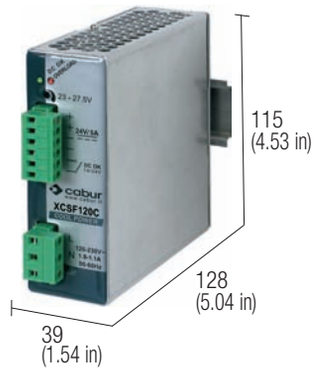
Single-phase switching power supply 120-230 Vac output power 120 W

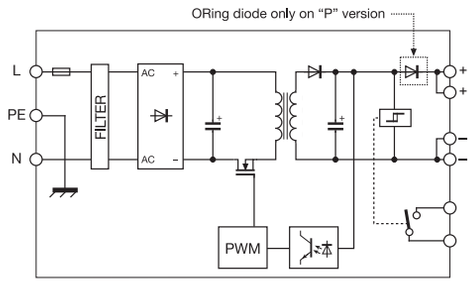
- Single-phase input 90…264 Vac and DC 100…370 Vdc
- Short circuit, overload, over temperature, input and ouput overvoltage protections
- High outrush current to guarantee downstream overcurrent protections selectivity and to start-up heavy loads
- Failure contact for Uout -10%
- Compact dimensions
-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



NOTES

The depth dimension includes the terminal blocks and the 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) Over 50°C (122°F) apply a derating -0.1 A/°C, max 60°C
(4) Overload and short circuit current depends on the total line resistance.

BLOCK DIAGRAM



VERSIONS	Cod. XCSF120C	Cod. XCSF120CP	Cod. XCSF120B	Cod. XCSF120D
Output 24 Vdc 5 A	**CSF120C**			
Output 24 Vdc 5 A redundant version		**CSF120CP**		
Output 12…15 Vdc 7 A			**CSF120B**	
Output 48 Vdc 2.5 A				**CSF120D**
INPUT TECHNICAL DATA				
Input rated voltage	**120–230 Vac** (range 90…264 Vac / 100…370 Vdc) (2)			
Frequency	47...63 Hz			
Current @ nominal Iout (Uin 120 /230 Vac)	1.9 A / 1.1 A ± 10%			
Inrush peak current	< 20 A			
Power factor	> 0.65			
Internal protection fuse	T 3.15 A replaceable			
External protection on AC line	circuit breaker: 4 A - C characteristic - fuse: T 4 A			
OUTPUT TECHNICAL DATA				
Output rated voltage	**24 Vdc**		**12…15 Vdc**	**48 Vdc**
Output adjustable range	23...27.5 Vdc		12…15 Vdc	45…55 Vdc
Continuous current	**5 A** @ 50°C (3)		**7 A** @ 50°C (3)	**2.5 A** @ 50°C (3)
Overload limit	8 A for >30 s with Uout >Un x 0.9 (4)		8 A for >30 s with Uout >Un x 0.9 (4)	8 A for >30 s with Uout >Un x 0.9 (4)
Short circuit peak current	15 A per 50 ms (4)		15 A per 50 ms (4)	7.5 A per 50 ms (4)
Load regulation	< 1%		< 1%	< 1%
Ripple @ nominal ratings	≤ 30 mVpp		≤ 40 mVpp	≤ 30 mVpp
Hold up time @ In (Uin 120 / 230 Vac)	>17 ms / >72 ms		>24 ms / >80 ms	>16 ms / >81 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	<43.2 Vdc
Parallel connection	possible		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)	>86% / >90%		>85% / >89%	>86% / >90%
Dissipated power (Uin 120 / 230 Vac)	19 W / 13 W		21 W / 15 W	20 W / 13 W
Operating temperature range	–20...+60°C, with derating over 50°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 mm² 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	—			