

# **HSE01201**

# **DIN Rail**

## **Made in Germany**

# 120 Watts Power Supply -20...+70°C 115/230Vac Input Voltage

## **Short Specification:**

- Metal housing
- Up to 91% efficiency
- -20°C...+60°C full output power
- Free air convection
- Galvanic insulated
- Continuous short circuit protected
- Overload & low voltage protected
- Soft start & auto-recovery
- Hold up time >30ms
- Minimum load = 0A

- Switching frequency typ. 100KHz
- EMI/EMS EN61000-6-2,3, EN55022 class B
- PFC: EN61000-3-2 class A
- cUL60950/16950 IEC(EN)60950-1
- · Series & parallel operation
- DIN Rail 35mm
- Screw terminals AWG26...AWG12
- 24 hours burn in test
- High reliability, shock & vibration resistant

## Smart start-up with critical loads:

- motor drives
- capacitive loads
- DC-DC-converters















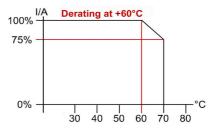
Single-Ua: 12V, 15V, 24V, 36V, 48V, 60V, 72V, 110V

In accordance with IEC60950-1



| AC Input   | 85132Vac / 184265Vac , 4763Hz , 110375Vdc |           |           |           |           |         |         |         |
|--|---|-----------|-----------|-----------|-----------|---------|---------|---------|
| <b>AC Nominal Input</b>  | 115Vac <2.2A 230Vac <1.1A                 |           |           |           |           |         |         |         |
| Nominal Voltage  | 12V                                       | 15V       | 24V       | 36V       | 48V       | 60V     | 72V     | 110V    |
| Nominal Current  | 10.0A                                     | 8.0A      | 5.0A      | 3.3A      | 2.5A      | 2.0A    | 1,7A    | 1,1A    |
| Adjust Range   | 11,413,2V                                 | 14,216.5V | 22,528,5V | 34,239,6V | 45,652,8V | 5766V   | 6886V   | 100120V |
| Ripple 230Vac 20MHz  | 50mVpp                                    | 50mVpp    | 65mVpp    | 65mVpp    | 100mVpp   | 120mVpp | 120mVpp | 200mVpp |
| Order code: HSF01201 Vout+(T= DIN Rail : W= wall mount) Example: 24V for DIN-Rail = HSF01201 24T |   |           |           |           |           |         |         |         |

| Factury Adjust. Tolerance Uout                  | ± 1%                                     |  |  |  |  |
|---|--|--|--|--|--|
| Load regulation                                 | < ± 0.5% 10-100%, 100-10%                |  |  |  |  |
| Switching Frequency                             | 100KHz typical                           |  |  |  |  |
| Basic Load                                      | 0 A                                      |  |  |  |  |
| Efficiency                                      | 91% typ.                                 |  |  |  |  |
| Load Protection                                 | 1,2x I <sub>rated</sub> ,auto recovery   |  |  |  |  |
| Voltage Protection                              | 145% of U <sub>out</sub> , auto recovery |  |  |  |  |
| Short Circuit Protection                        | Continuous                               |  |  |  |  |
| Temperature Control                             | Upon request                             |  |  |  |  |
| Hold Up Time                                    | > 30ms 230Vac                            |  |  |  |  |
| Inrush Current                                  | < 16A (230Vac)                           |  |  |  |  |
| Softstart                                       | 50ms typical                             |  |  |  |  |
| Cooling   | Natural convection                       |  |  |  |  |
| Ambient Temperature                             | - 20°C+70°C                              |  |  |  |  |
| Storage Temperature                             | - 40°C+85°C                              |  |  |  |  |
| EMI   | EN55022 class B / EN61000-3-2            |  |  |  |  |
| EMS   | EN61000-6-2,3                            |  |  |  |  |
| Safety  | cUL60950, EN60950-1, EN60204             |  |  |  |  |
| Safety class 1(A)                               | VDE0805, VDE0100                         |  |  |  |  |
| Air & Surface Leakage Paths                     | > 8mm                                    |  |  |  |  |
| Input/Output Isolation                          | I/P-O/P:4KVac I/P-G:2KVac                |  |  |  |  |
|   | O/P-G:0.5KVac                            |  |  |  |  |
| DC Fail Relay (galv. Insulated)                 | <48Vdc/500mA (not 72V, 110V)             |  |  |  |  |
| MTBF rated                                      | 400000h                                  |  |  |  |  |
| Dimensions (HxWxD)                              | 124x50x96mm                              |  |  |  |  |
| Weight  | 510g                                     |  |  |  |  |
| Connectors (AC & DC)                            | Terminal plug AWG26AWG12                 |  |  |  |  |
| Options for military use available upon request |  |  |  |  |  |



#### **Terminal Connects:**

1 = L 2 = N 3 = GND 1 = DC + 2 = DC + 3 = DC -4 = DC -5 = relay (not 72V & 6 = relay 110V)

Screw terminal order codes: Art.No.: 3520038 (3 pins) (each package = 10 pcs ) Art.No.: 3520037 (2 pins) for SK1 1pc (3520038) SK2 2-3pcs (3520037)

### Conception:

\*normally closed contact

# The HSE power supply series realizes very high power efficiency in a space-saving housing. This design enables Green Power applications and allows free air convection. Latest generation electrical devices relate to the high reliability of all Camtec products. The Camtec philosophy is, to employ 125°C low ESR ultra long life capacitors where expedient to achieve a superior lifetime of our products. The used screw terminal plugs allow easy to wire, smooth service and protect you from mix-up the input with the output signals.

#### **Parallel Operation Mode:**

Parallel operation of equal HSE-Power-Supplies provides you a higher output power. Make sure that the DC voltages differ at only ±1% and that DC cables are of equal length.

#### Series Operation Mode:

To raise the output voltage you can drive equal HSE power supplies in series, too.

