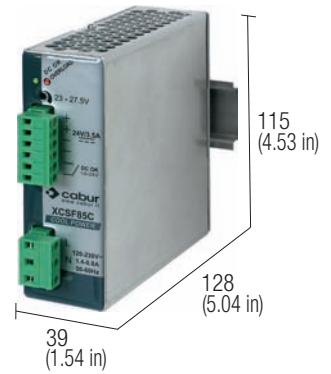


# Single-phase switching power supply 120-230 Vac output power 85 W

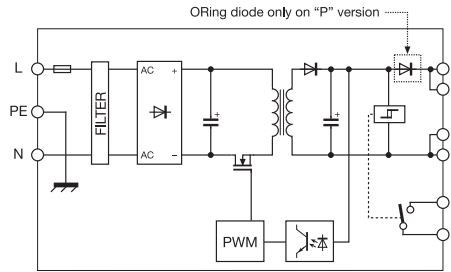
- Single-phase input 90...264 Vac and DC 100...370 Vdc
- Short circuit, overload, over temperature, input and output overvoltage protections
- High outrush current to guarantee downstream overcurrent protections selectivity and to start-up heavy loads
- Failure contact for Uout -10%
- Compact dimensions
- Suitable for applications in SELV and PELV circuits



## NOTES

- The depth dimension includes the DIN rail clamp.
- (2) With 100...127 Vdc input voltage, constant output power and  $T_a > 45^\circ\text{C}$ , the output current must be derated by 25%
- (3) Over  $45^\circ\text{C}$  ( $113^\circ\text{F}$ ) apply derating: CSF3-CSF3P:  $-0.07\text{ A}/^\circ\text{C}$ ; B version:  $-0.1\text{ A}/^\circ\text{C}$ ; versione A:  $-0.13\text{ A}/^\circ\text{C}$
- (4) Overload and short circuit current depends on the total line resistance.

## BLOCK DIAGRAM



## VERSIONS

- Output 24 Vdc 3.5 A
- Output 24 Vdc 3.5 A redundant version
- Output 12...15 Vdc 6 A
- Output 48 Vdc 1.8 A

Cod. XCSF85C      Cod. XCSF85CP      Cod. XCSF85B

CSF85C	CSF85CP	CSF85B	-
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## INPUT TECHNICAL DATA

Input rated voltage	120-230 Vac (range 90...264 Vac / 100...370 Vdc) (2)
Frequency	47...63 Hz
Current @ nominal lout (Uin 120 / 230 Vac)	1.6 A / 0.9 A $\pm 10\%$
Inrush peak current	< 20 A
Power factor	> 0.65
Internal protection fuse	T 2 A replaceable
External protection on AC line	circuit breaker: 4 A - C characteristic - fuse: T 4 A

## OUTPUT TECHNICAL DATA

	24 Vdc	12...15 Vdc	
Output rated voltage	23...27.5 Vdc	12...15 Vdc	
Output adjustable range			
Continuous current	3.5 A @ 50°C (3)	6 A @ 50°C (3)	
Overload limit	6 A per >30 s with Uout > Un x 0.9 (4)	9 A per >30 s with Uout > Un x 0.9 (4)	
Short circuit peak current	10 A per 50 ms (4)	10 A per 50 ms (4)	
Load regulation	< 1%	< 1%	
Ripple @ nominal ratings	$\leq 70\text{ mVpp}$	$\leq 30\text{ mVpp}$	
Hold up time @ In (Uin 120 / 230 Vac)	>20 ms / >70 ms	>15 ms / >60 ms	
Overload / short circuit protections	hiccup at the overload limit with auto reset / over temperature protection		
Status display	"DC OK" green LED / "DC OK" alarm contact/ "Overload" red LED		
Alarm contact threshold	21.6 Vdc	10.8 Vdc	
Parallel connection	possible	possible	
Redundant parallel connection	possible with external ORing diode	factory provided with internal ORing diode	possible with external ORing diode

## GENERAL TECHNICAL DATA

Efficiency (Uin 120 / 230 Vac)	>85% / >89%	>83% / >87%
Dissipated power (Uin 120 / 230 Vac)	15 W / 11 W	17 W / 13 W
Operating temperature range	$-20...+60^\circ\text{C}$ , with derating over $50^\circ\text{C}$ / 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, UL60950	
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	2.5 mm <sup>2</sup> pluggable screw type	
Housing material	aluminium	
Approx. weight	400 g (14.12 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	-