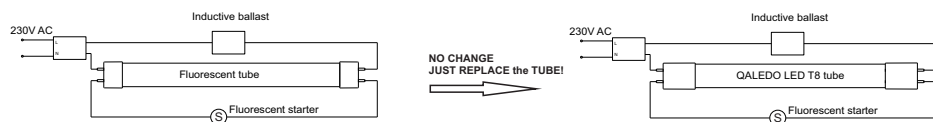


Installation Instruction

The Qaledo LED Tubes are designed to make their installation very easy. To light up the tube, power should be applied to any 2 of the 4 pins of it, which makes easy the replacement. In fixtures with inductive ballast, when the old tube is replaced with the Qaledo LED tube, there is no need to do anything else besides replacing the tube itself. The old ballast and starter can stay as they are, the loss of power on the inductive ballast after the replacement is really minimal (typical 0,2-0,3W).

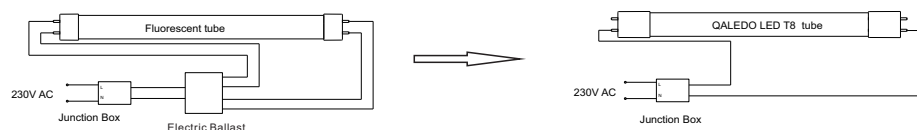
Installation with Inductive Ballast

QALEDO LED Tubes are PLUG and PLAY



Installation with Electric Ballast

The electronic ballast must be eliminated from the circuit.



How to recognize if my installation has Inductive or Electronic ballast?

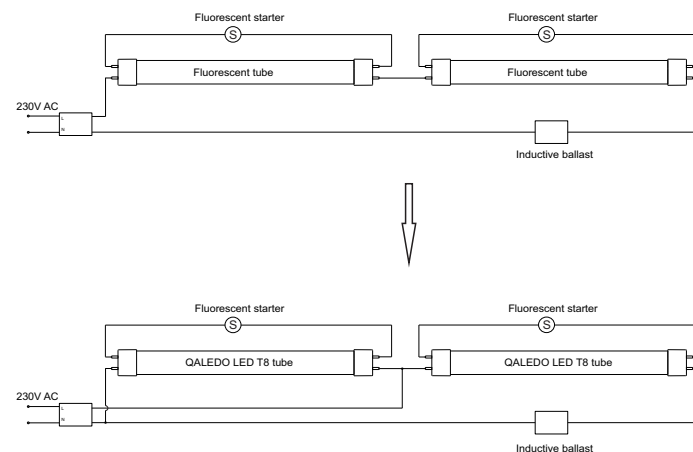
Installations with **Inductive** ballast can be recognized by one of the following ways:

- A starter is present in the fixture – this is a cylindrical piece of about 4cm long, which flickers when the light is put on.
- When the old tube was off and it is put on it flickers a few times before it goes continuously on. When an electronic ballast is present, the light goes on directly without flickering.
- Inside the fixture: the Inductive ballast has only 2 connection wires, while the electronic ballast is connected with 6 wires (2 input and 4 go to the pins of the tube)

Fixtures with multiple tubes inside

In some fixtures with multiple tubes, the tubes are connected in a serial configuration in groups of 2. This is almost always the case in fixtures with 4 tubes of 60cm (2feet), and with classical Inductive ballast. Only replacing the old tubes with LED tubes will not work, because the voltage on each new LED tube will be at best the half of the net voltage and that is not enough to make it work properly. Typically one tube will be on and the other off, or both will light only a little bit. In these cases, the connections inside the fixture must be changed in order to transform the serial connections into parallel connection, like in the drawing below...

This work should be done only by qualified electricians.



! Notice

Installation information:

1. Make sure the switch of product is off before connecting to the power supply to prevent electric shock.
2. Replacement of the tubes in installations with Inductive ballast can be done by anybody. In case of the installations with electronic ballast, since the electronic ballast must be eliminated, it is required that the replacement is done by a qualified electrician
3. Operation against rules may damage your property even harm to your personal safety.
4. If the exterior flexible cable or wire is damaged, it must exchange by the supplier, its agent or other similar qualified personnels to avoid dangers.