

DDRC-GRMS-E

Multi-protocol Switching Room Controller



Specification Sheet

Controllers > Relay Controllers



Fully networked relay control solution

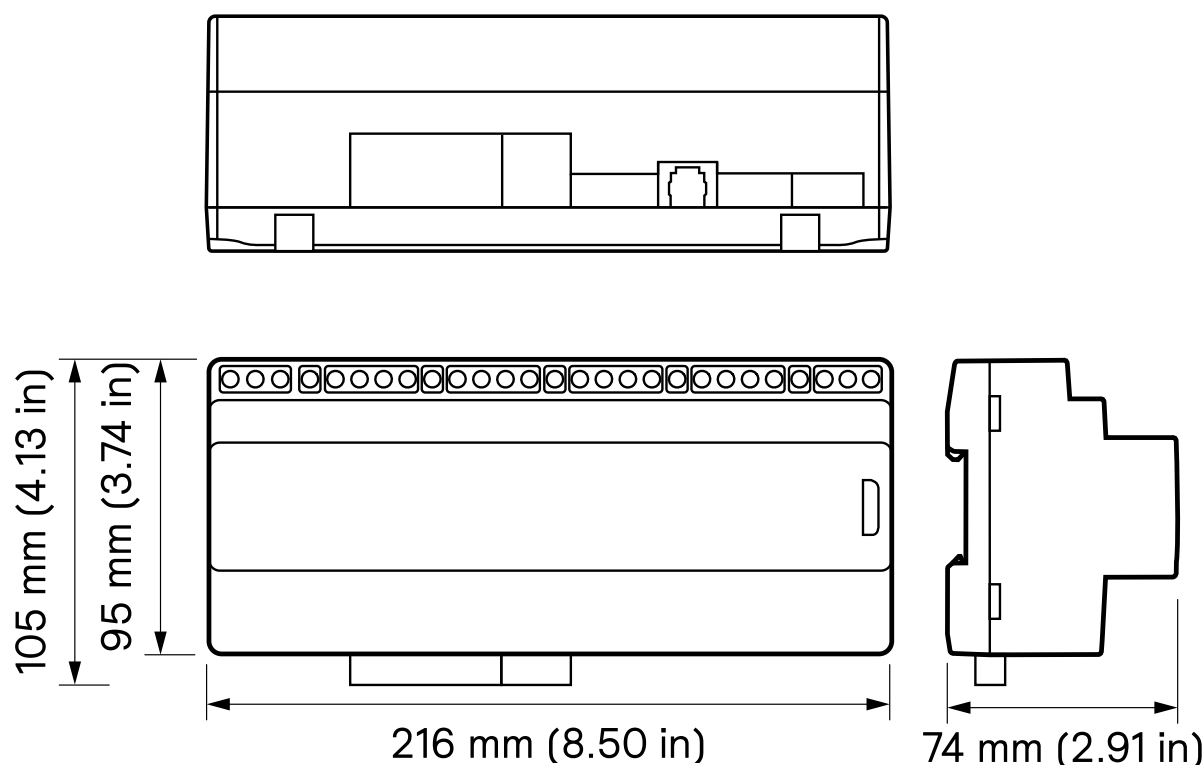
The Dynalite DDRC-GRMS-E controller is a compact, versatile room automation and energy management solution with bridging functionality between the Ethernet LAN and connected DyNet devices. Bespoke preconfiguration allows deployment without the need for commissioning software.

Incorporating switching relays and DMX for dimming and color control, every aspect of this device has been designed to be feature-rich and cost-effective.

Key Features

- **Single-box solution** - Compact design offers small installation footprint and reduced cabling for a simpler and faster installation.
- **Inbuilt Ethernet port** - Directly connecting to a site's Ethernet LAN, the device can securely report its status and pass network messages via the Dynalite PDDEG-S.
(Each PDDEG-S supports encrypted communication with up to 25 controllers)
- **Pre-programmed** - Can be preloaded with bespoke configuration to immediately meet the project's needs from the moment it powers up.
- **Powerful processor** - Can perform advanced scripted functions and provide automated intelligent responses to multiple inputs.
- **Mixture of switching relays** - Supports a combination of different relay ratings and types for the perfect blend of performance and cost-effectiveness.
- **18 dry contact inputs** - Provides simple integration with third-party devices and systems.
- **64 channel DMX output** - Adds colour and dimming control for dramatic lighting effects.
- **UL 924 input** - Integrates seamlessly with compatible emergency systems.
- **Four 12 V digital outputs** - Designed to drive room status indicator LEDs in common cathode configuration, and trigger additional devices such as doorbells.
- **300 mA DyNet output** - Directly power DyNet devices without the need for an additional network power supply.
- **Unique LAN addressing** - Two banks of DIP switches enable the installer to manually set the device's network identification.

Dimensions



Specifications

Electrical	
Supply Type	Single-phase (ALL inputs must be powered on the same phase)
Supply Voltage	100-240 VAC
Supply Current	0.25 A
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	300 mA
Digital Output Voltage	12 VDC
Digital Output Current	2 mA
Relay Outputs	13
Dry Contact / UL 924 Input Voltage	12 VDC max (SELV/Class 2) (no galvanic isolation on Dry Contact/UL 924 inputs)
Dry Contact / UL 924 Input Current	0.5 mA max
IEC Overvoltage Category	III

Control	
Communication Ports	1 x RS-485 1 x Ethernet (10/100 baseT) 1 x DMX
Supported Protocols	DyNet DMX Tx TCP/IP (TCP, UDP) IPv4 IPv6
DMX Tx Channels	64
Dry Contact Inputs	18
UL 924 Inputs	1
Digital Outputs	4
User Controls	1 x service switch 2 x 8-bit DIP switches
Indicators	1 x service LED 2 x Ethernet activity LED
Diagnostic Functions	Device online/offline status

Physical	
Dimensions	105 x 216 x 74 mm (4.13 x 3.74 x 2.91 in)
Packed Weight	0.67 kg (1.48 lb)
Construction	Polycarbonate DIN rail enclosure (12 unit)
Serial Ports	1 x 5-way pluggable screw terminal 1 x RJ45
Serial Port Conductor Size	0.3-2.5 mm² (#22-12 AWG)
Digital Outputs	1 x 5-way pluggable screw terminal
Digital Output Conductor Size	≤1.5 mm² (#16+ AWG)
DMX / UL 924 Outputs	1 x 5-way pluggable screw terminal
DMX / UL 924 Output Conductor Size	≤1.5 mm² (#16+ AWG)
Dry Contact Input Terminals	2 x 12-way pluggable screw terminal
Dry Contact Terminal Conductor Size	≤1.5 mm² (#16+ AWG)
Output Terminals	24 x screw terminal
Output Terminal Conductor Size	≤6 mm² (#10+ AWG)
Supply Terminals	3 x screw terminal
Supply Terminal Conductor Size	≤6 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

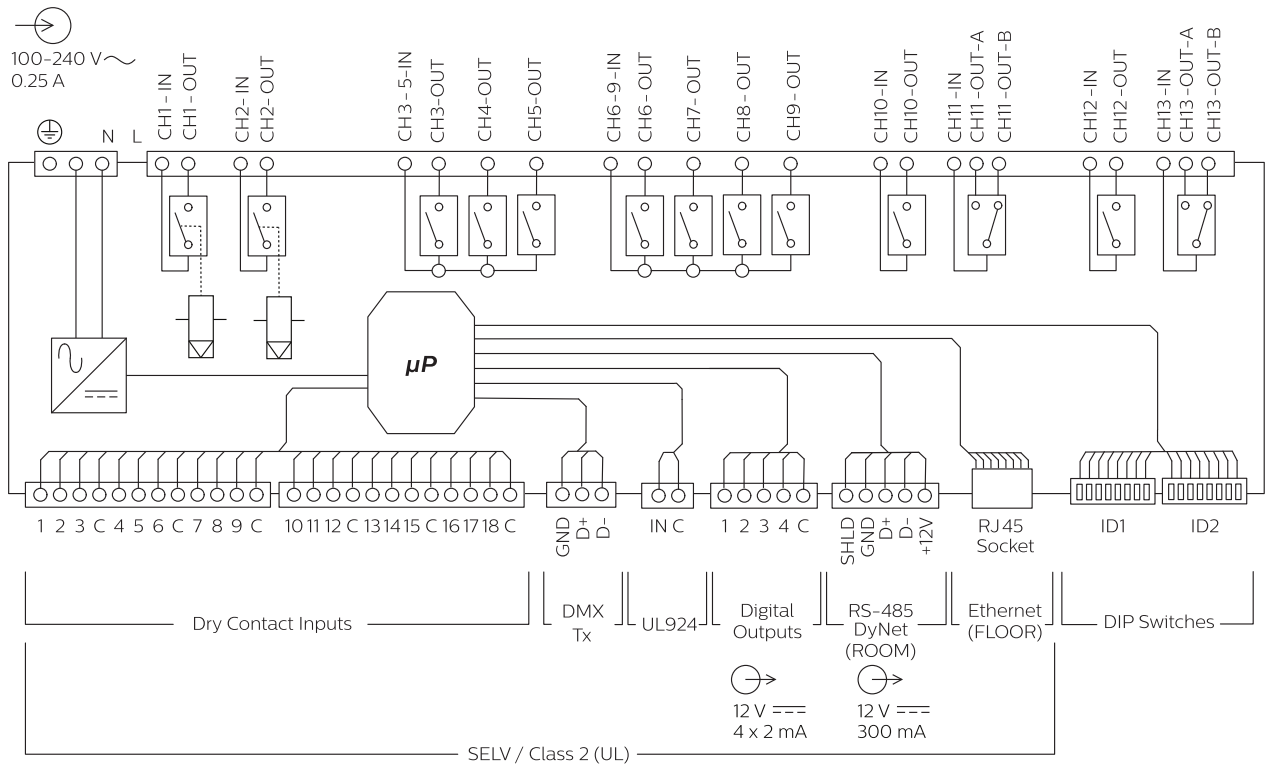
Compliance	
Certifications	CE, RCM, UL, FCC, ISED, UKCA, RoHS



Output Channel Ratings

Load Type	CH1-CH2
General Use	20 A, 240 VAC
Resistive	20 A, 240 VAC
Incandescent	15 A, 120 VAC, 6 A, 240 VAC
Electronic Driver	15 A, 120 VAC, 6 A, 240 VAC
Motor	9.8 FLA (½ HP) @ 120 VAC, 8 FLA (1 HP) @ 240 VAC
Inrush Current	320 A
TV Rating	TV-8, 240 VAC
Load Type	CH3-CH5, CH6-CH-9
General Use	4 A, 240 VAC
Resistive	4 A, 240 VAC
Incandescent	4 A, 240 VAC
Electronic Driver	2 A, 120 VAC, 0.8 A, 240 VAC
Inrush Current	60 A
TV Rating	TV-8, 120 VAC
Load Type	CH10, CH12
General Use	6 A, 240 VAC
Resistive	6 A, 240 VAC, 1 A, 24 VDC
Incandescent	4 A, 240 VAC
Electronic Driver	2 A, 120 VAC, 0.8 A, 240 VAC
Motor	5.2 FLA (⅓ HP) @ 120 VAC, 4.3 FLA (⅔ HP) @ 240 VAC
Inrush Current	60 A
TV Rating	TV-8, 120 VAC
Load Type	CH11, CH13
General Use	6 A, 240 VAC
Resistive	6 A, 240 VAC, 1 A, 24 VDC
Incandescent	4 A, 240 VAC
Electronic Driver	2 A, 120 VAC, 0.8 A, 240 VAC
Motor	5.2 FLA (⅓ HP) @ 120 VAC, 4.3 FLA (⅔ HP) @ 240 VAC
Inrush Current	90 A
TV Rating	TV-5, 240 VAC
Load Type	CH11B, CH13B
General Use	6 A, 240 VAC
Resistive	6 A, 240 VAC, 1 A, 24 VDC
Maximum Group Load	
CH3-CH5	Continuous Current: 6 A
CH6-CH9	Continuous Current: 6 A
Total Device Load	
≤ 76 A	

Electrical Drawing



Ordering Codes

Product	12NC
DDRC-GRMS-E	913703334009

Policies and Notices

Specific Data Notice

This Specific Data Notice applies to the Room Controller as specified in this product specification sheet (the "**Room 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 Room 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 Room Controller can generate the Data as specified below:

- Lighting control commands and Room status messages based on the events or control logic configured

The type and volume and format of Data that is generated depends on the actual devices connected, 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 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.