Switched-Mode Power Supply, 1-Phase
EPSITRON® ECO Power

- Primary switch mode power supply unit
- Prepared for class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

### Technical Data

#### Input:
- Nominal input voltage $V_{i\text{nom}}$: $110 \ldots 240$ VAC
- Input voltage range: $85 \ldots 264$ VAC, $90 \ldots 373$ VDC
- Frequency: $47 \ldots 63$ Hz
- Input current $I_i$: $1.0$ A typ. at $230$ VAC; $2.0$ A at $115$ VAC
- Discharge current: $<3.5$ mA
- Inrush current: $<30$ A at AC $230$ V; $<25$ A at AC $115$ V
- Mains failure hold-up time: $>20$ ms at $230$ VAC

#### Output:
- Nominal output voltage $V_{o\text{nom}}$: $24$ VDC (SELV)
- Output voltage range: $22 \ldots 28$ VDC adjustable
- Output current $I_o$: $5$ A at $24$ V DC
- Factory preset: $24$ VDC
- Adjustment accuracy: $1\%$
- Residual ripple: $<100$ mV (peak-to-peak)
- Overload behavior: Constant power (in overload range: $1.15 \ldots 1.4 \times I_a$); shutdown and automatic restart in the event of a short circuit
- Operational indication: LED green ($24$ V DC o.k.), LED red (overload)

#### Efficiency / power losses:
- Efficiency: $82$ % typ. ($110$ VAC), $86$ % typ. ($230$ VAC)
- Power loss $P_v$: $19.5$ W at $230$ VAC and $5$ A DC
- Max. power loss $P_v$: $23.5$ W at $110$ VAC and $5.5$ A DC

#### Fuse protection:
- Internal fuse: $F_{3.15}$ A / $250$ V
- External fuse: Circuit breakers $10$ A, $16$ A, characteristic: $B$ or $C$
- An external DC fuse is required for the DC input voltage

### Description

- Item No.: 787-722
- Pack.: 1

### Technical Data

- Environmental requirements:
  - Ambient operating temperature: $-10 \, ^\circ C \ldots +60 \, ^\circ C$
  - Storage temperature: $-25 \, ^\circ C \ldots +85 \, ^\circ C$
  - Rel. humidity: $95\%$ (no condensation)
  - Derating: $-5.33\% / K$ (> $45 \, ^\circ C$ at $230$ VAC)
  - Degree of pollution: $2$ (acc. to EN 50178)
  - Climatic category: $3K3$ (acc. to EN 60721)

- Safety and protection:
  - Test voltage pri.-sec. / pri.-gr. / sec.-gr.: $3$ kV AC / $1.5$ kV AC / $0.5$ kV AC
  - Protection class: Prepared for class I equipment
  - Degree of protection: IP20 acc. to EN 60529
  - Overvoltage protection: via varistor at primary circuit
  - Short circuit protection: yes
  - No-load proof: yes
  - Feedback voltage: $28$ VDC
  - Parallel operation: yes
  - Series connection: yes
  - MTBF: $480000$ h (acc. IEC 61709)

- Connection and type of mounting:
  - Wire connection: CAGE CLAMP® (WAGO 745 Series)
  - Cross sections: $0.08 \, \text{mm}^2 \ldots 4 \, \text{mm}^2 / \text{AWG} 28 \ldots 12$
  - Strip lengths: $8 \ldots 9$ mm / $0.33$ in
  - Type of mounting: DIN-rail mount (EN 60715)

- Dimensions and weight:
  - Dimensions [mm]: $75 \times 92 \times 136$
  - Height from upper-edge of DIN 35 rail: $850$ g

- Standards and approvals:
  - Standards/Specifications: EN 60950, EN 61204-3, EN 60950, UL 60950, 60950, ANSI/ISA 12.12.01 (Class I Div 2), ATEX, IEC Ex