

DDFCUC

Fan Coil Unit Controller



Specification Sheet

Controllers > HVAC Controllers



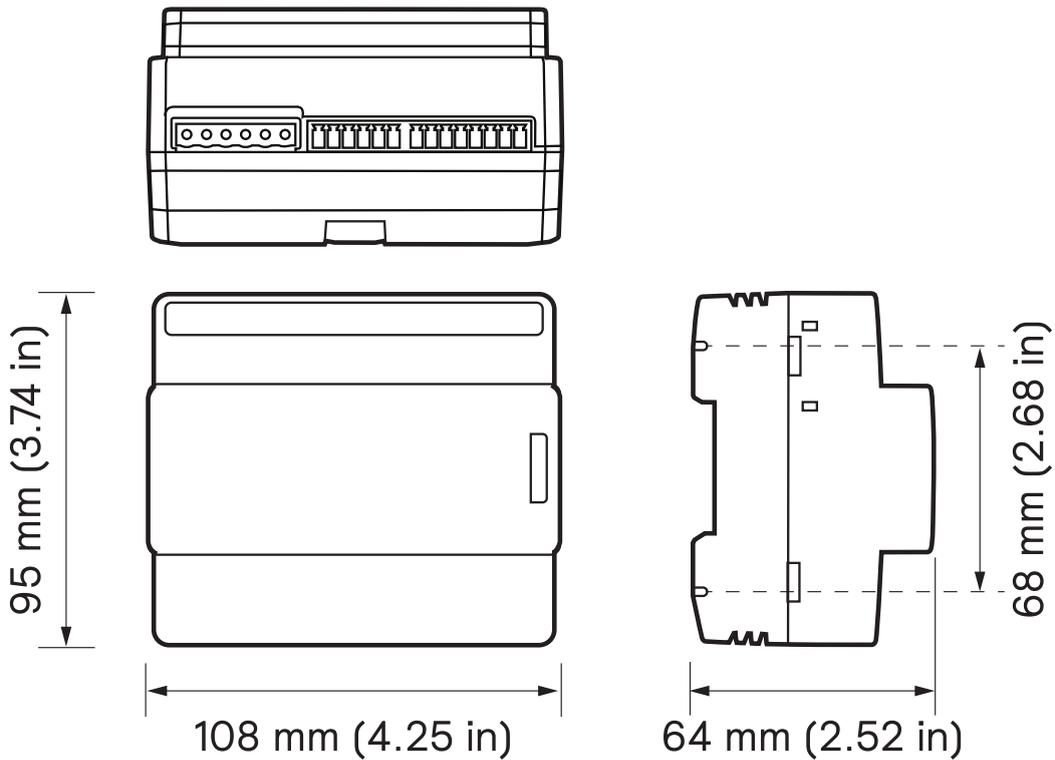
Direct control of air conditioning

The Dynalite DDFCUC is a fan coil unit controller designed for direct connection to components commonly found in heating, ventilation, and air conditioning (HVAC) systems with fan coil units (FCUs).

Key Features

- **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 online 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 kΩ NTC sources.
- **0–10 V 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** – Respond to 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

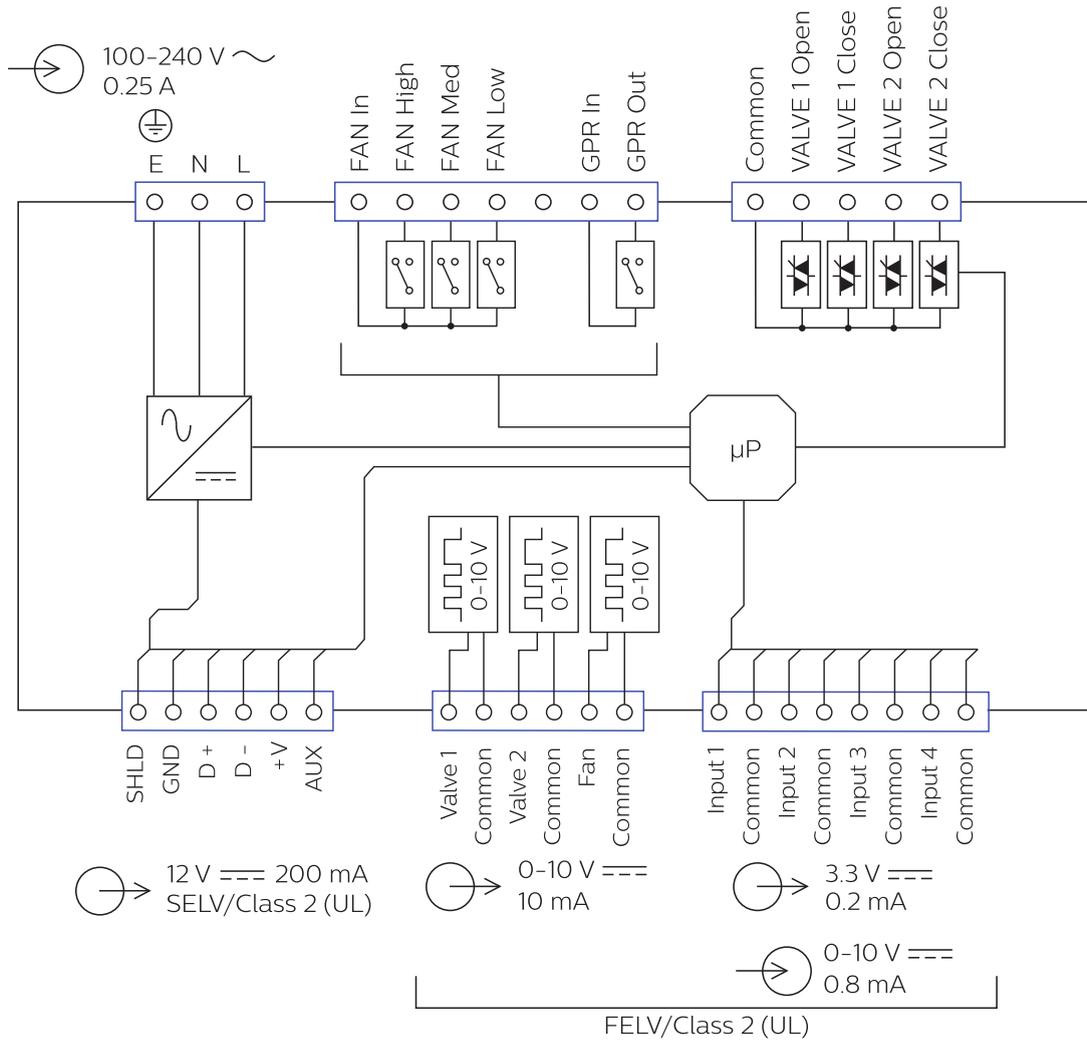
Electrical		Physical	
Supply Type	Single-phase	Dimensions	95 x 108 x 64 mm (3.74 x 4.25 x 2.52 in)
Supply Voltage	100-240 VAC	Packed Weight	0.29 kg (0.64 lb)
Supply Current	0.25 A	Construction	Polycarbonate DIN rail enclosure (6 unit)
DyNet DC Output Voltage	12 VDC	Serial Ports	1 x 6-way pluggable screw terminal
DyNet DC Output Current	200 mA SELV/CLASS 2 (UL)	Serial Port Conductor Size	0.3-2.5 mm ² (#22-12 AWG)
0-10 V Outputs	2 x valve control 1 x analog fan control	Fan Control Terminals	4 x screw terminal
0-24 V Valve Outputs	2 x dual-TRIAC (Open, Close)	GPR Output Terminals	2 x screw terminal
Fan Control Output	Three-way selectable relay (High, Medium, Low)	TRIAC Output Terminals	5 x screw terminal
GPR Output	1 x switched relay	Fan/GPR/Valve Terminal Conductor Size	0.2-5 mm ² (#24-10 AWG)
IEC Overvoltage Category	III	0-10 V Output Terminals	1 x 6-way pluggable screw terminal
		Configurable Input Terminals	1 x 8-way pluggable screw terminal
		0-10 V/Input Terminal Conductor Size	0.2-1.5 mm ² (#24-16 AWG)
		Supply Terminals	3 x screw terminal
		Supply Terminal Conductor Size	0.2-5 mm ² (#24-10 AWG)
		Maximum Dry Contact Cable Length	20 m
Control		Environment	
Communication Ports	1 x RS-485	Operating Temperature	0° to 50°C ambient (32° to 122°F)
Supported Protocols	DyNet	Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Configurable Inputs	4 (0-10 V / Dry contact / 20 kΩ NTC temperature sensor) (Networked temperature sensors also supported)	Relative Humidity	≤90% non-condensing
0-10 V Output Resolution	± 0.01 V	IEC Pollution Degree	II
User Controls	1 x service switch	Installation Note	For indoor installation only
Indicators	1 x service LED		
		Compliance	
		Certifications	CE, RCM, UL/cUL, FCC, ISED, UKCA, RoHS



Output Channel Ratings

Load Type	Fan
Resistive	10 A, 240 VAC
Motor	9.8 FLA (½HP) 120 VAC 8 FLA (1 HP) 240 VAC
Pilot Duty	A300
Load Type	GPR - Can be used for SELV/Class 2 (UL)
Resistive	1 A, 240 VAC 1 A, 30 VDC
Pilot Duty	C300 R300
Load Type	Valves - FELV/Class 2 (UL)
Valve Control	0.25 A, 24 VAC
Load Type	0-10 V Outputs - FELV/Class 2 (UL)
Valve Control	10 mA, 0-10 VDC
Fan Control	10 mA, 0-10 VDC

Electrical Drawing



Ordering Codes

Product	12NC
DDFCUC	913703367009