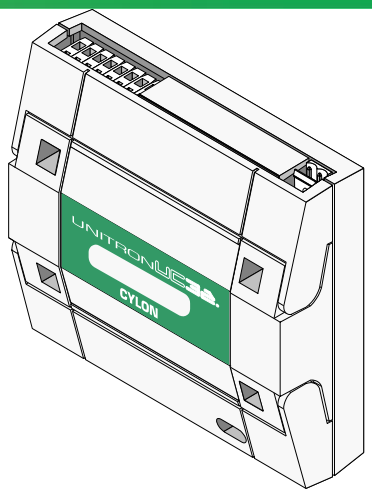
UCU8FC

The **UCU8FC** is low-cost unitary controller, with 3 inputs and 5 outputs, designed for use with single items of equipment that require 230 Vac switching, particularly Fan-coil units.



- **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

- **1 Relay Digital Output**

  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

The **UCU8FC** controller is part of the **UnitronUC32** range of products, which offers the following benefits:

Unique Flexibility with UniPuts™

The **UnitronUC32** range uniquely presents **UniPuts™** - a revolutionary answer to flexible point configuration, offering maximised utilisation of controller capacity along with flexibility in strategy changes. Built on a modern web-based architecture, the **UnitronUC32** range has a wide application scope with the flexibility of being stand-alone or network enabled.

Cost Effective, low entry point for building control

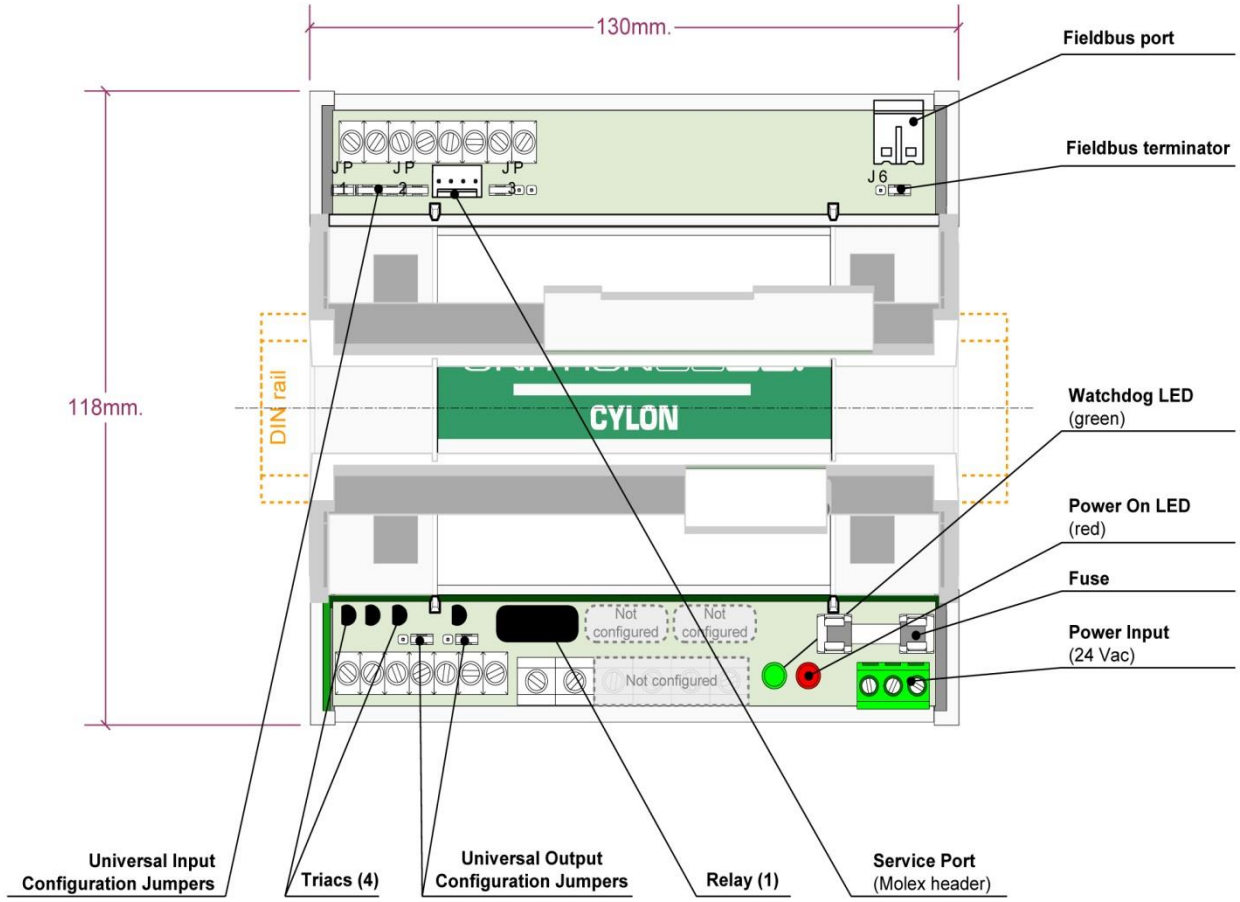
The **UnitronUC32** range offers reduced costs in terms of training, implementation, rollout and maintenance. Modular, extendible packages along with low installation costs mean a low entry point for building control. The future-proof **UnitronUC32** range provides forward & backward compatibility, meaning an effortless upgrade path for existing **Unitron** Systems.

Highly programmable and extendable through web-enabled HVAC technology

The **UnitronUC32** range offers an advanced web-based 32-bit architecture, with advanced programmability through the **Cylon Engineering Centre**. Inbuilt diagnostics, along with expanded data logging and strategy storage, is further enhanced by **Uniputs**™, offering up to 8 Universal inputs, up to 8 **Uniputs**™ (AI/DI/AO/DO) and up to 8 **Uniputs**™ with relays.

Cylon CONTROLS

DATASHEET



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

UK Patent GB 2 400 991
Irish Patent 84413

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

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^2) Min: AWG 22 (0.355 mm^2)

ELECTRICAL

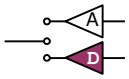
Supply Requirements	24 V AC +/- 20% 50/60 Hz
Transformer Rating	up to 55 VA (up to 10 VA internal power plus up to 45 VA supplied to Triac loads)
Fuse Rating	2 A 250 V anti-surge(250 Vac – 2 AT)

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. ***Note:** '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. ***Note:** 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.
1 Digital Relay Output 	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.

UK Patent GB 2 400 991
Irish Patent 84413

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

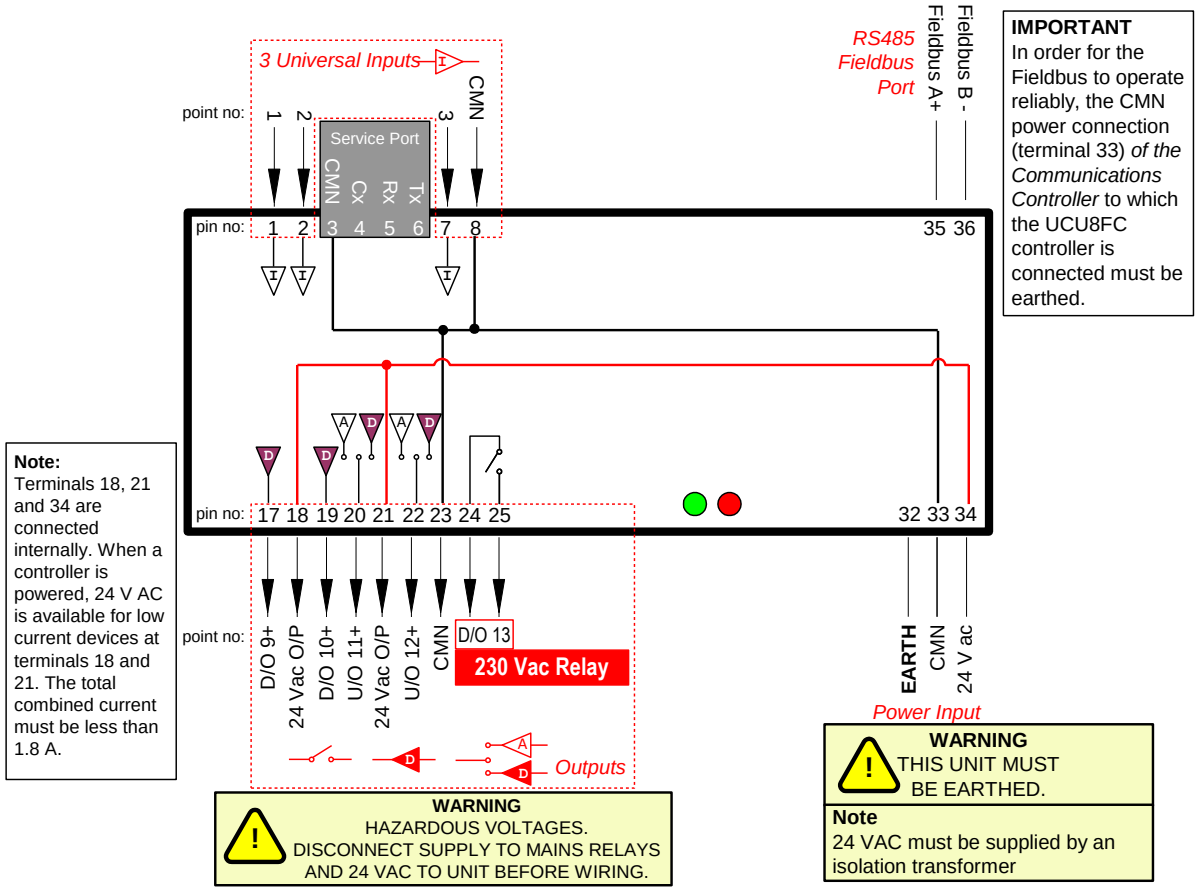
INTERFACE

Software	Unitron Command Centre Cylon Engineering Centre WebLink

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



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