







Selective Multimeter

SICO 2061 KS

Meter for selective current and voltage measurements on low frequency and audio frequency track circuits of the following types:

- Track circuits with 25 / 42 / 50 / 60 / 75 / 77 / 80 / 83 / 95 / 100 / 105 / 106.7 / 125 / 137.5 / 175 / 225 / 250 / 275 Hz
- FTGS, GLS, TCM
- GLL
- JADE
- UM71, FS 2000, FS 2500, FS 3000, FS 5000
- TI 21, TI 21-M, EBI Track 200, EBI Track 300
- CVLC, CVJM, CVBM
- AF 800, AF 902, AF 904
- DTC 24, DTC 921
- AFTC HBL
- TC ATP RET Rotterdam

For detailed information on audio track circuit frequencies, refer to the section Optional Accessories.

! Even more track circuits and frequencies are available on request.

Application videos
- How to measure voltage with the SICO 2061 KS?
- How to measure current with the SICO 2061 KS?

Data

Input resistance: >/= 1 MOhm
Connections:
- 4 mm safety sockets
- 8 pole socket on front

Power supply:
- 1 rechargeable battery type PA-LH201.K01.R001 or
- 3 non-rechargeable batteries / rechargeable batteries size AA

Protection class: II
IP code display unit: IP 54
Operating time: > 8 hours (at 20°C)
Operating and storage temperature range: -40°C … +70°C
(when operating the device at less than -20°C a doubling of the given accuracy is permissible)
Permissible maximum input voltage: 300 Veff (4 mm socket)
Voltage resistance to conducting parts of housing: 2.5 kV
Dimensions with handle: 170 x 145 x 155 mm
Weight with batteries: max. 1.5 kg

Selective Voltage / Current Measurement
- Measuring range:
50 mVeff ... 200 Veff
20 mAeff ... 20 Aeff
- Range selection: automatic

Mode Multimeter
- Range selection: automatic
- Measuring range alternating voltage: 50 mVeff ... 260 Veff
- Measuring range direct voltage: 200 mVeff … 200 Veff
- Measuring range frequency: 20 Hz … 99 kHz

Signal Concept GmbH
Geschäftsführer: Stefan Wetzig
Südring 11, 04416 Markkleeberg, Deutschland
Tel.: +49 (0)34297 1439 0, Fax: +49 (0)34297 1439 13

E-Mail: info@signalconcept.de
Internet: www.signalconcept.de
Umsatzsteuer-ID gemäß § 27 a Umsatzsteuergesetz: DE155914966







Technology

The Selective Meter SICO 2061 KS is suitable for
- Adjustments,
- Inspection, and
- Acceptance tests
on most low and audio frequency track circuits worldwide.

Current measurements on track circuits are simply done without any interference using flexible current transducers.

With its efficient microcontroller technology and its easy operation the meter is especially suited to detect short circuits and contact resistances on e.g. rail insulations, line connections, valve rods, earth cables, insulated rail joints, scissors crossings and impedance bonds.

It measures small signals even in places tending to be affected by high noise levels or external signals (e.g. due to neighboring track circuits).

Preset frequencies can easily be chosen from the well-arranged menu.

Recording mode for measuring results: Measuring results can be stored automatically in a scheduled period in defined intervals. The results are transferred to a PC with the USB data cable.

Multimeter functions:
- Voltage AC (mains alternating voltage),
- Voltage DC or
- Frequency

Frequency-selective measurement of alternating voltage and current

Large, illuminated LCD showing measuring results instantaneously

The device being enclosed in a sturdy shock- and humidity-resistant housing and with its wide operating temperature range is particularly tailored to the needs of operating and maintenance crews.

Universal power supply: One single rechargeable batterie or three type AA rechargeable/non-rechargeable batteries.

Delivery

- Selective Multimeter SICO 2061 KS Basic Unit (Rail Signal Meter)
- SICO 2061 KS Firmware Basic Module Multimeter AC, DC, F
- SICO 2061 KS Firmware Basic Module for low frequency track circuits, frequency selective measurements
  frequencies: 25 / 42 / 50 / 60 / 75 / 77 / 80 / 83 / 95 / 100 / 105 / 106.7 / 125 Hz / 137.5 / 175 / 225 / 250 / 275 Hz
- 1 Measuring lead 4 mm, black, 100 cm
- 1 Measuring lead 4 mm, red, 100 cm
- 1 Rechargeable battery type PA-LH201.K01.R001
- 1 Charger SICO 5007 for cells type PA-LH201.K01.R001, manual included
- 1 Transport case
- 1 Data cable USB
- SICO 2061 KS manual
- SICO 2061 KS Acceptance test certificate 3.1 according to BS EN 10204

Optional accessories

- SICO 2061 KS Current Sensor Low Frequency Track Circuits

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frequencies: 25 / 42 / 50 / 60 / 75 / 77 / 80 / 83 / 95 / 100 / 105 / 106,7 / 125 / 137,5 / 175 / 225 / 250 / 275 Hz

- SICO 2061 KS Firmware System Module Track Circuits FTGS, GLS, TCM
frequency selective measurement
frequencies: 4.75 / 5.25 / 5.75 / 6.25 / 9.5 / 10.5 / 11.5 / 12.5 / 13.5 / 14.5 / 15.5 / 16.5 / 17.5 / 18.5 / 19.5 kHz

- SICO 2061 KS Current Sensor FTGS, GLS, TCM
frequencies: 4.75 / 5.25 / 5.75 / 6.25 / 9.5 / 10.5 / 11.5 / 12.5 / 13.5 / 14.5 / 15.5 / 16.5 / 17.5 / 18.5 / 19.5 kHz

- SICO 2061 KS Firmware System Module Track Circuits GLL
frequency selective measurement
frequencies: 19.0 / 20.0 / 21.0 / 22.0 / 23.0 / 24.0 / 25.0 / 26.0 / 79.5 / 80.5 / 81.5 / 82.5 / 83.5 / 84.5 / 85.5 / 86.5 kHz

- SICO 2061 KS Current Sensor GLL
frequencies: 19.0 / 20.0 / 21.0 / 22.0 / 23.0 / 24.0 / 25.0 / 26.0 kHz

- **SICO 2061 KS Firmware System Module Track Circuit JADE**
frequency selective measurement
frequencies: 1.595 / 1.894 / 2.206 / 2.500 / 2.841 / 3.157 / 3.472 / 3.750 / 49.081 / 67.231 kHz

- SICO 2061 KS Current Sensor JADE
frequencies: 1.595 / 1.894 / 2.206 / 2.500 / 2.841 / 3.157 / 3.472 / 3.750 kHz

- SICO 2061 KS Current Sensor 2 JADE
frequencies: 49,081 / 67,231 kHz

- SICO 2061 KS Firmware System Module Track Circuits UM71, FS 2000, FS 2500, FS 3000, FS 5000
frequency selective measurement
frequencies: 1.7 / 2.0 / 2.04 / 2.3 / 2.4 / 2.6 / 2.76 / 3.12 / 4.08 / 4.32 / 4.56 / 5.04 / 5.28 / 5.52 / 6.0 / 6.48 / 6.72 / 7.2 kHz

- SICO 2061 KS Current Sensor UM71, FS 2000, FS 2500, FS 3000, FS 5000
frequencies: 1.7 / 2.0 / 2.04 / 2.3 / 2.4 / 2.6 / 2.76 / 3.12 / 4.08 / 4.32 / 4.56 / 5.04 / 5.28 / 5.52 / 6.0 / 6.48 / 6.72 / 7.2 kHz

- SICO 2061 KS Firmware System Module Track Circuits TI 21, TI 21-M, EBI Track 200, EBI Track 300
frequency selective measurement
frequencies: 1.549 / 1.699 / 1.848 / 1.996 / 2.146 / 2.296 / 2.445 / 2.593 / 5.3 / 5.7 / 6.1 / 6.5 / 6.9 / 7.3 / 7.7 / 8.1 / 8.5 kHz

- SICO 2061 KS Current Sensor TI 21, TI 21-M, EBI Track 200, EBI Track 300
frequencies: 1.549 / 1.699 / 1.848 / 1.996 / 2.146 / 2.296 / 2.445 / 2.593 / 5.3 / 5.7 / 6.1 / 6.5 / 6.9 / 7.3 / 7.7 / 8.1 / 8.5 kHz

- SICO 2061 KS Firmware System Module Track Circuits CVLC, CVJM, CVBM
frequency selective measurement
frequencies: 5.0 / 7.0 / 8.2 / 8.6 / 9.2 / 10.0 / 10.6 / 11.0 / 12.3 / 13.0 / 18.0 / 23.0 / 28.0 kHz

- SICO 2061 KS Current Sensor CVLC, CVJM, CVBM
frequencies: 5.0 / 7.0 / 8.2 / 8.6 / 9.2 / 10.0 / 10.6 / 11.0 / 12.3 / 13.0 / 18.0 / 23.0 / 28.0 kHz

- SICO 2061 KS Firmware System Module Track Circuits AF 800, AF 902, AF 904
frequency selective measurement
frequencies: 1.9 / 2.1 / 2.58 / 2.82 / 3.10 / 3.37 / 3.66 / 3.9 / 4.55 / 5.525 / 9.5 / 10.5 / 11.5 / 12.5 / 13.5 / 14.5 / 15.5 / 16.5 kHz

- SICO 2061 KS Current Sensor AF 800, AF 902, AF 904

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frequencies: 1.9 / 2.1 / 2.58 / 2.82 / 3.10 / 3.37 / 3.66 / 3.9 / 4.55 / 5.525 / 9.5 / 10.5 / 11.5 / 12.5 / 13.5 / 14.5 / 15.5 / 16.5 kHz

- SICO 2061 KS Firmware System Module Track Circuits DTC 24, DTC 921
frequency selective measurement
frequencies: 2.1 / 2.5 / 2.9 / 3.3 / 3.7 / 4.1 / 9.5 / 11.1 / 12.7 / 14.3 / 15.9 / 17.5 / 19.1 / 20.7 kHz

- SICO 2061 KS Current Sensor DTC 24, DTC 921
frequencies: 2.1 / 2.5 / 2.9 / 3.3 / 3.7 / 4.1 / 9.5 / 11.1 / 12.7 / 14.3 / 15.9 / 17.5 / 19.1 / 20.7 kHz

- SICO 2061 KS Firmware System Module Track Circuits AFTC HBL
frequency selective measurement
frequencies: 3345 / 3855 / 4351 / 4848 / 5348 / 5848 / 6347 / 6856 Hz

- SICO 2061 KS Current Sensor AFTC HBL
frequencies: 3345 / 3855 / 4351 / 4848 / 5348 / 5848 / 6347 / 6856 Hz

- SICO 2061 KS Firmware System Module Track Circuits ATP RET Rotterdam
frequency selective measurement
frequencies: 370 / 430 / 470 / 530 / 570 / 630 Hz

- SICO 2061 KS Current Sensor ATP RET Rotterdam
frequencies: 370 / 430 / 470 / 530 / 570 / 630 Hz

! Even more Firmware System Modules and Current Sensors with more freqencies are available on request.

- Rail Clip Contact

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