

NILV Series 24VAC IN Non Isolated Power Supplies



- Input : single phase 24 Vac
- Output: 5V 10V 12V 24V 3A - 20A
- Short circuit protected
- Non Isolated
- Compact size Din Rail Mount



Model Selection Table

Model Number	Description
NILV-5V-3A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (13VAC - 28VAC) Output: 5VDC 3A
NILV-10V-3A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (17VAC - 28VAC) Output: 10VDC 3A
NILV-24V-3A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (24VAC - 32VAC) Output: 24VDC 3A
NILV-12V-5A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (17VAC - 28VAC) Output: 12VDC 5A Peak 3.5A continuous
NILV-24V-5A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (24VAC - 32VAC) Output: 24VDC 5A Peak 3.5A continuous
NILV-24V-7A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (24VAC - 32VAC) Output: 24VDC 7A Peak 5.5A continuous
NILV-12V-10A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (17VAC - 32VAC) Output: 12VDC 10A Peak 7A Continuous
NILV-12V-15A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (17VAC - 32VAC) Output: 12VDC 15A Peak 10A Continuous
NILV-12V-20A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (17VAC - 32VAC) Output: 12VDC 20A Peak 15A Continuous
NILV-24V-10A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (24VAC - 32VAC) Output: 24VDC 10A Peak 7A Continuous
NILV-24V-15A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (24VAC - 32VAC) Output: 24VDC 15A Peak 10A Continuous
NILV-24V-20A	AC/DC Power Supply Din Rail Mount Non Isolated Input: 24VAC (24VAC - 32VAC) Output: 24VDC 20A Peak 15A Continuous

Description

These non-isolated single-output power supplies/converters are used to connect to a 24VAC transformer secondary and provide a regulated DC output voltage. Output current varies for different models from 3A up to 20A. Designed for industrial use these units offer a cost effective solution to supply a dc voltage from a low voltage ac transformer.

Specifications

Input Specifications

Input Voltage	24VAC (See model selection for details)
Input Frequency	47-63Hz
Internal Fuse	No internal fuse installed
External Fuse	3A Models: 4A 5A Models: 6A 7A Models: 10A

10A Models 15A
 15A Models: 20A
 20A Models: 25A

Output Specifications

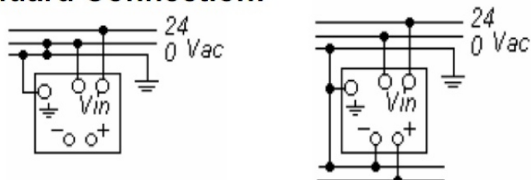
Output Voltage/Current	Model Dependent See Table
Output voltage Adjustment	Output is fixed
Switching Delay	Less than 100msec
Minimum Load	0A
Efficiency	Minimum 80%
Protection	Short circuit and overload
Parallel Operation	No
Overvoltage protection	No
Output ripple	Less than 100mV

General Specifications

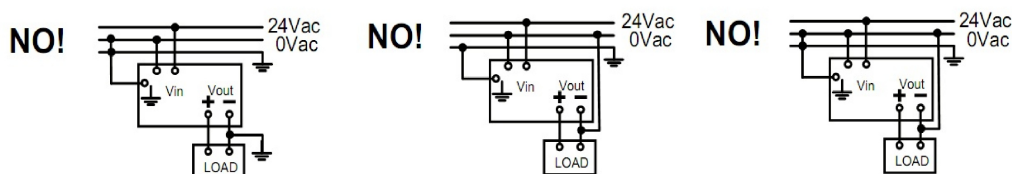
Operating Temp range	0 - 50°C
Storage Temp range	-25°C - +85°C
Humidity	95% - 25°C
Ip rating	IP20
Protection	I with PE connected
Dimensions / Weight	3A , 5A Models: 50 x 95 x 61 mm 0.2KG
	7A Models: 70 x 95 x 61 mm 0.35KG
	10A Models: 124 x 94 x 73 0.55KG
	15A , 20A Models: 150x115x 50x95mm 1.15KG
Standards	EMC 89/336/EEC 93/68/EEC
	Immunity EN50082-2 Level 4 class B
	Noise Radiation EN 55011 Class A

Connection Diagram for NILV series

Standard Connection:



Wrong Connection:



Operation of the power supply

The green led lights up permanently when the input voltage is applied at the power supply. The red led (DC ok) lights up permanently when the output voltage is OK and blinks when there is in overload range or in short circuit protection. The power supply is protected against short circuit on the output , overvoltage on the output and overload. The power supply can supply up to 1.1 x nominal current under overload , beyond that the voltage starts to drop down to zero The power supply is designed to operate at an ambient temperature of up to 50°C, please insure adequate ventillation around the power supply to allow for heat dissipation.