

# MHY 918

## Unit of outputs

Unit of outputs MHY 918 is a device intended for control of external devices on serial line RS 485 in Fire Detection and Fire Alarm System Lites with C.I.E. MHU 109, MHU 110/111, MHU 113, MHU 115 and MHU 116/117.



Outputs are type open collector and are intended for control of external devices (siren, beacon etc.) or for control of additional relays. For smaller switched power it is possible to attach each pair of open collectors with 6XK 199 722 module with two relay contacts, or use single relay placed by the external device. Each output of type open collector can be set to guard a short-circuit and line interruption. Unit of outputs contains 8 outputs. Seven outputs are user definable, eighth serves as an output for system fault and is normally activated. This output cannot be defined by the user.

In the special setting of C.I.E. *Output of state* the unit allows automatic activation of outputs based on actual C.I.E. state.

Unit of outputs is equipped with a short-circuit isolator for line RS 485.

Unit of outputs is a printed circuit board with terminal blocks placed in a plastic box with a lid and with pre-moulded holes designed for mounting cable glands.

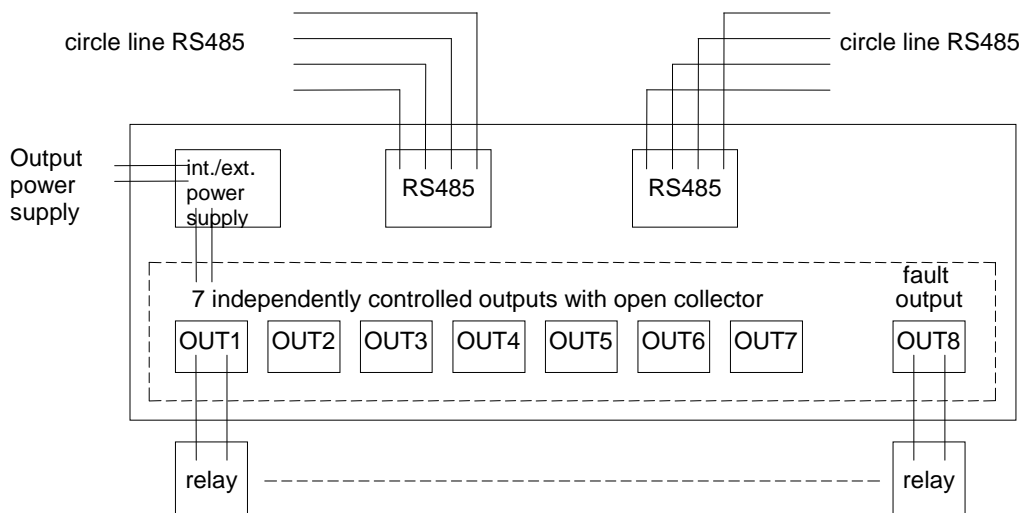
Unit of outputs is supplied in two variants that differ by outputs attachment:

- MHY 918/K - 8 output connectors CF 5,08/2 used as open collectors (for example as unit of guarded serial outputs for siren).
- MHY 918/R - 4 modules 6XK 199 722 with two relays as a voltage-free changeover contact (for example as a direct replacement of Unit of outputs MHY 907).

Outputs type open collector and type with modules can be combined as needed.

Unit of outputs and connected external devices can be powered:

- from connected C.I.E.
- from external backup source – must be used in case when the unit of outputs powers external devices and voltage drop on wiring is higher than technical parameters permit, or when consumption of all connected devices is higher than 0,5 A.



Block diagram of Unit of outputs MHY 918

**Capacity of each output is 0,3 A while count of all currents is max. 0,5 A when powered from C.I.E. or max. 2 A when powered from external source.**

Unit of outputs and connected devices can be powered from C.I.E., external source or the connected device can have it's own power supply.

These combinations are allowed:

- Unit of outputs and connected devices are powered from C.I.E.
- Unit of outputs is powered from C.I.E. and connected devices from external source
- Unit of outputs and connected devices are powered from external source
- Unit of outputs is powered from C.I.E. and connected device has it's own power supply
- Unit of outputs is powered from C.I.E. and connected device is controlled with a relay

### Technical parameters

Power supply	9 ÷ 27 V
Stand-by current consumption (board only)	max. 20 mA
Activation current with 4 pcs relay modules	100 mA at 12 V, 60 mA at 24 V
Activation current with 1 pc relay module	20 mA at 12 V, 10 mA at 24 V
Communication and supply cable RS 485	shielded low-frequency communication twisted-pair cable
Diameter of connectable wires	solid Cu core Ø (0,5 ÷ 1,5) mm
Length and resistance of communication wires RS 485	max. 1000 m, max. 100 Ω
Max. resistance of supply wires RS 485	according to the size of the load $I_{z \max}$ .
Length of digression RS 485	max. 300 m
Protection according to ČSN EN 60529	IP 54
Safety class equipment	III (according to ČSN EN 61010-1)
Radio screening degree ČSN EN 55022	B-class equipment
Dimensions	254 mm × 180 mm × 63 mm
Weight	cc 580 g
Number of independently controlled outputs	7 (OUT1 ÷ OUT7)
System fault indication output	1 (OUT8)
<i>Single output: open collector</i>	
Type	normally open normally closed
Max. current in closed state	OUT1 ÷ OUT7 OUT8
Max. current in open state	0,3 A
Current count from all outputs	0,1 mA
From internal power supply	max. 0,5 A
(considering the consumption of other devices on power cable)	
From external power supply	max. 2 A
Max. switching voltage	30 V
Usable for electricity grid	no
<i>With an additional relay module 6XK 199 722:</i>	
Type	changeover, 2 outputs – 2 independent relays
Maximal switching current	1 A
Maximal switching voltage	48 V
Maximal switching power	30 W <sub>DC</sub> / 30 VA <sub>AC</sub>
Usable for electricity grid	no
<i>With an external relay:</i>	
Parameters	according to used relay

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