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NP-P5ASUP

5 AMP SUPERVISED

POWER SUPPLY / CHARGER

WI1340B 12/05



DESCRIPTION

The NP-P5ASUP is both a charger and supervised power limited supply that converts a low voltage AC input into a 12VDC or 24VDC power limited output, with 5A of continuous supply current.

FEATURES

- 12VDC or 24VDC selectable output.
- Maximum charge current .5 amps.
- 5 amps continuous supply current at 12VDC-24VDC.
- Filtered and electronically regulated outputs.
- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails
- AC input and DC output LED indicators.
- AC fail supervision (form "C" contacts).
- Low battery supervision (form "C" contacts).
- Short circuit and thermal overload protection.
- Includes battery leads.

Board Dimensions: 179.3mm(L) x 108.7mm(W) x 45mm(H)
Specified at 25° C ambient.

VOLTAGE OUTPUT/TRANSFORMER SELECTION TABLE

Output VDC	Switch Position	Transformer Requirements
12VDC @ 5 amps continuous supply current	1. ON 2. OFF	NP-TRF28100
24VDC @ 5 amps continuous supply current	1. ON 2. ON	NP-TRF28175

Note: Transformers with higher VA ratings may be used for all output voltages above as long as you do not exceed 28VAC.

INSTALLATION INSTRUCTIONS

The NP-P5ASUP should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount the NP-P5ASUP in desired location.
2. Set the NP-P5ASUP to desired DC output voltage via SW1 (see Voltage Output/Transformer Selection Table).
3. Connect proper transformer to terminals marked [AC] (see Voltage Output/Transformer Selection Table).
Use 18 AWG or larger for all power connections (Battery, DC output). Use 22 AWG to 18 AWG for power limited circuits (AC Fail/Low Battery reporting).
4. Connect devices to be powered to terminals marked [+ DC -]. **Note:** It is important to measure output voltage before connecting devices. This helps avoid potential damage.
5. When the use of stand-by batteries are desired, they must be lead acid or gel type. Connect battery to terminals marked [+ BAT -] on the board (battery leads included). Use two (2) 12VDC batteries connected in series for 24VDC operation. **Note:** When batteries are not used, a loss of AC will result in the loss of output voltage.
6. Connect appropriate signaling notification devices to AC Fail & Low battery supervisory relay outputs marked [N. C., C, N.O.].

LED DIAGNOSTICS

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC, Stand-by battery supplying power.
OFF	ON	No DC output.
OFF	OFF	No DC output. Loss of AC. Discharged or no battery.

TERMINAL IDENTIFICATION

Terminal Legend	Function/Description
AC/AC	Low voltage AC input (see voltage output/transformer selection table). For 12VDC output use 28VAC or higher with 100 VA power rating or higher. For 24VDC output use 28VAC with 175VA power rating or higher. Caution: Do not apply voltages above 28VAC (28 VAC is maximum input rating)
+ DC -	12VDC/24VDC @ 5 amps continuous power limited output.
AC FAIL N.C., C, N.O.	Used to notify loss of AC power, e.g. connect to audible device or alarm NC, C, NO panel. Relay normally energized when AC power is present. Contact rating 1 amp @ 120VAC / 28VDC
Low Battery N.C., C, N.O.	Used to indicate low battery condition, e.g. connect to alarm panel. NC, NO, C Relay normally energized when DC power is present. Contact rating 1 amp @ 120VAC / 28VDC. Low battery threshold: 12VDC output threshold set @ approximately 10.5VDC, 24VDC output threshold set @ approximately 21VDC.
+ BAT -	Stand-by battery connections. Maximum charge rate .5 amp.