

To be read in full before installation  
and kept for future reference

4600	4" (100mm) Standard	4660	6" (150mm) Standard
4601	4" (100mm) Timer	4661	6" (150mm) Timer
4603	4" (100mm) Timer & Humidistat	4616	4" 12V Timer
4630	4" (100mm) Standard, flat fascia	4617	4" 12V Humidistat
4631	4" (100mm) Timer, flat fascia	4640	Shower Fan Kit Timer
4666	6" (150mm) Humidistat & Automatic Shutters	4641	Shower Fan Kit Timer and Light

Safety Instructions and Installation Notes	Product Features
<p><b>Safety Instructions</b></p> <ul style="list-style-type: none"> <li>Always switch off the electrical supply before commencing installation.</li> <li>This fan must be connected via a DP connection unit which is fitted with a 3A fuse.</li> <li>This fan must be installed using fixed wiring. A flexible cord should not be used.</li> <li>Connect to a 240V ac electrical supply. This extractor fan is double insulated and does not require an earth.</li> <li>This extractor fan must be installed outside the zones (except low voltage fans) as described under Special Installations or Locations Particular Requirements in the IEE Wiring Regulations</li> <li>This extractor fan must be installed in accordance with the current edition of the IEE Wiring Regulations and Building Regulations, BS 7671.</li> </ul> <p><b>Installation Notes</b></p> <ul style="list-style-type: none"> <li>When installing this fan through an external wall, an external grille must be fitted at all times.</li> <li>The extractor fan must be mounted on flat surface.</li> <li>The extractor fan should be installed a minimum of 1.8m from the floor.</li> <li>For the best results, the extractor fan should be fitted as high as possible on the wall.</li> </ul> <p><b>If in doubt, contact a qualified electrician</b></p>	<p><b>Timer Fans</b></p> <p>Timer fans are designed to be connected to the lighting circuit so that they will operate when the light is switched on, and stay on for a pre-set time after the light has been switched off.</p> <p><b>Timer and Humidistat Fans</b></p> <p>Timer and Humidistat fans are designed to be connected to the lighting circuit and will operate when either the light is switched on or when the humidity level exceeds the pre-set level between 60 and 90%.</p> <p>Once the light is switched off, or the humidity level drops below the pre-set level, the fan will stay on for the time period set by the timer control, between 2 -30 minutes.</p> <p><b>Noise Level</b></p> <p>All ventilations fans have a low noise level, under 35dB.</p> <p><b>Thermal Fuse</b></p> <p>All ventilation fans have a thermal fuse which prevents the motor overheating if the impeller becomes jams.</p>
Installation Instructions	Ventilation Fan Performance
<ol style="list-style-type: none"> <li>Switch off the mains supply before commencing the installation.</li> <li>Drill a hole in the wall to suit the fan and ducting: <ul style="list-style-type: none"> <li>4" fan      Ø 110mm hole max.</li> <li>6" fan      Ø 155mm hole max.</li> </ul>                     If mounting the fan on the ceiling, position the fan between the joists                 </li> <li>Route ducting from the fan position to the external grille position, ensuring the end of the ducting is flush to the walls. Ducting runs should be as short as possible for optimum performance.</li> <li>Remove the front cover of the fan by undoing the securing screw on the bottom edge.</li> <li>Hold the body of the fan in position and mark on the wall/ceiling the four fixing screw positions and the cable entry hole.</li> <li>Drill and plug the wall/ceiling.</li> <li>Route the cable so that it exits through the wall ceiling at the position marked, leaving enough cable protruding so it can be terminated.</li> <li>Fix the fan body in position.</li> <li>Terminate the cable.</li> <li>Fit the front cover and tighten the securing screw.</li> </ol> <p><b>Shower Fan Kits</b></p> <p>The ventilation fan in the shower fan kit should go in-line with the ducting, between the internal and external grilles, and should be positioned in the loft space. Secure the ducting to the fan and grilles using the cables supplied.</p>	<p>Deta ventilation fans are design to meet the requirements of The Building Regulations – Approved Document F1 Means of Ventilation, and The Building Standards (Scotland) – Domestic Ventilation.</p> <p>These Building Regulations and the Domestic Building Services Compliance Guide state the intermittent extract ventilation fans should have a specific fan power (SPF) less than 0.5W/(ltr/sec). Deta fans meet this requirement.</p>
	Fan Positioning
	<p>Deta's ventilation fans are designed to move air over short distances, typically under 2m, and are suitable for through wall installations. These ventilation fans can also be installed in ceilings with the ducting length under 2m.</p> <p>The ventilation fan should always be sited in the wall or located on the ceiling furthest from the main source of air replacement, e.g. door, to ensure optimum performance. The fan should also be located as high as possible.</p>

## Wiring

### Standard Fans

The standard fan can be connected to the lighting circuit and controlled from a switch so that it only operates when the switch is on. The fan must be fed by a DP switched connection unit fitted with a 3A fuse. See Fig. 1.

The connections for this fan are:

- L permanent live
- N neutral

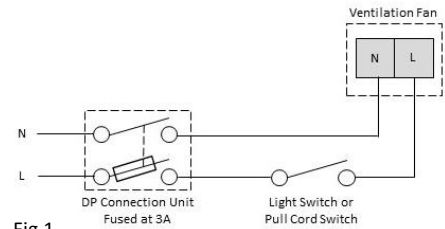


Fig.1

### Timer Fans and Timer and Humidistat Fans

The timer fan can be connected to the lighting circuit. The circuit for this fan must be protected by a 3A device and should be controlled by a 3 pole fan isolator. See Fig. 2.

The connections for this fan are:

- L permanent live
- S switch live
- N neutral

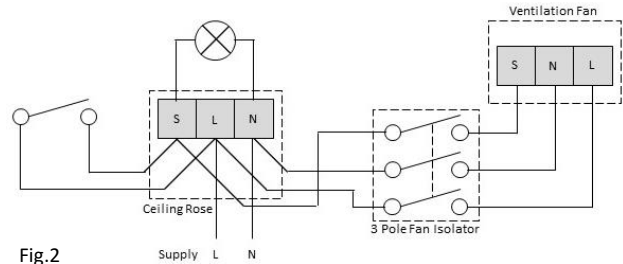


Fig.2

### Low Voltage Fans

The Low Voltage ventilation fan can be installed in zone 1 in a bathroom or shower room, however the supply transformer must be installed outside zone 2 (see Special Installations or Locations Particular Requirements in the current edition of the IEE Wiring Regulations, BS 7671). The transformer requires a 240V supply, and has an ELV output to the fan.

### Shower Fan Kits

In-line fans in the shower fan kit are mains voltage and wiring is identical to timer fan, see Fig. 2. The 12V light in the shower kit is low voltage and is fed by the voltage transformer which is wired independently from the ceiling rose/junction box.

## Control Adjustments

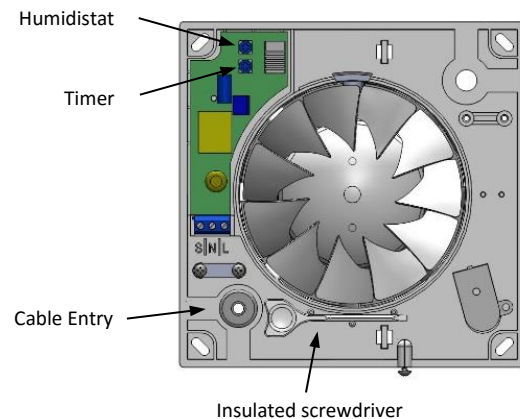
The timer and humidistat and timer fans are supplied with an insulated screwdriver for adjusting the controls, which is clipped to the fan body.

### Timer

The timer is adjustable from approximately 2 minutes to 30 minutes. The timer is factory set at approximately 15 minutes. Turn the control clockwise to increase the on time. Timers should be set for 15 minutes minimum.

### Humidistat

The humidistat range is approximately 60 – 90% relative humidity. The humidistat is factory set at approximately 75%. Turn the control clockwise to increase humidity



## Specification

Voltage	220 – 250V ac 50Hz	Extraction Rate 4"	90m <sup>3</sup> /hr ( 25 ltr/sec)
Compliance	BS EN 60335-1 and EN 62233	Extraction Rate 6"	255m <sup>3</sup> /hr ( 71 ltr/sec)
Hole cutout dimensions	4" fan    Ø 110mm hole max.	Extraction Rate 4" Low Voltage	85m <sup>3</sup> /hr ( 24 ltr/sec)
	6" fan    Ø 155mm hole max.	Extraction Rate 4" Flat Fascia	92m <sup>3</sup> /hr ( 26 ltr/sec)
Timer Adjustment	2 – 30 minutes	Extraction Rate 4" Shower Fan	107m <sup>3</sup> /hr ( 30 ltr/sec)
Humidistat Adjustment	60 – 90% humidity	IP Rating	IP 24 (Shower Fan IP X4)

**Deta Electrical Company Limited**

Kingsway House Laporte Way

Luton Bedfordshire LU4 8RJ UK

Tel.: +44 (0)1582 544 544    Technical Helpline: +44 (0)1582 544 548