



# DBC905

Signal Dimmer Controller

Easy to install controller with flexible mounting options

The Philips Dynalite DBC905 is a nine-channel signal dimmer controller, designed for direct installation within ceiling cavities. The device incorporates structured wiring connectors, to enable ready connection without the use of tools.

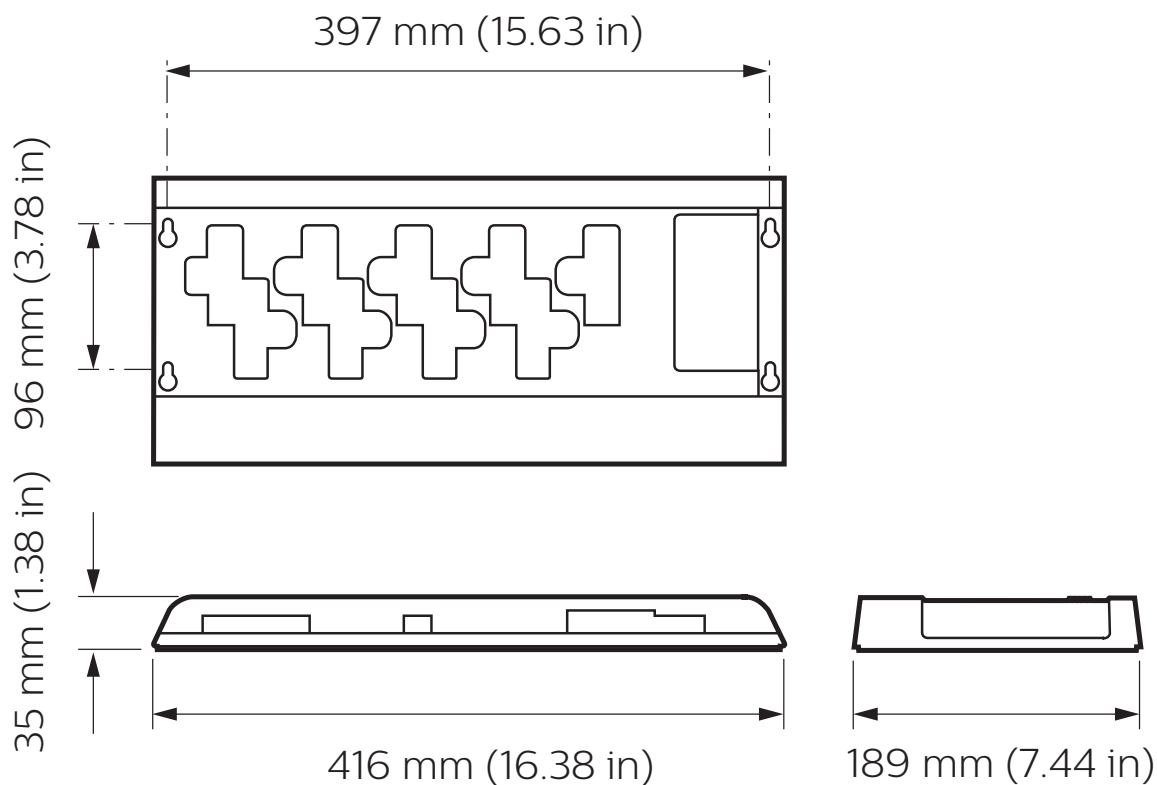
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- **Multiple protocols supported** – Each control output supports DALI broadcast, DALI addressed, 1-10 V and DSI protocols.
- **Built-in energy savings** – Control signals can be programmed to operate in tandem with five internal switched outputs, which will automatically isolate the power circuit when all associated channels are at 0%. This is a useful feature as DALI drivers still draw significant power when lamps are turned off via a DALI command.
- **No tools required** – The device is available with connectors suited to three major modular wiring brands – CMS Electracom, Wieland and Wago.
- **Inbuilt diagnostic functionality** – Includes lamp and driver failure, circuit run time tracking/lamp life, automated battery tests and Device Online/Offline status indication.

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## Dimensions



# Specifications

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



## DBC905

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### Electrical

|                                  |  |
|----------------------------------|--|
| Supply Type                      | Single-Phase   |
| Supply Voltage                   | 230 VAC  |
| Supply Current                   | 16 A   |
| DyNet DC Output Voltage          | 12 VDC   |
| DyNet DC Output Current          | 400 mA   |
| Switched Outputs                 | 9 x 5 A resistive (All versions)<br>1 x Maintained NC 5 A resistive (CMS/Wieland only) |
| Electrical Protection (Standard) | 3 x 6.3 A Replaceable HRC fuses<br>(CH1-CH3, CH4-CH6, CH7-CH9+MO)                      |
| Output Channel Ratings           | (See below)  |
| IEC Overvoltage Category         | III  |

### Control

|                         |  |
|-------------------------|--|
| Serial Ports            | 2 x RS-485   |
| Supported Protocols     | DyNet  |
| Control Channel Outputs | 9<br>(DALI Broadcast, DALI Addressed, DSI or 1-10 V)   |
| Control Channel Ratings | (See below)  |
| Control Inputs          | 4 x voltage-free SPDT switch inputs<br>(momentary or latch)  |
| Dry Contact Inputs      | 1 (AUX)  |
| User Input              | 1 x service override switch<br>(All channels to 100%)  |
| Indicators              | 1 x diagnostic LED   |
| Diagnostic Functions    | Lamp failure<br>Driver failure<br>Circuit run time tracking/lamp life<br>Automated battery tests<br>Device online/offline status |

### Control Channel Ratings

| DALI/DSI           | Channel                    | Device |
|--------------------|----------------------------|--------|
| Output Voltage     | 12.5 VDC                   |        |
| Guaranteed Current | 15 mA                      |        |
| Maximum Current    | 250 mA                     |        |
| Maximum Drivers    | 5                          | 45     |
| Insulation         | Basic                      |        |
| 1-10 V             | Channel                    |        |
| Current            | sink 10 mA<br>source 10 mA |        |

### Physical

|                               |  |
|-------------------------------|--|
| Dimensions (H x W x D)        | 189 x 416 x 35 mm (7.44 x 16.38 x 1.38 in)   |
| Packed Weight                 | 2.0 kg (4.41 lb)   |
| Construction                  | Moulded ABS Plastic  |
| Serial Ports                  | 4 x RJ12<br>1 x 6-way pluggable screw terminal<br>1 x 3-way pluggable screw terminal |
| Serial Port Conductor Size    | 2.5 mm <sup>2</sup> (#12 AWG) (max)  |
| Supply Terminals              | 1 x connector terminal<br>CMS/Wieland/WAGO<br>(See Ordering Codes on Page 4)         |
| Input Terminals               | 4 x 3-way pluggable screw terminal   |
| Input Terminal Conductor Size | 2.5 mm <sup>2</sup> (#12 AWG) (max)  |
| Output Terminals              | 9 x connector terminal<br>CMS/Wieland/WAGO<br>(See Ordering Codes on Page 4)         |

### 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             | 0 to 95% non-condensing              |
| IEC Pollution Degree          | II                                   |

### Compliance

|               |               |
|---------------|---------------|
| Certification | CE, RCM, RoHS |
|---------------|---------------|

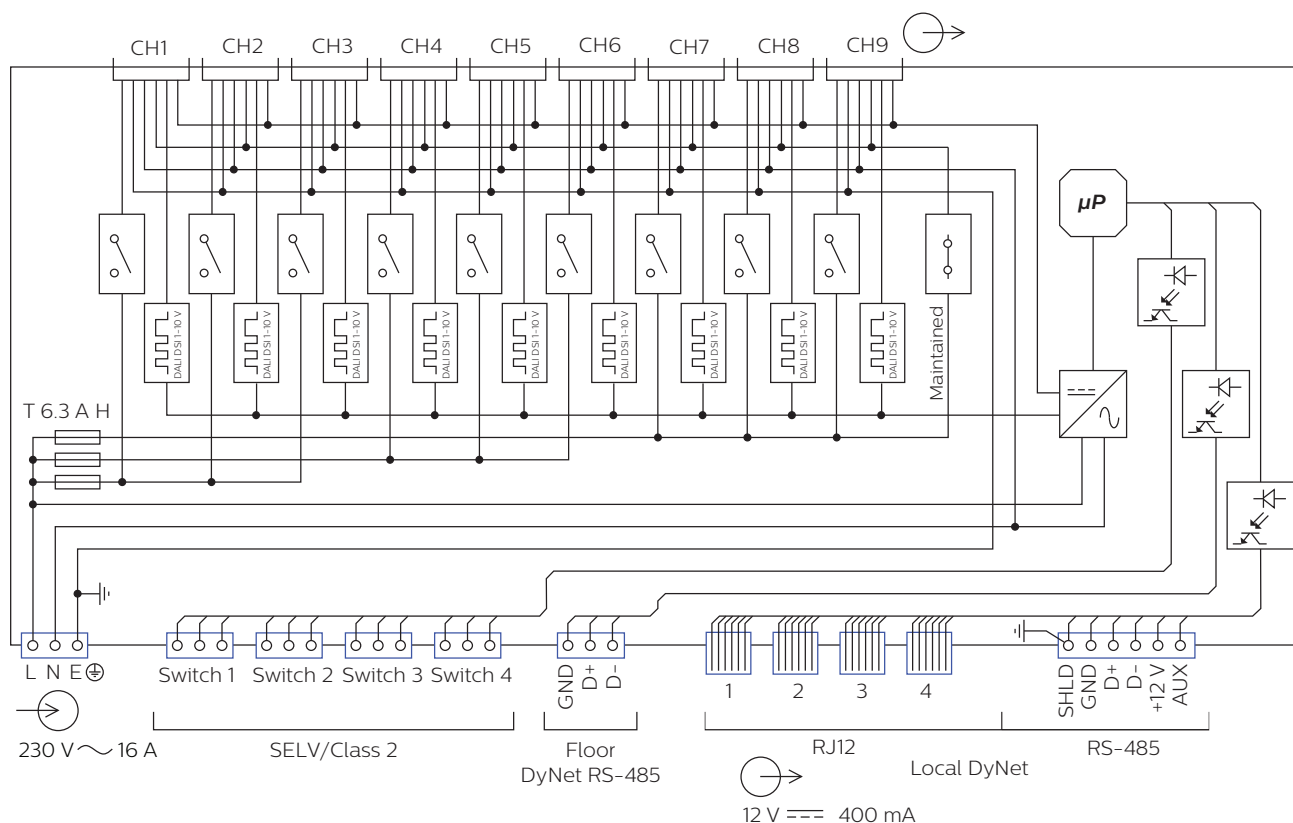
### Output Channel Ratings

| Load Type          | Maximum Rating per Output |              |
|--------------------|---------------------------|--------------|
|                    | CH1-CH9                   | Maintained   |
| General Use        | 5 A, 230 VAC              | 5 A, 230 VAC |
| Electronic Ballast | 2 A, 230 VAC              |              |
| Inrush Current     | 100 A                     |              |

| Maximum Group Load | CH1-CH3 | CH4-CH6 | CH7-CH9 + Maintained |
|--------------------|---------|---------|----------------------|
| Continuous Current | 5 A     | 5 A     | 5 A                  |
| Inrush Current     | 100 A   | 100 A   | 100 A                |



## Electrical



## Compatible Serial Connectors

| Terminals                                 | Vendor - Model                             | Part Number       |                        |
|---|--|-------------------|------------------------|
|   |  | Standard          | Strain Relief          |
| Local DyNet RS-485                        | Wieland - Wiecon 8113 (Box 50)             | 25.320.3653.0     | 25.320.8653.0          |
|   | Phoenix Contact - Combicon MSTB 2 (box 50) | 1754520 (5/6-ST)  |                        |
|   | PTR  | AK950/6-5-0-GREEN | AK950/6L-5.0-GREEN     |
| Switch 1 - Switch 4<br>Floor DyNet RS-485 | Wieland - Wiecon 8113 (Box 50)             | 25.320.3353.0     | 25.320.8353.0          |
|   | Phoenix Contact - Combicon MSTB 2 (box 50) | 1754465 (5/3-ST)  | 1776168 (5/3-STZ-5,08) |
|   | PTR  | AK950/3-5.0-GREEN | AK950/3L-5.0-GREEN     |

## Ordering Code

### Product

DBC905C (CMS connectors)

DBC905W (Wieland connectors)

### Philips 12NC

913703040509

913703040009



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