

# Technical Datasheet

## TRETEC 2448 N



**J. Schneider**  
Elektrotechnik



### Switch mode power supply

#### NFPG 1529G04001

(TRETEC 2448 N)

## 1 Short description

The **TRETEC 2448 N** is a switch mode power supply of the latest generation, which is characterised by its high efficiency and the resulting minimum power losses. The device also works with power boost function (output  $75\text{ A} \leq 5\text{ seconds}$  at  $60^\circ\text{C}$ ). The **TRETEC N** can be operated in a redundant way. It is possible to connect the device in series (max. 2 units) and in parallel up to 3 units without decoupling module. Due to its modern design it can be operated with a peak current in temperatures up to  $45^\circ\text{C}$  without load reduction.

## 2 Technical Data

<b>Input</b>	
Input	3 x 360 V ... 500 VAC $\pm 10\%$ 500 V ... 700 VDC $\pm 10\%$
Network	TN-S, TN-C, TT, IT grid
Nominal frequency	50 / 60 Hz $\pm 6\%$
Nominal current	2,3 A @ 3 x 360 V AC 1,6 A @ 3 x 500 V AC
Efficiency	93,7 %
No load power losses	2,3 W
Recommended pre-fusing max.	Max. 3 x 20 A (T) in house installation
Recommended circuit breaker	3 x 10...20 A characteristics C
<b>Output</b>	
Voltage	24 VDC $\pm 1\%$
Voltage adjustable	24-28 VDC / Potentiometer in front plate
Residual ripple	< 20 mV eff / rms
Output current max. $45^\circ\text{C}$	48,0 A
Derating at $60^\circ\text{C}$	40,0 A
at $70^\circ\text{C}$	30,0 A
Ride-through	> 20 ms
"Power Boost" current	60 A > 5 s without voltage drop
Short circuit current	after "Power Boost" follows constant current: 48A
Switching in parallel	3 devices
Switching in series	2 devices
<b>Connection input</b>	
Terminal strip	4 x 6 mm <sup>2</sup> with Push-In spring-type terminals
<b>Connection output</b>	
Terminal strip	4 x 16 mm <sup>2</sup> with Push-In spring-type terminals

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<b>Alarm contact</b>	
Potential-free alarm contact for pre-warning at overload, overheating or short-circuit	30 V AC/DC 50mA (ohmic)
Over voltage protection	yes
Terminal strip	4 x 2,5 mm <sup>2</sup> Push-In spring-type terminals
Classification of environmental conditions	class 3K3 according to EN 60721
Relative humidity	95%, no condensation
Environmental temperature	-40 ... +70 °C see Derating
Storage temperature	-40 ... +85 °C
MTBF according to DIN EN 61709:1999-01, SN 29500, DIN EN ISO 13849-1:2008-12	>750.000h
<b>Housing</b>	
Dimensions	138 x 109 x 182 mm (H x W x D)
Weight	2,7 kg
Protection class	I
IP protection	IP 20
Degree of pollution	2
Fixation	Snap-on mounting on DIN rail
Installation direction	vertical
Material	metal

### 3 Norms and regulations

EN 61204-3
EN 61000-3-2/-3
EN 61000-4-2/-3/-4/-5/-6/-11
IEC / EN 60950-1
EN 60204-1
SEMI F47 – 0706
EN 60950-1 overvoltage categorie II
UL 508

CE-approval according to EMI standard 2014/30/EU and low voltage standard 2014/35/EU and EU standard 2011/65/EU (RoHS - standard) of the European Parliament and of the European Council from 8<sup>th</sup> of June 2011 for the limitation of the use of certain dangerous material in electrical and electronic devices (amended version).