

I/O-08H-230V-16A

General

The I/O-08H-230V-16 module was conceived for applications in which the intervention by hand is necessary or the condition of the relays after a BUS failure or voltage breakdown must be preserved. The I/O-08H-230V-16A I/O module allows you to connect 8 circuits with a maximum of 230V/16A. The phase relationship of the individual fuses is arbitrary.

As input are 8 optical coupler inputs 12-48V on a common counter potential available. In the module you can program all the in- and outputs on different functions. The functions are freely programmable by using the ISYGLT ProgrammDesigner.

In order to protect the module against dust and unwanted operations, the module is locked by a transparent cover. For manual operation a screw driver will be necessary.

- The output relays can be switched manually even without programming (implementing, service, attendance ...)
- The relay position remains preserved even at intermission of the supply voltage
- Each individual output of the average module is programmable for the operating modes BUS mode, BUS failure, average mode (DIP1 on)
- The feedback LED can show the condition of the inputs or of the outputs
- By the large parameter setting possibilities the module can be used as a stand-alone module.

In- / Outputs

- 8 relay outputs, 230V/16A with hand actuation lever
- 8 optical coupler inputs 12-48V

Function displays

- 1 red LED indicates the operating voltage
- 1 flashing yellow LED indicates the communication with the master via subnet
- 8 green LED signalise the OFF or ON states (parameterable)

Connections

- 1 connection for the subnet (BUS A and B, RS485)
- 1 connection for the operation voltage (Ub, 0V)
- 8 outputs
- 8 inputs (on a common root)
- 2 P-COM connections (subnet and operating voltage)

Design

- Light grey plastic, can be snapped onto 35 mm DIN rail mounting 9 separating units

Special function DIP switch 1

emergency mode

- Switch „OFF“ = BUS-mode
- Switch „ON“ = emergency mode (see parameter possibilities)

Parameterisation

The ISYGLT ProgrammDesigner offers various parameterisation options.

- fixing of the functions in the operating modes: BUS mode, BUS failure, average
- function allocation per output
- synchronization conditions per output
- definition of the 8 LED for the feedback of the in- or outputs
- detailed explanations for this in the following table

Please note:

1st column = parameter tab

2nd column = setting (function)

3rd column = description of the parameter to be set

4th column = possible setting (default values are in ***bold italics***)

Register	Setting	Parameter	Value
BUS mode	DIP1 = OFF		<i>BUS AX.1</i>
	function outputs	function output A1	fix ON
		default = BUS controlled!	fix OFF
		explanations of the functions	only hand mode
		see table function allocation	toggle E1
			toggle E2
			toggle E3
			toggle E4
			toggle E5
			toggle E6
			toggle E7
			toggle E8
			E1
			E2
			E3
			E4
			E5
			E6
			E7
			E8
			!E1
			!E2
			!E3
			!E4
			!E5
			!E6
			!E7
			!E8
			A2
			A3
			A4
			A5
			A6
			A7
			A8

Register	Setting	Parameter	Value
			!A2
			!A3
			!A4
			!A5
			!A6
			!A7
			!A8
		Function output A2 ... A8	see A1
	Cyclic switch revision		
	Synchronizes output A1		never
	Here is settable, if the recommended output should be synchronized.		10s
			20s
			30s
			1m
			2m
			3m
			5m
			10m
			30m
			1h
			2h
			3h
			5h
			10h
			12h
			15h
		Function output A2 ... A8	
BUS failure	DIP1 = OFF	Time detection BUS failure	25s
			3-250s
	Function outputs	Function output A1 default = last status explanation of the functions see table function allocation	fix ON fix OFF last status only hand mode otherwise like „BUS mode“
		Synchronizes output A2 ... A8	see A1
	Cyclic switch revision		
		Synchronizes output A1	never otherwise like „BUS mode“
Average mode	DIP1 = ON		
	Function outputs	Function output A1 default = last status explanation of the functions see table function allocation	fix ON fix OFF last status only hand mode otherwise like „BUS mode“

Register	Setting	Parameter	Value
		Synchronize output A2 ... A8	see A1
	Cyclic switch revision		
		Synchronize output A1	never otherwise like „BUS mode“
		Synchronize output A2 ... A8	see A1
Feedback LED		LED display status	Inputs
		Inputs = display, what is existing on the 8 inputs	Outputs
		Output last status = the status, which was activated by the module lastly (also average and switchfunctions by parameter allocation)	last status
		Output BUS = the status, which was prompted by the BUS (it can, according to the parameters distinguish from the switch status of the module)	Output BUS
		Attention! When the relays will be switched manually, the relay status won't match with the displayed feedbacks because the nominal states of the relays will be displayed!	

Function allocation

Function allocation for	explanation
output Ax	
BUS Ax.1	relay operates in the BUS mode
fix ON	relay is „duration ON“
fix OFF	relay is „duration OFF“
last status	relay stays in the last status (at BUS failure)
only hand mode	relay can only be switched by the hand lever
Toggle E1	relay will be activated into the impulse switch function by the input E1
Toggle E...8	relay will be activated into the impulse switch function by the input E2 (or by the adjusted)
E1	relay attracts, when the input E1 on tension is put.
E2...E8	relay attracts, when the input E2 (or the adjusted) on tension is put.
!E1	relay is thightened always and drops, if the input E1 is put on tension
!E2...!E8	relay is thightened always and drops, if the input E2 (or the adjusted) is put on tension
A2	relay is activated, when the output A2 is ON
A3...A8	relay is activated, when the output A3 (or the adjusted) is ON
!A2	relay is thightened always and drops, if the output A2 is ON
!A3...!A8	relay is thightened always and drops, if the output A3 (or the adjusted) is ON

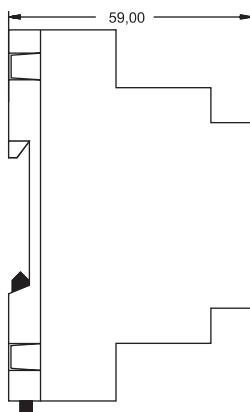
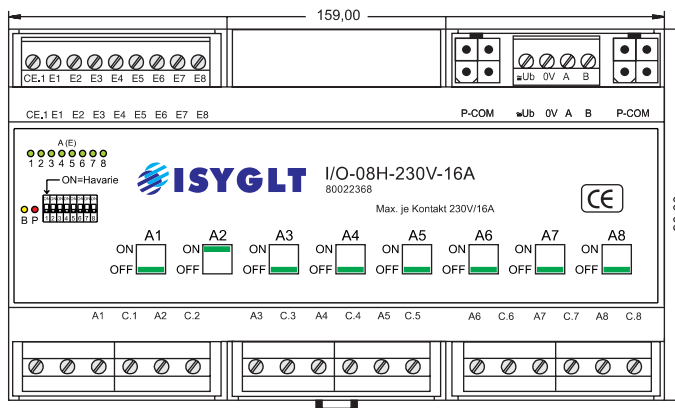
Technical data

Type	I/O-08H-230V-16A
Art. Nr.	80022368
Operating voltage	16V to 35V DC or 16V to 27V AC
Power consumption	200mA at 24V DC
Input	12-48V AC/DC, input current per input 5mA at 24V
Output	Relay contact - max. switch voltage 440V AC - max. switch current 40A --> (terminal max. 16A!) - mechanical life time 10.000.000 switching cycles load carrying ability - non inductive 16A - bulbs 3500W (max. 30.000 switching cycles) - fluorescent lamp uncompensated 3500W (max. 30.000 switching cycles) - fluorescent lamp comp. 2500W/200uF (max. 30.000 switching cycles) - LV halogen 3500VA (max. 30.000 switching cycles) - NV halogen via transformer 2000VA via transformer - electronic ballast's manufacturer-specific - starting current 100A <20ms - !! The starting current of electronic ballasts is up to 100 times the nominal current !!
Subnet (RS-485)	max. 5,6V limited by Z-diodes
Dimensions	BxHxT 159x90x59mm (9TE)
Weight	530g
Connection	Screw terminals 2,5mm ² , Inputs and BUS plug-in
Operating voltage	-10...+50°C
Storage temperature	-25...+70°C
Humidity	0 ...85 % r.F. non condensing
Protection class	IP30
ESD immunity	Category 3 according to IEC-1000-4-2
EMC immunity	Use in typical industrial enviroment. Category 3 according to IEC-1000-4-4 (Test was carried out within a whole system)
CE mark	yes

Terminal assignment

CE.1	Common for E1 - E8	C.1	Common for A1
E1	Input 1	A1	Output 1
E2	Input 2	C.2	Common for A2
E3	Input 3	A2	Output 2
E4	Input 4	C.3	Common for A3
E5	Input 5	A3	Output 3
E6	Input 6	C.4	Common for A4
E7	Input 7	A4	Output 4
E8	Input 8	C.5	Common for A5
		A5	Output A5
		C.6	Common for A6
		A6	Output A6
≅ Ub	Operating voltage	C.7	Common for A7
0V	Operating voltage	A7	Output 7
A	Subnet (BUS A, RS-485)	C.8	Common for A8
B	Subnet (BUS B, RS-485)	A8	Output 8

View



Wiring diagram

