PROFESSIONAL SOLUTIONS

IN AUTOMATION AND METHANOMETRY

STRAY CURRENTS RECORDER

RPB-1

Catalogue card

HASO S.C. ul. Towarowa 20, 43-100 Tychy, Poland
tel. +48 32 323 38 00, fax. +48 32 323 38 31
haso@haso.pl, www.haso.pl

DESCRIPTION

Stray currents recorder RPB-1 is designed for measurement of direct and alternating stray currents intensity in rock shooting sites and blasting agents storage places. It fully meets the requirements of PN-G-02700-1 and PN-G-02700-3 standards. The recorder shows the effective value of long-lasting current (> 0.4 s) which reflects the thermal effects in the connected receiver. It measures the total effective current value, the value of direct component and the effective value of alternating component. Another function of the device is the detection of short lasting current pulses (below 110 ms) and comparing the energy of such pulses with the pulse permitted for the applied electrical detonating fuse. Such measurements allow an assessment of the hazard of an electrical fuse blast-off. The assessment is made for the selected fuse class: ZE 0.2A , ZE 0.45A , ZE 2A , ZE 4A.

The stray currents recorder is a universal device designed for use in underground and open-cast mines. It is a category M2 device and may thus be used in all underground mines with methane or coal dust explosion hazard. If explosive atmosphere is present, the device may not be used.

The device may be used by electric service crews taking periodic measurements and by blasting service personnel when an immediate measurement is required. In RPB-1 version with memory there are two other modes available: “special measurement” and “explosive materials storage recorder” where periodic measurements are made and recorded. The measurement results are stored in the internal memory. They may at any time be viewed and transmitted to a PC for further analysis. The recorder is supplied with a computer program (and communication cable) which enables, among other things:

- sending measurement results do a PC,
- supplementing measurements with measurement points,
- creating and printing stray currents measurement reports.

The recorder is a portable device, battery powered and enclosed in a plastic casing. It is produced in a version with built-in memory and without memory.

BASIC TECHNICAL PARAMETERS

Stray currents recorder RPB-1	
Inputs resistance:	
for ZE02/ZE045 terminals - common	3 Ω
for ZE2/ZE4 terminals - common	0,3 Ω
Current range – peak value, depending on fuse class selected in measurement settings:	
ZE02 fuse	2 A
ZE045 fuse	4,5 A
ZE2 fuse	20 A
ZE4 fuse	40 A
autonomous power supply:	20 h
Working temperature range	from -10 °C to + 40 °C
Relative humidity range	from 0% to 95%
External dimensions	1950 g
Weight	IP65
Casing internal protection	75 x 190 x 112 mm

EXPLOSION-PROOF MARK

IM2 I M2 Ex ib I EC type examination certificate: KDB 06 ATEX 227

HASO S.C. ul. Towarowa 20, 43-100 Tychy, Poland
tel. +48 32 323 38 00, fax. +48 32 323 38 31
haso@haso.pl, www.haso.pl

RPB-1 EQUIPMENT

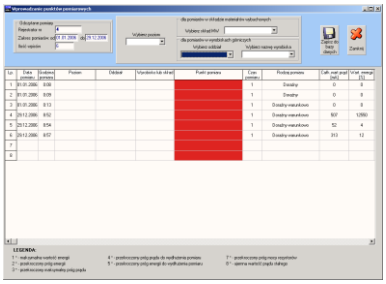
magnetic measurement probe

ixodic measurement probe

hand measurement probe

Contact cable with z PC

Recorder programm



loader RPB-1ł

RPB-1T tester

HASO S.C. ul. Towarowa 20, 43-100 Tychy, Poland
tel. +48 32 323 38 00, fax. +48 32 323 38 31
haso@haso.pl, www.haso.pl