SHUNTS

The purpose of the shunt is to permit the passage of the current which exceeds the capacity of the instrument. The latter will therefore be supplied only with a current which corresponds to its capacity, thus avoiding the risk of damaging the measuring equipment.
The shunts are resistances of very little value and for this reason they are at times formed by conductors with a bar of limited length and substantial rectangular section. For heat dissipation several bars in parallel are used, terminating in two clamps with a large contact surface.
Alongside the two current clamps there are a further two clamps which serve to connect the ammeter.These clamps have lesser section as the current necessary for the instrument is much lower than that of the shunt.
Infact , it is not so much a question of the shunt being parallel with the instrument as the instrument deriving from the clamps of the shunt, of which it utilizes the drop in voltage, withdrawing a part of the current of the circuit, proportionate with the total current.

TECHNICAL CHARACTERISTICS

STANDARDS
- Electrical characteristics: CENELEC HD 233, CEI 13-6, IEC 51, VDE 0410, BS 89, C 42-100
- Safety regulations: CENELEC HD 215, CEI 13-10, IEC 414, DIN 57410, BS 5458, C 42-010
- Dimensions DIN 43703

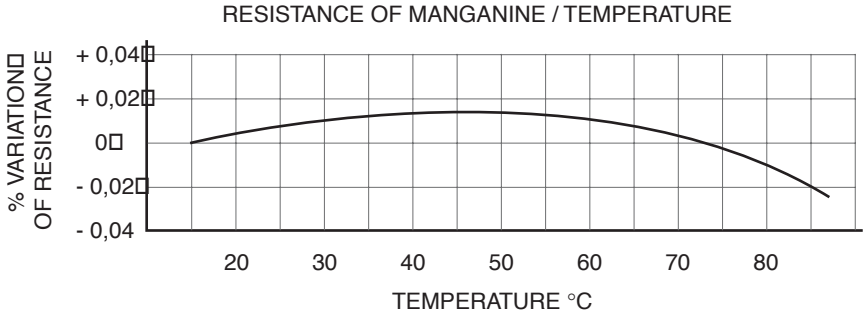
MATERIALS
- Body: Brass OT58 - UNI 4892
- Derivation with Manganina 43
- Accessories: zinc-iron 8.8

TEMPERATURES
- Referred temperature: 20°C ± 10°C respecting the precision of their class
- Working temperature: -25°C ÷ +60°C
- Storage temperature: -40°C ÷ +80°C
- Temperature's coefficient: 0,002% for each °C

HUMIDITY
- Relative humidity of the ambient ≤ 95%

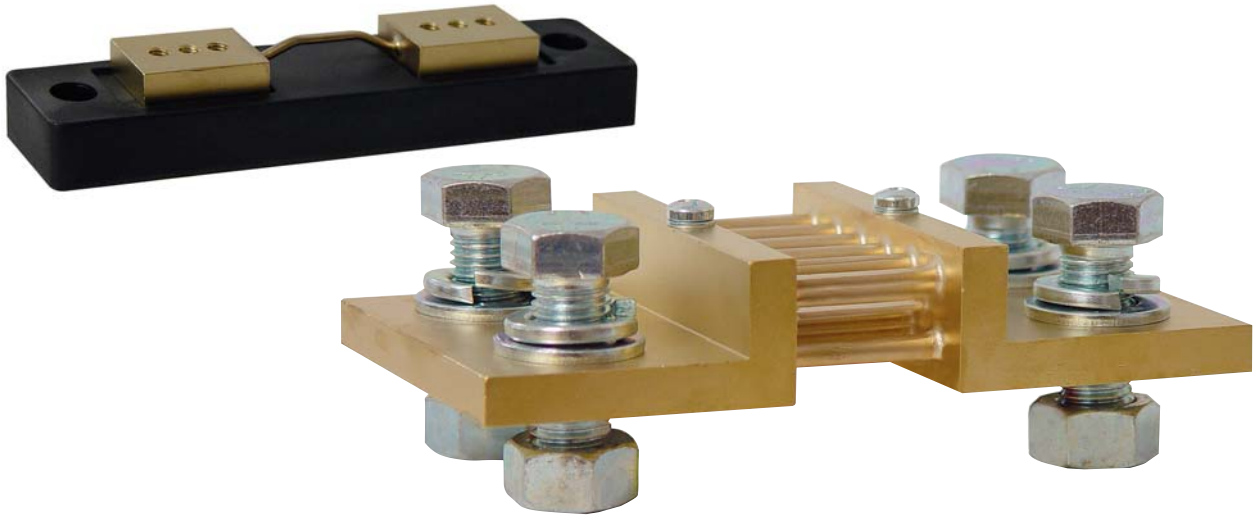
PRECISION
- Class 0,5

OVERLOAD
- 1,2 In continuously
- 10 In for 5 seconds up to 250A
  5 In for 5 seconds from 300 to 2000A
  2 In for 5 seconds from 2500 to 6000A



GENERAL
- Standard application: 60 mV and 150 mV
  The 60mV shunts are used with a maximum load of 0,25 ohm ; in the case of greater loads or long connection cables, the 150mV shunts should be used.
- Standards require the following primary values: 1 - 1,5 - 2,5 - 4 - 6 - 10 - 15 - 25 - 40 - 60 - 100 - 150 - 250 - 400 - 600 - 1000 - 1500 - 2500 - 4000 - 6000 - 10000 - 15000 A. Primary values different from the standard can be manufactured on request.
- To ensure the unit functions perfectly Revalco insists the following points are observed:
  1. They can be fitted in either a horizontal or vertical position (if horizontal there is a greater dissipation of heat)
  2. The contact surface must be completely used.
  3. The contact surface must be clean; after connecting, cover with special grease.
  4. The screws and bolts must be perfectly tightened.
  5. The shunts must be sufficiently ventilated.
- Due the fact that the shunts are not insulated, it is better to protect them against accidental contacts.

CODES LEGEND
- Code SH1K0A60MV identify a 1000A/60mV shunt
  Code SH1K5A60MV identify a 1500A/60mV shunt
  Code SH10KA60MV identify a 10000A/60mV shunt
  Code SH1K2A150MV identify a 1200A/150mV shunt
  Code SH5K0A60MV identify a 5000A/60mV shunt

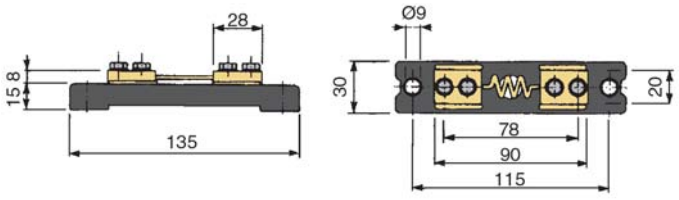


DIMENSIONS in mm

secondary 60 mV

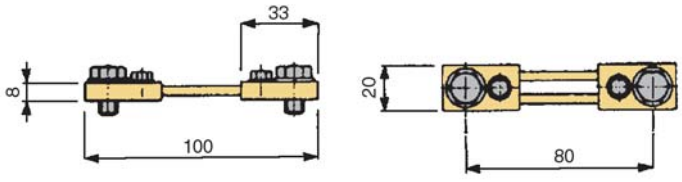
SH1A60MV ÷ SH25A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M5x12 DIN 933 + 4 washers M5 DIN 125A
- weight: 0,11 Kg



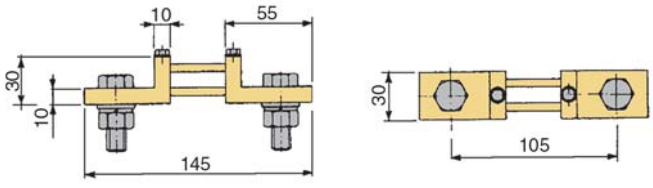
SH30A60MV ÷ SH200A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M8x16 DIN 933
  + 2 washers M5 DIN 125A + 2 washers M8 DIN 125A
- Weight: 0,14 Kg



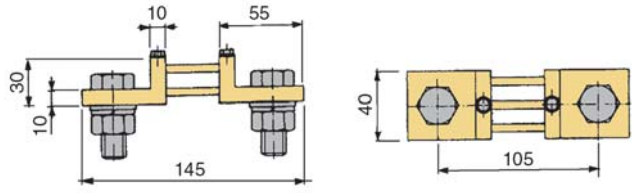
SH250A60MV ÷ SH350A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M12x40 DIN 933 + 2 nuts M12 DIN 934
  + 2 washers M5 DIN 125A + 2 washers M12 DIN 125A
  + 2 grower washers M12 DIN 127B
- Weight: 0,53 Kg



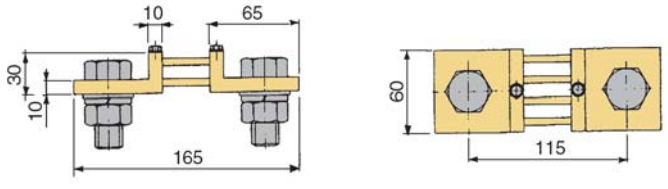
SH400A60MV ÷ SH700A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M16x45 DIN 933 + 2 nuts M16 DIN 934
  + 2 washers M5 DIN 125A + 2 washers M16 DIN 125A
  + 2 grower washers M16 DIN 127B
- Weight: 0,80 Kg



SH750A60MV ÷ SH1K0A60MV

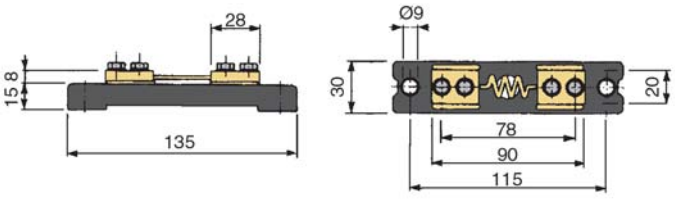
- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M20x50 DIN 933 + 2 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 2 washers M20 DIN 125A
  + 2 grower washers M20 DIN 127B
- Weight: 1,40 Kg



secondary 150 mV

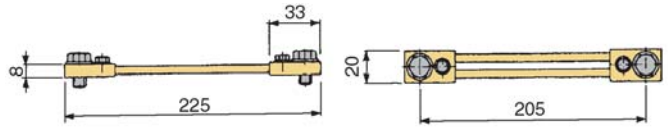
SH1A150MV ÷ SH25A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M5x12 DIN 933 + 4 weight M5 DIN 125A
- Peso: 0,11 Kg



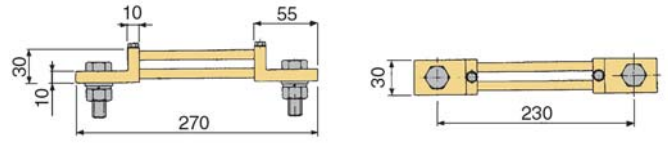
SH30A150MV ÷ SH200A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M8x16 DIN 933
  + 2 washers M5 DIN 125A + 2 washers M8 DIN 125A
- Weight: 0,20 Kg



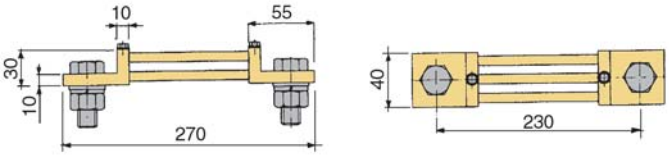
SH250A150MV ÷ SH350A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M12x40 DIN 933 + 2 nuts M12 DIN 934
  + 2 washers M5 DIN 125A + 2 washers M12 DIN 125A
  + 2 grower washers M12 DIN 127B
- Weight: 0,65 Kg



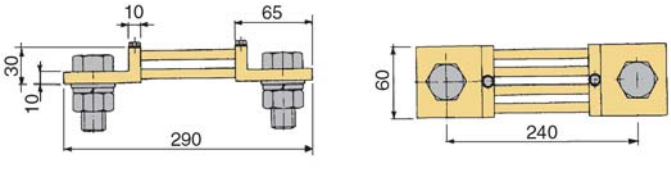
SH400A150MV ÷ SH700A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M16x45 DIN 933 + 2 nuts M16 DIN 934
  + 2 washers M5 DIN 125A + 2 washers M16 DIN 125A
  + 2 grower washers M16 DIN 127B
- Weight: 0,95 Kg



SH750A150MV ÷ SH1K0A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 2 screws M20x50 DIN 933 + 2 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 2 washers M20 DIN 125A
  + 2 grower washers M20 DIN 127B
- Weight: 1,55 Kg

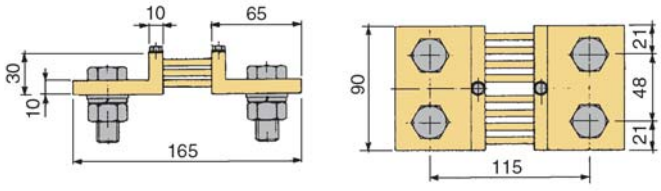


DIMENSIONS in mm

secondary 60 mV

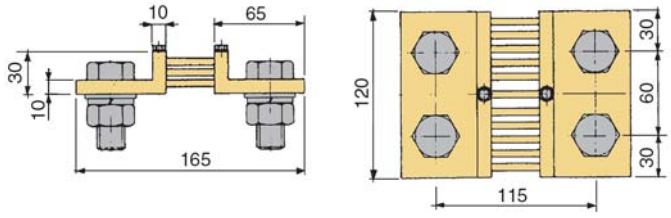
SH1K2A60MV ÷ SH1K5A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 4 screws M16x45 DIN 933 + 4 nuts M16 DIN 934
  + 2 washers M5 DIN 125A + 4 washers M16 DIN 125A
  + 4 grower washers M16 DIN 127B
- Weight: 1,90 Kg



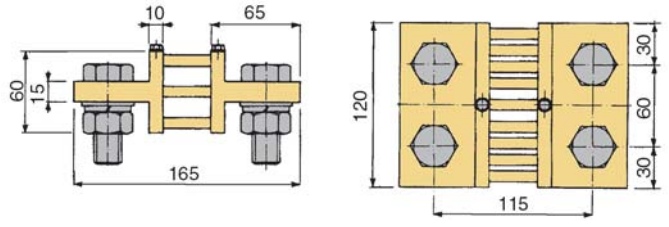
SH2K0A60MV ÷ SH2K5A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 4 screws M20x50 DIN 933 + 4 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 4 washers M20 DIN 125A
  + 4 grower washers M20 DIN 127B
- Weight: 2,75 Kg



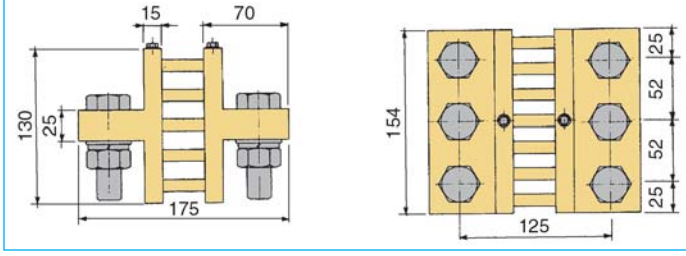
SH4K0A60MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 4 screws M20x60 DIN 933 + 4 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 4 washers M20 DIN 125A
  + 4 grower washers M20 DIN 127B
- Weight: 4,10 Kg



SH5K0A60MV ÷ SH6K0A60MV

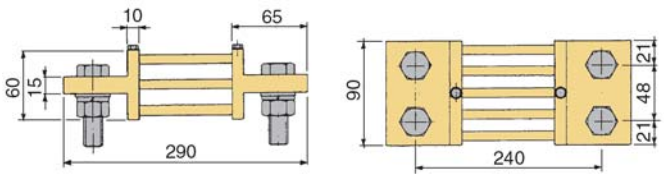
- Fixing packs:
  2 screws M5x8 DIN 933 + 6 screws M20x75 DIN 933 + 6 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 6 washers M20 DIN 125A
  + 6 grower washers M20 DIN 127B
- Weight: 5,00 Kg



secondary 150 mV

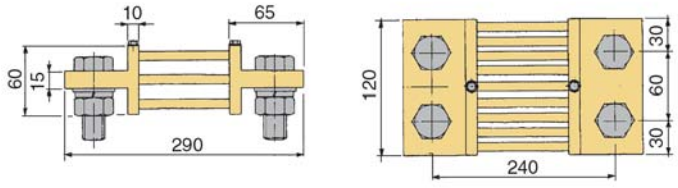
SH1K2A150MV ÷ SH1K5A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 4 screws M16x60 DIN 933 + 4 nuts M16 DIN 934
  + 2 washers M5 DIN 125A + 4 washers M16 DIN 125A
  + 4 grower washers M16 DIN 127B
- Weight: 2,20 Kg



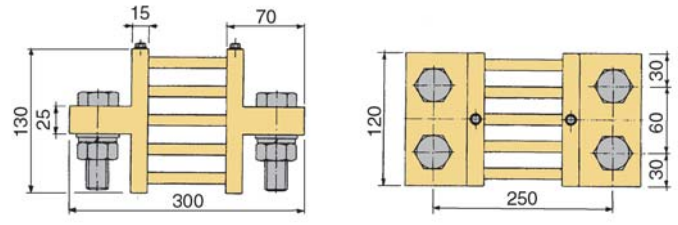
SH2K0A150MV ÷ SH2K5A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 4 screws M20x60 DIN 933 + 4 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 4 washers M20 DIN 125A
  + 4 grower washers M20 DIN 127B
- Weight: 3,10 Kg



SH4K0A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 4 screws M20x75 DIN 933 + 4 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 4 washers M20 DIN 125A
  + 4 grower washers M20 DIN 127B
- Weight: 4,65 Kg



SH5K0A150MV ÷ SH6K0A150MV

- Fixing packs:
  2 screws M5x8 DIN 933 + 6 screws M20x75 DIN 933 + 6 nuts M20 DIN 934
  + 2 washers M5 DIN 125A + 6 washers M20 DIN 125A
  + 6 grower washers M20 DIN 127B
- Weight: 5,60 Kg