# ActiveAhead Control Unit DA (5606)

A member of the ActiveAhead® family of wirelessly networked devices, the ActiveAhead Control Unit DA connects standard DALI luminaires to the ActiveAhead low-energy Bluetooth® radio mesh network.

Communicates with the other ActiveAhead generation 2018 devices, including other 5606 devices as well as 5605 ActiveAhead Control Units.

The connected units share information, such as movement detections, through the mesh network, and a mobile app allows you to adjust the parameters of the system.

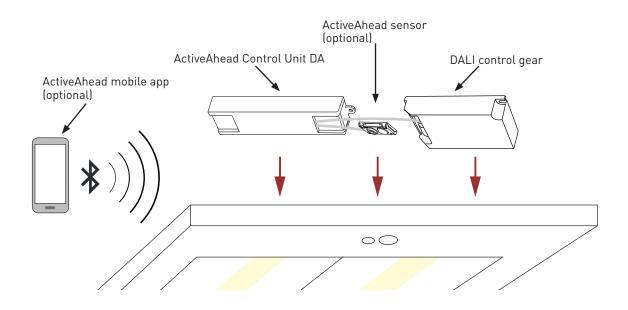
The ActiveAhead Control Unit DA is equipped with strain relief, so it can be placed either inside or outside a DALI luminaire. Each unit has a DALI output with dual parallel connectors.

When it is fitted with an ActiveAhead compatible sensor, the ActiveAhead Control Unit DA makes DALI luminaires anticipate the most suitable lighting conditions right before they are needed. Thanks to its smart software algorithm, it is able to learn the movement patterns in its environment, to predict movement and to adjust the luminaire operation accordingly.

Learning is based on the data that the unit receives from locally connected sensors and from other ActiveAhead nodes in the network. Since it never stops learning, the ActiveAhead Control Unit DA will adapt to any future changes in its environment, such as a wall installation or removal.

#### **Key Features**

- Continuous self-learning which adapts to the actual space usage.
- Converts DALI luminaires into wireless ActiveAhead generation 2018 luminaires.
- Suitable for Class I or Class II luminaires.
- Links to the ActiveAhead generation 2018 mesh network with other 5606 as well as 5605 ActiveAhead Control Unit devices.
- Compatible with the ActiveAhead range of sensors (3021 and 3022).
- Additional customisation via mobile app.
- Strain relief for easy installation outside a luminaire.
- Supports chaining of the mains power.
- From Revision H onwards compatible with range of Helvar DALI system sensors (320, 321, 322 and 341). Support is limited to movement detections.
- From Revision H onwards supports switch input.





# CE

Helvar



## **Technical Data**

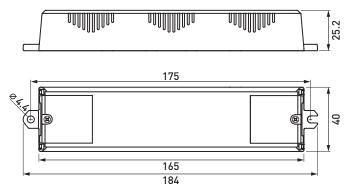
| Connections              |  | Operating conditions               |  |
|--------------------------|--|------------------------------------|--|
| DALI cable:              | 2 × 2-pole push-fit terminals<br>Wire section: 0.5 mm² – 1.5 mm²<br>solid or stranded.   | Number of connected DALI<br>loads: | DALI Recommended 1-4; within the<br>DALI output current limits more<br>as long as max. distance between<br>control units is followed and sensor<br>coverage areas are considered |
| Mains:                   | 2 × 2-pole terminal block<br>Wago 250-202<br>Wire section: 0.5 mm² – 1.5 mm²<br>solid or stranded.                             |                                    |  |
|                          |  | Operating temperature:             | -20 °C to +50 °C   |
|                          |  | Relative humidity:                 | Max. 90 %, noncondensing   |
| Sensor:                  | Active+ Sense connector  | Storage temperature:               | -40 °C to +80 °C   |
| Electrical data          |  | Max. DALI cable length:            | 30 m   |
| Input voltage:           | 100 VAC - 240 VAC  | Max. distance between              |  |
| Starting voltage:        | 85 V   | control units:                     | 10 m in free space   |
| Input current:           | Max. 40 mA   | Conformity and standards           |  |
| Input power:             | Max. 2 W   | EMC:                               | EN 55015, EN 61547   |
| Input frequency:         | 50 Hz – 60 Hz  | Safety:                            | EN 61347-1, EN 61347-2-11  |
| Output current for DALI: | Max. 64 mA (additional DALI PSUs are not allowed on the line)  | RED:                               | EN 301 489-1, EN 301 489-17,<br>EN 300 328   |
| Sensor interface:        | 3.3 V  | Isolation mains to DALI:           | Basic isolation (250 V)  |
| Mechanical data          |  | Isolation mains to sensor:         | Reinforced isolation (250 V)   |
| Dimensions:              | 184 mm × 40 mm × 25.2 mm   | Isolation DALI to sensor:          | Supplementary isolation (250 V)  |
| Material (casing):       | Polycarbonate  | Environment:                       | Complies with WEEE and RoHS  |
| Colour:                  | White RAL 9016   |                                    | directives.  |
| Weight:                  | 80 g   |                                    |  |
| Safety class:            | Construction class: II. Suitable<br>for installation in Class I or Class<br>II luminaires, or for independent<br>installation. | Dimensions (mm)                    |  |

#### Power ratio and frequency

| Bluetooth® wireless | Bluetooth® Low Energy |
|---------------------|-----------------------|
| technology:         | (2.4 GHz)             |
| Antenna pattern:    | Omnidirectional       |

|                                      | as long as max. distance between<br>control units is followed and sensor<br>coverage areas are considered |  |
|--------------------------------------|---|--|
| Operating temperature:               | -20 °C to +50 °C  |  |
| Relative humidity:                   | Max. 90 %, noncondensing  |  |
| Storage temperature:                 | -40 °C to +80 °C  |  |
| Max. DALI cable length:              | 30 m  |  |
| Max. distance between control units: | 10 m in free space  |  |
| Conformity and standards             |   |  |
| EMC:                                 | EN 55015, EN 61547  |  |
| Safety:                              | EN 61347-1, EN 61347-2-11   |  |
| RED:                                 | EN 301 489-1, EN 301 489-17,<br>EN 300 328  |  |
| Isolation mains to DALI:             | Basic isolation (250 V)   |  |
| Isolation mains to sensor:           | Reinforced isolation (250 V)  |  |
| Isolation DALI to sensor:            | Supplementary isolation (250 V)   |  |
| Environment:                         | Complies with WEEE and RoHS directives.   |  |
|                                      |   |  |

### imensions (mm)



### Connections

