

## 15-90W High Reliability Linear Power Supplies

### Features

- ◆ Single and Dual Outputs
- ◆ Excellent Line & Load Regulation
- ◆ Remote Programming and Current Share (NNS)
- ◆ Front Panel Voltage Taps
- ◆ Thermal Protection
- ◆ Five Year Warranty
- ◆ Low Output Ripple
- ◆ Fully Featured
- ◆ Operation from -20 to +71°C Ambient



### Key Market Segments & Applications



| Specifications            |     | NNS15   | NNS30      | NNS50      | NND15        | NND30        |
|---------------------------|-----|---|------------|------------|--------------|--------------|
| AC Input                  | VAC | 85~115, 98~132, 170~230, 195~265VAC (Front panel selectable)        |            |            |              |              |
| Input Frequency           | Hz  | 47~440Hz  |            |            |              |              |
| EMI                       | -   | FCC Class B, VDE0871 Level B  |            |            |              |              |
| Output Adjustment         | -   | ±10%  |            |            |              |              |
| Remote Sense              | -   | Yes   | Yes        | Yes        | None         |              |
| Remote Programming        | -   | 1000 Ohm/Volt   |            |            | None         |              |
| Parallel Operation        | -   | Via PC Terminal   |            |            | None         |              |
| Output Indicator          | -   | LED = On  |            |            |              |              |
| Line Regulation           | %   | 0.01%   |            |            |              |              |
| Load Regulation           | %   | 0.03%   |            |            |              |              |
| Cross Regulation          | %   | Not applicable  |            |            | 0.03%        |              |
| Ripple and Noise          | mV  | 1mV rms, 3mV peak to peak   |            |            |              |              |
| Overcurrent Protection    | %   | 105 to 130%   |            |            |              |              |
| Overvoltage Protection    | VDC | 5V: 6 ~ 7.2V, 12V: 14.5 ~ 17.2V, 15V: 18.1 ~ 21.5V, 24V: 29 ~ 34.3V |            |            |              |              |
| Cooling                   | -   | Convection  |            |            |              |              |
| Operating Temp. Range     | °C  | -20°C: 60%, 0 to 50°C: 100%, 60°C: 60%, 71°C: 40%                   |            |            |              |              |
| Storage Temperature       | °C  | -40 to +85°C  |            |            |              |              |
| Temperature coefficient   | %   | ±0.02% per °C   |            |            |              |              |
| Humidity (non condensing) | %RH | Operating: 20 - 95% RH, Non operating: 10 - 95% RH                  |            |            |              |              |
| Vibration                 | -   | 10-55Hz Amplitude (sweep for 1 min), <2G X, Y, Z 1 hour each        |            |            |              |              |
| Shock                     | -   | <20G  |            |            |              |              |
| Safety Agency Approval    | -   | UL60950-1, CSA60950-1, EN60950-1, CE Mark                           |            |            |              |              |
| Withstand Voltage         | -   | Input to Output: 3.75kVAC, Input to Chassis: 2.5kVAC for 1 minute   |            |            |              |              |
| Isolation Resistance      | -   | >100M at 500VDC @ 25C & 70%RH for 1 minute                          |            |            |              |              |
| Weight                    | g   | 1750  | 2930       | 4200       | 1750         | 2750         |
| Size WxHxD                | mm  | 60x124x124  | 80x124x178 | 97x113x200 | 60x113.5x150 | 80x113.5x164 |
| Warranty                  | yrs | Five years  |            |            |              |              |

Note: See Installation Manual for full details, test methods of parameters and application notes

## Model Selector

|               | Model      | O/P | O/P(V) | Max Cur.(A) | Max Pwr(W) | Eff. (%) |
|---------------|------------|-----|--------|-------------|------------|----------|
| Single Output | NNS155     | V1  | 5      | 3.0         | 15.0       | 35       |
|               | NNS305     | V1  | 5      | 6.0         | 30.0       | 35       |
|               | NNS505     | V1  | 5      | 10.0        | 50.0       | 42       |
|               | NNS1512    | V1  | 12     | 1.7         | 20.4       | 45       |
|               | NNS3012    | V1  | 12     | 4.0         | 48.0       | 45       |
|               | NNS5012    | V1  | 12     | 6.5         | 78.0       | 51       |
|               | NNS1515    | V1  | 15     | 1.4         | 21.0       | 46       |
|               | NNS3015    | V1  | 15     | 3.4         | 51.0       | 46       |
|               | NNS5015    | V1  | 15     | 5.5         | 82.5       | 53       |
|               | NNS1524    | V1  | 24     | 0.9         | 21.6       | 50       |
| Dual Output   | NND15-1212 | V1  | +12    | 0.75        | 18.0       | 45       |
|               |            | V2  | -12    | 0.75        |            |          |
|               | NND30-1212 | V1  | +12    | 1.6         | 38.4       | 45       |
|               |            | V2  | -12    | 1.6         |            |          |
|               | NND15-1515 | V1  | +15    | 0.6         | 18.0       | 45       |
|               |            | V2  | -15    | 0.6         |            |          |
|               | NND30-1515 | V1  | +15    | 1.3         | 39.0       | 45       |
|               |            | V2  | -15    | 1.3         |            |          |

## NND15 Outline Drawing



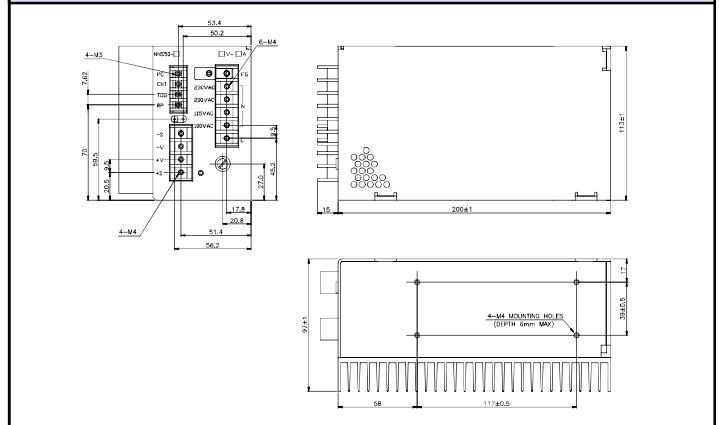
## NND30 Outline Drawing



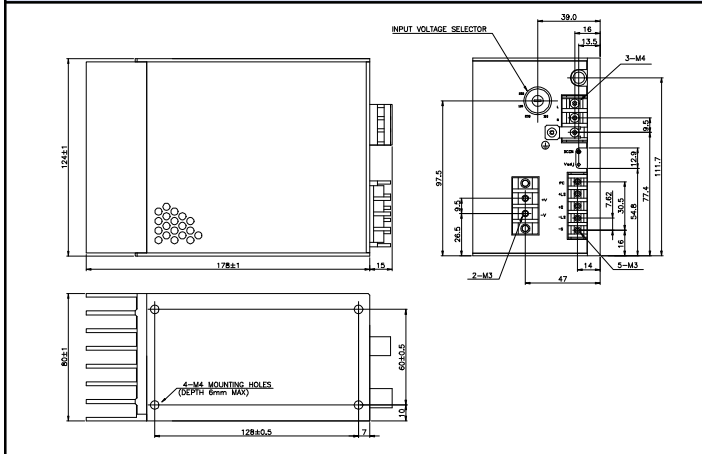
## NNS15 Outline Drawing



## NNS50 Outline Drawing



## NNS30 Outline Drawing



## Other Industrial Products

- HWS 15 to 1500W Single output, universal input switching
- ZWS 5 to 150W single output, universal input (switching)
- VSB & VSC 10 to 150W single output, 115VAC input (switching)

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| Input Frequency           | Hz  | 47~440Hz  |                 |            |              |              |       |  |
| EMI                       | -   | FCC Class B, VDE0871 Level B  |                 |            |              |              |       |  |
| Output Adjustment         | -   | ±10%  |                 |            |              |              |       |  |
| Remote Sense              | -   | Yes   | Yes             | Yes        |              | None         |       |  |
| Remote Programming        | -   |   | 1000 Ohm/Volt   |            |              | None         |       |  |
| Parallel Operation        | -   |   | Via PC Terminal |            |              | None         |       |  |
| Output Indicator          | -   | LED = On  |                 |            |              |              |       |  |
| Line Regulation           | %   | 0.01%   |                 |            |              |              |       |  |
| Load Regulation           | %   | 0.03%   |                 |            |              |              |       |  |
| Cross Regulation          | %   | Not applicable  |                 |            |              | 0.03%        |       |  |
| Ripple and Noise          | mV  | 1mV rms, 3mV peak to peak   |                 |            |              |              |       |  |
| Overcurrent Protection    | %   | 105 to 130%   |                 |            |              |              |       |  |
| Overvoltage Protection    | VDC | 5V: 6 ~ 7.2V, 12V: 14.5 ~ 17.2V, 15V: 18.1 ~ 21.5V, 24V: 29 ~ 34.3V |                 |            |              |              |       |  |
| Cooling                   | -   | Convection  |                 |            |              |              |       |  |
| Operating Temp. Range     | °C  | -20°C: 60%, 0 to 50°C: 100%, 60°C: 60%, 71°C: 40%                   |                 |            |              |              |       |  |
| Storage Temperature       | °C  | -40 to +85°C  |                 |            |              |              |       |  |
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| Vibration                 | -   | 10-55Hz Amplitude (sweep for 1 min), <2G X, Y, Z 1 hour each        |                 |            |              |              |       |  |
| Shock                     | -   | <20G  |                 |            |              |              |       |  |
| Safety Agency Approval    | -   | UL60950-1, CSA60950-1, EN60950-1, CE Mark                           |                 |            |              |              |       |  |
| Withstand Voltage         | -   | Input to Output: 3.75kVAC, Input to Chassis: 2.5kVAC for 1 minute   |                 |            |              |              |       |  |
| Isolation Resistance      | -   | >100M at 500VDC @ 25C & 70%RH for 1 minute                          |                 |            |              |              |       |  |
| Weight                    | g   | 1750  | 2930            | 4200       | 1750         | 2750         |       |  |
| Size WxHxD                | mm  | 60x124x124  | 80x124x178      | 97x113x200 | 60x113.5x150 | 80x113.5x164 |       |  |
| Warranty                  | yrs | Five years  |                 |            |              |              |       |  |

Note: See Installation Manual for full details, test methods of parameters and application notes

## Model Selector

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|---------------|------------|-----|--------|-------------|------------|----------|
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|               | NNS305     | V1  | 5      | 6.0         | 30.0       | 35       |
|               | NNS505     | V1  | 5      | 10.0        | 50.0       | 42       |
|               | NNS1512    | V1  | 12     | 1.7         | 20.4       | 45       |
|               | NNS3012    | V1  | 12     | 4.0         | 48.0       | 45       |
|               | NNS5012    | V1  | 12     | 6.5         | 78.0       | 51       |
|               | NNS1515    | V1  | 15     | 1.4         | 21.0       | 46       |
|               | NNS3015    | V1  | 15     | 3.4         | 51.0       | 46       |
|               | NNS5015    | V1  | 15     | 5.5         | 82.5       | 53       |
|               | NNS1524    | V1  | 24     | 0.9         | 21.6       | 50       |
| Dual Output   | NNS3024    | V1  | 24     | 2.3         | 55.2       | 50       |
|               | NNS5024    | V1  | 24     | 3.8         | 91.2       | 56       |
|               | NND15-1212 | V1  | +12    | 0.75        | 18.0       | 45       |
|               |            | V2  | -12    | 0.75        |            |          |
|               | NND30-1212 | V1  | +12    | 1.6         | 38.4       | 45       |
|               |            | V2  | -12    | 1.6         |            |          |
|               | NND15-1515 | V1  | +15    | 0.6         | 18.0       | 45       |
|               |            | V2  | -15    | 0.6         |            |          |
| Dual Output   | NND30-1515 | V1  | +15    | 1.3         | 39.0       | 45       |
|               |            | V2  | -15    | 1.3         |            |          |

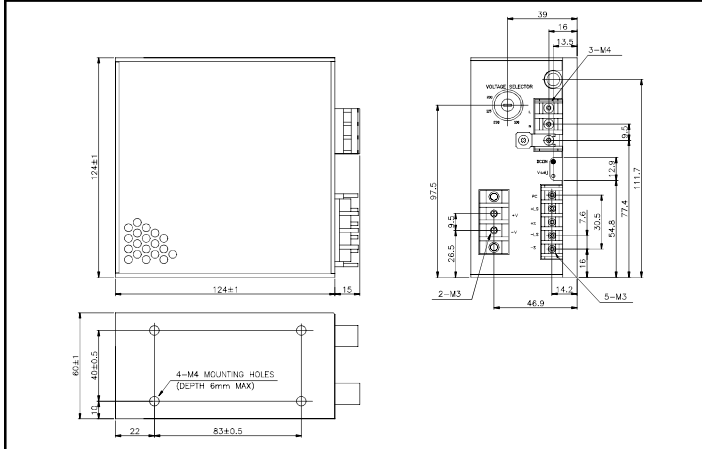
## NND15 Outline Drawing



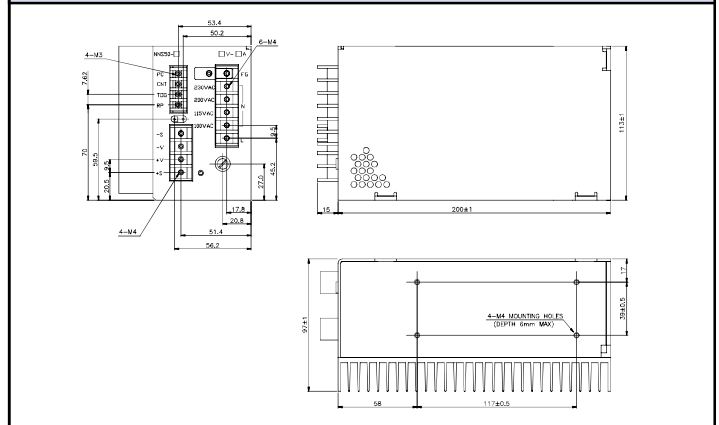
## NND30 Outline Drawing



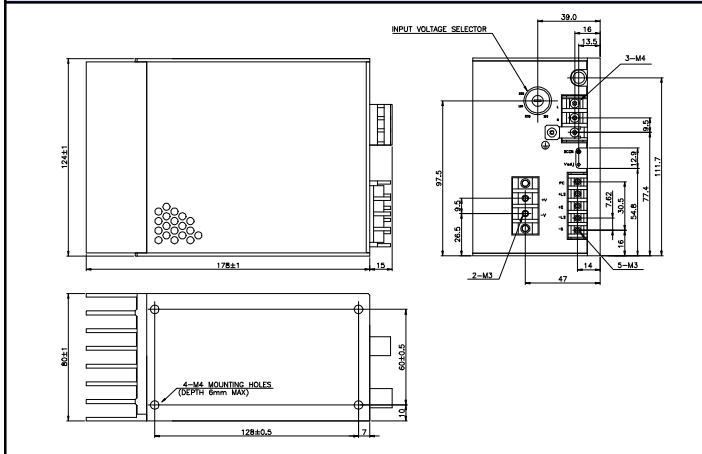
## NNS15 Outline Drawing



## NNS50 Outline Drawing



## NNS30 Outline Drawing



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### Вы можете приобрести в компании MosChip.

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<http://moschip.ru/get-element>

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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