

DDRC420FR

Four-Channel Relay Controller



Specification Sheet

Controllers > Relay Controllers



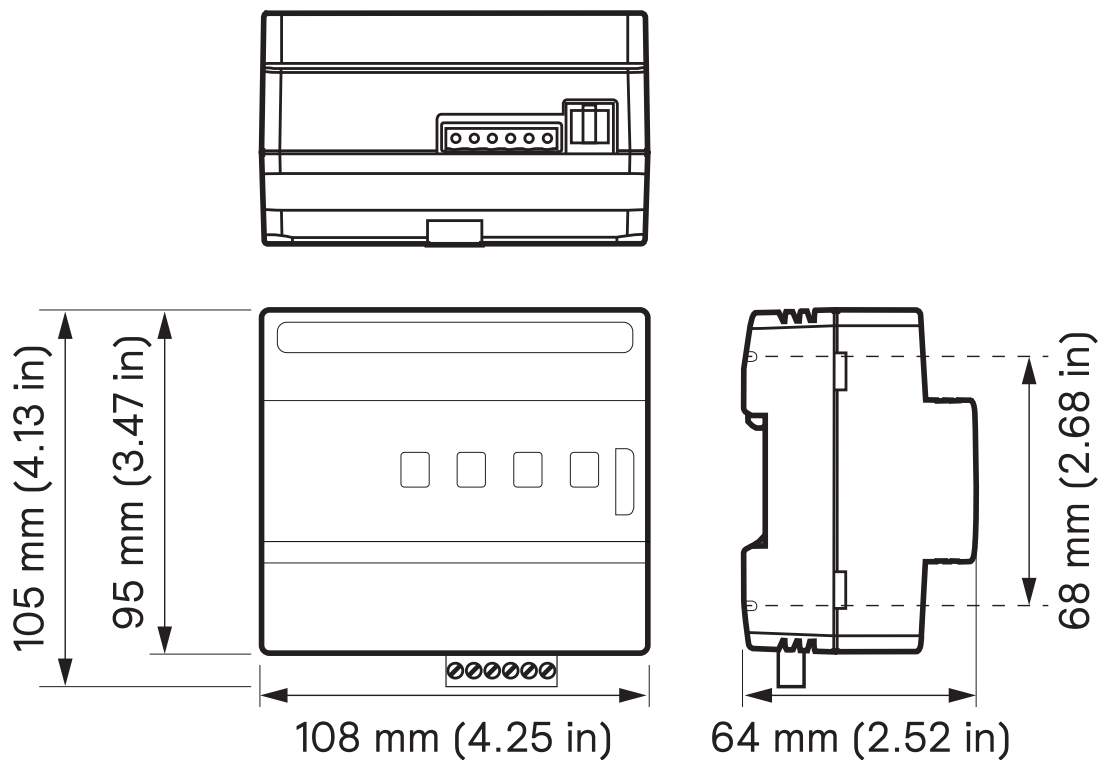
Robust control of switched loads

The Dynalite DDRC420FR provides control of any type of switched load, including difficult lighting loads, up to 20 A inductive.

Key Features

- **Feed-through power circuit design** – Electrically equivalent to 4 pole contactor, with the added advantage of each pole being separately controllable via the DyNet network.
- **Flexible mounting** – DIN rail mounting clips designed for installation into the distribution board supplying power to the controlled circuits.
- **Inbuilt diagnostic functionality** – Circuit run time tracking and device online/offline status.
- **Multiple wiring schemes supported** – Controls 'single phase and neutral' or 'three phase and neutral (star)' wiring configurations.
- **Hardware override** – Service override switch accessible on front panel.

Dimensions



Specifications

Electrical	
Supply Type	Single-phase
Supply Voltage	100-240 VAC
Supply Current	0.25 A
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	200 mA (approximately 10 user interfaces)
Outputs	4 x switched feed-through relay with manual override
Maximum CH-CH Voltage	300 VAC (UL) 400 VAC (CE)
Maximum CH-XX-CH Voltage	480 VAC XX = unpopulated channel for isolation See Installation Instructions for correct terminations for phase separation.
IEC Overvoltage Category	III

Control	
Communication Ports	1 x RS-485
Supported Protocols	DyNet DMX Rx
DMX Rx Channels	4
Dry Contact Inputs	1 (AUX)
User Controls	1 x service switch 4 x channel override switch
Indicators	1 x service LED
Diagnostic Functions	Device online/offline status Network Watchdog

Physical	
Dimensions	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	0.3-2.5 mm² (#22-12 AWG)
Output Terminals	2 x screw terminal per channel
Output Terminal Conductor Size	≤5 mm² (#10+ AWG)
Supply Terminals	3 x screw terminal
Supply Terminal Conductor Size	≤5 mm² (#10+ AWG)

Environment	
Operating Temperature	0° to 50°C ambient (32° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Relative Humidity	≤90% non-condensing
IEC Pollution Degree	II
Installation Note	For indoor installation only

Compliance	
Certifications	CE, RCM, UL/cUL, FCC, UKCA, RoHS



Output Channel Ratings

Load Type	UL/cUL
General Use	16 A, 277 VAC
Incandescent	16 A, 277 VAC
Standard Driver	16 A, 277 VAC
Electronic Driver	16 A, 277 VAC
Motor	16 FLA (1 HP) @ 120 VAC 14.5 FLA (2½ HP) @ 240 VAC 14.1 FLA (3 HP) @ 277 VAC
Inrush Current	500 A
Load Type	CE
General Use	20 A, 240 VAC
Incandescent	20 A, 240 VAC
Standard Driver	20 A, 240 VAC
Electronic Driver	16 A, 277 VAC
Motor	16 FLA (1 HP) @ 120 VAC 14.5 FLA (2½ HP) @ 240 VAC 14.1 FLA (3 HP) @ 277 VAC
Inrush Current	500 A

Policies and Notices

Specific Data Notice

This Specific Data Notice applies to the Controllers as specified in this product specification sheet (the "**Controller**") that is part of or works with a Professional System offered by Signify for use in the European Union and supplements and/or corrects the Generic Data Notice For Professional Systems and Services that can be found at <https://www.signify.com/global/resources/policies-announcements> (the "**Generic Data Notice**") by providing additional and/or more specific details specific to this Controller.

Terms starting with a capital in this Specific Data Notice will have the meaning as attributed thereto in the Generic Data Notice, unless explicitly defined otherwise in this document.

When used in a Signify professional lighting system in combination with a Dynalite Gateway with either the Dynalite Switch App, Dynalite System Builder, Dynalite System Manager, or Dynalite Cloud, the Controller can generate the Data as specified below:

- Operational Data: Lighting control commands based on the configured control logic in the product via the DyNet network
- Sensor Data: This product does not generate any sensor data.

The type and volume and format of Data that is generated depends on the actual devices connected to the Controller, the product and/or software configuration. For further details on data generation capabilities of such devices, please check the product specification sheets of such devices.

The Data generated in this combination is communicated via the network to the gateway and is stored on the gateway. If configured to do so, the gateway can forward the Data to Dynalite Cloud or to Dynalite System Manager. For applicable retention period and means of access to Data that is Readily Available Data, please refer to the Dynalite Cloud software specification sheet. Data cannot be accessed directly from the Controller. Data can be accessed from the Gateway using Dynalite System Builder or directly from any of the APIs of the Gateway. The Gateway will persist the Data for 28 days on a rolling basis.

This Specific Data Notice may be changed by Signify from time to time. The current version of this notice will apply and can be obtained at request via the point of contact as indicated in paragraph 7 of the Generic Data Notice.