

# Technical Data Sheet

Compressor model **NLY75LAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R290**

## APPLICATION

Application Low Back Pressure  
 Refrigerant R290  
 Evaporating Temp. -40,0 °C to -10,0 °C  
 Expansion Capillar/Valve  
 Comp. Cooling Fan cooled  
 Max. ambient temp. 43,0 °C

## COMPRESSOR

Displacement 7,36 cm<sup>3</sup>  
 Diameter 24,27 mm  
 Stroke 15,90 mm  
 Net Weight 10,24 Kg  
 Oil type ISO VG 46 MINER  
 Oil charge 300 cm<sup>3</sup>

## MOTOR

Nominal Power 1/4 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 198-255 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 10,50 A  
 Max. Cont. Current (MCC) 2,40 A  
 Main W. resist. at 25°C 11,04 Ω  
 Start W. resist. at 25°C 12,00 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	293 kCal/h	253 W
COP	1,38 W/W	1,07 W/W
EER	1,19 kCal/Wh	0,92 kCal/Wh
Input Power	247 W	238 W
Current	1,51 A	1,48 A

## APPROVALS

## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °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 131.			
Pick-Up	5,30 A			
Drop-Out	4,50 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	-40	131	155	1,21	0,98	0,85
40	-35	171	176	1,27	1,13	0,97
40	-30	222	196	1,34	1,31	1,13
40	-25	284	217	1,40	1,52	1,30
40	-23,3	307	224	1,43	1,59	1,37
40	-20	357	238	1,48	1,74	1,50
40	-15	441	260	1,56	1,97	1,70
40	-10	537	282	1,64	2,22	1,91

45	-40	126	155	1,21	0,95	0,81
45	-35	166	178	1,28	1,08	0,93
45	-30	217	201	1,35	1,26	1,08
45	-25	279	224	1,43	1,45	1,24
45	-23,3	302	232	1,46	1,52	1,30
45	-20	352	247	1,51	1,65	1,42
45	-15	436	271	1,60	1,87	1,61
45	-10	532	295	1,70	2,10	1,80

50	-40	121	155	1,21	0,91	0,78
50	-35	161	180	1,28	1,04	0,89
50	-30	212	205	1,36	1,20	1,03
50	-25	274	231	1,45	1,38	1,19
50	-23,3	298	239	1,48	1,45	1,24
50	-20	347	256	1,55	1,58	1,35
50	-15	432	282	1,65	1,78	1,53
50	-10	528	309	1,75	1,99	1,71

55	-40	116	155	1,21	0,87	0,75
55	-35	156	182	1,29	0,99	0,86
55	-30	207	210	1,38	1,15	0,99
55	-25	269	238	1,48	1,32	1,13
55	-23,3	293	247	1,51	1,38	1,19
55	-20	343	265	1,58	1,50	1,29
55	-15	427	294	1,69	1,69	1,46
55	-10	523	322	1,81	1,89	1,62

60	-40	111	155	1,21	0,83	0,72
60	-35	151	185	1,30	0,95	0,82
60	-30	202	214	1,39	1,10	0,94
60	-25	265	244	1,50	1,26	1,08
60	-23,3	288	255	1,54	1,32	1,13
60	-20	338	274	1,61	1,43	1,23
60	-15	423	305	1,74	1,61	1,39
60	-10	519	336	1,87	1,80	1,55

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	142	155	1,21	0,92	0,79
40	-35	190	176	1,27	1,08	0,93
40	-30	248	196	1,34	1,26	1,09
40	-25	316	217	1,40	1,46	1,26
40	-23,3	342	224	1,43	1,52	1,32
40	-20	395	238	1,48	1,66	1,43
40	-15	484	260	1,56	1,86	1,61
40	-10	584	282	1,64	2,07	1,79

45	-40	131	155	1,21	0,85	0,73
45	-35	176	178	1,28	0,99	0,85
45	-30	230	201	1,35	1,15	0,99
45	-25	295	224	1,43	1,32	1,14
45	-23,3	320	232	1,46	1,38	1,19
45	-20	371	247	1,51	1,50	1,29
45	-15	457	271	1,60	1,68	1,45
45	-10	553	295	1,70	1,87	1,62

50	-40	120	155	1,21	0,78	0,67
50	-35	161	180	1,28	0,90	0,77
50	-30	213	205	1,36	1,04	0,89
50	-25	274	231	1,45	1,19	1,03
50	-23,3	298	239	1,48	1,24	1,07
50	-20	346	256	1,55	1,35	1,17
50	-15	429	282	1,65	1,52	1,31
50	-10	522	309	1,75	1,69	1,46

55	-40	109	155	1,21	0,70	0,61
55	-35	147	182	1,29	0,81	0,70
55	-30	195	210	1,38	0,93	0,80
55	-25	253	238	1,48	1,07	0,92
55	-23,3	275	247	1,51	1,12	0,96
55	-20	322	265	1,58	1,21	1,05
55	-15	401	294	1,69	1,37	1,18
55	-10	490	322	1,81	1,52	1,32

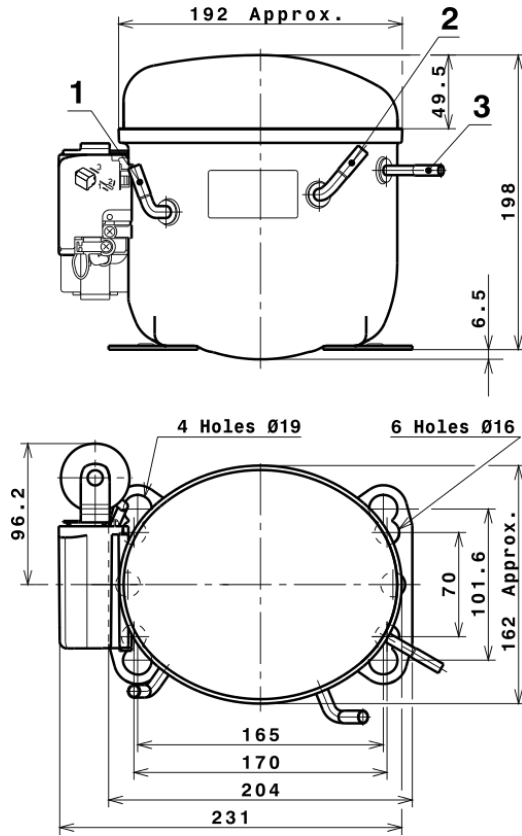
60	-40	98	155	1,21	0,63	0,55
60	-35	133	185	1,30	0,72	0,62
60	-30	177	214	1,39	0,83	0,71
60	-25	232	244	1,50	0,95	0,82
60	-23,3	253	255	1,54	1,00	0,86
60	-20	298	274	1,61	1,08	0,94
60	-15	373	305	1,74	1,22	1,06
60	-10	459	336	1,87	1,37	1,18

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.113,8696079963	186,4522489479	1,2508261604	10,045846675069
2	30,2253701261	0,9210754767	0,0073866476	0,31693153008453
3	-7,8731730036	3,6889802050	0,0157886179	-0,011085590776434
4	0,2019446881	0,0054685737	0,0001651719	0,0029506462539663
5	-0,1414013215	0,0922245051	0,0003947154	2,8777981129396E-5

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 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

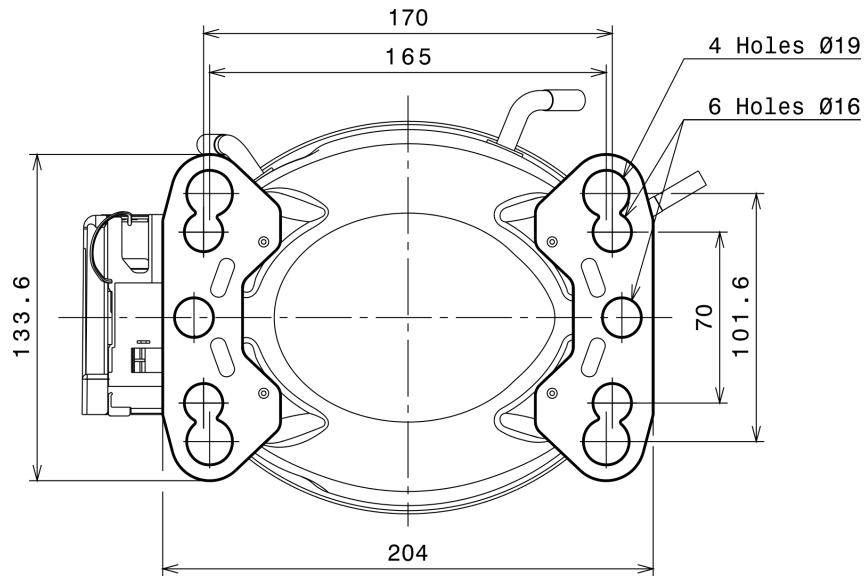
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)



# Technical Data Sheet

## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

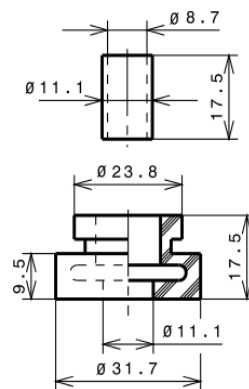
### STANDARD

Ø16 holes (170x70 net)



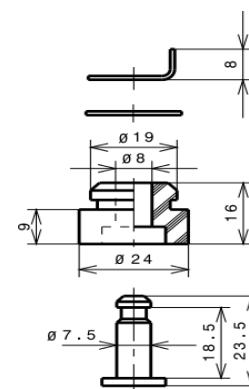
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R290 LBP

