



Device Description:

Intrinsically safe power supply type ZIM-BX is designed to supply electrical and electronic installations, especially the intrinsically safe control and signaling systems. Stabilized output voltage allows the use of power supply to power the microprocessor controllers. It is characterized by high stability of the output voltages at the volatile input voltage, which changes may take place in the range from 36V to 75V (for power supply in "L") with DC current or from 35V to 54V with AC current and from 80V to 250V (for power supplies as "H") when powered by AC voltage. Connecting the power supply is done by output junction chamber equipped with two conduits. Power supply type ZIM-BX can be supported by two independent outputs with different values of current and voltage according to the customer needs. It is equipped both with an LCD display, giving the ability to monitor voltage and current values of output and with RS-485 port for remote reading made for monitoring purposes on the surface of the mine. Power supply type ZIM-BX/A is equipped with two signal LEDs, but does not have LCD display and RS-485 communication protocol.

Technical characteristics:

ATEX certificate number

FTZÚ 09 ATEX 0120X

Supply parameters:

Supply voltage U_N for the implementation of:

ZIM-BX/H

$80V_{AC} \div 250 V_{AC}$ 50Hz

ZIM-BX/L

$35V_{AC} \div 54 V_{AC}$ 50Hz

$36V_{DC} \div 75 V_{DC}$

Supply Current I_N (electronic assembly)

< 1A ZIM-BX/H/...

< 2A ZIM-BX/L/...

Output Voltage U_o

max 12,8V for voltage U_N 12V

max 15,8V for voltage U_N 15V

1,5A (for each of the outputs)

Maximum load current

Tolerance of output voltages

as a function of voltage fluctuations

$U_o \pm 2\%$

Tolerance of output voltages

as a function of load changes

$U_o \pm 2\%$

Normal working conditions:

Device category

I M2

Casing type

Ex d q ib [ib] I

Gas explosiveness group

I

Working temperature range

$0^{\circ}C \div 40^{\circ}C$

Air humidity

max 95%

Casing protection degree

IP54

Mechanical exposure

low

Width x Height x Depth

404 × 407 × 150 mm

Number of outlets / cable connectors

3

Weight

12 kg

