

**ABB Control**10, Rue Ampère  
69680 Chassieu**TRANSTRONIC**Code : **ES300**

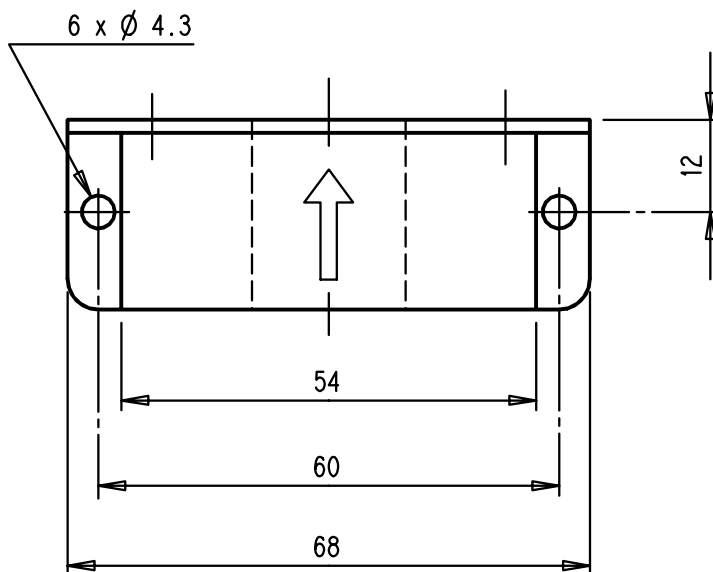
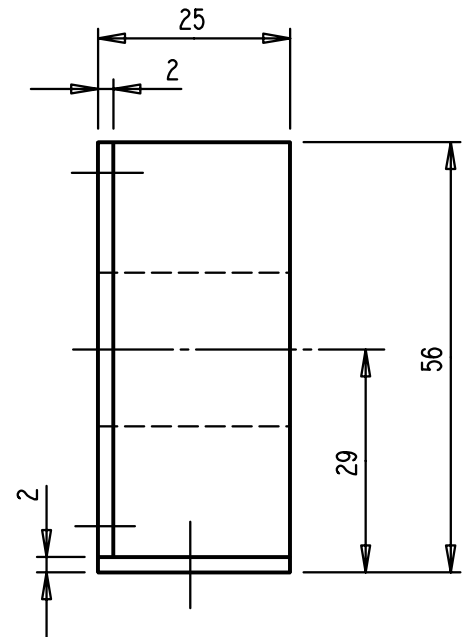
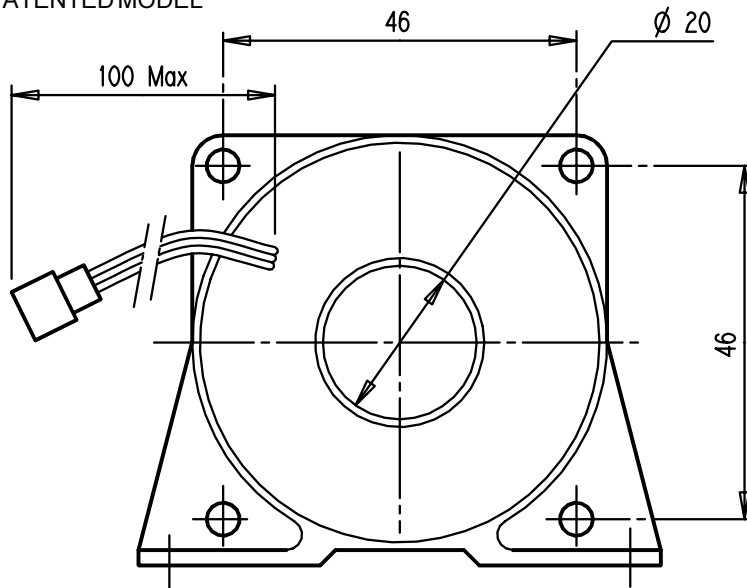
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Modif N° 5

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Electronic measuring transformer for d.c., a.c., and pulsating currents with a high isolation level between primary and secondary circuits.

PATENTED MODEL



Terminals marking

+ M -



+ : Red

M : Green

- : Black

**DESCRIPTION AND GENERAL CHARACTERISTICS**

Coated electronic circuit

Self extinguishing plastic case

Weight (g) : 115

Operating temperature (° C) : - 5 + 70

Storage temperature (° C) : - 25 + 85

Direction of the current - A primary current in the direction of arrow results in a positive output current on the terminal M.

Protections :

- Against short and open circuit of the output
- Against accidental inversion of the supply voltage

Instructions for use and mounting according to our technical catalogue

## ELECTRICAL CHARACTERISTICS

- Nominal current $I_{PN}$	(A eff.)	:	300
- Supply voltage	(V)	:	+/- 12 to +/- 20 (+/- 5%)
- Measuring range	(Adc)	:	0 to +/- 500
$R_M$ max.	( $\Omega$ )	:	12 with $V_A = +/- 12 V$
$R_M$ max.	( $\Omega$ )	:	45 with $V_A = +/- 20 V$
- Overload	( $\hat{A}$ )	:	3000 - 10 ms
- Turn ratio	$N_p/N_s$	:	1/2000
- Secondary current $I_{SN}$ at $I_{PN}$	(mA)	:	150
- accuracy at $I_{PN}$ (from - 5 to + 70° C)	(%)	:	+/- 1
- Including : Residual current $I_{SO}$ at + 25° C	(mA)	:	+/- 0,25
Linearity better than		:	$< 10^{-4}$
Thermal drift/ $I_{SN}$	(/° C)	:	$< 10^{-3}$
- Delay time	( $\mu s$ )	:	$< 1$
- di/dt	(A/ $\mu s$ )	:	$> 50$
- Bandwidth at - 1 db	(kHz)	:	0 at $> 100$
- Current drain unload current $I_{AO}$ (inload $I_{AO} + I_s$ )	(mA)	:	7,5 at $U_A +/- 12 V$
	(mA)	:	12 at $U_A +/- 20 V$
- Internal secondary resistance at + 70° C	( $\Omega$ )	:	30
- Dielectric strength P / S	(kV r.m.s 50Hz/1mn)	:	3
- Measuring resistor minimum value at +/- 12 V	( $\Omega$ )	:	0
at the maximum of the at +/- 15 V	( $\Omega$ )	:	0
operating temperature at +/- 20 V	( $\Omega$ )	:	15
(1) Use under one way current 24 V - $R_M$ minimum	( $\Omega$ )	:	35

(2) Maximum temperature of the primary lead in contact with the sensor : 100° C

The characteristics detailed in this leaflet are subjected to change without prior notice

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## **Notes :**



10, Rue Ampère  
69685 CHASSIEU Cedex France

Téléphone : 72.22.17.22    Télécopie : 72.22.1732    Télex : 305428F