DC/DC Insulated converters output power 120 W

- DC wide range input
- Short circuit, overload, over temperature protection
- Compact design



Cod. XCSA120DC

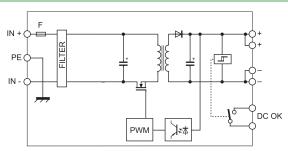
NOTES

The depth dimension includes the terminal blocks and the DIN clamp.

- (1) Inrush current is measured with input supplied by a battery; the current peak vary depending on the internal impedance of the current source and depending on cables and connections resistance.
- (2) Over 50°C (122°F) apply a derating -3 W/°C, max 60°C (3) According to EN60950 insulation tests on input side must be made only with DC instruments.

VERSIONS

BLOCK DIAGRAM



Cod. XCSA120CC

Cod. XCSA120CB

12 Vdc / 24 Vdc 5 A	CSA120BC					
24 Vdc / 12 Vdc 7 A		CSA120CB				
24 Vdc / 24 Vdc 5 A			CSA120CC			
48 Vdc / 24 Vdc 5 A				CSA120DC		
INPUT TECHNICAL DATA						
Input rated voltage	12 Vdc (range 10.518 Vdc)	24 Vdc (range 1836 Vdc)	24 Vdc (range 1836 Vdc)	48 Vdc (range 3672 Vdc)		
Current @ lout max.	12 A ±10%	5.1 A ±10%	5.8 A ±10%	2.8 A ±10%		
Inrush peak current	< 60A / < 2ms (1)	< 100A / < 2ms (1)	< 90A /< 2ms (1)	< 120A / < 2ms (1)		
Standby power	<1.5 W @ 12 Vdc	<1 W @ 24 Vdc	<1.5 W @ 24 Vdc	<2 W @ 48 Vdc		
Internal protection fuse	T 20 A replaceable	T 10 A replaceable		T 5 A replaceable		
External protection on AC line	≥25 A C characteristic	≥13 A C characteristic		≥6 A C characteristic		
Overvoltage input protection circuit	Passive varistor and active shutdown at 19 Vdc	Passive varistor and active shutdown at 38 Vdc		Passive varistor and active shutdown at 76 Vdc		
OUTPUT TECHNICAL DATA						
Output rated voltage	24 Vdc	1215 Vdc	24 Vdc	24 Vdc		
Output adjustable range	22.527.5 Vdc	1215 Vdc	22.527.5 Vdc	22.527.5 Vdc		
Continuous current	5 A @ 50°C (2)	7 A @ 50°C (2)	5 A @ 50°C (2)	5 A @ 50°C (2)		
Overload limit	6.5 A	9.1 A	6.5 A	6.5 A		
Short circuit peak current	12 A for 300 ms	15 A for 300 ms	12 A for 300 ms	13 A for 300 ms		
Load regulation	<0.5%					
Ripple @ nominal ratings	≤ 100 mVpp		≤ 150 mVpp	≤ 200 mVpp		
Hold up time @ In	>1 ms	>2	ms	>4.5 ms		
Overload / short circuit protections	hiccup at the overload limit with auto reset / over temperature protection					
Status display	"DC OK" green LED					
Alarm contact threshold	_					
Parallel connection	possible					
Redundant parallel connection	possible with external ORing diode					

Cod. XCSA120BC

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dundant parallel connection	possible with external

GENERAL TECHNICAL DATA						
Efficiency (Uin 110 Vdc)	> 83%	>87%	>87%	>90%		
Dissipated power (Uin 110 Vdc)	<25 W	<16 W	<18 W	<13 W		
Operating temperature range	-20+60°C, with derating over 50°C (2)					
Input/output isolation	2.1 kVdc / 60s (3)					
Input/ground isolation	1.41 kVdc / 60s (3)					
Output/ground isolation	0.75 kVdc / 60s (3)					
Standard/approvals	IEC950, EN60950					
EMC Standards	EN61000-6-2, EN61000-6-4, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-5-5, 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	550 g (19.40 oz)					
Mounting information	vertical on rail, allow 10 mm spacing between adjacent components					

MOUNTING ACCESSORIES

Mounting rail type according to IEC60715/TH35-7.5 Mounting rail type according to IEC60715/G32

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB