**Enabling a full DALI universe including tunable white drivers, DALI sensors and user interfaces**

The Philips Dynalite DDBC120-DALI delivers cost-effective control of DALI drivers through provision of a full universe of 64 DALI drivers. The device communicates seamlessly with Philips Dynalite DALI sensors and user interfaces.

**DALI MultiMaster solution:** Compatible with a range of DALI fittings and devices including DALI fluorescent drivers, DALI electronic low voltage transformers, DALI LED fixtures, DALI emergency lighting fixtures and Philips Dynalite DALI sensors and user interfaces.

**Compatible with DALI 209 drivers:** Provides control of tunable white luminaires.

**DALI auto-enumeration:** Provides automatic enumeration of DALI ballasts when powered on and enables self repair of the network system if a DALI driver fails.

**Fully scalable network solution:** Direct mapping from DALI to the DyNet network protocol eliminates DALI imposed limits, such as maximum group sizes.

**Flexible mounting solution:** A DIN-rail mountable device, designed to be installed into the distribution board supplying power to the controlled lighting circuit.

**Dual functionality:** Leverage advantages of a true DALI network solution, whilst still allowing full function set of DyNet network control.

**Built-in energy savings:** Control signals can be programmed to operate in tandem with the internal relay, which will automatically isolate the power circuit when all associated channels are at 0%.

**Integral DALI bus power supply:** Removes the need for provision of a separate external power supply and reduces distribution board wiring complexity.

**Inbuilt diagnostic functionality:** Features lamp and driver failure reporting, driver run time tracking for each driver, emergency test reporting and Device Online/Offline status indication.

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### Dimensions

[Diagram of dimensions]

3 3⁄4 in 95 mm

4 1⁄8 in 105 mm

3 in 75 mm

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### Output Channel Ratings

<table>
<thead>
<tr>
<th>Load Type</th>
<th>Maximum Rating per Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL/cUL</td>
<td></td>
</tr>
<tr>
<td>Electronic Ballast</td>
<td>16 A, 277 VAC</td>
</tr>
<tr>
<td>Inrush Current</td>
<td>500 A</td>
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</tbody>
</table>

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### Ordering Code

<table>
<thead>
<tr>
<th>Product</th>
<th>Philips 12NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDBC120-DALI</td>
<td>913703685109</td>
</tr>
</tbody>
</table>

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DDBC120-DALI MultiMaster DALI Driver Controller

Dynalite – Enabling a full DALI universe with signal dimmers

### Electrical

![Electrical Diagram]

- **12 V, 120 mA**
- **100-240 V, 0.25 A**
- **240 V, 20 A**
- **277 V, 16 A**
- **DyNet RS-485**
- **SELV CLASS 2**
- **DA-, DA+**
- **IN, OUT**
- **DyNet CLASS 1/CLASS 2**

#### Maximum DALI Device Count

<table>
<thead>
<tr>
<th>Max number of DALI sensors/switches</th>
<th>Max number of DALI drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>64</td>
</tr>
<tr>
<td>11</td>
<td>59</td>
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<td>12</td>
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<td>15</td>
<td>39</td>
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<td>16</td>
<td>34</td>
</tr>
</tbody>
</table>

#### Physical

- **Dimensions (H x W x D)**: 3.74 x 4.13 x 2.95 in (95 x 105 x 75 mm)
- **Packed Weight**: 0.99 lb (0.45 kg)
- **Construction**: Polycarbonate DIN rail enclosure (6 unit)
- **Serial Ports**: 1 x RJ12, 1 x 6-way pluggable screw terminal
- **Serial Port Conductor Size**: 2.5 mm², #12 AWG (max)
- **Supply Terminals**: 3 x screw terminal Line, Neutral, Earth
- **Supply Terminal Conductor Size**: 5 mm², #10 AWG (max)
- **Control Terminals**: 1 x 2-way screw terminal DA-, DA+
- **Control Terminal Conductor Size**: 5 mm², #10 AWG (max)
- **Relay/Loop Terminals**: 4 x screw terminal Loop IN, Loop OUT, Relay IN, Relay OUT
- **Relay/Loop Terminal Conductor Size**: 5 mm², #10 AWG (max)

#### Electrical

- **Supply Type**: Single-Phase
- **Supply Voltage**: 100-240 VAC
- **Supply Current**: 0.25 A
- **DyNet DC Output Voltage**: 12 VDC
- **DyNet DC Output Current**: 120 mA
- **DALI Bus Power Supply Max Current**: 250 mA
- **DALI Insulation System**: Basic
- **Switched Outputs**: 1 x 20 A feed-through
- **Output Channel Ratings**: (see first page)
- **IEC Overvoltage Category**: III

#### Control

- **Serial Ports**: 1 x RS-485
- **Supported Protocols**: DyNet, DMX Rx
- **DMX Rx Channels**: 1
- **Control Channel Outputs**: 1 x DALI (DALI 207, DALI 209, MultiMaster)
- **Control Channel Output Capacity**: 64* (See above - Max DALI Device Count)
- **Dry Contact Inputs**: 1 (AUX)
- **User Input**: 1 x service switch
- **Indicators**: 1 x diagnostic LED
- **Diagnostic Functions**: Lamp failure reporting, Driver failure reporting, Driver runtime tracking, Switched output runtime tracking, Emergency test reporting, Device online/offline status

#### Environment

- **Operating temp**: -4° to 122°F ambient (-20° to 50°C)
- **Storage/Transport temp**: -13° to 158°F ambient (-25° to 70°C)
- **Relative Humidity**: 0 to 90% non-condensing
- **IEC Pollution Degree**: II

#### Compliance

- **Certification**: CE, RCM, UL/cUL, FCC, ICES, IEC62386, RoHS

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* Including backward channel and communication to Philips Dynalite DALI sensors and user interfaces.

** Philips Dynalite System Manager required for analyzing diagnostic data. The availability of some diagnostics is dependent on driver type.

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