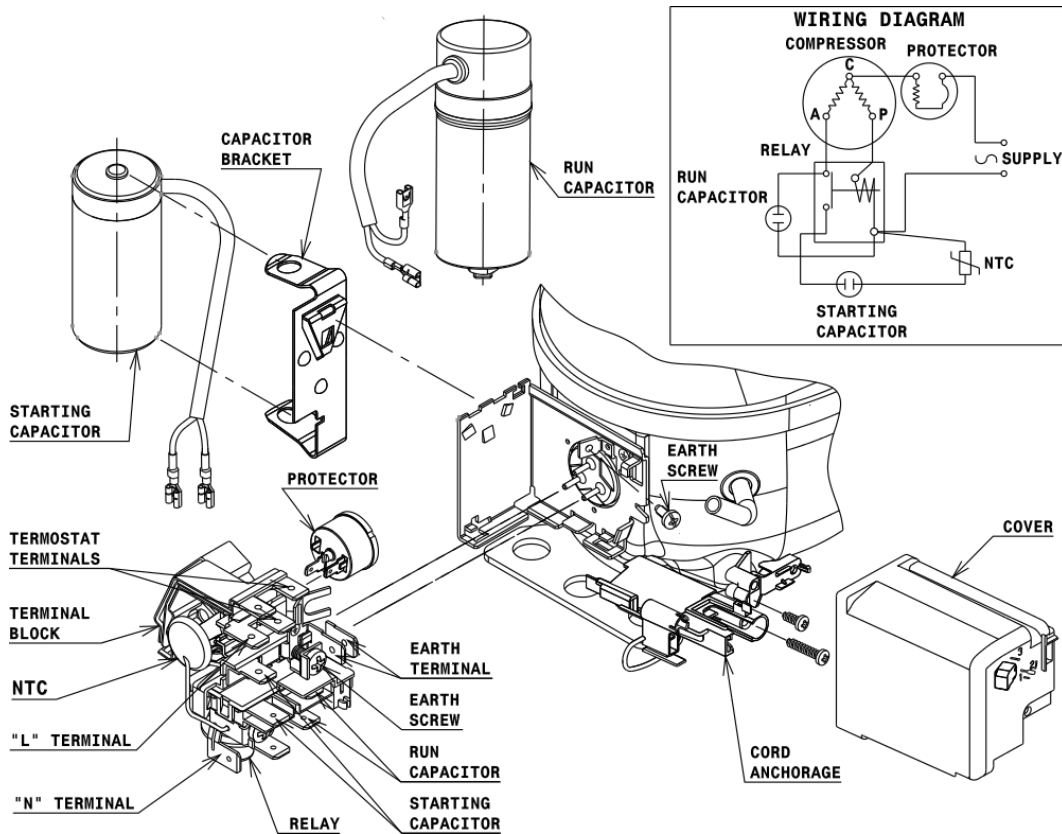


DESIGNATION INTERNAL DIAM.

1	Service	8,1 mm
2	Suction	8,1 mm
3	Discharge	6,5 mm

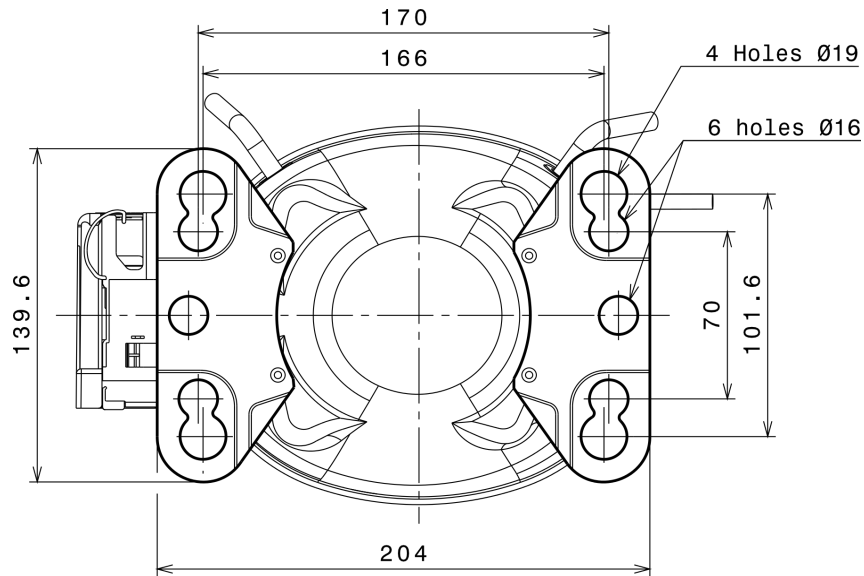
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



Technical Data Sheet

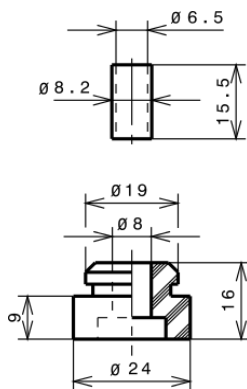
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

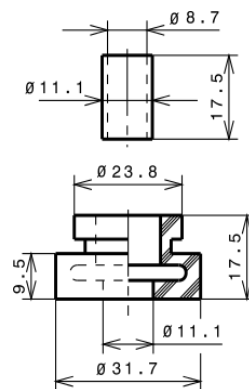
STANDARD

Ø16 holes (170x70 net)



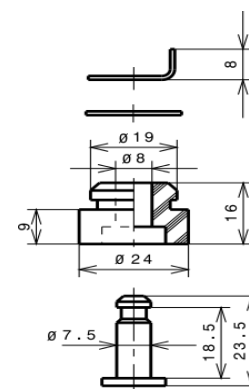
AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP

