Switching power supply with integrated battery charger

- Suitable for 12 Vdc loads and batteries
- Suitable for lead batteries
- Suitable for charging batteries while feeding loads
- · Battery protection circuit
- "Deep discharge" battery protection
- Status display LED and failure contact

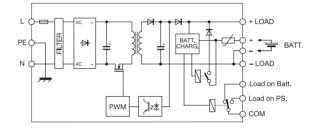
NOTES

The depth dimension includes the terminal blocks and the $\ensuremath{\mathsf{DIN}}$ clamp.

- (2) With 100...127 Vdc input voltage, constant output power and Ta>45°C, the output current must be derated by 25%
 (3) In addition to the current load, the device supplies about 0.8
- A for battery charging
- (4) Over 50°C (122°F) apply a derating -0.13 A/°C, max 60°C



BLOCK DIAGRAM



VERSIONS **APPLICATIONS** Cod. XCSC120B Cod. XCSC120C Output 12 Vdc 5 A CSC120B Output 24 Vdc 5 A CSC120C **INPUT TECHNICAL DATA** 120-230 Vac (range 90...264 Vac / 100...370 Vdc) (2) Input rated voltage Frequency 47...63 Hz 2.0 A / 1.1 A ± 10% Current @ nominal lout (Uin 120 /230 Vac) Inrush peak current < 20 A Power factor > 0.6 Internal protection fuse T 3.15 A replaceable circuit breaker: 4 A - C characteristic - fuse: T 3.15 A External protection on AC line **OUTPUT TECHNICAL DATA** Output voltage with operating power supply 12.5...15.5 Vdc 23...27.5 Vdc Output voltage with batteries 12...14.4 Vdc 24...26.2 Vdc Continuous current 7 A @ 50°C (3) 5 A @ 50°C (3) >11 A for >30 s >8 A for >30 s Overload limit Short circuit peak current >18 A for >50 ms >12 A for >50 ms Load regulation < 1% < 1% Ripple @ nominal ratings 80 mVpp 80 mVpp Hold up time @ In (Uin 120 / 230 Vac) >24 ms / >80 ms >17 ms / >72 ms Overload / short circuit protections with operating power supply: hiccup at the overload limit with auto reset non operating power supply: auto resettable electronic fuse against battery short circuit with non operating power supply: threshold-relay against battery deep discharge Alarm signals 'PSU OK" green LED / failure contact / "BATTERY" red LED Max. charging current 0.8 A (suitable for sealed lead batteries up to 15 Ah) **GENERAL TECHNICAL DATA** Efficiency (Uin 120 / 230 Vac) >86% / >90% >90% Dissipated power (Uin 120 / 230 Vac) 21 W / 13 W < 13 W Operating temperature range -20...+60°C, with derating over 50°C / over temperature protection (4) Input/output isolation 1.5 kVac / 60 s SELV output Input/ground isolation 1.5 kVac / 60 s Output/ground isolation 0.5 kVac / 60 s Standard/approvals IEC950, EN60950 EMC Standards EN55011, EN61000-6-1 MTBF @ 25°C @ nominal ratings >500'000 h acc. to SN 29500 / >150'000 h acc. to MIL Std. HDBK 217F Overvoltage category/Pollution degree ∥/2 Protection degree IP 20 IEC 529 EN60529 Connection terminal 2.5 mm² pluggable screw type Housing material aluminium Approx. weight 500 g (17.65 oz) Mounting information vertical on rail, allow 10 mm spacing between adjacent components **MOUNTING ACCESSORIES** Mounting rail type according to IEC60715/TH35-7.5 PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB Mounting rail type according to IEC60715/G32

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