



EcoStruxure Power Design- Ecodial

How to add modular contactor in Ecodial 4.9.3 INT

Presented by: Rashmi Kumari
Schneider Electric

Confidential Property of Schneider Electric

Life Is On

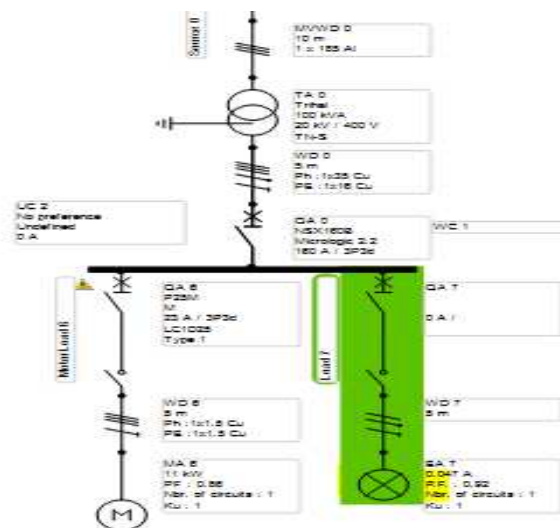
Schneider
Electric

EcoStruxure Power Design – Ecodial

Steps to add modular contactor in Ecodial

if the user has selected 'modular contactors = Yes, then a 'solution window' should appear with the following fields:

- Launch the application
- Draw a simple network along with the Lighting load.



EcoStruxure Power Design – Ecodial

Steps to add modular contactor in Ecodial- Contd.

- Select the lighting load and change the type of lighting load to “LED module with electronic driver”

The screenshot displays the EcoStruxure Power Design software interface. On the left, a circuit diagram shows a power distribution system with various components like transformers, cables, and loads. A specific lighting load is highlighted in green. On the right, the 'Properties' panel for 'Circuit Load 7' is open, showing the following configuration:

| Property | Value |
|------------------------------|--|
| Type of system earthing | TN-S |
| I _b (A) | 0.047 |
| Cable length (m) | 5 |
| Type of lamp | LED module with Electronic Driver |
| Lamp unit P (W) | Halogen incandescent lamp |
| Ballast unit P (W) | Standard incandescent lamp |
| Nbr. of lamps per luminaire | Electronic fluocompact |
| P.F. | Standard low-pressure sodium vapour |
| Nbr. of circuits | High-pressure sodium vapour |
| Number and type of conductor | High-pressure mercury vapour |
| Connection | Metal iodine |
| | Fluorescent with electronic ballast |
| | Fluorescent with ferromagnetic ballast |
| | LED module with Electronic Driver |

EcoStruxure Power Design – Ecodial

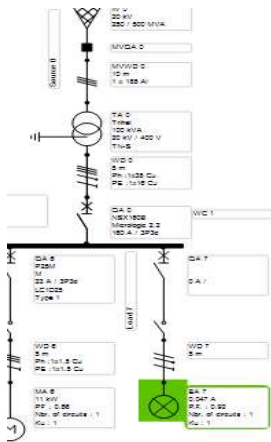
Steps to add modular contactor in Ecodial- Contd.

The default values of the LED lighting should be

Polarity : 1P+N

Power factor:0.92

Lamp unit power: 10w



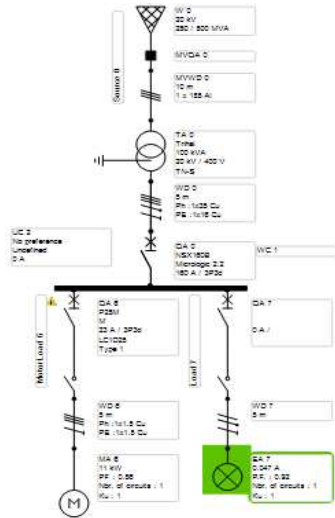
Lighting load EA 1

| | |
|-------------------------------|-----------------------------------|
| Type of lamp | LED module with Electronic Driver |
| Lamp unit P (W) | 10 |
| Ballast unit P (W) | 0 |
| Nbr. of lamps per luminaire | 1 |
| P.F. | 0.92 |
| Ia (A) | 0.047 |
| Ku | 1 |
| Nbr. of circuits | 1 |
| Number and type of conductors | 1Ph+N |
| Connection | L1-N |
| ΔU tolerance (%) | 4 |
| Final load | Yes |
| Non-linear load | No |
| THDi3 (%) | 33 |
| Sr (kVA) | 0.011 |
| Total rated power (kW) | 0.01 |
| Ir (A) | 0.047 |

EcoStruxure Power Design – Ecodial

Steps to add modular contactor in Ecodial- Contd.

- Enter the number of Lighting loads to 1 (Should be as per installation requirement)
- Run the calculation



Lighting load EA /

| | |
|-------------------------------|------------------------------|
| Type of lamp | LED module with Electronic D |
| Lamp unit P (W) | 10 |
| Ballast unit P (W) | 0 |
| Nbr. of lamps per luminaire | 1 |
| P.F. | 0.92 |
| Ia (A) | 0.047 |
| Ku | 1 |
| Nbr. of circuits | 1 |
| Number and type of conductors | 1Ph+N |
| Connection | L1-N |
| ΔU tolerance (%) | 4 |
| Final load | Yes |
| Non-linear load | No |
| THDi3 (%) | 33 |
| Sr (kVA) | 0.011 |
| Total rated power (kW) | 0.01 |
| Ir (A) | 0.047 |

EcoStruxure Power Design – Ecodial

Steps to add modular contactor in Ecodial- Contd.

- Select the lighting load CB and check whether the modular contactor option is available or not.
- Note: And the option should have Required and Not Required as the available drop down

The screenshot displays the EcoStruxure Power Design software interface. On the left, a circuit diagram shows a lighting load connected to a circuit breaker (QA 7). The circuit breaker is highlighted in green. On the right, the configuration panel for 'Circuit breaker QA 7' is shown. The panel includes a list of parameters and their values, along with a 'Modular Contactor' dropdown menu.

| Parameter | Value |
|-----------------------------|-----------------|
| Type | Circuit breaker |
| Type of standard | Industrial |
| Type of system earthing | TN-S |
| Ib (A) | 0.047 |
| Device status | Closed |
| Withdrawable | Not required |
| Cascading | No |
| Motor mechanism | Not required |
| Residual-current protection | No |
| Overload protection | Yes |

Modular Contactor

Modular Contactor: Required

Solution

Required (highlighted)
Not Required

Circuit breaker

EcoStruxure Power Design – Ecodial

Steps to add modular contactor in Ecodial- Contd.

- Enable the modular contactor as "Required"
- Run the calculation

Circuit breaker QA 7

| | |
|-----------------------------|-----------------|
| Type | Circuit breaker |
| Type of standard | Industrial |
| Type of system earthing | TN-S |
| I _b (A) | 0.047 |
| Device status | Closed |
| Withdrawable | Not required |
| Cascading | No |
| Motor mechanism | Not required |
| Residual-current protection | No |
| Overload protection | Yes |

Contactor

| | |
|-------------------|----------|
| Modular Contactor | Required |
|-------------------|----------|

Solution

| |
|--------------|
| Required |
| Not Required |

Circuit breaker

