

Technical Note

Adding Constant Powered Circuits

This note describes how to connect a constant powered circuit or charging circuit for emergency lighting to any DMC2 or DMC4 control module with circuit breakers, without sacrificing power to an output channel.

Caution

- ⚠ Use 12AWG 75°C copper wires only.
- ⚠ Keep additional wiring separated from heatsinks by at least 10 mm.
- ⚠ Constant powered circuit wiring should match the gauge of the module wiring (#12AWG / 2.5 mm²)
- ⚠ The full load of the circuit breaker (constant powered circuit load combined with other lighting loads) shall not exceed circuit breaker rating

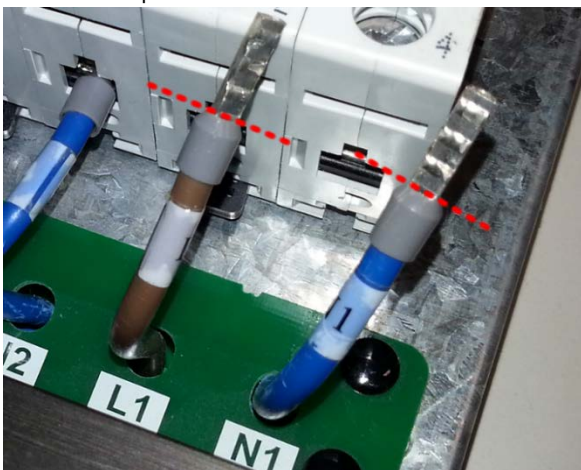
Wiring Procedure

Connect constant circuit to module:

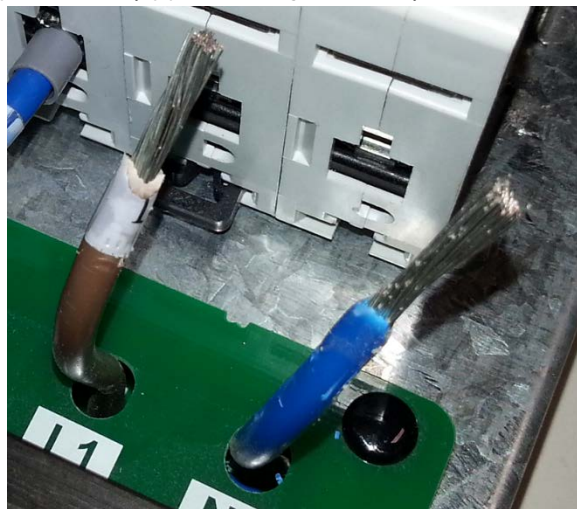
1. Unscrew and remove the Load and Neutral fly lead wires on the output side of the control module circuit breaker.



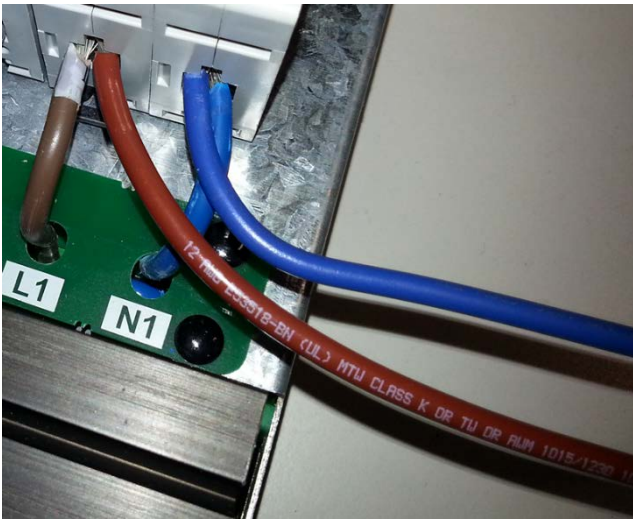
2. Cut the crimped ferrule off each wire.



3. Remove the plastic remaining from the ferrules and strip the wires (approximately 8-10 mm).

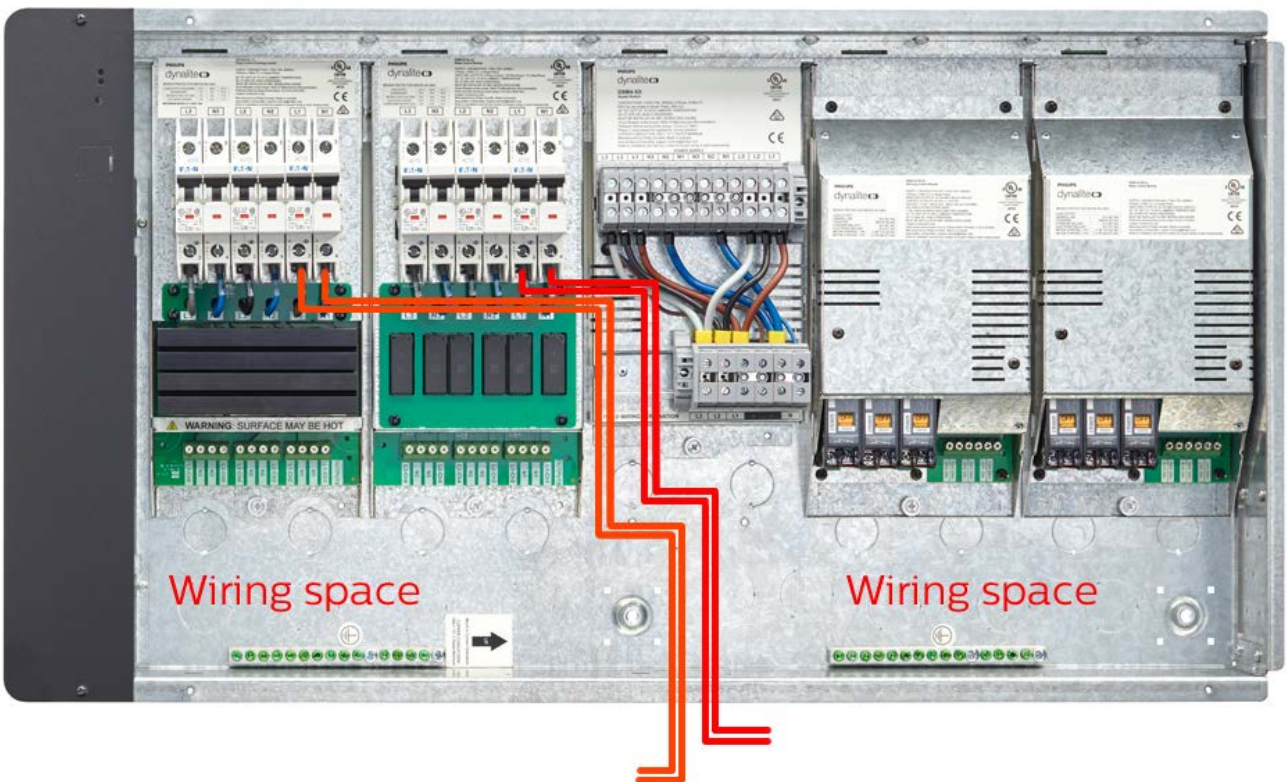


4. Terminate the fly lead wires and constant circuit wires together as shown.



Wiring Arrangement

The diagram below shows the suggested wiring arrangement, using the DMC4 as an example. Ensure that all wiring is properly segregated and at least 10 mm from control module heatsinks.



To external equipment
(can be used to power constant or emergency charging circuit)

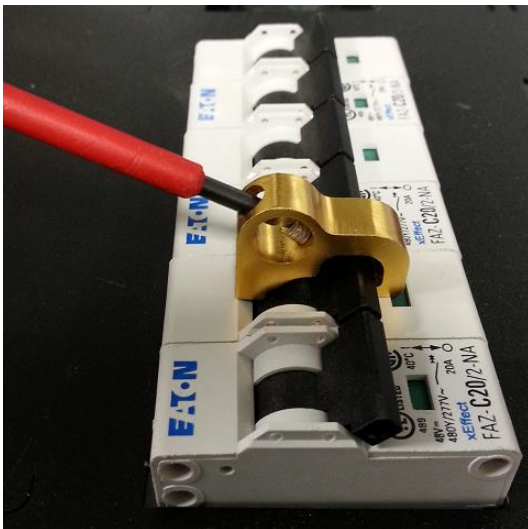
Circuit Breaker Locking*

To lock the circuit breaker in required position (On or Off) follow instructions below:

1. Use Eaton part ZIS-SPE-1TE or equivalent. Loosen the screw as shown.



2. Switch circuit breaker in desired position, install the lock and fix it with the screw driver



* - Required if applying the exception to National Electrical Code ® 700.12(F)(2)(3)