



## The explosion-proof mining Circuit Breaker SKD-01



### Technical parameters::

Design	I M2(M1) Ex d[ia] I
Nominal supply voltage	500VAC 690VAC
Maximum current	160A
Nominal input voltage	500VAC 690VAC
Wire cross-section	
CB auxiliary contacts	0.2 to 4mm <sup>2</sup>
Incoming/outgoing feeders	6 to 120mm <sup>2</sup>
Temperature range	0°C to +40°C
Relative humidity	95% w/o condensation
Protection level	IP 54
Dimensions	1050 x 440 x 225mm
Weight	95kg

### Use:

The explosion-proof mining Circuit Breaker is designed for protection of mining electrical equipment in the locations of gaseous mines with explosive gas atmosphere.

### Functional description:

The explosion-proof mining Circuit Breaker SKD-01 is built in a flameproof enclosure I M2 (M1) Ex d[ia] I. The explosion-proof mining Circuit Breaker consists of instrument and terminal compartments.

Electrical and electronic meters are housed in a flameproof enclosure. The terminal compartment is in flameproof enclosure Ex d. The terminal compartment contains screwless-type terminals to provide connection of wires with cross-section up to 4mm<sup>2</sup>. The terminal compartment contains also some screw-type terminals for connection of wires with cross-section up to 120mm<sup>2</sup>. On the terminal cabinet, there are four cable entries in explosion-proof design.

The instrument compartment, made up of a flameproof enclosure, is equipped with a cover on which there are controls for the circuit board, an earth-fault alarm and integrity testing, an emergency CB power switch and a vision slit. Under the vision slit, there is an indicator to indicate the presence of voltage on the incoming feeder, a CB on-state indicator, a CB off-state indicator, an earth fault indicator and a cable integrity failure indicator.

To fix the explosion-proof CB, there are four snugs with holes for M10 screws.

The voltage on the incoming feeder to the cabinet is brought to the Circuit Breaker and also via the disconnecting switch to the transformer. The voltage from the CB is brought to the outgoing feeder from the cabinet. The voltage from the transformer is brought through the contacts of protective circuits to the undervoltage release; from there, to the indicators to indicate on-state and off-state of the CB, the earth-fault alarm and the cable integrity failure indicator.

The circuit breaker is switched ON/OFF by a rotary switch located on the cabinet cover. It can be switched off also by pressing down the latched red STOP push-button. It is also possible to switch off the circuit breaker by a STOP push-button located outside the cabinet.

Two double throw contacts are brought to the terminal block. Their changeover state follows the state of the circuit breaker.

**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.**