

Important: Retain these instructions

These instructions shall be used by trained service personnel only. If the equipment is used in a manner not specified by these instructions, the protection provided by the equipment may be impaired.

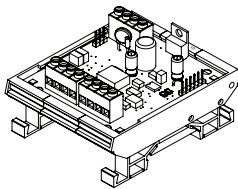
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1 BOX CONTENTS




4DIX/24VAC
Installation
Instructions
(TG200651)

2 STORING

Temperature: -10°C \rightarrow $+70^{\circ}\text{C}$
 (-14°F) \rightarrow $(+158^{\circ}\text{F})$

Humidity: 0 \rightarrow $95\%RH$

H_2O ✓ 

3 INSTALLATION

It is recommended that the installation should comply with the local electrical safety installation practices (e.g. HSE Memorandum of Guidance on Electricity at Work Regulations 1989, USA National Electric Code).

1 Dimensions

Top View Dimensions: 68 mm (2.68")

Side View Dimensions: 50 mm (1.97"), 77 mm (3.03"), 82 mm (3.23"), 13 mm (0.51")

2 Requirements

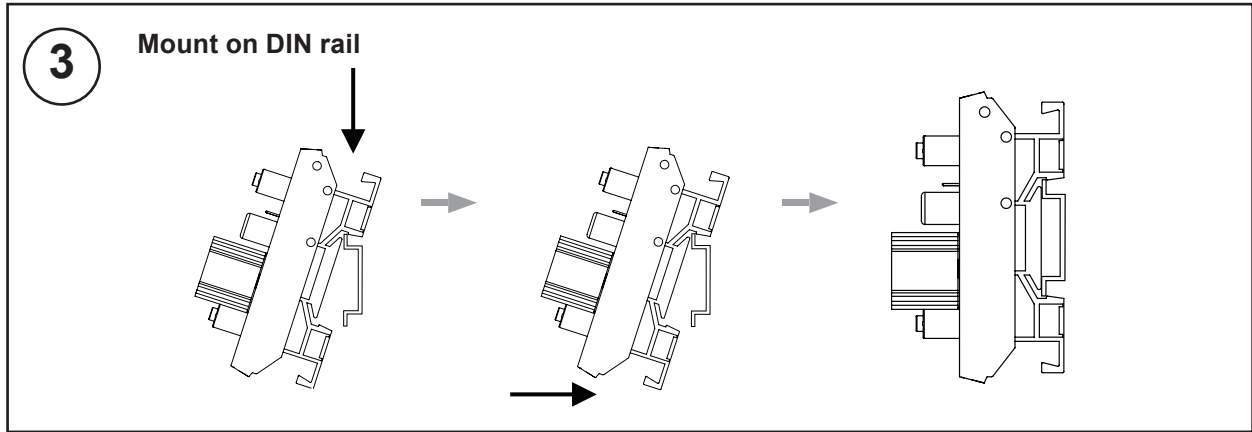
The unit is UL rated as 'UL916 listed accessory to open energy management equipment'

Temperature: -10°C \rightarrow $+50^{\circ}\text{C}$
 (14°F) \rightarrow (122°F) ✓

Humidity: $0\%RH$ \rightarrow $90\%RH$ ✓

H_2O ✓

3.1 Installation - Mounting (continued)

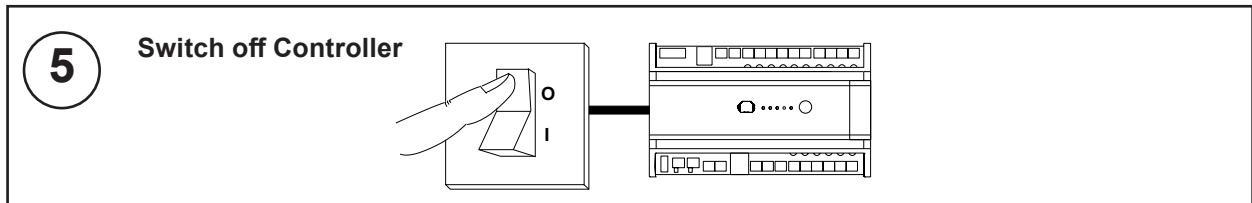


4 Specify output Signal

Current I

Voltage V

Caution: This unit contains static sensitive devices. Suitable anti-static precautions should be taken throughout this operation to prevent damage to the unit. BS EN100015/1 Basic Specification: protection of electrostatic sensitive devices.



6 Set Controller Input Channel to Analogue and to match 4DIX Output Signal Mode

V or I

IN IQ analogue input channel

IQ Controller Installation Instructions

7 Wire 4DIX to Controller

Cable size 0.5 to 2.5 mm² (20 to 14 AWG), Cu only
 Maximum distance from 4DIX to IQ:
 I mode=100 m (1090 yds), V mode=25 m (27 yds)

either using IQ 24 Vdc auxiliary supply

Note that the controller's 24 Vdc auxiliary supply or an external 24 Vac or dc supply should be used to supply the 4DIX, not the current input 24 V (except for IQ3 with 4DIX in voltage mode - see below).

Analogue input channel linked as table below

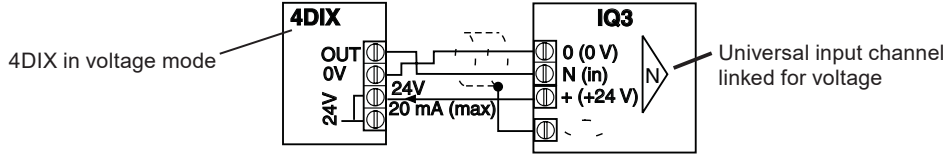
4 DIX output mode linking	IQ analogue input channel linking	24 V current (max.)	
		24 Vac	24 Vdc
Current I	External powered current Ix	90 mA	48 mA
Voltage V	Voltage V	48 mA	20 mA

3.1 Installation - Mounting (continued)

7

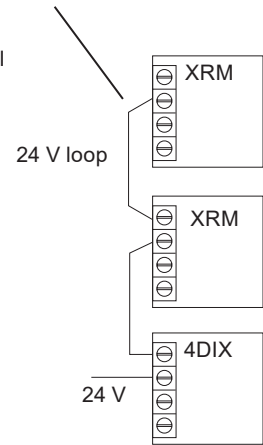
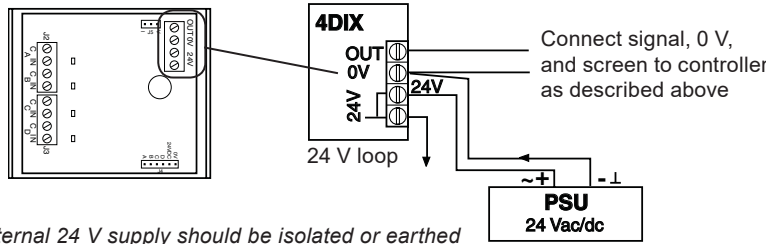
Wire 4DIX to Controller (continued)

Connecting 4DIX in voltage mode to IQ3. It can supply the attached single 4DIX in voltage mode



Check current carefully if using loop e.g. IQ3 input + (24 V) is unsuitable for daisy chaining

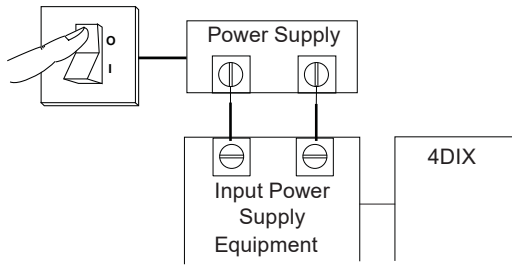
or using external 24 Vac/dc supply (e.g. IQeco)
For IQeco check current available carefully, nearly always requires external supply



Note that external 24 V supply should be isolated or earthed (grounded) to IQ earth (ground); ensure correct polarity

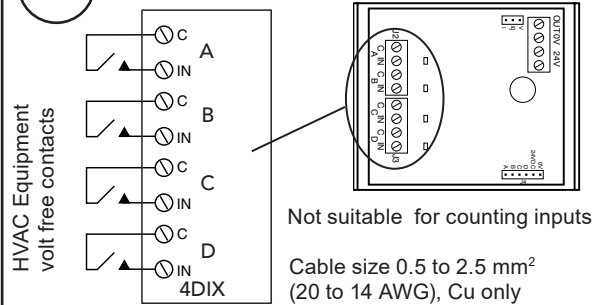
8

Ensure Equipment Input Power Supply is Switched Off



9

Connect 4DIX to HVAC Equipment



10

Configure Controller

It is recommended to use SET (software tool) for configuring the controller. SET is supplied with 4DIX strategy blocks for IQ1/2, IQ3/4, and IQeco controllers; the strategy is described in the 4DIX data sheet. If the SET strategy block is used it will set up both sensor scaling and strategy modules.

Sensor scaling:

For all IQ2 series controllers with firmware version 2.1 or greater, IQ3/4, or IQeco controllers, the appropriate SET Unique Sensor Reference from the following should be used:

- Voltage (V) mode: 4DIXV
- Current (I) mode: 4DIXI

If not using SET, use sensor type scaling mode 5, characterise, with the appropriate scaling from the table below for all IQ2 series controllers of firmware version 2.1 or greater, IQ3/4, or IQeco controllers; for all other IQ controllers see Sensor Scaling Reference Card TB100521A.

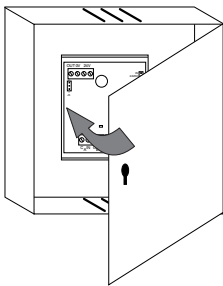
Mode	Y	E	U	L	P	I1	I2	O1	O2
I	2	3	270	-1	2	0	20	0	268.25
V	0	3	270	-1	2	0	10	0	268.25

Strategy:

The strategy must be set up to decode the digital status from the analogue input. IQ3/4 and IQeco are more responsive than IQ1/2 controllers and require more complex strategy. The SET 4DIX strategy blocks can be used as examples.

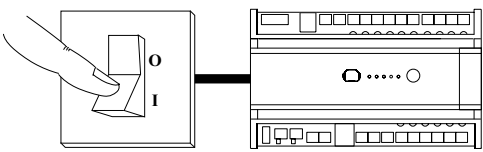
3.1 Installation - Mounting (continued)

11 Close Panel

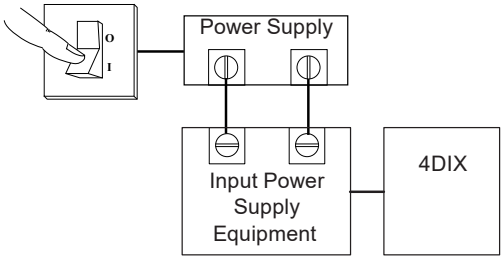


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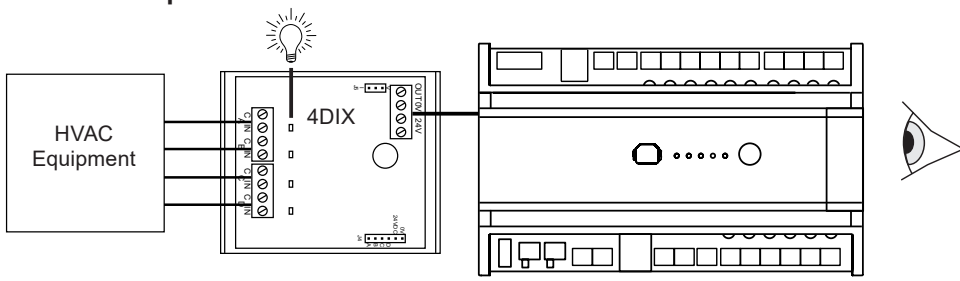
12 Switch on Controller



13 Switch on HVAC Equipment Input Power Supply




14 Check 4DIX Operation



5 FIELD MAINTENANCE

The <vx.xx> requires no routine maintenance.

6 DISPOSAL



WEEE Directive:
 At the end of their useful life the packaging and product should be disposed of by a suitable recycling centre.
 Do not dispose of with normal household waste.
 Do not burn.

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