

DCCS DC Current Shunt Series

- Allows for High Current Calibration, up to 60 A
- Resistances ranges from 100 $\mu\Omega$ - 1 k Ω
- High Accuracy 0.02%
- Suitable for Direct Current & Technical Frequencies
- Oil-Filled Design Ensures Great Long Term Stability <0.01% Over Many Years

Current Shunts

The DCCS Series Current Shunts are calibration grade devices used for precise dc current measurements. They extend high accuracy measurements beyond the available limits of self-contained dc ammeters and the DCCS Current Shunts can be used as standard reference resistors. The DCCS Current Shunts are low cost 4 terminal calibration resistors that combine high accuracy , class 0.02, long term stability and permanence of calibration in a compact unit. Constructed using carefully selected low temperature coefficient Manganin[®] or Zeranin[®] wire, depending on the value, and mounted to ensure mechanical stability, these current shunts will provide a cost-effective addition to any laboratory or workshop. Main Areas of Application For The DCCS Current Shunt:

*For tests of measuring bridges or electrical temperature measuring equipment

*For a laboratory setup of a Wheatstone bridge

*As shunt resistor for current measurement

*As part of standard equipment in research laboratories

A variety of values are available from 100 $\mu\Omega$ - 1 k Ω .

DCCS DC Current Shunt Specifications

Type	Nominal Value	Accuracy	Temperature Coefficient (ppm/ °C)	Max Current in Air	1 Year Stability	Nominal Voltage at Potential Terminals
DCCS/0.0001	100 $\mu\Omega$	0.1 %	10	60 A	400 ppm	6 mV
DCCS/0.001	1 m Ω	0.05 %	10	30 A	50 ppm	30 mV
DCCS/0.01	10 m Ω	0.03 %	10	14 A	50 ppm	140 mV
DCCS/0.1	100 m Ω	0.02 %	10	5 A	30 ppm	500 mV
DCCS/1	1 Ω	0.02 %	2	1.5 A	10 ppm	1.5 V
DCCS/10	10 Ω	0.02 %	2	0.5 A	10 ppm	5 V
DCCS/100	100 Ω	0.02 %	2	0.15 A	10 ppm	15 V
DCCS/1000	1 k Ω	0.02 %	2	45 mA	10 ppm	45 V

Resistance material: 100 $\mu\Omega$ - 100 m Ω MANGANIN[®] sheet, 1 Ω -100 k Ω ZERANIN[®] wire

Calibration temperature: 23 °C \pm 3 K (< 0.5 W load)

Surface temperature: max. 85 °C

Thermal resistance: 11 K/W

Test voltage: 2900 V DC (resistance element-housing)

Nominal insulation voltage: 650 V DC (insulated mounting required)

Insulation resistance: > 100 M Ω

Specifications: according IEC 60477

Size: 1.5 x 3.8 x 1.6 in (2.3 in with terminals) Weight: 0.55 lbs.