

Technical Data Sheet

Compressor model **NUY80NGa**
 Voltage **220-240/230V 50/60Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure	Displacement	8,10 cm ³	Nominal Power	1/4 hp
Refrigerant	R290	Diameter	24,30 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-40,0 °C to 0,0 °C	Stroke	17,50 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,85 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Locked Rotor Amps (LRA)	12,30 A
				Max. Cont. Current (MCC)	3,10 A
				Main W. resist. at 25°C	8,37 Ω
				Start W. resist. at 25°C	13,10 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	348 kCal/h	303 W
COP	1,46 W/W	1,13 W/W
EER	1,25 kCal/Wh	0,97 kCal/Wh
Input Power	278 W	268 W
Current	1,82 A	1,79 A

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	64- 77 µF 330 V			
Relay	Option 1	Option 2		
Reference	2014 145.	QLZ-7.1A		
Pick-Up	7,10 A	7,10 A		
Drop-Out	6,00 A	6,00 A		
Protector	Option 1			
Reference	B90-105			
Current	9,40 A			
Time check	7,5-16 seg			
Disc temp. (Open/Close)	110,00 / 62,00 °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	174	185	1,59	1,10	0,94
40	-35	221	204	1,63	1,25	1,08
40	-30	280	224	1,68	1,45	1,25
40	-25	352	244	1,72	1,68	1,44
40	-23,3	380	251	1,74	1,76	1,51
40	-20	437	264	1,78	1,93	1,66
40	-15	535	283	1,84	2,20	1,89
40	-10	646	302	1,90	2,48	2,14
40	-5	769	321	1,97	2,78	2,39
40	0	906	341	2,04	3,09	2,66

45	-40	167	184	1,59	1,06	0,91
45	-35	213	207	1,64	1,19	1,03
45	-30	271	230	1,69	1,37	1,18
45	-25	342	252	1,75	1,58	1,36
45	-23,3	369	260	1,77	1,65	1,42
45	-20	426	275	1,81	1,80	1,55
45	-15	523	297	1,88	2,05	1,76
45	-10	632	319	1,96	2,30	1,98
45	-5	755	341	2,04	2,57	2,21
45	0	890	363	2,13	2,85	2,45

50	-40	160	184	1,59	1,01	0,87
50	-35	204	209	1,64	1,14	0,98
50	-30	262	235	1,70	1,30	1,11
50	-25	332	260	1,77	1,48	1,27
50	-23,3	359	269	1,79	1,55	1,33
50	-20	415	286	1,84	1,69	1,45
50	-15	510	311	1,93	1,91	1,64
50	-10	619	336	2,02	2,14	1,84
50	-5	740	361	2,12	2,39	2,05
50	0	875	386	2,23	2,64	2,27

55	-40	153	183	1,59	0,97	0,84
55	-35	196	212	1,65	1,08	0,93
55	-30	253	240	1,71	1,22	1,05
55	-25	322	268	1,79	1,39	1,20
55	-23,3	348	278	1,82	1,46	1,25
55	-20	403	297	1,88	1,58	1,36
55	-15	498	325	1,98	1,78	1,53
55	-10	606	353	2,08	2,00	1,72
55	-5	726	380	2,20	2,22	1,91
55	0	859	408	2,33	2,45	2,11

60	-40	146	183	1,59	0,93	0,80
60	-35	188	214	1,65	1,02	0,88
60	-30	243	245	1,73	1,15	0,99
60	-25	311	277	1,82	1,31	1,13
60	-23,3	337	287	1,85	1,37	1,18
60	-20	392	308	1,92	1,48	1,28
60	-15	486	339	2,03	1,67	1,44
60	-10	592	369	2,15	1,86	1,60
60	-5	711	400	2,29	2,07	1,78
60	0	844	431	2,44	2,28	1,96

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	189	185	1,59	1,02	0,88
40	-35	247	204	1,63	1,21	1,04
40	-30	316	224	1,68	1,41	1,22
40	-25	398	244	1,72	1,63	1,41
40	-23,3	428	251	1,74	1,71	1,48
40	-20	491	264	1,78	1,86	1,61
40	-15	596	283	1,84	2,11	1,82
40	-10	714	302	1,90	2,36	2,04
40	-5	842	321	1,97	2,62	2,26
40	0	983	341	2,04	2,89	2,50

45	-40	174	184	1,59	0,94	0,82
45	-35	226	207	1,64	1,09	0,94
45	-30	290	230	1,69	1,26	1,09
45	-25	366	252	1,75	1,45	1,25
45	-23,3	395	260	1,77	1,52	1,31
45	-20	454	275	1,81	1,65	1,43
45	-15	553	297	1,88	1,86	1,61
45	-10	665	319	1,96	2,08	1,80
45	-5	788	341	2,04	2,31	2,00
45	0	923	363	2,13	2,54	2,20

50	-40	159	184	1,59	0,87	0,75
50	-35	206	209	1,64	0,98	0,85
50	-30	264	235	1,70	1,12	0,97
50	-25	334	260	1,77	1,28	1,11
50	-23,3	361	269	1,79	1,34	1,16
50	-20	416	286	1,84	1,46	1,26
50	-15	510	311	1,93	1,64	1,42
50	-10	616	336	2,02	1,83	1,59
50	-5	734	361	2,12	2,03	1,76
50	0	863	386	2,23	2,24	1,94

55	-40	144	183	1,59	0,79	0,68
55	-35	185	212	1,65	0,87	0,76
55	-30	238	240	1,71	0,99	0,86
55	-25	303	268	1,79	1,13	0,97
55	-23,3	327	278	1,82	1,18	1,02
55	-20	379	297	1,88	1,28	1,10
55	-15	467	325	1,98	1,44	1,24
55	-10	568	353	2,08	1,61	1,39
55	-5	680	380	2,20	1,79	1,54
55	0	803	408	2,33	1,97	1,70

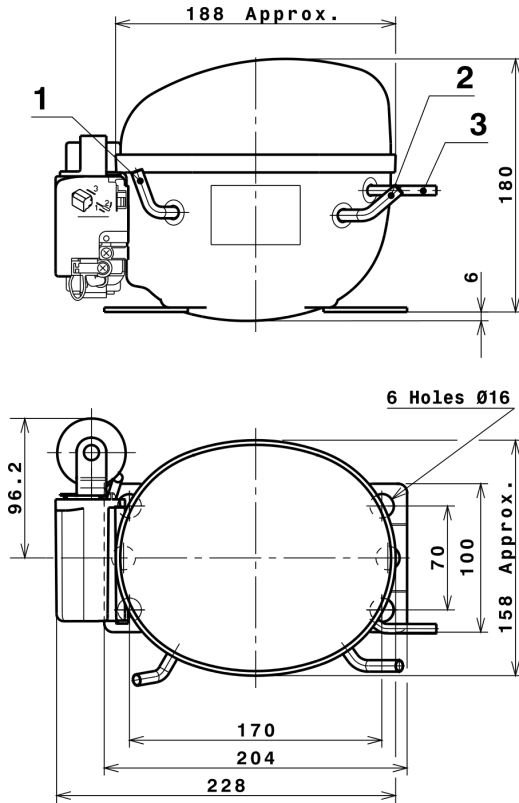
60	-40	129	183	1,59	0,71	0,61
60	-35	165	214	1,65	0,77	0,66
60	-30	212	245	1,73	0,86	0,75
60	-25	271	277	1,82	0,98	0,85
60	-23,3	293	287	1,85	1,02	0,88
60	-20	342	308	1,92	1,11	0,96
60	-15	424	339	2,03	1,25	1,08
60	-10	519	369	2,15	1,40	1,21
60	-5	625	400	2,29	1,56	1,35
60	0	743	431	2,44	1,73	1,49

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.463,2664667007	164,7999778645	1,2069468794	13,092582615754
2	38,2089284996	-0,7530636463	-0,0012187601	0,39584422490625
3	-12,3976944510	4,6205601270	0,0213858033	-0,039579694654308
4	0,2314405859	-0,0014610062	0,0002199191	0,0034698494221383
5	-0,2347735676	0,1180681798	0,0005393617	-0,00056125346626368

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

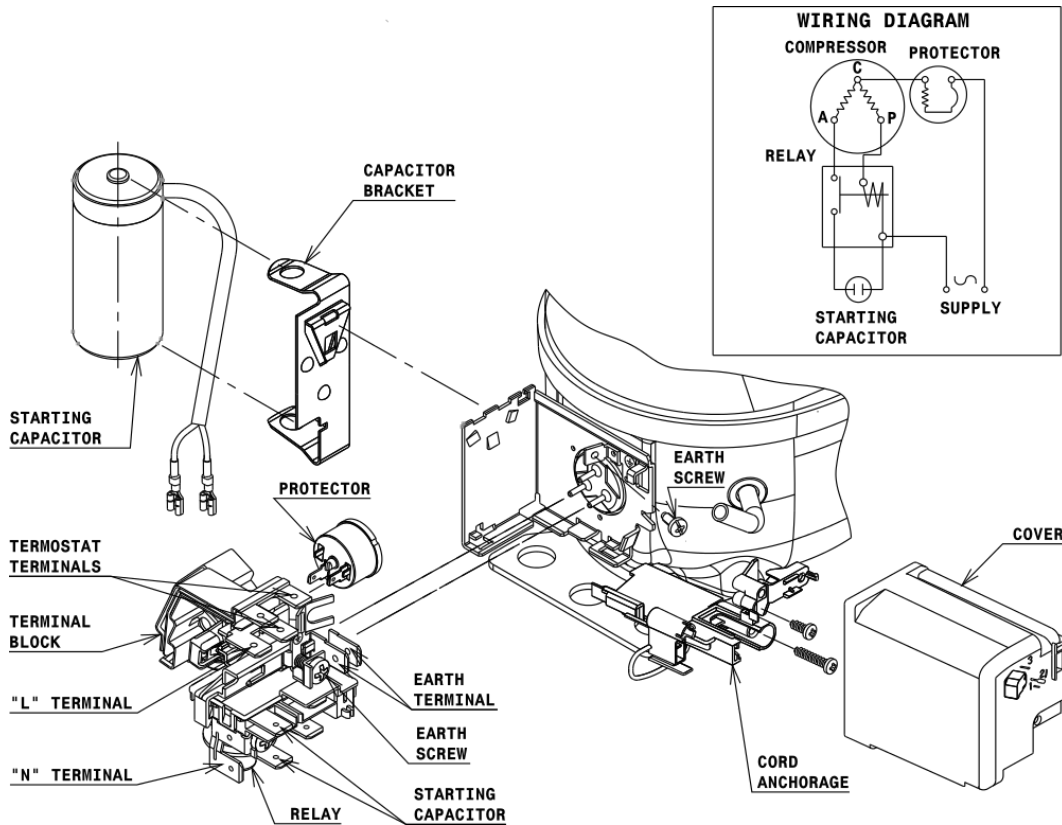


DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

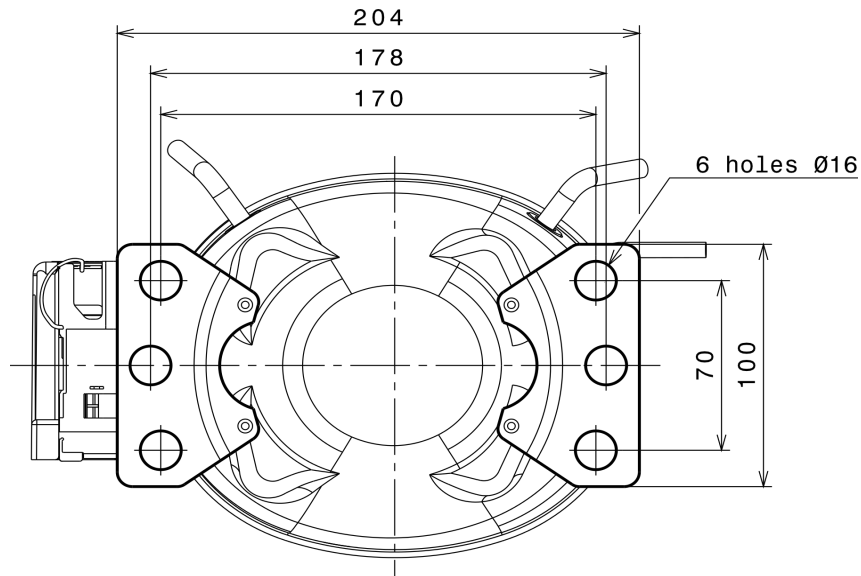
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

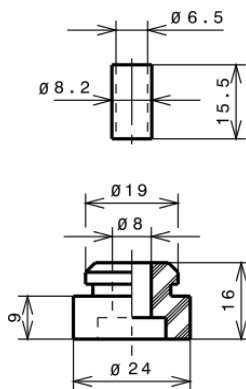
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

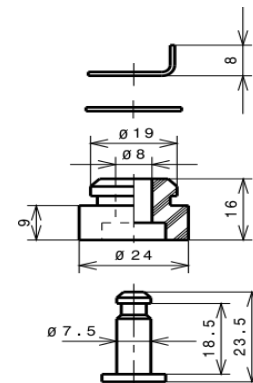
STANDARD

$\varnothing 16$ holes (170x70 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R290 LMBP

