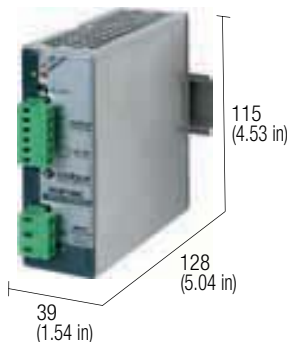


Single-phase switching power supply 120-230 Vac output power 120 W

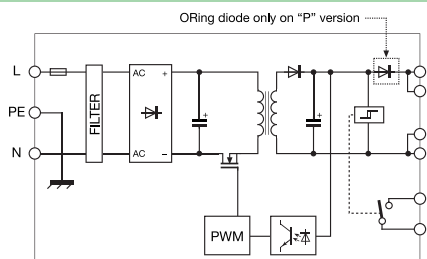
- Single-phase input 90...264 Vac and DC 100...345 Vdc
- Short circuit, overload, over temperature, input and output overvoltage protections
- High inrush current to guarantee downstream overcurrent protections selectivity and to start-up heavy loads
- Failure contact for Uout -10%
- Compact dimensions
- 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 $T_a > 45^\circ\text{C}$, the output current must be derated by 25%
- (3) Over 45°C (113°F) apply a derating $-0.08\text{ A}/^\circ\text{C}$ for version C, CP and CPH; $-0.12\text{ A}/^\circ\text{C}$ for version B; $-0.05\text{ A}/^\circ\text{C}$ for version DP;
- (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.
- (5) Only on version CSF120CP, for orders, add the letter H to the code (XCSF120CPH)
- (6) article available till seal-out

BLOCK DIAGRAM



NEW

Special version for DC motors

VERSIONS
Output 24 Vdc 5 A
Output 24 Vdc 5 A redundant version
Output 12...15 Vdc 7 A
Output 48 Vdc 2.5 A

Cod. XCSF120C	Cod. XCSF120CP	Cod. XCSF120B	Cod. XCSF120DP
CSF120C			
	CSF120CP		
		CSF120B (6)	
			CSF120DP

INPUT TECHNICAL DATA	
Input rated voltage	120-230 Vac (range 90...264 Vac / 100...345 Vdc) (2)
Frequency	47...63 Hz
Current @ nominal Iout (Uin 120 /230 Vac)	1.9 A / 1.1 A \pm 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

24 Vdc	12...15 Vdc	48 Vdc
23...27.5 Vdc	12...15 Vdc	45...55 Vdc
5 A @ 45°C (3)	7 A @ 45°C (3)	2.5 A @ 45°C (3)
8 A for $>$ 30 s with 90% Un (4)	8 A for $>$ 30 s with 90% Un (4)	8 A for $>$ 30 s with 90% Un (4)
15 A for 50 ms (4)	15 A for 50 ms (4)	7.5 A for 50 ms (4)
$<$ 1%	$<$ 1%	$<$ 1%
\leq 30 mVpp	\leq 40 mVpp	\leq 30 mVpp
$>$ 17 ms / $>$ 72 ms	$>$ 24 ms / $>$ 80 ms	$>$ 16 ms / $>$ 81 ms
hiccup at the overload limit with auto reset / over temperature protection		
"DC OK" green LED / "DC OK" alarm contact/ "Overload" red LED		
$<$ 21.6 Vdc	$<$ 10.8 Vdc	$<$ 43.2 Vdc
possible	possible	possible
possible with external ORing diode	factory provided with internal ORing diode	factory provided with internal ORing diode

OUTPUT TECHNICAL DATA	
Output rated voltage	24 Vdc
Output adjustable range	23...27.5 Vdc
Continuous current	5 A @ 45°C (3)
Overload limit	8 A for $>$ 30 s with 90% Un (4)
Short circuit peak current	15 A for 50 ms (4)
Load regulation	$<$ 1%
Ripple @ nominal ratings	\leq 30 mVpp
Hold up time @ In (Uin 120 / 230 Vac)	$>$ 17 ms / $>$ 72 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
Parallel connection	possible
Redundant parallel connection	possible with external ORing diode

GENERAL TECHNICAL DATA	
Efficiency (Uin 120 / 230 Vac)	$>$ 86% / $>$ 90%
Dissipated power (Uin 120 / 230 Vac)	19 W / 13 W
Operating temperature range	$-20...+60^\circ\text{C}$, 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, 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 / 3
Protection degree	IP 20 IEC 529, EN60529
Connection terminal	2.5 mm ² 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	—

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	—