



Lighting Contactor

LC Series

LC100R, LC100T, LC200R, LC200T

The LC series of Lighting Contactors provide remote mains switching and dimming control for 0-10V or 1-10V control gear, including LED drivers, fluorescent ballasts and VoltMaster

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Product order codes

Relay switching

LC100R

Single lighting circuit

LC200R

Double lighting circuits

Semi-conductor switching

LC100T

Single lighting circuit

LC200T

Double lighting circuits



Installation

Function

The Multiload LC Series of Lighting Contactors provide 0-10V controlled 2-way mains switches combined with boosted 0-10V signals, and each also outputs a 15V power supply.

The LC100 series provides a single 2-way switch.

The LC200 series provides two independent 2-way switches with independent 0-10V inputs and boosted outputs.

LC100R and LC200R provide relay-controlled mains switches which provide a very low on-resistance.

LC100T and LC200T incorporate Triac switch mechanisms which can tolerate very high in-rush currents.

Mains outputs, L1, L2

Provide a 2-way switch when required.

When signal input is less than 1V, L1 is 'off' (open circuit) and L2 is 'on' (connected to mains live).

When signal input is more than 1V, L1 is 'on' (connected to mains live) and L2 is 'off' (open circuit).

If a 1-way switch is required, use L1.

Global inputs (ON and OFF)

Provided for each switch and can be used with PIRs or a master switch. When held to 0V they are active.

When GLOBAL ON is active:

L1 is ON (connected to mains live) and L2 is OFF (open circuit)

When GLOBAL OFF is active:

L1 is OFF (open circuit) and L2 is ON (connected to mains live)

Safety

The product complies with European Safety Regulations (IEC669-2-1) when used in lighting circuits containing suitably rated MCBs.

Installation

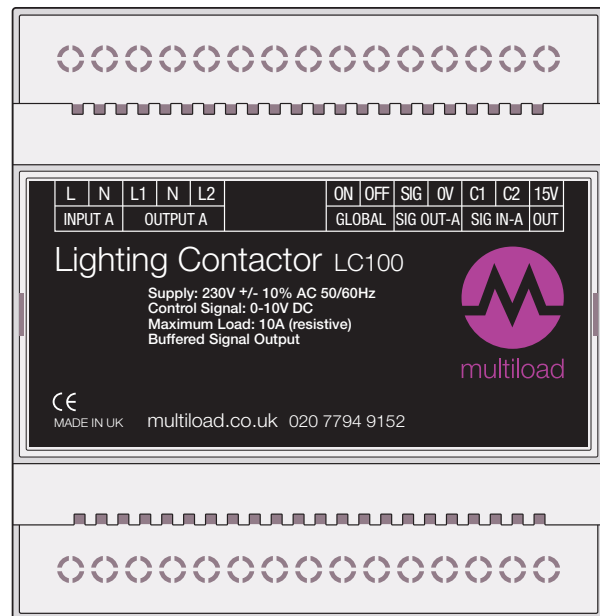
LC Series Lighting Contactors are DIN-rail mounted products which should be installed in a suitable location. It is not supplied with a DIN-rail cabinet (contact Multiload if you need to have a cabinet supplied).

LC Series Lighting Contactors can also be installed as a standalone version for direct screw mounting in a suitable enclosure. Extend the lugs attached to the base of the enclosure.

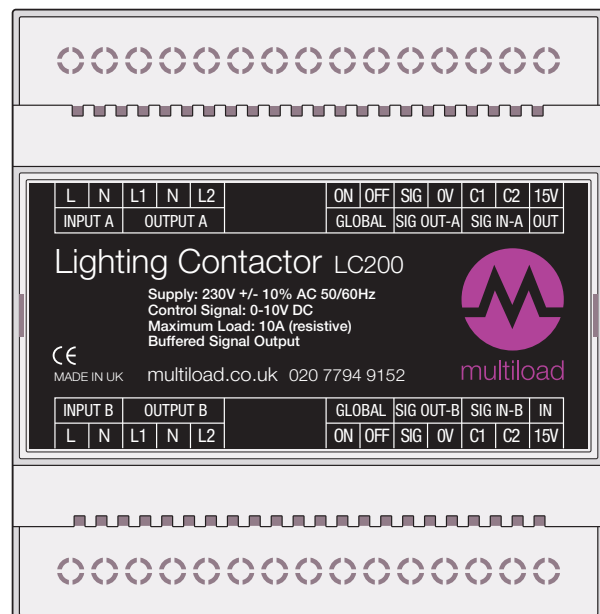
Installation should be carried out by suitably qualified personnel in accordance with good electrical practice and the appropriate national wiring regulations.

The product complies with European Safety Regulations (IEC669-2-1) when used in lighting circuits containing suitably rated MCBs.

Switch off mains electrical supply before commencing.



LC100 series



LC200 series



Technical specification

This product is intended to be placed in a secure electrical cabinet. Secured on a DIN rail (EN60715).

Mains input voltage

230 Volts AC +/- 10% 50Hz (protected by MCB)

Load rating

Maximum continuous load for each switch:

For LC100R and LC200R (for each switch) – 2.3 kVA

For LC100T and LC200T (for each switch) – 500VA

Maximum in-rush current over one mains cycle

For LC100R and LC200R (for each switch) – 80A

For LC100T and LC200T (for each switch) – 400A

Boosted signal output

Maximum total source – 40mA

Maximum total sink – 40mA

15V output

Maximum current output – 50mA

Environmental conditions

Ambient temperature

10 to 40°C with free air flow

Humidity

Up to 95%

Physical data

Weight: 270g

Finish: Plastic

Dimensions: W:88mm; D:90mm; H:58mm

Terminal connections for the LC100R and LC100T

Each terminal accepts cable up to 4mm²

INPUT A (mains supply terminal)

L (live): N (neutral)

OUTPUT A (load output terminals)

N (neutral):

L1 (switched live, switched off below 1V at signal input)

L2 (switched live, switched off above 1V at signal input)

SIG IN-A (signal input)

C1 (0V), C2 (0-10V signal)

GLOBAL

ON, OFF

SIG OUT-A (boosted signal output)

SIG

OUT (15V DC output)

15V. 50mA maximum output current

Terminal connections for the LC200R and LC200T

Each terminal accepts cable up to 4mm²

INPUT A (mains supply terminal)

L (live): N (neutral)

OUTPUT A (load output terminals)

N (neutral):

L1 (switched live, switched off below 1V at signal input

SIG IN-A),

L2 (switched live, switched off above 1V at signal input

SIG IN-A)

SIG IN-A (signal input)

C1 (0V), C2 (0-10V signal)

GLOBAL

ON, OFF

SIG OUT-A (boosted signal output)

SIG

OUT (15V DC output)

15V. 50mA maximum output current

INPUT B (mains supply terminal)

L (live): N (neutral)

OUTPUT B (load output terminals)

N (neutral):

L1 (switched live, switched off below 1V at signal input

SIG IN-B),

L2 (switched live, switched off above 1V at signal input

SIG IN-B)

SIG IN-B (signal input)

C1 (0V), C2 (0-10V signal)

GLOBAL

ON, OFF

SIG OUT-B (boosted signal output)

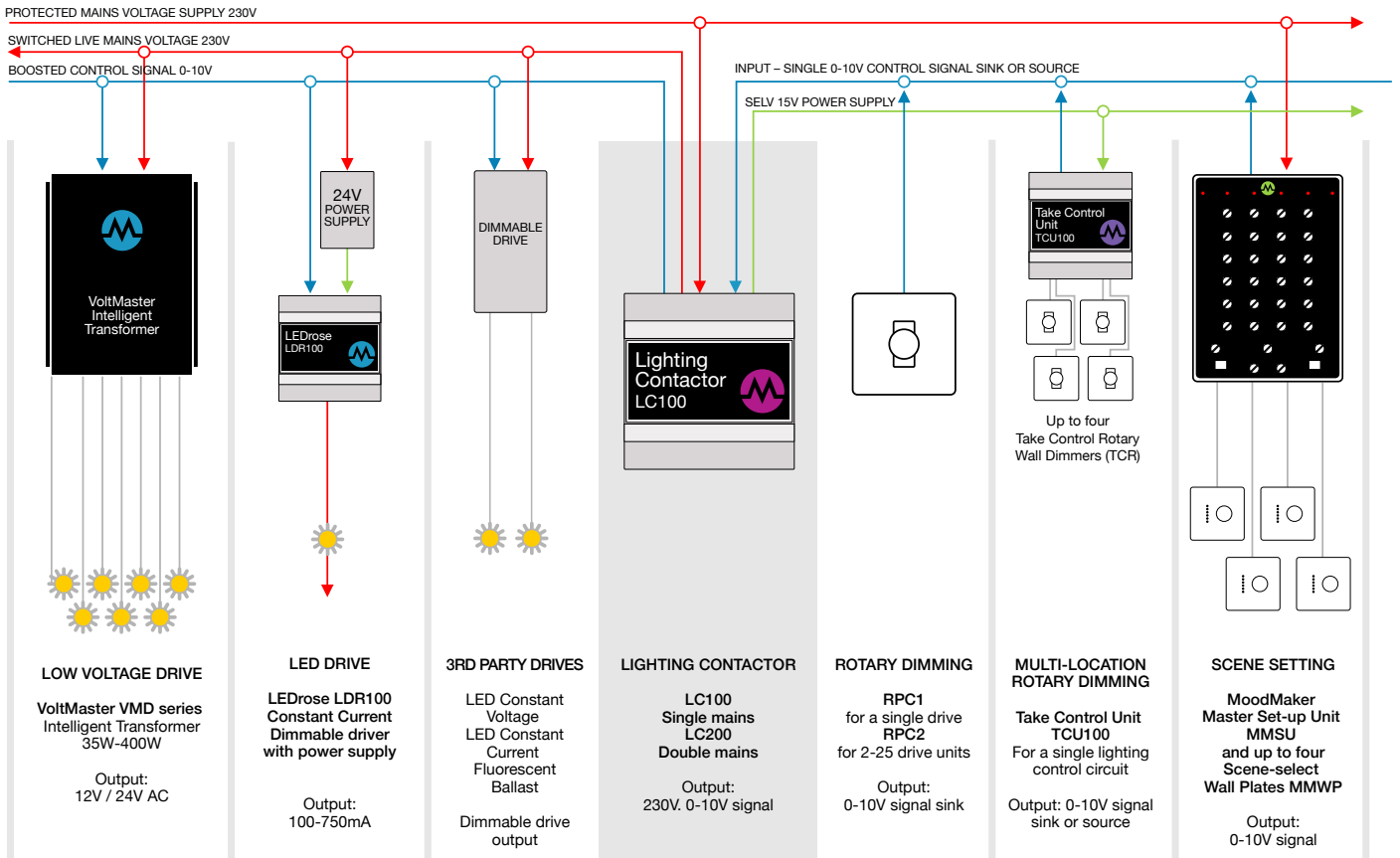
SIG

15V DC INPUT

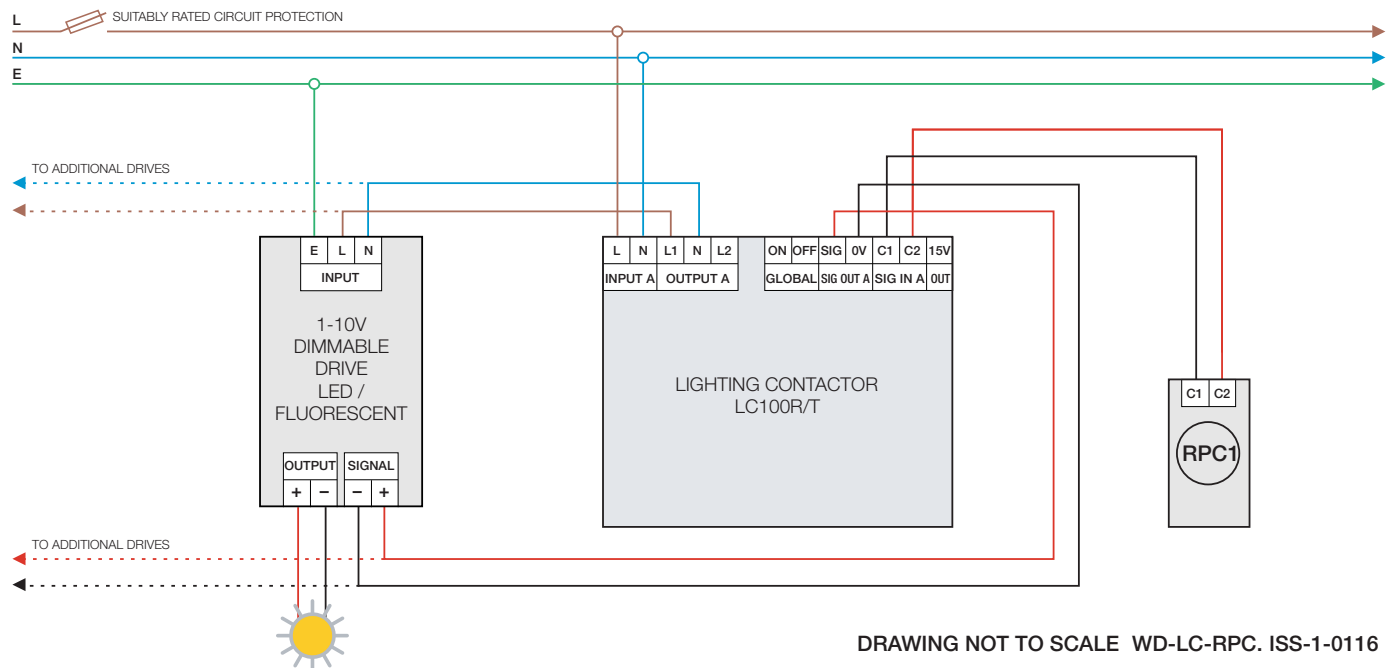
15V-IN, 100mA maximum input current, (may be used when mains is not used to provide the power for the control circuits)



Lighting Contactor LC series related product options

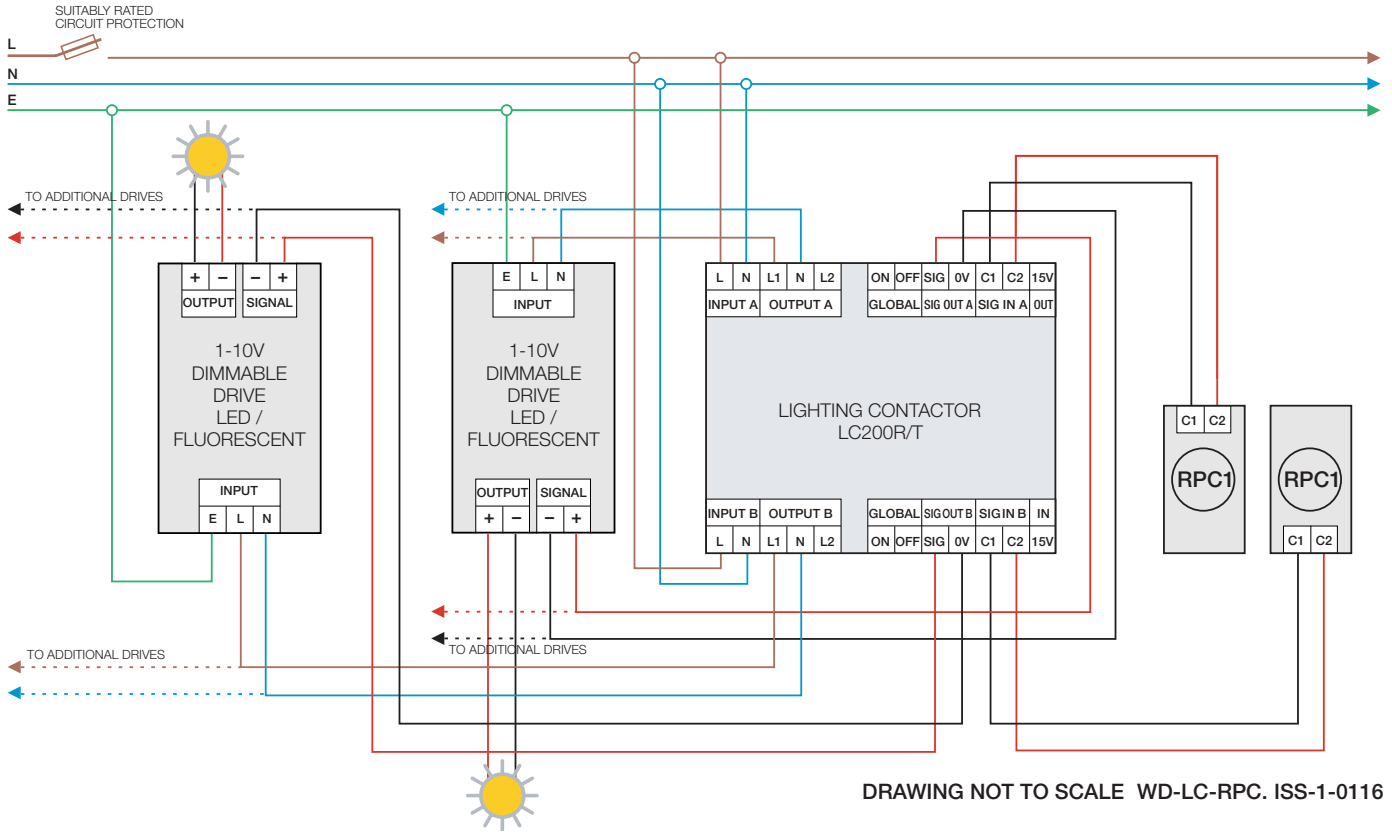


Lighting Contactor wired to Rotary Push-control Wall Dimmer RPC1

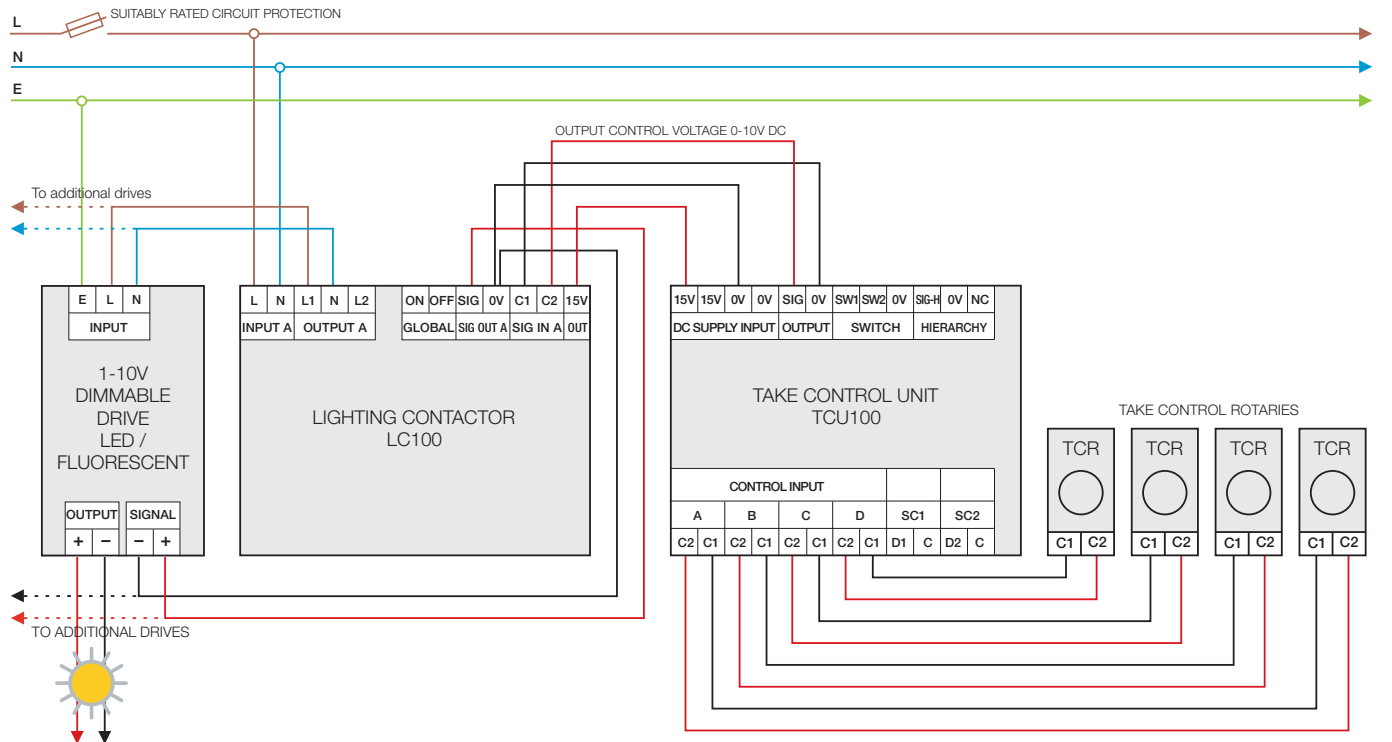




Wired to two Rotary Push-control Wall Dimmers RPC1

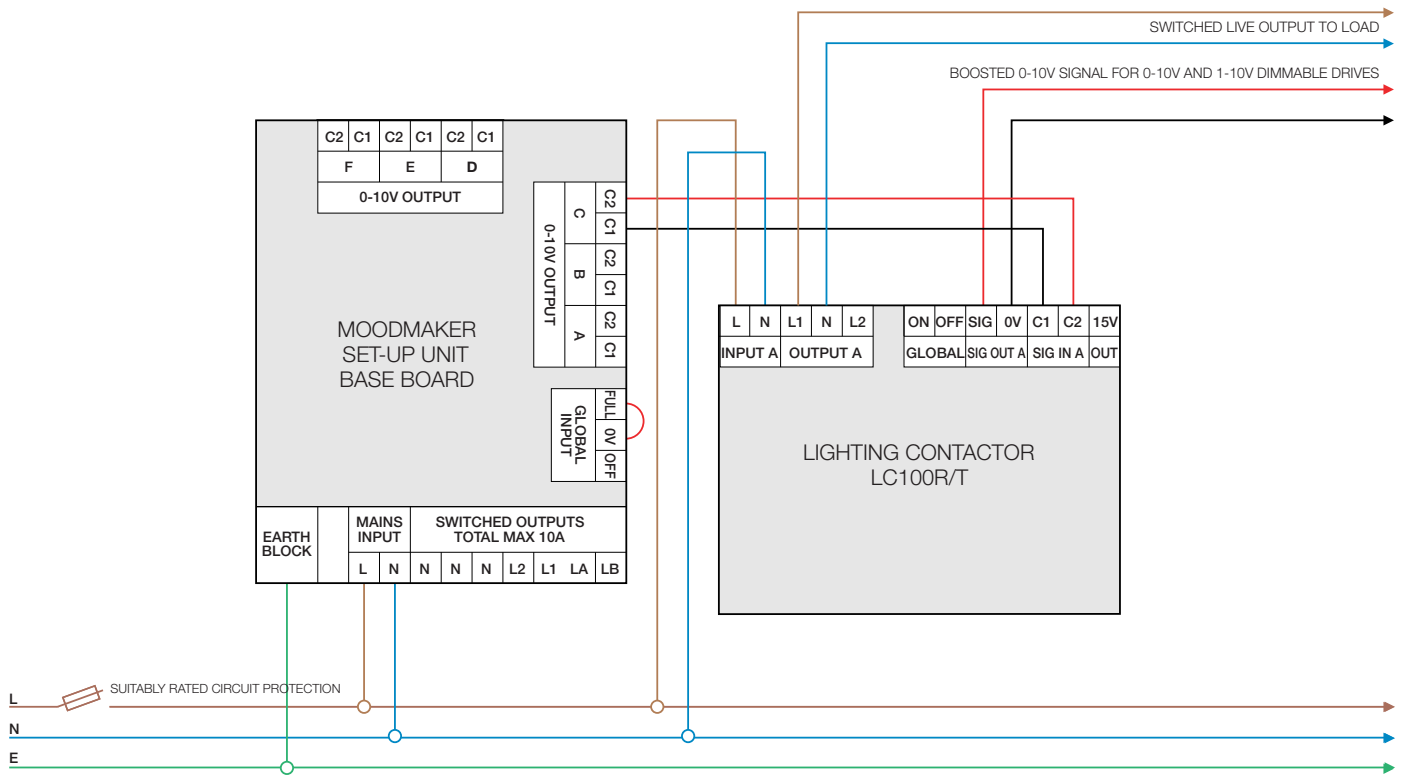


Wired to Take Control Unit TCU100



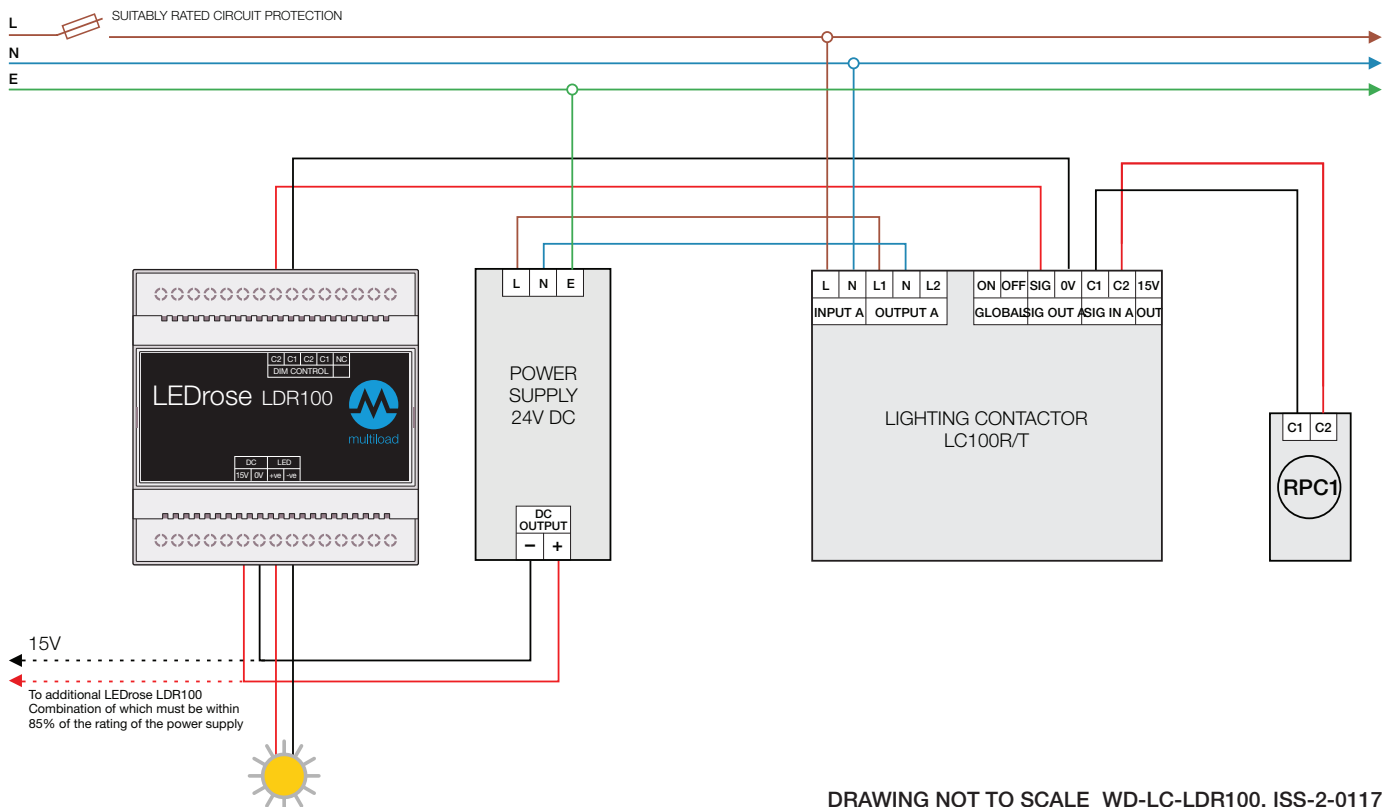


Lighting Contactor wired to MoodMaker Set-up Unit



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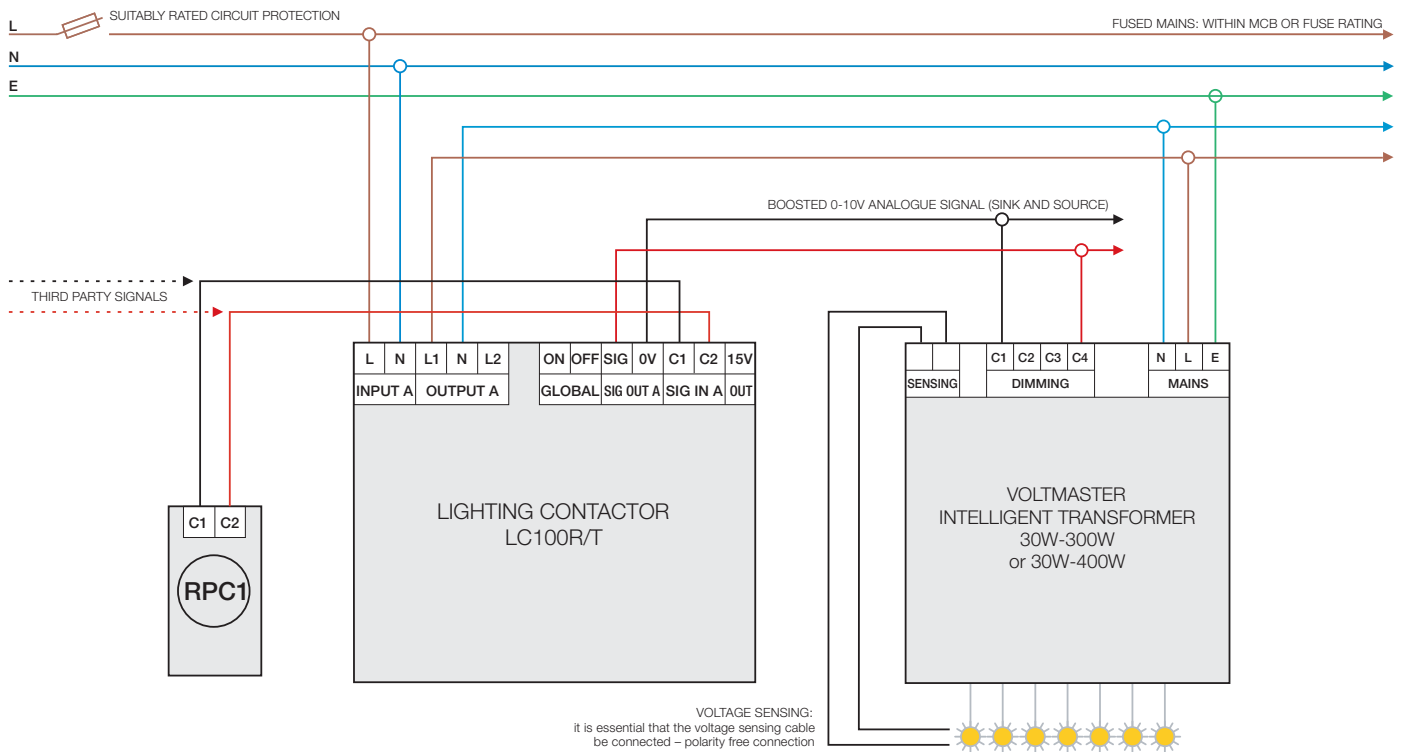
Lighting Contactor wired to a LEDrose LDR100



DRAWING NOT TO SCALE WD-LC-LDR100. ISS-2-0117



Lighting Contactor wired to VoltMaster



DRAWING NOT TO SCALE WD-LC-VMD. ISS-1-0116