TRIDONIC

ACU Z18 Bracket Holder

General



Product description

_ One to two Zhaga interfaces, upwards and/or downwards facing, per bracket
_ In built surge protection on both DALI and auxiliary lines
_ 800 V surge, both polarities
_ 56 V (DALI Bus) and 66 V (AUX) maximum clamping voltage
_ Three adapters included for pole and wall mounting
_ Capable to fit poles with ø 50 mm to ø 100 mm and ø 100 mm to ø 200 mm
_ Tapered pole compatible
_ Suitable for pole section thickness of 2.5 to 6 mm
_ Screwed directly to the pole or strap fixable
_ Prevents downwards facing device from collecting water
_ IP66 and IK09 rated
_ Two cable exit options. For internal and external pole routing
_ Pre-installed connection via 3 0.75 mm² conductors, sunlight resistant cable

Benefits

_ Inbuilt surge protection designed to help protect control devices from induced surges on the signal lines, as defined in DALI Part 151
_ Allows controls to be retro fitted to existing LED luminaires in the field
_ Pole and wall mounted adapter options available

Typical applications

_ Heritage and decorative luminaires
_ Powered DA
_ High mast lighting
_ Urban lighting
_ Historically protected and important luminaires

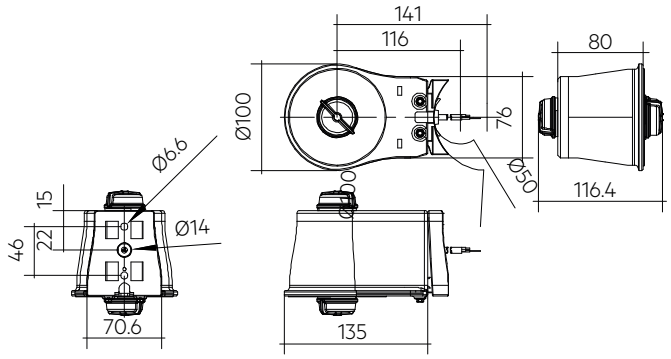
Website

http://www.tridonic.com/28006367

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General



Ordering data

Type	Article number	Packaging, carton	Packaging, pallet	Weight per pc.
ACU Z18 Bracket Holder	**28006367**	15 pc(s).	864 pc(s).	0.387 kg

Technical data

Supply voltage DC	33 V
Max. rated current	0.305 A
Mounting hole	acc. to Zhaga Book 18 Ed. 3
Type of installation	Zhaga Book 18 Ed. 3 socket
Housing	Black
Housing material	PBT
UV resistance	f1
Impact protection degree	IK09
Type of protection	IP66
Ambient temperature ta	-40 … +85 °C
Storage temperature ts	-40 … +85 °C
Connection cable	Yes
Cable length	1.5 m
Dimensions L x W x H	135 x 100 x 98.8 mm

Approval marks

CE UKCA

Standards

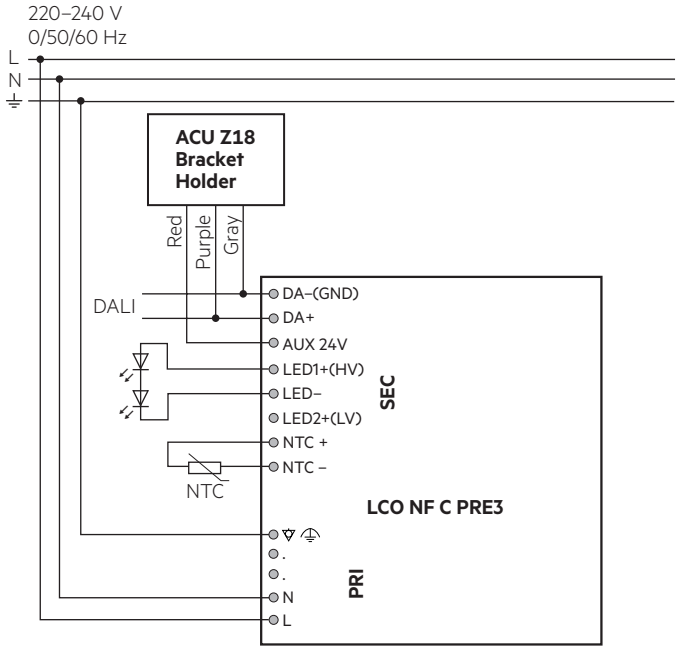
IEC 60529, IEC 62262, UL UV-f1

1. Standards

IEC 60529
IEC 62262
UL UV-f1

2. Installation / wiring

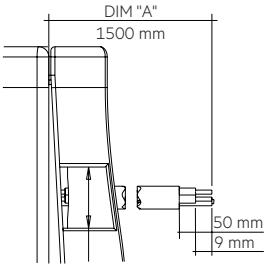
2.1 Circuit diagrams



2.2 Connection

The ACU Z18 Bracket Holder assembly is supplied with a 3 conductor, 0.75 mm² stranded copper cable attached. The cable should be prepared as necessary to make connections to the communication bus within the luminaire and pole assembly.
The bridge cable conductors are to be connected as shown in the table below:

DA+	DA–	24V
PURPLE	GRAY	RED
0.75 mm²	0.75 mm²	0.75 mm²



Cable:
3x 0.75 mm²

2.3 Installation considerations

When adding the ACU Z18 Bracket Holder assembly to the intended installation (pole or flat surface) dynamic loading should be considered within the application. For calculation purposes the ACU Z18 Bracket Holder assembly has an approximate FPA (frontal projected area) of 0.0137 m².

It is the responsibility of the customer and / or installer to determine the wind loading risks for adding the ACU Z18 Bracket Holder and the associated controls attached to it within the final installation.

2.4 Mounting location and orientation

The ACU Z18 Bracket Holder should be mounted on a luminaire pole or suitable flat mounting surface that ensures a secure mounting structure. The bridge assembly should not be mounted to damaged or failing surfaces that could adversely affect it's mounting security and performance.

2.5 Workmanship

The bridge assembly must not be damaged in any way. Inspect bridge assembly for proper contacts and ensure contacts and cable have not been damaged. Ensure that the sealing caps remain in place on the ACU Z18 Bracket Holder receptacles until there is a need to connect a D4i based photocell or motion control device to the ACU Z18 Bracket Holder assembly.

2.6 Replacement and repair

The ACU Z18 Bracket Holder assembly is not repairable.
DO NOT use if there is damage or the assembly has defective contacts and / or housing. If damaged, replace the bridge assembly with a new one.

2.7 Qualification

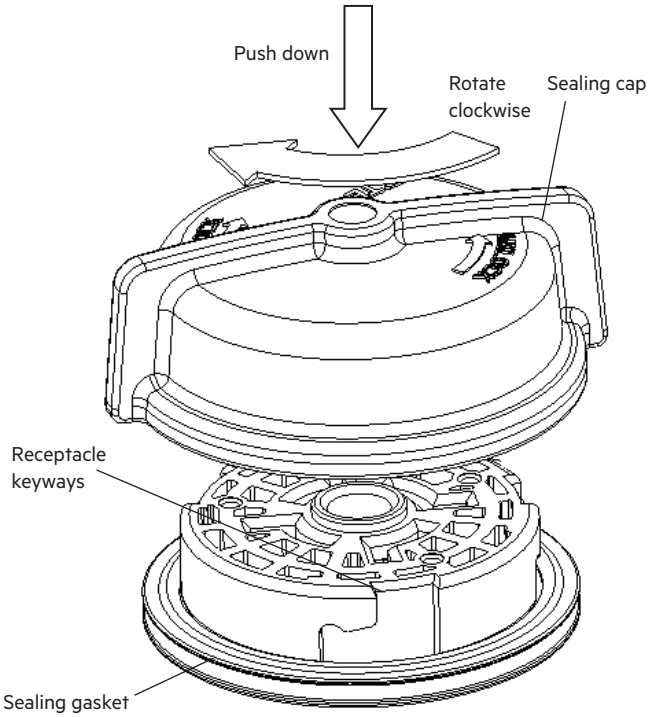
CE Marking per EU DoC (Declaration of conformity) 128-0001.

2.8 Tooling

Customer supplied tooling such as metric sockets, electric drill, drill bits and a torque wrench are required for drilling holes and applying screw hardware to mount the bridge to the intended mounting surface.
Customer supplied tools are also required to strip and prepare the cable for termination of the luminaire's wiring system.

2.9 Cap release

Align the sealing cap over the mounted receptacle. Based on polarizing features on each, the sealing cap can only be installed in one position. Lightly rotate the sealing cap until you feel the alignment keys and the blades align to the proper location. After alignment, push downward until the sealing cap is bottomed on the receptacles mating face.
Then complete mating by rotating sealing cap with downward pressure while twisting in a clockwise direction. The sealing cap will lock into position with an audible 'click'.
To un-mate, gently push down and reverse the process.

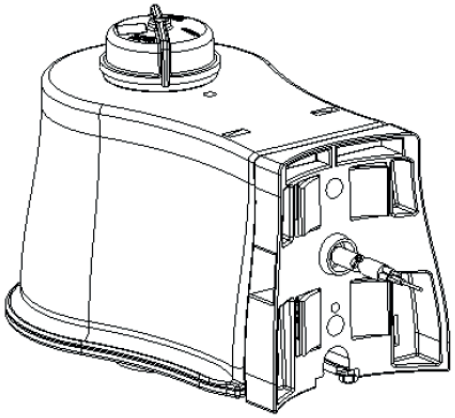


2.10 Commissioning and humidity:

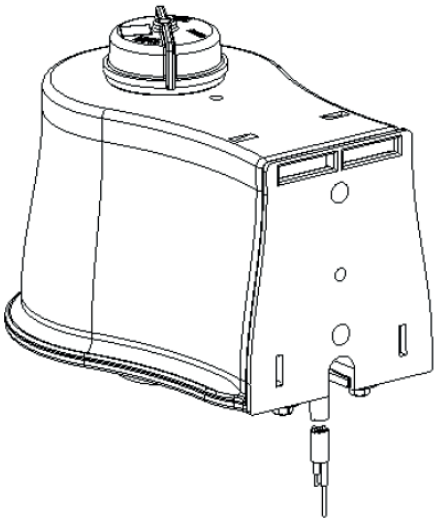
When using the ACU Z18 CAP, make sure that the contact connections are dry during following installation.
Each time the connector (ACU Z18 REP 4PIN) is assembled or disassembled using an ACU Z18 CAP / communication module / sensor, the connector (ACU Z18 REP 4PIN) must be checked again for moisture damage.
The use of the ACU Z18 REP 4PIN without the ACU Z18 CAP / communication module / sensor is not permitted.

2.11 Mounting options

Pole mount with internal cable connection:



Wall mount with external cable connection:



Included mounting plates for poles with 50 – 100 mm, poles with 100 – 200 mm and wall.

2.12 Drawings

Customer drawings for product part numbers are available from:
www.te.com
Information contained in the customer drawing takes priority.

2.13 Specifications

Product Specification 108-161586 provides product performance and test results.
For information regarding the Zhaga Book 18 ACU Z18 Bracket Holder receptacle and sealing cap application spec 114-133074.

2.14 Safety

Perform all electrical wiring of the bridge assembly with power turned OFF. The ACU Z18 Bracket Holder assembly is a fully enclosed device which is powered from the luminaire DALI D4i communication lines.

2.15 Limitations

The connectors are designed to operate in a temperature range of -40° to 85°C [-40° to 185°F].

2.16 Material

The bridge housings are made of UL 94V-0, UV f1 rated thermoplastic.
For more details on the ACU Z18 Bracket Holder receptacle reference TE base number 2213858 or 2343403.

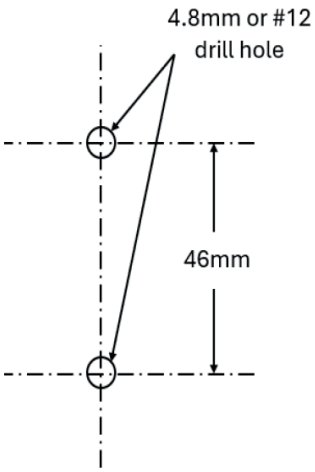
2.17 Handling

The ACU Z18 Bracket Holder is supplied with a minimum of (1) receptacle connector installed. Take care not to damage the connector gasket when handling or installing the ACU Z18 Bracket Holder assembly.
When attaching modules, do not exceed 6N-m of torque.

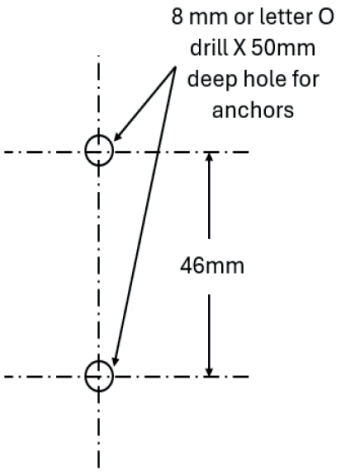
2.18 Installation flat (wall) mount

1. Identify the desired location for the bridge, drill holes suitable for the fasteners designed for the mounting surface material. Ensure that the holes are level and plumb. It is recommended that the flat mount is used on metal or flat masonry surfaces for best performance.
Refer to the following graphics for appropriate hole size and spacing.

Metal surfaces:

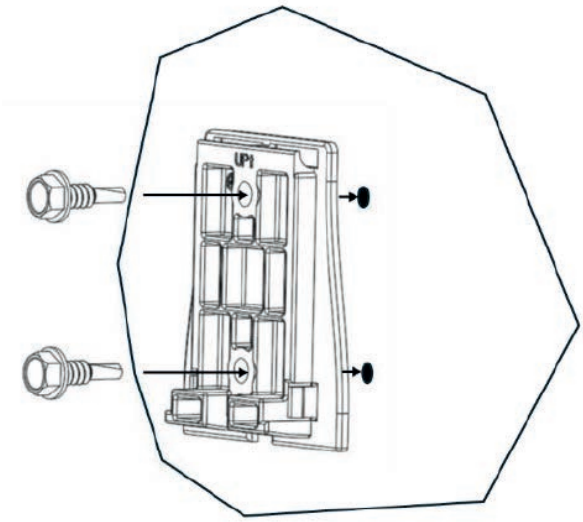


Masonry surfaces:

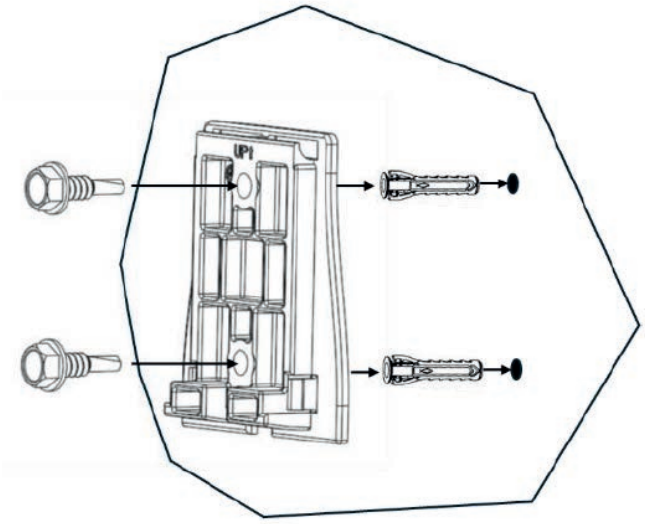


2. Making sure the UP arrow on the mounting base is pointing up, attach using the appropriate M6 sized screws and anchors (for masonry surfaces). Tighten to a maximum of 8 N-m of torque taking care not to crack or damage the wall mount. Refer to the following graphics.

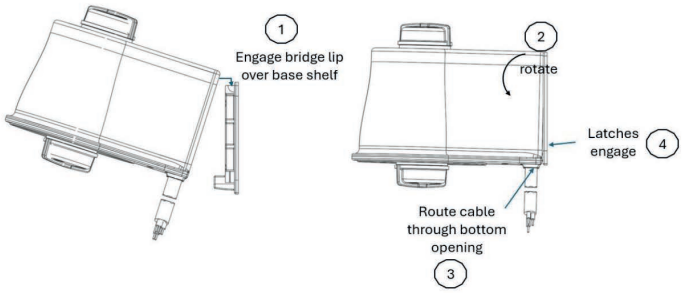
Metal surfaces (no anchor):



Masonry surfaces (use anchor):

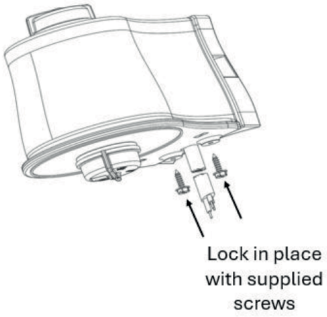


3. Engage the top lip of the bridge over the shelf on the base top and rotate the bridge downward while directing the cable through the opening at the bottom of the base. Continue to rotate and engage the latches which serve to loosely hold the bridge and base together.
Refer to the following graphic.



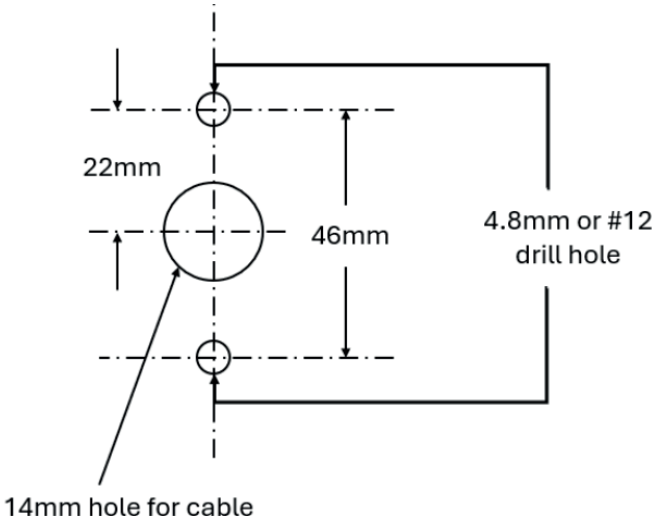
4. The bridge has a feature that allows the installer to adjust the angle between the bridge body and base (+/-1°) to compensate for angles within the mounting surface. This allows for leveling and a more aesthetic looking installation as well as ensuring that any device connected to the bridge is optimally oriented for the application.
The bridge assembly should then be leveled and secured to the mount with the two supplied hinge lock screws.
Utilize a 6mm socket to tighten the screws to a maximum of 0.5 N-m.
Refer to the following graphic.

The hinge lock screws can only be installed once. Removing them and changing the angle of the bridge will result in damage to the mount and less than required screw retention.

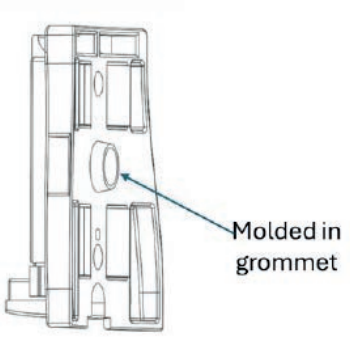


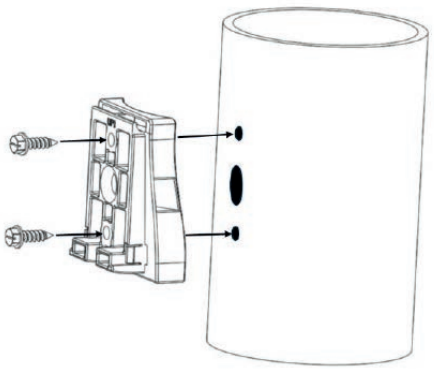
2.19 Installation pole mount with internal wiring

1. Identify the desired location for the bridge, drill holes for the cable (14 mm) and suitable for M6 sized fasteners that are designed for the mounting surface material. Ensure holes are level and plumb. It is recommended that the pole mount is used on steel or aluminum-based poles having no more than 3.6 mm wall thickness. Refer to the following graphic for appropriate hole spacing.

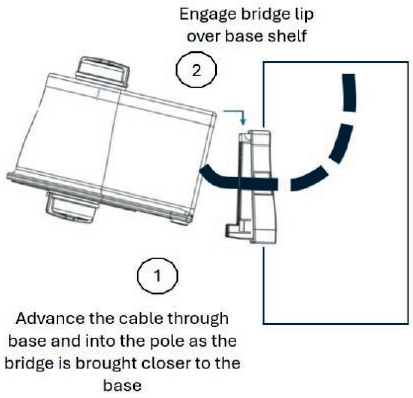


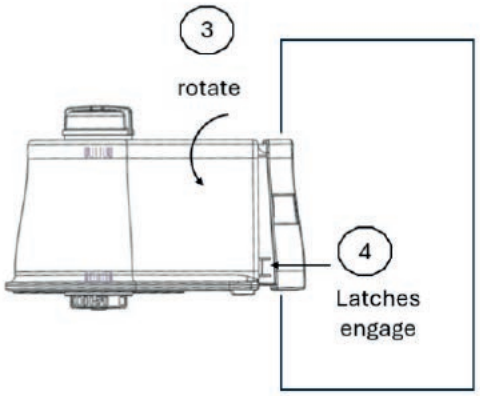
2. Making sure the UP arrow on the mounting base is pointing up, then guide the molded grommet feature located on the base into the 14 mm diameter hole drilled in the pole for the cable and attach the mounting base. Utilize M6 sized screws for the mounting surface material being utilized. Tighten to a maximum of 8 N-m of torque taking care not to crack or damage the pole mount. Refer to figure 7. Refer to the following graphics.





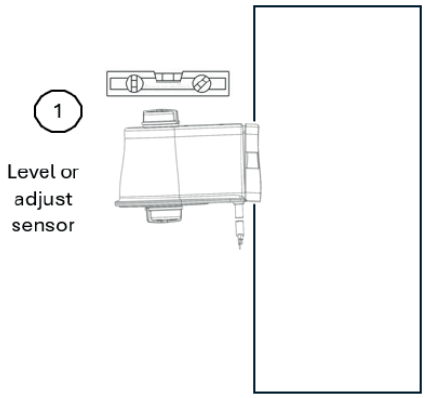
3. Engage the top lip of the bridge over the shelf on the base top and rotate the bridge downward while directing the cable through the hole in the base and pole. Continue to rotate and engage the latches which serve to loosely hold the bridge and base together. Refer to the following graphics.

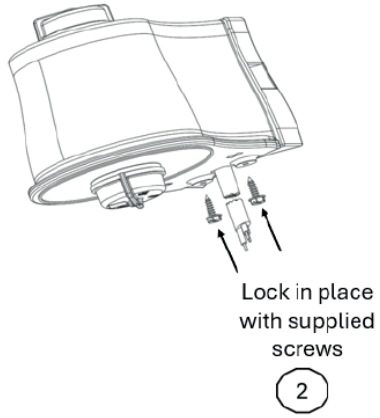




4. The bridge has a feature that allows the installer to adjust the angle between the bridge body and base (+/-1°). to compensate for tapering of the pole. This allows for leveling and a more aesthetic looking installation as well as ensuring that any device connected to the bridge is optimally oriented for the application. The bridge assembly should then be secured to the mount with the two supplied hinge lock screws. Utilize a 6mm socket to tighten the screws to a maximum of 0.5 N-m. Refer to the following graphics.

The hinge lock screws can only be installed once. Removing them and changing the angle of the bridge will result in damage to the mount and less than required screw retention.





3. Miscellaneous

3.1 Conditions of use and storage

Humidity:	up to max. 100 % for use, up to max. 30% for storage not condensed
Storage temperature:	-40 °C up to max. +85 °C

3.2 Additional information

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

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.
No warranty if device was opened.