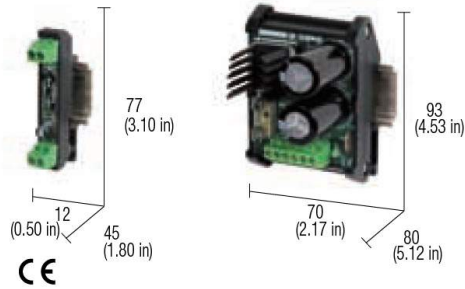


# Бестрансформаторный фильтр с нерегулируемым выходом серии XAR



## Filtered power supplies without transformer with non regulated output

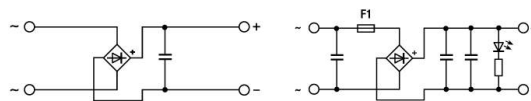
- DIN rail mounting
- Suitable for rectifying 6 Vac to 20 Vac
- V output = Vac input x 1.41 (-1V)



### NOTES

- (2) Version available upon request; for information call our sales department, local agent or representative  
 (3) They can work with input from min. 6 Vac to 30 Vac max., the non regulated output voltage depends on the load and on the variations of the input voltage supplied by the transformer  
 (4) They are protected from overcurrent by their input fuse (except AR1 model); it is recommended to protect cables of the output line with fuses of value coordinated with the current of the load and cables.

### BLOCK DIAGRAM



### VERSIONS

Output 1 A  
Output 6 A

### Cod. XAR1

AR1

### Cod. XAR2

AR6

### APPLICATIONS

A rectified and filtered power supply is made with a rectifier bridge and a filter capacitor, that converts the alternating voltage into a continuous voltage. Since the power supply unit is not regulated, the output voltage varies considerably according to the current required by the load and according to the  $\pm 10\%$  mains voltage variations. The formula indicated in the output specifications allows to calculate the output voltage with Zero load, with 50% load and full load. This allows you to choose the most suitable transformer for your needs. **These units offer a low cost and a reliable voltage source suitable for loads such as relays, contactors, solenoid valves or loads that can work with relatively high ripple and wide voltage variations; in applications where mains is unstable or troubled, it might be not suitable to feed microprocessor devices, analog converters, encoders and electronic devices which are sensitive to voltage variations.**

### INPUT TECHNICAL DATA

Input rated voltage	6...20 Vac	
Frequency	50...60 Hz	
Current @ Iout max.	1.2 A @ 20 Vac	7.2 A @ 20 Vac
Internal protection fuse	not available	T 8 A replaceable
External protection on AC line	MCB: 1 A C characteristic - fuse T 1 A	MCB: 10 A C characteristic - fusibile T 10 A

### OUTPUT TECHNICAL DATA

Output voltage (without load)	$U_{out} = (U_{in} \times 1.41) \quad (3)$	
Output voltage (full load)	$U_{out} = (U_{in} \times 1.41) - 2 \quad (3)$	
Continuous current	1 A @ 20°C	6 A @ 20°C
Overload limit	1 A	9 A
Load regulation	—	
Ripple @ nominal ratings	$\leq 10\%$	
Hold up time @ In	$> 20$ ms	
Overload / short circuit protections	not available, insert external fuse (4)	
Status display	"DC OK" green LED	
Parallel connection	—	
Redundant parallel connection	—	

### GENERAL TECHNICAL DATA

Operating temperature range	$-20...+45^\circ\text{C} / \text{max } 60^\circ\text{C}$	
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	
MTBF @ 25°C @ nominal ratings	$> 500'000$ h acc. to SN 29500 / $> 150'000$ h acc. to MIL Std. HDBK 217F	
Overvoltage category/Pollution degree	II / 2	
Protection degree	IP 00 IEC 529, EN60529	
Connection terminal	2.5 mm $\phi$ fixed screw type	
Housing material	UL94V-0 plastic material	
Approx. weight	22 g (0.77 oz)	140 g (4.93 oz)
Mounting information	vertical on rail, allow 50 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)	OUTPUT without load (Vdc)	OUTPUT full load (Vdc)
20	28.7	24.2
18	25.4	21.4
15	21.2	17.2
12	17	15
9	12.7	8.7
6	8.5	4.5