

## General description

The N1hFSW 6W family of switch mode power supplies delivers typically 6W output and features wide-range input (94-264V), small size and light weight.

The units are available in cable-cable and printed circuit module versions.

Typical applications are electric equipment for use in household- and information technology equipment area such as field bus systems, heat controllers, jalousie drivers supply of DC – motors etc.



## Features

- **Wide input range (94-264V)**
- **Output voltage fixed (3,3-24VDC)**
- **Output voltage stability  $\pm 3\%$**
- **Output power typically 6W (max 1A)**
- **High efficiency**
- **Protection class II**
- **Short circuit proof**
- **Manufacturing according to ISO 9001**
- **Compact form factor**
- **Small size**
- **Wide operating temperature range (-25 to +50°C)**
- **Cable – cable version**  
The unit is designed to fit into standard flush boxes and can be mounted onto wood-surfaces or materials with unknown flammability with screws. The connection to mains and to the customer unit is realised with cables.
- **Printed circuit board module version**  
The unit is designed to be soldered onto a PCB with soldering pins.




| Input Parameter | Min | Typ | Max | Unit |
|-----------------|-----|-----|-----|------|
| Input voltage   | 94  |     | 264 | V    |
| Input current   |     |     | 160 | mA   |
| Input frequency | 47  | 50  | 63  | Hz   |
| Efficiency      | 65  |     | 80  | %    |

| Output Parameter         | Min | Typ | Max  | Unit |
|--------------------------|-----|-----|------|------|
| Output Voltage           | 3,3 |     | 24   | V    |
| Output voltage tolerance |     |     | 3    | %    |
| Output power             |     |     | 6    | W    |
| Output current           |     |     | 1000 | mA   |
| Ripple voltage           |     | 200 | 500  | mV   |

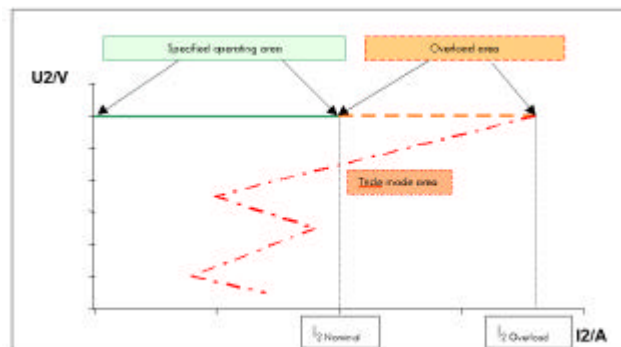
| Safety and Environmental Conditions | Min  | Typ | Max | Unit  |
|-------------------------------------|------|-----|-----|-------|
| Dielectric strength                 | 3,75 |     |     | KV/AC |
| Operation Temperature               | -25  |     | 50  | °C    |
| Storage Temperature                 | -30  |     | 80  | °C    |

| Reliability            |   |
|------------------------|---|
| MTBF according SN29500 | 1.700.000 h at 50°C ambient temperature and max load conditions |

## Test standards and approvals

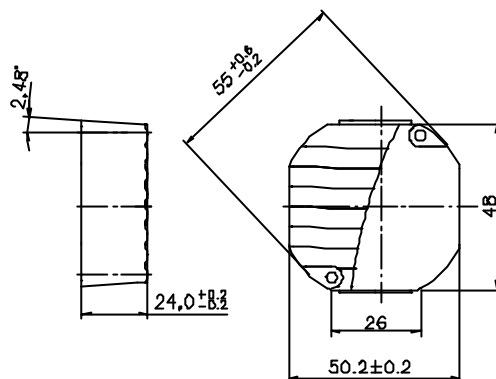
| Test standards  | Approvals   |
|---|---|
| EN 60950<br>EN 60335.-1<br>EN 61558-1<br>EN 61558-2-17<br>UL 1310<br>EN 61000-6-1<br>EN 61000-6-3 | <br><br> |

## Typical output chart



### Dimensions

| Dimensions | Length | Width | Diameter | Height | Unit |
|------------|--------|-------|----------|--------|------|
| N1hFSW     | 50,2   | 48    | 55       | 24     | mm   |



Cable – cable version

Printed circuit board module version

