# AUTOMETERS

# Installation Instructions for PX-5 Enclosure & IC-5 Meter

### Introduction

The PX-5 meter enclosure has been specifically designed to be fitted next to a three phase distribution board enabling various electrical parameters to be read by pressing the keys on the front of the enclosure.

The PX-5 must be installed in compliance to the latest edition of electricity regulations by a qualified electrical contractor who is familiar with installation of electricity meters.

# PX-5



IC-5 Connection Diagram

### Installation

Before you start to install the enclosure it is imperative that you look at the installation carefully ensuring you have all the required parts and you have the correct meter for the application.

The PX-5 can be purchased in two formats. **(1)** PX-5 Basic Meter and Enclosure **(2)** PX-5 Complete Kit Assembly consisting of the following:

- A. IC-5 Meter
- B. PX-5 Plastic Enclosure
- **C.** Current transformers (type and current rating to be advised by customer)
- **D.** 2 metre cable harness consisting of all wires required for the installation (part no. sx-ch-2)
- **E.** 1 metre length of plastic flexible tubing with 2 x 25mm glands for each end and a securing saddle

### You will also need to:

- \* Check and measure where you are going to install the enclosure so all cables will reach the appropriate terminals
- \* Check where the Isolation switch is fitted to isolate the supply.
- \* Check what the distribution board controls and who you need to notify that the power will be switched of while you install the meter.

# Installing the Enclosure

When you have done the above you are now in a position to install the enclosure.

### It is Imperative that you follow the instructions below.

1. You must isolate the power to the distribution board. If the switch or fuse is not fitted next to the distribution board and is fitted in another area where you cannot see it while working on the installation, you must remove the fuse completely, lock the switch in the OFF position and place a warning label on the switch, stating that the switch must not be switched on under any condition.

### This must be done before removing any electrical cover.

2. When the cover on the distribution board has been removed. Check with a suitable calibrated instrument that the power cable supplying the distribution board has been totally isolated.

Only when you have tested with a calibrated instrument that no Voltage or Current is present on the supply cable can you start to install the PX-5.

- **3.** Inspect the cable which supplies the distribution board and check that there is enough room to fit your current transformers.
- **4.** It is good practice to secure the current transformers using the fixing brackets supplied to the distribution board below the main isolation breaker. Ensure that you have the side marked P1 facing the mains and that P2 is facing the load.

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# Installing the Enclosure (Cont'd)

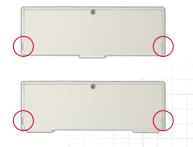
- **5.** Remove each of the cores from the main breaker, slide each core through the correct current transformer and back into the breaker terminals and secure.
- **6.** Fit the enclosure to the wall and measure where you will run the plastic conduit to the distribution board. You will need to drill a 25mm hole in the distribution board to secure the plastic conduit. At this point you will also need to fit the plastic conduit securing clamps to the wall.
- **7.** Thread the cable harness through the plastic Conduit making sure there is enough cable to connect into the meter terminals and secure the plastic conduit in position.

# Connecting the Cable Harness

- **8.** Wire the cables into the meter terminals, as per the label fitted under the meter in the Enclosure number IC-5 Connection Diagram.
- **9.** Connect the three voltage cables Brown, Black and Grey into the spare breaker terminals L1,L2,and L3. Connect the Blue wire neutral into the Neutral terminal block.

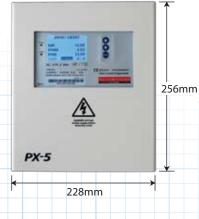
- **10.** Connect the cables to each of the current transformers starting with Brown L1-S1. See Diagram for connections.
- **11.** All cables supplied by Autometers with this Installation are colour coded and individually marked to simplify and ensure correct connections are made.
- **12.** When all the cables have been connected, take a minute and check again all cables are in the correct terminals and the screws are tight on the conductors.
- **13.** Replace the covers on the distribution board and on the PX-5 enclosure and make safe.
- **14.** Inform all necessary people that you are going to switch on the mains to the distribution board.
- **15.** Switch on the main supply to the distribution board.
- **16.** Switch on the main isolator switch in the distribution board.
- **17.** With power on and electricity being consumed, press the switches on the front of the meter, you should immediately notice that the display will light up and you will see readings.

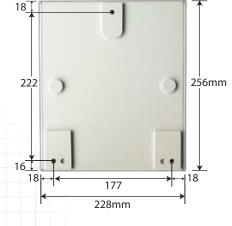
### **How To Remove Enclosure Cover**



Gently pull the cover away from the base, using the 4 four indentations indicated above, then lift the cover away from the enclosure base.

### **Casing Dimensions PX-5**





60mm 40mm 79mm 79mm 228mm

There are 4 circular knock outs (25mm), two at the top and two at the bottom. To remove, push from the inside.

# A U T O M E T E R S

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