

MHY 925

Input/output element with isolator

MHY 925 is an addressable multiple input/output element, containing 8 (4) programmable inputs and 8 (4) programmable outputs. It connects to a detection line of Fire Detection and Fire Alarm System LITES, eventually on communication line SL-RS 485 of C.I.E. MHU 115. The element contains an isolator.



Inputs serve to automatic signalling of user defined states of any external device, which indicates this state either by closing or opening an electrical contact or by voltage received by the optoisolated input. Contacts can also be set as guarded.

Outputs serve to control of external devices connected to NO or NC relay contacts.

MHY 925 is produced in two variants:

- a) MHY 925/4 – contains 4 programmable inputs and outputs
- b) MHY 925/8 – contains 8 programmable inputs and outputs

Properties of each input, conditions for activation and properties of each output are defined via the configuration program for C.I.E.s.

Electrical circuits are on a printed circuit board which is placed in a plastic box with removable cover. Connecting wires are connected to plug-in screw terminal blocks.

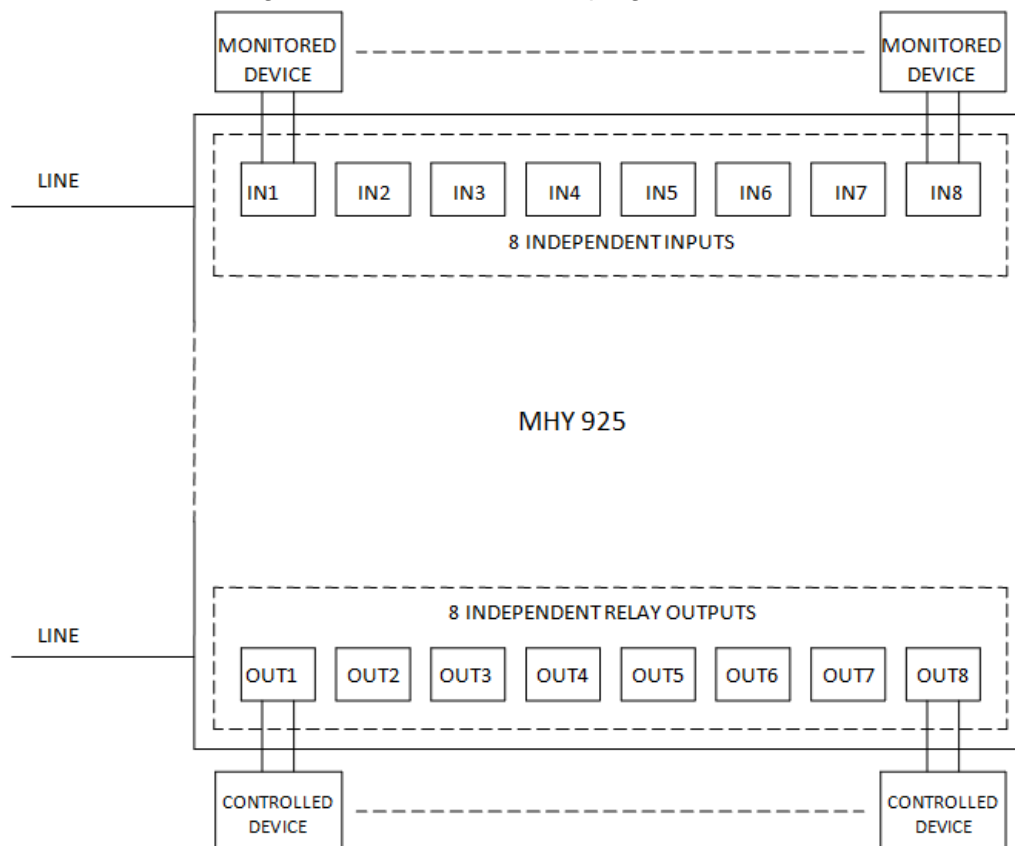


Fig. 1 Block diagram of multiple input/output element MHY 925

Operation principle

The element is powered by a pulse voltage from the detection line of C.I.E. It contains power supply for its own electronic circuits. Evaluation circuits of input can be set as optoisolated or for connection of switching or breaking contact. These inputs can be set as well as guarded, where with the external device an opening (FAULT) or closing (ALARM) contacts can be connected simultaneously. At the same time the loop is guarded for interruption or a short-circuit.

Addressable part registers the communication from C.I.E., reports under appropriate address and sends information about input activation to the C.I.E.

Technical parameters

Power supply	18 – 21 V _{imp}
Stand-by current	max 200 µA
Number of outputs	4 or 8
Input optoisolated – voltage	
input voltage	9 – 30 V (logical 1) 0 – 3V (logical 0)
input resistance	cc 10 kΩ
Input NO/NC contact	
resistance of wire and closed contact	max. 1 kΩ
resistance of open contact	min. 10 kΩ
output test voltage	cc 12 V _{imp}
output test current (closed contact)	max. 1,2 mA
Input guarded	
test voltage	12 V _{imp}
line resistance	max. 100 Ω
stand-by test current	cc 0,8 mA _{imp}
alarm test current	cc 1,5 mA _{imp}
fault test current	cc 0,5mA _{imp}
stand-by resistance	10 kΩ
alarm resistance	4,7 kΩ
fault resistance	20 kΩ
Number of outputs	4 or 8
Maximal switching current	1 A
Maximal switching voltage	48 V
Maximal switching power	30 W _{DC} /VA _{AC}
Usable for electricity grid	no
Optical signalling	red and yellow LED
Address adjustment (via MHY 535)	1 – 128
Protection according to ČSN 60529	IP 54
Radio screening degree according to ČSN 55022	B-class equipment
Cross-section of connectable wires	0,2 – 1,5 mm ²
Dimensions	(254 x 180 x 63) mm
Weight	cc 600 g

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