

Technical Data Sheet

Compressor model **NUY70RAb**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	6,70 cm ³	Nominal Power	1/3 hp
Refrigerant	R290	Diameter	24,30 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	14,50 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,70 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	200 cm ³	Locked Rotor Amps (LRA)	15,00 A
				Max. Cont. Current (MCC)	3,30 A
				Main W. resist. at 25°C	6,66 Ω
				Start W. resist. at 25°C	30,60 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	836 kCal/h	817 W
COP	2,90 W/W	2,47 W/W
EER	2,50 kCal/Wh	2,13 kCal/Wh
Input Power	335 W	331 W
Current	1,88 A	1,87 A

APPROVALS



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	47- 56 µF 330 V		
Run capacitor	6 µF 400 V		
Relay	Option 1	Option 2	
Reference	2014 138. + NTC15Ω	QLZ 6.1A + NTC15Ω	
Pick-Up	6.10 A	6.10 A	
Drop-Out	5.20 A	5.20 A	
Protector	Option 1		
Reference	T0269		
Current	9,60 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	285	209	1,45	1,58	1,36
40	-20	361	222	1,49	1,89	1,63
40	-15	451	234	1,53	2,24	1,93
40	-10	554	245	1,57	2,63	2,26
40	-5	671	255	1,60	3,06	2,63
40	0	801	265	1,63	3,52	3,03
40	5	944	273	1,66	4,02	3,46
40	7,2	1.012	277	1,67	4,25	3,66
40	10	1.101	281	1,69	4,56	3,92

45	-25	268	215	1,47	1,45	1,25
45	-20	338	230	1,52	1,71	1,47
45	-15	421	244	1,56	2,01	1,73
45	-10	518	257	1,61	2,34	2,01
45	-5	628	270	1,65	2,71	2,33
45	0	752	281	1,69	3,11	2,67
45	5	889	292	1,72	3,54	3,05
45	7,2	953	296	1,74	3,74	3,22
45	10	1.039	301	1,76	4,01	3,45

50	-25	252	221	1,49	1,32	1,14
50	-20	315	238	1,55	1,54	1,32
50	-15	392	254	1,60	1,79	1,54
50	-10	482	270	1,65	2,08	1,79
50	-5	586	284	1,70	2,40	2,06
50	0	703	298	1,74	2,75	2,36
50	5	833	310	1,79	3,12	2,68
50	7,2	895	316	1,81	3,30	2,84
50	10	977	322	1,83	3,53	3,03

55	-25	235	227	1,51	1,20	1,04
55	-20	292	246	1,57	1,38	1,19
55	-15	362	265	1,63	1,59	1,37
55	-10	446	282	1,69	1,84	1,58
55	-5	543	299	1,75	2,12	1,82
55	0	653	314	1,80	2,42	2,08
55	5	777	329	1,86	2,75	2,36
55	7,2	836	335	1,88	2,90	2,50
55	10	914	343	1,91	3,10	2,67

60	-25	219	233	1,53	1,09	0,94
60	-20	269	254	1,60	1,23	1,06
60	-15	333	275	1,67	1,41	1,21
60	-10	410	294	1,73	1,62	1,39
60	-5	500	313	1,80	1,86	1,60
60	0	604	331	1,86	2,13	1,83
60	5	722	347	1,93	2,42	2,08
60	7,2	778	355	1,95	2,55	2,19
60	10	852	363	1,99	2,73	2,35

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	306	210	1,46	1,46	1,26
40	-20	389	223	1,50	1,74	1,51
40	-15	487	235	1,54	2,07	1,79
40	-10	598	247	1,57	2,42	2,09
40	-5	723	257	1,61	2,81	2,43
40	0	862	266	1,64	3,24	2,80
40	5	1.015	275	1,67	3,69	3,19
40	7,2	1.087	278	1,68	3,90	3,37
40	10	1.182	283	1,69	4,18	3,62

45	-25	287	216	1,48	1,33	1,15
45	-20	362	231	1,52	1,57	1,35
45	-15	452	246	1,57	1,84	1,59
45	-10	555	259	1,61	2,14	1,85
45	-5	673	271	1,65	2,48	2,14
45	0	804	283	1,69	2,84	2,45
45	5	949	294	1,73	3,23	2,79
45	7,2	1.018	298	1,75	3,41	2,95
45	10	1.109	303	1,76	3,65	3,16

50	-25	267	222	1,50	1,20	1,04
50	-20	335	239	1,55	1,40	1,21
50	-15	417	256	1,60	1,63	1,41
50	-10	512	271	1,65	1,89	1,63
50	-5	622	286	1,70	2,18	1,88
50	0	746	300	1,75	2,49	2,15
50	5	883	312	1,80	2,83	2,44
50	7,2	948	318	1,82	2,99	2,58
50	10	1.035	324	1,84	3,19	2,76

55	-25	248	228	1,51	1,09	0,94
55	-20	308	248	1,58	1,24	1,07
55	-15	382	266	1,64	1,44	1,24
55	-10	470	284	1,70	1,66	1,43
55	-5	572	300	1,75	1,90	1,64
55	0	688	316	1,81	2,18	1,88
55	5	817	331	1,87	2,47	2,13
55	7,2	879	337	1,89	2,61	2,25
55	10	961	345	1,92	2,79	2,41

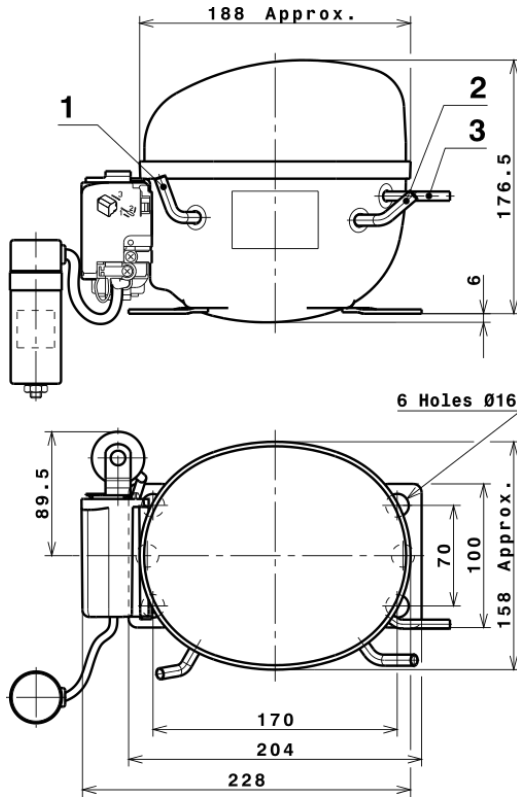
60	-25	228	234	1,53	0,97	0,84
60	-20	281	256	1,60	1,10	0,95
60	-15	347	276	1,67	1,26	1,08
60	-10	427	296	1,74	1,44	1,25
60	-5	521	315	1,81	1,66	1,43
60	0	629	333	1,87	1,89	1,63
60	5	752	350	1,94	2,15	1,86
60	7,2	810	357	1,96	2,27	1,96
60	10	888	366	2,00	2,43	2,10

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.330,3348490597	136,9595553431	1,1569822085	11,760513410142
2	41,6875483340	-1,5630934174	-0,0070229341	0,41648185138641
3	-12,0252723244	3,4129073479	0,0124383035	-0,04339574538437
4	0,2741056959	-0,0167326662	-0,0000220746	0,004355256752646
5	-0,3217932697	0,0871511339	0,0003437400	-0,0011375307364479

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

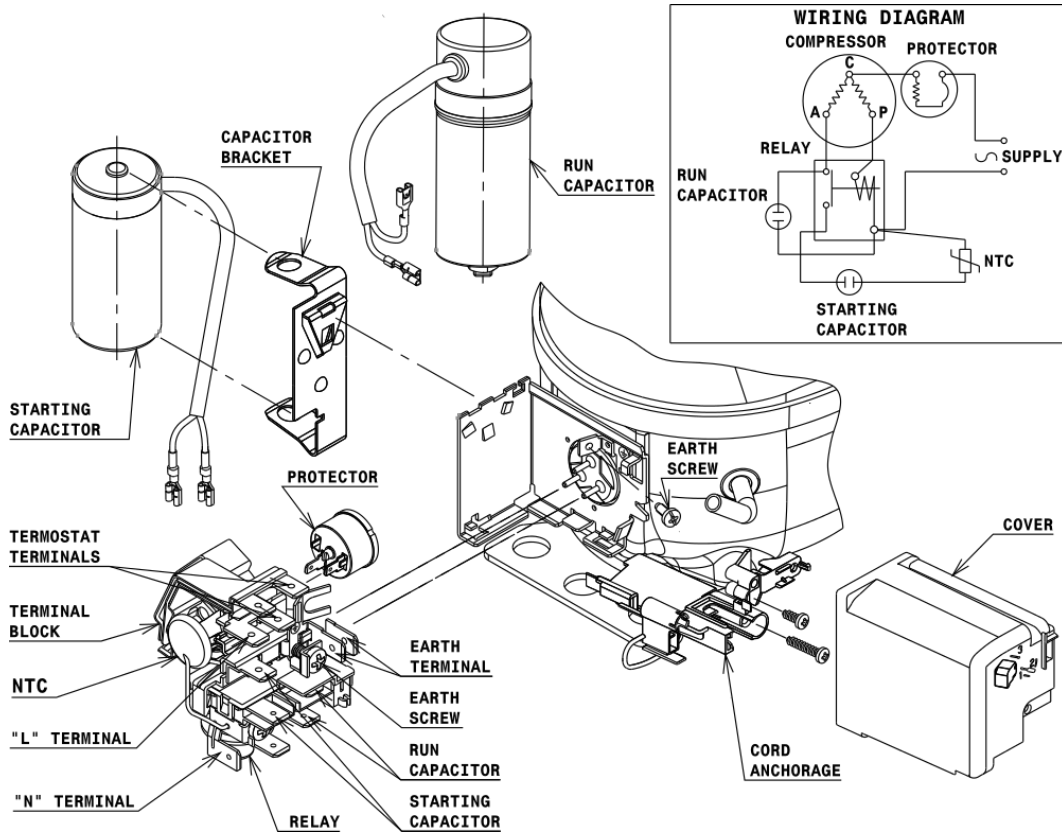


DESIGNATION INTERNAL DIAM.

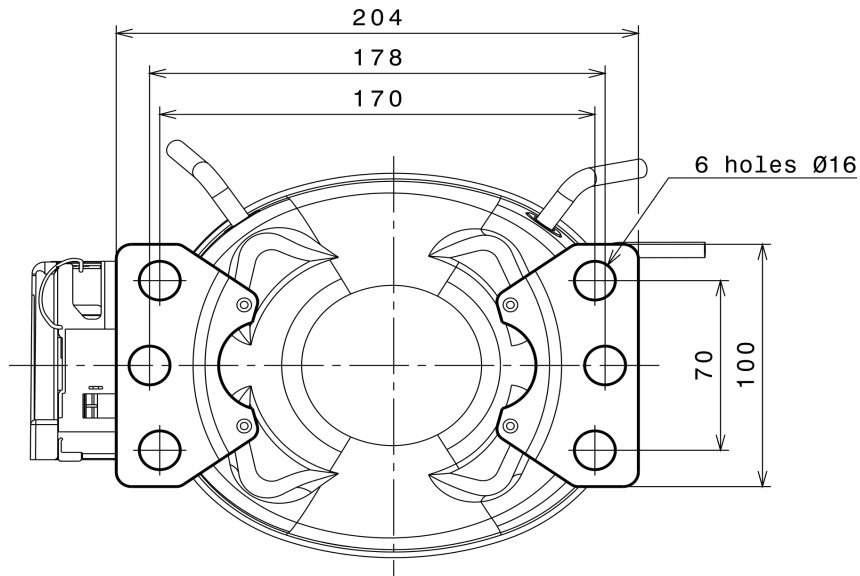
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



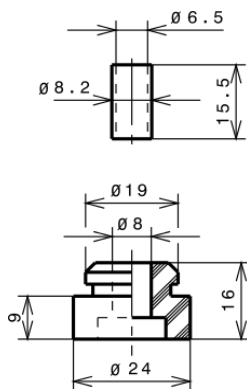
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

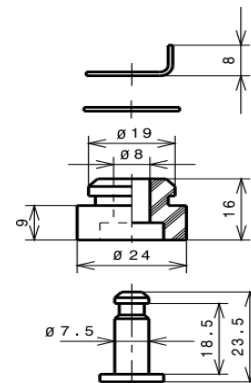
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP

