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.

DBC905
Easy-to-install controller with flexible mounting options

- **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.

Dimensions

397 mm (15.63 in)

96 mm (3.78 in)

35 mm (1.38 in)

416 mm (16.38 in)

189 mm (7.44 in)
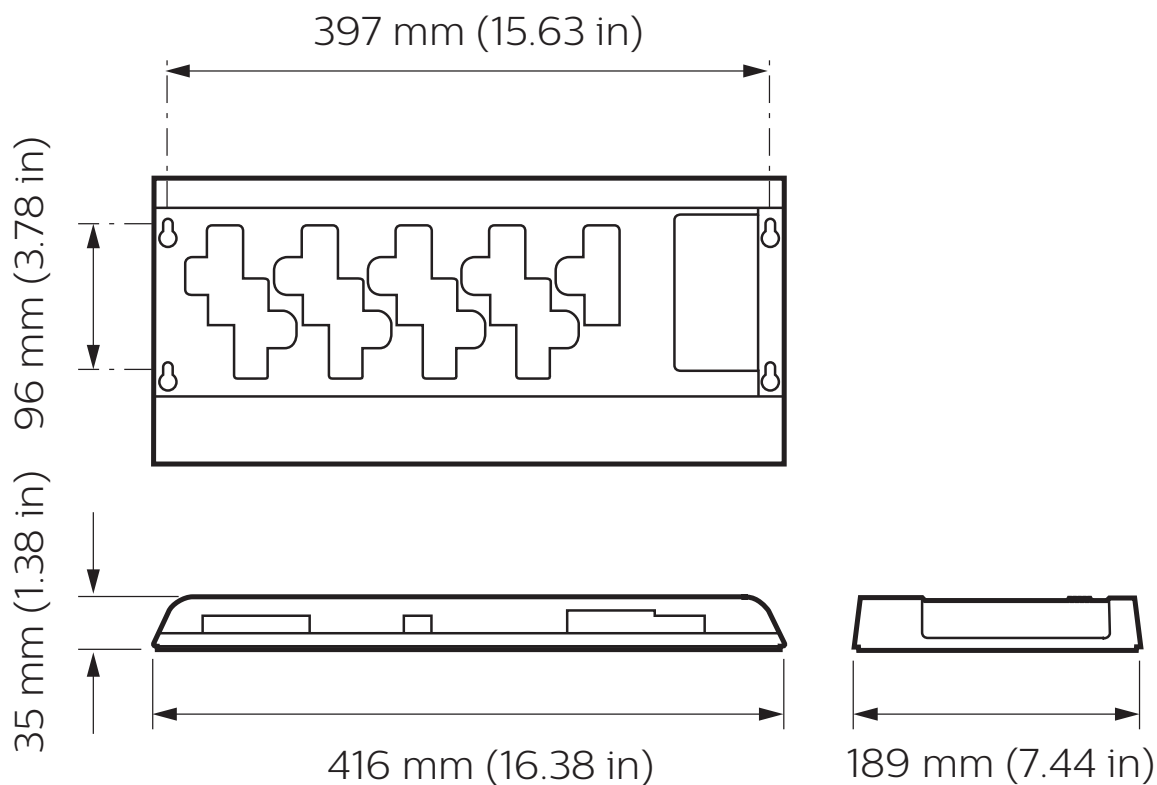
Specifications

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

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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) 1 x Maintained NC 5 A resistive (CMS/Wieland only)
Electrical Protection (Standard)	3 x 6.3 A Replaceable HRC fuses (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 (DALI Broadcast, DALI Addressed, DSI or 1-10 V)
Control Channel Ratings	(See below)
Control Inputs	4 x voltage-free SPDT switch inputs (momentary or latch)
Dry Contact Inputs	1 (AUX)
User Input	1 x service override switch (All channels to 100%)
Indicators	1 x diagnostic LED
Diagnostic Functions	Lamp failure Driver failure Circuit run time tracking/lamp life Automated battery tests Device online/offline status

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 1 x 6-way pluggable screw terminal 1 x 3-way pluggable screw terminal
Serial Port Conductor Size	2.5 mm^2 (#12 AWG) (max)
Supply Terminals	1 x connector terminal CMS/Wieland/WAGO (See Ordering Codes on Page 4)
Input Terminals	4 x 3-way pluggable screw terminal
Input Terminal Conductor Size	2.5 mm^2 (#12 AWG) (max)
Output Terminals	9 x connector terminal CMS/Wieland/WAGO (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, UKCA, RoHS

*   For indoor installation only

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 source 10 mA

Output Channel Ratings

Load Type	Maximum Rating per Output	
	CH1-CH9	Maintained
General Use	5 A, 230 VAC	5 A, 230 VAC
Electronic Driver	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
Total Device Load		≤ 15 A	

Electrical
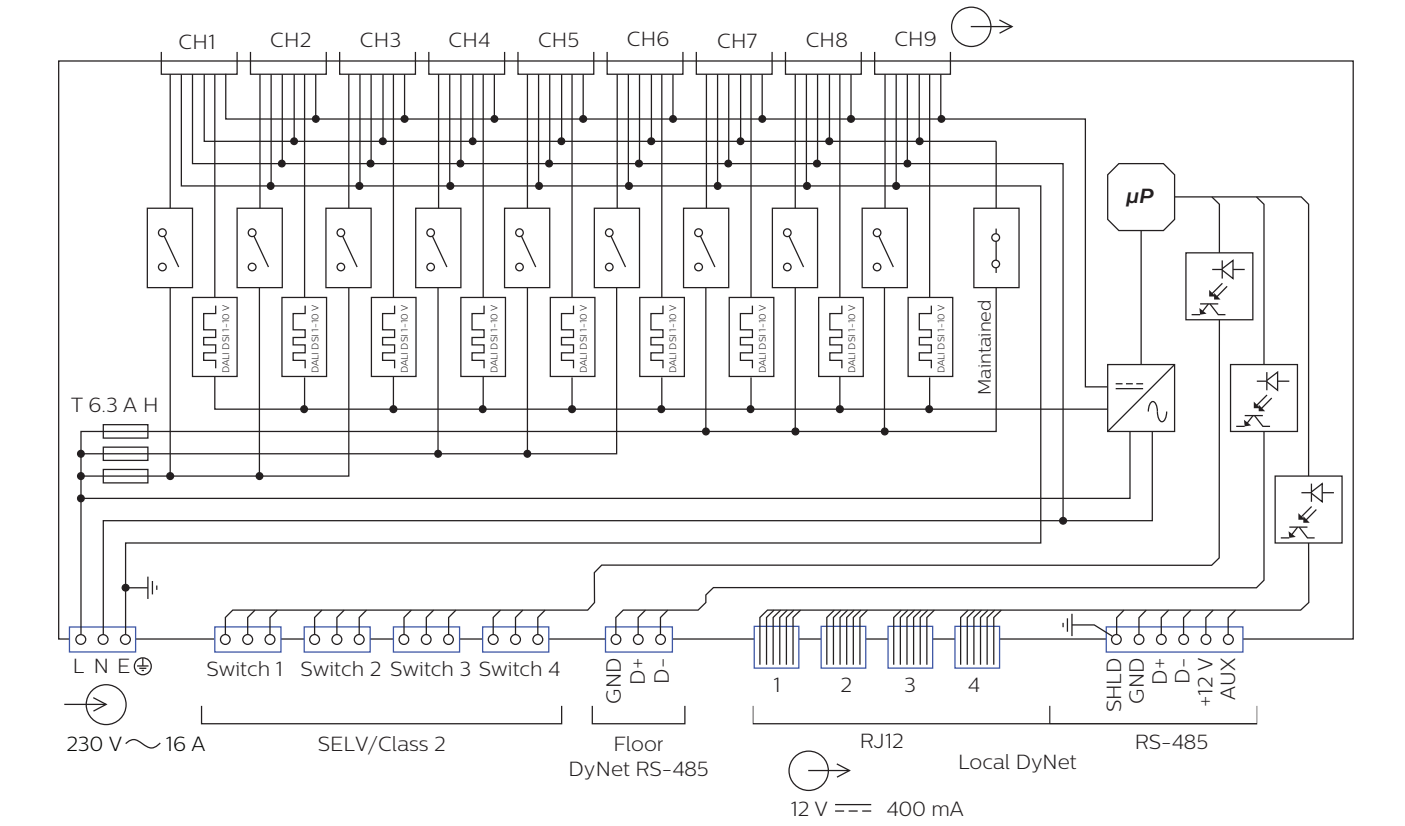
Compatible Serial Connectors

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 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	Philips 12NC
DBC905C (CMS connectors)	913703040509
DBC905W (Wieland connectors)	913703040009