

Current transformers with converter

TP 420

Split-core current transformer with built-in converter

Description

- Needs a power supply output of 10 to 28 V dc
- Primary current: from 5 to 4000 A ac, depending on the type
- Secondary current 4...20 mA
- Internal diameter from 20 to 80 mm, depending on the type
- Busbar dimensions from 20 x 30 mm to 80 x 160 mm, depending on the type

Application

Used in power lines to obtain a current proportional to the primary current rated at 4...20 mA in the secondary

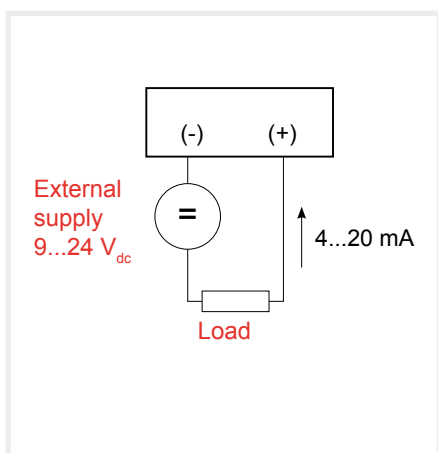
Recommended in scenarios where the process signal must be proportional to the current of an automated system or PLC and the installation's power supply can not be interrupted to install a closed entrance bar transformer.



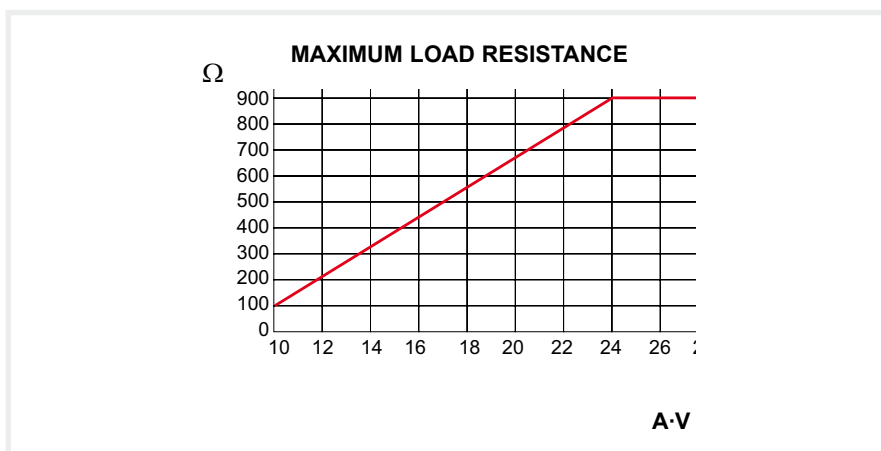
Features

Measurement circuit	
Frequency	50 / 60 Hz (linear)
Secondary current	4...20 mA dc
Accuracy class	±1.5% reading (between 5... 110 % I_n)
Overloads (at room temperature)	1.5 I_n permanent
Highest current in the material	0.72 kV ac
Operating temperature	-10°...+50 °C
Standards	
IEC 44-1, UNE 21 088-1, IEC 664, VDE 0110, VDE 0414, UL 94, IEC 1010-1, EN 61010-1	

Connection



Graph



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References

Type	TP-420 23	TP-420 58	TP-420 88	TP-420 812	TP-420 816
inner Ø (mm) Busbar	20 x 30	50 x 80	80 x 80	80 x 120	80 x 160
Dimensions (mm)					
	a	110	145	145	185
	b	89	114	144	144
	c	58	50	50	50
A	10...28 V dc power supply output 4...20 mA				
	Code	Code	Code	Code	Code
5	[*] M70211				
10	[*] M70212				
20	[*] M70213				
50	[*] M70214				
100	[*] M70215	[*] M70221	[*] M70231		
200	[*] M70216				
250	[*] M70217	[*] M70222	[*] M70232	[2] M70241	
500	[*] M70218	[*] M70223	[2] M70233	[2] M70242	[2] M70251
750		[*] M70224	[2] M70234	[2] M70243	[2] M70252
1 000			[2] M70235	[2] M70244	[2] M70253
1 500			[2] M70236	[2] M70245	[2] M70254
2 000					[2] M70255
3 000					[2] M70256
4 000					[2] M70257

For greater currents, use: transformer + converter

Dimensions

dimensions (mm)	TP-23	TP-58	TP-88	TP-812	TP-816
a	20	50	80	80	80
b	30	80	80	120	160
c	51	78	108	108	120
d	89	114	144	144	184
e	110	145	145	185	245
f	34	32	32	32	52
g	47	32	32	32	47
h	40	32	32	32	52
i	32	32	32	32	38

Note: All types have fixing centering units, except for TP-23