



DZ-01 – Communication Device in the Mine Extraction Shaft

Certificate: ATEX, Po



Use:

DZ-01 communication device (system) serves for remote acoustic communication of 2 – 4 persons at 2 – 15 stations in heavy industry plants and environments with a methane explosion hazard. A user establishes connection by pushing a signalisation button which rings electrical bells at all stations connected in parallel. According to an agreed signal the authorized users respond by answering micro-telephones (headsets with a microphone) at their stations. Communication proceeds in parallel at all disconnected stations.

Description:

The system consists of 2 – 15 DZ-01-T stations connected in parallel to a DZ-01-R switchboard. The main part of the DZ-01-T station is made as a non-explosive Ex d firm closure; a micro-telephone and station receivers are made with the Ex (ib) intrinsic (spark) safety. DZ-01-T stations are connected in parallel by 3 or 4 pairs of telephone lines to the DZ-01-R supply switchboard. The DZ-01-R supply switchboard contains a DZ-01-G supply module and other auxiliary devices. It should be mounted on a wall in the environment without explosion hazard.

DZ-01-T stations cannot be connected to a telephone exchange and telephone devices must not be supplied from the DZ-01-R supply switchboard.

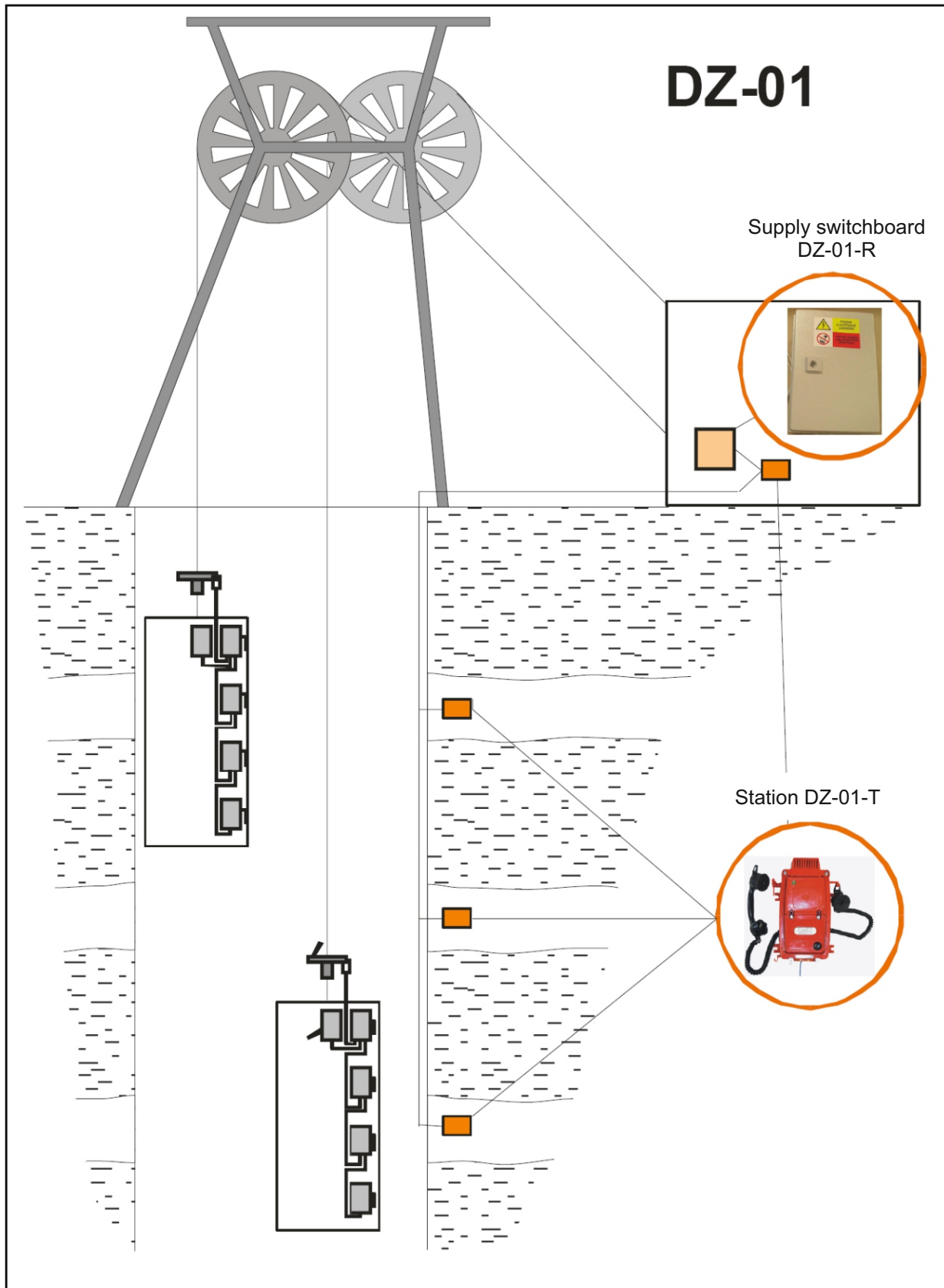
Technical parameters:

Model	I M2 Ex d [ib] I
Range of supply voltage at A, B terminals (1,2)	30-60 V DC
Range of supply voltage at BZ terminals (5,6)	40-70 V AC
Consumed current in the voltage range	10-25 mA
Consumed current	ca 12 mA
Cable cross-section at the cable terminal	20 mm ²
Maximum cross-section of connecting conductors	Wire 2.5 mm ² /stranded conductor 1.5 mm ²
Frequency range for transmission	280-3800 HZ for the drop of 3 dB
Frequency range for transmission around the compartment	450-3400 Hz for the drop of 3 dB
Measurement uncertainty	± 3 dB
Maximum total line length (TTOT...O 0.8 mm)	1 km
Maximum total line loop resistance	80Ω
Ambient temperature	-10°C – 45°C
Relative humidity	Max. 90% without cond.
Protection	IP 54
Cover dimensions	395 x 330 x 115 mm
Weight	15 kg

The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.



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