PHILIPS

dynalite

Relay Controllers

DDRC1220FR-GL

Relay Controller

Robust control of switched loads

The Philips Dynalite DDRC1220FR-GL provides control of multiple types of switched loads. This general-purpose 12 channel controller supports switched loads of up to 20 A per channel, up to a maximum device load of 180 A.
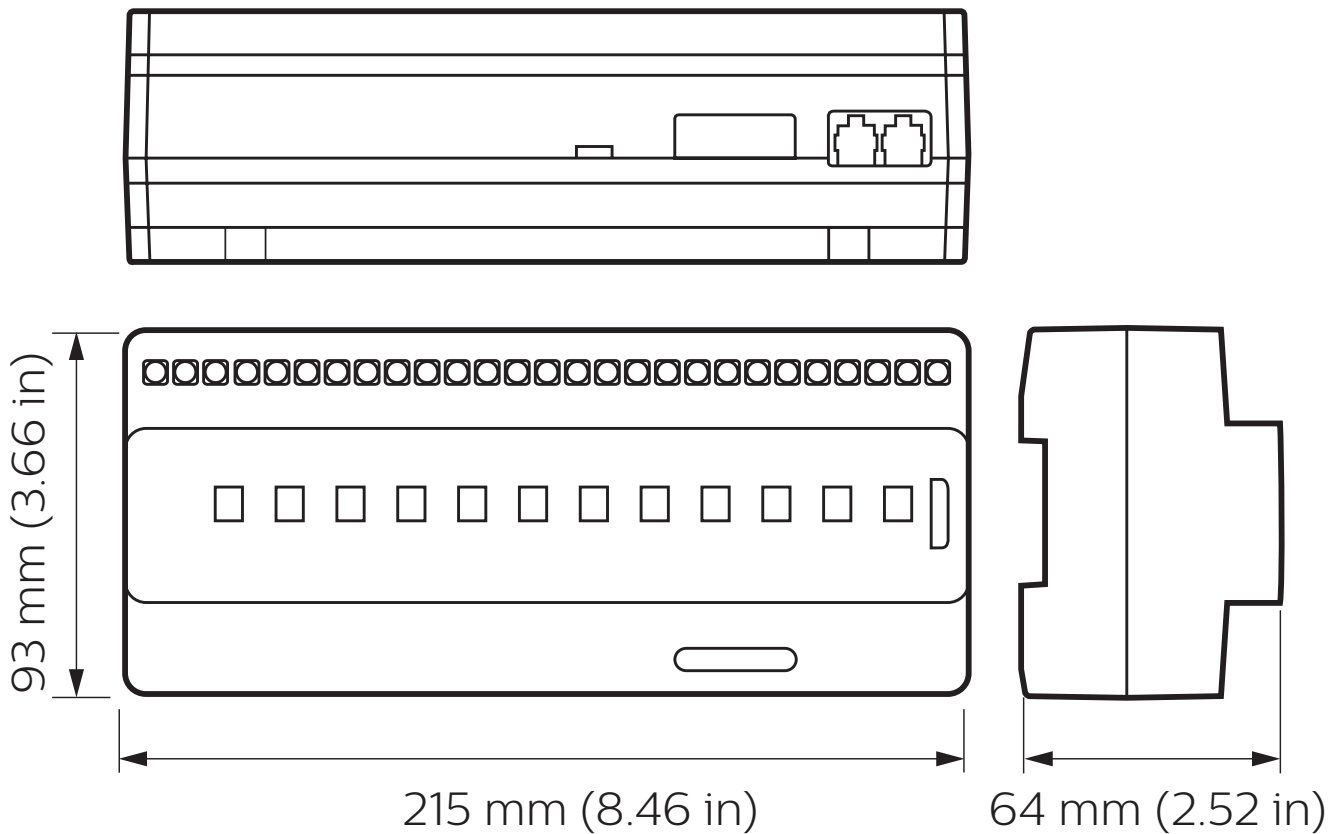
DDRC1220FR-GL

Robust control of switched loads

- **Feed-through power circuit design** – Electrically equivalent to a 12 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

93 mm (3.66 in)

215 mm (8.46 in)

64 mm (2.52 in)

Specifications

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

DDRC1220FR-GL
Relay Controller

Electrical

Supply Type	Single phase
Suppy Voltage	100-240 VAC
Supply Current	0.25 A
Outputs	12 x SPST feed-through relay with manual override
Output Channel Current	20 A (max)
Maximum Device Load	180 A
Maximum CH-CH Voltage	300 VAC (UL) 400 VAC (CE)
Output Channel Ratings	(See Load Table on Pg 4)
Supported Wiring Schemes	Single Phase and Neutral Three Phase and Neutral (Star)
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 RS-485
Supported Protocols	DyNet DMX Rx
DMX Rx Channels	12
Dry Contact Inputs	1 (AUX)
Diagnostic Functions	Device online/offline status
User Controls	1 x service switch Manual override switch for each channel
Indicators	1 x diagnostic LED

Physical

Dimensions (H x W x D)	93 x 215 x 64 mm (3.66 x 8.46 x 2.52 in)
Packed Weight	1.1 kg (2.43 lb)
Construction	Polycarbonate DIN rail enclosure (12 unit)
Serial Ports	2 x RJ12 1 x 6-way screw terminal SHLD, GND, D+, D-, +12V, AUX
Serial Port Conductor Size	2.5 mm^2 (#12 AWG) (max)
Supply Terminals	3 x screw terminal Line, Neutral, Earth
Supply Terminal Conductor Size	5 mm^2 (#10 AWG) (max)
Load Terminals	12 x 2-way screw terminal Line IN, Line OUT
Load Terminal Conductor Size	5 mm^2 (#10 AWG) (max)

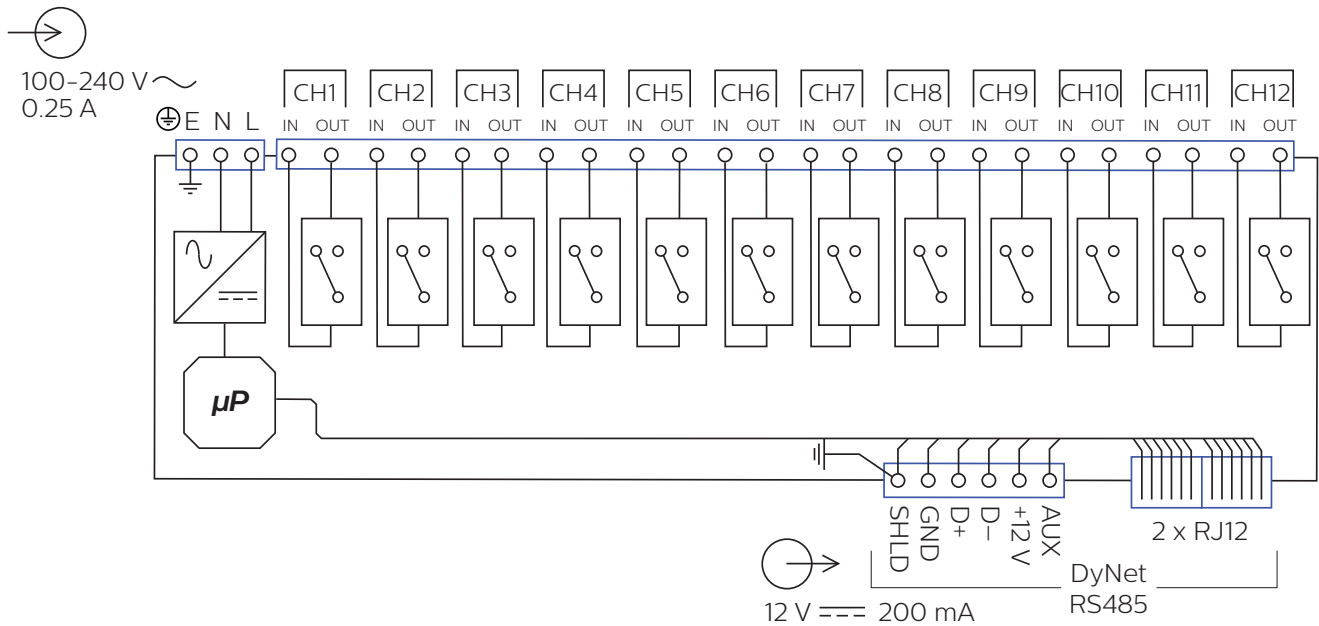## Environment

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, ICES-003, RoHS

Electrical

100-240 V ～
0.25 A

E N L
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT IN OUT

μP

SHLD GND D+ D− +12 V AUX

12 V === 200 mA

DyNet RS485

2 x RJ12

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	

* Note Maximum Device Load and Maximum CH–CH Voltage on Pg 3
**FLA: Full Load Amps

Ordering Code

Product	Philips 12NC
DDRC1220FR–GL	913703243009