Products Covered
252-X**  253-XHZ  256-X**
** - any letter or number.

Introduction
This Crompton Advantage range of precision transducers converts ac inputs into an industry standard DC signal for monitoring and control use, with accuracy to Class 0.2.

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.  
1. Screen output and low signal input 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.

Installation - General
Units must be mounted in a reasonably stable ambient temperature within the range 0 to 60ºC. The units must not be mounted where they will be subjected to excessive sunlight and vibration should be kept to a minimum. Connection wires must be sized to comply with local regulations and preferably should be fitted with tags for the terminals provided. Labels are fixed to the units and carry connection-input information. These products do not have internal fuses therefore external fuses must be used for safety protection under fault conditions.

Earth/Ground Connections
For safety reasons, CT secondary connections should be grounded according to local codes of practice.

Outputs
See the data label on the product. The transducer output produces a current sufficient to drive standard panel meters, computer hardware, relays, etc. The connection wires must be rated to suit the isolation voltage required and be capable of transmitting at least 1 watt. The analogue outputs use the bridge-tied-load (BTL) principle, for a number of technical benefits. Please note that the -ve terminals may not be connomed together, and that the RTU or similar load must have differential inputs.

Outputs a, b and c follow the same order as the product description, e.g.: 256-XRL is a Watt & VAr & VA transducer. Output terminals a15 and a16 are for the Watt transducer, terminals b15 and b16 are for the VAr transducer and terminals c15 and c16 are for the VA transducer.

Connection Diagram
Type 252-XAA
Single Phase Current, self powered

Type 256-XAS/XAR
3 Current, 3 Outputs

Type 252-XAS/XAR/XAL
Single Phase Current
INSTALLATION INSTRUCTIONS
Paladin Transducers
Class 0.2 Series 250

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 trade mark.

Notes on connection diagrams
1) When using more than one item via a Current Transformer, the inputs must be in series.
2) Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self-powering is achievable for a voltage variation of less than 20%.
3) When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var & VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4) With multiple analogue outputs, do not comment the –ve terminal.
INSTALLATION INSTRUCTIONS
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**INSTALLATION INSTRUCTIONS**

**Paladin Transducers**  
**Class 0.2 Series 250**  
**Signal Isolator**

**Installation**  
The 250-ISA Isolator is a 2-wire loop isolator that requires no external power supply. The device accepts d.c. mA inputs with a range of 0 ≤ 20mA and provides an isolated output current directly proportional to the input signal.

The unit should be mounted in a reasonably stable ambient temperature within the range of -25 to +60ºC.

Connection wires should be sized to comply with local regulations and preferably should be fitted with tags for terminals provided.

**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.
- 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.

**Connection Diagram**

**Dimensions**

**Mounting Details**

Position 1 – Din top hat rail mounting (DIN EN50022-35)

Position 2 = Screw mounting to suite M4 fixings.

**LOW VOLTAGE DIRECTIVE:** This product complies with BSEN61010-1

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