



Evaluation Unit SAD-04

 **Certificate: ATEX**



SAD-04

Technical parameters of SAD-04:

Design	I M2(M1) Ex d[ia] I
Supply voltage	90-264 VAC, 120-375 VDC
Power input	23W
Inputs	1 x 4-20mA Ex 1 x kontakt Ex
Outputs	1 x 4-20mA Ex, 3 x relay 1 x telephone line Ex
Line transmission rate	192 kbit/s max
Line transmission distance	6km max
Temperature range	0°C to +40°C
Relative humidity	95% non-condensing
Protection	IP 54
Dimensions	230 x 531 x 177mm
Weight	32.5kg

Application:

The evaluation unit SAD-04 is a device for evaluating, processing and transmitting analogues, binary and data signals. It is intended for the use in underground and surface mine areas with a higher methane explosion hazard.

Description and Functions:

The evaluation unit consists of the mine SAD-04 and the surface RM1-SAD-04 parts. The mine part is situated in a non-explosive cabinet. The surface part is situated in a standardized wall distribution cabinet. The mine and the surface parts are mutually connected by a two-wire spark-proof telephone line.

The non-explosive cabinet of the mine part is designed as a secure enclosure. In the secure enclosure of the non-explosive cabinet there is electronics and fuses of the supply part. The terminal block part of the cabinet is divided into two parts separated by a metal partition. The terminal block part is connected with the area where the electronics is placed by three non-explosive bushings. Five non-explosive cable bushings serve for interconnecting the cables.

The electronics comprises input signal separators, PLC control system, transmission modem and output relays. The input spark-proof signals are evaluated in the PLC implemented software. Output relays are switched and the analogue output is set by SW. It is possible to communicate with PLC by means of an Ethernet modem via the spark-proof telephone line.



RM1-SAD-04

Technical parameters of RM1-SAD-04:

Supply voltage	90-264 VAC, 90-375 VDC
Power input	4.2W
Temperature range	0°C to +40°C
Relative humidity	95% non-condensing
Protection	IP 66
Dimensions	200 x 300 x 155mm
Weight	5.2kg

The surface part consists of the wall distribution cabinet where electronics is situated. The signal brought in by the telephone line from the mine part is converted to the Ethernet signal for further processing.

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.