



## Communication Converter SMA-03

Certificate: ATEX



SMA-03

### Application:

The communication converter SMA-03 is used for combining the Ethernet signal, converting it to the DSL signal and for distance transmission of the DSL signal via the telephone line. The communication converter is intended for the use in underground and surface mine areas with a higher methane explosion hazard.

### Description:

The communication converter consists of the mine SMA-03 and the surface RM1-SMA-03 parts. The mine part is situated in a non-explosive cabinet.

The non-explosive cabinet consists of a secure enclosure with Ex d design and a terminal block part in the Ex e design. The secure enclosure of the non-explosive cabinet contains an instrument area where electronics and fuses for the supply part are situated. The electronics comprises an Ethernet switch, a modem converting the Ethernet signal to the DSL telephone line and a supply source. The terminal block part is connected with the instrument area by four non-explosive bushings. The terminal block is divided to the supply part and a data signal part. Nine cable bushings serve for connecting the cables. Up to seven Ethernet signals can be connected to the device.

The surface part consists of a standard wall distribution cabinet where DSL line converter to the Ethernet signal and supply are placed.

The transmission distance between the mine and the surface parts depends on the set transmission rate and the telephone line quality. The transmission distance is lower with higher transmission rate and vice versa.

### Technical parameters of SMA-03:

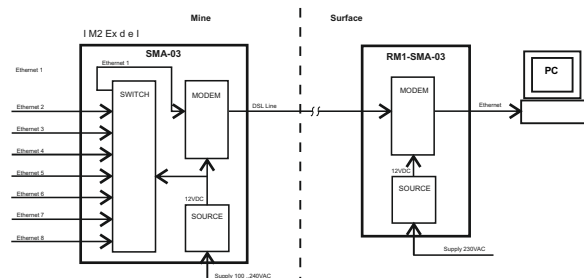
Design	I M2 Ex d e l
Supply voltage	100-240VAC
Power input	15VA
Line transmission rate	192 kbit/s to 5696 kbit/s
Line transmission distance	10km, 3,6km
Temperature range	0 to +40°C
Relative humidity	95% non-condensing
Protection	IP54
Dimensions	380 x 510 x 210mm
Weight	21kg

RM1-SMA-03



### Technical parameters of RM1-SMA-03:

Supply system	1PEN AC 50Hz 230V/TN-S
Power input	5W
Temperature range	0 to +40°C
Relative humidity	95% non-condensing
Protection	IP66
Dimensions	300 x 200 x 155mm
Weight	5.5kg



Block diagram

**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.**