

Preliminary

RA 1000-T/SP6

Definition

The «RA 1000-T/SP6» is a current transducer designed to measure AC components, in a determined bandwidth, contained in a primary DC current up to 2400 A.

Electrical data

| | |
|---|--|
| Nominal primary current (DC) | : 1000 A |
| Maximum primary current (DC) | : 2400 A |
| Measuring range of the I_p AC current component | : 10 A max. |
| Allowable short-circuit current | : 50 kA |
| Analog output current I_M | : 200 mA max. |
| Current ratio I_p/I_M | : 10 A/200 mA |
| Measuring resistance | : 10 ohm min, 45 ohm max. |
| Supply voltage | : + and - 15 V ($\pm 5\%$) |
| Isolation | : between primary and secondary : 6 kV rms/50Hz/1 min. |

Accuracy - Dynamic performance

| | |
|---|----------------------|
| Continuous offset current (of I_M) | : max. ± 1 mA |
| Accuracy within the bandwidth and the temperature range, for $I_p > 0.5$ A rms. | : $\pm 5\%$ of I_p |
| Bandwidth | : 40 to 120 Hz |
| Attenuation at 29 Hz and 165 Hz | : 15 dB |
| Response time | : 40 ms |

Test circuit

| | |
|-----------------|-----------------------------------|
| Number of turns | : 200 |
| Resistance | : 10.5 ohm ($\pm 5\%$) at +70°C |
| Test current | : 50 mA during 2 s. |

General data

| | |
|-------------------------------|---|
| Operating temperature | : -25°C to +70°C |
| Storage temperature | : -40°C to +85°C |
| Current consumption | : 60 mA + output current |
| Package | : - potted into an insulated self-extinguishing plastic case - accessible electronic circuit |
| Weight | : 6.3 kg. |
| Fastening | : by the primary bar |
| Connection to primary circuit | : on primary bar |
| to secondary circuit | : on 6 M5 threaded studs |

Special feature

: measurement of AC components in DC current.

Note : the temperature of the primary conductor should not exceed 100°C.

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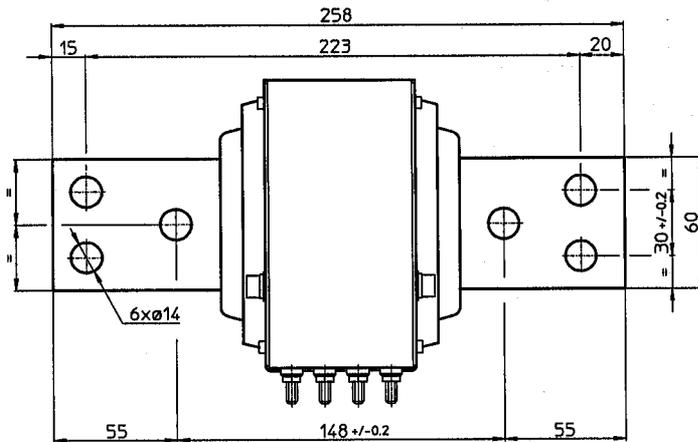
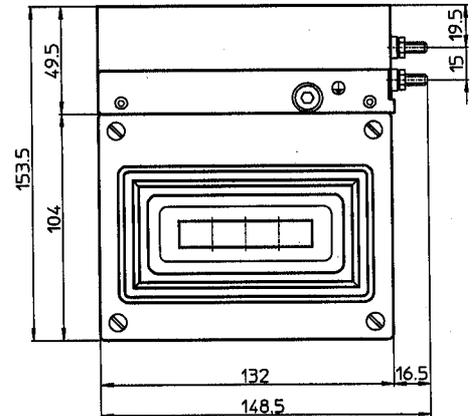
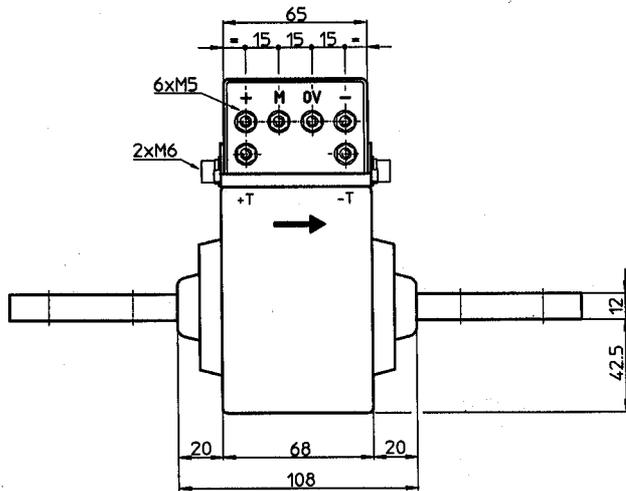
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Dimensions RA 1000-T/SP6

General tolerance ± 0.5 mm

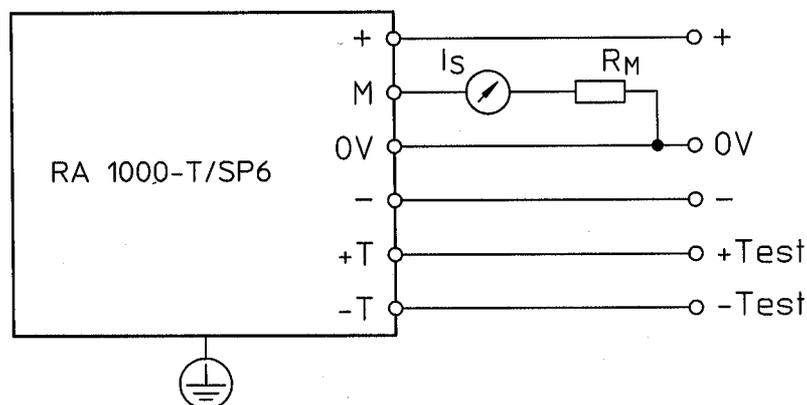


Secondary terminals :

- Terminal+ : supply voltage + 15 V
- Terminal M : measure
- Terminal 0V : 0 V
- Terminal - : supply voltage - 15 V
- Terminal T+ : + test winding
- Terminal T- : - test winding

Note : fastening torque of secondary connections : 2.2 Nm

Connection :



«This data sheet is a translation of the French version which is deemed authentic.»

We reserve the right to carry out modifications on our transducers, in order to improve them, without previous notice.