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## UNITED AUTOMATION LTD

Southport Business Park  
 Wight Moss Way  
 Southport, PR8 4HQ  
 ENGLAND

Tel: 0044 (0) 1704 – 516500  
 enquiries@united-automation.com  
 www.united-automation.com




 unitedautomationltd
 
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## 1 Key Features

- Soft Start
- Pedestal
- Easy to install

## 2 Technical Specification

Supply Voltage	230/110V AC ±10% 50/60Hz
Switching Capacity	6kW Max AT 230v AC 3Kw at 110v AC
Ramp On-Time	1-5 Seconds
Pedestal Value	0-40% (Conduction Angle)
Current Consumption	20mA
Terminals	6.0mm Rising Clamp
Operating Temperature	-20 to 40°C
Protection Rating	IP65
Gland Diameter	Max Cable Entry 2.5mm
Enclosure Dimensions (W x L x H) (mm)	130 x 130 x 75mm

## 3 Introduction

The Soft Start with contactor is a soft start controller designed to be used on both inductive and resistive loads. The Soft Start model has a predetermined ramp up time of 1 to 5 seconds. It also has a pedestal which is used to adjust the start of the sine wave the range of this is 0-40%.

The soft start is used to help eliminate high inrush current. This helps protect the Load from getting damaged and eliminates nuisance MCB trips.

## 4 Installation

SAFETY FIRST!

Please read these instructions before installing and operating this product.

The Soft start unit should be positioned with the three fixed cable glands facing down and securely fixed via the four mounting holes accessible from the front of the unit. Round cable is recommended to avoid water ingress. To ease installation, a mounting template is provided opposite to locate the 4 mounting hole centres.

## 5 Wiring

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.E. wiring regulations (BS7671) by suitably qualified/trained personnel. These regulations contain important requirements regarding safety of electrical equipment (for International Standards refer to I.E.C./ directive IEC950).

Warning! Isolate the mains supply before commencing any work on the unit. Failure to do so could result in serious injury or fatality.

The unit is fitted with three cable glands. The first gland on the left is for the mains supply the second is for the Load the small gland on the right is for the enable input. Only one cable should be fitted per gland to prevent degrading the unit's IP rating.

The mains supply connects to the terminal block marked 'LINE'. Connect the supply LIVE to the 'L' terminal, NEUTRAL to the 'N' terminal and EARTH to the 'E' terminal.

The load connects to the terminal block marked 'LOAD'. Connect the load LIVE to the 'L' terminal, NEUTRAL to the 'N' terminal and EARTH to the 'E' terminal.

If an external enable signal is used it should be connected to the terminal block marked 'ENABLE'. If no enable input is needed a wire link should be inserted into the Enable terminal.

Important! Ensure all earth wires are connected to maintain earth continuity.

Check all wiring and make sure the cable glands are tightened.

## 6 Commissioning

Set the Secs Cermet (VR2) to a value between 1 and 5 seconds. Also if the Pedestal (VR1) needs to be used move it to a position between 0-40% if it is not being used it should be at 0%. If an enable switch needs to be attached take the link attached to the ENABLE terminal and fit the switch. Replace the lid and switch on the mains supply to the unit. The soft start should start once it has been powered on if the link is fitted or when the ENABLE switch has been engaged.








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Southport Business Park  
Wight Moss Way  
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ENGLAND

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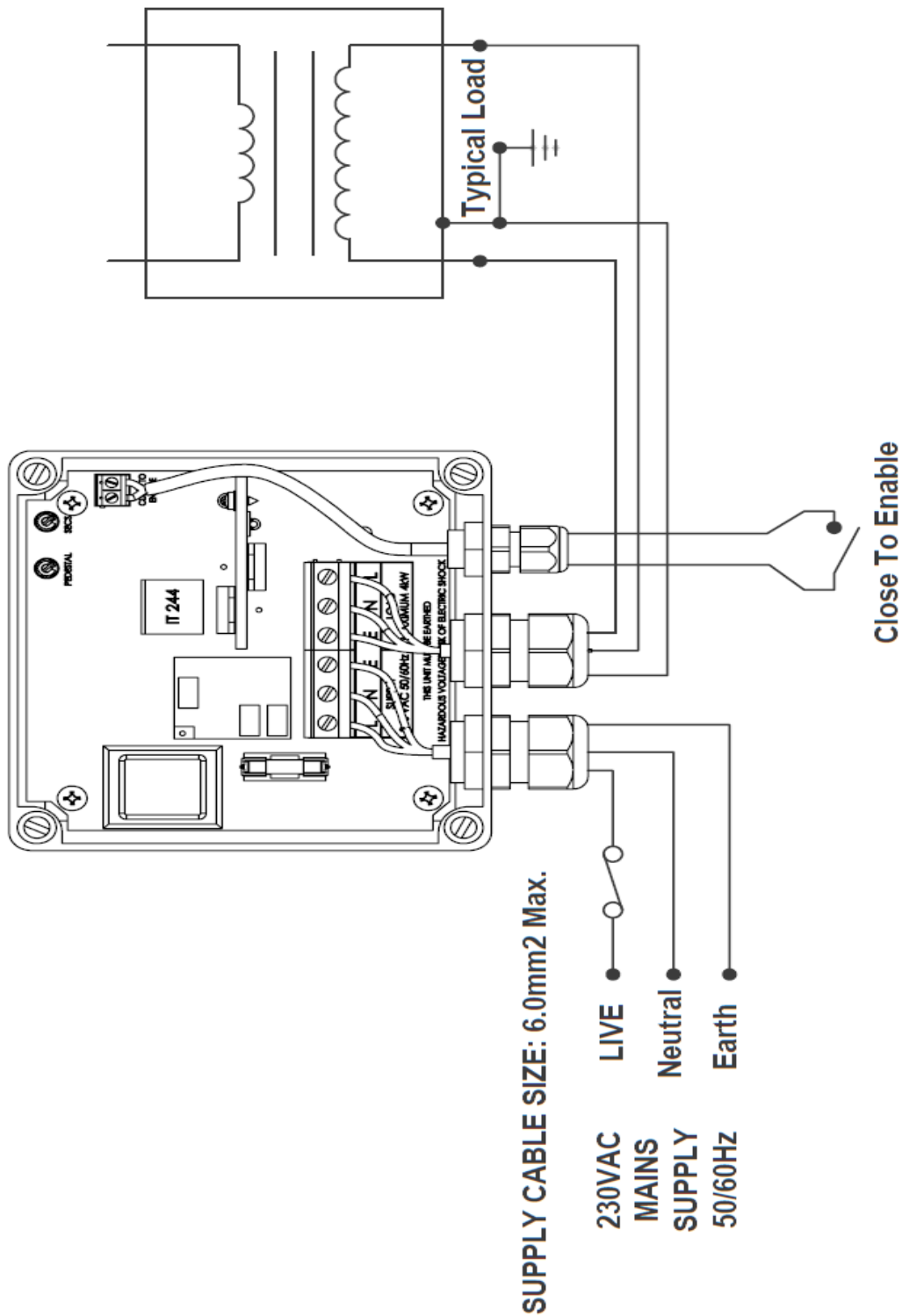


# X20012 - Soft Start with Bypass Contactor 6kW

## User Manual

### Issue 4

#### 7 Wiring Diagram



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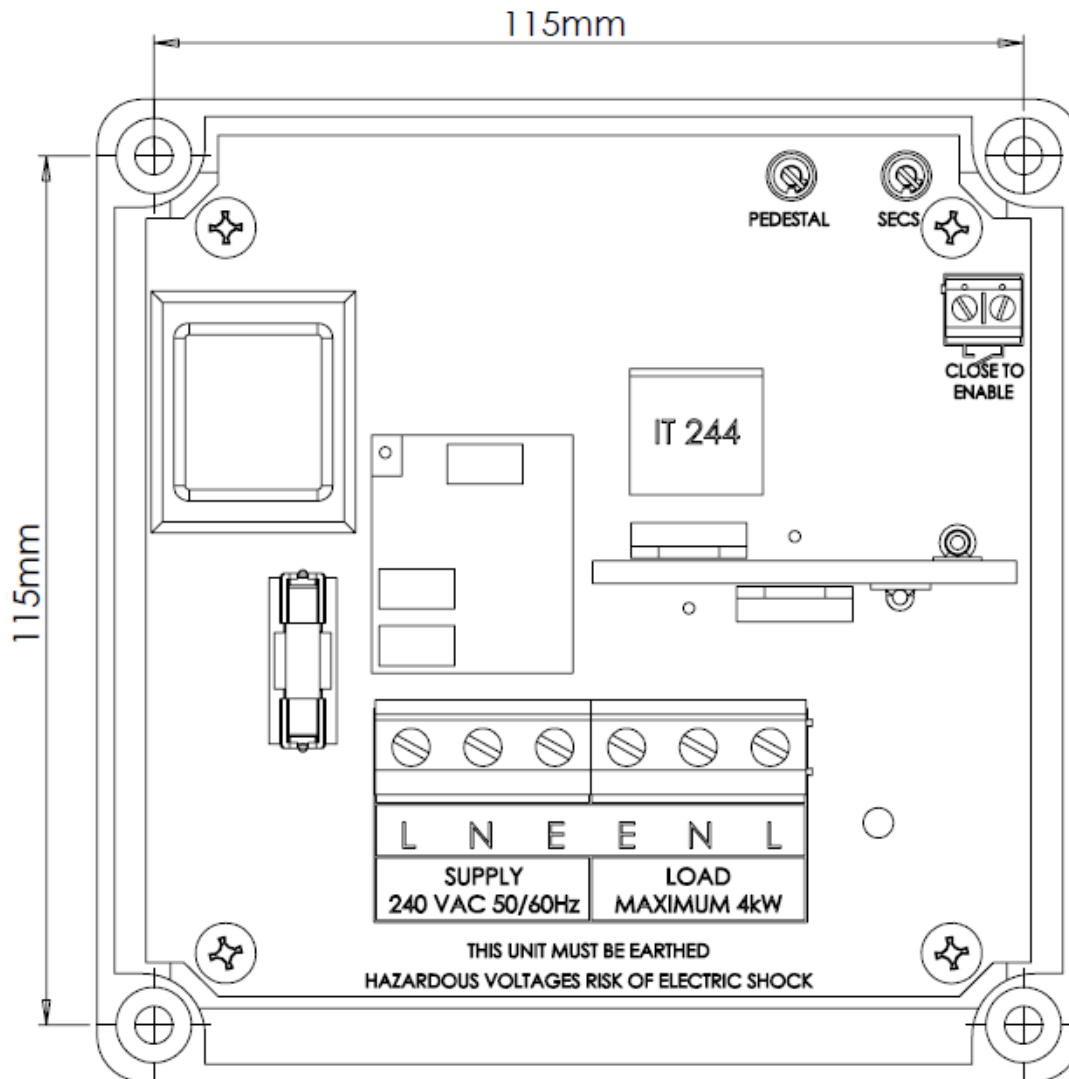
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unitedautomationltd UA\_Limited



**IMPORTANT!** When wall mounting, the unit must be orientated with the cable glands facing down.



## 9 Troubleshooting

Warning! Isolate the mains supply before commencing any work on the unit. Failure to do so could result in serious injury or fatality.

Problem: System doesn't Start

Solution:

Check the mains supply to the unit is switched on.

- Check Enable Link Is Fitted.
- Check the LINE and LOAD wiring connections to the unit and the Load.
- Contact your supplier.

#### 10 Recommendations & Safety Requirements

Other documents which may be appropriate for your applications are available upon request.

Code	Identity	Description
X10255	SRA	Safety requirements: Addressing the Low Voltage Directive (LVD) including, Thermal Data/Cooling, Live Parts Warning, Earthing Requirements and Fusing Recommendations
P01.1	COS	UAL Conditions if Sale

**Note:**

It is recommended that installation and maintenance of this equipment should be carried out by suitably qualified personnel, with reference to the current edition of the I.E.T. Wiring Regulations BS7671. The regulations contain important requirements regarding the safety of electrical equipment.

#### 11 Order Code

Part Number	A403156 – 230VAC 6kW A403158 – 110VAC 3kW
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#### 12 Product Applications

- Transformers
- Motors
- Compressors
- All resistive loads



**Not for general waste**