

Single-phase switching power supply 120-230 Vac output power 500 W

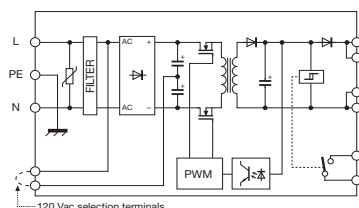
- Single-phase input 120 and 230 Vac
- Short circuit, overload, over temperature, input and output overvoltage protections
- High inrush current to guarantee downstream overcurrent protections selectivity and to start-up heavy loads
- Compact dimensions
- Suitable for applications in SELV and PELV circuits
- Failure contact for Uout -10%



NOTES

- The depth dimension includes the DIN rail clamp.
- (2) Double input selectable with external jumper.
 - (3) Over 45°C (113°F) apply a derating: C version: -0.34 A/°C for version C; -0.17 A/°C for version D;
 - (4) For this peak current, the output voltage does not drop more than 10% of the nominal value, but the current value, provided by the power supply also depends on the total line resistance.

BLOCK DIAGRAM



Special version for DC motors

VERSIONS
Output 24 Vdc 20 A
Output 24 Vdc 20 A redundant version
Output 12...15 Vdc 40 A
Output 48 Vdc 10 A redundant version

Cod. XCSF500C	Cod. XCSF500D
CSF500C	CSF500D

INPUT TECHNICAL DATA	
Input rated voltage	120-230 Vac (range 90...132 Vac / 185...264 Vac) (2)
Frequency	47...63 Hz
Current @ nominal Iout (Iin 120 / 230 Vac)	4.1 A / 2 A ± 10%
Inrush peak current	< 25 A with electronic limiter
Power factor	> 0.75 with PFC
Internal protection fuse	—
External protection on AC line	circuit breaker: 16 A C characteristic - fuse: T 15 A

OUTPUT TECHNICAL DATA	24 Vdc	48 Vdc
Output rated voltage	24...28 Vdc	45...55 Vdc
Output adjustable range	20 A @ 45°C (3)	10 A @ 45°C (3)
Continuous current	30 A for >5 s with Uout >90% Un (4)	15 A for >5 s with Uout >90% Un (4)
Overload limit	>50 A for 5 s (4)	>50 A for 5 s (4)
Short circuit peak current	< 0.5%	< 0.5%
Load regulation	≤ 50 mVpp	≤ 50 mVpp
Ripple @ nominal ratings	>12 ms / >20 ms	>12 ms / >20 ms
Hold up time @ In (Iin 120 / 230 Vac)	hiccup at the overload limit with auto reset / over temperature protection	
Overload / short circuit protections	"DC OK" green LED / "DC OK" alarm contact/ "Overload" red LED	
Status display	21.6 Vdc	43.2 Vdc
Alarm contact threshold	possible	possible
Parallel connection	factory provided with internal ORing diode	factory provided with internal ORing diode

GENERAL TECHNICAL DATA	
Efficiency (Iin 120 / 230 Vac)	>92% / >92%
Dissipated power (Iin 120 / 230 Vac)	42 W / 42 W
Operating temperature range	-20...+60°C, with derating over 45°C / over temperature protection (3)
Input/output isolation	3 kVac / 60 s SELV output
Input/ground isolation	1.5 kVac / 60 s
Output/ground isolation	0.5 kVac / 60 s
Standard/approvals	EN50178, EN61558, EN60950, IEC950, UL508
EMC Standards	EN61000-6-2, EN61000-6-4, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11
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	II / 2
Protection degree	IP 20 IEC 529, EN60529
Connection terminal	4 and 6 mm ² fixed screw type
Housing material	aluminium
Approx. weight	1,3 kg (45.89 oz)
Mounting information	vertical on rail, allow 10 mm spacing between adjacent components

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Overvoltage category/Pollution degree	II / 2
Protection degree	IP 20 IEC 529, EN60529
Connection terminal	4 and 6 mm ² fixed screw type
Housing material	aluminium
Approx. weight	1,3 kg (45.89 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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