

DECADE BOXES RESISTANCE

ON REQUEST: certificate of calibration of our laboratory

DECADES BOXES OF RESISTANCE with switch precision 0.05% at terminals

Calibration precision: $\pm 0.02\%$

The precision shown refers to the terminals and therefore is total resistance included the resistance of zero

Resistors are in manganine wire (temperature coefficient ± 10 ppm/ $^{\circ}$ C) wrapped in ant-inductive way. Thanks to an opportune seasoning process the long term stability is ensured: 10 ppm in the first year and max 20 ppm in three years. Switches have a resistance of contact lower than 0.001 Ω invariable in the time.



| TYPE | No. decades | SECTIONS Ω | Resistance Total Ω |
|---------|-------------|---|---------------------------|
| CR/6DC1 | 6 | $10 \times (1+10+100+1K+10K+100K) \Omega$ | 1,111,110 |
| CR/6DC2 | 6 | $10 \times (0.1+1+10+100+1K+10K) \Omega$ | 111,111 |
| CR/6DC3 | 6 | $10 \times (0.01+0.1+1+10+100+1K) \Omega$ | 11,111.1 |
| CR/5DC1 | 5 | $10 \times (1+10+100+1K+10K) \Omega$ | 111,110 |
| CR/5DC2 | 5 | $10 \times (0.1+1+10+100+1K) \Omega$ | 11,111 |
| CR/5DC3 | 5 | $10 \times (0.1+0.1+1+10+100) \Omega$ | 1,111.1 |
| CR/4DC1 | 4 | $10 \times (1+10+100+1K) \Omega$ | 11,110 |
| CR/4DC2 | 4 | $10 \times (0.1+1+10+100) \Omega$ | 1,111 |
| CR/4DC3 | 4 | $10 \times (0.01+0.1+1+10) \Omega$ | 111.1 |

| ADMISSIBLE MAX CURRENT Dissipation 1W for coil FOR DECADE CONTINUE SERVICE | |
|--|--------|
| DECADE Ω | AMPERE |
| 0.01 | 3 |
| 0.1 | 3 |
| 1 | 1 |
| 10 | 0.3 |
| 100 | 0.1 |
| 1,000 | 0.03 |
| 10,000 | 0.01 |
| 100,000 | 0.003 |

ON REQUEST BOXES TO 1-2-3 DECADES (SEVERAL SECTIONS)

DECADES BOXES OF RESISTANCE with switch precision 0.1% at terminals

Calibration precision: $\pm 0.02\%$

The precision shown refers to the terminals and therefore is total resistance included the resistance of zero

Resistors are in manganine wire (temperature coefficient ± 10 ppm/ $^{\circ}$ C) wrapped in ant-inductive way. Thanks to an opportune seasoning process the long term stability is ensured: 10 ppm in the first year and max. 20 ppm in three years. Switches have a resistance of contact lower than 0.002 Ω invariable in the time.



| TYPE | No. Decades | SECTIONS Ω | Resistance Total Ω |
|-----------|-------------|---|---------------------------|
| CR-E/7DC1 | 7 | $10 \times (1+10+100+1K+10K+100K+1M) \Omega$ | 11,111,110 |
| CR-E/7DC2 | 7 | $10 \times (0.1+1+10+100+1K+10K+100K) \Omega$ | 1,111,111 |
| CR-E/6DC1 | 6 | $10 \times (1+10+100+1K+10K+100K) \Omega$ | 1,111,110 |
| CR-E/6DC2 | 6 | $10 \times (0.1+1+10+100+1K+10K) \Omega$ | 111,111 |
| CR-E/5DC1 | 5 | $10 \times (1+10+100+1K+10K) \Omega$ | 11,110 |
| CR-E/5DC2 | 5 | $10 \times (0.1+1+10+100+1K) \Omega$ | 11,111 |
| CR-E/4DC1 | 4 | $10 \times (1+10+100+1K) \Omega$ | 11,110 |
| CR-E/4DC2 | 4 | $10 \times (0.1+1+10+100) \Omega$ | 1,111 |
| CR-E/3DC1 | 3 | $10 \times (1+10+100) \Omega$ | 1,110 |
| CR-E/3DC2 | 3 | $10 \times (0.1+1+10) \Omega$ | 111 |

| ADMISSIBLE MAX CURRENT Dissipation 0.5W for coil FOR DECADE CONTINUE SERVICE | |
|--|--------|
| DECADE Ω | AMPERE |
| 0.1 | 2.2 |
| 1 | 0.7 |
| 10 | 0.22 |
| 100 | 0.07 |
| 1,000 | 0.022 |
| 10,000 | 0.007 |
| 100,000 | 0.0022 |
| 1,000,000 | 0.0007 |

ON REQUEST BOXES TO 1-2 DECADES (SEVERAL SECTIONS)

DECADES BOXES OF RESISTANCE with switch precision 0.1% at terminals DC and AC up to 1MHz

Resistors are to metal film with low coefficient of temperature and high stability. Switches have a resistance of contact lower than 0.01 (invariable in the time).

The precision shown refers at the terminals and therefore the total resistance includes also the resistance of zero



ON REQUEST BOXES TO 1-2 DECADES (SEVERAL SECTIONS)

| TYPE | number decades | SECTIONS Ω | Resistance Total Ω |
|-----------|----------------|--|---------------------------|
| CR-B/7DC1 | 7 | $10 \times (1+10+100+1K+10K+100K+1M) \Omega$ | 11,111,110 |
| CR-B/6DC1 | 6 | $10 \times (1+10+100+1K+10K+100K) \Omega$ | 1,111,110 |
| CR-B/6DC2 | 6 | $10 \times (10+100+1K+10K+100K+1M) \Omega$ | 11,111,100 |
| CR-B/5DC1 | 5 | $10 \times (1+10+100+1K+10K) \Omega$ | 111,110 |
| CR-B/5DC2 | 5 | $10 \times (10+100+1K+10K+100K) \Omega$ | 1,111,100 |
| CR-B/5DC3 | 5 | $10 \times (100+1K+10K+100K+1M) \Omega$ | 11,111,000 |
| CR-B/4DC1 | 4 | $10 \times (1+10+100+1K) \Omega$ | 11,110 |
| CR-B/4DC2 | 4 | $10 \times (10+100+1K+10K) \Omega$ | 111,100 |
| CR-B/4DC3 | 4 | $10 \times (100+1K+10K+100K) \Omega$ | 1,111,000 |
| CR-B/4DC4 | 4 | $10 \times (1K+10K+100K+1M) \Omega$ | 11,110,000 |
| CR-B/3DC1 | 3 | $10 \times (1+10+100) \Omega$ | 1,110 |
| CR-B/3DC2 | 3 | $10 \times (10+100+1K) \Omega$ | 11,100 |
| CR-B/3DC3 | 3 | $10 \times (100+1K+10K) \Omega$ | 111,000 |
| CR-B/3DC4 | 3 | $10 \times (1K+10K+100K) \Omega$ | 1,110,000 |
| CR-B/3DC5 | 3 | $10 \times (10K+100K+1M) \Omega$ | 11,100,000 |

DECADES BOXES OF RESISTANCE PRECISION 0.5% EDUCATIONAL VERSION

- Power: 0.5 W permanent
- Resistances: 0.1Ω and 1 Ω to coil, from 10Ω to 1 MΩ metal film to 50ppm
- Security rule terminals
- Plastic box, panel of aluminium with serigraphy
- Double insulation
- Work frequency: 0 – 500 KHz
- Precision: 0.5 %



| TYPE | NO. DECADES | RANGE | DIMENSIONS (mm) |
|------|-------------|----------------------------------|-----------------|
| R40 | 4 | from 10x1Ω to 10x1KΩ | 290x80x60 |
| R50 | 5 | From 10x1 Ω to 10 x 10 KΩ | 420x80x60 |
| R60 | 6 | From 10x1Ω to 10x100 KΩ | 490x80x60 |
| R70 | 7 | From 10x1Ω to 10x1 MΩ | 490x80x60 |
| R80 | 8 | From 10x0.1Ω to 10x1MΩ | 490x80x60 |
| R0 | 1 | 10x0.1 Ω | 82x82x60 |
| R1 | 1 | 10x1 Ω | 82x82x60 |
| R2 | 1 | 10x10 Ω | 82x82x60 |
| R3 | 1 | 10 x 100 Ω | 82x82x60 |
| R4 | 1 | 10 x 1 KΩ | 82x82x60 |
| R5 | 1 | 10 x 10 KΩ | 82x82x60 |
| R6 | 1 | 10 x 100 KΩ | 82x82x60 |
| R7 | 1 | 10 x 1 MΩ | 82x82x60 |

DECADES BOXES OF RESISTANCE 1 DECADE

With switch - precision 1% at terminals dc and ac up to 1MHz. same technical features as the previous models.



| TYPE | RANGE | DIMENSION (mm) |
|-----------|-------------|----------------|
| CR-B/1DC0 | 10x0.1 | 110x70x70 |
| CR-B/1DC1 | 10x1 Ω | 110x70x70 |
| CR-B/1DC2 | 10x10 Ω | 110x70x70 |
| CR-B/1DC3 | 10 x 100 Ω | 110x70x70 |
| CR-B/1DC4 | 10 x 1 KΩ | 110x70x70 |
| CR-B/1DC5 | 10 x 10 KΩ | 110x70x70 |
| CR-B/1DC6 | 10 x 100 KΩ | 110x70x70 |
| CR-B/1DC7 | 10 x 1 MΩ | 110x70x70 |



Possibility of connection as photo



version with transparent cover
also available for inductance and capacitance

KIT ASSEMBLY OF WHEATSTONE BRIDGE

Included:

- Plug-in ratio arm type LDR-B/4 arm A and B 10-100-1,000-10,000 precision 1%
- Decade resistances box type CR-B/4DC1
- Pivot galvanometer type SLD-E/G
- Switch PB/9 with battery 9V with limiting device resistance
- Unknown resistance on panel with terminals 4 mm
- NO. 5 cables.