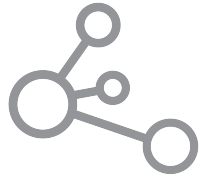**smartscape**

connected lighting systems

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DDRC-GRMS-E

Multi-protocol Switching Room Controller

Fully networked relay control solution

The Philips 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 pre-configuration 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.
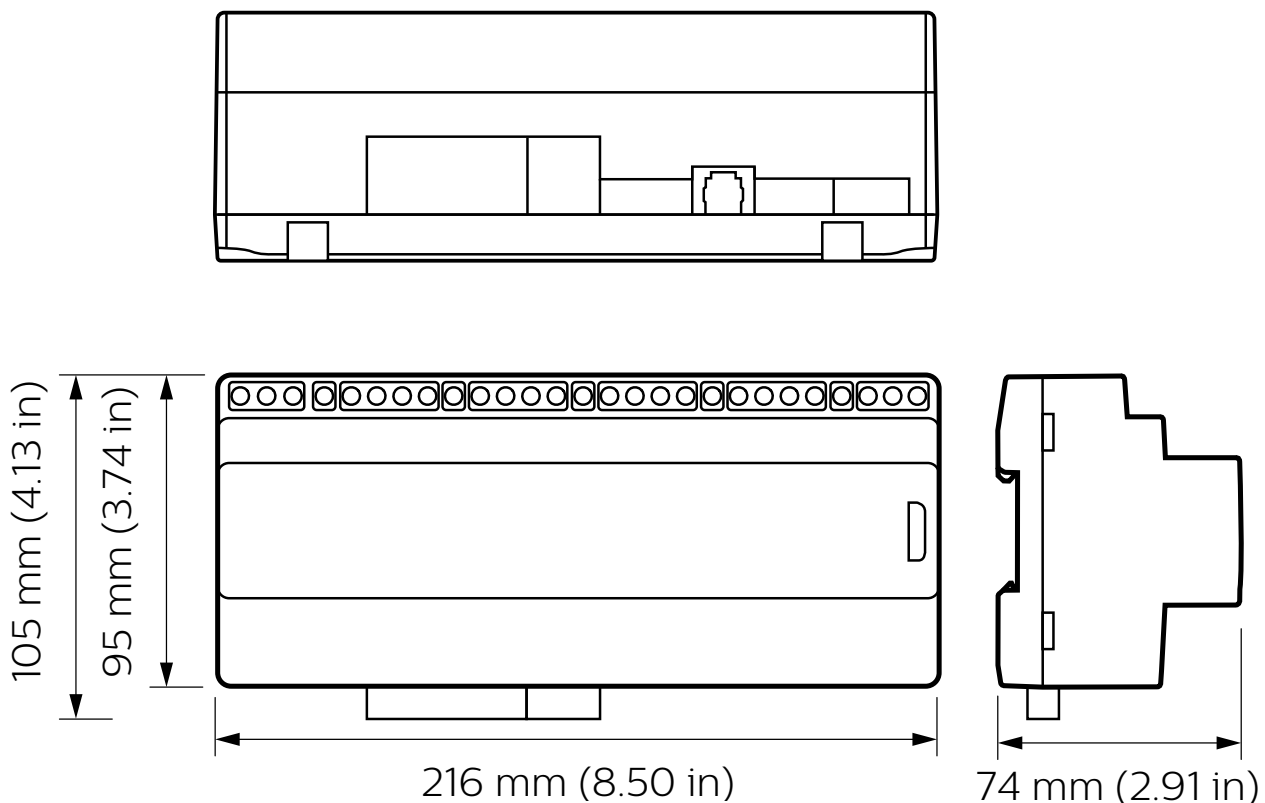
DDRC-GRMS-E

Room controller and Ethernet bridge in one compact device

- **Single box solution** – Compact design allows for 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*.

- **Pre-programmed** – Can be preloaded with a bespoke configuration to immediately meet the project's needs from the moment it powers up.

- **Powerful processor –** The internal processor allows the device to 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 a perfect blend of performance and cost-effectiveness.

- **18 dry contact inputs** – Allows simple integration with third-party devices and systems.

- **64 channel DMX output** – Adds color and dimming control for a touch of theatrics.

- **UL924 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 support the requirements of DyNet devices without the need for an additional network power supply.

- **Unique LAN addressing** – Two banks of DIP switches allow the installer to manually set the device's network identification.

* Each PDDEG-S supports encrypted communication with up to 25 controllers.

Dimensions

105 mm (4.13 in)

95 mm (3.74 in)

216 mm (8.50 in)

74 mm (2.91 in)

Smartscape Connected Lighting Systems   PH:07 3357 1922   info@ssqld.com.au   www.ssqld.com.au

Specifications

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

DDRC-GRMS-E
Multi-protocol Switching Room Controller

Electrical

Supply Type	Single-phase*
Supply Voltage	100-240 VAC
Supply Current	0.25 A
Outputs	13 x switched outputs (See diagram below)
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	300 mA
Digital Output Voltage	12 VDC
Digital Output Current	2 mA
Dry Contact / UL924 Input Voltage**	12 VDC (max)
Dry Contact / UL924 Input Current**	0.5 mA (max)
IEC Overvoltage Category	III

Control

Serial Ports	1 x RS485 1 x Ethernet (10/100 baseT) 1 x DMX
Supported Protocols	DyNet DMX Tx TCP/IP (TCP, UDP), IPv4, IPv6
Dry Contact Inputs	18
DMX Tx Channels	64
UL924 Inputs	1
Digital Outputs	4
Diagnostic Functions	Device online/offline status
User Controls	1 x service switch 2 x 8-bit DIP switches
Indicators	1 x service LED 2 x Ethernet activity LED

Physical

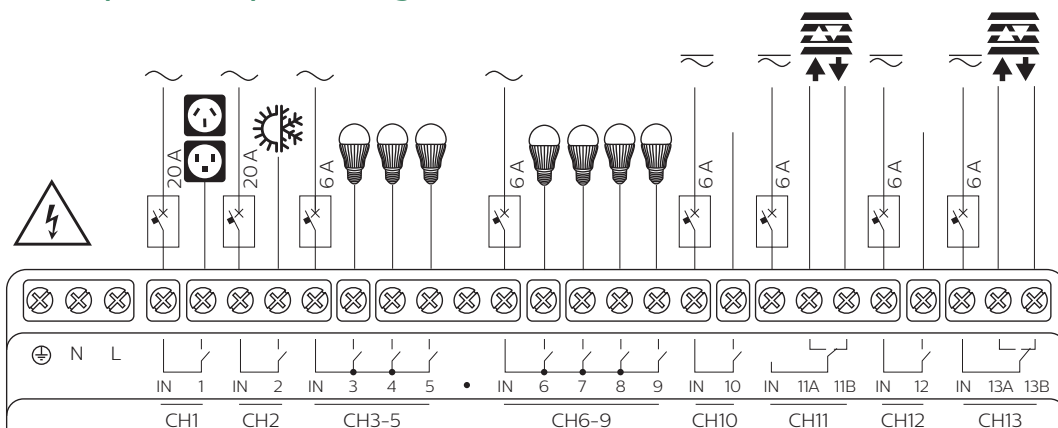|	
Dimensions (H x W x D)	105 x 216 x 74 mm (4.13 x 3.74 x 2.91 in)
Packed Weight	0.67 kg (1.48 lb)
Construction	Polycarbonate DIN-rail enclosure (12 unit)
Serial Ports	1 x 5-way pluggable screw terminal 1 x RJ45
Serial Port Conductor Size	2.5 mm² (#12 AWG) (max)
Digital Outputs	1 x 5-way pluggable screw terminal
DMX/UL924	1 x 5-way pluggable screw terminal (3/2)
Dry Contact Input Terminals	2 x 12-way pluggable screw terminal
Digital Output, DMX/UL924, Dry Contact Input Terminal Conductor Size	1.5 mm² (#16 AWG) (max)
Supply Terminals	3 x screw terminal Line, Neutral, Earth
Supply Terminal Conductor Size	6 mm² (#10 AWG) (max)
Output Terminals	24 x screw terminal
Output Terminal Conductor Size	6 mm² (#10 AWG) (max)

Environment***

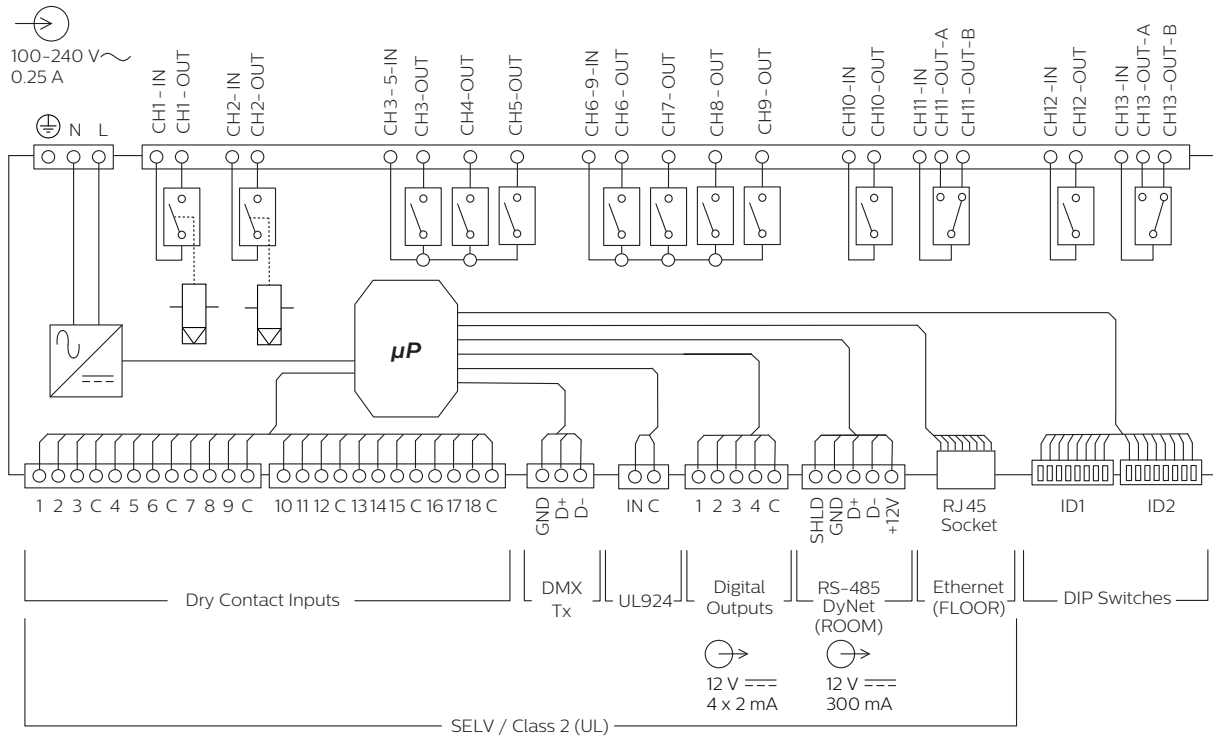|	
Operating Temperature	0° to 50°C ambient (32° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

Compliance

Certification	CE, RCM, UL, FCC, ICES, UKCA, RoHS

*** For indoor installation only

* **NOTE:** ALL inputs must be powered on the same phase.
** SELV/Class 2, no galvanic isolation on Dry Contact/UL924 inputs

Example Output Diagram

100–240 V~
0.25 A

N L

CH1–IN CH1–OUT CH2–IN CH2–OUT CH3–5–IN CH3–OUT CH4–OUT CH5–OUT CH6–9–IN CH6–OUT CH7–OUT CH8–OUT CH9–OUT CH10–IN CH10–OUT CH11–IN CH11–OUT–A CH11–OUT–B CH12–IN CH12–OUT CH13–IN CH13–OUT–A CH13–OUT–B

µP

1 2 3 C 4 5 6 C 7 8 9 C 10 11 12 C 13 14 15 C 16 17 18 C | GND D+ D– | IN C | 1 2 3 4 C | SHLD GND D+ D– +12V | RJ45 Socket | ID1 ID2

Dry Contact Inputs | DMX Tx | UL924 | Digital Outputs | RS–485 DyNet (ROOM) | Ethernet (FLOOR) | DIP Switches

12 V === 4 x 2 mA
12 V === 300 mA

SELV / Class 2 (UL)

Output Channel Ratings

Load Type	Maximum Rating per Output				
	CH1, CH2	CH3 - CH5 CH6 - CH9	CH10, CH12	CH11A, CH13A	CH11B, CH13B
General Use	20 A, 240 VAC	4 A, 240 VAC	6 A, 240 VAC	6 A, 240 VAC	6 A, 240 VAC
Resistive	20 A, 240 VAC	4 A, 240 VAC	6 A, 240 VAC 1 A, 24 VDC	6 A, 240 VAC 1 A, 24 VDC	6 A, 240 VAC 1A, 24 VDC
Incandescent	15 A, 120 VAC 6 A, 240 VAC	4 A, 240 VAC	4 A, 240 VAC	4 A, 240 VAC	X
Electronic Ballast	15 A, 120 VAC 6 A, 240 VAC	2 A, 120 VAC 0.8 A, 240 VAC	2 A, 120 VAC 0.8 A, 240 VAC	2 A, 120 VAC 0.8 A, 240 VAC	X
Motor	9.8 FLA (½ HP), 120 VAC 8 FLA (1 HP), 240 VAC	X	5.2 FLA (⅕ HP), 120 VAC 4.3 FLA (⅖ HP), 240 VAC	5.2 FLA (⅕ HP), 120 VAC 4.3 FLA (⅖ HP), 240 VAC	X
TV Rating	TV-8, 240 VAC	TV-8, 120 VAC	TV-8, 120 VAC	TV-5, 240 VAC	X
Inrush Current	320 A	60 A	60 A	90 A	X

Maximum Group Load	CH3 - CH5	CH6 - CH9	DEVICE TOTAL
	6 A	6 A	76 A

Ordering Code

Product	Philips 12NC
DDRC-GRMS-E	913703334009

PHILIPS

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