



SHB 1A/60mV

SHB 1A/60mV, Shunt

Code: M71221.

- > Accuracy: 0.5
- > Measurement Range (A): 1A/60mV
- > Input current: 1 A
- > Relation: 1A/60mV

Description

- Shunt for the measurement of DC, from 1 A dc to 15 000 A dc, depending on the type
- Accuracy class: 0.5
- All types are supplied with 1.5 m long cables, with a section of 1.5 m²
- The standard output voltage is .../60 mV, but there are other types of outputs on demand, see coding table.

Application

Used in DC electrical lines to obtain a voltage signal that is proportional to the current through the shunt



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Shunts

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Specifications

Electrical characteristics

| | |
|--------------------|--------------------|
| Permanent overload | 1,2 I _n |
|--------------------|--------------------|

Environmental characteristics

| | |
|---------------------|----------------|
| Working temperature | -25 ... +60 °C |
|---------------------|----------------|

Mechanical characteristics

| | |
|-------------|-------------------------------|
| Envelope | Manganin rods Brass terminals |
| Weight (kg) | 0,15 |

Current measurement circuit

| | |
|-----------------------------|--|
| Nominal frequency | 50 / 60 Hz |
| Primary current measurement | 1A |
| Allowable overload | During 5 s 10 I _n , yes 10 A ≤ I _n ≤ 500 A 5 I _n , yes 600 A ≤ I _n ≤ 2000 A 2 I _n , yes 2500 A ≤ I _n |
| Transformation ratio | ... / 60 mV |

Standards

| | |
|-----------|-----------------------------------|
| Standards | DIN 43703, IEC 51, VDE 410, BS 89 |
|-----------|-----------------------------------|

Measurement accuracy

| | |
|----------|-----|
| Accuracy | 0.5 |
|----------|-----|

SH

Shunts for direct current measurement

| CODE | TYPE | Measurement Range (A) |
|---------|---------------|-----------------------|
| M71211. | SHP 30A/60mV | 30A/60mV |
| M71212. | SHP 40A/60mV | 40A/60mV |
| M71213. | SHP 50A/60mV | 50A/60mV |
| M71214. | SHP 60A/60mV | 60A/60mV |
| M71215. | SHP 75A/60mV | 75A/60mV |
| M71216. | SHP 100A/60mV | 100A/60mV |
| M71217. | SHP 150A/60mV | 150A/60mV |
| M71218. | SHP 200A/60mV | 200A/60mV |
| M71221. | SHB 1A/60mV | 1A/60mV |
| M71222. | SHB 1.5A/60mV | 1.5A/60mV |
| M71223. | SHB 2.5A/60mV | 2.5A/60mV |

SHB 1A/60mV



Shunts

Code: M71221.

| CODE | TYPE | Measurement Range (A) |
|---------|----------------|-----------------------|
| M71224. | SHB 4A/60mV | 4A/60mV |
| M71225. | SHB 5A/60mV | 5A/60mV |
| M71226. | SHB 6A/60mV | 6A/60mV |
| M71227. | SHB 10A/60mV | 10A/60mV |
| M71228. | SHB 15A/60mV | 15A/60mV |
| M71229. | SHB 25A/60mV | 25A/60mV |
| M7122A. | SHB 30A/60mV | 30A/60mV |
| M7122B. | SHB 40A/60mV | 40A/60mV |
| M7122C. | SHB 50A/60mV | 50A/60mV |
| M7122D. | SHB 60A/60mV | 60A/60mV |
| M7122E. | SHB 80A/60mV | 80A/60mV |
| M7122F. | SHB 100A/60mV | 100A/60mV |
| M7122N. | SHB 200A/60mV | 200A/60mV |
| M71231. | SH 30A/60mV | 30A/60mV |
| M71232. | SH 40A/60mV | 40A/60mV |
| M71233. | SH 50A/60mV | 50A/60mV |
| M71234. | SH 60A/60mV | 60A/60mV |
| M71235. | SH 80A/60mV | 80A/60mV |
| M71236. | SH 100A/60mV | 100A/60mV |
| M71237. | SH 150A/60mV | 150A/60mV |
| M71238. | SH 200A/60mV | 200A/60mV |
| M71239. | SH 250A/60mV | 250A/60mV |
| M7123A. | SH 300A/60mV | 300A/60mV |
| M7123B. | SH 400A/60mV | 400A/60mV |
| M7123C. | SH 500A/60mV | 500A/60mV |
| M7123D. | SH 600A/60mV | 600A/60mV |
| M7123E. | SH 750A/60mV | 750A/60mV |
| M7123F. | SH 800A/60mV | 800A/60mV |
| M7123G. | SH 1000A/60mV | 1000A/60mV |
| M7123H. | SH 1200A/60mV | 1200A/60mV |
| M7123J. | SH 1500A/60mV | 1500A/60mV |
| M7123K. | SH 2000A/60mV | 2000A/60mV |
| M7123L. | SH 2500A/60mV | 2500A/60mV |
| M7123M. | SH 3000A/60mV | 3000A/60mV |
| M7123N. | SH 4000A/60mV | 4000A/60mV |
| M7123O. | SH 20000A/60mV | 20000A/60mV |
| M7123P. | SH 5000A/60mV | 5000A/60mV |
| M7123Q. | SH 6000A/60mV | 6000A/60mV |
| M7123R. | SH 7500A/60mV | 7500A/60mV |



SHB 1A/60mV

Shunts

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| CODE | TYPE | Measurement Range (A) |
|---------|----------------|-----------------------|
| M7123S. | SH 8000A/60mV | 8000A/60mV |
| M7123T. | SH 10000A/60mV | 10000A/60mV |
| M7123U. | SH 12500A/60mV | 12500A/60mV |
| M7123V. | SH 15000A/60mV | 15000A/60mV |
| M7123Z. | SH 18000A/60mV | 18000A/60mV |

SHP: Faston connection; **SHB:** Insulating base socket(up to 100 A); **SH:** Without base

For other configurations see additional performance table.

All shunts are supplied with 1.5 m long cables with a 1.5 mm² cross-section

SHB 1A/60mV

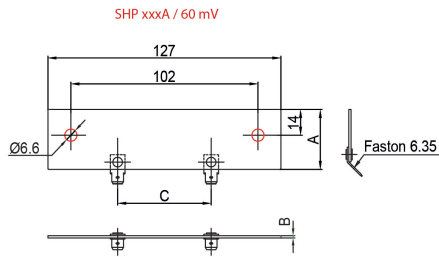
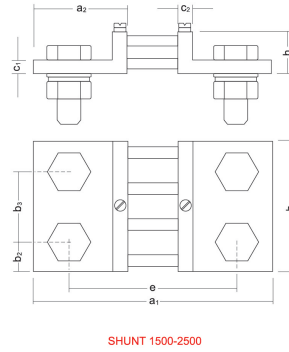
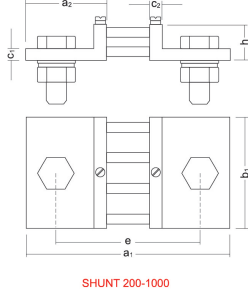
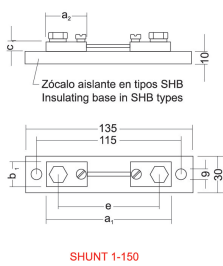


Shunts

Code: M71221.

Dimensions

| Voltage drop mV_{90} | Range A_{90} | Fig. | a1 | a2 | b1 | b2 | b3 | c1 | c2 | e | h | N° Current connections | Current connections | | | Voltage connections | |
|------------------------|--------------------------|------|-----|----|-----|----|----|----|----|-----|----|------------------------|--------------------------|----------------|-------------|---|-----|
| | | | | | | | | | | | | | Hexagonal screws DIN 933 | Washer DIN 125 | DIN 934 nut | | |
| 60 | 1-1, 5-2, 5-4-6-10-15-25 | 1 | 90 | 28 | 20 | - | - | 8 | - | 78 | - | 2 x 1 | M5 x 12 | 5,3 | - | 2 Screws M5 x 8 DIN 84 & 2 Washer 5,3 DIN 433 | |
| | 30-40-60-100-150 | | 100 | 33 | 20 | - | - | 8 | - | 80 | - | 2 x 1 | M8 x 16 | 8,4 | - | | |
| | 250 | 2 | 145 | 55 | 30 | 15 | - | 10 | 10 | 105 | 30 | 2 x 1 | M12 x 40 | 13 | M12 | | |
| | 400-600 | | | | 40 | 20 | - | - | - | - | - | - | 2 x 1 | M16 x 45 | 17 | | M16 |
| | 800 | | | | 60 | 30 | - | - | - | - | - | - | 2 x 1 | M20 x 50 | 21 | | M20 |
| | 1500 | | | | 90 | 21 | 48 | 10 | 10 | 115 | 30 | 2 x 2 | M16 x 45 | 17 | M16 | | |
| | 2500 | | | | 120 | 30 | 60 | 10 | 10 | 115 | 30 | 2 x 2 | M20 x 50 | 21 | M20 | | |
| | 800 | | | | 165 | 65 | 20 | - | - | 8 | - | 78 | - | 2 x 1 | M5 x 12 | | 5,3 |
| 150 | 1-1, 5-2, 5-4-6-10-15-25 | 1 | 90 | 25 | 20 | - | - | 8 | - | 205 | - | 2 x 1 | M8 x 16 | 8,4 | - | | |
| | 40-60-100-150 | | 225 | 33 | 25 | - | - | 8 | - | 205 | - | 2 x 1 | M8 x 16 | 8,4 | - | | |
| | 250 | 2 | 270 | 55 | 30 | 15 | - | 10 | 10 | 230 | 50 | 2 x 1 | M12 x 40 | 13 | M12 | | |
| | 400-600 | | | | 40 | 20 | - | - | - | - | - | - | 2 x 1 | M16 x 45 | 17 | M16 | |
| | 800 | | | | 60 | 30 | - | - | - | - | - | - | 2 x 1 | M20 x 50 | 21 | M20 | |
| | 1500 | | | | 90 | 21 | 48 | 10 | 10 | 115 | 30 | 2 x 2 | M16 x 45 | 17 | M16 | | |
| | 2500 | | | | 120 | 30 | 60 | 10 | 10 | 115 | 30 | 2 x 2 | M20 x 50 | 21 | M20 | | |
| | 800 | | | | 165 | 65 | 20 | - | - | 8 | - | 78 | - | 2 x 1 | M5 x 12 | 5,3 | - |



| Units: (A) | A | B | C |
|------------|------|------|------|
| 30 | 35 | 0,7 | 73,5 |
| 40 | 35 | 0,7 | 73,5 |
| 50 | 35 | 0,7 | 73,5 |
| 60 | 35 | 0,7 | 62 |
| 75 | 35 | 1,25 | 48 |
| 100 | 28,5 | 1,25 | 50,5 |
| 150 | 35 | 1,25 | 41,5 |
| 200 | 28,5 | 3 | 64 |