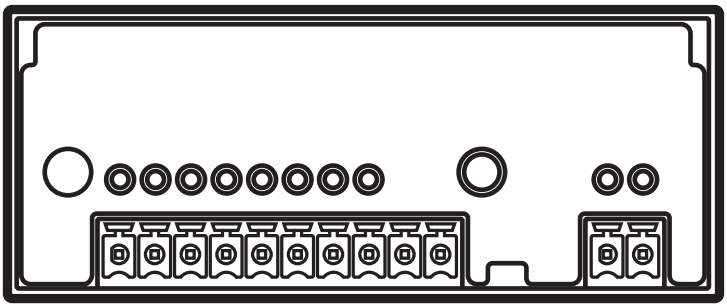
Operating instructions
AS-i PCB module

UK

AC2750
AC2751
AC2752
AC2753

80285129/00 04/2019



1 Preliminary note

An instruction is indicated by "▶".
Example: ▶ Mount the unit as shown.

Important note
Non-compliance can result in malfunction or interference.

2 Safety instructions

- Please read the operating instructions prior to set-up of the device.
- Ensure that the product is suitable for your application without any restrictions.
- The unit conforms to the relevant regulations and EC directives.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application.
- Installation, electrical connection, set-up, operation and maintenance of the unit must only be carried out by qualified personnel authorised by the machine operator.

3 Functions and features

The AS-i module functions as digital I/O slave in the AS-i system and is exclusively supplied via AS-i. It connects 4 sensors (2-wire sensors or 3-wire sensors) and max. 4 actuators (pnp) with the AS-i master.

- Maximum number of modules per master: 62 (A/B slave)
- Watchdog function: If the connection to the master is interrupted for more than 40 ms, all outputs are disconnected.
- AS-Interface version 3.0, downward compatible

4 Installation

▶ Disconnect the system from power before installation.

▶ Install the module in a protected location, e.g. in a housing with at least IP 54. Use the supplied adhesive pad or the DIN rail adapter E70432 (accessory) for fixing.

▶ When using the adhesive pad, the surfaces must be kept free from dust, oil, release agents and other kinds of contamination.

▶ Position the adhesive pad in the centre of the back of the PCB module.

▶ Carry out a set-up test after installation of the module.

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.

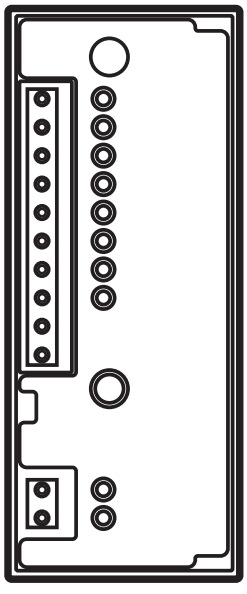
▶ Disconnect the installation from power and connect the unit.

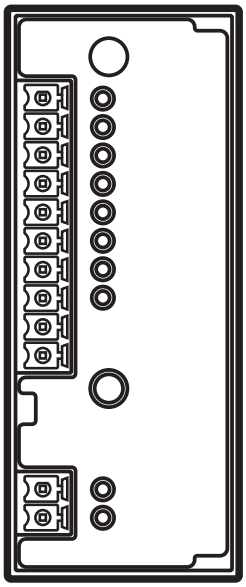
5.1 External protective circuitry for inductive loads

The switch-on and switch-off capacity for triggering solenoids is rated up to 2.5 W (IEC 60947-5-1, utilisation category DC-13).

Recommendation: For inductive loads use a free wheel diode on the load.

5.2 Wiring

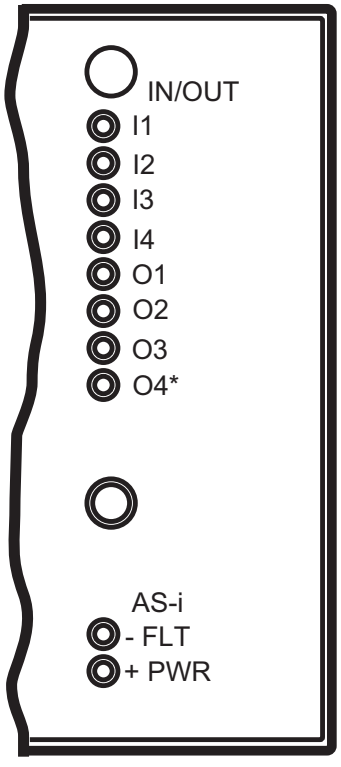
AC2750 (4 DI / 4 DO) / AC2751 (4 DI / 3 DO) Connection cables		
I1 WH (white)	Switching input sensor 1	
I2 WH (white)	Switching input sensor 2	
I3 WH (white)	Switching input sensor 3	
I4 WH (white)	Switching input sensor 4	
O1 YE (yellow)	Switching output actuator 1	
O2 YE (yellow)	Switching output actuator 2	
O3 YE (yellow)	Switching output actuator 3	
O4 YE (only AC2750)	Switching output actuator 4	
0- BK (black)	Sensor and actuator supply 0 V	
I+ RD (red)	Sensor and actuator supply 24 V	
AS-i - (FLT) BU (blue)	AS-i -	
AS-i + (PWR) BN (brown)	AS-i +	

AC2752 (4 DI / 4 DO) / AC2753 (4 DI / 3 DO) Screw terminal		
I1	Switching input sensor 1	
I2	Switching input sensor 2	
I3	Switching input sensor 3	
I4	Switching input sensor 4	
O1	Switching output actuator 1	
O2	Switching output actuator 2	
O3	Switching output actuator 3	
O4 (only AC2752)	Switching output actuator 4	
0-	Sensor and actuator supply 0 V	
I+	Sensor and actuator supply 24 V	
AS-i - (FLT)	AS-i -	
AS-i + (PWR)	AS-i +	

6 Addressing

▶ Assign a free address between 1A/1B and 31A/31B. At the moment of delivery the address is 0.

7 LED display



* only AC2750 and AC2752

8 Operation

LED Ix / Ox yellow:	input / output switched
LED PWR green:	AS-i voltage supply ok
LED FLT red lights:	AS-i communication error, slave does not participate in the "normal" exchange of data, e.g. slave address 0
LED FLT red flashes:	periphery fault, e.g. sensor supply overloaded or shorted, is signalled to the AS-i master (version 2.1 or higher).

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.

10 Technical data

Technical data and further information at www.ifm.com.