

# **Technical Data / Instruction Manual**

I/O-08B-24V-1A Article no. 80021000

8-way Switching Actuator





# **Directory of Content**

- 1. Notes on documentation
  - 1.1. Retention of documents
  - 1.2. Symbols used
- 2. Safety instructions
  - 2.1. Intended usage
  - 2.2. Predictable mishandling
  - 2.3. Safe handling
  - 2.4. Qualification of staff
  - 2.5. Changes to the product
  - 2.6. Use of spare parts and additional equipment
  - 2.7. Liability notes
- 3. Warranty
- 4. Declaration of Conformity
- 5. Service address
- 6. Maintenance / Care / Disposal
- 7. Storage
- 8. Assembly
- 9. Product description
- 10. Technical Data
  - 10.1. Pin assignment
- 11. Wiring diagram

## 1. Notes on documentation

These instructions are intended for qualified personnel who are familiar with the assembly, installation and operation of the ISYGLT system. It is essential that you read these operating instructions through before commissioning and keep them accessible for further

SEEBACHER cannot accept any liability for damage or malfunctions resulting from failure to observe these instructions.

# 1.1. Retention of documents

These instructions and all other applicable documents are part of the product. They must be handed over to the device operator. The operator will store the documents so that they can be made available if necessary.

## 1.2. Symbols used

Observe the following safety and other instructions in the manual:



The hand indicates that you should carry out an act.



Danger!

Immediate danger to life!



Attention!

General notes, useful information and special features



# 2. Safety instructions 🛕 🤨





Observe the following general safety instructions when installing and commissioning the device:

Assembly and installation of the ISYGLT module may only be carried out by a qualified electrician. Other activities in connection with the ISYGLT module, such as assembly and installation of system components with tested standard plug connections, as well as operation and configuration of the ISYGLT module may only be carried out by trained staff.

Observe the electrical installation regulations of the country in which the device is installed and operated as well as its national accident prevention regulations. In addition, observe internal company regulations (work, operating and safety regulations).



Before working on the ISYGLT module system, it must be disconnected from the power supply and secured against being switched on again. After completion of the assembly, installation and maintenance work, an electrical check must be carried out! Check all protective conductor connections and the voltages at all connection plugs as well as at each individual module slot.

## 2.1. Intended usage

The module is exclusively suitable for regulation (control) in connection with ISYGLT system components. Any other use is not intended. The limit values stated in the technical data must not be exceeded under any circumstances. This applies in particular to the permissible ambient temperature range and the permissible IP protection type. For applications with a higher required IP protection type, the ISYGLT module must be installed in a housing or a cabinet with a higher IP protection type.

## 2.2. Predictable mishandling

The module must not be used in the following cases in particular: explosive area

When operating in explosive areas, sparking can lead to deflagration, fire or explosions.

#### 2.3. Safe handling

This module corresponds to the state of the art and the recognised safety regulations. Each device is tested for function and safety before delivery.

Only operate this module in perfect condition in accordance with the operating instructions, the applicable regulations and directives of the country in which the device is installed and operated, and the applicable safety and accident prevention regulations.

The module is designed for cabinet installation on a 35mm DIN rail according to EN 60715 in corresponding standard housings. Extreme environmental conditions impair the function of the product.

- Protect module from shocks
- · Use module indoors only
- Protect module from humidity

In addition to these safety instructions, you must also observe the special safety instructions listed in the individual chapters for the individual acts.

#### 2.4. Qualification of staff

Assembly, commissioning, operation, maintenance, decommissioning and disposal may only be carried out by qualified staff. Work on electrical parts may only be carried out by a trained electrician in accordance with the applicable regulations and directives. Other activities in connection with the ISYGLT module, such as assembly and installation of system components with tested standard plug connections, as well as operation and configuration of the ISYGLT module may only be carried out by trained staff.

## 2.5. Changes to the product

Unauthorized modifications to the ISYGLT module which are not described in this or the other applicable instructions can lead to malfunctions and are prohibited for safety reasons.

## 2.6. Use of spare parts and additional equipment

The module may be damaged if unsuitable spare parts and additional equipment are used. Only use original spare parts and additional equipment from the manufacturer.

## 2.7. Liability notes

SEEBACHER accepts no liability or warranty whatsoever for damage and consequential damage caused by non-compliance with the technical regulations, instructions and recommendations. SEEBACHER shall not be liable for any costs or damage incurred by the user or third parties as a result of the use of this equipment, in particular improper use of the equipment, misuse or malfunction of the connection, malfunction of the equipment or connected devices.

SEEBACHER accepts no liability for printing errors.



# 3. Warranty



We provide warranty within the framework of the statutory provisions. These are limited to the intended use of the module and refer to the repair or replacement of the ISYGLT module. Please send the device with an attached error description to our company address given below.

must be disposed of according to the EU directive WEEE 2012/19/ EU on waste electrical and electronic equipment at the local collection points for waste electrical and electronic equipment!

# 4. Declaration of Conformity (1)



The valid declaration of conformity for the module can be requested from us free of charge by stating type and article no. as follows:

By phone: +49(0)8041/77776 By fax: +49(0)8041/77772 By mail: info@seebacher.de

## 5. Service address

# Seebacher GmbH

Marktstrasse 57 83646 Bad Tölz **GERMANY** 

Phone: +49 (0) 80 41 / 77 77 6 Fax: +49 (0) 80 41 / 77 77 2

www.seebacher.de info@seebacher.de

# 6. Maintenance / Care / Disposal



The product is maintenance-free. It is sufficient from time to time to remove any dust deposits. This may only be done in a power-free state.

# Disposal (European Union)

Do not dispose of product in household waste! Products with this symbol

# 7. Storage 🔨



The product must be stored in a dry place, protected from dirt and mechanical stress. After damp or dirty storage, the product may only be operated after a condition check by an authorised electrician.

# 8. Assembly



(Only by certified electrician!)

Mount the product only when it is in a power-free state!

Switch off the power supply, check that there is no voltage, secure against being switched on again!

The device may only be operated at voltages according to the technical data and loaded with the currents defined therein. Only use suitable equipment (system modules).

Check that there are no loose parts in the product. If this is the case and the presence of such parts is not explicitly described, do not install or commission the product.

Only use suitable cables and fixing screws.

# Assembly site

• The product can be installed in any position in a casing to be determined by the electrician (distribution box, switch cabinet). Observe maximum ambient temperature!

### Assembly steps

(Read completely before assembly!)

- · Mount the device in a suitable casing.
- Make the electrical connections according to the wiring diagram.
- Configure the DIP switches according to your requirements.
- Only after a complete connection and a visual test by a qualified electrician, the system may be put under voltage.



# 9. Product description

With the I/O module I/O-08B-24V-1A 8 circuits with a maximum of 24V/1A can be switched. As inputs 8 optocoupler inputs 12-48V (4 inputs each on a common counter potential) are available. All inputs and outputs are freely programmable in the functions via the software.

## **NEW!!** The following functions can be parameterized

- . Status of the output relays after Power ON
- Definition of the inputs as currentless OFF or ON
- Definition of the functions of the BUS inputs
- Definition of the functions in the operating modes: BUS, BUS failure and emergency operating
- · Safety functions for motor controls (limit switch setup, interlockings, definable unlock times, switch-on times)
- Specification of defined pulse times on the relays
- · Definition of the display LEDs at the module (indication inputs or outputs, BUS error, operating mode, chaser)

### Inputs / Outputs

- 8 relay outputs 24V/1A
- 8 optocoupler inputs

### **Function displays**

- 1 red LED indicates the operating voltage
- 1 flashing yellow LED indicates the communication with the master via subnet
- 8 green LEDs signalize the current output states

#### **Connections**

- 1 connection for the subnet (BUS A and B, RS-485)
- 1 connection for the operating voltage (Ub, 0V)
- 8 outputs (2 each on a common connection)
- 8 inputs (4 each on a common reference terminal)
- 2 P-COM connections (subnet and operating voltage)

### Design

• DIN rail mounted plastic housing light grey, snap-on on 35mm DIN rail, 4 HP

#### Special function DIP switch 1 = Emergency operation

- Switch "OFF" = BUS operation
- Switch "ON" = Emergency operation (8x impulse switching function: input E1 switches output A1, input E2 switches output A2, etc.)



# 10. Technical data

Type designation	I/O-08B-24V-1A
Article no.	80021000
Operating voltage	12V to 35V DC or 12V to 27V AC
Current consumption	12V DC = 180mA, 24V DC = 80mA, 35V DC = 55mA
•	12V AC = 105mA, 24V AC = 70mA, 27V AC = 65mA
	(each all relays activated)
Inputs	12-48V AC/DC, input current each input 5mA at 24V
Outputs	max. 48V AC or 30V DC / 1A each output
Subnet (RS-485)	max. 5.6V limited by Z-diodes
Dimensions	WxHxD 71x90x59mm DIN rail mounted (4 HP)
Weight	179g
Connection	screw terminals 1.5mm², inputs and BUS plug-in, BUS connector
Operating temperature	-10°C to +50°C
Storage temperature	-25°C to +70°C
Humidity	085% r. h. non condensing
Protection class	in not installed state IP30
CE mark	yes

# 10.1. Pin assignment

# 10-pole plug top

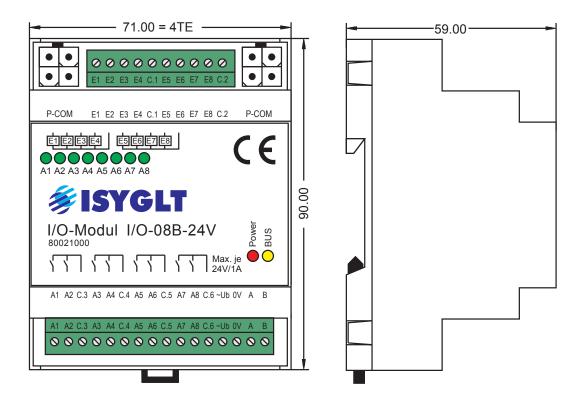
E1	Input 1
E2	Input 2
E3	Input 3
E4	Input 4
C.1	Common for E1-E4
E5	Input 5
E6	Input 6
E7	Input 7
E8	Input 8
C.2	Common for E5-E8

# 16-pole plug below

A1	Output 1
A2	Output 2
C.3	Common for A1/A2
A3	Output 3
A4	Output 4
C.4	Common for A3/A4
A5	Output 5
A6	Output 6
C.5	Common for A5/A6
A7	Output 7
A8	Output 8
C.6	Common for A7/A8
$\cong Ub$	Operating voltage
0V	Operating voltage
Α	Subnet (BUS A, RS-485)
В	Subnet (BUS B, RS-485)



## View





# 11. Wiring diagram

