

zehnder

Zehnder Adaptive ZLE100TA, ZLE100HTA
For Bathrooms and Toilets
Installation Instructions





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1.0 General Preparation - read all instructions before commencing

- 1.1.0 Warning: This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.**
- Cleaning and user maintenance shall not be made by children without supervision.**

- 1.1.1** Observe appropriate safety precautions if working on steps or ladders. Wear eye protection when breaking out wall or window materials etc.
- 1.1.2** Siting Notes: Where an open-flued oil or gas-fuelled appliance is installed in the kitchen, extract ventilation can cause the spillage of flue gases. Care must be taken to ensure ventilation is reduced appropriately, as set out in the local Building Regulations. Kitchens with solid-fuel appliances should not have extract fans fitted.
- 1.1.3** When installing wall mounted fans, ensure that there are no buried cables or pipes in the way. It is recommended that this fan is mounted >1.8m above floor level.
- 1.1.4** The fan should not be sited where it would be subject to a direct source of heat in excess of 40°C.
- 1.1.5** A clearance of 50mm to be allowed on all sides of the fan for the removal of the discreet front cover.

2.0 Overview

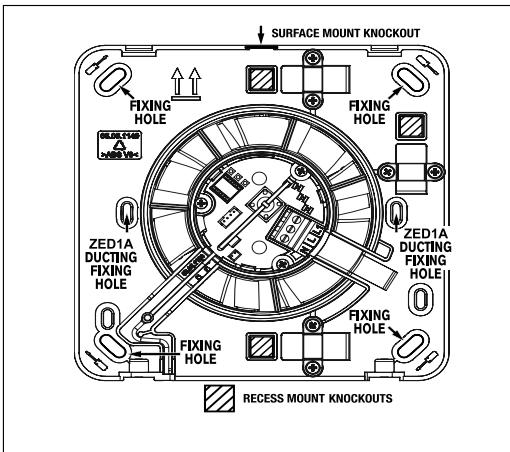
- 2.1.0 Zehnder's adaptive fan range has been designed to offer a simplistic approach to meet local Building Regulations and provide an energy efficient domestic ventilation solution to improve indoor air quality in dwellings. The fan may incorporate fully automated integral controls which monitors the homeowners' environment.
- 2.1.1 Smart Timer monitors the length of time that there is an occupant present within a wet room (*via the 'switch-live'*) and provides a fixed over-run time period to best match the length of time that the 'switch live' is active (as shown in the table below). This removes nuisance running noise and unnecessary energy wastage typically associated with traditional timers.

Note: *The first 5 minutes will not activate an over-run.*

Time 'Switch Live' is Active	'Switch Live' Over-run Period
0 – 5 minutes	No over-run
5 – 10 minutes	5 minutes
10 – 15 minutes	10 minutes
15 – 20 minutes	15 minutes

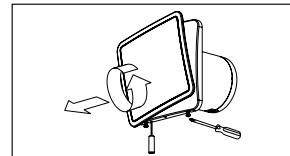
- 2.1.2 Smart Humidity monitors the ambient humidity within the wet room environment and looks for short peaks of humidity made by either cooking, showering or bathing. This smart technology ensures that your fan is only running when required, removing nuisance running noise and unnecessary energy wastage typically associated with increases to background humidity which naturally occur with the changing seasons and during the night.

- 2.1.3 Fixing and Mounting Diagram



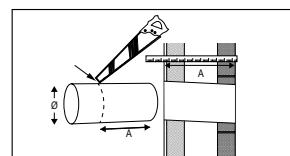
3.0 Wall Mounting - Using ZED1A wall duct and ZEG1 external grille

- 3.1.0 Rotate discreet front cover to the left and pull off.
Loosen retaining screws at the bottom of the internal grille and lift off.

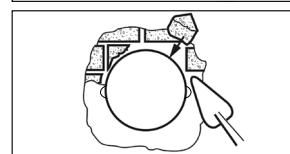


- 3.1.1 Cut the duct to width of the plasterboard (A) or tiled wall with slight fall to exterior.
(Make provisions for cable).

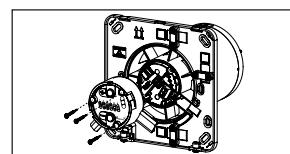
ZLE100TA, ZLE100HTA Ø = 125mm



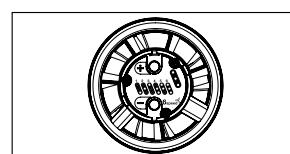
- 3.1.2 Fill in any gaps with mortar or foam and make good internal and external walls. Make sure that ducting remains circular and screw holes are horizontal.



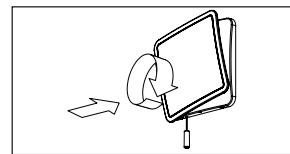
- 3.1.3 Remove 3 screws within the control section and wire fan (see *wiring details in sections 5.0 to 7.0*).
Fix fan body to ZED1A ducting or wall, using the respective fixing points (as per 2.1.3) and align.
Re-secure control section with the 3 screws.
- 3.1.4 Replace internal grille ensuring no wires are trapped.
Secure with retaining screws at the bottom.



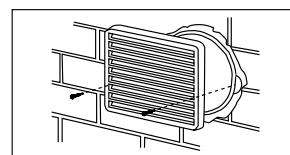
- 3.1.5 Commission fan to the respective installed speed by using the + and – buttons (see *commissioning set-up section on page 10* for details on all installation settings).



- 3.1.6 Push on discreet front cover and rotate to the right until secure.

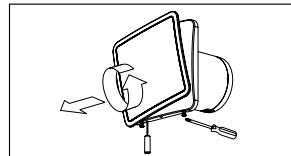


- 3.1.7 Fix the protective wall grille to the ZED1A ducting or external wall using the respective fixing points.



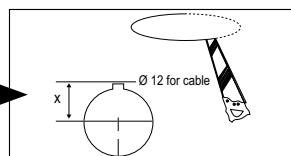
4.0 Ceiling Mounting

- 4.1.0 Rotate discreet front cover to the left and pull off.
Loosen retaining screws at the bottom of the internal grille and lift off.

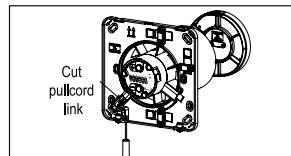


- 4.1.1 Cut an opening through the ceiling for the fan and electric cable.

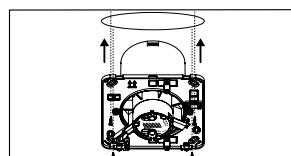
$\varnothing = 105\text{mm}$ $x = 68\text{mm}$
 $\varnothing = 12\text{mm}$ for cable



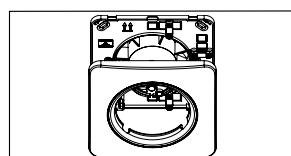
- 4.1.2 Remove backdraught shutters & discard.



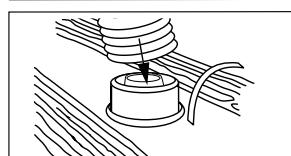
- 4.1.3 Remove 3 screws within the control section and wire fan (see wiring details in sections 5.0 to 7.0).
Fix fan body to ceiling and re-secure control section with the 3 screws.



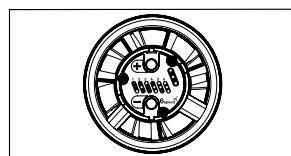
- 4.1.4 Replace internal grille ensuring no wires are trapped.
Secure with retaining screws at the bottom.



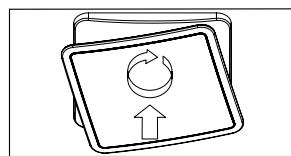
- 4.1.5 Place ducting (either flexible or rigid) over the spigot of the fan ensuring the impeller rotates freely.
Secure in place with ties/non hardening sealant.



- 4.1.6 Commission fan to the respective installed speed by using the + and – buttons (*see commissioning set-up section on page 10 for details on all installation settings*).



- 4.1.7 Push on discreet front cover and rotate to the right until secure.

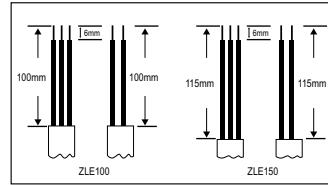


5.0 Wiring Appliance

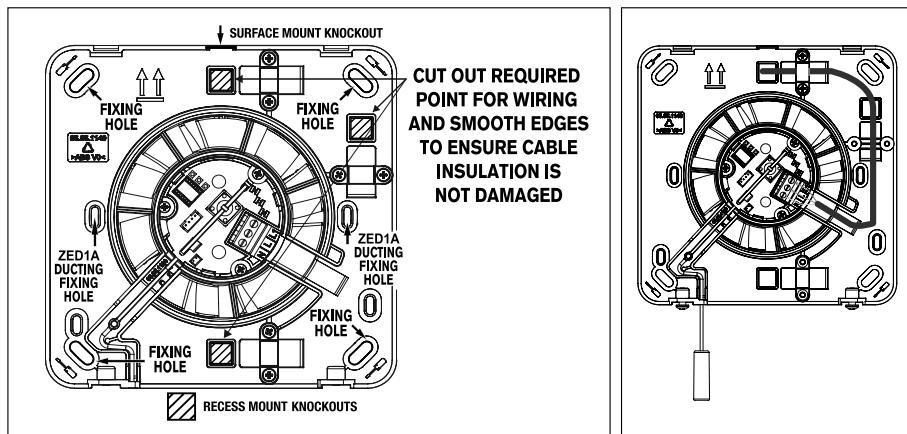
5.1.0 **WARNING: Installation must be carried out by a qualified electrician and all wiring must conform to IEE or local Wiring Regulations.**

The appliance must be isolated from the mains supply before removing the electronics cover.

- 5.1.1 Strip cable to correct lengths as shown.
- 5.1.2 Insert cable through cable entry point, and then secure cable using the cable clamp.
- 5.1.3 Push the wires into the terminal block (as per the 230V wiring diagram on page 8).



- 5.1.4 Tighten the terminal block screws and ensure a good connection.
- 5.1.4 For surface mounting utilise respective knockouts and cable clamps as shown below.



6.0 Fan Specifications

- 6.1.0 **230V Model:** IPX4 220-240V ~ 50Hz / 1 Ph
100mm: 9 Watts max 150mm: 12 Watts max
- 6.1.1 **Cable Sizes:** Mains: Fixed flat wiring - 2 core 1mm²,
3 core 1/1.5mm²

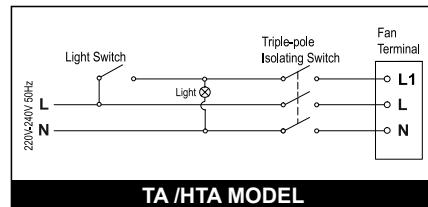
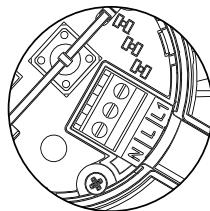
7.0 Wiring Specification

7.1.0 **WARNING: Isolate electricity supply before starting work.**
The electrical connections must be carried out by a qualified electrician in accordance with IEE or local regulations.

- 7.1.1 The 230V fan is double insulated and does not require an earth.
- 7.1.2 A double-pole switch having a minimum contact separation of 3mm must be used to provide isolation.
- 7.1.3 When supplied from a 6 amp lighting circuit no local fuse is required.
If electricity is not supplied via the lighting circuit, a localised 3 amp fuse must be used.

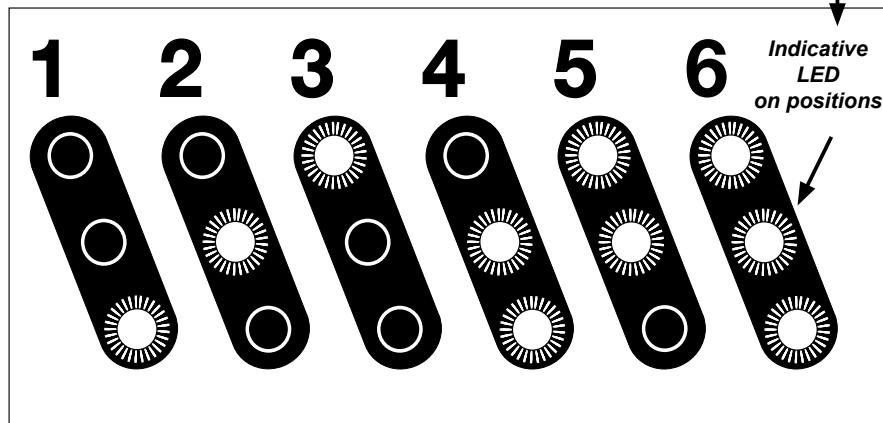
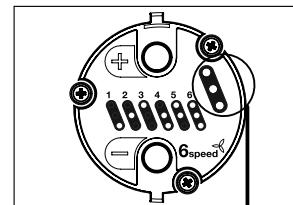
7.1.4 230V Wiring Diagrams

- ZLE100TA
- ZLE100HTA



8.0 Commissioning / Set-up

- 8.1.0 Press the + or – button to identify speed that the fan has been set to.
- 8.1.1 Press the + or - button to increase/decrease fan to desired installed airflow requirement.
- 8.1.2 The 3 LED lights on the right hand side of the control panel will change to indicate speed setting.



- 8.1.3 Lights will remain on for approximately 5 seconds to enable the set up and status of the fan to be observed.
- 8.1.4 Airflow setting will be locked after 30 minutes.
- 8.1.5 **To reactivate the commission set up mode**, press and hold the + and - buttons simultaneously for approximately 3 seconds until the lights go out and come back on again. Fan can now be set to required speed.

Speed setting	Room	Installation	Shutters used	Installed performance Litres per second l/s
1	WC	Through the wall < 3m Ducting (2 bends)	yes no	6 l/s 6 l/s
2	Bathroom	< 1.5m ducting (1 bend)	no	15 l/s
3	WC	Through the wall < 1.5m Ducting (1 bend)	yes no	19 l/s 18 l/s
4	Bathroom	Through the wall	yes	20 l/s
5	Bathroom	Through the wall < 1.5m Ducting (1 bend)	yes no	23 l/s 21 l/s
6	Bathroom	< 3m Ducting (2 bends)	no	15 l/s

Note: The Zehnder Adaptivefan has the ability to be set at a “maximum airflow” capacity (in excess of installed speed setting 6). To achieve this, whilst in commissioning mode, press the + button for 3 seconds, all 3 LED lights will flash to indicate that the fan is now at the maximum airflow setting.



9.0 Servicing/Maintenance

9.1.0 **Warning: Always isolate fan from mains supply before cleaning. Do not use solvents to clean this fan.**

- 9.1.1 Rotate discreet grille to the left and pull off – wash with a damp cloth and dry.
- 9.1.2 The fan's impeller and internal grille may now be cleaned using a brush, cotton bud or damp cloth (do not immerse in water).
- 9.1.3 After cleaning, push on discreet grille and rotate to the right until secure.
- 9.1.4 Please note that your stored fan setting will not be lost during any interruptions to your fan's power supply.





All information is believed correct at time of going to press. E&OE.

All goods are sold according to Zehnder's Standard Conditions of Sale which are available on request.

All dimensions referred to are in millimetres unless otherwise stated.



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