

# Technical Data Sheet

Compressor model **NUY60RAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R290**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	6,00 cm <sup>3</sup>	Nominal Power	1/4 hp
Refrigerant	R290	Diameter	21,99 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	16,00 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,48 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 22 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	220 cm <sup>3</sup>	Locked Rotor Amps (LRA)	12,90 A
				Max. Cont. Current (MCC)	3,20 A
				Main W. resist. at 25°C	7,50 Ω
				Start W. resist. at 25°C	32,00 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	731 kCal/h	714 W
COP	2,72 W/W	2,32 W/W
EER	2,34 kCal/Wh	2,00 kCal/Wh
Input Power	313 W	308 W
Current	1,99 A	1,97 A

## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	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			
Relay	Option 1			
Reference	2014 118.			
Pick-Up	3,75 A			
Drop-Out	3,20 A			
Protector	Option 1	Option 2		
Reference	T0269	B96-105		
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	248	181	1,60	1,59	1,37
40	-20	313	195	1,63	1,87	1,61
40	-15	389	207	1,66	2,18	1,88
40	-10	477	219	1,69	2,53	2,18
40	-5	576	230	1,72	2,91	2,51
40	0	687	240	1,75	3,33	2,86
40	5	810	249	1,77	3,78	3,25
40	7,2	868	253	1,78	3,99	3,43
40	10	944	258	1,80	4,26	3,67

45	-25	231	186	1,61	1,44	1,24
45	-20	291	202	1,64	1,68	1,44
45	-15	363	217	1,68	1,95	1,67
45	-10	447	231	1,72	2,25	1,93
45	-5	542	244	1,76	2,58	2,22
45	0	648	257	1,80	2,94	2,53
45	5	766	268	1,83	3,32	2,86
45	7,2	822	273	1,85	3,50	3,01
45	10	896	279	1,87	3,74	3,21

50	-25	214	191	1,62	1,30	1,12
50	-20	270	209	1,66	1,50	1,29
50	-15	337	227	1,71	1,73	1,49
50	-10	416	243	1,75	1,99	1,71
50	-5	507	259	1,80	2,28	1,96
50	0	609	273	1,85	2,59	2,23
50	5	723	287	1,90	2,93	2,52
50	7,2	777	293	1,92	3,08	2,65
50	10	848	300	1,94	3,29	2,83

55	-25	197	196	1,63	1,17	1,01
55	-20	248	217	1,68	1,33	1,15
55	-15	311	236	1,73	1,53	1,32
55	-10	386	255	1,79	1,76	1,51
55	-5	472	273	1,85	2,01	1,73
55	0	570	290	1,91	2,29	1,97
55	5	679	306	1,96	2,58	2,22
55	7,2	731	313	1,99	2,72	2,34
55	10	800	321	2,02	2,89	2,49

60	-25	180	201	1,64	1,04	0,90
60	-20	227	224	1,70	1,18	1,01
60	-15	286	246	1,76	1,35	1,16
60	-10	356	267	1,83	1,55	1,33
60	-5	437	287	1,90	1,77	1,52
60	0	531	307	1,97	2,01	1,73
60	5	636	325	2,04	2,27	1,96
60	7,2	686	333	2,07	2,39	2,06
60	10	752	343	2,11	2,55	2,19

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	267	182	1,60	1,47	1,27
40	-20	337	196	1,63	1,72	1,49
40	-15	420	208	1,66	2,01	1,74
40	-10	514	220	1,69	2,33	2,02
40	-5	621	231	1,72	2,68	2,32
40	0	740	242	1,75	3,06	2,65
40	5	871	251	1,78	3,47	3,00
40	7,2	932	255	1,79	3,66	3,16
40	10	1.014	259	1,80	3,91	3,38

45	-25	247	187	1,61	1,32	1,14
45	-20	312	203	1,65	1,54	1,33
45	-15	389	218	1,68	1,78	1,54
45	-10	478	232	1,72	2,06	1,78
45	-5	580	246	1,76	2,36	2,04
45	0	693	258	1,80	2,68	2,32
45	5	819	270	1,84	3,03	2,62
45	7,2	878	275	1,85	3,19	2,76
45	10	956	281	1,87	3,41	2,94

50	-25	227	192	1,62	1,18	1,02
50	-20	287	210	1,66	1,36	1,18
50	-15	359	228	1,71	1,57	1,36
50	-10	443	244	1,76	1,81	1,56
50	-5	538	260	1,81	2,07	1,79
50	0	646	275	1,85	2,35	2,03
50	5	766	289	1,90	2,65	2,29
50	7,2	823	295	1,92	2,79	2,41
50	10	899	302	1,95	2,97	2,57

55	-25	208	197	1,63	1,05	0,91
55	-20	262	218	1,68	1,20	1,04
55	-15	328	238	1,74	1,38	1,19
55	-10	407	256	1,79	1,59	1,37
55	-5	497	275	1,85	1,81	1,56
55	0	600	292	1,91	2,06	1,78
55	5	714	308	1,97	2,32	2,00
55	7,2	769	315	2,00	2,44	2,11
55	10	841	324	2,03	2,60	2,25

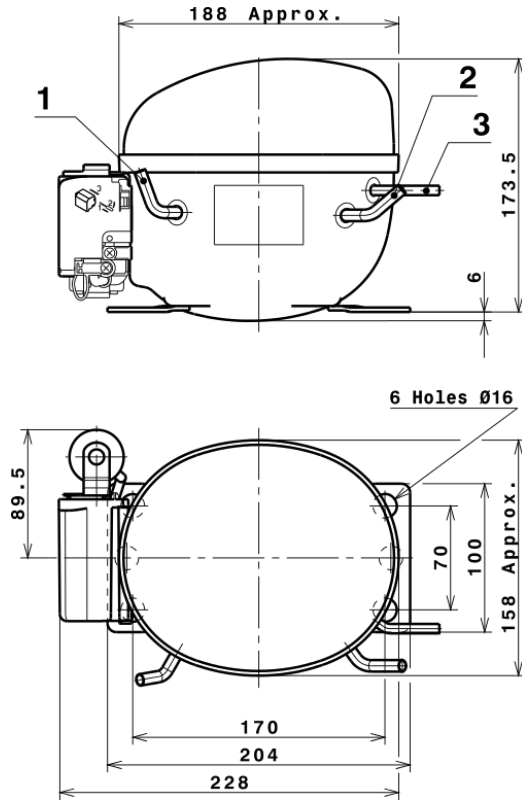
60	-25	188	202	1,64	0,93	0,80
60	-20	237	225	1,70	1,05	0,91
60	-15	298	247	1,77	1,20	1,04
60	-10	371	269	1,83	1,38	1,19
60	-5	456	289	1,90	1,58	1,36
60	0	553	309	1,97	1,79	1,55
60	5	662	327	2,05	2,02	1,75
60	7,2	714	335	2,08	2,13	1,84
60	10	784	345	2,12	2,27	1,96

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.117,4617568875	110,1116597387	1,2556845524	9,7124888687306
2	33,7711613235	-1,7963237345	-0,0091735511	0,32889968823487
3	-9,7106316807	3,4473496560	0,0124256243	-0,027957367504973
4	0,2374997085	-0,0160153527	0,0000408355	0,0037825190127485
5	-0,2284415768	0,0967563529	0,0004005180	-0,00029544921506441

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

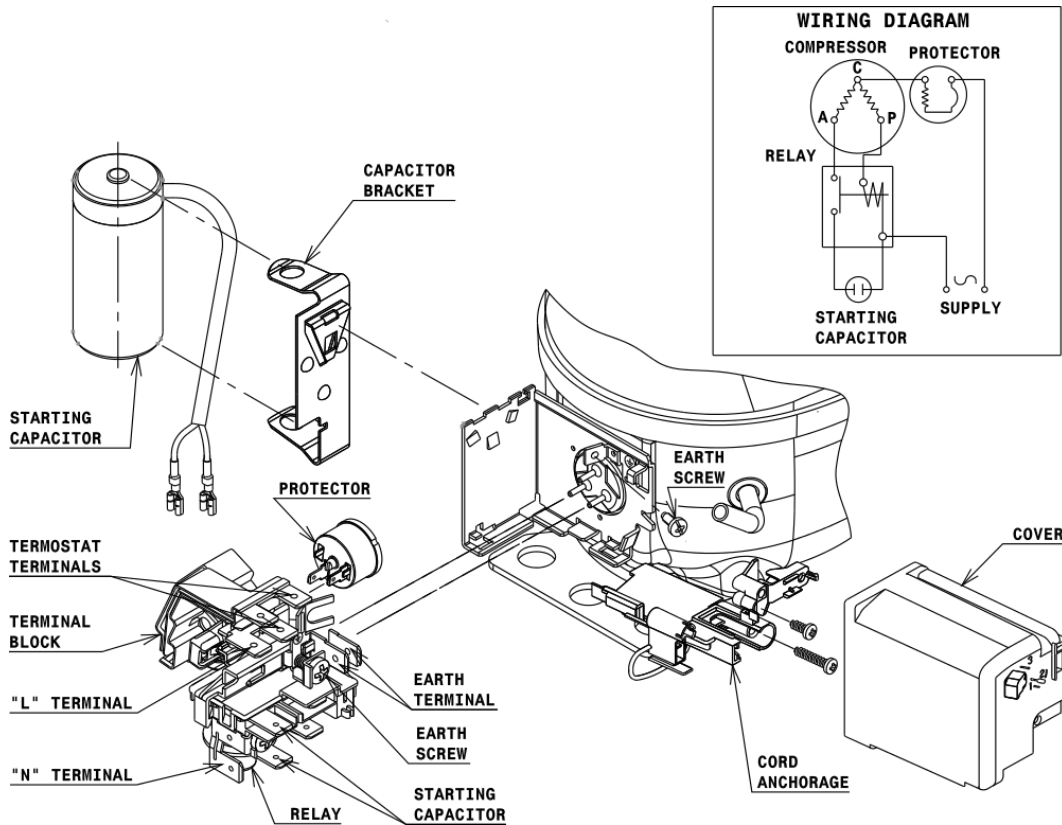


## DESIGNATION INTERNAL DIAM.

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

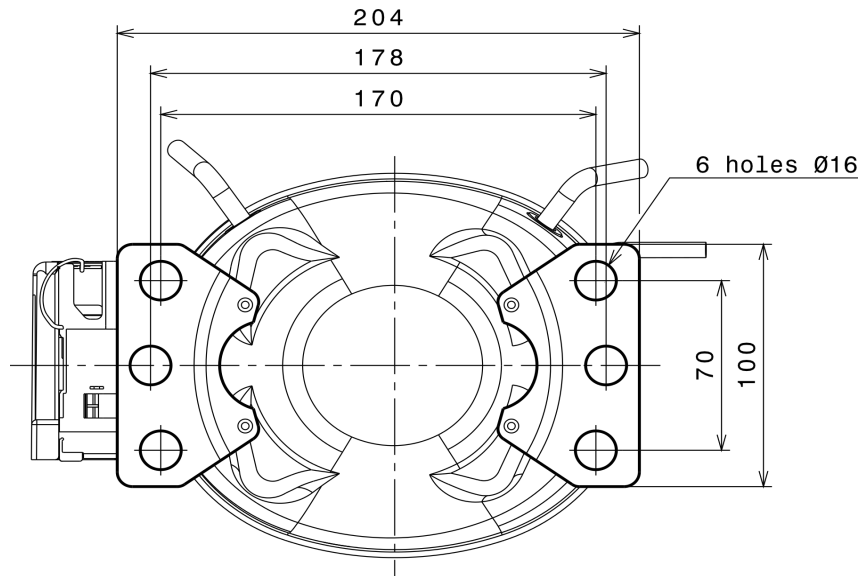
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (U range)



# Technical Data Sheet

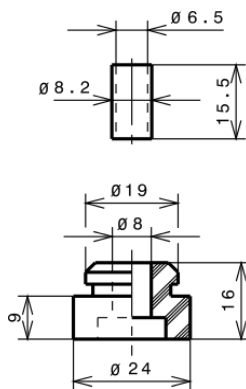
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

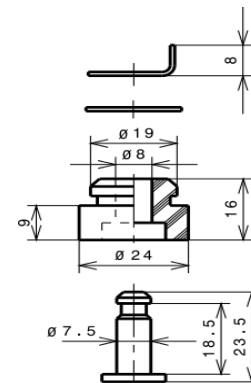
### STANDARD

$\varnothing 16$  holes (170x70 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R290 HMBP

