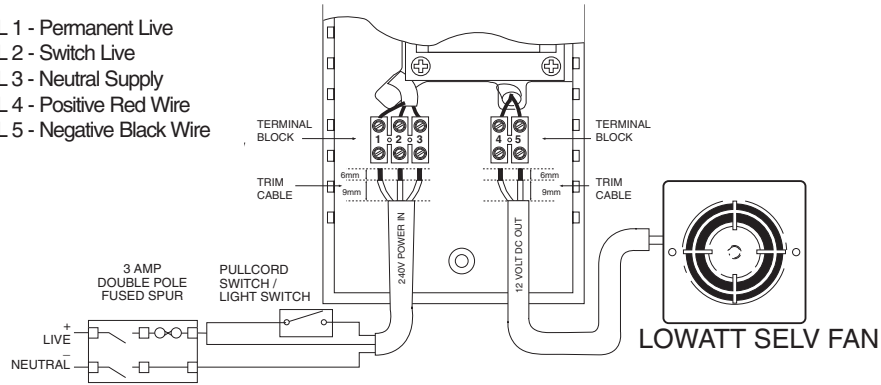


Diagram T2 .

- TERMINAL 1 - Permanent Live
- TERMINAL 2 - Switch Live
- TERMINAL 3 - Neutral Supply
- TERMINAL 4 - Positive Red Wire
- TERMINAL 5 - Negative Black Wire



## INSTALLATION INSTRUCTIONS FOR THE LOWATT and SELV LOWATT RANGE OF FANS

### Fan Installation Important Notes

1. When installing through an external wall, an external wall grille must be fitted at all times
2. This fan must be installed by fixed wiring only. A flexible cord should not be used.
3. A double pole fused spur having a contact separation of at least 3mm in all poles must be used and fitted with a 3 amp fuse.
4. When a fan is mounted on a wall it **must** be installed with the PCB and connection terminals at the TOP. See diagram 2.
5. This product should be fitted by a competent person who is aware of part P building regulations. All wiring must comply with IEE regulations. Must be securely fixed and the cable must be minimum 1mm sq in section. If in any doubt contact a qualified electrician.
6. For best result the extractor fan should be fitted as high on the wall as possible, or if preferred on the ceiling.
7. Switch off mains supply before making electrical connections.
8. This fan is double insulated and does not require an earth.

### Bathrooms and Shower rooms

The SELV range LVLW fans may be installed in zone 1 and 2 provided the Transformer is fitted outside the zones, the Lowatt fans must be fitted outside any zones. If in any doubt consult a qualified electrician. See diagram 3 for Zones.

1. Cut a 112mm / 4" hole in the wall.
2. Fix ducting flush to plaster or ceiling
3. Remove the front cover. This should lift off; the screws and holes plugs are clipped to the inside of the fan.
4. Hold the body of the fan against the wall or ceiling and mark the four screw holes and the cable entry.

**IMPORTANT: Ensure that the fan is square on the wall or ceiling.**

5. Bring the power cable into position, as marked. Allow an extra 230mm (9") protruding to make the connection.
6. Replace the front cover and secure using the front cover screws and insert the hole plugs into the screw holes.

### LOWATT FANS

#### Wiring of LOWATT Humidity Model – See diagram 2

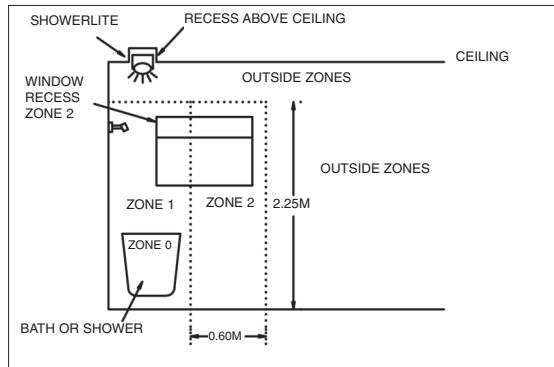
For this fan to operate as a normal Time Delay Unit with Humidity Override, i.e. when connected to a Switched Live Supply coming from the light switch into the Fan, the Fan will operate when the light is switched on and will switch itself off after the pre-set time. However, should the humidity rise above the pre-set level the Fan will switch on and continue to run until the humidity falls 5% below the pre-set level. In some cases, in a new house for example, the Fan will continue to run for extended periods, as the humidity will be high. It is, therefore, advisable that in normal situations the Fan be pre-set at between 0% and 80% RH. In exceptional circumstances e.g., very humid days in the summer, the Fan may well switch on at 80%. This is not unusual and a higher setting may be preferable.

For the fan to operate a normal time delay unit with humidity over-ride i.e. when connected with a switch live coming from the light switch into the fan. The fan will operate when the light is switched on, and switch off after about 20 seconds to 20 minutes (timer is pre-set for the minimum). However should the humidity in the room reach about 75%, which will happen if the shower is run or the bath filled with hot water, the fan will switch on and keep running until the humidity has been reduced to a normal level, about 65%. Requires neutral, switch live and perm live supply. Refer to internal wiring label and Diag 2 of this instruction for correct connection.

**NOTE: When the humidity fan is first installed they can run continuously for several hours.**

This fan requires a permanent live and permanent neutral supply. Refer to internal wiring label for correct connection. The fan will operate should the humidity in the room reach to a higher level than the sensor detects and will run continuously until the humidity level is reduced.

Diagram 3 - Bath and Shower room zones



### IMPORTANT

Switch off mains supply before making any electrical connections. Installation must be supervised by a qualified electrician.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other open-fire appliances when mounted in outside windows or walls.

Fan must be disconnected from electrical power before any maintenance is carried out.



### Wiring of LOWATT Standard Model

This fan can be either operated from a suitable remote switch or a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. The cable from the fan must be connected to a double pole fused spur having a contact separation of at least 3mm in all poles, it must be used and fitted with a 3 amp fuse, and should be sited outside any room containing a shower or fixed bath. The fan should not be accessible to a person using either the shower or the bath.

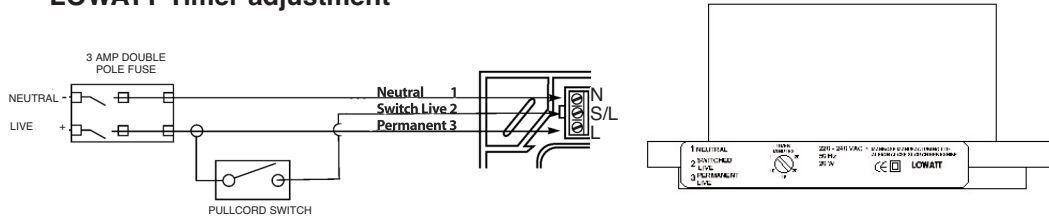
### Wiring of LOWATT Timer Model – See diagram 1

The fan can be either operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. A double pole fused spur having a contact separation of at least 3mm in all poles must be used and fitted with a 3 amp fuse, and should be sited outside any room containing a shower or fixed bath. The fan should not be accessible to a person using either the shower or the bath.

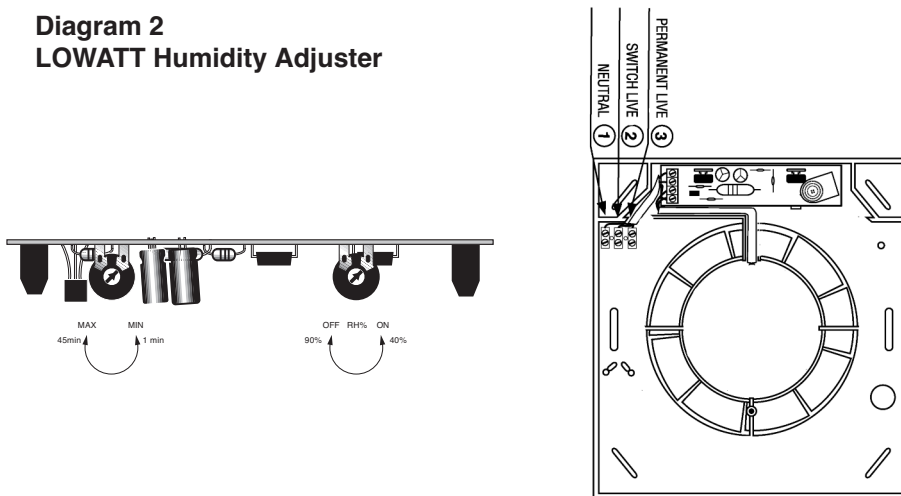
### Timer Adjustment

The Timer fan will run approximately one minute after it has been switched off. This time delay can be increased by firstly switching off the power to the fan. Remove the timer cover and bracket and carefully turn the thumb wheel clockwise to reduce the time and anti-clockwise to increase the time. **Only adjust with power switched off.** The timer will run for is 20 seconds and the maximum is about 20 minutes. NB Timer delay is adjustable as indicated on the timer strip cover

**Diagram 1**  
**LOWATT Timer adjustment**



**Diagram 2**  
**LOWATT Humidity Adjuster**



## SELV LOWATT – SAFETY EXTRA LOW VOLTAGE FANS + POWER SUPPLIES

SELV LOWATT fans may installed in Zones 1 + 2 – see diagram 3. The power supply must be installed outside of the zones. SELV LOWATT fans must only be installed with the correct power supply.

### Isolated Transformer Installation SELV fans

The Safety Extra Low Voltage Transformer can be mounted in the loft area (not Pullcord or Humidistat models) on high on the wall or ceiling next to the pullcord light switch away from the bath or shower and designed to power LOWATT fans only installed in the splash area of the bath or shower. Comes complete with pattress but can be flush mounted. (Protrusion 25mm). All models fitted with neon light.

TYPE	WIRING DIAGRAM	INSTALLATION
SELV T12S	T1	<b>Standard model</b> for remote switching
SELV T12T	T2	<b>Timer model</b> incorporating integral adjustable timer (adjustable 1-20 mins). For remote switching.
SELV T12H	T2	<b>Humidity model</b> with built-in humidity sensor which will switch on when the humidity rise over 75% RH and will switch off as the humidity level drops below 75% RH. This level is adjustable between 50-90% RH.

### WIRING INSTRUCTIONS FOR LOWATT SELV POWER SUPPLY

#### T1

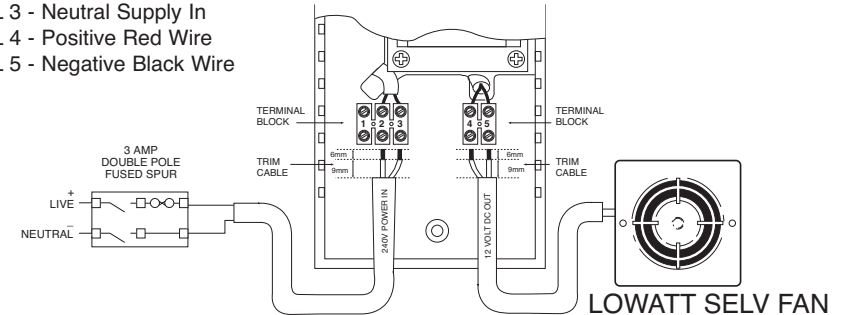
- Fit the pattress to the wall and connect the 240V~50Hz supply to terminals No2 and No3 as shown in diagram T1 below.
- The cable to the fan must be at least 1.5mm<sup>2</sup> in section and is connected to terminals No4 and No5, as shown in diagram T1 below

#### IMPORTANT

It is essential that the positive wire from the power supply is connected to the positive terminal in the fan and likewise it is essential that the negative wire from the transformer is connected to the negative terminal in the fan.

- TERMINAL 1 - Spare
- TERMINAL 2 - Live Supply In
- TERMINAL 3 - Neutral Supply In
- TERMINAL 4 - Positive Red Wire
- TERMINAL 5 - Negative Black Wire

**Diagram T1. rear of Power Supply with Pattress Removed**



### WIRING INSTRUCTIONS FOR LOWATT SELV TIMER AND HUMIDITY POWER SUPPLY

Timer or humidity unit which is operated by a remote pullcord switch or light switch