



DDRC420FR

Relay Controller

Robust control of switched loads

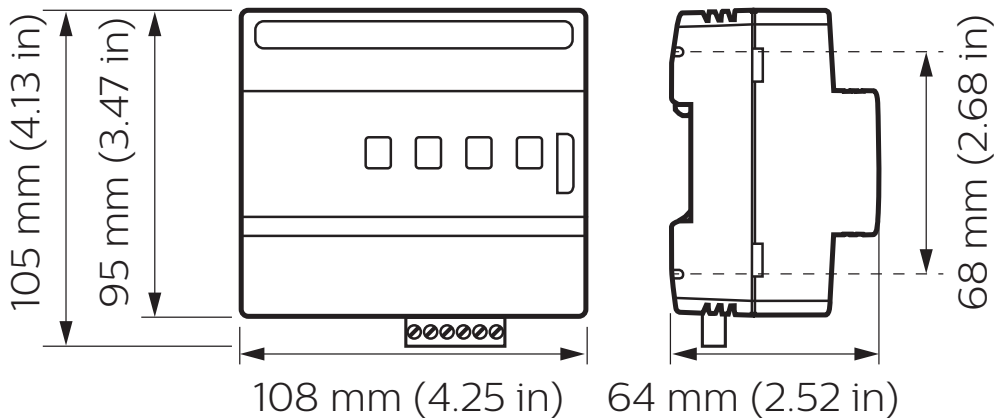
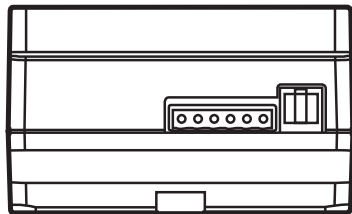
The Philips Dynalite DDRC420FR provides control of any type of switched load, including difficult lighting loads. This four channel device supports all types of switched loads up to 20 A inductive.

DDRC420FR

Robust control of switched loads

- **Feed-through power circuit design** – Electrically equivalent to a 4 pole contactor, with the added advantage of each pole being separately controllable via the DyNet network.
- **Flexible mounting solution** – A DIN-rail mountable device, designed to be installed into the distribution board supplying power to the controlled circuit.
- **Inbuilt diagnostic functionality** – Features circuit run time tracking on each channel and Device Online/Offline status indication.
- **Multiple wiring schemes supported** – Controls single phase and neutral or three phase and neutral (star) wiring configurations.
- **Hardware override** – Service override switch accessible from front panel.

Dimensions



Specifications

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



DDR420FR
Relay Controller

Electrical

| | |
|---|---|
| Supply Type | Single-phase |
| Supply Voltage | 100–240 VAC |
| Supply Current | 0.25 A |
| Outputs | 4 x switched feed-through relay with manual override |
| Output Channel Current | 20 A (max) |
| Output Channel Ratings | (See Page 4) |
| Maximum CH-CH Voltage | 300 VAC (UL) 400 VAC (CE) |
| Maximum CH-XX-CH Voltage* | 480 VAC |
| XX = unpopulated channel (2x terminals) for isolation | |
| DyNet DC Output Voltage | 12 VDC |
| DyNet DC Output Current | 200 mA (supply for approximately 10 user interfaces) |

Control

| | |
|----------------------|---|
| Serial Ports | 1 x RS485 |
| Supported Protocols | DyNet DMX Rx |
| DMX Rx Channels | 4 |
| Dry Contact Inputs | 1 (AUX) |
| Diagnostic Functions | Device online/offline status Network Watchdog |
| User Controls | 1 x service switch Manual override switch for each channel |
| Indicators | 1 x service LED |

* Refer to Installation Instructions for correct terminations for phase separation.

Physical

| | |
|--------------------------------|---|
| Dimensions (H x W x D) | 105 x 108 x 64 mm (4.13 x 4.25 x 2.52 in) |
| Packed Weight | 0.8 kg (1.76 lb) |
| Construction | Polycarbonate DIN-rail enclosure (6 unit) |
| Serial Ports | 1 x screw terminal 1 x RJ12 |
| Serial Port Conductor Size | 2.5 mm ² (#12 AWG) (max) |
| Supply Terminals | Screw terminal Line, Neutral, Earth |
| Supply Terminal Conductor Size | 5 mm ² (#10 AWG) (max) |
| Output Terminals | 2 x screw terminal per channel Line In, Line Out |
| Output Terminal Conductor Size | 5 mm ² (#10 AWG) (max) |

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 |

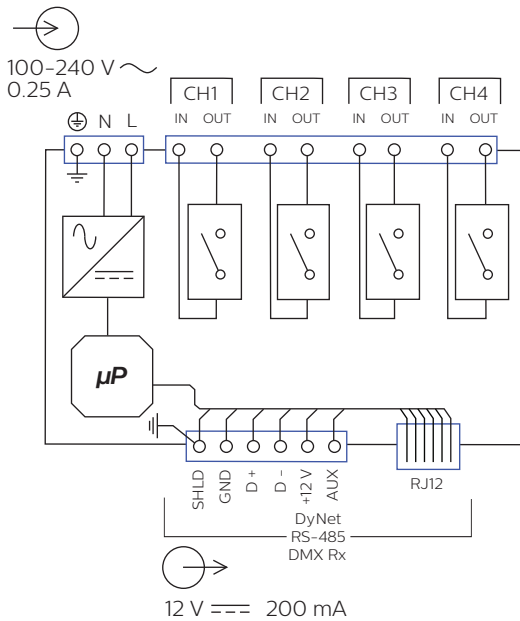
Compliance

| | |
|---------------|----------------------------------|
| Certification | CE, RCM, UL/cUL, FCC, UKCA, RoHS |
|---------------|----------------------------------|

* For indoor installation only



Electrical



Output Channel Ratings

| Load Type | Maximum Rating per Output* | |
|--------------------|--|---------------|
| | UL/cUL | CE |
| General Use | | |
| Incandescent | 16 A, 277 VAC | 20 A, 240 VAC |
| Standard Ballast | | |
| Electronic Ballast | 16 A, 277 VAC | |
| Motor | 16 FLA** (1 HP), 120 VAC 14.5 FLA** (2 ½ HP), 240 VAC 14.1 FLA** (3 HP), 277 VAC | |
| Inrush Current | 500 A | |
| Total Device Load | ≤ 64 A | ≤ 80 A |

* Note Maximum Device Load and Maximum CH-CH Voltage on Pg 3

**FLA: Full Load Amps

Ordering Code

Product

DDRC420FR

Philips 12NC

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