

ANALOGUE SIGNAL CONTROL UNIT

CSA-2



Catalogue card



DESCRIPTION

CSA-2 Analogue Signal Control Unit is generally intended for use with telemetric central station CST-40(A), CST-40C in transmission data area. It can also operate with other systems, on condition that they comply with the supply and measurement line parameters.

The main purpose of using the CSA-2 unit is the possibility of connecting sensors with voltage analogue outputs of 0,4 – 2V, 2-stage inputs and 2-stage outputs to the CST-40 system. The unit not only does the measurements and transfers them, but also supplies the connected sensors with power. Application of the control unit highly extends the measurement capability of the CST-40(A), CST-40C unit and contributes to an increase of its capacity even up to 320 sensors.

To each CST-40A supply-transmission line a single CSA-2 control unit can be connected, to which up to four analogue sensors can be linked. CSA-2 unit supplies sensors and at the CST-40 or CST-40A query, CSA-2 unit transfers information on the size of an analogue measurement signal, and on existing damage measurement lines such as a shortcut or an overload of a power supply line.

CSA-2 control unit has four 2-stage inputs, which enable to connect and measurement of 2-stage signals. It can act as control device, which controls and checks working and safety conditions of other devices in mine.

Moreover CSA-2 control unit has two 2-stage outputs, which act as UW shutdown devices. Thanks this function, CSA-2 can become an element of protection of power-supply shutdowns, signalling switch-on or it can control other electric devices. The CSA-2 control unit does not require an operator's intervention. All control functions and configuration data are transmitted from the central unit.

BASIC TECHNICAL PARAMETERS

Analogue Signal Control Unit CSA-2

Power supply (current source of the supply-transmission line)	27 mA or 40 mA
Transmission mode	digital
Max. transmission time (of a measurement cycle)	2s
Max. length of a supply-transmission line	8 km
Working temperatures range	-5 °C ÷ +40 °C
Relative humidity range	0% ÷ 95% without condensation
External dimensions	260 x 160 x 91 mm
Weight	2 kg
Casing internal protection	IP 65
Parameters of the supply-transmission line	U _i =54 V, I _i =150 mA, P _i = 3,3 W, C _i = 0, L _i = 0
Number of inputs	4
Number of 2-state inputs	4
Number of 2-state outputs	2
Acceptable parameters of linked analogue sensors	
Rated voltage	12 VDC
Max. supply voltage	≥14,5V
Max. power intake	27 mA (at power 40mA)
Output voltage range	0,4 ÷ 2,0V

EXPLOSION-PROOF MARK



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EC type examination certificate: FTZU 10 ATEX 0043