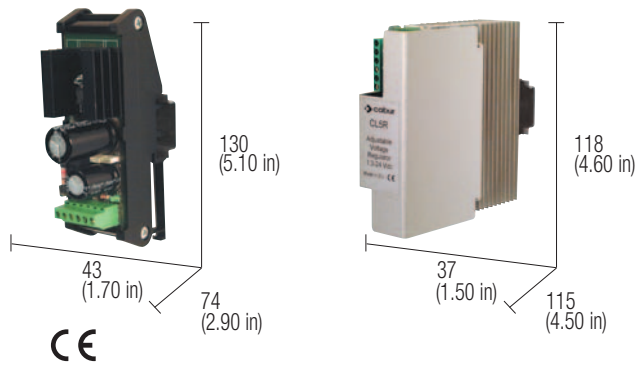


# Adjustable linear power supply input 24 Vac

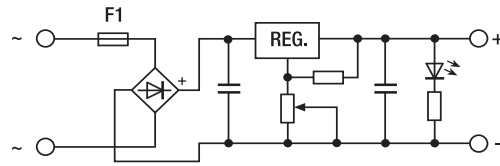
- Adjustable output voltage 1.2...24 Vdc
- Output current 1.5 and 5 A
- Short circuit, overload, over temperature protection



## NOTES

The depth dimension includes the terminal blocks and the DIN clamp.  
(1) See "Applications"

## BLOCK DIAGRAM



## VERSIONS

Output 1.2 A  
Output 5 A

### INPUT TECHNICAL DATA

Input rated voltage  
Frequency  
Current @ Iout max.  
Internal protection fuse  
External protection on AC line

### OUTPUT TECHNICAL DATA

Output rated voltage  
Output adjustable range  
Continuous current  
Overload limit  
Load regulation  
Ripple @ nominal ratings  
Hold up time @ In  
Overload / short circuit protections  
Status display

### GENERAL TECHNICAL DATA

Operating temperature range  
Input/output isolation  
Input/ground isolation  
Output/ground isolation  
Reference Standards  
EMC Standards  
MTBF @ 25°C @ nominal ratings  
Overvoltage category/Pollution degree  
Protection degree  
Connection terminal  
Housing material  
Approx. weight  
Mounting information

## Cod. XCL1R

CL1R

## Cod. XCL5R

CL5R

9...26 Vac (see Tab. 1)  
50...60 Hz

2,5 A T 3 A replaceable MCB: 4 A C characteristic - fuse T 4 A	6 A T 10 A replaceable MCB: 10 A C characteristic - fusibile T 10 A
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1.2...24 Vdc

(see Tab. 1 and Tab. 2)  
0.3...1.5 A (see Tab. 2)

1.2...24 Vdc

(see Tab. 1 and Tab. 2)  
0.8...5 A (see Tab. 2)

< 1%  
< 50 mVpp @ 24 Vac  
>20 ms  
constant current, limit current, auto reset / over temperature protection  
"DC OK" green LED

-20...+45°C / over temperature protection (1)

not insulated  
0.5 kVac / 60 s  
0.5 kVac / 60 s  
IEC 664-1, DIN VDE  
EN50081-1, EN61000-6-4  
>500'000 h acc. to SN 29500 / >150'000 h acc. to MIL Std. HDBK 217F  
II / 2  
IP 00 IEC 529, EN60529  
2.5 mm<sup>2</sup> fixed screw type

UL94V-0 plastic material 120 g (4.23 oz)	aluminium 350 g (12.35 oz)
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vertical on rail, allow 20 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

PR/DIN/AC, PR/DIN/AS, PR/DIN/AL

INPUT (Vac)	Uout max. (Vdc)	Iout max (A) XCL1R	Iout max (A) XCL5R
24...27	24	1.5	5
16...18	15	1.5	5
14...16	12	1.5	5
12...14	10	1.5	5
12	9	1.5	5
9	5	1.5	5

Tab. 1 (see explanation on right side)

INPUT (Vac)	Uout max. (Vdc)	Iout max (A) XCL1R	Iout max (A) XCL5R
24	24	1.5	5
24	15	0.8	2.5
24	12	0.7	2
24	10	0.5	1.5
24	9	0.45	1.3
24	5	0.3	0.8

Tab. 2 (see explanation on right side)

## APPLICATIONS

The CL-R linear regulated power supply series of CABUR is provided with adjustable output and it can satisfy all those needs related to the feeding of small loads with non-standard rated voltage and at an extremely limited cost. It can be mounted on the rail in whatever position, providing that enough space for the free circulation of the air remains for the cooling; the CL1R model having an IP 00 protection degree, its use is intended inside a protected enclosure. Even if the power supply is protected from over-current it is advisable to respect the rated values shown in table 1 and 2.

(1) CL1R and CL5R give the rated performances if fed by a voltage between 24 and 27 Vac, as indicated on Tab. 1; with input voltage between 24 and 27 Vac, the maximum output current for output voltages lower than 24 Vdc are indicated on Tab. 2; to achieve a good voltage stabilization and low ripple, linear power supplies must be fed with an input voltage higher than output voltage, while if they are supplied with 24 Vac, and adjusted for 24 Vdc output, when rated current is supplied, the ripple increases and voltage stabilization decreases; input voltages higher than 27 Vac increases power dissipation and increases operating temperature of the component, and might cause thermal protection shut down. The products are preadjusted to Vout 24 Vdc with Vin 26 Vac.