30/06/1

www.elecdan-converter.com

Modules equipped with streamlined DC/DC converters, dust & water-resistant IP67, available in two presentations for optimum space saving and heat dissipation:

➤ 3: special heat dissipator, mounting on side or front, on DIN rail or wall; connections through 4 streamlined clamps for wires ≤ 72mm²

➤ 1: integrated dynamic cooling with a mini tubed fan, fast rackingout for fan replacement directly by the user after 50,000 hours. Case 96 x 64 x 61 mm thickness, to be mounted on wall or DIN rail. NB. The range of temperatures is limited (-30 to +70°C).

Electrical data

- ♦ "Vin" Input (protected against undervoltage and surge pulses)
 - **60 to 160V** (accidental max.: 180V / 0.1s)
 - no load consumption: < 15mA at 72V</p>
 - > possible external time-delay fuse: 7A
 - > optional "ON/OFF" remote control

♦ "Vout" Output

- > 12V / 15V / 24V; accuracy: 1%
- > optional fit with embedded "10 revolutions" axis: ±10%
- ▶ line and load regulation: < 5.10⁻³ of Vout
- ➤ temperature coefficient: 2.10⁻⁴ of Vout, per °C
- ➤ switching frequency: fixed (≈ 360 kHz)
- ➤ residual ripple: ≤1.5% of Vout
- nominal efficiency: 88% (losses < 28W)</p>
- ➤ dynamic response: < 0.5 ms, with 25% load variation
- > permissive capacitive load: 1000μF to >10,000μF depending on load

Protections

- input-output insulation: 2500V AC. Internal filter on the input
- > against overload and short circuit (even constant) by pulsed flow
- > in case of inductive load: option "L" will reinforce protection
- > "inversion Vin"option: internal diode (external fuse required)
- > abnormal temperature rise: automatic shutdown and restarting
- > total sealing IP67 (except fan for case 1)

Thermal and environmental performances

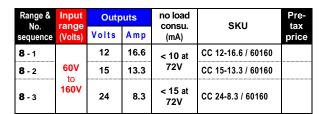
- > storage 3: -40 to +100°C; operating 3: -40 to +90°C
- > cooling 3: natural convection (derating 2.5% per °C)
- > temperature rise of the case, at full load: < 35°C
- > maximum ambient temperature:
 - 50°C at full power for case 3 (60°C for case 1)
 - 70°C at half power for cases 3 and 1
- vibrations, shocks, humidity: protection by epoxy resin

Standards and specifications

- > marking CE/UL60950-1, ICE60950-1, EN60950-1 / RoHS
- ➤ flammability for PA 2002: UL94HB, horizontal test
- ➤ MTBF case 3: > 150,000 hours, case at 25°C (MIL-HB217E)
- > MTBF fan (easy rapid unplugging): 50,000 hours
- > worldwide manufacturers for active parts
- ➤ assembling and final controls: *ELECDAN-CONVERTER*

| Case mountable on | Dimensions (mm) | Weight | SKU | Connections | |
|-------------------|-----------------|--------|-----|-----------------|--|
| 3 DIN rail & wall | 112 x 120 x 37 | 700g | 3 | screw terminal, | |
| 1 DIN rail & wall | 96 x 64 x 61 | 380g | 1 | wires ≤ 72 mm² | |

| SZ | Vout fit with axis "10 revolutions" | | other Vin and/or Vout | value |
|--------------------|-------------------------------------|---|------------------------|-------|
| OPTIONS and SKU | inductive load driving | ٦ | remote sense | Т |
| 0 P | "ON / OFF" remote control | Н | "inversion" protection | PI |



| Case 3 to be mounted on wall or DIN rail | | | | | |
|--|--|---------------------------|--|--|--|
| paroi | front 112 x 120 : two holes Ø 4.5 mm, vertical fixing distance 90 mm | | | | |
| paroi | front 112 x 37 : two M3, vertical fixing distance 50 mm | | | | |
| clip | front 112 x 120 : clip C | face 112 x 37 : clip C 37 | | | |



Case 1 64 x 96 x thickness 61 mm; with built-in fan

> DIN rail mounting

> wall mounting (vertical fixing distance 85 mm)

