





Operating instructions AS-i illuminated pushbutton module

AC2386 AC2388 AC2396 AC2398



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1 Preliminary note

Technical data, approvals, accessories and further information at www.ifm.com.

1.1 Symbols used

- Instructions
- → Cross-reference
- Important note
 - Non-compliance may result in malfunction or interference.
- Information Supplementary note.

2 Safety instructions

- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ Functions and features).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, operation and maintenance of the product must be carried out by qualified personnel authorised by the machine operator.
- · Protect units and cables against damage.

3 Functions and features

- maximum number of modules per master: 62
- · AS-Interface version 3.0, backwards compatible

4 Installation

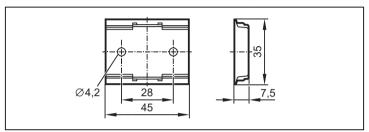


▶ Disconnect power before installation.

Fix the AS-i module onto a 35 mm rail.

The mounting orientation has no adverse effect on the function.

▶ As an alternative, fix the AS-i module onto a mounting adapter (supplied).



4.1 Fitting of the illuminated pushbuttons (AC2386 / AC2396)

- ▶ Screw the requested upper parts (colour plates) onto the cover supports.
- Place the complete covers into the requested position. Turn them so that the 4 cross-shaped grooves are located over the ridge cross of the holder.
- ▶ Slightly press the cover until it snaps into place.

You can remove the cover by means of a small screwdriver.

5 Electrical connection



The unit must be connected by a qualified electrician.

The national and international regulations for the installation of electrical equipment must be adhered to.

- Disconnect power.
- ▶ Connect the unit.

To ensure the protection rating

- ► Connect the AS-i connector to the M12 socket.
- ► Tighten firmly, recommended tightening torque 0.3...0.5 Nm.

5.1 Pin connection / data bits

M12 connector

1: AS-i + 3: AS-i -



AC2386

2 inputs / 2 outputs

2 NO / 2 LEDs white / 10 colour plates (red/green/yellow/white/blue)

AS-i profile S-7.A.E / extended addressing mode: yes

AC2388

2 inputs / 2 outputs

1 NC - LED red / 1 NO - LED green

AS-i profile S-7.A.E / extended addressing mode: yes

AC2396

2 inputs / 2 outputs

2 NO / 2 LEDs white / 10 colour plates (red/green/yellow/white/blue)

AS-i profile S-B.A.E / extended addressing mode: yes

AC2398

2 inputs / 2 outputs

1 NC - LED red / 1 NO - LED green

AS-i profile S-B.A.E / extended addressing mode: yes

5.2 Data bits (AC2386 / AC2388)

D0	D1	D2	D3
DI-0: pushbutton 1	DI-1: pushbutton 2	-	-
DO-0: LED 1	DO-1: LED 2	-	-

5.3 Data bits (AC2396 / AC2398)

D0	D1	D2	D3
DO-0: LED 1	DO-1: LED 2	-	-
-	-	DI-2: pushbutton 1	DI-3: pushbutton 2

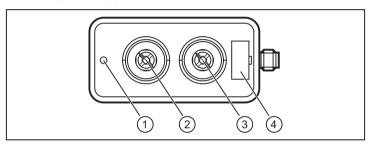
6 Addressing

- ▶ Address the unit via the M12 connector; the address is set to 0 at the factory.
- ► Assign a free address between 1A and 31B.

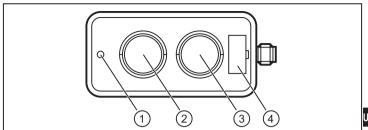
Addressing unit AC1154 Wiring of the addressing socket 3 3 4 1: AS-i + 2: TTL → 3: AS-i 4: TTL ← 5: + 5 V

7 Operating and display elements

7.1 AC2386 / AC2396



- 1: LED PWR/Fault
- 2: Pushbutton 2 / LED 2
- 3: Pushbutton 1 / LED 1
- 4: Label



- 1: LED PWR/Fault
- 2: Pushbutton 2 / LED 2
- 3: Pushbutton 1 / LED 1
- 4: Label

8 Operation

LED PWR green on: AS-i voltage supply OK

LED FAULT red on:

AS-i communication error, slave does not participate

in the "normal" exchange of data, e.g. slave address 0

9 Maintenance, repair and disposal

The operation of the unit is maintenance-free. After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.