GENERAL INFORMATION

1) A qualified electrician, in accordance with IEE wiring regulations should carry out connection to mains wiring.
2) Ensure that the rated voltage and frequency requirements are compatible with the available mains supply.
3) Do not carry out high voltage insulation test, i.e. 500/1000v this may damage internal components.

SPECIFICATION

- 9 Port LCM (3 separate groups)
- 3 Switch Inputs (latching or retractive switches)
- 3 Sensor Inputs (occupancy, absence, presence & constant lux control)
- 2 x DALI modes - DALI auto addressing (Broadcast) / DALI Addressable (individual addressing)
- Integral emergency testing and reporting (via smart device app or switch input)
- Corridor Linking
- 2.4Ghz low energy wireless networking Auto discoverable; password security.
- 2.4Ghz low energy wireless programming via free app (Android & iOS)

TECHNICAL DATA

- Operating Temperature: 0°C to +40°C
- Mains supply: 230Vac +/- 10%; 50Hz
- Mains input: Male socket for Wieland GST18i3 (Black) female connection
- Maximum output per LCM: 6.3A (internally fused) (1450W or 160W per port)
- Isolation: 4kV between mains and sensors control
- Inrush current: 1s time delay between group outputs at power-up
- In-rush current rating of relays: 6.3A

- Output connections:
  - Wieland GST18i6 (Blue / Black) x 2
  - GST18i5 (Blue) x 7
- Maximum DALI dimming load: 100mA (or 16 DALI devices)

- Sensor inputs: RJ11 connection for 3 sensors (VERVERECPIR / VERVESURPIR)
- Sensor supply: 12Vdc +/- 5%, 30mA
- Switch inputs: 3 pole 5mm pitch plug (0.5 to 2.5mm²)
- Switch input cable: max. 10m; segregated from mains

- Max distance between hubs: 8m
- Max no of hubs: 20 per cluster; multiple clusters

- PC/ABS housing
- Dimensions: 250mm(∅) x 47.5mm(h)

Whitecroft lighting

Verve
VERVE

November 2023 - Rev 8

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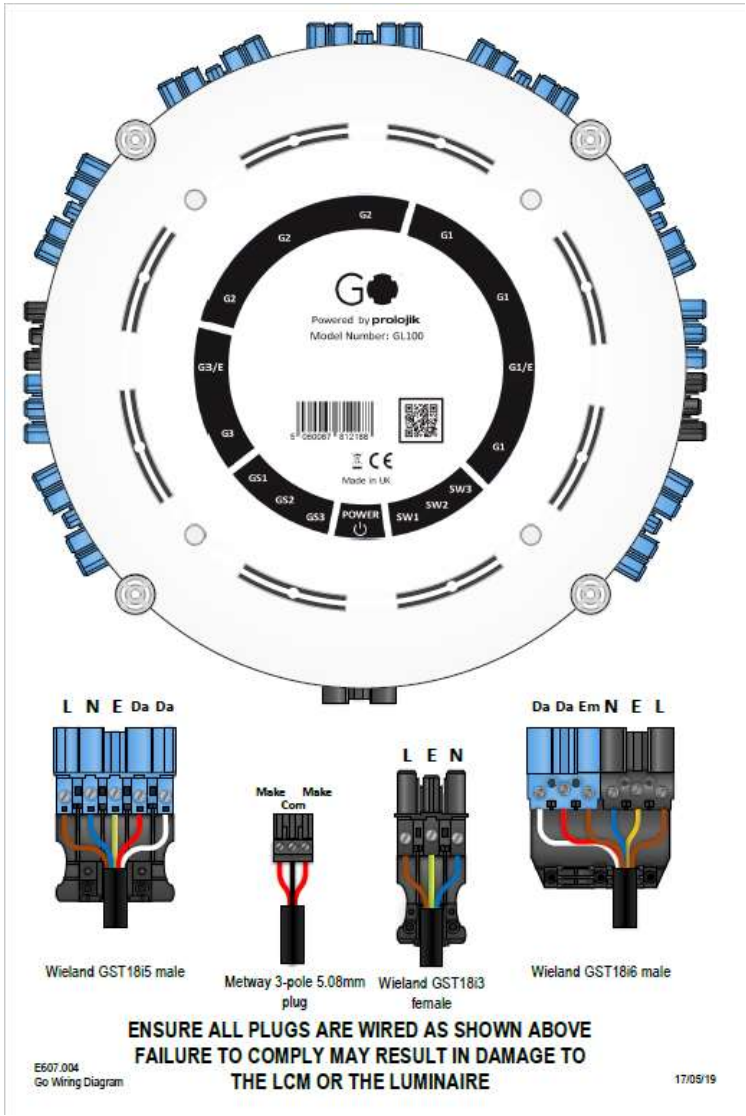


Mounting:

ONLY mount in a horizontal orientation
Label MUST face towards the floor
DO NOT vertically mount the hub

Mechanical Installation:

The Verve is designed for surface and drop-rod installation. All mountings are located on the outside of the enclosure to reduce installation time.

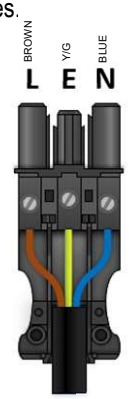
Four M4 mounts are provided at the base of the enclosure for surface mounting. Drilling out the inner rings of the supports will allow for M8 drop rod mounting to be used. The unit should be mounted in an orientation, as to provide suitable fixing and cable access. The LCM must be mounted flat and true to avoid distortion or damage to the enclosure and/or any internal components.

When securing the LCM in place in a ceiling, ensure that the label of the unit is facing downward so the status LED is visible. Doing otherwise may affect the communication ability of the LCM.

The total weight load bearing capabilities of the unit when installed correctly, including plugs and cabling, is 20kg. Exceeding this may cause damage to the unit. All cables should be dressed and tied to avoid any unnecessary strain on the sockets.

N.B. Due to the nature of wireless 2.4Ghz low energy wireless communications, issues may arise with device pairing if the units are above metal-bonded ceiling tiles.

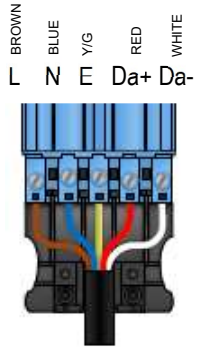
Input power connection:



Power is applied to the LCM via a 3-pole Wieland GST18i3 female connector (supplied in box). Input power to the unit must be 230V AC 50Hz ±10%. The input power cable must be a 3-core cable providing live, neutral and earth to each LCM and should be adequately insulated and rated for the supply current and voltage.

The total current rating of the device is 6.3A. The total supply current should not be exceeded, and the unit should be externally fused by means of a suitably rated Miniature Circuit Breaker (MCB).

Non EM Luminaire ports:

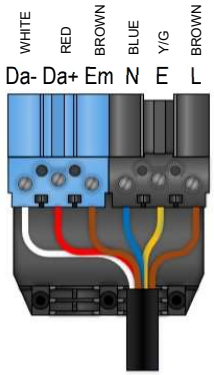


Connection to the luminaires is achieved using a 5 pole Wieland GST18i5 blue male plug.
At minimum live, neutral and earth pins should be connected between the LCM and the luminaires.

Dimming is provided via pins 4 (DA+) and 5 (DA-). These cables must in-turn be connected to the correct terminals on the luminaires.

WLL Part number TB/9295444530 for the 5 pole plug

Emergency-enabled Luminaire ports:

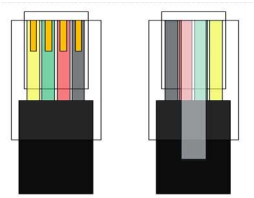


The two emergency ports (G1/E&G3/E) require 6 pole Wieland GST18i6 male plugs to connect to the load.
At minimum live, neutral, earth and the fourth pin (Em) should be connected between the LCM and the load.

Dimming is provided via pins 5 (DA+) and 6 (DA-). These cables must in-turn be connected to the correct terminals on the ballast.

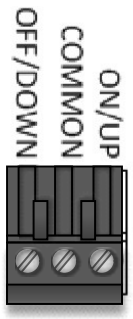
WLL Part no TB/9296903581 6 pole plug

Sensor inputs:



The three sensor ports use RJ11 terminations to connect to the VERVERECPIR or VERVESURPIR sensor and the sensor input lead is wired like for like on each end.

Switch inputs:



Latching or retractive switches connect to the switch inputs via a 3 pole 5mm pitch plug.
Two-way retractive switches should be wired between Common (terminal 2) and Off/Down (terminal 1) and On/Up (terminal 3).
The switch input may also be configured for use as an emergency test key switch input.
The switch inputs are volt-free and should not be connected to any external voltage.

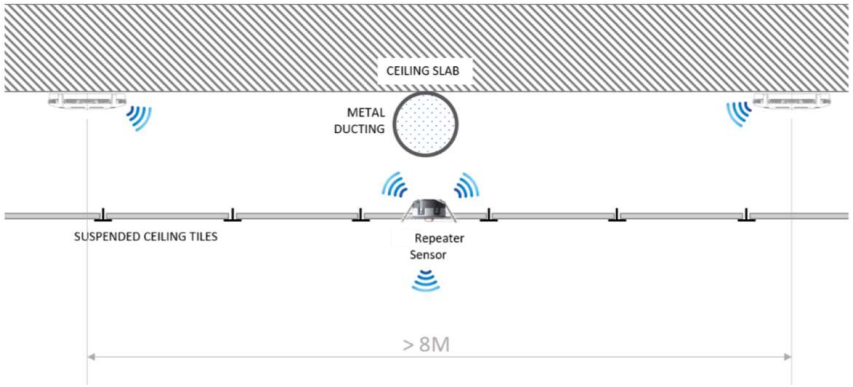
Restrictions and barriers:

Objects made of metal, such as metallic separation walls and metal inserted ceilings, wall reinforcements and the metal foil of heat insulations, reflect electromagnetic waves and thus create what is known as radio shadow and are barriers to signal path. Fire-safety walls (and curtain barriers), elevator shafts, staircase, air ducting (and HVAC units) and RSJ's can be considered as barriers, as well as metal pan ceiling tiles

Material range reduction

- Wood, plaster, glass uncoated, without metal 0 - 10%
- Brick, press board 5 - 35%
- Ferro concrete 10 - 90%
- Metal, aluminium lining 70 - 90%

Avoid barriers when installing BLE wireless networks by repositioning the 2.4Ghz low energy wireless transmitting and/or receiving unit away from the radio shadow, or by using a repeater unit either via sensor or repeater node – repeater unit
(VERVERECPIR / VERVESURPIR / W-GS480BLE repeater sensor).



It is recommended to keep a clearance distance around the LCM of >50cm to ensure the 2.4Ghz low energy wireless communications are not restricted.