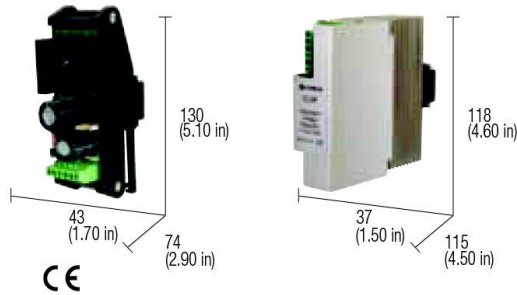


Источник питания с регулируемым входным и выходным напряжением серии XCL



Adjustable linear power supply input 24 Vac

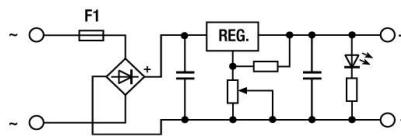
- Adjustable output voltage 1.2...24 Vdc
- Output current 1.5 and 5 A
- Short circuit, overload, over temperature protection



NOTES

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

BLOCK DIAGRAM



VERSIONS	
Output 1.2 A	Cod. XCL1R
Output 5 A	Cod. XCL5R
INPUT TECHNICAL DATA	
Input rated voltage	9...26 Vac (see Tab. 1)
Frequency	50...60 Hz
Current @ Iout max.	2,5 A
Internal protection fuse	T 3 A replaceable
External protection on AC line	MCB: 4 A C characteristic - fuse T 4 A
OUTPUT TECHNICAL DATA	
Output rated voltage	1.2...24 Vdc
Output adjustable range	(see Tab. 1 and Tab. 2)
Continuous current	0.3...1.5 A (see Tab. 2)
Overload limit	—
Load regulation	< 1%
Ripple @ nominal ratings	< 50 mVpp @ 24 Vac
Hold up time @ In	>20 ms
Overload / short circuit protections	constant current, limit current, auto reset / over temperature protection
Status display	"DC OK" green LED
GENERAL TECHNICAL DATA	
Operating temperature range	-20...+45°C / over temperature protection (1)
Input/output isolation	not insulated
Input/ground isolation	0.5 kVac / 60 s
Output/ground isolation	0.5 kVac / 60 s
Reference Standards	IEC 664-1, DIN VDE
EMC Standards	EN50081-1, EN61000-6-4
MTBF @ 25°C @ nominal ratings	>500'000 h acc. to SN 29500 / >150'000 h acc. to MIL Std. HDBK 217F II / 2
Overvoltage category/Pollution degree	IP 00 IEC 529, EN60529
Protection degree	IP 00 IEC 529, EN60529
Connection terminal	2.5 mm ² fixed screw type
Housing material	UL94V-0 plastic material
Approx. weight	120 g (4.23 oz)
Mounting information	vertical on rail, allow 20 mm spacing between adjacent components

Cod. XCL1R		Cod. XCL5R	
CL1R		CL5R	
INPUT TECHNICAL DATA			
Input rated voltage: 9...26 Vac (see Tab. 1)			
Frequency: 50...60 Hz			
Current @ Iout max.: 2,5 A		6 A	
Internal protection fuse: T 3 A replaceable		T 10 A replaceable	
External protection on AC line: MCB: 4 A C characteristic - fuse T 4 A		MCB: 10 A C characteristic - fusibile T 10 A	
OUTPUT TECHNICAL DATA			
Output rated voltage: 1.2...24 Vdc		1.2...24 Vdc	
Output adjustable range: (see Tab. 1 and Tab. 2)		(see Tab. 1 and Tab. 2)	
Continuous current: 0.3...1.5 A (see Tab. 2)		0.8...5 A (see Tab. 2)	
Overload limit: —		—	
Load regulation: < 1%		< 1%	
Ripple @ nominal ratings: < 50 mVpp @ 24 Vac		< 50 mVpp @ 24 Vac	
Hold up time @ In: >20 ms		>20 ms	
Overload / short circuit protections: constant current, limit current, auto reset / over temperature protection		constant current, limit current, auto reset / over temperature protection	
Status display: "DC OK" green LED		"DC OK" green LED	
GENERAL TECHNICAL DATA			
Operating temperature range: -20...+45°C / over temperature protection (1)			
Input/output isolation: not insulated			
Input/ground isolation: 0.5 kVac / 60 s		0.5 kVac / 60 s	
Output/ground isolation: 0.5 kVac / 60 s		0.5 kVac / 60 s	
Reference Standards: IEC 664-1, DIN VDE			
EMC Standards: EN50081-1, EN61000-6-4			
MTBF @ 25°C @ nominal ratings: >500'000 h acc. to SN 29500 / >150'000 h acc. to MIL Std. HDBK 217F II / 2			
Overvoltage category/Pollution degree: IP 00 IEC 529, EN60529			
Protection degree: IP 00 IEC 529, EN60529			
Connection terminal: 2.5 mm ² fixed screw type			
Housing material: UL94V-0 plastic material		aluminium	
Approx. weight: 120 g (4.23 oz)		350 g (12.35 oz)	
Mounting information: vertical on rail, allow 20 mm spacing between adjacent components			

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.

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)