

Page 1 of 2 Ref: IW012346 - Rev 4 - July 03

# Analogue Instruments Panel Indicators Saxon & Fiesta Series

## Products Covered

012-\*\*, 013-\*\*, 014-\*\* & 016-\*\*

### Installation

The product should be panel mounted using the mounting kit provided. Consideration should be given to the space required behind the unit to allow for bends in the connecting cables. Additional protection to the panel may be obtained by the use of an optional panel gasket. The terminals at the rear of the case should be protected from liquids. Units should be mounted in a reasonably stable ambient temperature.

The unit should not be mounted where it can be subjected to excessive direct sunlight and vibration should be kept to a minimum. Connection wires should be sized to comply with local regulations and should be terminated on to tags suitable for screw connection. The products do not have internal fuses therefore; external fuses **must** be used for safety protection under fault conditions.

## **Electromagnetic Compatibility (EMC) Installation Requirements**

This product range has been designed to meet the certification requirements of the EU Directives when installed to a good code of practice for EMC in industrial environments. e.g.

- Screen all leads. In the event of RF fields causing problems where screened leads can not be used, provision for fitting RF suppression components, such as ferrite absorbers, line filters etc., must be made. N.B. It is good practice to install sensitive electronic instruments that are performing critical functions, in EMC enclosures that protect against electrical interference causing a disturbance in function.
- 2. Avoid routing leads alongside cables and products that are, or could be, a source of interference.
- 3. To protect the product against permanent damage, surge transients must be limited to 2kV pk.
- 4. Electro Static Discharge (ESD) precautions must be taken at all times when handling this product.

For assistance on protection requirements please contact your local sales office.

Low Voltage Directive: This product complies with BSEN61010-1.

## Saxon & Fiesta Series

Where models have different terminal markings all options are illustrated. Voltage circuits should be fused. When practical, instrument circuits should be earthed at one point. C.Ts must not be open circuited on load.

### Indoor Use

Altitude up to 2000m or above 2000m if specified by the manufacturer.

## Temperature 0 to 40°C;

Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C;

Mains supply voltage fluctuations not to exceed + 10% of the nominal voltage;

Other supply voltage fluctuations as stated by the manufacturer;

Transient overvoltages according to INSTALLATION CATEGORIES (OVERVOLTAGE CATEGORIES) I, II and III (see Annex J). For mains supply the minimum and normal category is II;

POLLUTION DEGREE 1 or 2 in accordance with IEC 664.

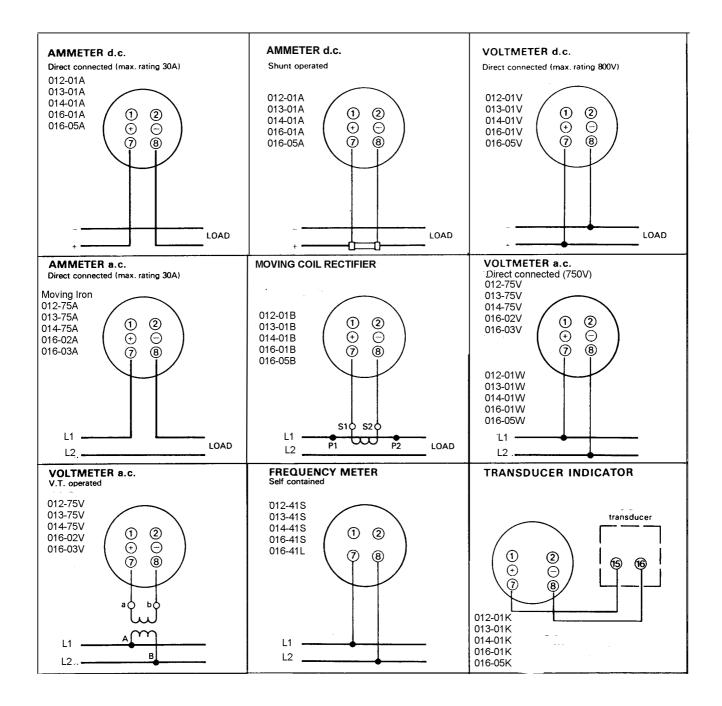


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# INSTALLATION INSTRUCTIONS

## Analogue Instruments Panel Indicators Saxon & Fiesta Series



The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions, which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. Crompton is a trademark.



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# Ref: IW05678 - Rev 4 - Sept 02

**Products Covered** 056-\*\* 057-\*\* 058-\*\* \*= Any letter or number

## Installation

The product should be panel mounted using the Clamp Band provided. Consideration should be given to the space required behind the unit to allow for bends in the connecting cables. Additional protection to the panel may be obtained by the use of an optional panel gasket. The terminals at the rear of the case should be protected from liquids. Units should be mounted in a reasonably stable ambient temperature and within the range -10 to +60°C.

The unit should not be mounted where it is subjected to excessive direct sunlight and vibration should be kept to a minimum. Connection wires should be sized to comply with local regulations and should be terminated in tags suitable for screw connection. The products do not have internal fuses therefore external fuses must be used for safety protection under fault conditions.

## Fusing and connections

- This unit must be fitted with external fuses in voltage and 1. auxiliary supply lines.
- 2. Voltage input lines must be fused with a quick blow fuse 1A maximum.
- 3. Auxiliary supply lines must be fused with a slow blow fuse rated 1A maximum.
- Choose fuses of a type and with a breaking capacity 4. appropriate to the supply and in accordance with local regulations
- Where fitted, CT secondaries must be grounded in accordance 5. with local regulations.

### Warning

- During normal operation, voltages hazardous to life may be present at some of the terminals of this unit. Installation and servicing should be performed only by qualified, properly trained personnel' abiding by local regulations. Ensure all supplies are de-energised before attempting connection or other procedures.
- It is recommended adjustments be made with the supplies deenergised, but if this is not possible, then extreme caution should be exercised.
- Terminals should not be user accessible after installation and external installation provisions must be sufficient to prevent hazards under fault conditions.
- This unit is not intended to function as part of a system providing the sole means of fault protection - good engineering practice dictates that any critical function be protected by at least two independent and diverse means.
- Never open circuit the secondary winding of an energised current transformer.

### **Electromagnetic Compatibility**

This unit has been designed to provide protection against EM (electro-magnetic) interference in line with requirements of EU and other regulations. Precautions necessary to provide proper operation of this and adjacent equipment will be installation dependent and so the following can only be general guidance:-

- Avoid routing wiring to this unit alongside cables and products that are, or could be, a source of interference.
- The auxiliary supply to the unit should not be subject to excessive interference. In some cases, a supply line filter may be required.
- To protect the product against incorrect operation or permanent damage, surge transients must be controlled. It is good EMC practice to suppress differential surges to 2kV or less at the source. The unit has been designed to automatically recover from typical transients, however in extreme circumstances it may be necessary to temporarily disconnect the auxiliary supply for a period of greater than 5 seconds to restore correct operation.

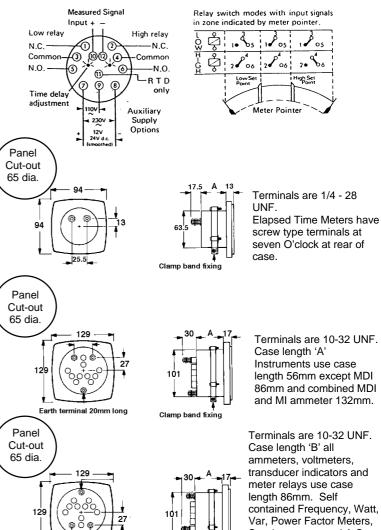
# Analogue Instruments

## Panel Indicators 050 Unifix Series

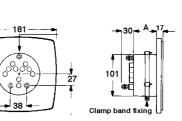
Screened communication and small signal leads are recommended and may be required. These and other connecting leads may require the fitting of RF suppression components, such as ferrite absorbers, line filters etc., if RF fields cause problems.

It is good practice to install sensitive electronic instruments that are performing critical functions in EMC enclosures that protect against electrical interference causing a disturbance in function.

## Meter Relav 057-30\* Circuit Connections



Clamp band fixing



38

38

Panel

Cut-out

65 dia.

18

Terminals are 10-32 UNF. length 56mm except MDI 86mm and combined MDI

Terminals are 10-32 UNF. transducer indicators and contained Frequency, Watt, Var, Power Factor Meters, Synchroscopes and A.C. Position Indicators have 132mm cases.

Terminals are 10-32 UNF. Case length 'C' all ammeters voltmeters, transducer indicators and meter relays use case length 86mm. Self contained Frequency, Watt, Var, Power Factor Meters, Synchroscopes and A.C. Position Indicators have 132mm cases.

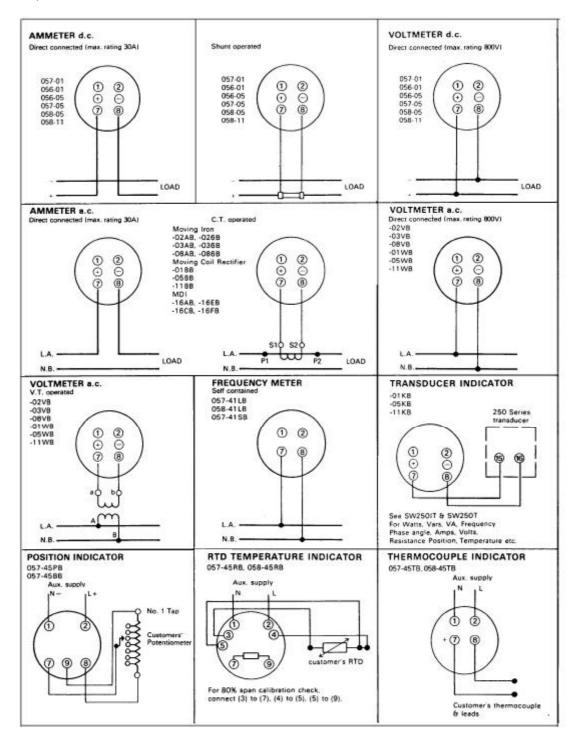


# INSTALLATION INSTRUCTIONS

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## Analogue Instruments Panel Indicators 050 Unifix Series

Where models have different terminal markings all options are illustrated. Voltage circuits should be fused. When practical, instrument circuits should be earthed at one point. CT's must not be open circuited on load. Watt, Var, Power Factor meters and Synchroscopes normally require a VT for ratings above 450V (where models have different terminal markings all options are illustrated).



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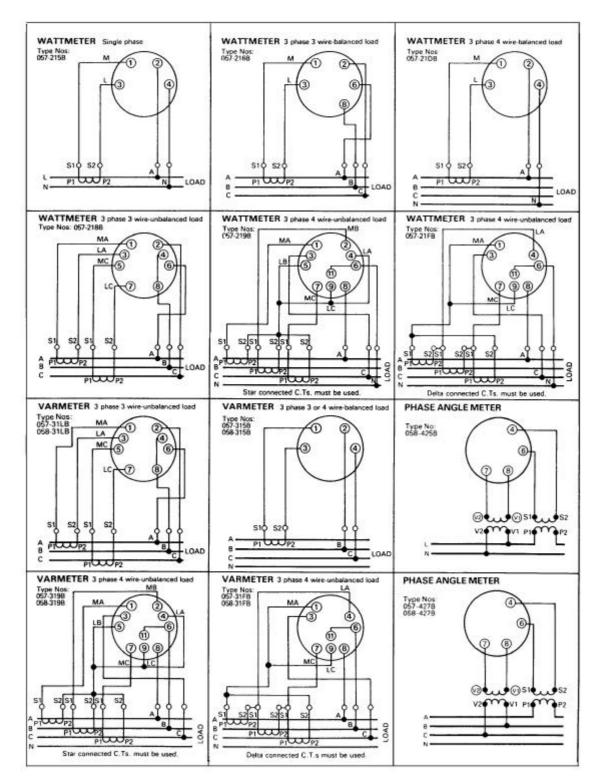
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# INSTALLATION INSTRUCTIONS

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Connection diagrams are shown with current and voltage transformers, which are subject to separate order. Direct connected ratings are usually available for voltages up to 600V and current up to 10A.



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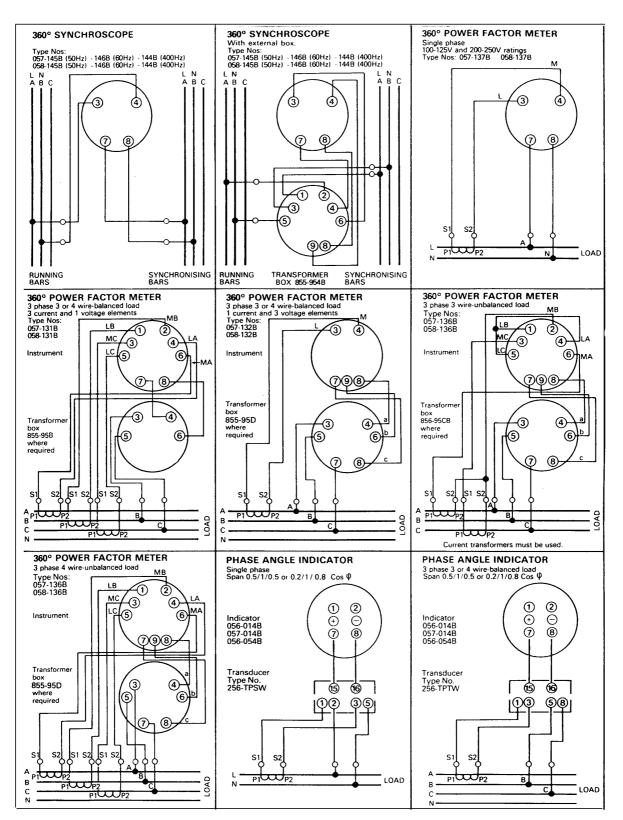
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