

Functional lighting for a hypermarket

iCT+, the contactor

iCT+



Customer needs

The Maintenance Department of a hypermarket is to replace the T12 fluorescent tubes of the functional lighting system with far more efficient LED luminaires.

The customer does not wish to change the distribution architecture or the type of protection (long cable length), or increase the number of feeders in the electrical switchboard.

For a given illumination level, the installed capacity with LEDs is far smaller, but the current peaks generated at power up could possibly cause unwanted tripping of the B-curve protective circuit breakers.

Users / customer benefits

Reduction of current peaks within a ratio of 4 to 5 at power up, thanks to the use of iCT+ contactors, which will make it possible to:

- keep the protection system,
- eliminate the risk of nuisance tripping,
- limit the level of overvoltage generated at power up and “stress” the LED drivers less (Soft Start concept).

Proposed solution

iCT+, the contactor

Replace the standard contactors with iCT+ controlled-action control contactors (switching at zero voltage phase angle).

Keep the protective circuit breakers with the same characteristics (ratings, curves).



Hypermarket

Preferred application

- hypermarkets,
- shops,
- offices,
- etc.

LED lighting + controlled-action control = limited capital cost + operating savings

Specifications

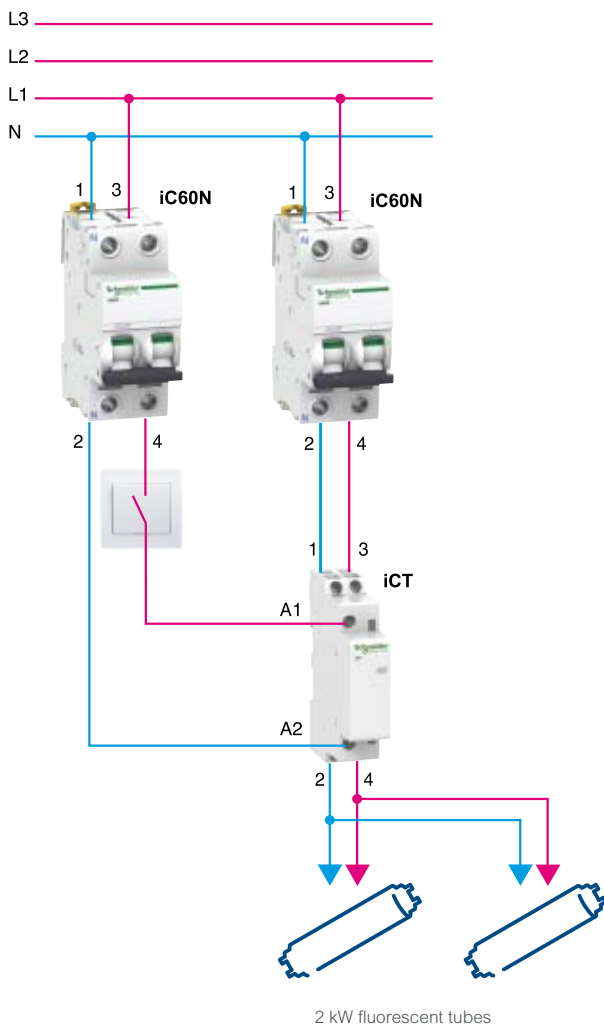
The replacement of the T12 fluorescent tube lighting system must not require:

- a change of architecture,
- a change in the characteristics of protective devices,
- additional space in the electrical distribution switchboard.

Solution diagram

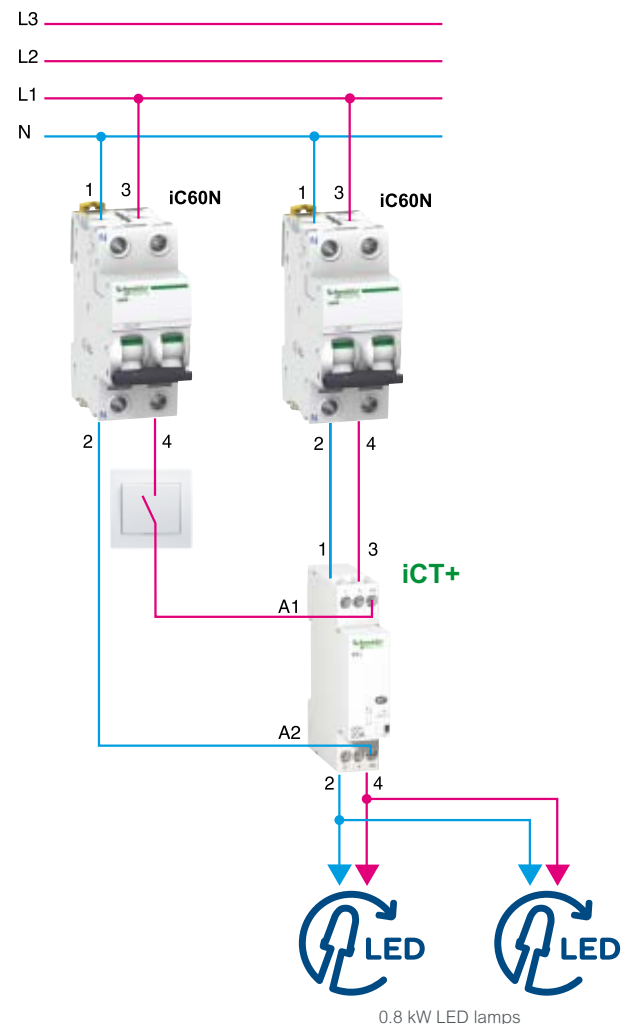
Before

Old installation with CT and fluorescent tubes



After

New installation with iCT+ and LED lamps



Products used

Product	Description	Unity	Cat. no.
iC60N	C10 A 1P+N circuit breaker	1	-
iC60N	C16 A 1P+N circuit breaker	1	-
iCT+	Silent contactor	1	A9C15030

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