



DALI Control Elements

There are several elements which can be used independently or linked together to create a fully functioning DALI control system:



DALI Hub

The DALI Hub can be used to create highly functional and flexible lighting installations for up to 63 luminaires.



DALI Router

The DALI Router can be used to link DALI Hubs to create a simple plug and play system that is fully scalable. The DALI Router can also be used independently to be the central controller for an intelligent building solution.



addressable DALI systems

What is DALI?

DALI stands for Digital Addressable Lighting Interface. It is a uniform standard throughout the lighting industry designed to cope with the needs of modern lighting control systems. It allows for ballasts, transformers, emergency fittings and control devices to be combined into a single seamless system controlled from a single point. Whilst most applications can be met with a simple local area broadcast system as described in the previous pages, addressable systems offer an increased level of functionality and flexibility for complex projects.

The benefits of DALI

Lighting designers benefit from the ability to control a wide range of devices, and can concentrate on the requirements of the building rather than the limitations of wiring. Installation time is reduced with simple 6 core wiring without segregation.

Commissioning is simple with intuitive interfaces and once installed, switching and dimming arrangements can be re-configured without the need for hardware changes. This reduces the through life cost of any installation. Building occupiers can customise local lighting to their own preference, and benefit from a more economical and motivating environment.

DALI Broadcast

The Control device sends a DALI signal to all DALI ballasts connected and they all react to the command. All or COMR local area DALI detectors work in this way

DALI Addressable

All control devices and DALI ballasts with luminaires are assigned a unique address during onsite commissioning. A command from a control device can then communicate with specific luminaires on the DALI bus. Zones can be software defined for more complete control configuration. The following pages help you create a DALI addressable system



DALI Accessories

With the Whitecroft Lighting DALI offer we are able to integrate simple detection and manual override via a range of devices with varying levels of sophistication

DALI addressable hub

> weblink > CFLDALIHUB

The DALI addressable hub can be used in isolation to provide simple control to a localised application such as a classroom or office area. It has the added flexibility of being able to control multiple rooms up to the maximum addresses as detailed below.

- Low profile housing, perimeter mounted connector for mounting in limited void space
- Integrated mounting detail for surface, rod or trunking fixing
- Output connections
 - 3 x 6 pole lighting outputs rated at 6A
- Injection moulded flame retardant housing with mains entry cover and cable retainer

SYSTEM GUIDELINES

- Up to 63 addresses per hub (each ballast, detector or switch constitutes 1 address)
- Maximum 300m cable run and 250mA power consumption (typical 2mA per ballast)
- Up to 6A load on each of 3 socket outlets

SIMPLE WIRING

- Enhanced connectivity with CFL wiring components
- Switches and detectors can also be connected with CFL cables

SOFTWARE CONFIGURATION

- Post installation software interface can be used to define dimming zones for daylight harvesting or switching zones

SCENE SETTING

- Touch button panels can be programmed to control a variety of different scenes by individually addressing each luminaire within the space
- Simple corridor linkage can be programmed so the luminaires stay on at a defined level whilst adjoining areas are occupied
- Multiple lighting levels can be selected from the switch panel
- Switching in 'X' direction and daylight control in 'Y' direction is possible



ORDER CODES

DALI Hub

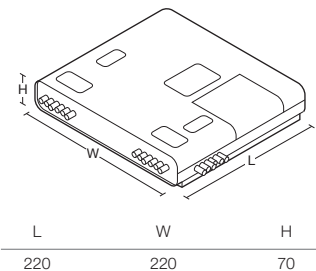
DALI Addressable Hub

CFLDALIHUB

Command Fast Link

See pages 202 to 207 for a listing of the range of leads and detectors to complete a full Command Fast link plug and play installation. A design service is available, please contact the Whitecroft office for further details.

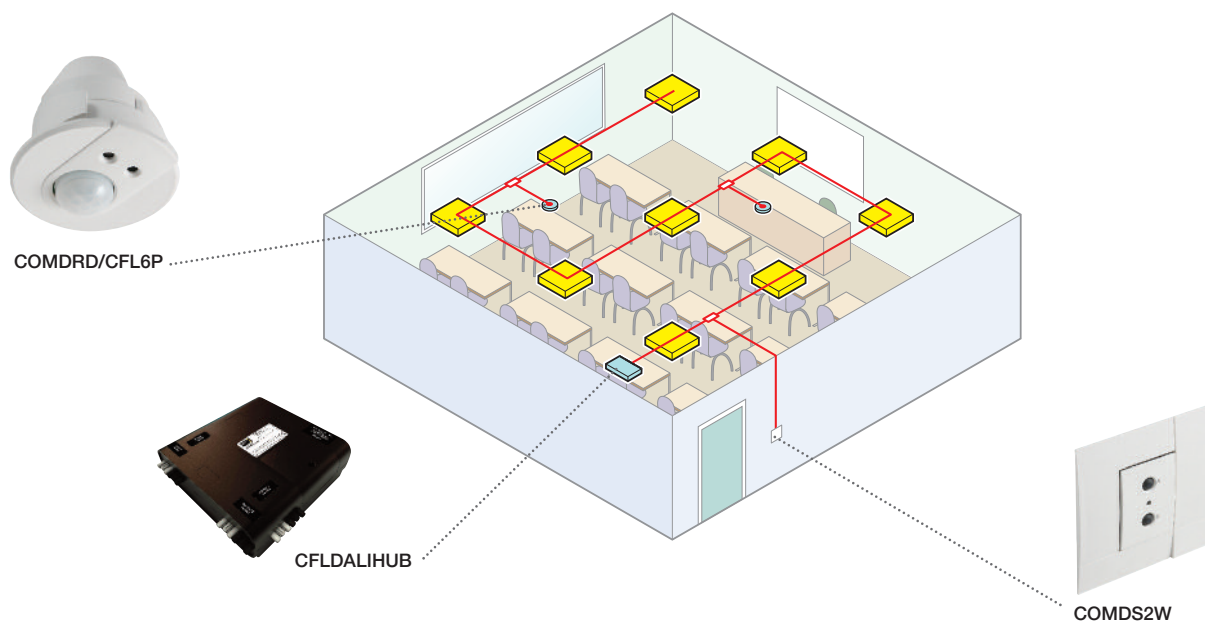
DIMENSIONS



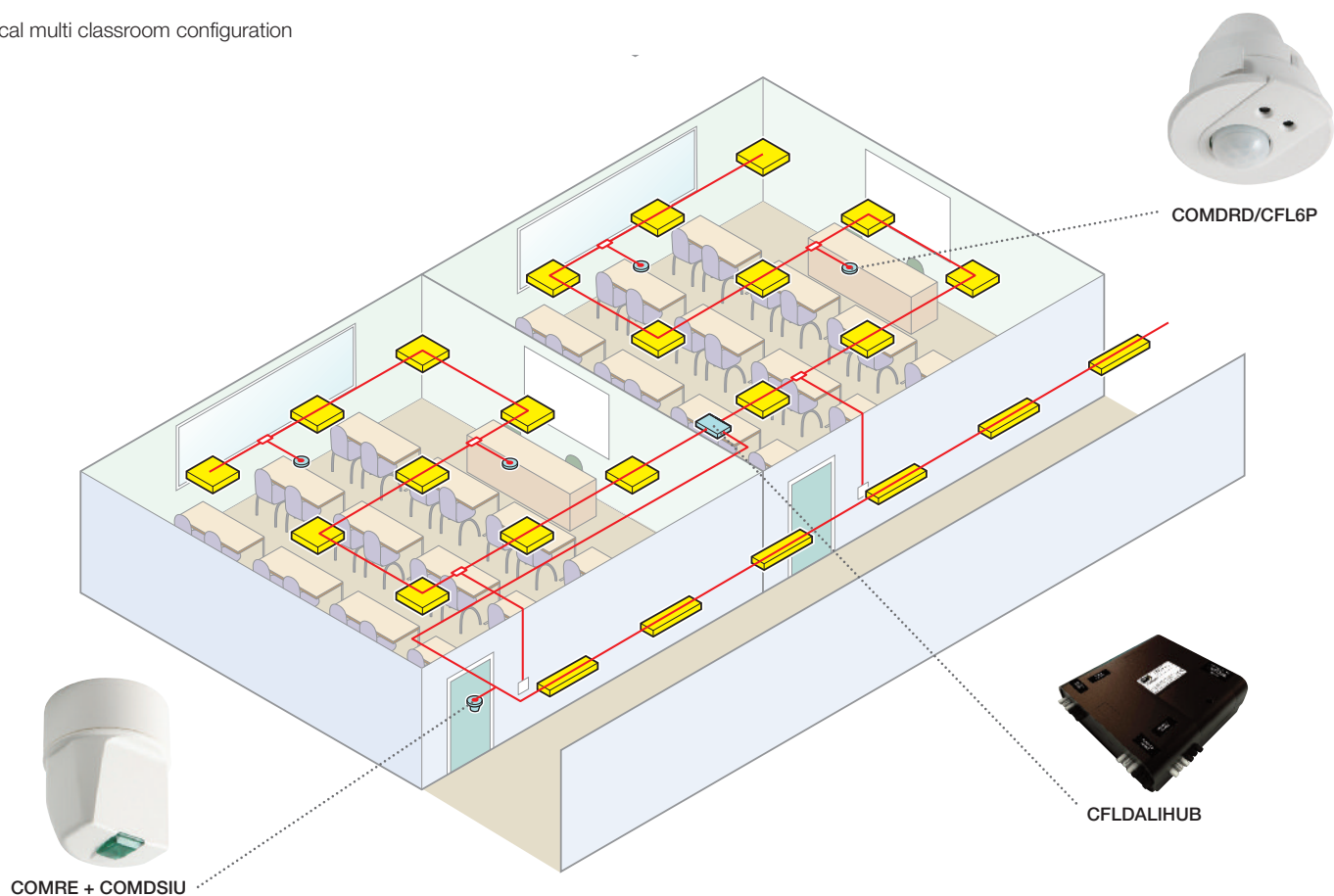
TO SPECIFY

DALI Hub with integrated power supply for connection of up to 63 luminaires via 3 separate GST18/6 outputs – as Whitecroft Lighting CFLDALIHUB

Typical single classroom configuration



Typical multi classroom configuration



DALI router

> weblink > **COMD2CR**

To further expand the flexibility of a DALI lighting control system, a 2 channel router is available. This gives the opportunity to address up to 128 devices from one router and is scalable to meet the needs of the largest installation as multiple routers can be networked.

128 ADDRESSES

- The DALI Router can address 64 devices on each of 2 channels, giving a wider range than an individual hub

SCALABLE

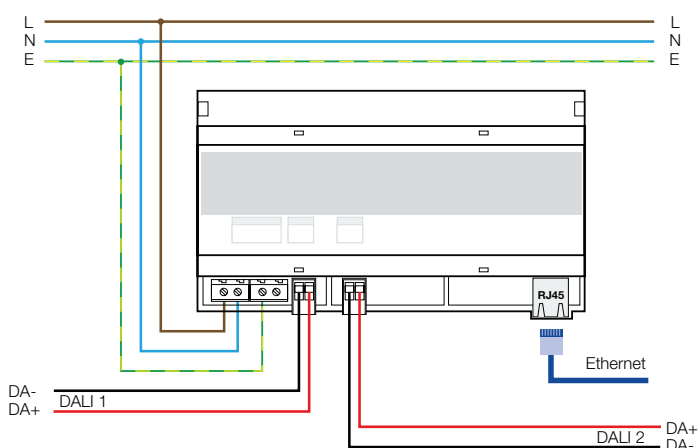
- DALI Routers can be linked together by Ethernet cable
- There is no limit to the number of routers used in a single installation, making the system infinitely scalable
- Each router can be assigned an IP address and can be linked into an existing computer network

BUILDING -WIDE FLEXIBILITY

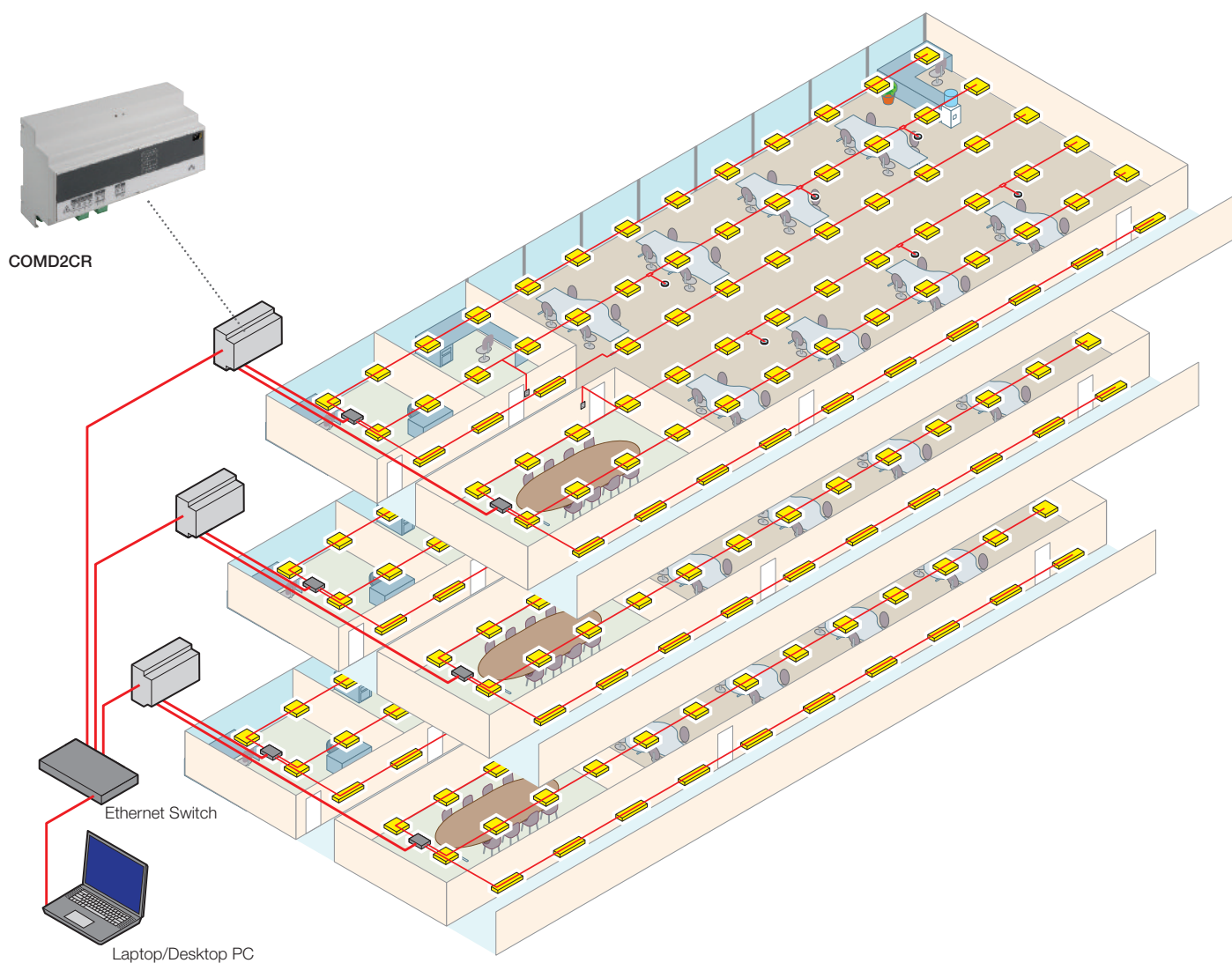
- Each room can be configured independently for the requirements of the space, from simple PIR functionality for storage areas to complex scene-setting for meeting areas.
- Daylight harvesting can reduce energy consumption in open plan or cellular office environments
- Programming can be from a single point with PC-based software configuration. This can even be achieved remotely.



CONNECTIONS



Typical multi floor and room configuration



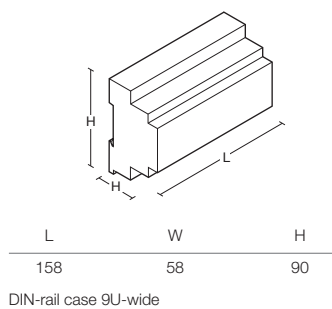
ORDER CODES

DALI Router

DALI Router

COMD2CR

DIMENSIONS



TO SPECIFY

DALI Router with 2 off 250mA channels.
Din rail mounting and ethernet port for
networking – as Whitecroft Lighting
COMD2CR

modular switch panels

> weblink > COMDS

Modular switch panels are fully DALI compatible range of user interfaces that allow basic adjustments to the system as well as scene setting.

- Indicator LED and an infrared receiver
- Out of box operation
- Designed to fit both DIN and UK standard back boxes
- DALI power consumption 10mA

ORDER CODES

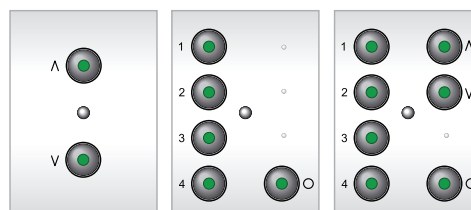
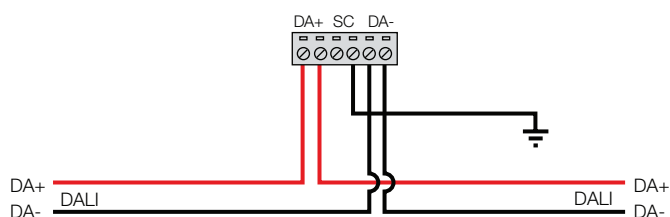
Modular Switch Panels

2 Button – On/Off, Raise/Lower – White	COMDS2W
5 Button – On/Off, 4 Scenes – White	COMDS5W
7 Button – On/Off, Raise/Lower, 4 Scenes – White	COMDS7W
2 Button – On/Off, Raise/Lower – Brushed Stainless Steel	COMDS2S
5 Button – On/Off, 4 Scenes – Brushed Stainless Steel	COMDS5S
7 Button – On/Off, Raise/Lower, 4 Scenes – Brushed Stainless Steel	COMDS7S



COMDS2W White/Brushed Stainless Steel

CONNECTIONS



Standard Modules

hand held controller

> weblink > COMDSSC

The Infrared Remote is a handheld unit that can be used to control basic system functions such as on/off, raising and lowering the general light level and the selection of four scenes.

- On/Off button
- Raise/Lower buttons
- Four scene recall buttons

ORDER CODES

Hand Held Controller

DALI hand Held Controller	COMDSSC
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DALI addressable PIR detector/photocell

> weblink > **COMDRD**

The Multisensor is a compact unit containing the necessary sensors to provide energy saving functions. It has constant light sensor, a passive infra-red detector (PIR) and an infra-red receiver for the Infrared Remote.

- Designed to push fit into a ceiling or luminaire housing.
- Programmable constant light
- Presence detection
- Control using the hand held remote.
- Switch-Control input
- DALI power consumption 15mA



ORDER CODES

DALI Addressable PIR/Photocell detector

Recessed Mounting

COMDRD

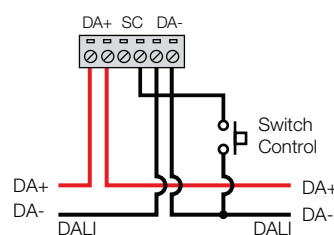
Optional Command Fast Link connector

CFL 3 POLE

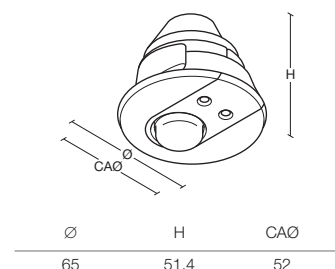
Add suffix /CFL3P to order code

i.e. COMDRD/CFL3P

CONNECTIONS



DIMENSIONS



DALI switch input unit

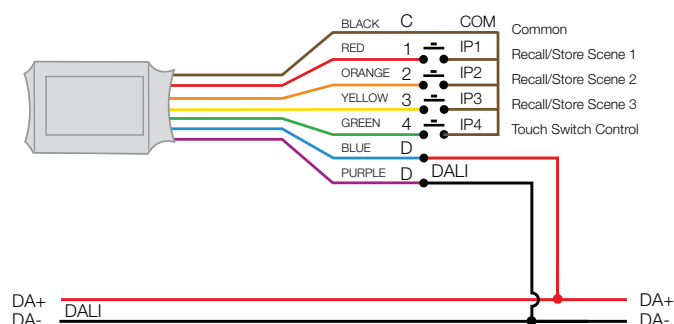
> weblink > **COMDSIU**

Switch Input Unit is designed to allow customer specified switches, sensors, time clocks or other on/off control devices to be incorporated into a Whitecroft DALI lighting control system. The Switch input Unit is suitable for inclusion into all standard size back boxes together with a suitable mains rated switch.

- Touch dimming with a momentary push switch
- Can be used with momentary or latching switches
- Can be used with COMRE or COMRG for switching with microwave detector
- DALI power consumption 10mA



CONNECTIONS



ORDER CODES

DALI Switch Input Unit

DALI Switch Input Unit

COMDSIU

DALI power supply

> weblink > **COMDPSU**

Fully DALI compatible Power Supply Unit, designed to provide the required supply of up to 250 mA. Unit is DIN-rail mounted.

- Status LED
- DALI short circuit and over temperature protected

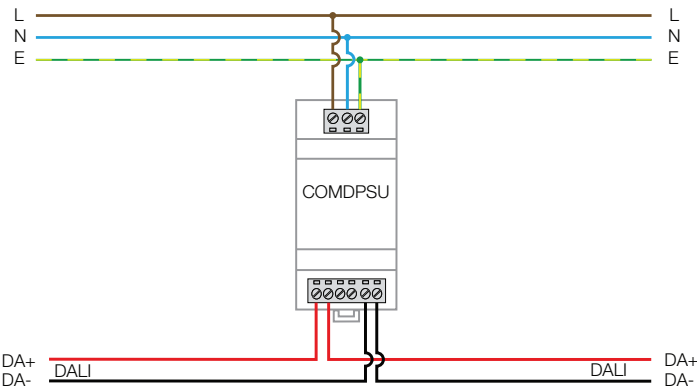


ORDER CODES

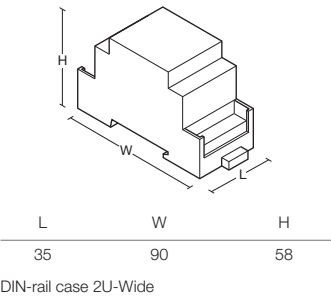
DALI Power Supply

DALI Power Supply	COMDPSU
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CONNECTIONS



DIMENSIONS



LCD touch screen

> weblink > **COMDT**

The TouchPanel is a 3.5" touch sensitive 65,000 colour LCD screen that can be used for controlling and programming a Whitecroft lighting control system.

- Built-in astronomic real time clock.
- Automatic scene changing (Sequences and cycles)
- Integral infrared receiver
- Customisable graphics and user language selection
- Requires double gang UK back box
- Can only be used on a DALI Router Controlled System



ORDER CODES

LCD Touch Screen

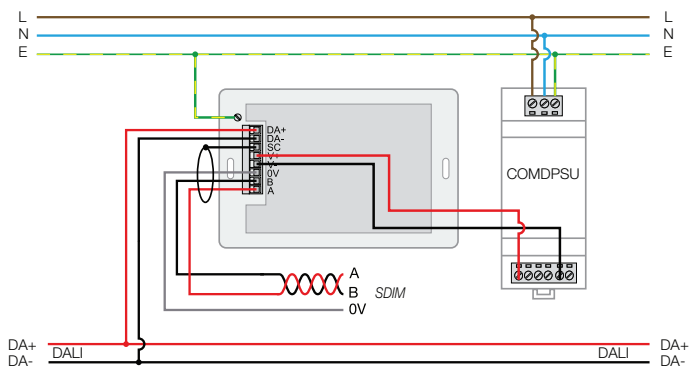
LCD Touch Screen – White	COMDTW
LCD Touch Screen – Brushed Stainless Steel	COMDTS

Options

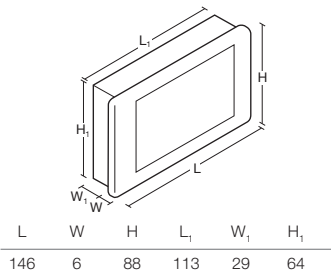
DALI Power Supply	COMDPSU
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Note – The touch screen needs its own dedicated power supply unit.
Please add COMDPSU for each unit.

CONNECTIONS



DIMENSIONS



*Requires Double Gang UK back box
(provided in the package)