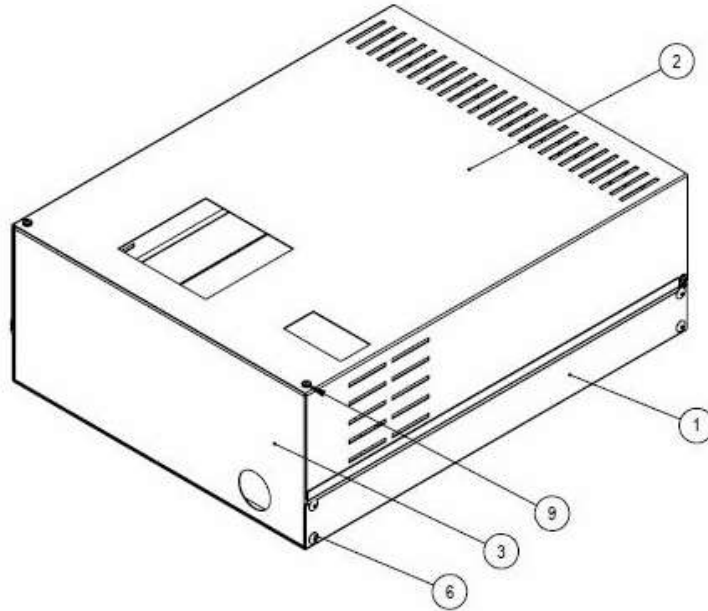


Step by step Instructions for Plug and Play Capacitor Banks

1) Remove Fixing Screws for the front Panel



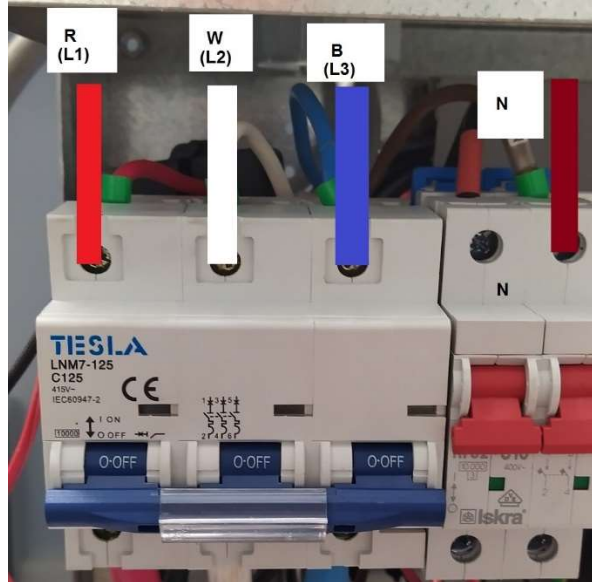
2) Remove or Adjust Cable Entry if Included (IP52 Models)

3) Connect 3 Phase Input Wiring, as per Diagram in Appendix 1

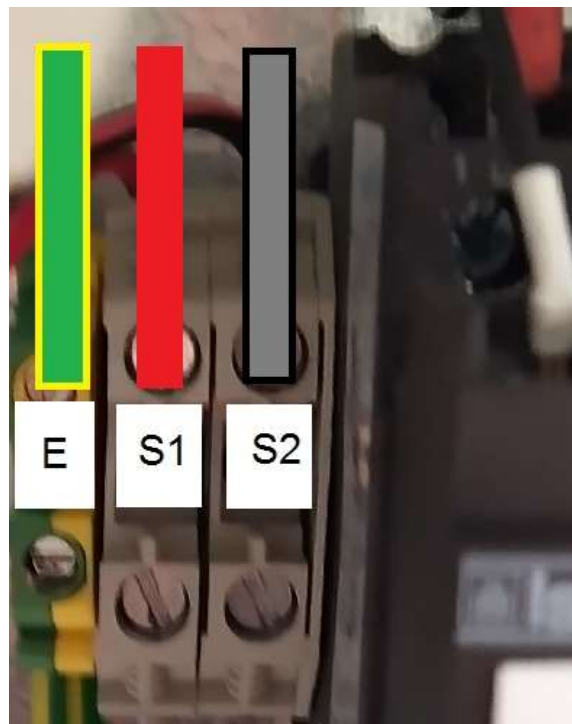
-Connect L1,L2,L3 in sequence as shown on the next page. **Note: You must connect Earth Terminal NO Exceptions**

Smart One Installation Guide

4) Connect Neutral to the Neutral Terminal or if no neutral terminal to the left side of the 2 Pole MCB



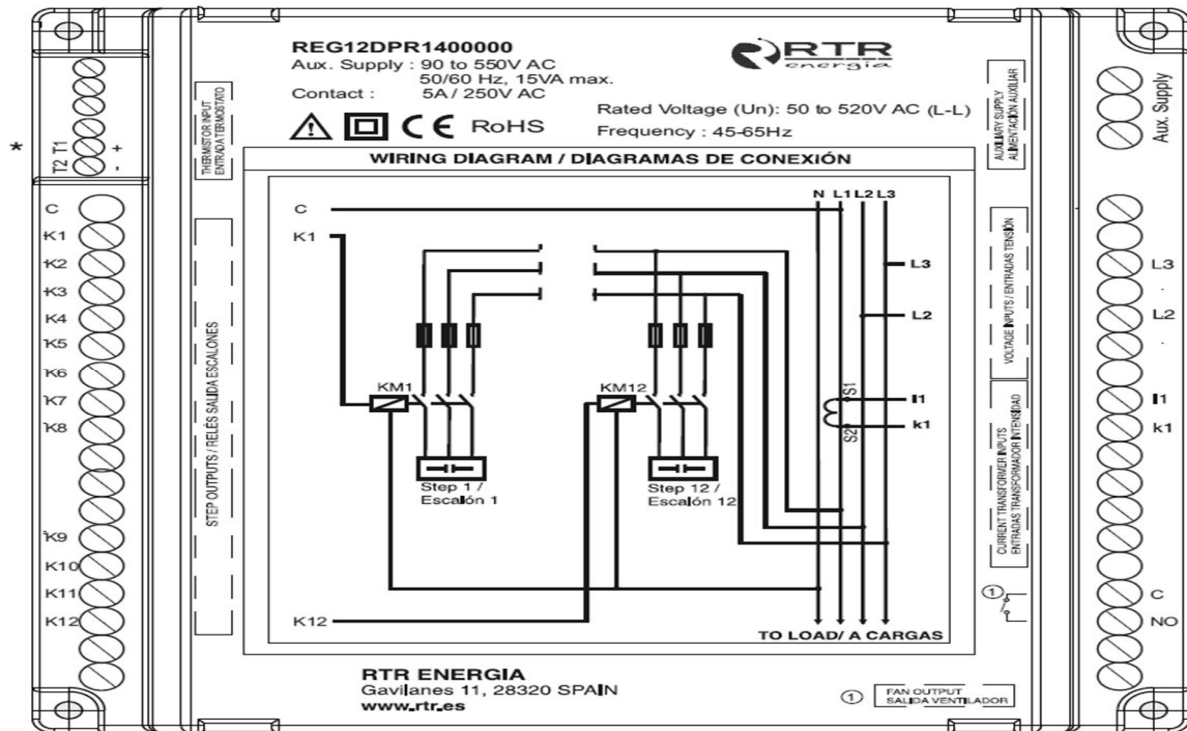
5) Connect Incoming Earth to Earth Terminal (Mandatory for Australian Installtions)



6) Connect CT to S1 and S2 Terminals

-Note the CT Must be connected close to the switchboard in order to measure the full load current on the switchboard.

-5 Amp Secondary CT's Must be used










7) PFC Controller Operation

Note the PFC Controller will not operate without CT Current or Aux power supply connected. You can Isolate the contactor circuit by switching off the auxiliary 1Pole/2Pole MCB. Once the correct voltage and Ct Connections are made the controller is completely plug and play.

In order to make adjustments to the PFC Controller Operation


Front Panel

KEYBOARD	
	Press 5s to enter the configuration
	Press to increase digits
	Press to edit values and go to the next digit (right).
	Press to save changes and go to the next page. Press 5s to see the serial number.
	Press to go back in programming. Press 5s to change AUTO / MAN.
 & 	Press for 5s to enter Test Mode


Note: Test Mode checks all relays



Note: programming should be done by professional after reading this manual.





SERIAL NUMBER

Press  to see the serial number of the device.

AUTOMATIC/MANUAL MODE


Press  for 5 seconds to change mode (Auto / Man). The output relays will be disconnected when switching from one mode to another.

Press  to connect the output relays one by one and  to disconnect them (in manual mode)


The controller has 4 keys.     Use these keys to enter the configuration mode and make changes.

NOTE: programming should be done by a professional after reading this manual.



DATA SCREENS

Pulsing	Key	Description
	-	Power Factor Display
Press once		Temperature Display

NOTE:Temperature Display requires a NTC temperature probe to be connected

Press  for 5 seconds to enter configuration mode

CONFIGURABLE SCREENS


Configuration	PROG.
Basic parameters	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>COSϕ</p> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center; font-size: 24px;">1000</div> <p>(cos fi)</p> </div> <div style="font-size: 24px;">→</div> <div style="text-align: center;"> <p>Step Number</p> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center; font-size: 24px;">12</div> <p>(nº escalones)</p> </div> <div style="font-size: 24px;">→</div> <div style="text-align: center;"> <p>Step Time</p> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center; font-size: 24px;">15</div> <p>(tiempo conexión)</p> </div> <div style="font-size: 24px;">→</div> <div style="text-align: center;"> <p>Temperature</p> <div style="border: 1px solid black; padding: 5px; width: 60px; height: 40px; display: flex; align-items: center; justify-content: center; font-size: 24px;">55</div> <p>(temperatura)</p> </div> </div>
	<p>*To move from one screen to another press  </p>

SETTING TABLES

Paramater	Range	Default Value
Cos FI	0.800 (ind) a 0.800 (cap)	0.95
Step number	1-12	12
Step time	1s-999s	120s
Temperature	10°C a 70°C	55°C

SPECIFICATION (PFC Cap Bank)

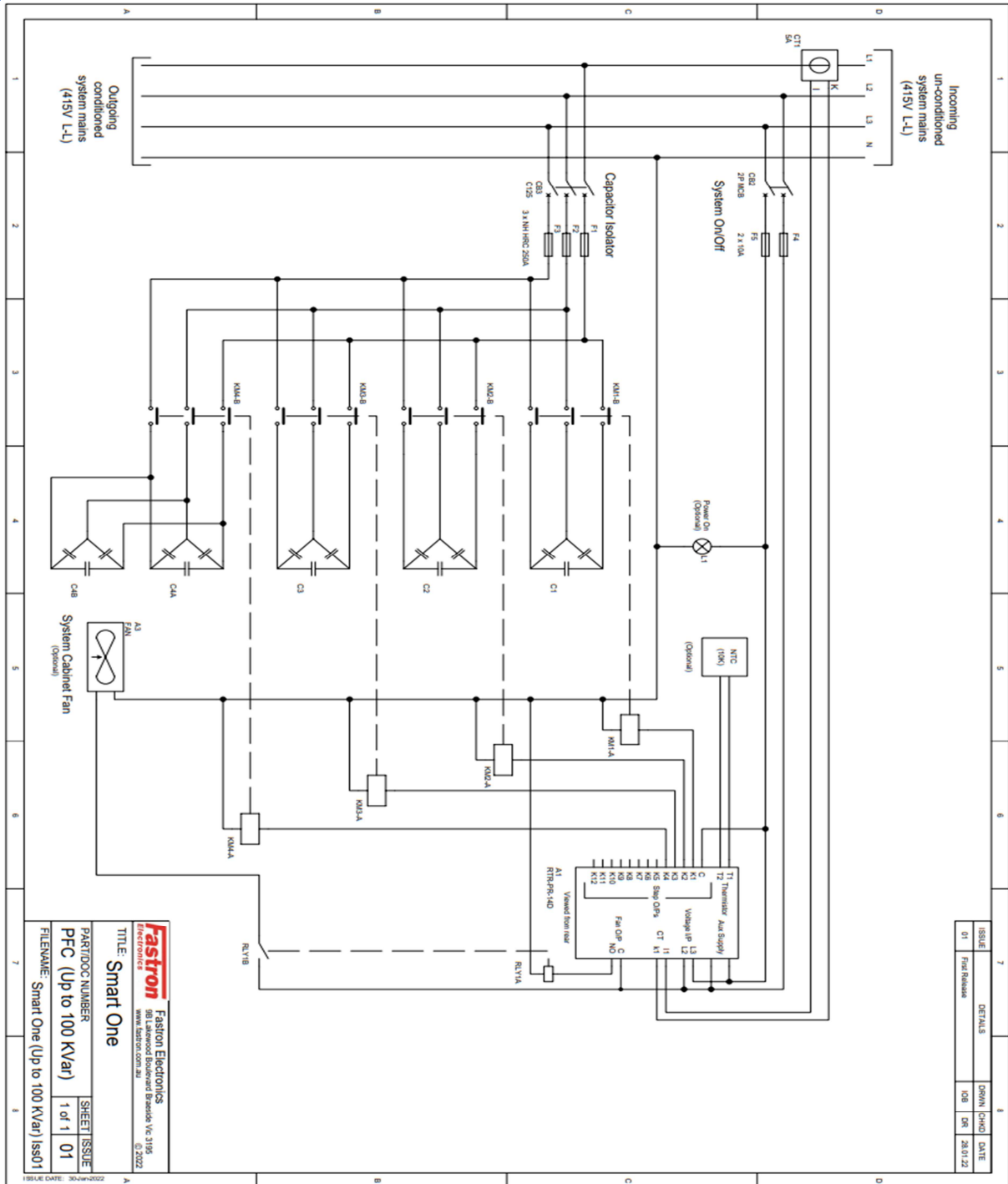
TECHNICAL CHARACTERISTICS CAPACITOR BANK	
Rated Power	50Kvar @ 415VAC
Rated Voltage	230/400/440V. Other voltages upon request
Rated Frequency	50Hz/60Hz
Rated Current	According to power
Steps	Up to four steps
General dimensions	-Height: 600mm -Width: 360mm -Depth: 160mm
Recommended connection	To define
Recommended protection	To define
Degree protection	IP 21
Color	RAL 1013
Mounting	Indoor
Cable entry	Left side top entry
External CT	Not included/Necessary
Standards	IEC 61921



SPECIFICATION (PFC Controller)

TECHNICAL CHARACTERISTICS	
Display	Liquid crystal display with backlight (4 digits)
Auxiliary supply	90 - 550V Ac
Wiring input	2 phases, 2 wires (L2L3)
Rated input voltage	50 - 520V AC (L2-L3)
Rated input current	5A AC (min 50mA, max 6A)
Burden	20mΩ
Frequency range	45 - 65Hz
Power consumption	Max. 15VA
Over temp. indication	⚠ Symbol turns ON
Controlling range	target PF: 0.800 (ind.) to -0.800 (cap.) Switching program: Automatic
Alarm	Over temperature error E01: phase current error
Environmental conditions	Outdoor use Temperature-operating: 0 – 60°C Temperature-storage: -20 – 60°C Humidity: 0 – 95%
Mounting	Panel mounting
Dimensions	144x144x50 mm

Appendix 1 – Wiring Diagram



For Further Clarification Contact Fastron sales@fastron.com.au
0397635155