

Single-phase switching power supply 120-230 Vac output power 50 W

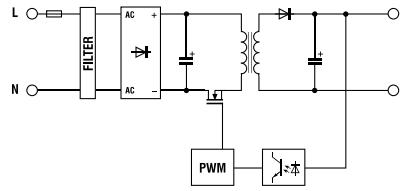
- Single-phase input 90...264 Vac and DC 100...345 Vdc
- Short circuit, overload, over temperature, input overvoltage protections
- Isolation Class 2, no grounding needed
- Compact dimensions
- Suitable for applications in SELV and PELV circuits



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 50°C (122°F) apply a derating:
C version: $-0.06\text{ A}/^\circ\text{C}$; B version: $-0.085\text{ A}/^\circ\text{C}$.
- (4) Overload and short circuit current depends on the total line resistance.

BLOCK DIAGRAM



VERSIONS

- Output 24 Vdc 2.2 A
- Output 24 Vdc 2.2 A redundant version
- Output 12...15 Vdc 3.5...3 A
- Output 48 Vdc 1.1 A

Cod. XCSD50B

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	CSD50B	-

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)	0.9 A / 0.5 A $\pm 10\%$
Inrush peak current	< 15 A
Power factor	> 0.6
Internal protection fuse	T 2 A replaceable
External protection on AC line	circuit breaker: 3 A - C characteristic - fuse: T 3.15 A

OUTPUT TECHNICAL DATA

Output rated voltage	12...15 Vdc
Output adjustable range	12...15 Vdc
Continuous current	3.5...3 A @ 50°C (3)
Overload limit	4.37...3.75 A (4)
Short circuit peak current	-
Load regulation	< 1%
Ripple @ nominal ratings	$\leq 50\text{ mVpp}$
Hold up time @ In (Uin 120 / 230 Vac)	>20 ms / >40 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

GENERAL TECHNICAL DATA

Efficiency (Uin 120 / 230 Vac)	>88% / >90%
Dissipated power (Uin 120 / 230 Vac)	6.8 W / 5.5 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	class 2 without PE connection
Output/ground isolation	class 2 without PE connection
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	>750'000 h acc. to SN 29500 / >250'000 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 ² fixed screw type
Housing material	UL94V-0 plastic material
Approx. weight	200 g (7.06 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

Modular switching power supply CSD series

DOMOTIC POWER

Single phase switching power supplies with output power up to 70W for civil and industrial automation applications.

The housings have the standard dimensions for installation in DIN modular panels, and are **optimized for the deployment in the field of building automation**. The high performance and compact size make them an excellent solution for low-depth electrical panels.

The high efficiency and low dissipated power save energy and increase the life of the components.

Suggested uses

- Applications in industrial automation
- Applications in civil automation
- General applications in systems fit into small remote panels

Main features

- The 90...264 Vac and 110...370 Vdc input makes them suitable for use on all power supply lines.
- These power supplies are Insulation Class 2, thus they don't require grounding, which reduces costs and times during installation into remote panels, surveillance and monitoring systems.
- Their high efficiency reduces energy consumption and working temperature and allows their use in small panels.
- Their backup power allows the supply of continuous current at least +50% above the rated value ensuring safety and reliability.
- Dimensioned power supply and surge protection supplying breakaway starting currents 150% above the rated value required by heavy loads.
- Thermal protection prevents faults caused by prolonged overload at high ambient temperatures.
- Their internal components' high efficiency and excellent ventilation offer small dimensions and IP20 protection against accidental contacts in compliance with IEC529.



Compact size

Ideal solution for electrical panels with low profile

Short circuit and overload

Designed to provide load start up current required by medium loads

Power boost

The output power supplied reaches up to 130% of the rated value

High Efficiency

Designed to save energy and reduce working temperature

90...264 Vac and 110...350 Vdc input wide range

Suitable in single phase voltage networks

