

## Product data sheet

Sheet No.: 1.604.04 - Rev: E, Page 1 of 2

Date: January, 2008

FieldQ

# Smart - Control Modules

## QC30: AS-Interface

### Description:

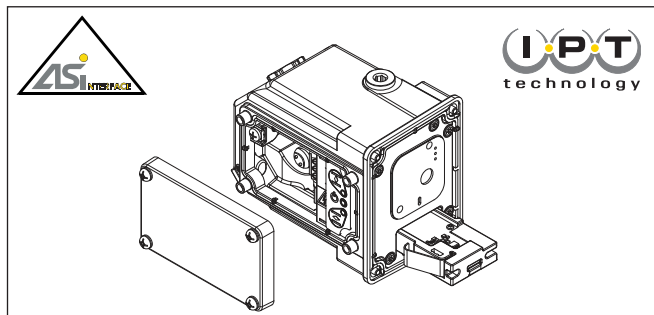
This FieldQ Control Module offers an integrated concept for valve automation. Its compact and robust construction incorporates basic control and feedback functionality and communicates through the ASI 2 or ASI 1 protocol.

### Construction

The Control Module is mounted at the side of the Pneumatic Module in front of the basic actuator housing. Inside are terminals available for connecting ASI wiring. Two cable entries are available for this purpose.

### Features

- **ASI** digital communication..
- **Supports both single and double acting actuators.**
- **One entry for all wiring** (control and feedback).
- **IPT-technology** (Intelligent Position Tracking).
- Up to **62 devices per segment** for ASI-2 protocol
- **IPT-technology** (Intelligent Position Tracking).
- **Automatic initialization** for easy setup of the actuator.  
**Pressing 4 seconds** simultaneously the "Open" and "Closed" reassignment buttons starts auto-initialization procedure and sets automatically the feedback limit switches.
- **Adjustable or Reversible position feedback** using the reassignment buttons.
- **Three indication LED's** for "Status", "Open" and "Closed" position. Status LED indicates:
  - Initialization procedure running (blinking)
  - Successful initialization procedure (LED is on)
  - No or failed initialization (flashing)
- Control Module **is easily plugged in** the Pneumatic Module.
- Modular functionality for **easy update** towards present and future bus systems.
- **The power supply and all inputs and outputs are galvanic isolated** which offers greater flexibility for systems connection.



### General specifications

Material housing	: Aluminium alloy
Electrical connections	: Internal terminal strip : Optional 4-pole quick connector M12x1
Cable entries	: 2x M20x1.5 or 2x 1/2"NPT
Enclosure	: IP65 / NEMA 4X
Finish	: Polyester non-TGIC based powder coating.
Operating media	: Air or inert gasses, filtered at 50 micron.
Temperature	: -20° to +80°C / -4° to +176°F
Dimensions	: See 1.603.01 metric : See 1.603.04 imperial/UNC : See 1.603.02 DIN 3337

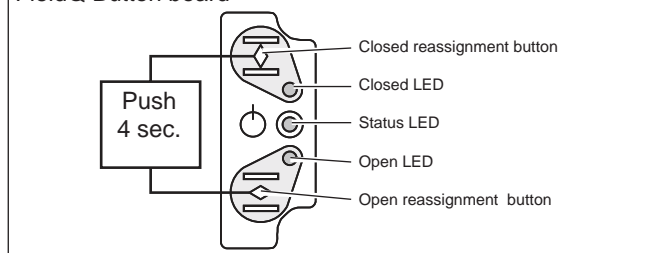
### Communication Protocol:

Protocol	: AS-Interface
Number of devices	: 31 for ASI-1 protocol : 62 for ASI-2 protocol
Current Minimum	: 30 mA (pilot valve off)
Maximum	: 127 mA (at 26.5V and 25°C and pilot valve on)
Protection	: 250mA from AS-Interface, by an internal automatic, resettable fuse.
ASI-Profile V3.0	: S-6.A.E (other profiles optional)

### Factory settings:

Factory address	: 00	EID1	: 7
IO code	: 6	EID2	: E
ID code	: A	Parameter	: 00

FieldQ Button board



FieldQ data bits		Functions	
	Type	DI's	DO's
D0	Input	Feedback "Closed"	-/-
D1	Bi-directional	Feedback "Open"	Solenoid Control
D2	Bi-directional	Not used	
D3	Bi-directional	Not used	



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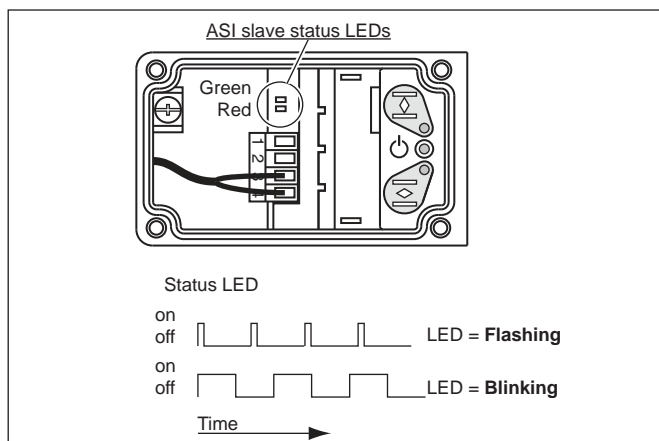
FieldQ

# Smart - Control Modules

## QC30: AS-Interface

### ASI status feedback

Status feedback is provided according to the ASI standard  
For more detailed information on button board functionality and LED indications, see Installation Guide : DOC.IG.QC30.1



### ASI terminal wiring connections:

Detailed Non-Incendive / Non-sparking wiring instructions, will be shipped with the product, see control drawing: see Installation Guide : DOC.IG.QC30.1

### Wiring dimensions

Cable range : 0.14 - 1.5mm<sup>2</sup> or 28-16 AWG

### Quick connector:

- The ASI Module can optionally be equipped with prewired quick connectors. Two versions are available: 7/8" or M12 (male chassis part)
- Quick connectors, as shown below, are excluded for non-Incendive or non-sparking use in hazardous area's classified as Zone 2 or 22 or CI I, II, III, Div. 2.

## Options

### Manual Control

- Can be added as kit or factory option in 2 versions, "Push button" or a "Push and lock" button.

### Glands and plugs

- FieldQ Control Modules can be shipped with plastic or metal glands (M20x1.5 or 1/2"NPT) and rated IP65 or higher.

### Hazardous area executions:

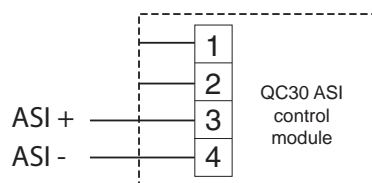
- The ASI Control Module QC30 is available with optional Non-Incendive or Non-Sparking approvals as listed below:

- **IECEX** : Ex nA II T4  
: Ex tD A22 T90° / IP65  
: Certificate : KEM 07.0046x
- **ATEX** : Ex II 3 G Ex nA II T4  
: Ex II 3 D Ex tD A22 T90° / IP65  
: Certificate : KEMA 02ATEX1258X
- **FM** : Non-Incendive, Class I, II, III, Div.2,  
Groups ABCDFG, T4, Type 4X/IP65  
: Class I, Zone 2, IIC T4
- **CSA** : Non Incendive: Class I, II, III, Div.2,  
Groups ABCDFG, T4  
: Ex nA II T4 (Class I, Zone 2)  
: Certificate: 1477696

Ambient temperature:

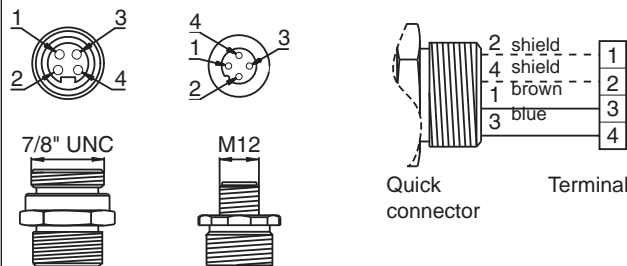
T4 @ Ta = : -20°C...+75°C (-4°F...167°F)

### ASI terminal wiring connections:



Note:  
Terminal 1 and 2 may be used for shield.

### Quick connector pinouts: (male chassis part)



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