

ready2mains™ Programmer ready2mains™

Product description

- Interface for programming of Tridonic products via ready2mains, DALI and U6Me2
- Support of configuration scripts
- Display and keypad for manual operation
- Removable protective cover
- USB interface for easy integration in automated test systems
- Parallel programming up to 5 LED Driver
- Current setting in 1-mA-steps
- Integrated DALI USB interface incl. intelligent 40 mA bus supply
- USB Mini-B cable 1 m included
- 5-year guarantee



Standards, page 3

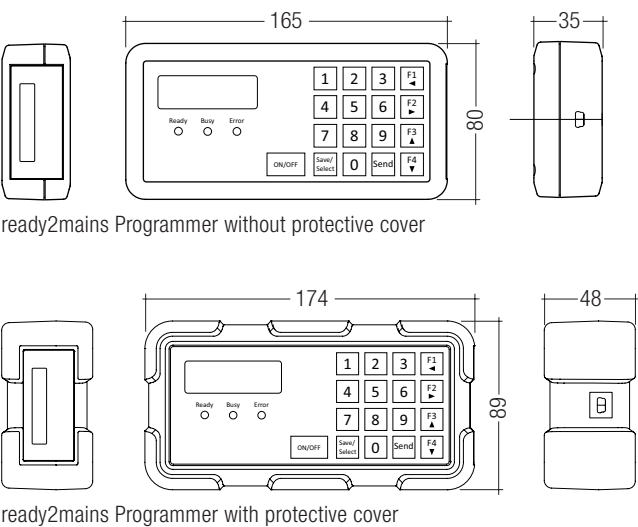
Wiring diagrams and installation examples, page 4





ready2mains™ Programmer
ready2mains™

| Technical data | |
|------------------------|----------------------------|
| AC voltage range | 110 – 277 V |
| Mains frequency | 50 / 60 Hz |
| Max. load | 400 VA |
| Max. mains current | 3 A |
| Terminals | 0.25 – 1.5 mm ² |
| Cable length secondary | ≤ 5 m |
| Ambient temperature ta | -25 ... +40 °C |
| Type of protection | IP20 |
| Protective cover | blue, removable |
| Housing | grey, ABS UL94V-0 |



| Ordering data | | | |
|------------------------|----------------|-------------------|----------------|
| Type | Article number | Packaging, carton | Weight per pc. |
| ready2mains Programmer | 28001206 | 1 pc(s). | 0.423 kg |

Standards

EN 61347-2
EN 61347-2-11
EN 55015
EN 61000-3-2
EN 61000-3-3
EN 61547
According to DALI Standard V2
EN 62386-101
EN 62386-102
EN 60950-1 (USB)

Glow wire test

according to EN 60598-1 with increased temperature of 650 °C passed.

Overview ready2mains Programmer

The ready2mains Programmer is a versatile tool to program various Tridonic products via ready2mains, DALI and U6Me2. It is used in luminaire productions to cover a wide range of manufacturing processes, from manual programming to fully automated production lines. In addition, the Programmer can be used in outdoor applications to configure LED Driver via U6Me2.

Installation



General:

- Connect max. 5 LED Driver to the Programmer.
- Momentary-action switch has to be rated for mains voltage.
- At low mains voltages the max. mains current of 3 A has to be considered (max. 330 VA at 110 V).
- To guarantee a selective shut down in case of a hardware defect, we recommend to use an extra circuit breaker for the Programmer.
- To prevent destruction of the programmer at incorrect wiring of the luminaire (ground fault), it is recommended to use an isolating transformer plus an adequate fuse.

ready2mains:

- The ready2mains Programmer may only be used in conjunction with ready2mains compatible LED Drivers.
- Any other LED Driver or loads shall not be connected when programming via ready2mains.

DALI:

- DALI / DSI is not SELV. Apply the installation instructions for mains voltage.

U6Me2:

- If load exceeds the stated maximum load, a contactor must be used in between the Programmer and the connected LED Driver.

Notes

- The programmer turns off the internal DALI power supply when a second supply is detected on the bus.
- LED Driver requires a load to be connected during programming.
- To use the Programmer as a DALI interface, mains supply is not required. For ready2mains operation, mains supply is required.

Short-circuit behaviour

If there is a short-circuit between L and N at the output, the Programmer will switch off and restart after 10 s. If another short-circuit is detected, the Programmer will switch off and will be reactivated only after a mains reset. If a ground fault without isolating transformer happens the programmer can be destroyed.

Overload protection

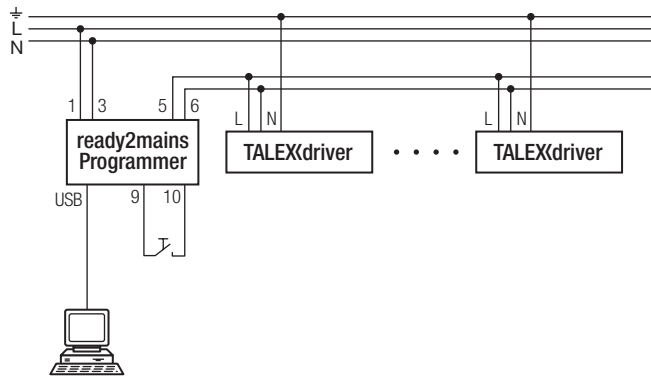
If the maximum permissible connected load is exceeded, the Programmer will switch off the output and restart after 10 s. If the overload persists, the Programmer will switch off and will be reactivated only after a mains reset.

Overtemperature protection

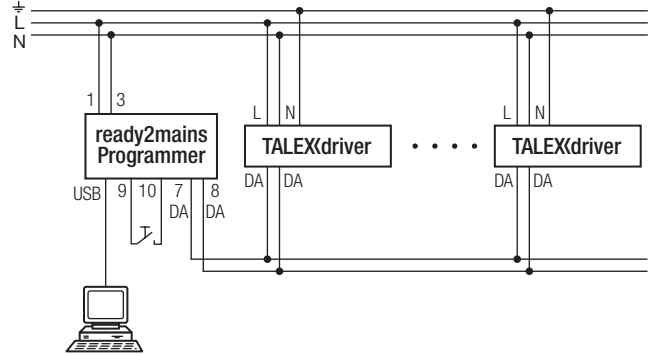
If a temperature of 65 °C in the Programmer is exceeded, the data rate will be gradually linearly reduced. Commands will therefore be implemented by the LED Driver with a slight delay. If the temperature continues to rise and reaches a value of 120 °C, the Programmer will switch off and will be reactivated only after a mains reset.

Wiring

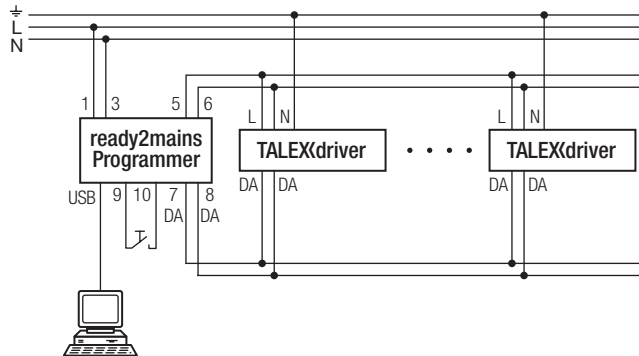
ready2mains



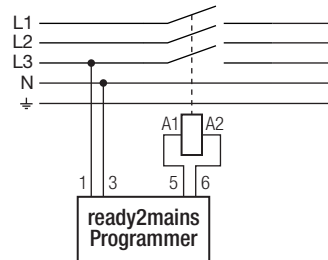
DALI



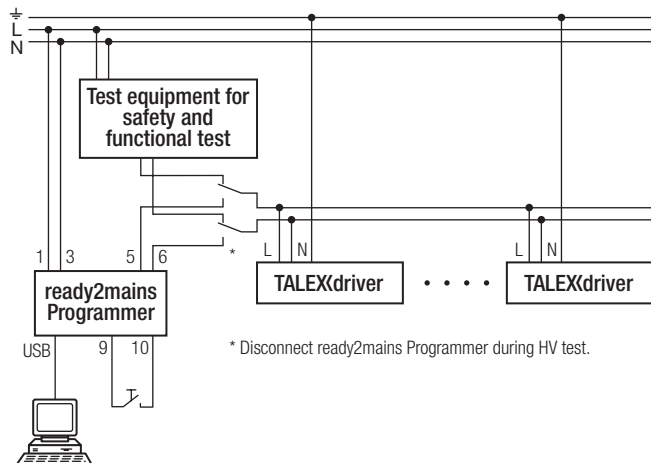
DALI and ready2mains



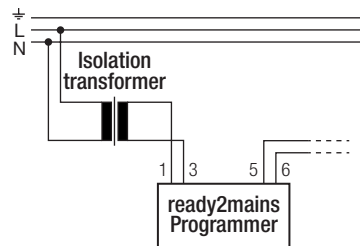
U6Me2 with contactor



Production



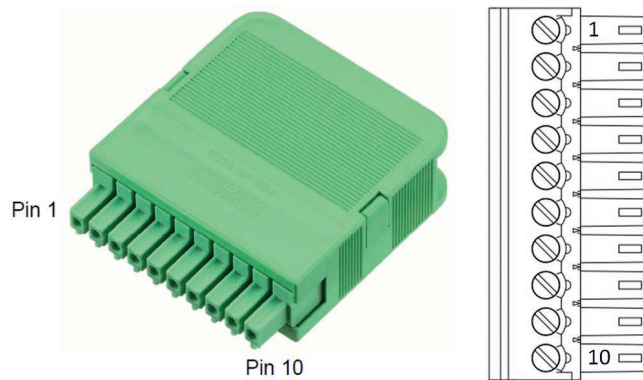
Security circuit against ground fault (incorrect wiring of the luminaire)



Tested transformer:
RS Pro 500VA Isolating Transformer
Reference number at RS components: 504-228

Isolation transformer should be protected against secondary short-circuit (B10 circuit breaker primary or a fuse secondary).

Connector pinning



| Pin no. | Input / output | Description |
|---------|----------------|--------------------------------------|
| 1 | Input | Mains input L |
| 2 | — | n.c. |
| 3 | Input | Mains input N |
| 4 | — | n.c. |
| 5 | Output | Mains output L' |
| 6 | Output | Mains output N' |
| 7 | Output | DALI |
| 8 | Output | DALI |
| 9 | Input | Momentary-action switch ^① |
| 10 | Input | Momentary-action switch ^① |

Installation instructions

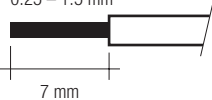
Wiring type and cross section

The wiring can be in stranded wires with ferrules or solid with a cross section of 0.25–1.5 mm².

Strip 7 mm of insulation from the cables to ensure perfect operation of the screw terminals.

Use one wire for each terminal connector only.

wire preparation:
0.25 – 1.5 mm²



^① Momentary-action switch has to be rated for mains voltage. Switch impulse > 200 ms. Potential-free contact.

Connector notes

One connector with housing is included.

If additional connectors are needed, they maybe ordered from a specialized trader or the connector manufacturer itself.

Connector data:

Manufacturer: Phoenix Contact
Type: Printed-circuit board connector MC 1,5/10-ST-3,81
Article number: 1803659

Housing data:

Manufacturer: Phoenix Contact
Type: Cable housing KGG-MC 1,5/10
Article number: 1834424

Additional information

Additional technical information at
www.tridonic.com → Technical Data

Guarantee conditions at
www.tridonic.com → Services

No warranty if device was opened.