

# SCHIEDERWERK

**Electronic Power Supply**

**SMPS 48-53 10 U**

*Technical Specifications*



## CHARACTERISTICS

- Compact and light design
- High efficiency
- High reliability

## ORDER NUMBER

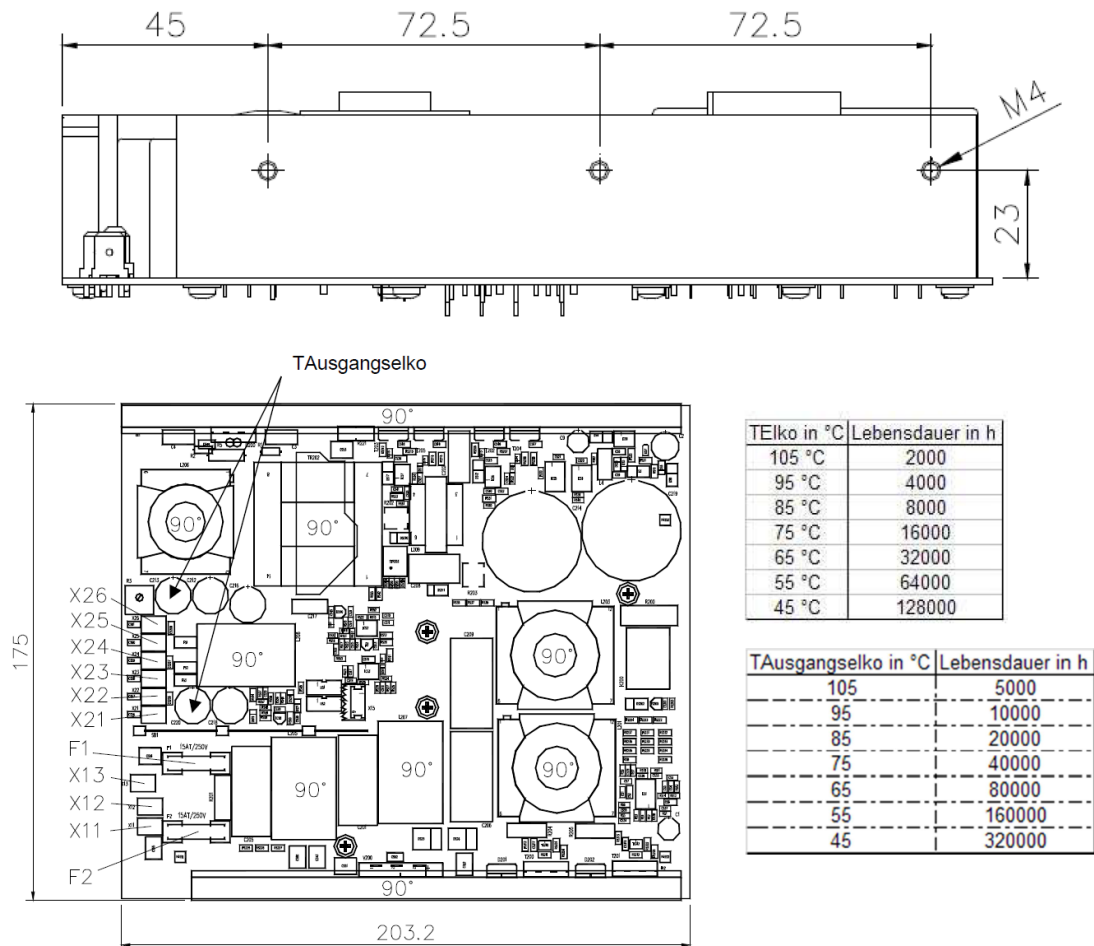
| Type            | Order No.   | Output Power | Connector (input) | Connector (output)       |
|-----------------|-------------|--------------|-------------------|--------------------------|
| SMPS 48-53 10 U | 35 429 1000 | 1000 W       | 3x AMP6,3         | 3x AMP 4,8<br>3x AMP 6,3 |

## TECHNICAL DATA

|                                       |  |
|---------------------------------------|--|
| Input voltage range, nominal (AC)     | 100V – 240V (functional 90V – 264V)                            |
| Input current range (AC)              | 7,8A – 3,3A (100V – 240V)                                      |
| Inrush current (peak value)           | < 35A  |
| Frequency range                       | 50Hz - 60Hz (functional 47Hz - 63Hz)                           |
| Input voltage range, nominal (AC)     | 100 – 240V (functional 90V – 264V)                             |
| Input current range (AC)              | 10 A – 5A (100V – 240V)  |
| Frequency range                       | 50Hz - 60Hz (functional 47Hz – 63Hz)                           |
| Inrush current (peak value)           | < 35A  |
| Hold-Up Time                          | 10ms   |
| Output voltage / current / power (DC) | 48-53V/ 19A / 1000W  |
| Peak Output current (max.)            | 23A  |
| Output voltage tolerance              | +/- 2 % (10% - 100% load)                                      |
| Maximum output voltage                | 55V (no load)  |
| Overvoltage protection                | 60V  |
| Efficiency                            | typical 90%  |
| Power factor                          | > 0,94 at nominal load within input voltage range              |
| EMI                                   | Internal noise filter  |
| Earth leakage current                 | < 0,5mA (240 VAC mains voltage @ 60Hz)                         |
| Ambient temperature                   | 0°C ...+50°C operation (no condensation) -5°C ...+60°C storage |
| Cooling                               | Forced cooling with min. 0,654 m <sup>3</sup> /min (23,1 CFM)  |
| Thermal Shutdown, automatically       | 90-100°C shell- / heatsink-temperature                         |
| Dimensions in mm                      | l = 203,5 w = 175 h = 45                                       |

Subject to changes without notice

## PERMITTED MAXIMAL OPERATION TEMPERATURES ON COMPONENT SURFACES



## PLUG CONNECTION

| OUTPUT |                             |         |
|--------|-----------------------------|---------|
| X26    | Ground (PE)                 | AMP 6,3 |
| X25    | 48V (LEDs, 10A fuse)        | AMP 4,8 |
| X24    | Ground (PE)                 | AMP 6,3 |
| X23    | 48V (LEDs, 10A fuse)        | AMP 4,8 |
| X22    | Ground (PE)                 | AMP 6,3 |
| X21    | 48V (Zusatzboard, 10A fuse) | AMP 4,8 |
| INPUT  |                             |         |
| X13    | PE                          | AMP 6,3 |
| X12    | N (15A fuse)                | AMP 6,3 |
| X11    | L (15A fuse)                | AMP 6,3 |

## WARNING NOTICE

A basic requirement for both installation and initial operation of the power supply assembly is the knowledge of the updated mounting and wiring instructions that are included in delivery. In case of any doubt it is imperative to contact Schiederwerk.

The power supply assembly (SMPS) has been designed to be installed in closed housings. Mounting, wiring and replacement if necessary has to be done by qualified personnel only. Due observation of the valid norms and safety regulations is mandatory when mounting and wiring the device. See that sufficient cooling is provided during operation.

The output voltage of the assembly is galvanically isolated from mains voltage. Output voltage level is within SELV range and absolutely nonhazardous in case of touching. The output is short-circuit proof. However, short-circuits on the output side should be avoided in order to prevent sparking. Use tools or measuring equipment that is mostly insulated.

The power supply assembly must never be used in explosive areas or close to inflammable material.

Do not expose the devices to moisture, dust or other kind of contamination because this may cause short circuits or fire in worst case.

Furthermore, the power supply assembly may be used outdoor under special conditions only. In case of doubt, please contact Schiederwerk.

For measurements at the power supply use an isolating transformer and carry out your work with due diligence. Measuring equipment must not be connected to Protective Earth (PE) in any way.

Schiederwerk does not assume liability for disregarding of this notice, incorrect use of the SMPS or disregarding of any legal requirements. This product is subject to technical changes without prior notice.

Last Update: 31.10.2014