



DMC2

Multipurpose Modular Controller

Control different load types with one device

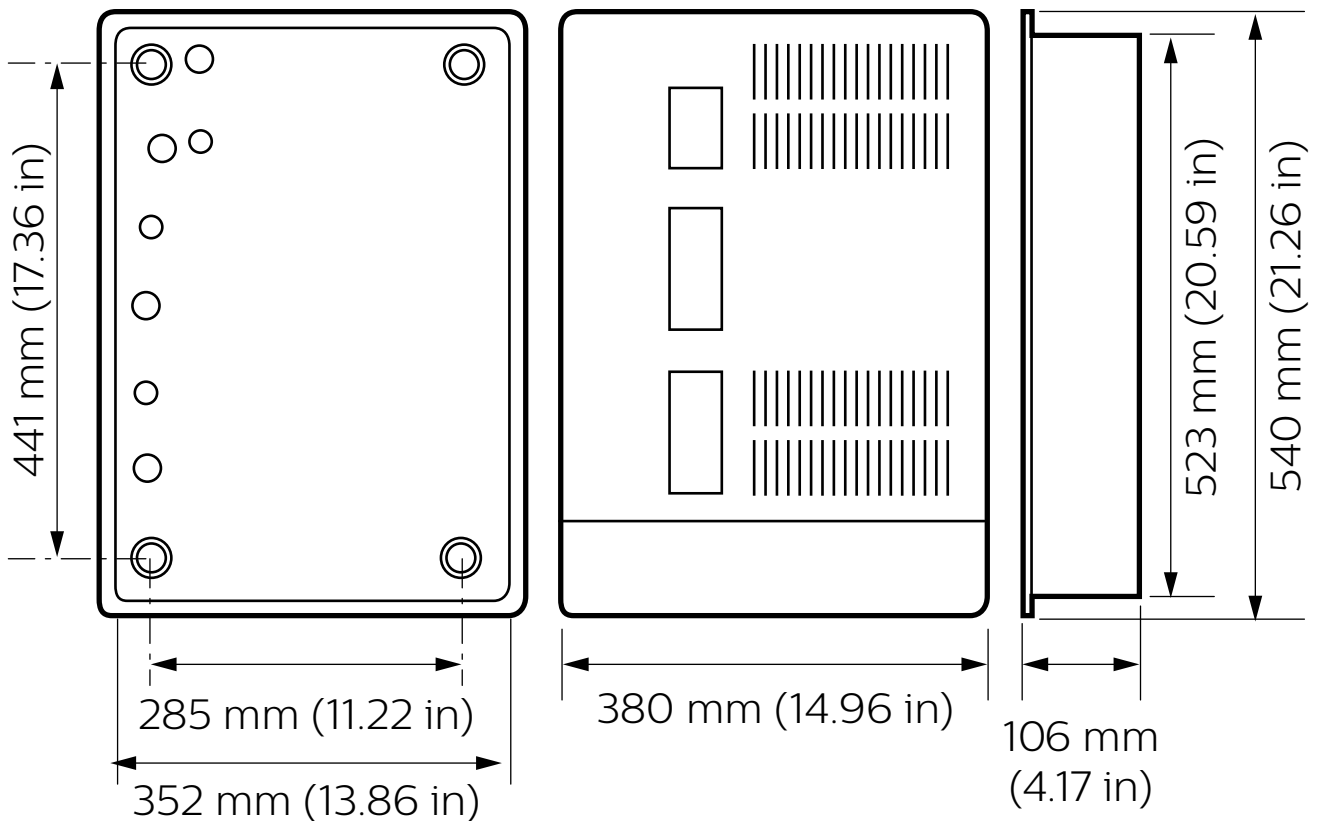
The Philips Dynalite DMC2 provides multichannel control via two interchangeable output modules. The device is available with a variety of control modules to handle various load types and capacities.

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 |

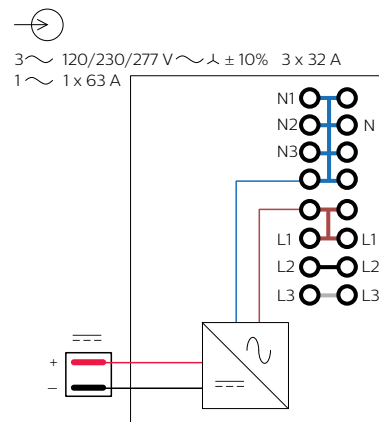
Compliance

| | |
|---------------|--|
| Certification | CE, RCM, UL/cUL, FCC, ICES, UKCA, RoHS |
|---------------|--|

* For indoor installation only

Supply Module - DSM2

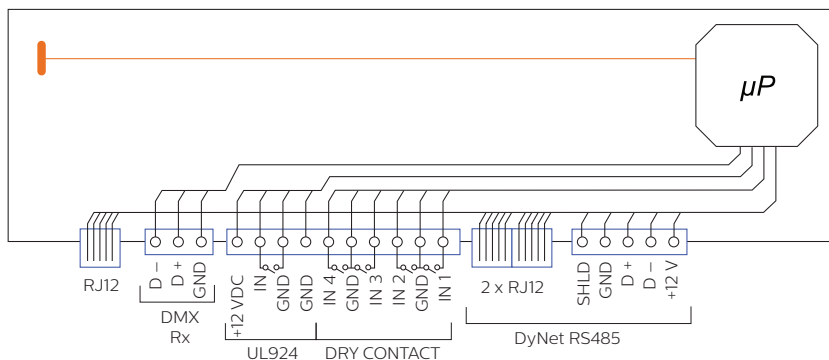
| | |
|--------------------------------|--|
| Supply Type | Single-phase Three-phase, four wire (Λ) |
| Single-Phase Supply | 120/230/277 VAC @ 63 A |
| Three-Phase Voltage | 120/230/277 VAC (±10%) @ 32 A/phase |
| Supply Terminals | 4 x screw terminal Line 1, Line 2, Line 3, Neutral (Earth link bar provided) |
| Supply Terminal Conductor Size | 16 mm ² (#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 ² (#11 AWG) (max) |

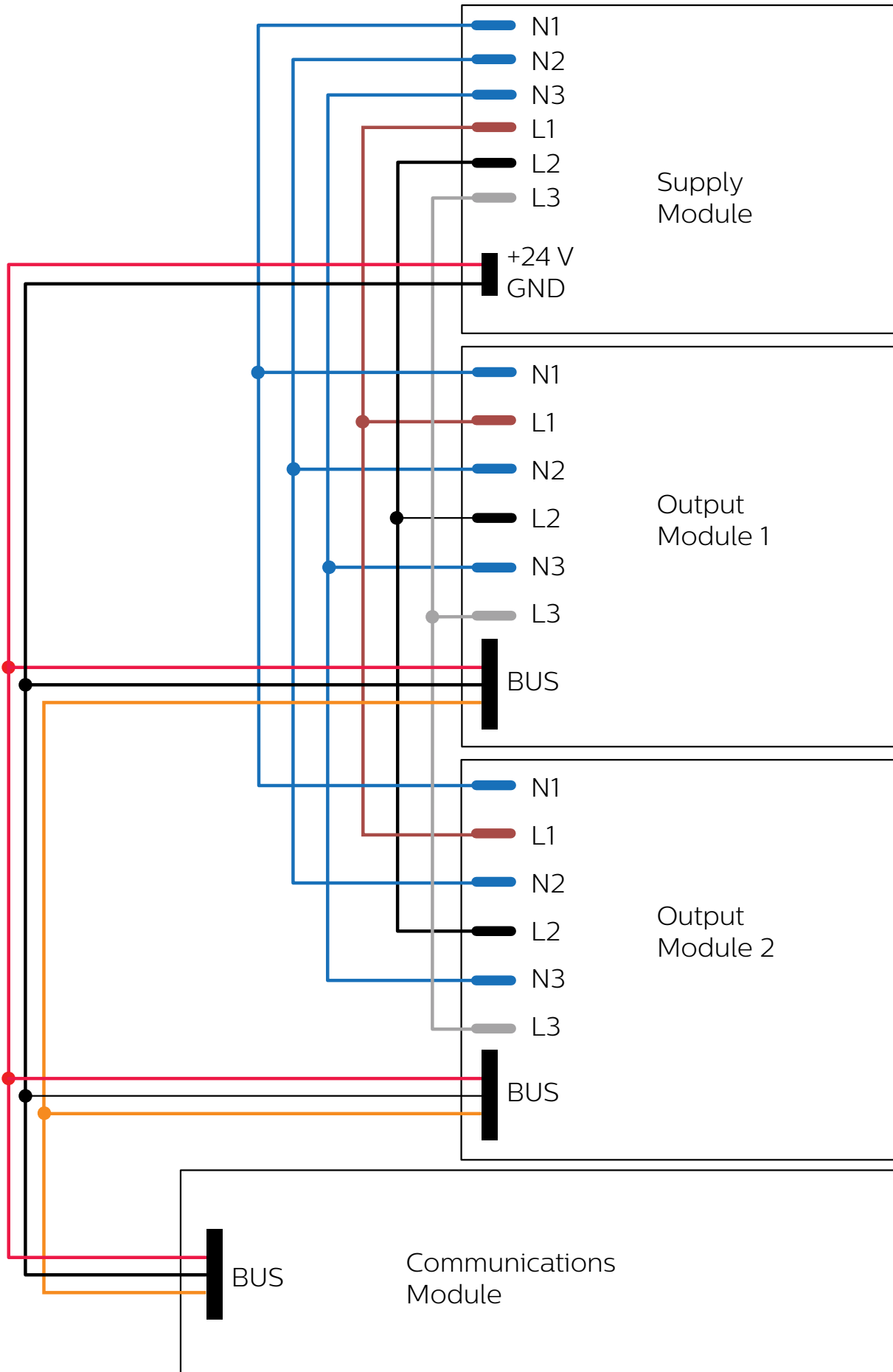


* This function must only be used with systems complying to UL924, and must not be used with any other system.

** 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) |

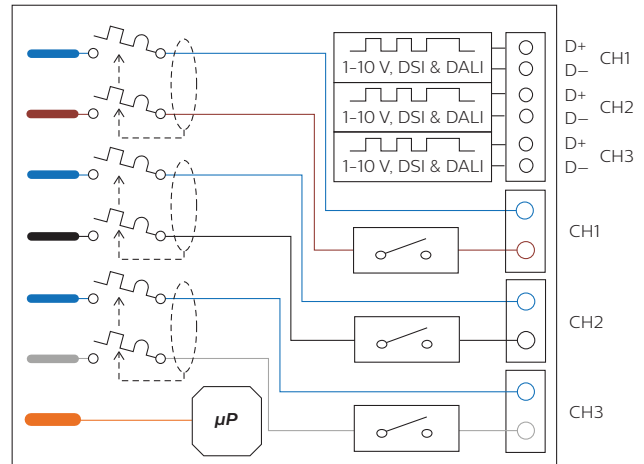
Electrical Protection

| | |
|----------------|---|
| 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 |
|--------------------|----------------------------|--------|
| Output Voltage | 13 VDC | |
| Guaranteed Current | 160 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 |

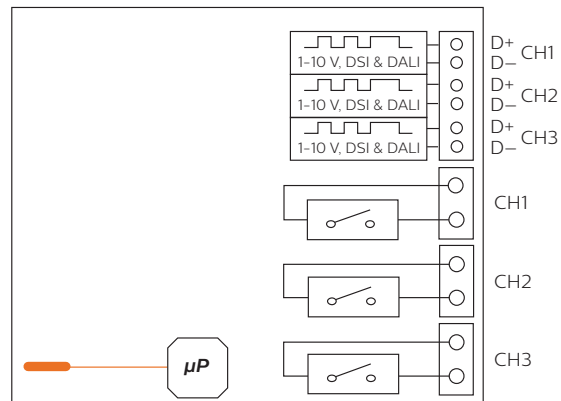
DMD316FR-UL

| | |
|-------------------------|--|
| 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 |
|--------------------|----------------------------|--------|
| Output Voltage | 13 VDC | |
| 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

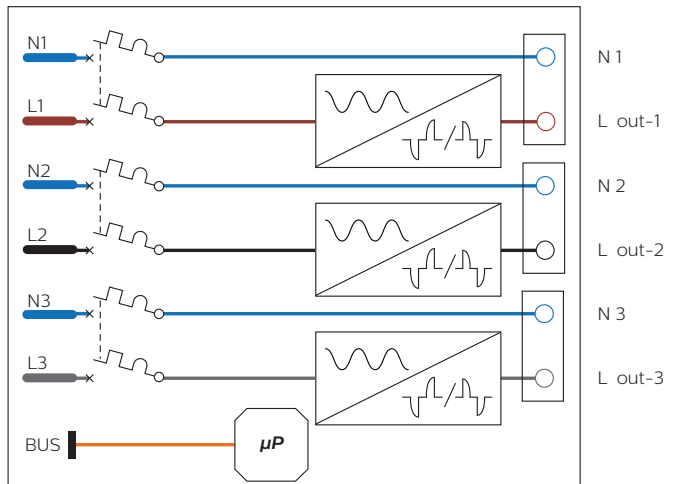
| | |
|--------------------------------|---------------------------------------|
| Module Type | Phase-cut dimming control |
| Output Channels | 3 x Leading/Trailing Edge Dimming |
| Maximum Module Load | 14 A |
| Output Terminal Conductor Size | 6 x 16 mm ² (#6 AWG) (max) |
| Packed Weight | 2.1 kg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

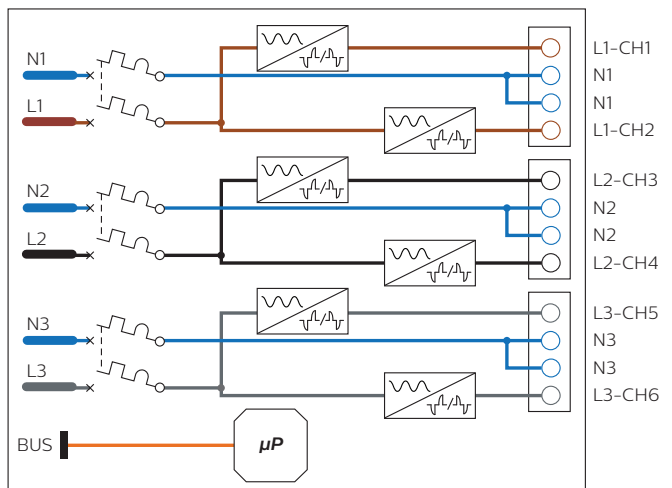
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| Module Type | Phase-cut dimming control |
| Output Channels | 6 x Leading/Trailing Edge Dimming |
| Maximum Module Load | 16 A |
| Output Terminal Conductor Size | 12 x 6 mm ² (#10 AWG) (max) |
| Packed Weight | 2.3 kg (5.07 lb) |

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

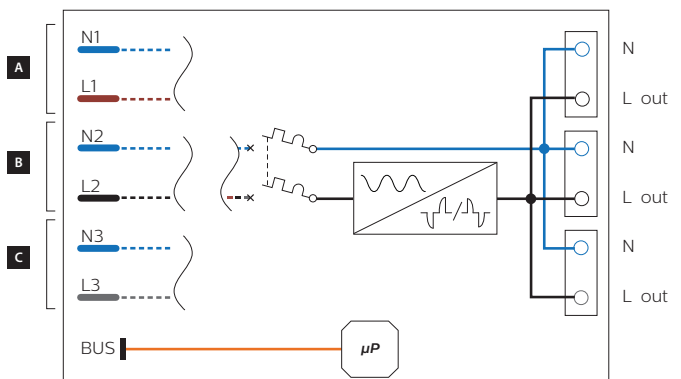
| | |
|--------------------------------|--|
| Module Type | Phase-cut dimming control |
| Output Channels | 1 x Leading/Trailing Edge Dimming |
| Maximum Module Load | 16 A |
| Output Terminal Conductor Size | 12 x 6 mm ² (#10 AWG) (max) |
| Packed Weight | 2.1 kg (4.63 lb) |

Electrical Protection

| | |
|--------|---|
| DMP116 | 1 x 20 A dual pole C-curve circuit breaker (UL489 listed) |
|--------|---|

Output Ratings/Channel (CH)

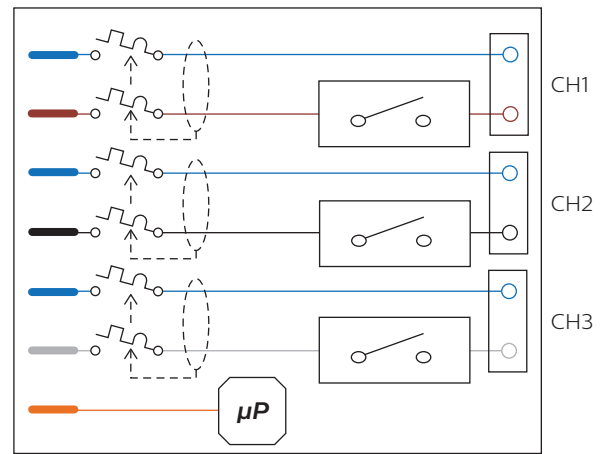
| Load Type | Operating Mode | 120 / 240 VAC | 277 VAC |
|-----------------------|-------------------------|---------------|---------|
| Incandescent | Leading / Trailing Edge | | |
| Magnetic with Halogen | Leading Edge | 16 A | 10 A |
| Electronic Driver | Trailing Edge | | |



Relay Control Modules

DMR310, DMR316

| | |
|--------------------------------|---|
| Module Type | Relay control |
| Switched Outputs | 3 |
| Output Terminal Conductor Size | 6 x 6 mm ² (#10 AWG) (max) |
| Packed Weight | 1.7 kg (3.75 lb) |
| Electrical Protection | |
| 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) |

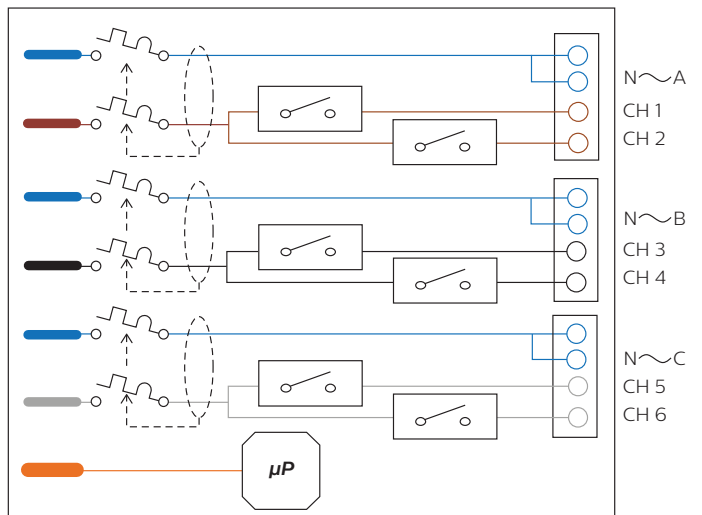


Switched Output Ratings

| 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 ² (#6 AWG) (max) |
| Packed Weight | 1.9 kg (4.19 lb) |
| Electrical Protection | |
| 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 |
|--|--------------|

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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