

Technical Data Sheet

Compressor model **NLY45LRa**
 Voltage **115-127V 60Hz ~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 4,56 cm³
 Diameter 19,09 mm
 Stroke 15,93 mm
 Net Weight 9,21 Kg
 Oil type ISO VG 46 MINER
 Oil charge 300 cm³

MOTOR

Nominal Power 1/6 hp
 Voltage/Frequency 115-127V 60Hz
 Voltage range 98-140 V
 Type CSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 23,00 A
 Max. Cont. Current (MCC) 3,40 A
 Main W. resist. at 25°C 2,98 Ω
 Start W. resist. at 25°C 9,22 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	207 kCal/h	177 W
COP	1,30 W/W	1,00 W/W
EER	1,12 kCal/Wh	0,86 kCal/Wh
Input Power	185 W	177 W
Current	2,31 A	2,26 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	200 µF 160 V			
Relay	Option 1			
Reference	2014 166.			
Pick-Up	11,00 A			
Drop-Out	9,35 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	101	139	2,02	0,85	0,73
40	-35	131	148	2,07	1,03	0,88
40	-30	170	159	2,14	1,24	1,07
40	-25	219	172	2,22	1,48	1,27
40	-23,3	237	177	2,26	1,56	1,34
40	-20	277	187	2,33	1,72	1,48
40	-15	344	204	2,45	1,96	1,68
40	-10	421	224	2,59	2,19	1,88

45	-40	92	133	1,99	0,80	0,69
45	-35	121	145	2,05	0,98	0,84
45	-30	160	158	2,13	1,18	1,01
45	-25	209	174	2,24	1,40	1,20
45	-23,3	227	180	2,27	1,47	1,26
45	-20	266	192	2,36	1,62	1,39
45	-15	333	211	2,50	1,84	1,58
45	-10	410	233	2,67	2,05	1,76

50	-40	83	127	1,95	0,76	0,65
50	-35	112	141	2,03	0,92	0,79
50	-30	151	157	2,13	1,11	0,96
50	-25	199	176	2,25	1,31	1,13
50	-23,3	217	182	2,29	1,38	1,19
50	-20	256	196	2,39	1,52	1,31
50	-15	323	218	2,55	1,72	1,48
50	-10	399	243	2,75	1,91	1,65

55	-40	74	121	1,92	0,71	0,61
55	-35	103	138	2,01	0,87	0,75
55	-30	141	157	2,12	1,05	0,90
55	-25	189	177	2,26	1,24	1,06
55	-23,3	207	185	2,31	1,30	1,12
55	-20	246	200	2,42	1,43	1,23
55	-15	312	225	2,61	1,61	1,39
55	-10	388	252	2,83	1,79	1,54

60	-40	65	115	1,89	0,66	0,57
60	-35	93	134	1,99	0,81	0,70
60	-30	131	156	2,12	0,98	0,84
60	-25	179	179	2,27	1,16	1,00
60	-23,3	197	188	2,33	1,22	1,05
60	-20	235	205	2,45	1,34	1,15
60	-15	301	232	2,66	1,51	1,30
60	-10	377	262	2,91	1,68	1,44

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	109	139	2,02	0,78	0,68
40	-35	145	148	2,07	0,98	0,85
40	-30	190	159	2,14	1,19	1,03
40	-25	244	172	2,22	1,41	1,22
40	-23,3	264	177	2,26	1,49	1,29
40	-20	306	187	2,33	1,63	1,41
40	-15	377	204	2,45	1,84	1,59
40	-10	457	224	2,59	2,04	1,77

45	-40	96	133	1,99	0,72	0,62
45	-35	129	145	2,05	0,89	0,77
45	-30	171	158	2,13	1,08	0,93
45	-25	222	174	2,24	1,27	1,10
45	-23,3	241	180	2,27	1,34	1,16
45	-20	281	192	2,36	1,47	1,27
45	-15	349	211	2,50	1,65	1,43
45	-10	426	233	2,67	1,83	1,58

50	-40	83	127	1,95	0,65	0,56
50	-35	113	141	2,03	0,80	0,69
50	-30	152	157	2,13	0,96	0,83
50	-25	199	176	2,25	1,14	0,98
50	-23,3	218	182	2,29	1,19	1,03
50	-20	256	196	2,39	1,31	1,13
50	-15	321	218	2,55	1,47	1,27
50	-10	395	243	2,75	1,63	1,41

55	-40	70	121	1,92	0,58	0,50
55	-35	97	138	2,01	0,70	0,61
55	-30	133	157	2,12	0,85	0,73
55	-25	177	177	2,26	1,00	0,86
55	-23,3	195	185	2,31	1,05	0,91
55	-20	231	200	2,42	1,15	1,00
55	-15	293	225	2,61	1,30	1,12
55	-10	364	252	2,83	1,44	1,25

60	-40	57	115	1,89	0,49	0,43
60	-35	81	134	1,99	0,60	0,52
60	-30	114	156	2,12	0,73	0,63
60	-25	155	179	2,27	0,87	0,75
60	-23,3	172	188	2,33	0,91	0,79
60	-20	206	205	2,45	1,01	0,87
60	-15	265	232	2,66	1,14	0,99
60	-10	333	262	2,91	1,27	1,10

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	935,1206822672	154,6057087849	2,0821791914	8,784561832983
2	24,9338999793	0,7650547663	0,0166411732	0,26562602937748
3	-7,6018289284	3,0046172854	0,0243782821	-0,02949307452833
4	0,1704311026	0,0419055561	0,0005552464	0,002471348322181
5	-0,1251284490	0,1057655510	0,0007780917	-0,00018733386428689

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

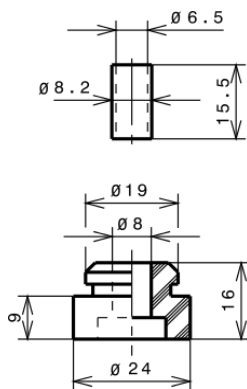
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

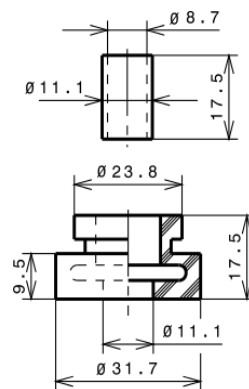
STANDARD

Ø16 holes (170x70 net)



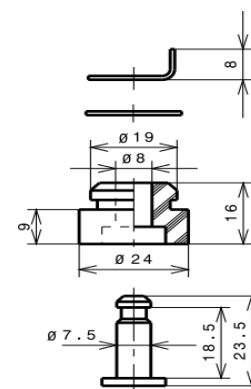
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LBP

