

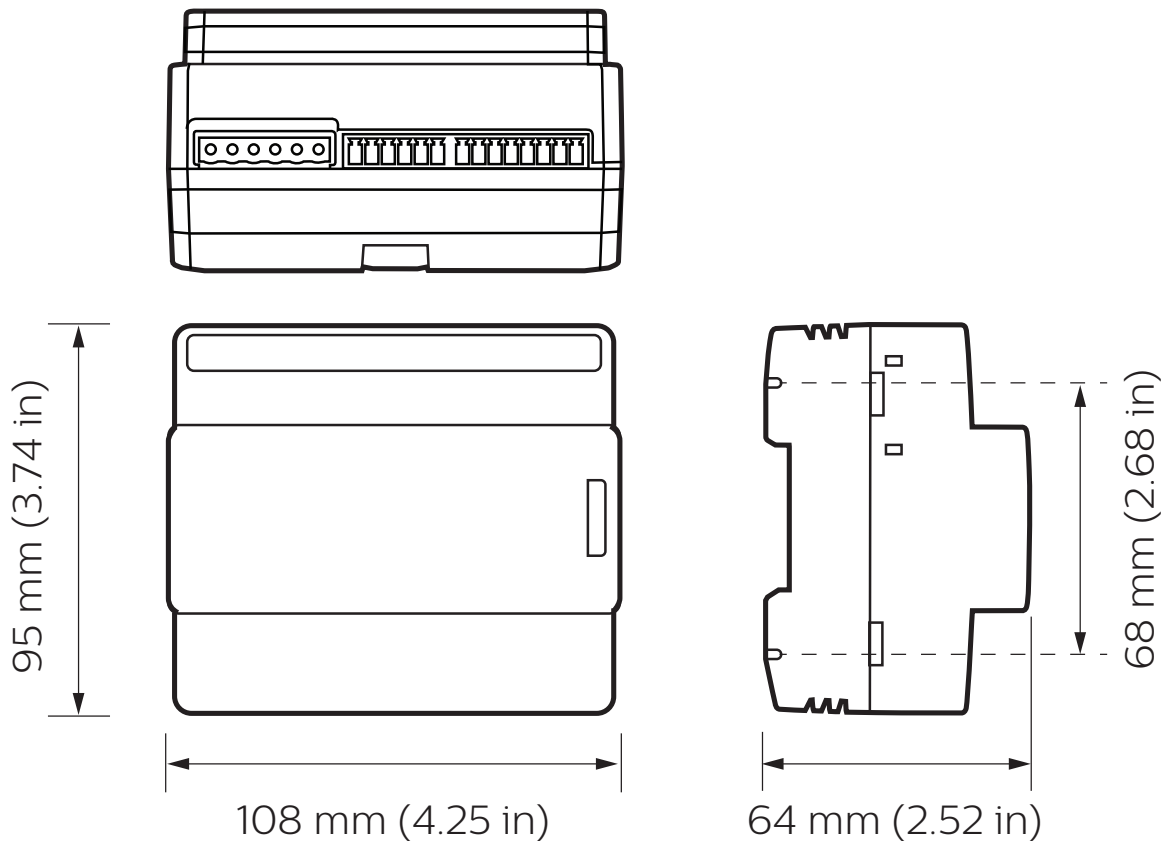


# DDFCUC

## Direct control of air conditioning

- **0-10 V and TRIAC (0-24 V) valve outputs** – Provided for control of hot and cold water valves.
- **0-10 V fan output** – Silent, accurate speed signal control of compatible fans.
- **1 to 3-speed fan output** – Switched control of LOW/MED/HIGH fan settings.
- **GPR (General Purpose Relay)** – Provided for use with electrical heaters or power outlet switching via an external contactor.
- **Suitable for non-seasonal two-pipe systems** - Refer to the easy-to-follow DDFCUC Installation Instructions and DDFCUC Commissioning Guide for more information.
- **Configurable inputs** – For use with peripheral devices including smoke detector, motion detector, window open/close sensor, airflow detector, drip tray overflow, dirty air filter, and hot water on cold valve. Supports 0-10 V, dry contact, and 20 k $\Omega$  NTC sources.
- **0-10V valve position feedback** – With compatible valves, INPUT1 and INPUT2 can capture position feedback for control outputs VALVE1 and VALVE2 respectively.
- **Resistive or networked temperature sensors** – Allows the device to use data from a local temperature sensor, or networked temperature sensor such as an Antumbra or Revolution user interface.
- **Networkable** – Can be networked with other Dynalite equipment via the onboard RS-485 DyNet port.

## Dimensions



# Specifications

Due to continuous improvements and innovations, specifications may change without notice.



**DDFCUC**  
Fan Coil Unit Controller

## Electrical

Supply Type	Single-phase
Supply Voltage	100-240 VAC
Supply Current	0.25 A
0-10 V Outputs	2 x valve control 1 x analog fan control
0-24 V Valve Outputs	2 x dual-TRIAC (Open, Close)
Fan Control Output	Three-way selectable relay (High, Medium, Low)
GPR Output	1 x switched relay
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	200 mA SELV/CLASS 2 (UL)
IEC Overvoltage Category	III

## Control

Communication Ports	1 x RS-485
Supported Protocols	DyNet
0-10 V Output Resolution	± 0.01 V
Configurable Inputs	4 0-10 V / Dry contact / 20 kΩ NTC temperature sensor (Networked temperature sensors also supported)
User Controls	1 x service switch
Indicators	1 x service LED

## Physical

Dimensions (H x W x D)	95 x 108 x 64 mm (3.74 x 4.25 x 2.52 in)
Packed Weight	0.29 kg (0.64 lb)
Construction	G3.1-style plastic DIN rail enclosure (6 unit)
Communication Terminal	1 x six-way pluggable screw terminal SHLD, GND, D+, D-, +12V, AUX
Communication Terminal Conductor Size	0.3-2.5 mm <sup>2</sup> (22-12 AWG)
Fan Control Terminals	4 x screw terminal
GPR Output Terminals	2 x screw terminal
TRIAC Output Terminals	5 x screw terminal
Fan/GPR/Valve Terminal Conductor Size	0.2-5 mm <sup>2</sup> (24-10 AWG)
0-10 V Output Terminals	1 x six-way pluggable screw terminal
Configurable Input Terminals	1 x eight-way pluggable screw terminal
0-10 V/Input Terminal Conductor Size	0.2-1.5 mm <sup>2</sup> (24-16 AWG)
Maximum Dry Contact Cable Length	20 m
Supply Terminals	3 x screw terminal
Supply Terminal Conductor Size	0.2-5 mm <sup>2</sup> (24-10 AWG)

## Environment\*

Operating Temperature	0° to 50°C ambient (32° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

## Compliance

Certification	CE, RCM, UL/cUL, FCC, ICES, UKCA, RoHS
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\* For indoor installation only

## Output Channel Ratings

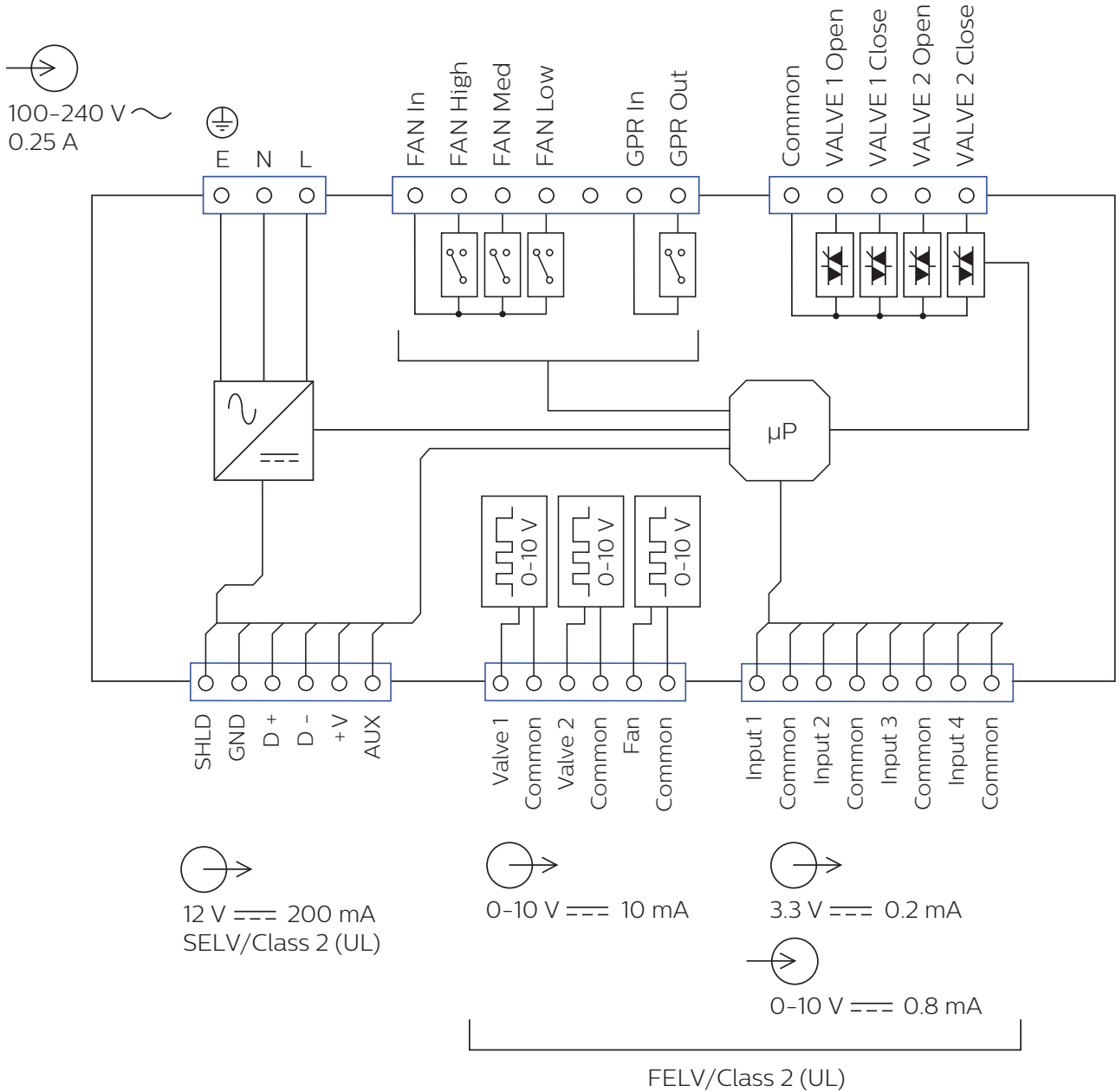
Load Type	Maximum Rating per Channel			
	Fan	GPR*	Valves**	0-10 V Outputs**
Resistive	10 A, 240 VAC	1 A, 240 VAC 1 A, 30 VDC		
Pilot Duty	A300	C300 R300		
Motor	9.8 FLA (½HP), 120 VAC 8 FLA (1 HP) 240 VAC			
Valve Control			0.25 A, 24 VAC	10 mA, 0-10 VDC
Fan Control				10 mA, 0-10 VDC

\* Can be used for SELV/Class 2 (UL)

\*\* FELV/Class 2 (UL)



# Electrical



## Ordering Code

Product

DDFCUC

12NC

913703367009

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