

24V Linear DIN Rail Power Supply

- Powered by a 12-24 Vac secondary transformer
- Short circuit, overload and input overvoltage protection
- · Over temperature protection
- · Adjustable output voltage



AC

REG.





NOTE

Please refer to the datasheet for more details

CODE	XCL1F	-
TYPE	CL1R	CL5R
INPUT TECHNICAL DATA		
Input rated voltage	12-24 Vac	12-24 Vac
Input voltage AC	1026 Vac (see Table 1)	1026 Vac (see Table 1)
Input voltage DC		_
Frequency	4763 Hz	4763 Hz
Current consumption	2.5 A (24 Vac)	6 A (24 Vac)
Inrush peak current	_	_
Power factor		_
Internal protection fuse	T3A	T 10 A
External protection on AC line	MCB: C-4 A / Fuse: T-4 A	MCB: C-10 A / Fuse: T-10 A
OUTPUT TECHNICAL DATA		
Output rated voltage	1.224 Vdc	1.224 Vdc
Output adjustable range	(see Table 1 and Table 2)	(see Table 1 and Table 2)
Continuous current	0.31.5 A (see Table 2)	0.85 A (see Table 2)
Overload limiting	_	_
Short circuit peak current	_	_
Ripple @ nominal ratings	< 50 mVpp at 24 Vac	< 50 mVpp at 24 Vac
Hold up time	>20 ms	>20 ms
Status indication	Green LED "DC OK"	Green LED "DC OK"
Alarm contact	_	=
Parallel connection	_	_
Redundant parallel connection	_	_
GENERAL TECHNICAL DATA		
Efficency	_	_
Dissipated power	_	_
Operating temperature range	-20+45°C	-20+45°C
Input / output isolation	not insulated	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
Standard / approvals	- 0.5 KVdc / 00 5	
EMC Standards	_	
Overvoltage category / Pollution degree	 / 2	
Protection degree	IP 00	IP 00
Protection degree Connection terminal IN/OUT	2.5 mm ² / 2.5 mm ²	2.5 mm ² / 2.5 mm ²
Housing material		aluminium
Housing material Dimension	UL94V-0 plastic material 43x74x130	37x115x118
Approximate weight	120 g	350 g
Mounting information	vertical on a rail, 20 mm from adjacent components	vertical on a rail, 20 mm from adjacent components
APPROVALS	C€	C€
ACCESSORIES		
Mounting rail (IEC60715/TH35-7.5)	PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB	PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

APPLICATIONS

Cabur CL-R series power supplies are linear stabilised with adjustable output, capable of satisfying all small load power needs with non-standard voltages at an extremely affordable cost.

They can be rail mounted in any position as long as sufficient space is left for the free circulation of air for cooling, while model CL1R has a degree of protection IP00, meaning it is to be used inside a protected container.

Even where the power supply is protected against overcurrents, it is advised to follow the nominal data indicated in the tables below.

(1) CL1R and CL5R provide the nominal performances if combined with the secondary voltages indicated in Tab. 1; with a secondary voltage of 24...27 Vac, the maximum obtainable current at output voltages adjusted to values below 24 Vdc is indicated in Tab. 2; to stabilise the output voltage and reduce ripple at full load, linear power supplies must be powered with an input voltage that exceeds the output voltage, whereas if they are powered at 24 Vac, with an output adjusted to 24 Vdc and maximum current absorption, the ripple increases and the stability of the output voltage to load variations and ±10% network variations drops; voltages above 27 Vac cause significant heating, triggering the thermal protection and reducing the current supplied.

Products are supplied with a default voltage of 24 Vdc at the output and 26 Vac at the input.

(Vac)	Uout max (Vdc)	lout max (A) XCL1R	lout max (A) XCL5R
2427	24	1.5	5
1618	15	1.5	5
1416	12	1.5	5
1214	10	1.5	5
12	9	1.5	5
9	5	1.5	5

Table 1 (see explanation to the side)

INPUT (Vac)	Uout max (Vdc)	lout max (A) XCL1R	lout 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		
Table 2 (see side evaluation)					

Table 2 (see side explanation)