

# CYLON

## UCU10FC/K :: Fancoil Controller with Room Display Support

The **UCU10FC/K** adds support for UCU Room Display to the existing Unitary Fancoil Controller.

The use of the powerful UCU10FC/K Field Controller in this system means that while the Room Display can be used for local control, the fancoil equipment can be easily networked into the overall building control by simply connecting the UCU10FC/K to the Unitron Network.

An RS485 serial connector is provided to allow connection to the UCU Room Display module. This has the advantage that all mains cabling is contained within the Fancoil equipment.

### Applications

For controlling the room temperature in individual rooms and zones



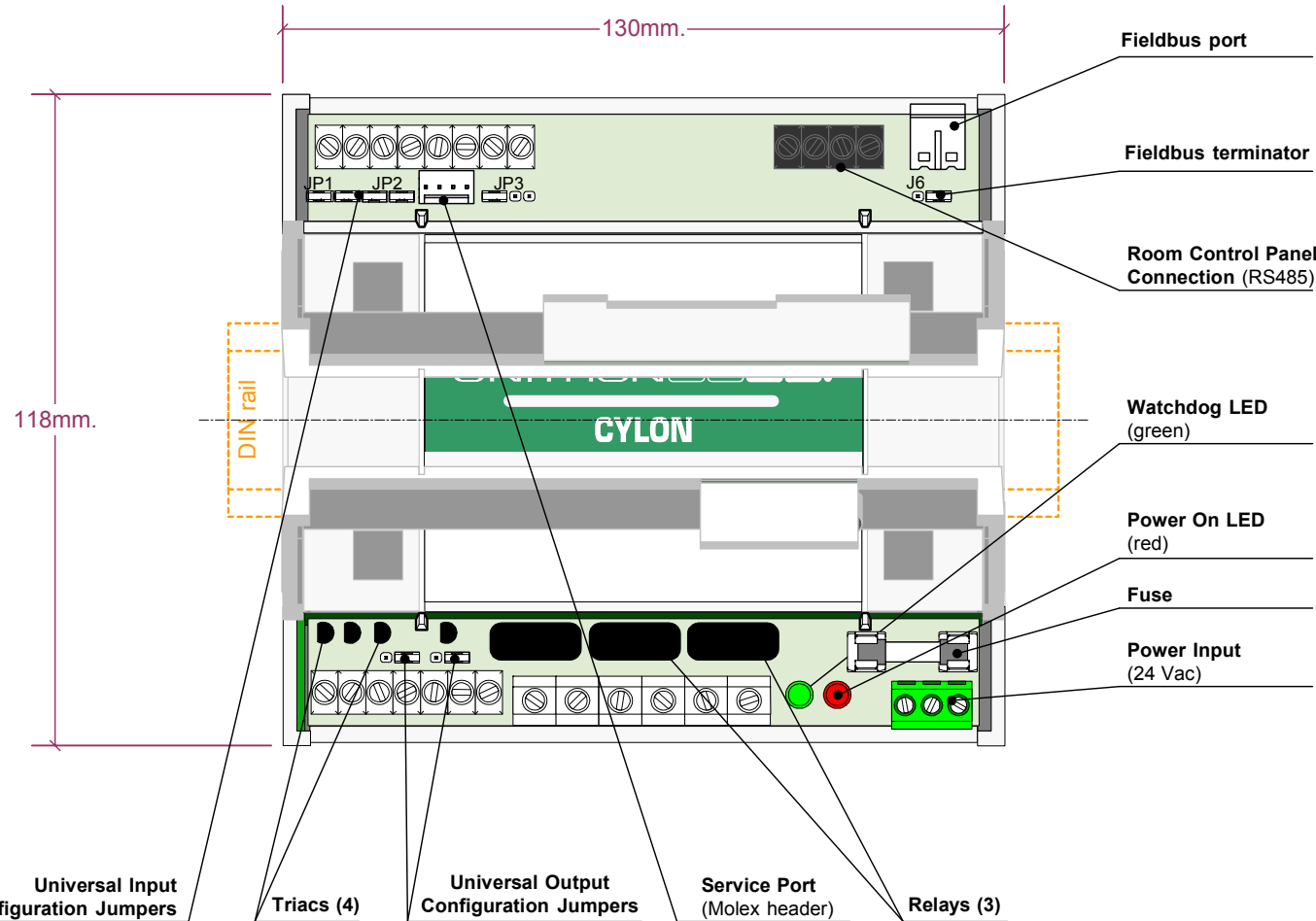
### Features

- **Dedicated Room Control Panel connector**  
Frees up 3 input connections by using sensors and control inputs from the Display Panel through a dedicated connector
- **3 Universal Inputs**  
can be used as analog or digital inputs
- **2 Universal Outputs**  
can be used as analog or digital outputs
- **2 Triac Digital Outputs**  
can switch up to 24 Vac
- **3 Relay Digital Outputs**  
can switch up to 230 Vac
- **Up to 63 controllers per fieldbus**
- **190 strategy blocks**
- **4 datalogs with up to 102 entries per datalog**
- **Data security**
- **Strategy and setpoints backed up in EEPROM**



Due to Cylon's policy of continuous improvements these specifications may be upgraded without notice.

**UNITRON UC32.**  
**Building Management System**



### Jumper settings

Pins covered by jumper  
  Pins open

#### Universal Output Configuration Jumpers

- 0-10 V Output
- Triac Output

#### Universal Input Selection Jumpers

- Volt free contacts
- Passive input
- 0-20mA input
- 0-10v input

#### Fieldbus (RS485 sub-network) Terminator

- J6   Terminator IN
- J6   Terminator OUT
- J6   Terminator OUT

### Specifications

#### MECHANICAL

Size (excluding terminal plugs)	145 x 130 x 45 mm (5.7 x 5.12 x 1.78")
Enclosure	Injection moulded ABS
Mounting	DIN rail

#### FIELD CONTROLLER::ENVIRONMENT

**Note:** This equipment is intended for field installation within another enclosure.

Ambient Temperature	0° - 50°C (32°-122°F) ambient.
Ambient Humidity	0% - 90% RH non-condensing
EMC Immunity	EN 50082-1
EMC Emission	EN 55011 Class B
Safety	EN 61010

#### WIRING

**Note:** Use Copper or Copper Clad Aluminium conductors only.

Termination	I/O and Power : PCB mounted screw terminal connections. Fieldbus : PCB mounted plug terminal connections.
Conductor Area	Max: AWG 12 (3.09 mm <sup>2</sup> ) Min: AWG 22 (0.355 mm <sup>2</sup> )

#### ELECTRICAL


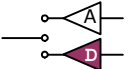


Supply Requirements	24 V AC +/- 20% 50/60 Hz
Transformer Rating	up to 55 VA (up to 10 VA internal power plus up to 45 VA supplied to Triac loads)
Fuse Rating	2 A 250 V anti-surge(250 Vac – 2 AT)

#### PROCESSOR

Type	Motorola 68HC11
Clock Speed	8 MHz
Operating System Memory	128K
User Programmable Memory	32k x 8 RAM 8k x 8 EEPROM backup for program. Maintenance free.

#### INPUTS/OUTPUTS

**Note:** Screened cable is recommended for all input connections.

3 Universal Inputs 	Active voltage input 0-10 V @ 134 K. Passive Input for a large range of temperature sensors, 10K3A1 sensors are recommended. <b>Note:</b> '10k option' controllers use 10k3A1 sensors only. Temperature input range: 0 – 50 °C Active current input 0-20 mA @ 120 Ω (screened cable). Digital Volt Free Contact. <b>Note:</b> UCU Universal inputs do not support pulse counting.
2 Universal Outputs 	Each A/T output is either one Analog 0-10 V, or one Digital. As analog, both are 0-10 V, 10 mA, 3 second response. As digital, both are rated @ 400 mA maximum, switch neutral only.
2 Digital Triac Outputs 	24 V AC Triac @ 500 mA maximum. Switch neutral only.
3 Digital Relay Outputs 	230 V AC Maximum Load: 2A inductive/resistive load
24 V AC output terminals	Total current drawn from 24 V AC terminals is limited to 1.8 A.

### COMMUNICATIONS

**Note:** The default Fieldbus baud rate is 38400. The baud rate may be changed using the Unitron Palmtop program (DOS)

Local RS232 TTL port	@ 9600 Baud Max cable length 4m
Fieldbus port	RS485 @ 1200, 9600, 19200 or 38400 Baud
Keypad Port	RS485 @ 9600 Baud Max cable length 25m

### INTERFACE

Software	Unitron Command Centre Unitron Engineering Centre WebLink
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### SOFTWARE FEATURES

**Note:** The controller's Fieldbus address is set by Unitron Command Centre's CCView software module (Windows), or Unitron Palmtop program (DOS)

Maximum Controller Address	63
Maximum number of Strategy Blocks	190
Maximum number of Datalog Modules	4
Maximum Datalog capacity (standard)	102
Data Security	Strategy and Point numbers 200 – 255 analog and digital backed up in EEPROM

### Cabling

