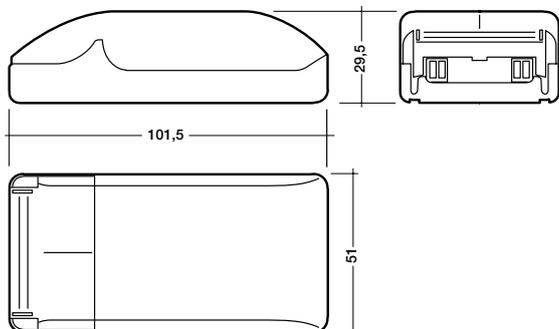


DALI-Somfy animeo interface



- For integrating Somfy animeo IB+ motor controllers in the DALI circuit
- The DALI-Somfy animeo interface requires 4 DALI addresses and can therefore independently control up to 4 blinds (i.e. 1 interface is needed per motor controller)
- Lighting moods can be conjured up using different blind positions
- The DALI-Somfy animeo interface supports 16 DALI groups and 16 DALI scenes. It is incorporated into the DALI circuit like a DALI electronic ballast. The blind positions (height and angle) are stored just like lighting scenes. Whenever the saved scene is called up, the blind moves to the preset position. It is possible to save and recreate a scene using the DALI SC, for instance. This makes it possible to save light and blind positions in a single scene.
- 5-year guarantee

Installation

- The polarity of the terminals (A, B) must be observed
- May only be used in conjunction with certain Somfy animeo IB+ motor controller (see list)
- Adjustments to the running and winding times must be made directly on the motor controller (Somfy) or using the software of the manufacturer (Somfy)
- The DALI-Somfy animeo interface will only function after the running and winding times have been set on the motor controller (Somfy)
- The DALI and Somfy signals are not SELV. Installation specifications for low-voltage devices apply
- The maximum current on the DALI control line may not exceed 250 mA
- The maximum cable length of the DALI control line may not exceed 300 m (given a wire cross section of 1.5 mm²) or a voltage drop of 2 V

Packaging carton:

1 pc(s).

Designed according to:

- EN 55015
- EN 55022
- EN 61000-3-2
- EN 61000-3-3
- EN 61000-6-2
- EN 61347-2-11
- EN 61547
- IEC 62386 (according to DALI standard V1)

Glow-wire test

according to EN 60598-1 passed.

| | | | DALI-Somfy animeo Interface |
|-------------------------|----------------------------------|------------------------|---------------------------------|
| Type | | | |
| article number Tridonic | | | 86458491 |
| article number Somfy | | | 1860140 |
| electrical supply | mains voltage | V | 220–240 |
| | frequency | Hz | 50/60 |
| | max. current | mA | 20 |
| input | number | – | 1 |
| | – | – | DALI |
| | power consumption DALI bus | mA | 6 |
| output | number of DALI addresses | – | 4 (one per motor) |
| | number | – | 1 |
| | – | – | Somfy motor controller protocol |
| mounting | max. number of selectable motors | – | 4 |
| | – | – | remote mounting |
| | mounting position | – | any |
| mechanical details | max. cross section | mm ² | 2.5 |
| | dimensions LxWxH | mm | 101.5x51x29.5 |
| | weight | kg | 0.155 |
| environment | protection type | – | IP 20 |
| | safety class | – | SKII |
| | temperature | ambient temperature ta | °C |
| storage temperature | | °C | -20 → 70 |
| tc point | | °C | 75 |

The following Somfy motor controllers can be used:

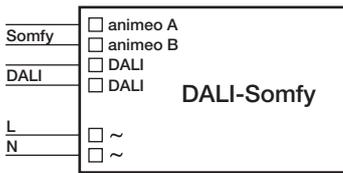
- animeo IB+ 4 AC motor controller (1860049, 1860081, 1860103, 1860108)
- animeo IB+ 4 DC motor controller (1860086)
- animeo IB+ 4 DC/DC-E motor controller (1860087)

Please read the instructions for the animeo IB+ motor controllers carefully.

The following Tridonic DALI controls are supported:

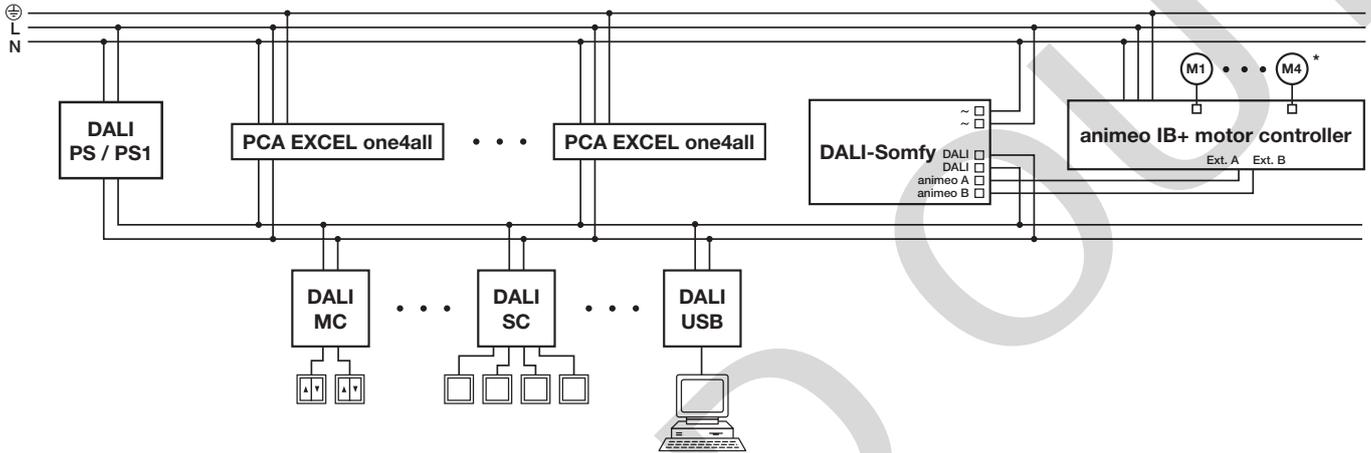
- DALI-GC-A
- DALI-SC
- DALI-SC-A
- DALI-MC
- DALI-TOUCHPANEL
- DALI-USB
- x-touchBOX version 3.00 or above
- x-touchPANEL version 3.00 or above
- x/e-touchPANEL
- DALI-TOUCHPANEL 02

Wiring diagrams:

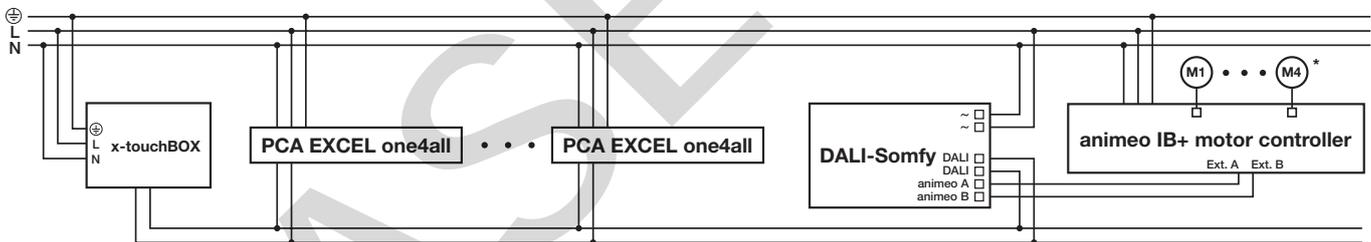


The polarity (A, B) between the DALI-Somfy module and the Somfy motor controller must be observed.

DALI-Somfy → **Motor controller**
 animeo A → Ext. A
 animeo B → Ext. B



* Please read the instructions for the animeo IB+ motor controllers carefully.



* Please read the instructions for the animeo IB+ motor controllers carefully.
 The DALI-Somfy animeo interface is supported by the x-touchPANEL and the x-touchBOX from software version 3.00 or above.

Command set

| Standard DALI command set | | Description |
|---------------------------|-------------------------------|--|
| | DIRECT ARC POWER | The DAP command is forwarded to the motor controller interface as a position. The angle remains unchanged. DALI DAP [0...254] is translated into position [0...100] |
| 0 | OFF | If motor is running: STOP, otherwise same as DAP 0. Different behaviour during tilt → see Device-specific commands |
| 1 | UP | Blind moves to "MAX LEVEL". Different behaviour during tilt → see Device-specific commands |
| 2 | DOWN | Blind closes completely. Different behaviour during tilt → see Device-specific commands |
| 3 | STEP UP | Not evaluated (motor controller cannot perform a single step) |
| 4 | STEP DOWN | Not evaluated (motor controller cannot perform a single step) |
| 5 | RECALL MAX LEVEL | If motor is running: STOP, otherwise the position stored as "MAX Level" is approached. The angle remains unchanged (unless limited by the end positions in the motor controller). Different behaviour during tilt → see Device-specific commands |
| 6 | RECALL MIN LEVEL | If motor is running: STOP, otherwise the position stored as "MIN Level" is approached. The angle remains unchanged (unless limited by the end positions in the motor controller). Different behaviour during tilt → see Device-specific commands |
| 7 | STEP DOWN AND OFF | Not evaluated |
| 8 | ON AND STEP UP | Same as UP |
| 16...31 | GOTO SCENE | Goes to the predefined scene value. A scene value consists of a position and angle. (See also "STORE DTR AS SCENE" and "STORE ACTUAL LEVEL IN THE DTR") |
| 32 | RESET | Reset to factory default (address not affected) |
| 33 | STORE ACTUAL LEVEL IN THE DTR | Stores the current position in the DTR and the current angle in a special "DTR_Tilt" register |
| 42 | STORE DTR AS MAX LEVEL | Stores the maximum position within the physical limits. The angle is not stored. |
| 43 | STORE DTR AS MIN LEVEL | Stores the minimum position within the physical limits. The angle is not stored. |
| 64...79 | STORE THE DTR AS SCENE | Stores a preprogrammed position. The angle is taken from the internal "DTR_Tilt" register and stored together with the scene value. |
| 80...85 | REMOVE FROM SCENE | Stores 255 in the scene register |
| 96...111 | ADD TO GROUP | As per standard |
| 112...127 | REMOVE FROM GROUP | As per standard |
| 128 | STORE DTR AS SHORT ADDRESS | As per standard |
| 144 | QUERY STATUS | As per standard |
| 145 | QUERY BALLAST | Response is always YES |
| 148 | QUERY LIMIT ERROR | As per standard |
| 149 | QUERY RESET STATE | As per standard |
| 150 | QUERY MISSING SHORT ADDRESS | As per standard |
| 151 | QUERY VERSION NUMBER | Response is always 0 |
| 152 | QUERY CONTENT DTR | As per standard |
| 153 | QUERY DEVICE TYPE | Response is always 0 (standard ballast) |
| 154 | QUERY PHYSICAL MINIMUM LEVEL | Response is always 1 |
| 155 | QUERY POWER FAILURE | As per standard |
| 160 | QUERY ACTUAL LEVEL | Response is the current motor position 0...254 |
| 161 | QUERY MAX LEVEL | 0...254 |
| 162 | QUERY MIN LEVEL | 0...254 |
| 163 | QUERY POWER ON LEVEL | Always 255 (MASK) |
| 164 | QUERY SYSTEM FAILURE LEVEL | Always 255 (MASK) |
| 179...191 | QUERY SCENE LEVEL | Response is the preprogrammed scene value (position) |
| 192 | QUERY GROUPS 0-7 | As per standard |
| 193 | QUERY GROUPS 8-15 | As per standard |
| 194 | QUERY RANDOM ADDRESS H | As per standard |
| 195 | QUERY RANDOM ADDRESS M | As per standard |
| 196 | QUERY RANDOM ADDRESS L | As per standard |

| Special DALI command set | | Description |
|--------------------------|-----------------------|--|
| 256 | TERMINATE | As per standard |
| 257 | DTR | Physical Addressing Method is not possible |
| 258 | INITIALISE | |
| 259 | RANDOMIZE | |
| 260 | COMPARE | |
| 261 | WITHDRAW | |
| 264 | SEARCHADDRH | |
| 265 | SEARCHADDRM | |
| 266 | SEARCHADDRL | |
| 267 | PROGRAM SHORT ADDRESS | |
| 268 | VERIFY SHORT ADDRESS | |
| 269 | QUERY SHORT ADDRESS | |

Device-specific commands

The response of the “DALI-Somfy animeo interface” to some DALI commands is different from those specified in the official DALI standard. These commands have the following meanings:

„FADE TIME, FADE RATE“

The values are accepted and stored but have no effect on the louvre blind movements.

„RECALL MAX, RECALL MIN, OFF“

For use with the DALI GC the following responses have been implemented:

- If “Recall MAX” is received while the motor is running, the motor will stop
- If “Recall MIN” is received while the motor is running, the motor will stop
- If “OFF” is received while the motor is running, the motor will stop

This results in the following behaviour:

Briefly pressing a button starts the motor; pressing the button again stops the motor.

Different behaviour during tilt → see Ergonomics.

„UP, DOWN“

A single “UP/DOWN” command moves the blind to the relevant end position, unless the blind is tilting. If the blind is tilting, the motor is switched on for 150 ms (tilt mode).

If the command is repeated (button pressed continuously) during a tilt the motor continues until the end of the tilt is reached. This is followed by a pause of 500 ms in which the button can be released to stop the blind. Otherwise the blind continues to the relevant end position.

Behaviour is also determined by the selected US/EU ergonomics:

Ergonomics determine the behaviour of the blind during tilting. Ergonomics can be selected with the aid of the “masterCONFIGURATOR” software tool (V1.10 or higher).

| Action | US | EU |
|---|--|---------------------------------------|
| Blind is tilting and the following DALI commands are sent: <ul style="list-style-type: none"> • OFF • DOWN • RECALL MIN | Moves to the lower end position | Makes a small positive angle movement |
| Blind is tilting and the following DALI commands are sent: <ul style="list-style-type: none"> • UP • ON AND STEPUP • RECALL MAX | Moves to the upper end position or MAX LEVEL | Makes a small negative angle movement |

Blind angle, storing scenes

A scene value consists of a position and angle. A special internal DTR register (DTR_Tilt) is used for the angle.

When a scene is recalled the blind moves to the position and angle stored for this scene.

The following process

- „STORE ACTUAL LEVEL IN THE DTR“ (stores the angle in DTR_Tilt)
- „STORE THE DTR AS SCENE“ stores both the position and the angle.