

DC Ammeter SMD 101



SMD 101 is a DC ammeter with serial communication interface for remote monitoring of DC networks. Measured wire connection is contactless by a built-in through-hole Hall sensor.

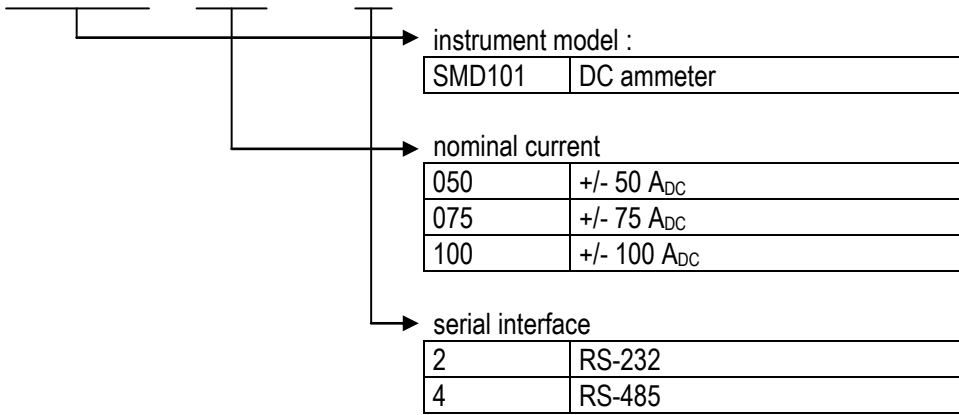
The instrument is equipped with electrically isolated communication line RS-485 or RS-232. In connection with the remote computer, the measured current can be monitored with standard Envis-Online program or a third-party monitoring system using the Modbus-RTU protocol.

Logic output with programmable function can be used as an alarm to indicate limit states etc.

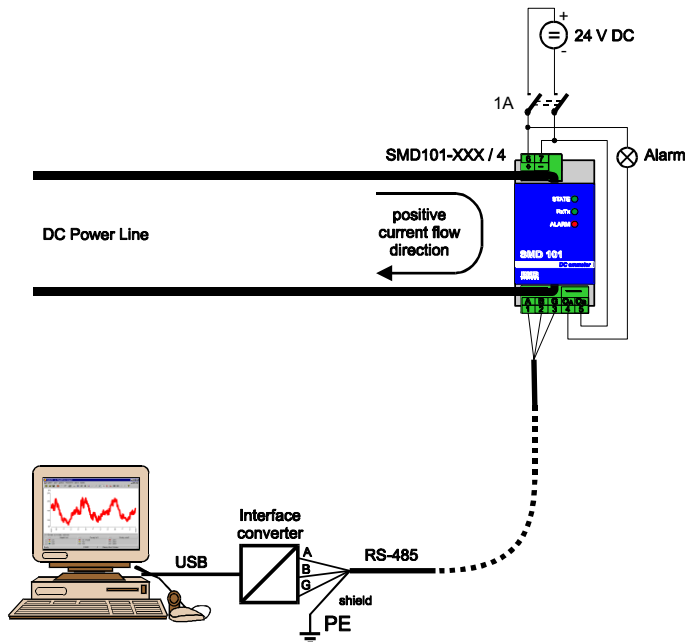
The device is designed for mounting on DIN-35 bar.

Overview of Models

SMD101 - 075 / 4



SMD 101-XXX / 4 – Typical Wiring



Installation example



Technical Parameters

nominal measured DC current I_{DCNOM} : SMD101-050 SMD101-075 SMD101-100	50 A _{DC} 75 A _{DC} 100 A _{DC}
DC measuring range	0 ÷ +/- 120 % I_{DCNOM}
DC current uncertainty without offset influence at room temperature	± 1 % I_{DCNOM}
DC current offset at room temperature	± 0.75 % I_{DCNOM}
DC current offset temperature drift	± 0.75 % I_{DCNOM} / 10 °C
DC current offset hysteresis after load change by 1 x I_{DCNOM}	± 0.4 % I_{DCNOM}
AC measuring range (effective value)	0 ÷ 80 % I_{DCNOM} [A _{AC}]
AC current uncertainty	± 0,5 % I_{DCNOM}
measured current through-hole withstand voltage	2.5 kV _{AC} , 1 minute
measured current through-hole diameter	11 mm
auxiliary voltage, power	18 ÷ 36 V _{DC} / V _{DC} , 2 W
measurement category / pollution degree	III / 2 in compl. with EN 61010-1
operation temperature	- 20 ÷ 60°C
storage temperature	- 40 ÷ 85°C
operation and storage humidity	< 95 % , non-condensing
EMC – immunity	EN 61000 – 4 - 2 EN 61000 – 4 - 3 EN 61000 – 4 - 4 EN 61000 – 4 - 5 EN 61000 – 4 - 6 EN 61000 – 4 - 11
EMC – emission	EN 55011, class A EN 55022, class A (not for home use)
communication interface type comm. speed comm. protocol	RS-485 or RS-232, galv. isolated 1200 ÷ 115200 Bd KMBLong or Modbus-RTU
protection	IP 20
dimensions / mass	91 x 36 x 58 / 0.1 kg