

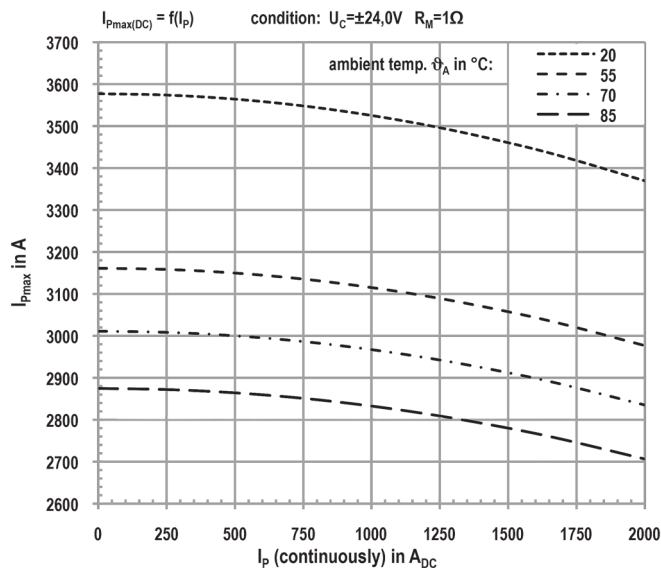
CLOSED LOOP CURRENT SENSOR FOR 1,700 A_{rms}

PRECISION FOR HIGH POWER APPLICATIONS – MOST COMPACT CLOSED-LOOP CURRENT SENSOR FOR NOMINAL DC AND AC CURRENTS ABOVE 1,000 A

VACUUMSCHMELZE developed the first ultra compact current sensor with high accuracy for continuous current up to $I_{PN} = 1,700$ A using MOSFET Class D output stage enabling higher compensation currents with lower power losses compared to linear output stages. The lower heat generation enables a high nominal current and a wide measuring range in extremely compact size.

The measuring range up to 3,400 A @ 20 °C ambient temperature with an accuracy of 0.3 % @ I_{PN} is combined with a very compact size and attractive price compared to any other available sensor on the market in this power class. The sensors can often replace the oversized sensors with 2,000 A I_{PN} leading to a space-optimized and up to 50 % more cost-effective solution.

MEASURING RANGE I_{Pmax} DEPENDING ON THE PRIMARY CONTINUOUS CURRENT I_{PN}

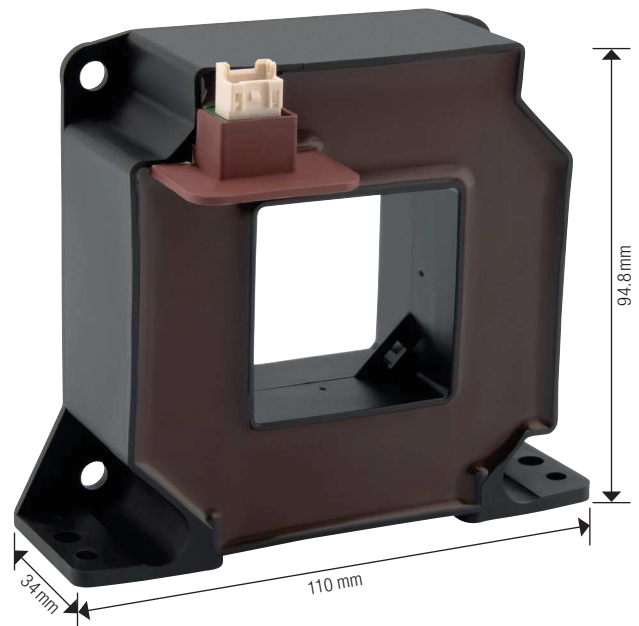


ADVANTAGES OF T60404-P4640-X256

- High I_{PN} of 1,700 A in compact design
- Wide measurement range of 3,400 A
- Low offset (0.1 mA) and low temperature drift (0.1 %)
- Excellent long-term stability
- Superior dynamic properties (rise time and response time < 0.5 μ s)
- Low current consumption (31 mA + compensation current)

TYPICAL APPLICATIONS FOR T60404-P4640-X256

- Drives
- Photovoltaic central inverters
- Power supplies
- Welding equipment
- Wind generators



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