

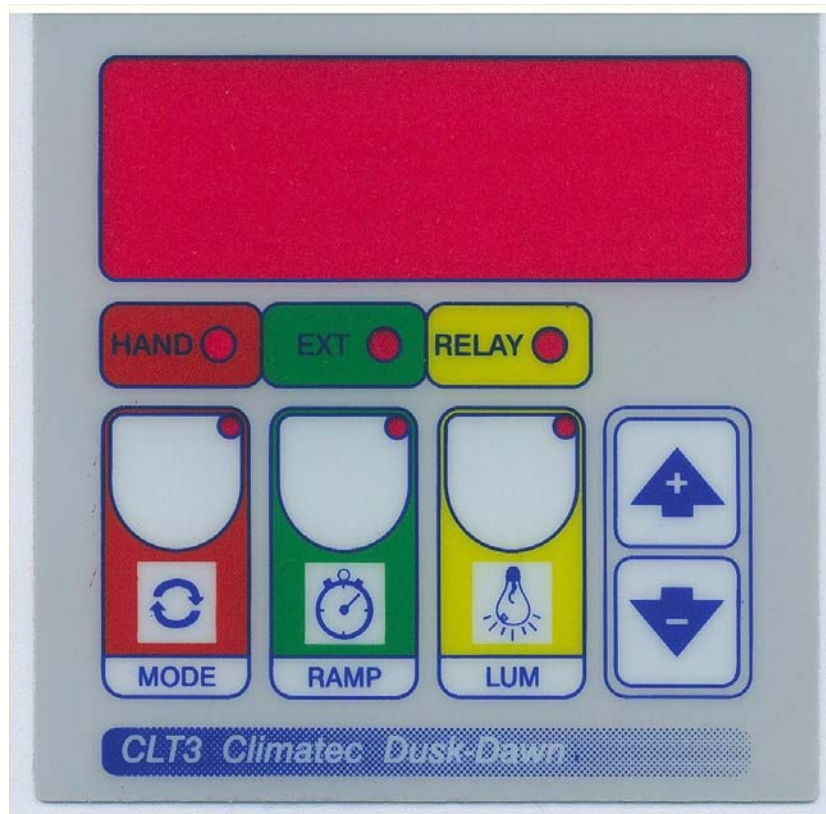
CLIMATEC

Dawn-Dusk Lighting Controller

CLT3

Version 4.2

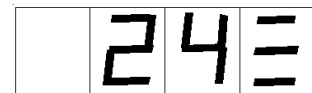
HANDBOOK



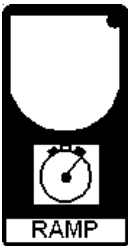
RUN MODE



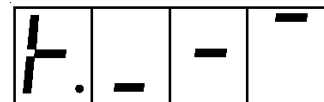
Press **MODE**.
This will give **manual control** of light intensity.
Press **+** or **-** to adjust light intensity.
Adjustment available between min. and max. LUM level settings.
(When in this mode **HAND** indicator on).
NOTE: When pressing **MODE**, the controller will remember the previous 'manual' lighting intensity.
Press **MODE** again to return to auto.



Lighting Intensity %



Press **RAMP**.
This message will be displayed showing Ramp up time (in minutes).
Press **+** or **-** to adjust.

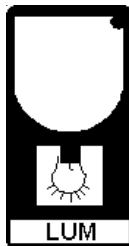


Press **RAMP** again.
Display will change to show Ramp down time (in minutes).
Press **+** or **-** to adjust.

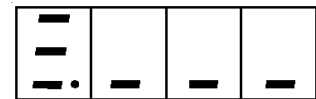


The minimum time which can be set is 1 minute.

Press **RAMP** again to return to current lighting intensity.



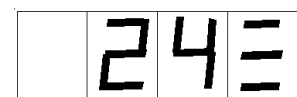
Press **LUM**.
This message will be displayed showing the minimum lighting intensity %.
Press **+** or **-** to adjust.
Press **LUM** again.
This message will be displayed showing maximum lighting intensity %.
Press **+** or **-** to adjust.



Press **LUM** again to return to current lighting intensity.

VIEWING

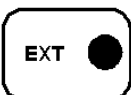
In normal condition the display shows current light intensity.



Example with % light intensity



This lamp is illuminated when the controller is in **Hand** (manual) mode.



This lamp is illuminated when the controller receives a signal from an external timeclock.



This lamp is illuminated when the controller allows the lighting to be on.

Note: Change **COSt** setting for computer 0-10 control or timeclock control before running system.

COS_t PROGRAMMING (System constants)

To enter **COS_t** settings press and hold the + & - keys until **COS_t** is displayed.

(On versions before version 4.0: switch the power off, press and hold the - key whilst switching the power on. **COS_t** will be displayed).

You are now in **COS_t**.

Press **LUM** to scroll through message setting, using the + & - keys to adjust the settings as required.

Message	Preset Value	Your Value	Meaning	Note
≡.on	4 ≡		Light intensity at which relay turns on.	
t.rLY	30"		Delay after power interruption before RLY on. (Min value = 1")	
type	= 0		Control input type	*1
intE	10"		Integration time of 0-10V input before adjusting output. Pressing the '-' key in <i>Run mode</i> will display actual 0-10V input level	*2
diFF	2 ≡		Relay differential. ≡.on less "diFF" = value when relay switches off.	

*1) **type** - 0 = External closing contact control input e.g. timeclock

1 = External 0-10 volt input control e.g computer control

*2) **intE** - only used when **type** = 1

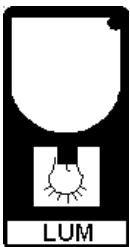
To return to *Run Mode*, press **Mode** button.

PRESET PROGRAMS

At **boot** this processor is pre-programmed with the following (variable) settings.

To return to these settings at any time:

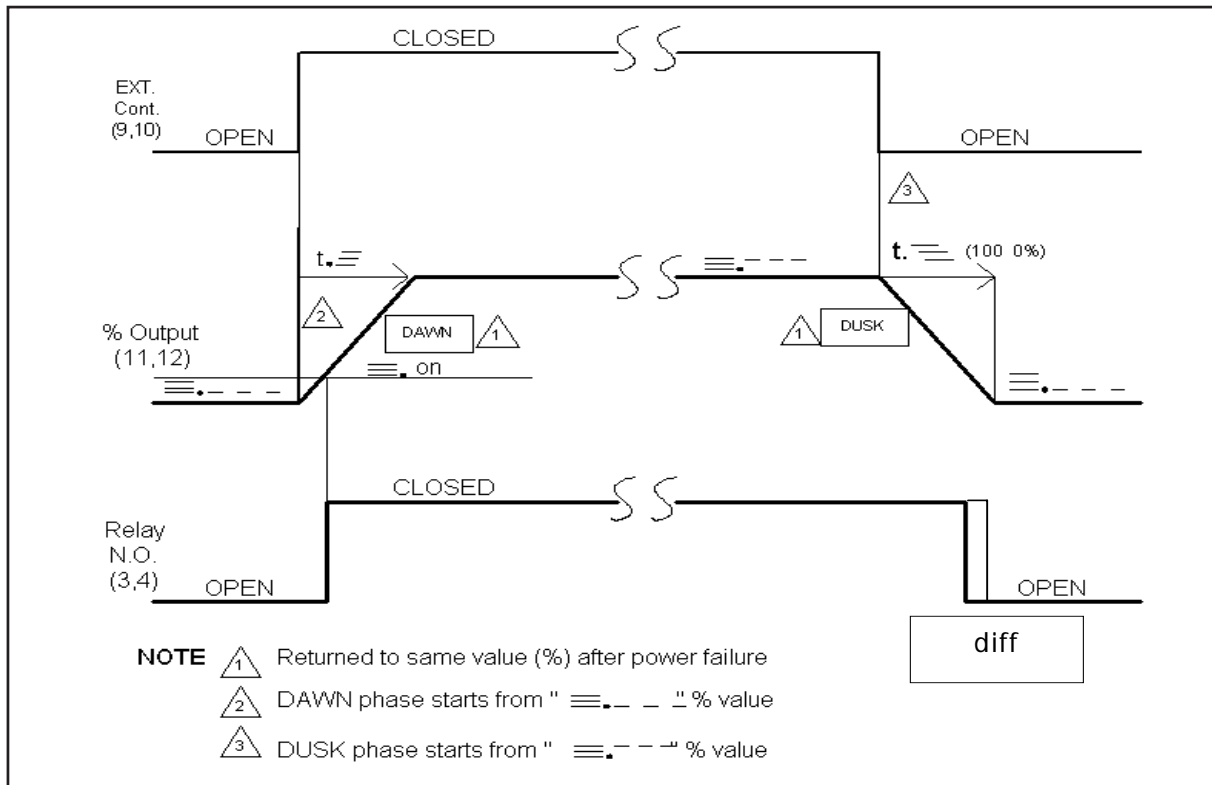
Power off the processor. Press **LUM** key and keep it pressed, giving power on: **boot** message will be displayed (now release **LUM** key).



≡.on = 10 t.rLY = 30 type = 0 intE = 10 diFF = 2

Mode = 50 t_-- = 30 t^-_ = 30 ≡_--- = 0 ≡^--- = 100

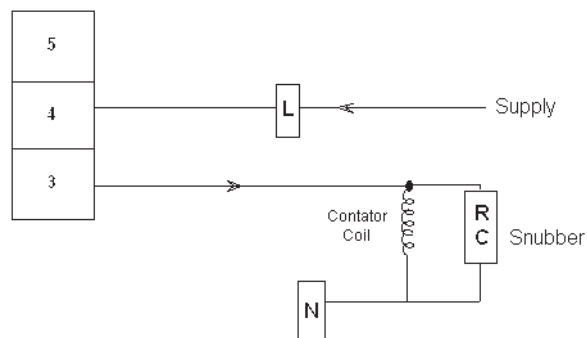
OPERATING DIAGRAM



SNUBBER DIAGRAM

If working with 240 volt relays or contactors, you must:

- Ensure that common feed (terminal 4) is supplied via a 4 amp fuse.
- A snubber network (supplied as an extra) is connected across the coil of the contactor.



INSTALLATION – Timeclock Control

How to connect the line.

Connect 230V line on terminals 1-2.

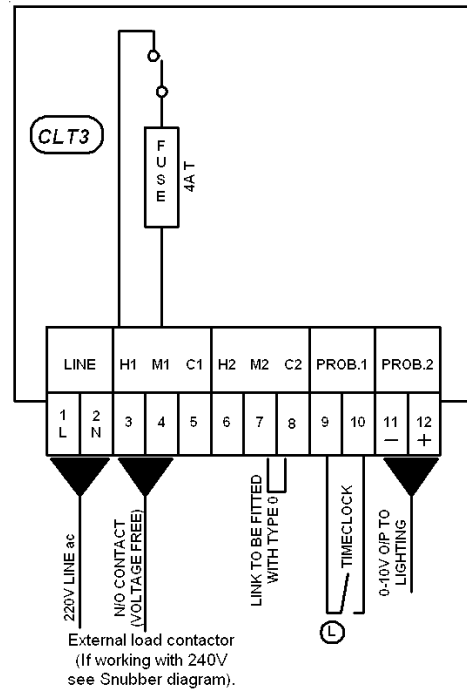
CLT models are overvoltage self protected (PTC on transformer's primary winding).

If the protection has intervened it is necessary to power down the module for at least 1 minute.

How to connect the contacts

Connect terminals on the terminal block (contacts up to 4AMP.AC1) to the loads as shown in the diagram.

This system has been designed and built to reduce electrical disturbance as far as possible. However, for better protection apply RC-type filters – e.g. our model **HCF1** – in parallel to the inductive loads (contactor coils, etc) controlled by the module relays.



Note: Cost setting type must be set to 0.

0-10 EXTERNAL CONTROL via e.g. computer

How to connect the line.

Connect 230V line on terminals 1-2.

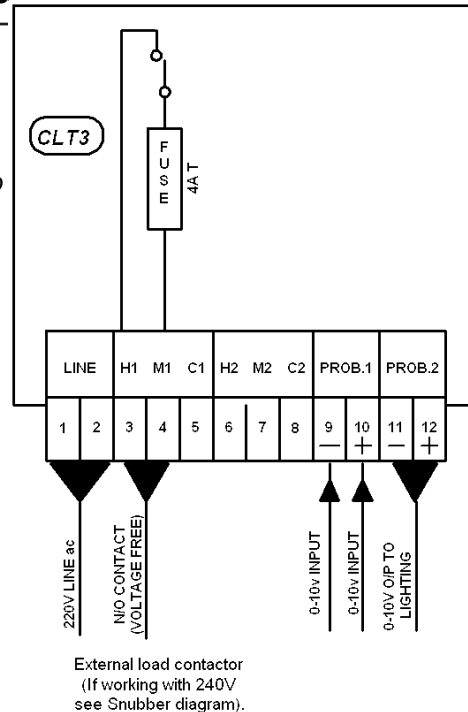
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This system has been designed and built to reduce electrical disturbance as far as possible. However, for better protection apply RC-type filters – e.g. our model **HCF1** – in parallel to the inductive loads (contactor coils, etc) controlled by the module relays.



Note: Cost setting type must be set to 1.

IF IN DOUBT PLEASE CALL CLIMATEC SYSTEMS FIRST.