



Switch Mode Power Supply

NFBG 1311G3001

(UNOTEC 2420 N)

1 Short Description

The **UNOTEC 2420N** is a switch mode power supply of the latest generation, which is characterized by its high efficiency and minimum power loss. It features Power Boost and Hyper Boost function. The **UNOTEC N** can be operated redundantly. Operation in series (2 units max.) and parallel operation (up to 5 devices) are possible. Because of modern architecture, it can work in temperatures up to 60 ° C without load reduction.

2 Technical Data

| | |
|--|--|
| Input | |
| Nominal voltage | 100-240 VAC -15% +10% 100-230 VDC -10 % + 8% |
| Network | TN-S, TN-C, TT, IT mains |
| Nominal frequency | 50 / 60 Hz ±6 % |
| Nominal current | 5,3 A @ 100 V AC 2,3 A @ 230 V AC |
| Efficiency | 94,1 % |
| No-load power losses | 3 W |
| Recommended external fuse max | 20 A (T) in building installation |
| Recommended circuit breaker | B6 |
| Output | |
| Voltage | 24 VDC |
| Voltage adjustable | 24-28 VDC / potentiometer in front plate |
| Residual Ripple | < 50 mV eff / rms |
| Spikes | < 200 mV ss / p-p |
| Nominal current | 20 A (up to 60 °C) |
| Ride-through | ≥ 30 ms |
| “Power boost“ current | 30 A >. 4 s without voltage variation |
| “Hyper boost“ current | 90 A > 20 ms |
| Short circuit current | After “power boost” follows constant current: 20 A |
| Switching in parallel | 5 devices |
| Switching in series | 2 devices |
| Output overload and short-circuit protected. With overload the output voltage begins to reduce. With over temperature the power supply switches off. | |

Technical Datasheet

UNOTEC 2420 N



J. Schneider
Elektrotechnik

| | |
|--|---|
| Connection Input | |
| Type of connection | Spring clamp, push-in 2,5 mm ² |
| Connection Output | |
| Type of connection | Spring clamp, push-in 2,5 mm ² |
| Connection Alarm | |
| Type of connection | Spring clamp, push-in 2,5 mm ² |
| Classification of climatic environmental conditions | Class 3K3 according to EN 60721 |
| Relative humidity | 5 ... 95%, no condensation |
| Environmental temperature | -25 ... +60 °C |
| Storage temperature | -40 ... +85 °C |
| MTBF according to DIN EN 61709:1999-01, SN 29500, DIN EN ISO 13849-1:2008-12 | |
| Housing | |
| Dimensions | 125 x 85 x 138 mm (H x W x D) |
| Weight | 1,26 kg |
| Protection class | I |
| Protection class of the housing | IP 20 |
| Pollution degree | 2 |
| Fixation | Snap-on mounting on DIN-rail |
| Fitting position | Vertical |
| Material | Metal |

3 Norms and Standards

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|-----------------------------|
| IEC / EN60950-1 SELV |
| EN 61204-3 |
| EN 55011 Klasse B, Gruppe 1 |
| EN 61000-3-2 |
| EN 61000-3-3 |
| EN 61000-4-2 ESD |
| EN 61000-4-3 HF-Feld |
| EN 61000-4-4 Burst |
| EN 61000-4-5 Surge |
| EN 61000-4-6 HF-asymm |
| EN 61000-4-11 |

CE-marking in compliance with EMC directive 2014/30/EU and low-voltage directive 2014/35/EU and Directive 2011/65/EU (RoHS Directive) of THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8th of June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast)