Installation and Instruction Manual



GST Type 6-Pole Quick Connection Box for Dimming Application

QCB03/ECO

1.Description

GST type 6-pole terminal base quick connection box for dimming application, with DALI or 0/1-10V output, 12 luminaire outlets and 2 sensor outlet. Freely switch between1-channel and 2-channel control. Rating of system 16A, rating of each output 10A.

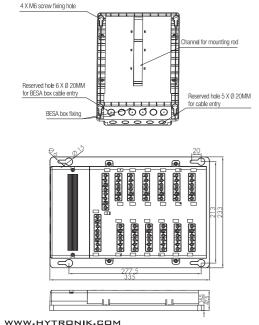
2. Key Features

- . Dimmable control applications (DALI-2 or 0/1-10V)
- 12 luminaire outlets + 2 extra sensor outlet for sensor connection
- Luminaire outlet: GST type 6-pole terminal base (L or L', E, N, Em, Dim-, Dim+)
- Sensor outlet: GST type 8-pole terminal base (L, E, N, L', P1, P2, Dim-, Dim+)
 Black housing and white housing available to choose from
- Freely switch between 1-channel (1 x 8) & 2-channel (2 x 4) control
- Tamper-proof structure design
- Expandable: easy extension to another QCB03/ECO via plug' n' play
- Rating of system: Max 16A, Rating of each output: Max 10A
- · Flame-retardant material for safety protection

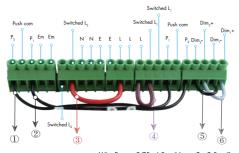
3. Your Benefits

- · Five types of installation methods meets different project needs
- · Reduce labour hours and labour cost significantly
- . Simple and intuitive wiring connections
- · Improved safety level during wiring operations
- . Clear and clean wiring makes it easy for future maintenance
- · Can be supplied with pre-wired cables

4. Dimensions (mm)



5. Input & Output Terminal Function



Wire Range: 0.75 - 4.0mm² (max. 2 x 2.5mm²)

Luminaire outlet

When using DALI dimming



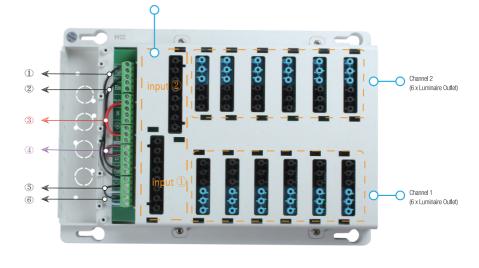
When using on/off switching or 0/1-10V dimming



Sensor outlet



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Factory default for QCB03/ECO comes with six pre-installed jumper wires. The wire ① short-connects Push 2, the wire ② short-connects Push 1, the wire ③ short-connects Switched L2 and L, the wire ④ short-connects Switched L1 and L tother, the wire ⑤ short-connects Dim2+ and Dim1+. With these jumper wires, user can freely choose different dimming control method and also freely switch between one-channel and two-channel control.

- 1) one-channel / one sensor (1 x 12) DALI dimming -- -- remain all jumper wires connected.
- 2) two-channel / two sensor (2 x 6) dual DALI dimming -- -- -- remain wire ③ & wire ④, remove wire ①, ②, ⑤ and ⑥.

 In this case the two channels will be controlled separately (channel 1 is controlled by Dim1+ & Dim1-, and channel 2 is controlled by Dim2- & Dim2+).
- 3) one-channel /one sensor (1 x 12) 0/1-10V dimming -- -- -- remove wire 4), remain the other jumper wires connected.

Sensor/Controller input (2 x Sensor Outlet)

- 4) two-channel / two sensor (2 x 6) dual 0/1-10V dimming -- -- remove all jumper wires.
- In this case the two channels will be controlled separately (channel 1 is controlled by Switched L1, Dim1+ & Dim1-, and channel 2 is controlled by Switched L2, Dim2- & Dim2+)
- 5) two-channel / two sensor (2 x 6) DALI dimming + on/off switching -- -- remain wire @, remove the other jumper wires.
 - In this case the two channels will be controlled separately (channel 1 is controlled by Dim1+ & Dim1-, and channel 2 is controlled by Switched L2).
- 6) two-channel / one sensor (2 x 6) DALI dimming + on/off switching (eg. HBIR29/2CH)
 - -- -- remain wire 3, 5, 6, remove the other jumper wires.
- In this case, the sensor need to be plugged into input 1. The two channels will be controlled separately (channel 1 is controlled by Dim1+ & Dim1-, and channel 2 is controlled by Switched L2).
- 7) two-channel / two sensor (2 x 6) DALI dimming + 0/1-10V dimming -- -- remain wire ④, remove the other jumper wires.
- In this case the two channels will be controlled separately. Channel 1 is controlled by DALI (Dim1+ & Dim1-), and channel 2 is controlled by (0/1--10V) Switched L2.

This flexible design aims to reduce model inventories for users, and just one box is capable enough to handle different dimming requirements on the project site. Easy for management, and powerful for usage!



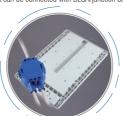
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6.Installation methods

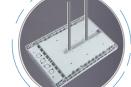


BESA/Junction Box Connection It can be connected with BESA/junction box.



Mounting Rods

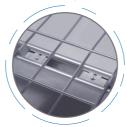




It can work with channel nuts to fasten into the back.

Marco Tray Mount



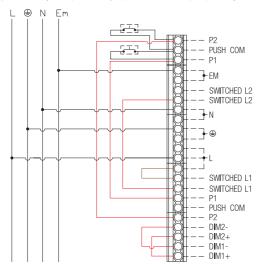


7. Wiring Diagram

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This product should be installed by a qualified electrician.

Factory default setting with a pre-installed jumper wire One-channel (1x12) dimming control



___ jumper wire

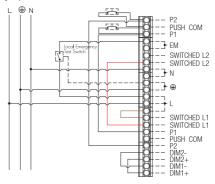
Note: 1. For two-channel (2x4) switching control please remove the jumper wire.

Do not wire across phases.

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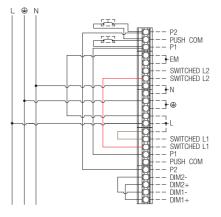
8. Wiring & Emergency Test

Local lighting switch and local emergency test switch



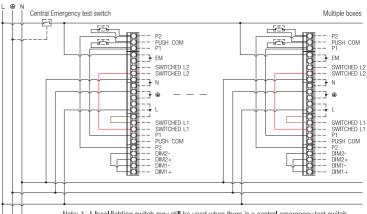
Note: Do not wire across phases.

Using Local lighting switch for power interruption



- Note: 1. A local lighting switch may still be used when there is a central emergency test switch or when a circuit breaker is used to
 - interrupt the power. Do not wire across phases.

Emergency test using central switch



Note: 1. A local lighting switch may still be used when there is a central emergency test switch.

2. Do not wire across phases.

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