PHILIPS
dynalite

DDRC420FR

Relay Controller

DDRC420FR

Relay Controller

Robust control of switched loads

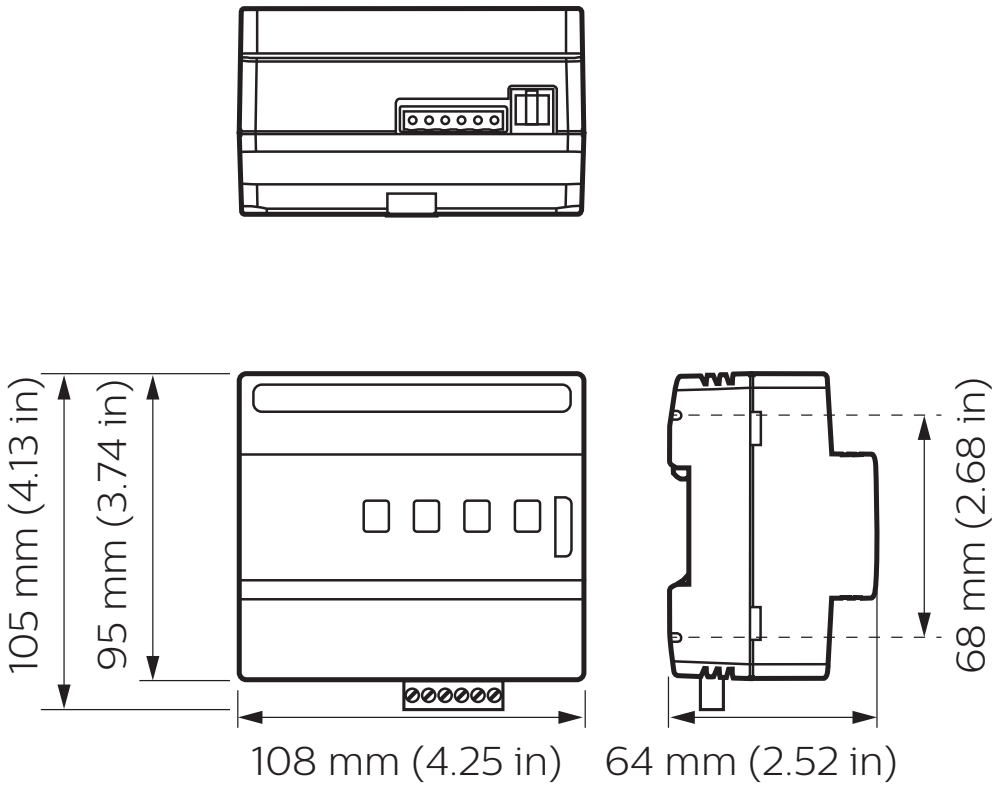
The Philips Dynalite DDRC420FR provides control of any type of switched load, including difficult lighting loads. This four channel device supports all types of switched loads up to 20 A inductive.

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.

DDRC420FR
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* XX = unpopulated channel (2x terminals) for isolation	480 VAC
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	200 mA (supply for approximately 10 user interfaces)
Overvoltage Category	III

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*

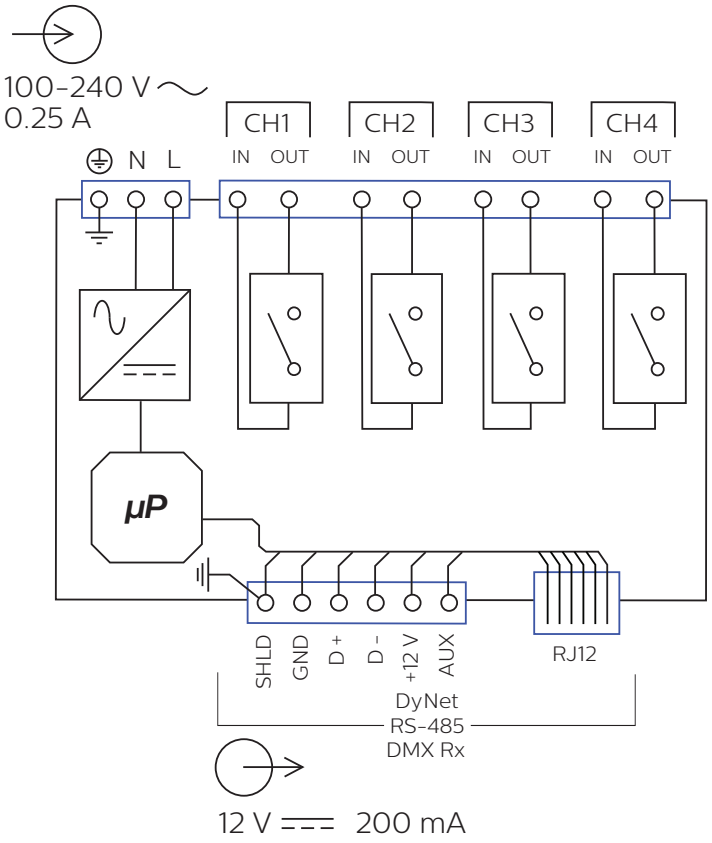
Operating Temperature	0° to 50°C ambient (32° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

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	Philips 12NC
DDRC420FR	913703244609