

Technical Data Sheet

Compressor model **NPY14LFb**
 Voltage **208-230V 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	14,32 cm ³
Diameter	29,37 mm
Stroke	21,13 mm
Net Weight	12,29 Kg
Oil type	ISO VG 32 ESTER
Oil charge	400 cm ³

MOTOR

Nominal Power	1/2 hp
Voltage/Frequency	208-230V 60Hz
Voltage range	187-253 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	22,00 A
Max. Cont. Current (MCC)	4,70 A
Main W. resist. at 25°C	3,90 Ω
Start W. resist. at 25°C	7,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	698 kCal/h	603 W
COP	1,42 W/W	1,09 W/W
EER	1,22 kCal/Wh	0,94 kCal/Wh
Input Power	572 W	554 W
Current	2,55 A	2,47 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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	64- 77 μF 330 V			
Run capacitor	16 μF 420 V			
Relay	Option 1			
Reference	2014 166. + NTC15Ω			
Pick-Up	11,00 A			
Drop-Out	9,35 A			
Protector	Option 1			
Reference	T0267			
Current	11,00 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	309	398	1,78	0,90	0,78
40	-35	406	433	1,94	1,09	0,94
40	-30	532	471	2,11	1,31	1,13
40	-25	686	512	2,29	1,56	1,34
40	-23,3	745	526	2,35	1,65	1,42
40	-20	868	554	2,47	1,82	1,57
40	-15	1.080	599	2,67	2,10	1,80
40	-10	1.319	646	2,87	2,37	2,04

45	-40	301	402	1,80	0,87	0,75
45	-35	396	441	1,97	1,04	0,90
45	-30	519	482	2,16	1,25	1,08
45	-25	671	526	2,35	1,48	1,28
45	-23,3	729	541	2,42	1,57	1,35
45	-20	851	572	2,55	1,73	1,49
45	-15	1.060	620	2,76	1,99	1,71
45	-10	1.297	670	2,97	2,25	1,94

50	-40	294	407	1,82	0,84	0,72
50	-35	386	449	2,01	1,00	0,86
50	-30	507	493	2,21	1,19	1,03
50	-25	656	540	2,41	1,41	1,21
50	-23,3	714	557	2,48	1,49	1,28
50	-20	834	589	2,63	1,65	1,42
50	-15	1.040	641	2,85	1,89	1,62
50	-10	1.275	694	3,08	2,14	1,84

55	-40	286	411	1,84	0,81	0,70
55	-35	376	457	2,04	0,96	0,82
55	-30	495	504	2,25	1,14	0,98
55	-25	642	554	2,47	1,35	1,16
55	-23,3	698	572	2,55	1,42	1,22
55	-20	817	607	2,70	1,57	1,35
55	-15	1.021	661	2,94	1,80	1,54
55	-10	1.253	718	3,18	2,03	1,75

60	-40	279	416	1,86	0,78	0,67
60	-35	366	464	2,08	0,92	0,79
60	-30	482	515	2,30	1,09	0,94
60	-25	627	569	2,54	1,28	1,10
60	-23,3	682	587	2,62	1,35	1,16
60	-20	800	624	2,78	1,49	1,28
60	-15	1.001	682	3,03	1,71	1,47
60	-10	1.231	742	3,28	1,93	1,66

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	335	398	1,78	0,84	0,73
40	-35	452	433	1,94	1,04	0,90
40	-30	596	471	2,11	1,26	1,09
40	-25	766	512	2,29	1,50	1,29
40	-23,3	829	526	2,35	1,58	1,36
40	-20	962	554	2,47	1,74	1,50
40	-15	1.184	599	2,67	1,98	1,71
40	-10	1.434	646	2,87	2,22	1,92

45	-40	313	402	1,80	0,78	0,67
45	-35	420	441	1,97	0,95	0,82
45	-30	552	482	2,16	1,15	0,99
45	-25	712	526	2,35	1,35	1,17
45	-23,3	772	541	2,42	1,43	1,23
45	-20	897	572	2,55	1,57	1,36
45	-15	1.109	620	2,76	1,79	1,55
45	-10	1.347	670	2,97	2,01	1,74

50	-40	291	407	1,82	0,72	0,62
50	-35	387	449	2,01	0,86	0,74
50	-30	509	493	2,21	1,03	0,89
50	-25	657	540	2,41	1,22	1,05
50	-23,3	714	557	2,48	1,28	1,11
50	-20	832	589	2,63	1,41	1,22
50	-15	1.034	641	2,85	1,61	1,39
50	-10	1.261	694	3,08	1,82	1,57

55	-40	269	411	1,84	0,66	0,57
55	-35	354	457	2,04	0,78	0,67
55	-30	466	504	2,25	0,92	0,80
55	-25	603	554	2,47	1,09	0,94
55	-23,3	656	572	2,55	1,15	0,99
55	-20	768	607	2,70	1,27	1,09
55	-15	958	661	2,94	1,45	1,25
55	-10	1.175	718	3,18	1,64	1,41

60	-40	247	416	1,86	0,60	0,51
60	-35	322	464	2,08	0,69	0,60
60	-30	422	515	2,30	0,82	0,71
60	-25	549	569	2,54	0,97	0,83
60	-23,3	599	587	2,62	1,02	0,88
60	-20	703	624	2,78	1,13	0,97
60	-15	883	682	3,03	1,29	1,12
60	-10	1.089	742	3,28	1,47	1,27

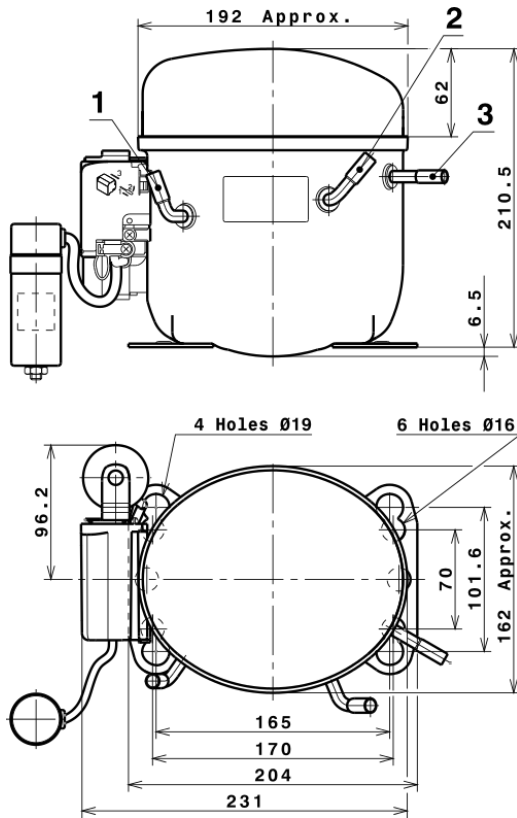
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.861,1105394567	516,2695294814	2,3170756648	26,46229818254
2	79,4222042410	5,5819549569	0,0234994853	0,84844377639542
3	-22,1815755761	6,2516858420	0,0266648070	-0,067656850901122
4	0,5148772254	0,0477141261	0,0001732476	0,007486774200343
5	-0,4424392921	0,1333045569	0,0005641639	-0,0012319971494646

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

COMPRESSOR DIMENSIONS

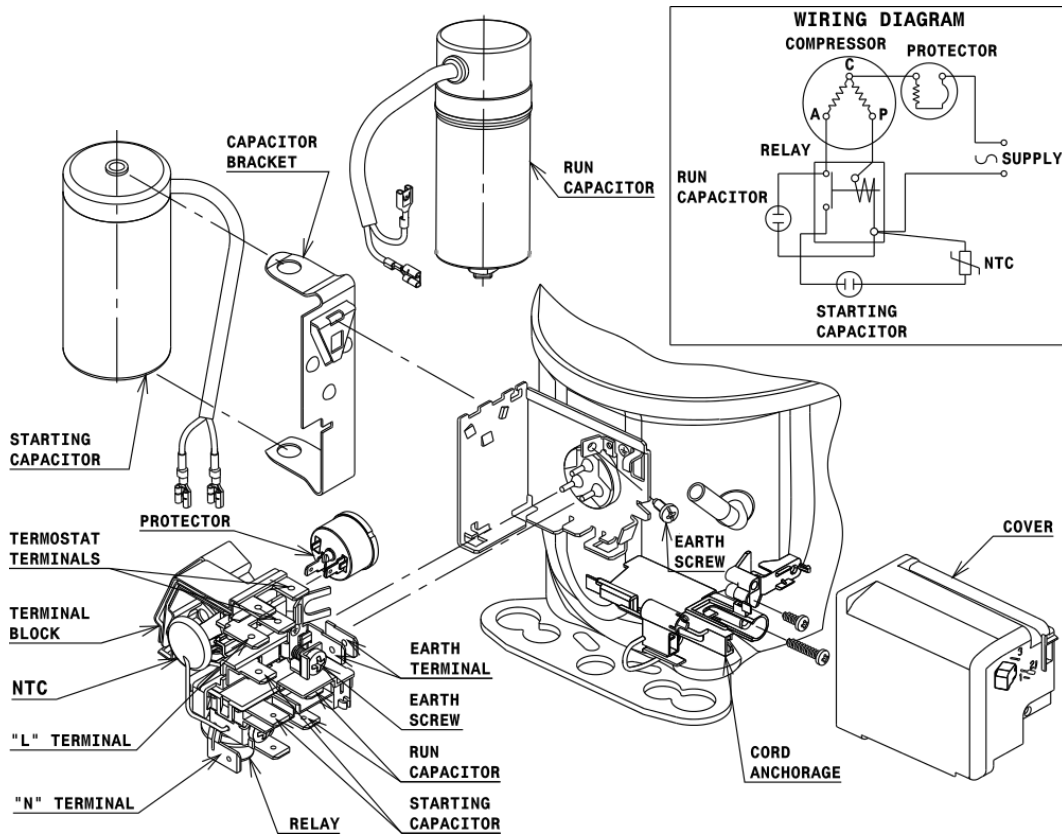


DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



AMERICAN FEET

$\varnothing 19$ holes (165x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R290 LBP

