

# CTR1 : 110V

VOLTAGE & CURRENT	Coil/Control Circuit	Main contact ratings
Control Input	18mA @ 1.5Vdc (typ)	
Coil Circuit	110/130Vac 50/60Hz 4VA	
Contact Rating		AC1 : Max 20A AC3 : Max 6A
Module Dimensions	H 56mm W 60mm D 50mm	
Minimum Enclosure Space Required	H 95mm W 95mm D 75mm	

## Warning

**Before use read DICAM CONTROL COMPONENTS ESSENTIAL INFORMATION.**

**The CTR1 is controlled by a solid state device and does not provide assured isolation of load circuits even when in the off state. For safety, all mains supply circuits must be provided with an effective means of electrical isolation.**

**Before connecting the module, make sure the software is correctly configured to a suitable type (see Output Type/Suitability).**

## Information

The CTR1 is an electrical device for the regulation of single or three phase mains loads by Dicam master units.

The CTR1 is wired between the mains supply (with suitable isolators and backup fuses) and the load to be controlled. Typical loads are fans or heaters.

The CTR1 consists of two components - a standard industrial "contactor" and an "interface card". (These must only be used in the combination as supplied.)

Under software control, a low voltage control current is applied by the Dicam master unit to the CTR1 "control input". This switches on a small triac on the interface card, which switches on the contactor, using a small current "tapped off" the mains supply circuit being controlled.

## Installation

1 The CTR must be installed in an enclosure providing suitable protection from the environmental conditions likely to be experienced, and conforming to local wiring codes.

2 When used in livestock or similar high humidity applications, cable entries into enclosures must be glanded and made only from below.

## Coil Circuit Protection

The CTR1 interface card contains components designed to minimise risk and extent of damage in the event of exceptional voltages or worn out contactor.

Overcurrent protection is provided by a resistor (next to the brown supply lead), and the circuit also contains an overvoltage protection device. This type of overcurrent protection is specifically designed to tolerate the wide range of supply voltages liable to be found on farm mains supplies, with minimal spurious failure.

In the event of excessively high or low supply voltages, or coil failure, the overcurrent protection resistor may fail.

Failure of this component indicates exposure to conditions outside normal standards, and does not indicate incorrect manufacture or component defect. In the event of failure of this component, DO NOT attempt repair.

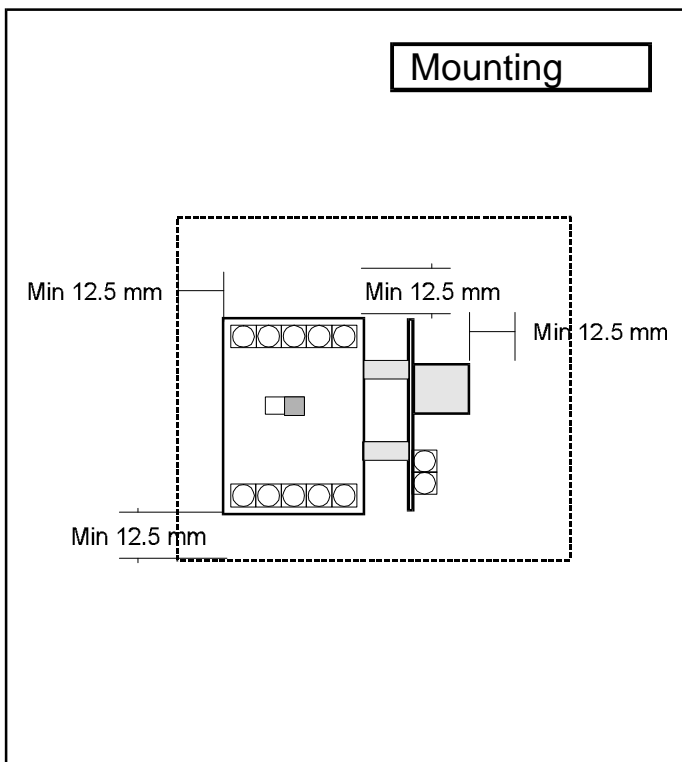
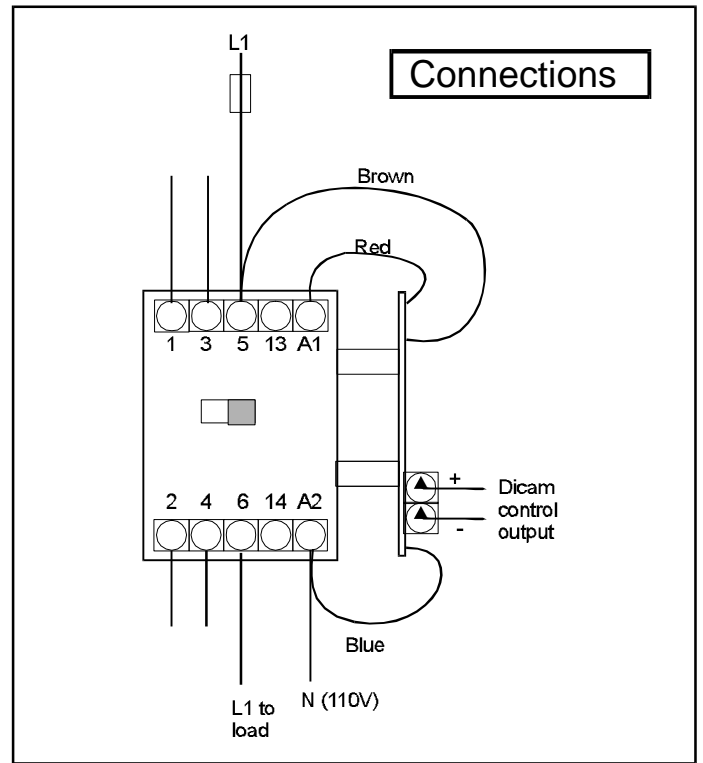
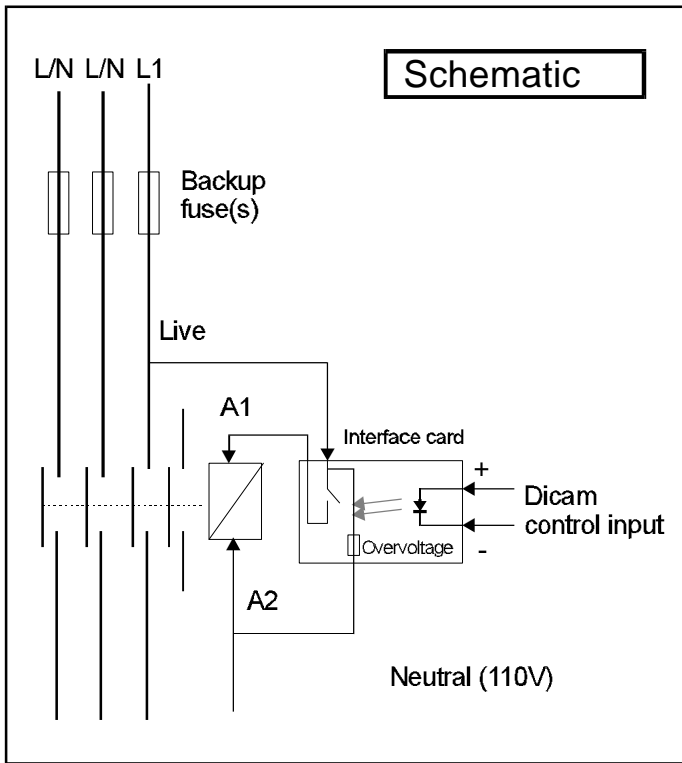
## Overload Protection

The CTR contains NO load circuit overload protection. Contact circuits MUST be supplied from backup fuses or circuit breakers suitably rated to the circuit being controlled (max 20A).

3 Enclosures must be suitably sized to allow for heat dissipation to avoid excessive cabinet temperature.

4 Dicam control circuit must be wired using screened low voltage cable, segregated from mains voltage circuits. Cable screen must be earthed.

5 Before powering up, check Output Type and Setup to ensure suitable signals from Dicam unit.



Output Type	Suitability	Notes
On-Off	Yes	
Simmer	Yes	Min 10 sec cycle recommended
Slave	Yes	If slave to Shaft type
Norm-On	Yes	
Lamp	NO	
Fan2wr,3wr or HIPF	NO	
Ram	NO	
Flap	Yes	