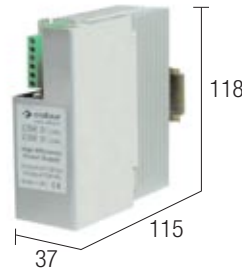
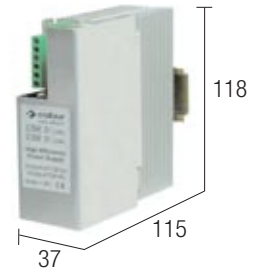


Switching power supplies

Input 24-28 Vac

CSE Series

- 24 - 28Vac input voltage
- 90% efficiency
- Electronic protection: short circuit, overload, over temperature
- Replaceable input protection fuse
- Compact design

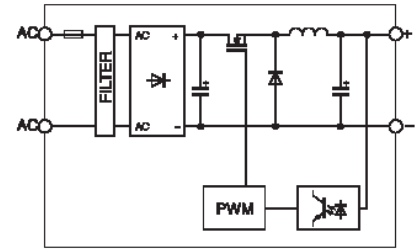
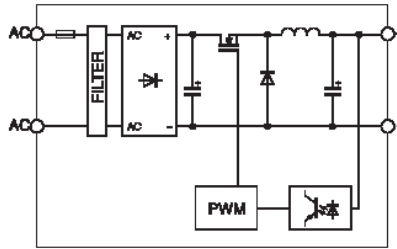

24 Vdc 3 A @ 25°C

24 Vdc 5 A @ 25°C

NOTES

Dimensions indicated on drawings and photos, are overall dimensions, are inclusive of external components such as terminal blocks and Din-rail clamps. The listed technical data and suitability characteristics reported in this catalogue, if not otherwise specified, are measured at an ambient temperature of 25°C, voltage input of 26Vac or rated input voltage, rated output voltage and current, measured after a pre-heating of 10 minutes; the ripple has surveyed to the nominal data, 20MHz band-limiting and probe on a 0,1 µF condenser.

(1) For good cooling of the power supply, a 50mm free space on upper and lower sides and 10 mm spacing between adjacent components must be allowed; if the device is mounted in horizontal position, left side must be kept towards the bottom, a 50 mm spacing between adjacent components must be allowed and the output current derated by a 25%.

BLOCK DIAGRAM



APPLICATIONS

CSE power supplies are suitable for use in SELV and PELV circuits.

WARNING! In PELV circuits, in which one safety low voltage pole is connected to the ground, a pole of the secondary of the transformer too must not be connected to ground at once; the only one pole to be grounded is normally the negative of the 24 Vdc output of the power supply and effectively used as control voltage.

The connection to ground of one pole of the transformer Vac output together with one pole of the 24 Vdc of the power supply output damages the power supply.

Input and output of the CSE Series power supplies are not isolated. Safety isolation function is therefore assigned to the external transformer which has to comply with EN60742 Std.

VERSIONS

CSE3

Cod. XCSE3

CSE5

od. XCSE5

INPUT TECHNICAL DATA

Rated voltage
Frequency
Inrush current
Protection fuse

24 – 28 Vac
50 – 60 Hz
4 A @ 24 Vac
T 5 A - internal, replaceable

OUTPUT TECHNICAL DATA

Voltage
Maximum current
Continuous current
Load regulation
Ripple
Hold up time
Overload / short circuit protection
Output signal
Parallel connection

24 Vdc ± 2%
4 A @ 25°C overload limit
3 A @ 25°C
< 1%
100 mVpp
> 20 ms full load
constant current 1.1 Inom. / over temperature protection
–
possible with external diode

APPROVALS

GENERAL TECHNICAL DATA

Efficiency
Dissipated power
Operating temperature
Input / output isolation
Input / ground isolation
Output / ground isolation
Protection degree
Standards / Approvals
EMC Standards
Surge immunity
Connection terminal blocks
Housing material
Approximative weight
Mounting information

>90%
< 8 W
-10 – +60°C with derating -0.08A/°C over 45°C
–
–
0.5 kVac / 60 s
IP 20 IEC 529 EN60529
–
EN 50081-1, EN 50082-1
–
2.5 mm ² , screw type
metallic
500 g
Vertical on rail (1)

Mounting rail type according to IEC60715/TH35-7.5

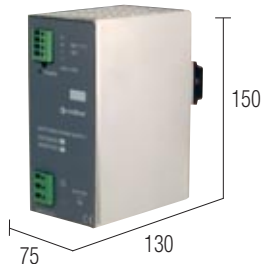
PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

≥ 90%
< 13 W
-10 – +60°C with derating -0.08A/°C over 45°C
–
–
0.5 kVac / 60 s
IP 20 IEC 529 EN60529
–
EN 50081-1, EN 50082-1
–
2.5 mm ² , screw type
metallic
650 g
Vertical on rail (1)

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

Switching power supply input 22–30 Vac

- Standard input voltage 24 Vac
- Dissipated power less than 10%
- Overload/short circuit protection with automatic restore
- Input protection fuse
- Compact design save panel space

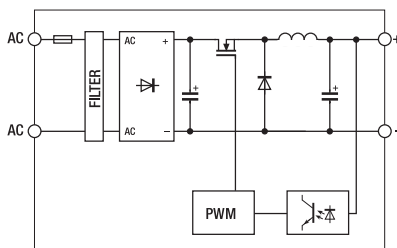


24 Vdc 12 A @ 25°C

NOTES

Dimensions indicated on drawings and photos, are overall dimensions, are inclusive of external components such as terminal blocks and Din-rail clamps.

Block diagram



APPLICATIONS

The CABUR power supply CS .../24 series with 22 - 30 Vac input allow transformers with standard secondary voltage of 24 Vac to be used, more economical and more readily available than transformers with special voltages.

They are suitable for use in SELV and PELV circuits. In PELV circuits, in which one safety low voltage pole has to be grounded, taking care not to ground the secondary winding of the transformer too, but only one pole, normally the negative, of the 24 Vdc output of the power supply effectively used as control voltage.

The grounding together of a pole of the secondary of the transformer and a pole of the 24 Vdc of the power supply unit would inevitably damage the power supply unit itself.

The purpose of the grounding connection is to discharge the interference trapped by the input filter and must be as short as possible.

Do not connect the GND terminal in SELV circuits.

The input and output of the power supply units in the CS .../24 series are not isolated. The safety isolation function is therefore assigned to the external transformer which has to conform with the standard CEI 14-6 and/or EN60742.

VERSIONS

CS1224/24

Cod. XAS12VC

INPUT TECHNICAL DATA

Rated voltage	22 – 30 Vac
Frequency	50 – 60 Hz
Current @ Iout max	13.2 A
Protection fuse	T 16 A - internal, replaceable

OUTPUT TECHNICAL DATA

Voltage	24 Vdc adjustable $\pm 8\%$
Maximum current	14 A overload limit
Continuous current	12 A
Load regulation	< 1 %
Ripple @ rated U-I output	< 100 mVpp
Hold up time	> 20 ms full load
Overload/short circuit protection	Hiccup circuit, auto reset
Output signal	-
Parallel connection	-

APPROVALS

GENERAL TECHNICAL DATA

Efficiency	$\geq 90\%$
Dissipated power	< 32 W
Operating temperature	-10 – 50°C, -0.5 A/°C over 45°C
Input / output isolation	-
Input / ground isolation	-
Output / ground isolation	0.5 kVac / 60 s
Protection degree	IP 20
Standard / Approvals	-
EMC standards	EN 50081-1, EN 50082-2
Surge immunity	varistor - 4.5 kA 8/20 in input
Connection terminal blocks	2.5 mm ² , screw type pluggable
Housing material	metallic
Approximative weight	0.9 kg ca.
Mounting information	vertical on rail, allow 20 mm spacing between adjacent components
Mounting rail type according to IEC60715/TH35-7.5	PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB