

# Technical Data Sheet

Compressor model **NLT12RR**  
 Voltage **115-127V 60Hz ~1**  
 Refrigerant **R290**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	10,70 cm <sup>3</sup>	Nominal Power	1/2 hp
Refrigerant	R290	Diameter	25,40 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,12 mm	Voltage range	98-135 V
Expansion	Capillar/Valve	Net Weight	11,91 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm <sup>3</sup>	Locked Rotor Amps (LRA)	51,60 A
				Max. Cont. Current (MCC)	11,10 A
				Main W. resist. at 25°C	0,70 Ω
				Start W. resist. at 25°C	6,57 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	1.534 kCal/h	1.501 W
COP	2,51 W/W	2,15 W/W
EER	2,15 kCal/Wh	1,86 kCal/Wh
Input Power	712 W	698 W
Current	7,47 A	7,34 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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	125 µF 160 V			
Run capacitor	15 µF 250 V			
Relay	Option 1			
Reference	2014 191. + NTC3Ω			
Pick-Up	24,40 A			
Drop-Out	20,30 A			
Protector	Option 1			
Reference	T1115-L6			
Current	47,00 A			
Time check	2,8-5,2 seg			
Disc temp. (Open/Close)	120,00 / 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	504	403	5,34	1,46	1,25
40	-20	643	437	5,51	1,71	1,47
40	-15	804	472	5,70	1,98	1,70
40	-10	987	507	5,90	2,27	1,95
40	-5	1.192	541	6,12	2,56	2,20
40	0	1.419	575	6,35	2,87	2,47
40	5	1.668	609	6,60	3,19	2,74
40	7,2	1.785	624	6,72	3,33	2,86
40	10	1.939	642	6,87	3,51	3,02

45	-25	470	412	5,39	1,33	1,14
45	-20	601	450	5,58	1,55	1,34
45	-15	755	488	5,79	1,80	1,55
45	-10	930	525	6,02	2,06	1,77
45	-5	1.127	563	6,27	2,33	2,00
45	0	1.347	600	6,54	2,61	2,24
45	5	1.588	637	6,82	2,90	2,49
45	7,2	1.701	653	6,96	3,03	2,60
45	10	1.851	674	7,13	3,20	2,75

50	-25	436	422	5,43	1,20	1,03
50	-20	560	463	5,65	1,41	1,21
50	-15	705	504	5,88	1,63	1,40
50	-10	873	544	6,14	1,87	1,60
50	-5	1.063	585	6,42	2,11	1,82
50	0	1.274	625	6,73	2,37	2,04
50	5	1.508	665	7,06	2,64	2,27
50	7,2	1.618	683	7,21	2,76	2,37
50	10	1.763	705	7,40	2,91	2,50

55	-25	402	431	5,48	1,08	0,93
55	-20	518	475	5,72	1,27	1,09
55	-15	656	519	5,98	1,47	1,26
55	-10	816	563	6,27	1,69	1,45
55	-5	998	607	6,59	1,91	1,65
55	0	1.202	650	6,93	2,15	1,85
55	5	1.428	693	7,30	2,40	2,06
55	7,2	1.534	712	7,47	2,51	2,15
55	10	1.675	736	7,69	2,65	2,28

60	-25	368	441	5,53	0,97	0,84
60	-20	476	488	5,79	1,14	0,98
60	-15	607	535	6,08	1,32	1,13
60	-10	759	582	6,40	1,52	1,30
60	-5	933	628	6,76	1,73	1,48
60	0	1.129	675	7,14	1,95	1,67
60	5	1.348	721	7,55	2,17	1,87
60	7,2	1.451	742	7,75	2,28	1,96
60	10	1.588	767	8,00	2,41	2,07

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	542	405	5,35	1,34	1,16
40	-20	693	440	5,52	1,58	1,36
40	-15	868	475	5,71	1,83	1,58
40	-10	1.065	509	5,92	2,09	1,81
40	-5	1.285	544	6,14	2,36	2,04
40	0	1.528	578	6,38	2,64	2,28
40	5	1.794	613	6,63	2,93	2,53
40	7,2	1.918	628	6,75	3,06	2,64
40	10	2.082	647	6,90	3,22	2,78

45	-25	503	414	5,40	1,21	1,05
45	-20	644	452	5,59	1,42	1,23
45	-15	809	491	5,80	1,65	1,42
45	-10	996	528	6,04	1,89	1,63
45	-5	1.207	566	6,29	2,13	1,84
45	0	1.440	604	6,56	2,39	2,06
45	5	1.696	641	6,86	2,65	2,29
45	7,2	1.816	657	6,99	2,76	2,39
45	10	1.975	678	7,17	2,91	2,52

50	-25	463	424	5,44	1,09	0,94
50	-20	595	465	5,66	1,28	1,11
50	-15	750	506	5,90	1,48	1,28
50	-10	928	547	6,16	1,70	1,46
50	-5	1.129	588	6,45	1,92	1,66
50	0	1.352	629	6,76	2,15	1,86
50	5	1.599	669	7,09	2,39	2,06
50	7,2	1.715	687	7,25	2,50	2,16
50	10	1.868	710	7,45	2,63	2,27

55	-25	424	433	5,49	0,98	0,85
55	-20	546	478	5,73	1,14	0,99
55	-15	691	522	6,00	1,32	1,14
55	-10	860	566	6,29	1,52	1,31
55	-5	1.051	610	6,62	1,72	1,49
55	0	1.265	654	6,96	1,93	1,67
55	5	1.501	698	7,34	2,15	1,86
55	7,2	1.613	717	7,51	2,25	1,94
55	10	1.761	741	7,74	2,38	2,05

60	-25	384	443	5,54	0,87	0,75
60	-20	497	491	5,80	1,01	0,88
60	-15	633	538	6,10	1,18	1,02
60	-10	791	585	6,43	1,35	1,17
60	-5	973	632	6,79	1,54	1,33
60	0	1.177	679	7,18	1,73	1,50
60	5	1.404	726	7,60	1,93	1,67
60	7,2	1.511	746	7,79	2,02	1,75
60	10	1.654	773	8,05	2,14	1,85

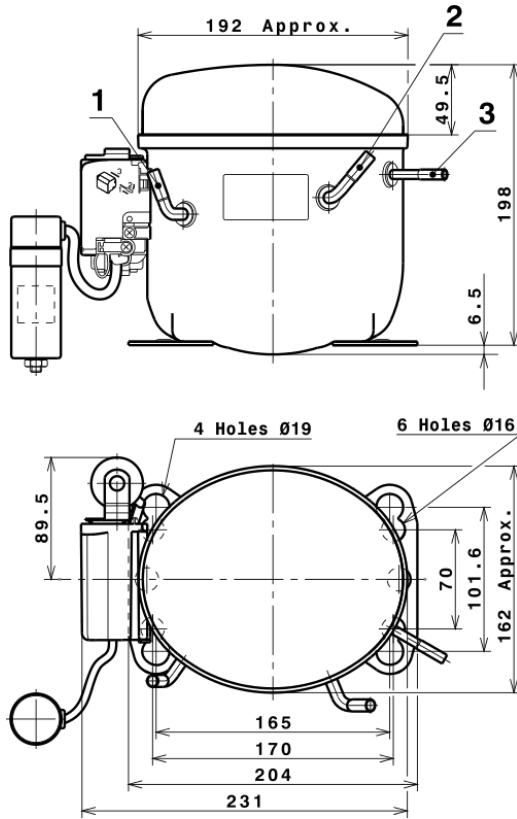
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.239,0774662159	386,7452471255	4,6231317579	19,067865396382
2	66,7288803173	2,0413945288	0,0003358220	0,6341141382705
3	-18,3427821970	5,1825745610	0,0452877287	-0,033288374619895
4	0,4505001844	0,0001208778	0,0006161987	0,0072853971754052
5	-0,4130242971	0,1291414790	0,0014168217	0,000277558363843

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

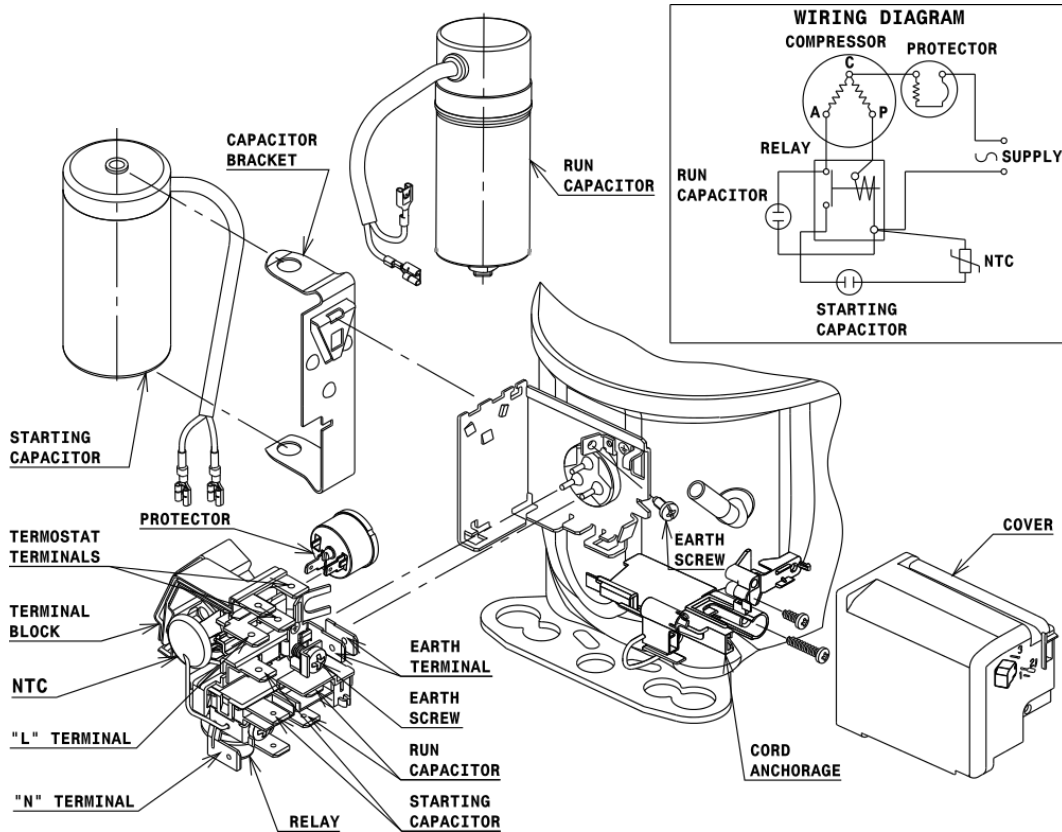
## COMPRESSOR DIMENSIONS



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

Ø16 holes (170x70 net)



### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R290 HMBP

