DDFCUC024

Fan Coil Unit Controller
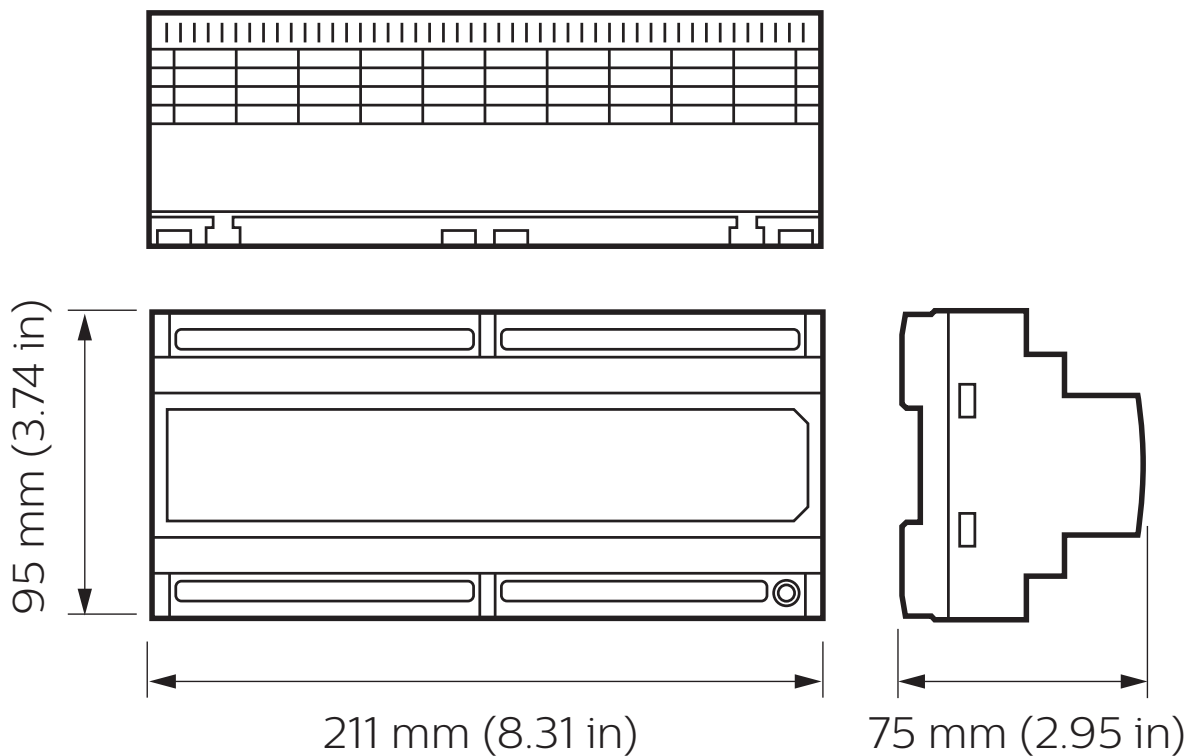
Direct control of air conditioning

The Philips Dynalite DDFCUC024 is a fan coil unit controller designed for direct connection to components commonly found in air conditioning systems. Triac outputs are provided for controlling hot and cold-water valves, relay outputs are provided for driving fan motors and a high capacity relay output is available for electrical heaters.

DDFCUC024
Direct control of air conditioning

- **Triac outputs** – Provided for controlling hot and cold-water valves.

- **Relay outputs** – Provided for driving fan motors.

- **High capacity relay** – Provided for use with electrical heaters or power outlet switching.

- **Inputs for resistive temperature sensors** – Allows the device to use data from a local temperature sensor or a networked temperature sensor, such as an Antumbra user interface.

- **Programmable auxiliary inputs** – Provided for use with peripheral devices including smoke detectors, motion detectors, window open/close sensors, airflow detectors, drip trays, dirty air filters and hot water on cold valve.

- **Networkable** – Can be networked with other equipment including Philips Dynalite user interfaces, via an on-board RS-485 DyNet port.

Dimensions

95 mm (3.74 in)

211 mm (8.31 in)

75 mm (2.95 in)

Specifications

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

DDFCUC024
Fan Coil Unit Controller

Electrical

Supply Type	Single-phase
Supply Voltage	230 VAC (± 14%)
Supply Current	10 A
Water Valve Control Outputs	2 x dual triac 24 VAC (open/close or floating, combined max load 4 VA)
Fan Control Output	8 FLA (1 HP) @ 230 VAC (Three-way selectable relay - High, Medium, Low)
Electric Heater Output	1 x 16 A @ 230 VAC switched feed-through
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	120 mA
IEC Overvoltage Category	III

Control

Communication Ports	1 x RS-485
Supported Protocols	DyNet
Dry Contact Inputs	3
Temperature Sensor Inputs*	1 x 20 K NTC
User Controls	1 x service switch
Indicators	1 x service LED

Physical

Dimensions (H x W x D)	95 x 211 x 75 mm (3.70 x 8.31 x 2.95 in)
Packed Weight	0.8 kg (1.76 lb)
Construction	Polycarbonate DIN-rail enclosure (12 unit)
Communication Ports	1 x RJ12 6 x screw terminal SHLD, GND, D+, D-, +12V, N/C
Communication Terminal Conductor Size	2.5 mm^2 (#12 AWG) (max)
Control Outputs	11 x screw terminal
Dry Contact Inputs	6 x screw terminal
Maximum Dry Contact Cable Length	20 m
Temperature Sensor Input	2 x screw terminal
Supply Terminals	5 x screw terminal
Input/Output/Supply Terminal Conductor Size	5 mm^2 (#10 AWG) (max)

Environment*

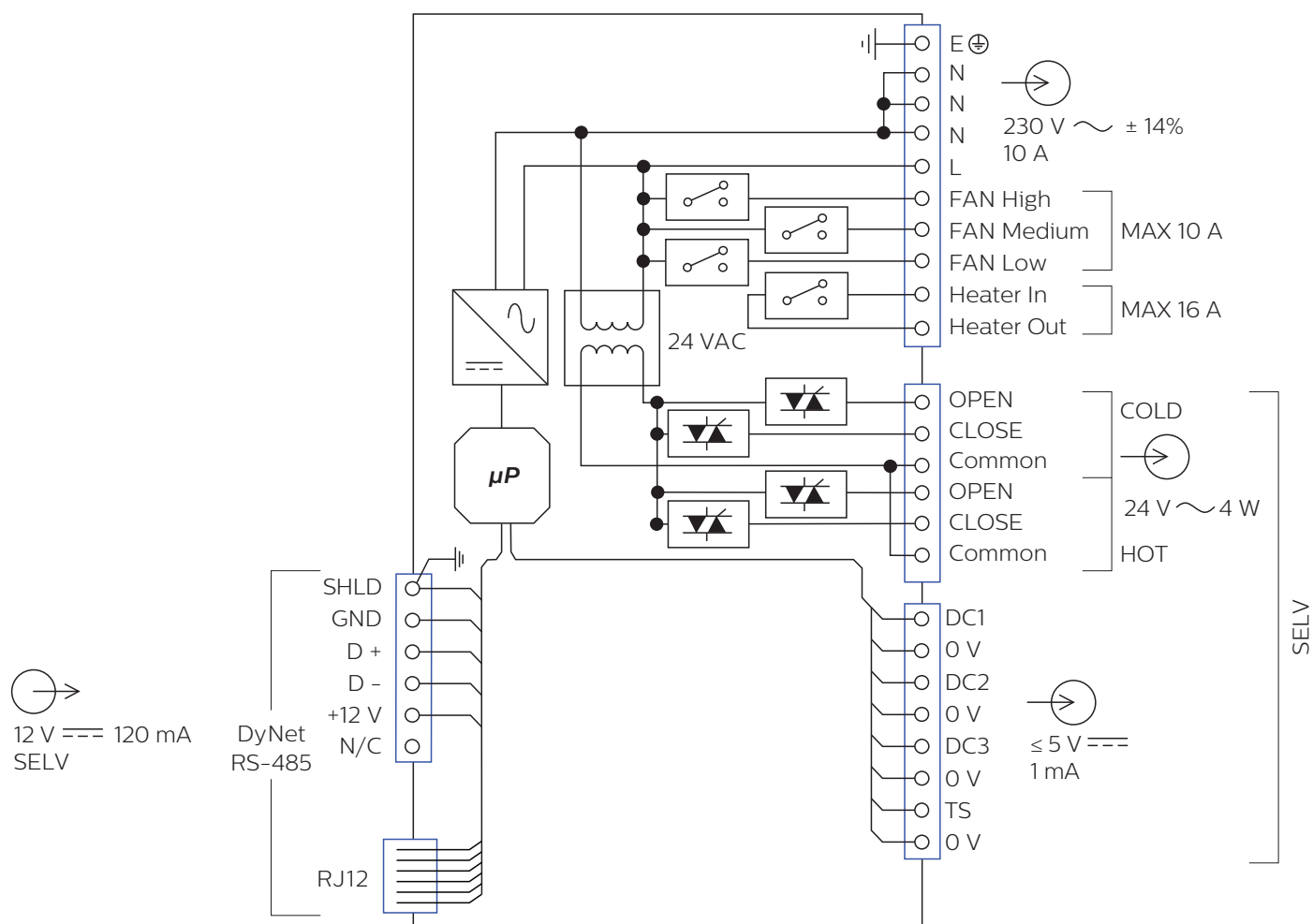|	
Operating Temperature	-0° to 40°C ambient (32° to 104°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Humidity	0 to 90% non-condensing
IEC Pollution Degree	III

Compliance

Certification	CE, RCM, UKCA, RoHS

* For indoor installation only

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*   Networked temperature sensors also supported.

Electrical

| | E ⏚ |
| N |
| N | 230 V ∿ ± 14% |
| N | 10 A |
| L |
| FAN High | |
| FAN Medium | MAX 10 A |
| FAN Low |
| Heater In | MAX 16 A |
| Heater Out |
| OPEN | COLD |
| CLOSE |
| Common | 24 V ∿ 4 W |
| OPEN |
| CLOSE |
| Common | HOT |

24 VAC

μP

SHLD
GND
D +
D –
+12 V
N/C

12 V ⎓ 120 mA
SELV

DyNet
RS–485

RJ12

DC1
0 V
DC2
0 V   ≤ 5 V ⎓
DC3   1 mA
0 V
TS
0 V

SELV

Ordering Code

Product	Philips 12NC
DDFCUC024	913703081009