Installation and Instruction Manual

HYTRONIK ®

Wieland 4-Pole Terminal Base Quick Connection Box (QCB) QCB01

1.Description

Wireland 4-pole terminal base quick connection box for non-dimmable control applications, with 8 luminaire outlets and 1 sensor outlet. Freely switch between 1-channel and 2-channel control. Rating of system 16A, rating of each output 10A.
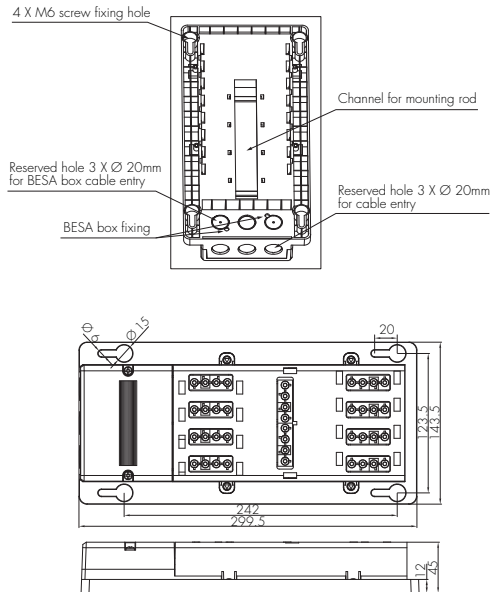
2. Key Features

- Non-dimmable control applications
- 8 luminaire outlets + 1 extra sensor outlet for sensor connection
- Luminaire outlet: GST type 4-pole terminal base (L', N, E, Em)
- Sensor outlet: GST type 8-pole terminal base (L, N, E, L1', L2', P1, P2)
- 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
- Rating of system: Max 16A. Rating of each output: Max 10A
- Flame-retardant material for safety protection
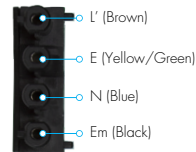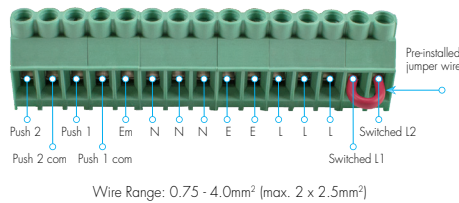
3. Your Benefits

- 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)

- 4 X M6 screw fixing hole
- Channel for mounting rod
- Reserved hole 3 X Ø 20mm for BESA box cable entry
- Reserved hole 3 X Ø 20mm for cable entry
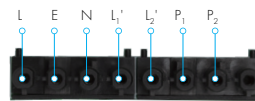- BESA box fixing

Attention: When the input power supplies are from two different phases, the voltage between the two L terminal could be as high as 415V.

5. Input & Output Terminal Function

Push 2 | Push 1 | Em | N | N | N | E | E | L | L | L | Switched L2
Push 2 com | Push 1 com | Pre-installed jumper wire | Switched L1

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

- L' (Brown)
- E (Yellow/Green)
- N (Blue)
- Em (Black)

Luminaire outlet

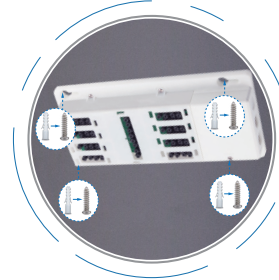
L E N L1' L2' P1 P2

Sensor outlet

By removing this pre-installed jumper wire, the 8 outlets are then divided into two separate channels. This QCB01 becomes a 2-channel box with 2 x 4 luminaire outlet. The two channels will be controlled separately (Channel 1 is controlled by Switched L1, and Channel 2 is controlled by Switched L2).
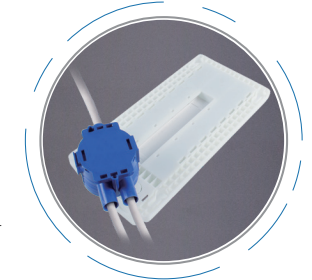

- Pre-installed jumper wire
- Channel 1 (4 x Luminaire Outlet)
- Sensor/Controller input (1 x Sensor Outlet)
- Channel 2 (4 x Luminaire Outlet)
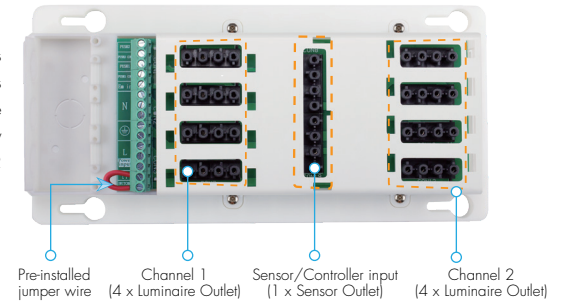
6.Installation methods

Surface Mount ▼

It can work with 4 x M6 screws to fix onto both walls and ceilings.

Channel Nut Mount ▼

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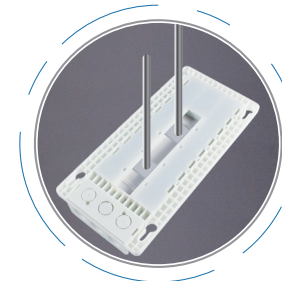
Mounting Rods ▼

It can be fixed with mounting rods.

BESA/Junction Box Connection ▼

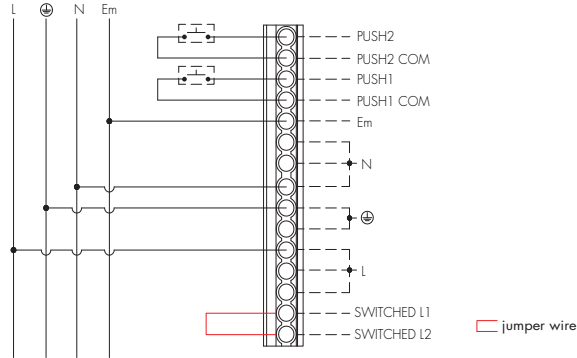It can be connected with BESA/junction box.

Marco Tray Mount ▼

It can work with Marco clips steel wire cables tray system.
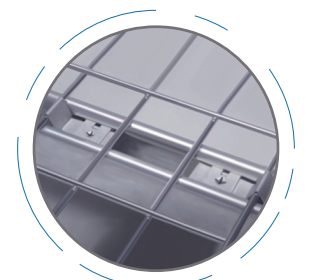
7. Wiring Diagram

Factory default setting with a pre-installed jumper wire One-channel (1x8) switching control

L ⏚ N Em

- PUSH2
- PUSH2 COM
- PUSH1
- PUSH1 COM
- Em
- N
- ⏚
- L
- SWITCHED L1
- SWITCHED L2

▭ jumper wire

Note: 1. For two-channel (2x4) switching control please remove the jumper wire.
 2. Do not wire across phases.

Wiring & Emergency Test

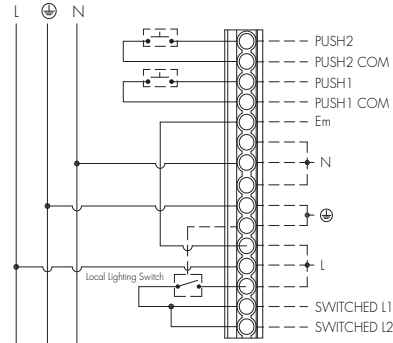Local lighting switch and local emergency test switch
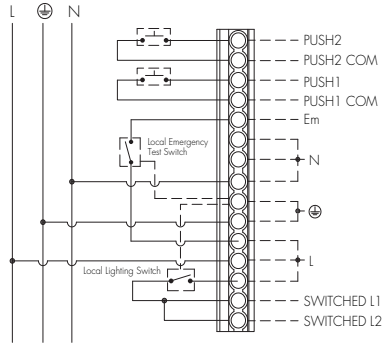
L ⏚ N

Local Emergency Test Switch

Local Lighting Switch

- PUSH2
- PUSH2 COM
- PUSH1
- PUSH1 COM
- Em
- N
- ⏚
- L
- SWITCHED L1
- SWITCHED L2

Using Local lighting switch for power interruption

L ⏚ N

Local Lighting Switch

- PUSH2
- PUSH2 COM
- PUSH1
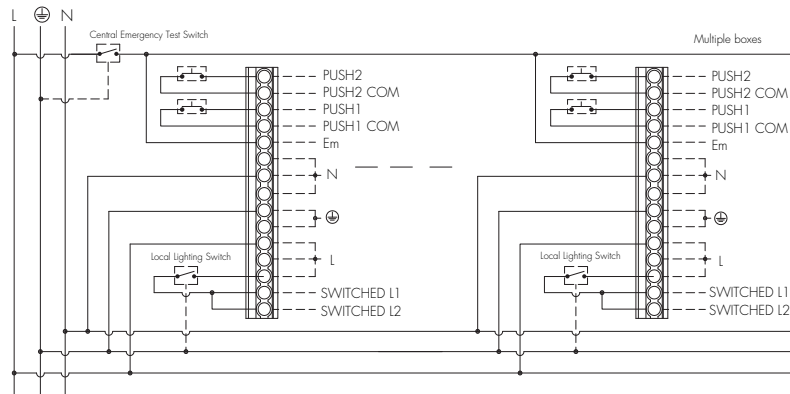- PUSH1 COM
- Em
- N
- ⏚
- L
- SWITCHED L1
- SWITCHED L2

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.
 2. Do not wire across phases.

Emergency test using central switch

L ⏚ N

Central Emergency Test Switch

Local Lighting Switch

- PUSH2
- PUSH2 COM
- PUSH1
- PUSH1 COM
- Em
- N
- ⏚
- L
- SWITCHED L1
- SWITCHED L2

Multiple boxes

Local Lighting Switch

- PUSH2
- PUSH2 COM
- PUSH1
- PUSH1 COM
- Em
- N
- ⏚
- L
- SWITCHED L1
- SWITCHED L2

Note: 1. A local lighting switch may still be used when there is a central emergency test switch.
 2. Do not wire across phases.

8. Ceiling Rose

Description

Ceiling rose QCCR01 can be used when there is a need to take power and dimming signal from a conduit box. The installation-friendly design comes with a very spacious termination space for really easy wirings.
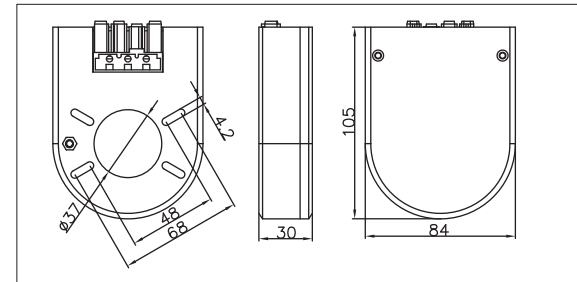
Key Features

- Can be freely placed or fixed with BESA/junction box
- Taking power from BESA/junction box
- 6-pole GST type connector (L, E, N, Em, Dim+, Dim-)
- Allowing fast connection with quick connection box
- 15mm depth big cabling space
- 48-68mm pitch for conduit mounting
- Nominal current max.16A
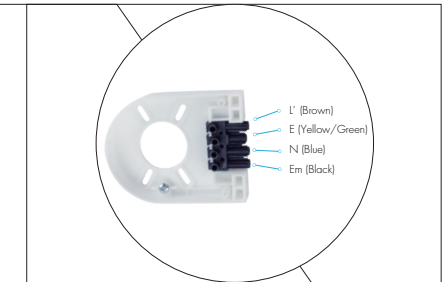- Flame-retardant material for safety protection

*QCCR01 is supplied with white color housing by default. Black color housing can be supplied upon request.
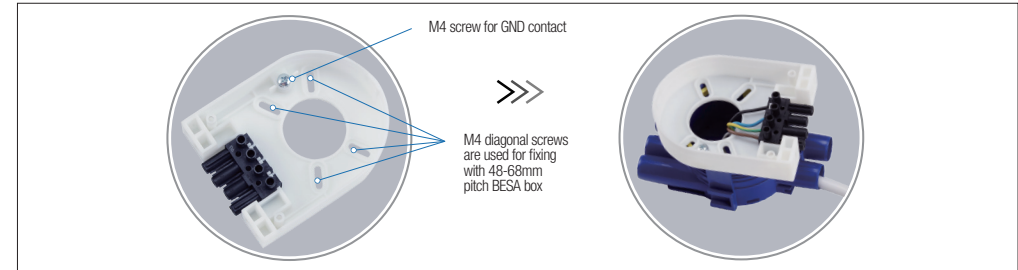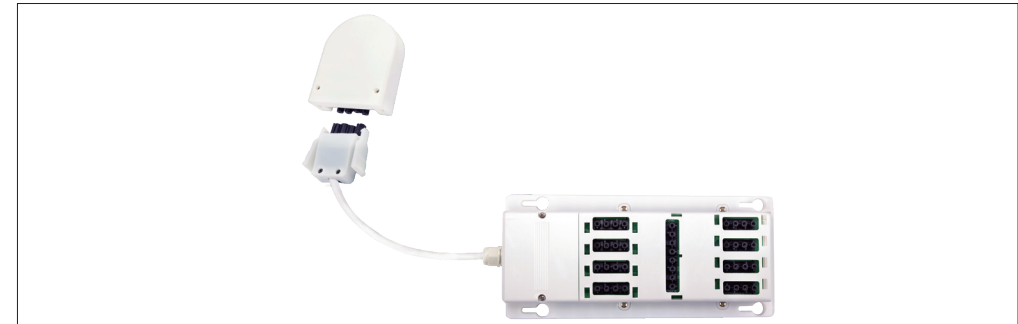
Mechanical Structure & Dimensions

Ø37   4.2   48   68   30   84   105

Input & Output Terminal Function

- L' (Brown)
- E (Yellow/Green)
- N (Blue)
- Em (Black)

Secure QCB01 with BESA/Junction box

M4 screw for GND contact

M4 diagonal screws are used for fixing with 48-68mm pitch BESA box

Connection to QCB01

9. Additional Information / Documents

Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy