

# TACHO OUTPUT FAN FAIL INDICATOR (TOFFI)







# 1. RECOMMENDATIONS

You have purchased a TOFFI designed specifically by Soler & Palau to perform the functions described in the table of contents.

Before you install and start up this product, please read this instruction book carefully because it contains important information for your safety and the safety of users during installation, use and maintenance. Once installation is complete, please pass the instruction book on to the end user. Please check that the equipment is in perfect condition when you unpack it since any factory defect is covered under the S&P guarantee. Please also check that the equipment is the one that you have ordered and that the information on the instruction plate meets your requirements.

# 2. GENERAL

The TOFFI has been designed to provide fault indication for both AC and EC type fan motors. The device is supplied with a jumper allowing the switch between a 'Tacho input' or 'External volt free contact' which the TOFFI continuously monitors. In the event that it no longer receives a signal the device will indicate a fault via its fault relay. When in fault mode the device isolates all power to the fan with a manual reset required to reset the fault.

# 3. SPECIFICATION

- The equipment is designed for continuous operation with a maximum rated current load of 8A at 40° C. ambient on single phase 230 Volts ~ 50Hz supply.
- The normal equipment temperature range is -20°C to +40°C.
- The unit meets the EMC requirements of EN 61800-3:1997 and EN61000-3:2006
- The controller is housed in an enclosure that is suitable for the current rating.

### 4. SAFETY RULES

#### 4.1. CAUTION

- Isolate mains supply before connecting.
- This unit must be earthed.
- All electrical connections should be made by a qualified electrician.
- All wiring must be in accordance with current wiring regulations. The unit should be provided with a separate double pole isolator switch.

#### 4.2. INSTALLATION

- Installation and commissioning must be done by a qualified professional specialist.
- Ensure that installation complies with mechanical and electrical regulations in each country.
- Do not use this equipment in explosive or corrosive atmospheres.
- Should the 8A current rating of the TOFFI exceed that of the equipment being connected to the volt-free output then the TOFFI could be connected to a contactor to switch a higher load.
- Install in a dry sheltered location. Do not install in close proximity to other heat sources. The maximum ambient temperature for the controller must not exceed 40°C.
- Remove the lid of the controller by removing the cover fixing screws. This provides access to the mounting holes and circuit board.

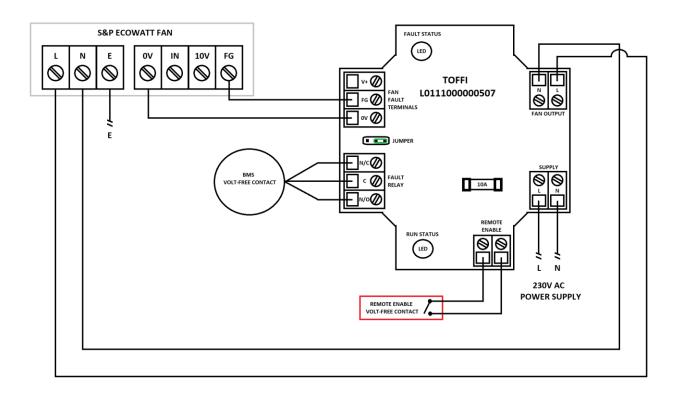
# 5. TERMINALS

- L Live
- N Neutral
- E Earth
- 0V Ground
- FG Tacho Output
- N/C Normally Closed
- N/O Normally Open
- C Common

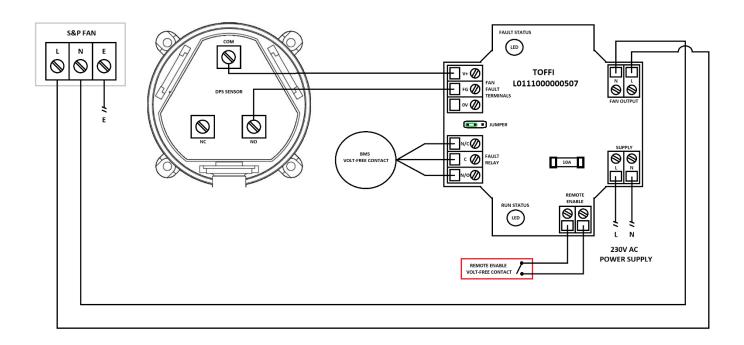
# 6. WIRING

When connecting the device, it required a closed circuit between the remote enable terminals to run, in the event that the system is constantly running fit a link between the terminals. In the event of a fault the relay will change condition producing continuity between 'C' and 'N/O'.

# 6.1. EC FAN WIRING



## 6.2. AC FAN WIRING



#### 7. MAINTAINENCE

Before manipulate the device, make sure that it is disconnected from the mains and that no one can turn it on during the intervention.

The apparatus must be regularly inspected. These inspections should be carried out bearing in mind the ventilator's working conditions, in order to avoid dirt or dust accumulating on the impeller, motor or back-draught shutter. This could be dangerous and perceptibly shorten the working life of the ventilator unit.

While cleaning, great care should be taken not to unbalance the impeller or motor.

In all maintenance and repair work, the safety regulations in force in each country must be observed.

# 8. Warranty

**S&P Limited Warranty** 

## 24 (TWENTY-FOUR) MONTH PRODUCT WARRANTY

S&P UK Ventilation Systems Limited warrants that the TOFFI controller will be free from defective materials and workmanship for the period of 24 (twenty-four) months from the date of original purchase. In the event that we find any part is defective the product will be repaired or at the company's discretion, replaced without charge provided that the product has been installed in accordance with the enclosed instructions and all applicable standards and national and local building standards.

### IF CLAIMING UNDER WARRANTY

Please return the completed product, carriage paid, to your local authorized distributor. All returns must be accompanied by a valid Invoice of Sale. All returns must be clearly marked "Warranty Claim", with an accompanying description stating the nature of the fault.

### THE FOLLOWING WARRANTIES DO NOT APPLY

- Damages resulting from improper wiring or installation.
- Damages resulting when using the fan/control with fans/motors/controls/sensors other than those supplied and manufactured by the S&P Group of Companies.
- Removal or alteration of the S&P data plate label.

#### **WARRANTY VALIDATION**

• The end user must keep a copy of the Invoice of Sale to verify a purchase date.

#### 9. RECYCLING

Dismantling and recycling must be carried out by qualified personnel and in compliance with local and international regulations.

Disconnect the electrical equipment from the power supply making sure that no one can start it during the operation.

Disassemble and eliminate the parts to be replaced according to current national and international standards.



EEC legislation and our consideration of future generations mean that we should always recycle materials where possible; please do not forget to deposit all packaging in the appropriate recycling bins. If your device is also labelled with this symbol, please take it to the nearest Waste Management Plant at the end of its serviceable life.

# 10. EC DECLARATION OF CONFORMITY

We declare that the fan/control designated below, on the basis of its design and construction in the form brought onto the market by us is, in accordance with the relevant EC Council Directives on Electromagnetic Compatibility. If alterations are made to the apparatus without prior consultations with us, this declaration becomes invalid. We further declare that the equipment identified below may be intended to be assembled with other equipment/machines to constitute machinery, which shall not be put into service until the assembled machinery has been declared in conformity with the provisions of these relevant EC Council Directives.

# 11. DESIGNATION OF EQUIPMENT

Relevant EC Council Directives, Electromagnetic Compatibility Directive (89/336/EEC.) Applied Harmonised standards in particular BS EN IEC 61000-6-3:2021, BS EN IEC 61000-4-4:2012, BS EN IEC 61000-4-11:2020, BS EN 61000-4-2-2009, BS EN 61000-4-8:2010, BS EN IEC 61000-4-3:2020, BS EN 61000-4-6:2014, BS EN 61000-4-5:2014+A1:2017.



# **S&P UK VENTILATION SYSTEMS LTD**

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