



# DMC2

Multipurpose Modular Controller

Control different load types with one device

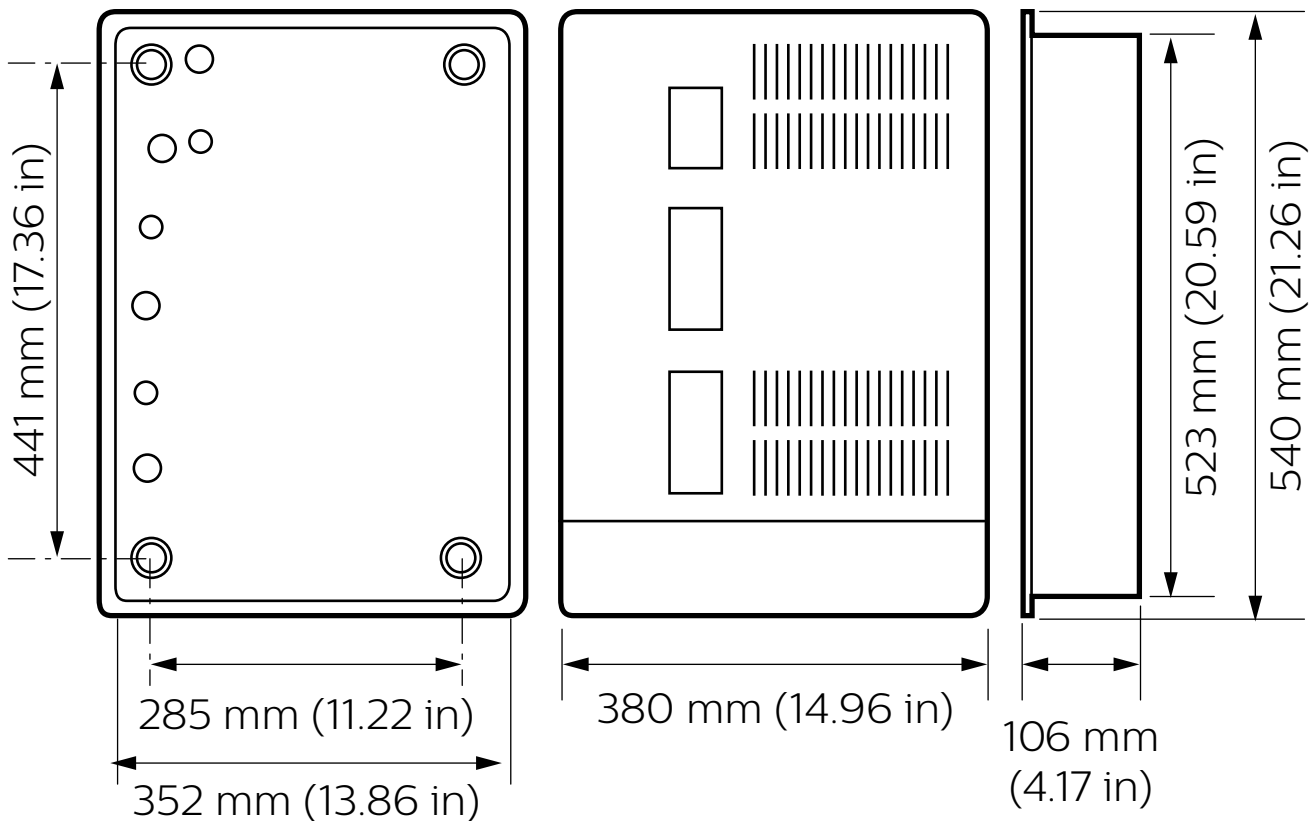
The Philips Dynalite DMC2 provides multichannel control via two interchangeable output modules. The device is available with a variety of control modules to handle various load types and capacities.

# DMC2

## Control different load types with one device

- **Single controller solution** – Control a multitude of load types from one device, suited to any segment requiring lighting or relay control.
- **Phase-cut dimming module** – Selectable per channel for leading or trailing edge output. Compatible with most dimming loads.
- **Signal dimming module** – Suitable for controlling 1-10 V, DSI, DALI Broadcast and DALI Addressable drivers. Built-in relays remove power when channel level is at 0%.
- **Relay control module** – Suitable for controlling most types of switched loads.
- **Flexible mounting solution** – Surface or recess mountable enclosure.
- **Passive cooling** – Fanless design reduces noise, power consumption and maintenance costs.

## Dimensions



# Specifications

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



## DMC2 Multipurpose Modular Controller

### Enclosure

Dimensions (H x W x D)	540 x 380 x 106 mm (21.26 x 14.96 x 4.17 in)
Packed Weight	8.9 kg (19.62 lb) (enclosure only)
Construction	Galvanized steel enclosure Powder-coated front covers
Output Module Bays	2
Mains/Output Cable Entry**	15 x Ø 28.2 mm (1.11 in) knockout 12 x Ø 22.2 mm (0.87 in) knockout
Data Cable Entry**	2 x Ø 28.2 mm (1.11 in) knockout

### Environment\*

Operating Temperature	0° to 40°C ambient (32° to 104°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

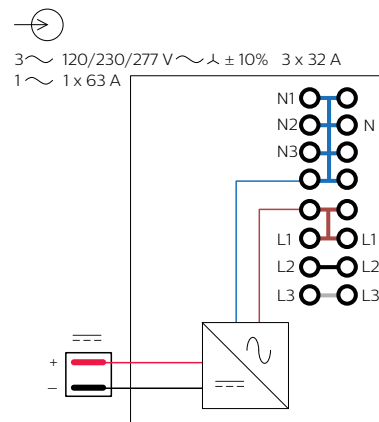
### Compliance

Certification	CE, RCM, UL/cUL, FCC, ICES, UKCA, RoHS
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\* For indoor installation only

## Supply Module - DSM2

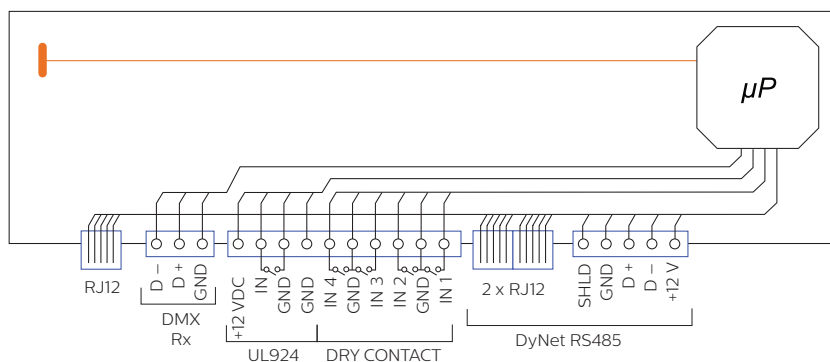
Supply Type	Single-phase Three-phase, four wire (Δ)
Single-Phase Supply	120/230/277 VAC @ 63 A
Three-Phase Voltage	120/230/277 VAC (±10%) @ 32 A/phase
Supply Terminals	4 x screw terminal Line 1, Line 2, Line 3, Neutral (Earth link bar provided)
Supply Terminal Conductor Size	16 mm <sup>2</sup> (#6 AWG) (max)
IEC Overvoltage Category	III



## Communication Module - DCM-DyNet

Serial Ports	1 x RS-485 1 x DMX Rx 1 x UL924*
Supported Protocols	DyNet DyNet2
DyNet DC Output Voltage	12/24 VDC
DyNet DC Output Current	200 mA
User Controls	1 x service switch 1 x channel override keypad
Indicators	1 x service LED

RS-485 Terminals	3 x RJ12 1 x 5-way pluggable screw terminal
DMX Rx Channels	512 (max)
DMX Terminal	1 x 3-way pluggable screw terminal
Dry Contact Inputs + UL924*	4 + 1
Dry Contact + UL924* Terminal	1 x 10-way pluggable screw terminal
Terminal Conductor Size	4 mm <sup>2</sup> (#11 AWG) (max)

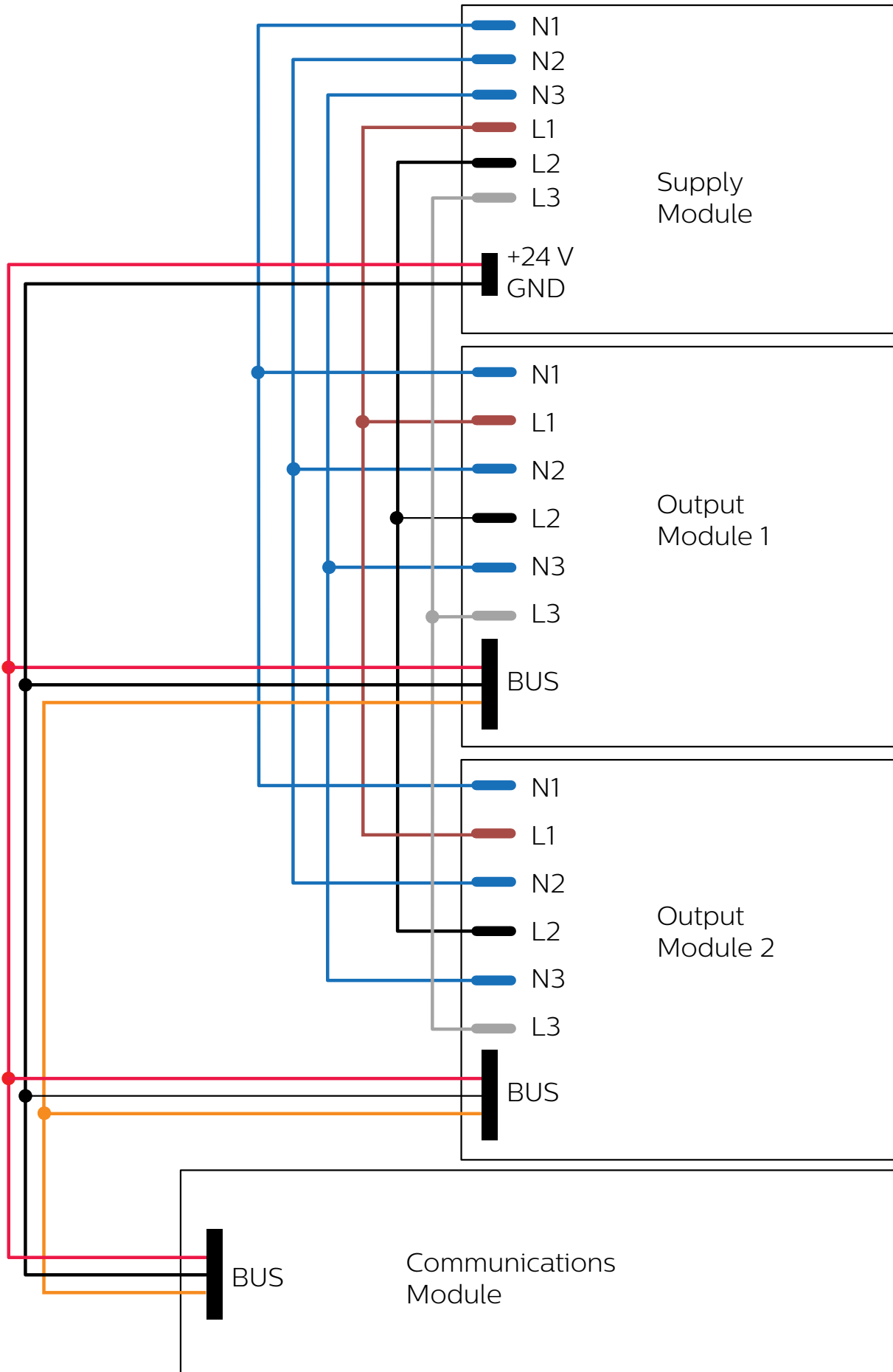


\* This function must only be used with systems complying to UL924, and must not be used with any other system.

\*\* Ø 35 mm (1.38 in) knockout is suitable for 1 inch conduit  
Ø 28.2 mm (1.11 in) knockout is suitable for ¾ inch conduit



# Electrical



# Signal Dimming Control Modules

## DMD310, DMD316

Module Type	Signal dimming control
Control Channel Outputs	3 (DALI Addressable, DALI Broadcast, DSI, 1-10 V)
Switched Outputs	3
Packed Weight	1.8 kg (3.97 lb)

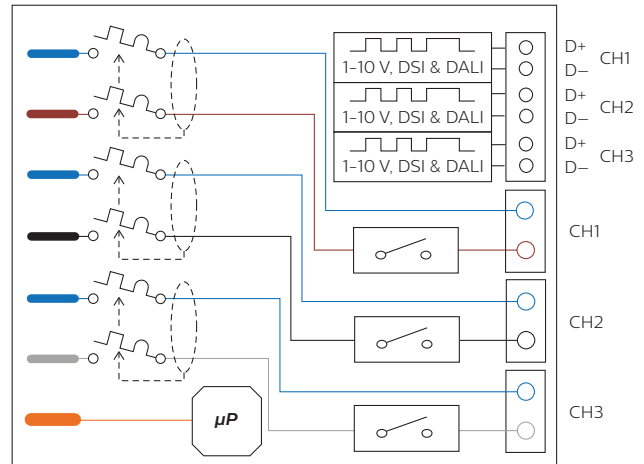
### Electrical Protection

DMD310-CE	3 x 10 A dual pole C-curve circuit breaker (IEC approved)
DMD316-CE	3 x 16 A dual pole C-curve circuit breaker (IEC approved)
DMD310-RCBO-CE	3 x 10 A C-curve RCBO (IEC approved)
DMD316-RCBO-CE	3 x 16 A C-curve RCBO (IEC approved)
DMD316-UL	3 x 20 A dual pole C-curve circuit breaker (UL489 listed)

### Control Channel Output Capacity

DALI/DSI*	Channel	Device
Guaranteed Current	130 mA	
Maximum Current	190 mA	
Maximum Drivers	64	192
Insulation	Basic	
1-10 V		
Channel		
Current	sink 50 mA source 50 mA	

\* Supports Class 1 / Class 2 wiring



### Switched Output Ratings

Load Type	Maximum Rating per Output	
	DMD310	DMD316
Incandescent		
Magnetic with Halogen	10 A, 277 VAC	16 A, 277 VAC
Electronic Driver		
Inrush Current	500 A	
Maximum Module Load	30 A	48 A

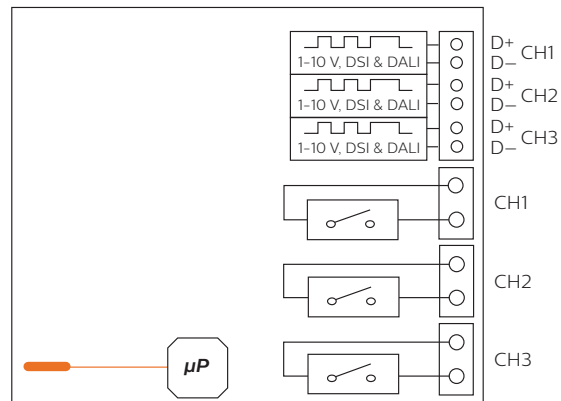
## DMD316FR-UL

Module Type	Signal dimming control
Control Channel Outputs	3 (DALI Addressable, DALI Broadcast, DSI, 1-10 V)
Switched Outputs	3 x 16 A feed-through
Packed Weight	1.8 kg (3.97 lb)

### Control Channel Output Capacity

DALI/DSI*	Channel	Device
Guaranteed Current	150 mA	
Maximum Current	250 mA	
Maximum Drivers	64	192
Insulation	Basic	
1-10 V		
Channel		
Current	sink 50 mA source 50 mA	

\* Supports Class 1 / Class 2 wiring



### Switched Output Ratings

Load Type	Maximum Rating per Output	
	CH1-CH3 (UL)	CH1-CH3 (CSA)
General Use	20 A, 300 VAC	20 A, 347 VAC
Incandescent	20 A, 120 VAC	
Magnetic with Halogen	20 A, 347 VAC	
Electronic Driver	16 A, 347 VAC	
Motor	9.8 FLA (½ HP), 110-125 VAC 10 FLA (1½ HP), 220/277 VAC	
Maximum Module Load	48 A	

# Phase-Cut Dimming Control Modules

## DMP310GL

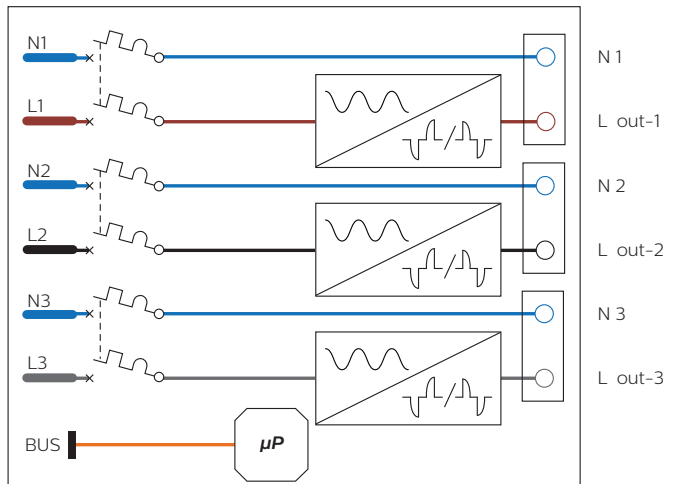
Module Type	Phase-cut dimming control
Output Channels	3 x Leading/Trailing Edge Dimming
Maximum Module Load	14 A
Output Terminal Conductor Size	6 x 16 mm <sup>2</sup> (#6 AWG) (max)
Packed Weight	2.1 kg (4.63 lb)

### Electrical Protection

DMP310GL-CE	3 x 10 A dual pole C-curve circuit breaker (IEC approved)
DMP310GL-RCBO-CE	3 x 10 A C-curve RCBO (IEC approved)
DMP310GL-UL	3 x 20 A dual pole C-curve circuit breaker (UL489 listed)

### Output Ratings/Channel (CH)

Load Type	Operating Mode	120 / 240 VAC	277 VAC
Incandescent	Leading / Trailing Edge		
Magnetic with Halogen	Leading Edge	10 A	4.3 A
Electronic Driver	Trailing Edge		



## DMP603GL

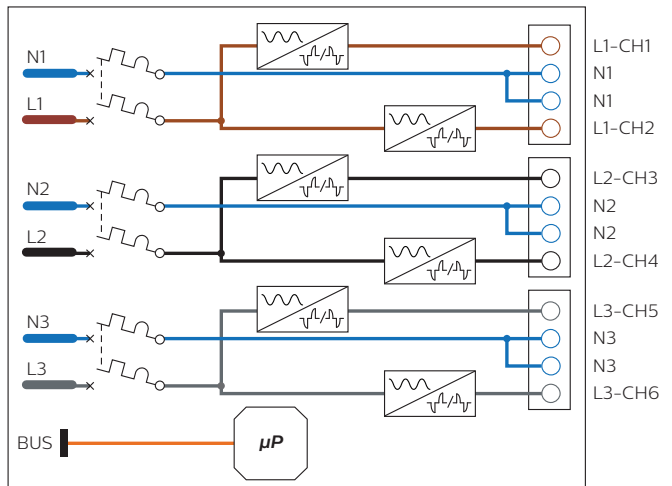
Module Type	Phase-cut dimming control
Output Channels	6 x Leading/Trailing Edge Dimming
Maximum Module Load	16 A
Output Terminal Conductor Size	12 x 6 mm <sup>2</sup> (#10 AWG) (max)
Packed Weight	2.3 kg (5.07 lb)

### Electrical Protection

DMP603GL-CE	6 x 10 A dual pole C-curve circuit breaker (IEC approved)
DMP603GL-RCBO-CE	6 x 10 A C-curve RCBO (IEC approved)
DMP603GL-UL	6 x 20 A dual pole C-curve circuit breaker (UL489 listed)

### Output Ratings/Channel (CH)

Load Type	Operating Mode	120 / 240 VAC	277 VAC
Incandescent	Leading / Trailing Edge		
Magnetic with Halogen	Leading Edge	3 A	1.7 A
Electronic Driver	Trailing Edge		



## DMP116

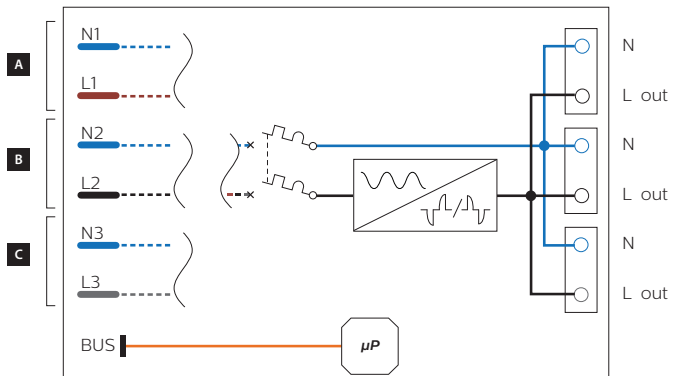
Module Type	Phase-cut dimming control
Output Channels	1 x Leading/Trailing Edge Dimming
Maximum Module Load	16 A
Output Terminal Conductor Size	12 x 6 mm <sup>2</sup> (#10 AWG) (max)
Packed Weight	2.1 kg (4.63 lb)

### Electrical Protection

DMP116	1 x 20 A dual pole C-curve circuit breaker (UL489 listed)
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### Output Ratings/Channel (CH)

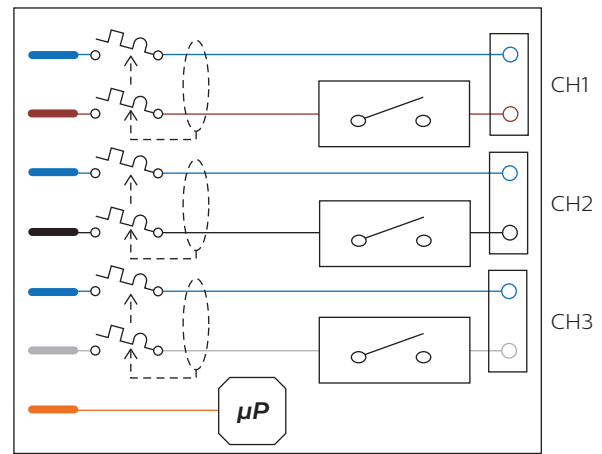
Load Type	Operating Mode	120 / 240 VAC	277 VAC
Incandescent	Leading / Trailing Edge		
Magnetic with Halogen	Leading Edge	16 A	10 A
Electronic Driver	Trailing Edge		



# Relay Control Modules

## DMR310, DMR316

Module Type	Relay control
Switched Outputs	3
Output Terminal Conductor Size	6 x 6 mm <sup>2</sup> (#10 AWG) (max)
Packed Weight	1.7 kg (3.75 lb)
<b>Electrical Protection</b>	
DMR310-CE	3 x 10 A dual pole C-curve circuit breaker (IEC approved)
DMR316-CE	3 x 16 A dual pole C-curve circuit breaker (IEC approved)
DMR310-RCBO-CE	3 x 10 A C-curve RCBO (IEC approved)
DMR316-RCBO-CE	3 x 16 A C-curve RCBO (IEC approved)
DMR316-UL	3 x 20 A dual pole C-curve circuit breaker (UL489 listed)

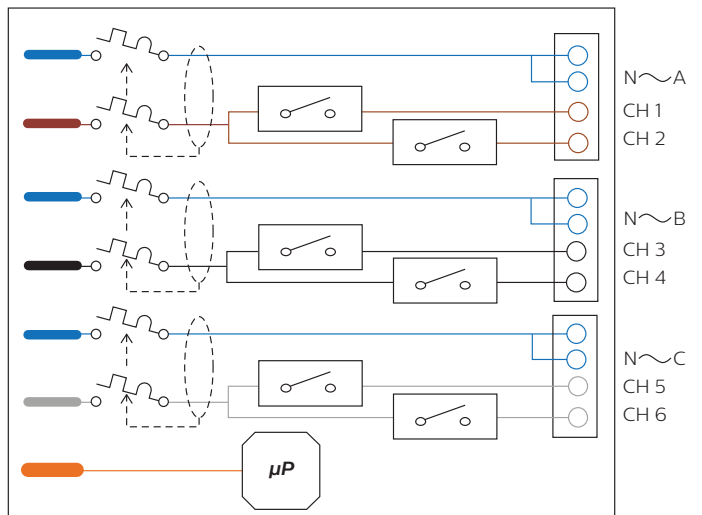


### Switched Output Ratings

Load Type	Maximum Rating per Output	
	DMR310	DMR316
Incandescent		
Magnetic with Halogen	10 A, 277 VAC	16 A, 277 VAC
Electronic Driver		
Motor	9.8 FLA (½ HP) 120 VAC 10 FLA (1 ½ HP) 230/277 VAC	16 FLA (½ HP) 120 VAC 12 FLA (1 ½ HP) 230/277 VAC
Inrush Current	500 A	
Maximum Module Load	30 A	48 A

## DMR610GL

Module Type	Relay control
Switched Outputs	6
Maximum Module Load	30 A
Output Terminal Conductor Size	12 x 16 mm <sup>2</sup> (#6 AWG) (max)
Packed Weight	1.9 kg (4.19 lb)
<b>Electrical Protection</b>	
DMR610GL-CE	6 x 16 A dual pole C-curve circuit breaker (IEC approved)
DMR610GL-RCBO-CE	6 x 16 A C-curve RCBO (IEC approved)
DMR610GL-UL	6 x 20 A dual pole C-curve circuit breaker (UL489 listed)



### Switched Output Ratings

Load Type	Maximum Rating per Output
Incandescent	
Magnetic with Halogen	10 A, 277 VAC
Electronic Driver	
Motor	9.8 FLA (½ HP) 120 VAC 10 FLA (1 ½ HP) 230/277 VAC
Inrush Current	500 A
CH1-CH2, CH3-CH4, CH5-CH6	
Maximum Group Load	10 A

## Ordering Codes

Product	Philips 12NC
DMC2-CE*	913703666109
DMC2-UL	913703666009

### Accessories

DINGUS-DMC-UL (dual RJ45 connector - pack of 10)	913703064209
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### Modules

DSM2* (DMC2 Supply module)	913703500509
DCM-DyNet* (DyNet Comms module)	913703666209
DMD310-CE* (3 x 10 A Signal dimmer control)	913703666609
DMD310-RCBO-CE* (3 x 10 A Signal dimmer control)	913703667109
DMD316-CE* (3 x 16 A Signal dimmer control)	913703666709
DMD316-RCBO-CE* (3 x 16 A Signal dimmer control)	913703667209
DMD316-UL (3 x 16 A Signal dimmer control)	913703667509
DMD316FR-UL (3 x 16 A Signal dimmer control)	913703668709
DMR310-CE* (3 x 10 A Relay control)	913703666409
DMR310-RCBO-CE* (3 x 10 A Relay control)	913703666909
DMR316-CE* (3 x 16 A Relay control)	913703666509
DMR316-RCBO-CE* (3 x 16 A Relay control)	913703667009
DMR316-UL (3 x 16 A Relay control)	913703667409
DMR610GL-CE* (6 x 10 A Relay control)	913703668209
DMR610GL-RCBO-CE* (6 x 10 A Relay control)	913703668309
DMR610GL-UL (6 x 10 A Relay control)	913703668109
DMP310GL-CE* (3 x 10 A Phase cut dimmer)	93703666809
DMP310GL-RCBO-CE* (3 x 10 A Phase cut dimmer)	913703667309
DMP310GL-UL (3 x 10 A Phase cut dimmer)	913703667609
DMP603GL-CE* (6 x 3 A Phase cut dimmer)	913703668509
DMP603GL-RCBO-CE* (6 x 3 A Phase cut dimmer)	913703668609
DMP116* (1 x 16 A Phase cut dimmer)	913703348309

\* Also suitable for UKCA markets.



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