



Intelligent Power Factor Controller
with Automatic set-up

etaCON Series | Automatic Power Factor Controller

Trouble-free Power Factor Correction is now at your fingertips, thanks to the etaCON series of digital controllers. Brought to you by Larsen & Toubro - India's largest manufacturer of low-tension switchgear - the etaCON series automatically corrects the power factor, with the help of contactors for the connection and disconnection of capacitor banks.

Choose from L&T's wide etaCON L range: 3, 5, 7, 8 and 12-step versions.

Now your switchgear and capacitors will last longer. etaCON ensures balanced capacitor usage by intelligent adjustment interface based on the number of switching operations and the connection time of each step.

The inbuilt controller set-up lets you automatically configure the etaCON controller.

SALIENT FEATURES

- Auto/ Manual mode
- Measurement Sensitivity - 2.5%
- 4-Quadrant / 2-Quadrant operation
- Automatic recognition of current flow direction
- Flashing of alarm code in case of abnormal conditions
- Online display of PF, Voltage, Current, KVA_r, capacitor overload and Panel temperature
- The last two contacts are programmable as alarm and / or fan control, except for etaCON 3
- No-voltage release protection function
- Capacitor over-current and panel over-heating protection
- Average weekly power factor measurement (last 7 days)
- Use in co-generation systems - 4-Quadrant operation

The etaCON L features:



Automatic set-up

The automatic set-up of parameters allows the controller to be placed in service without having to program any parameter.

By pressing just two buttons simultaneously, the automatic set-up can be activated.

With this, programming of controller becomes easier during commissioning or in case of change in capacitor configuration.

Panel overheat protection & Fan on/off Control

An inbuilt temperature sensor monitors the temperature variation of the electric panel.

A threshold can be set to Switch ON a relay to operate a ventilation system [Fan].

The controller disconnects capacitors in case of panel overheat to protect the switchgear and capacitors.





Display of average weekly power factor

Average value of last 7 days of P.F. is displayed and updated every day.

Thus, it provides you a greater level of reliability and assurance of APFC Panel performance.

Keypad Lock

With this function, only authorized persons can modify the operating parameters.

Even when lock is enabled, measurement viewing is possible.



Automatic recognition of current flow direction

etaCON L detects the CT reversal and automatically corrects the same.

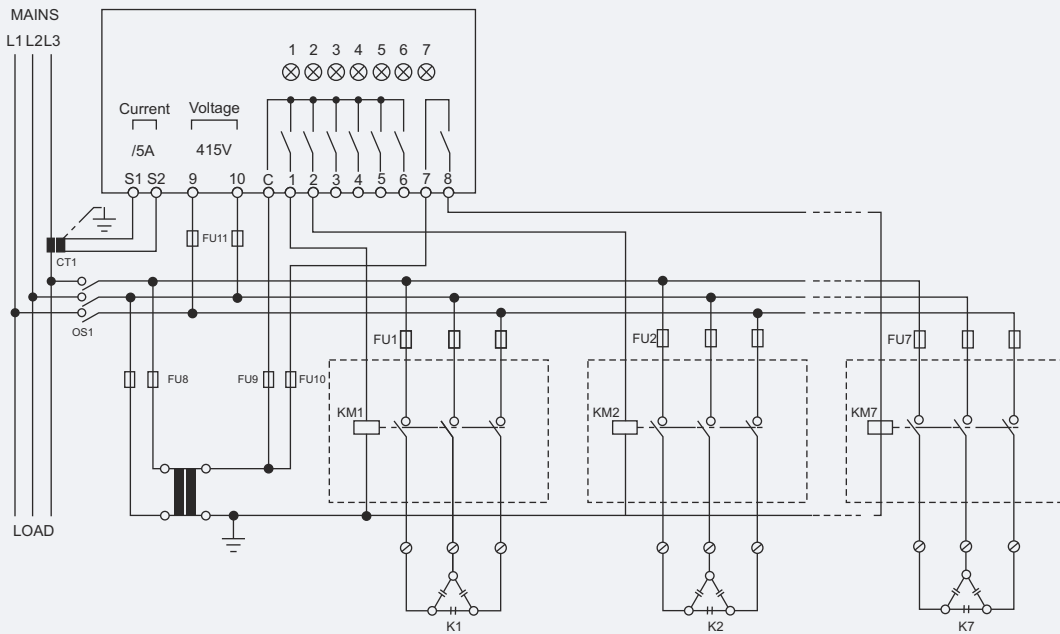
This saves the effort put into the detection and correction of CT polarity at site.

Description	etaCON L series APFC relay
No.of steps	3, 5, 7, 8, 12
Design	Digital Microprocessor-based
Display	3-Digit LED
Current Input	5 Amp
Voltage Input	415-440 VAC
Rated Frequency	50/ 60 Hz
Measurement	Instantaneous PF, V, I, KVAh, Capacitor Overload
	Panel temperature, Average weekly PF,
	Maximum Voltage, current, capacitor overload, panel temperature value
Setting	Target PF adjustment: 0.8 inductive to 0.8 capacitive
	Reconnection time of same capacitor: 5 - 240 secs
	Switching time sensitivity: 5 - 600 secs
Alarms	Under/Over compensation; Low/High Current; Low/High Voltage
	Capacitor Overload due to harmonic Voltage; Over temperature; No-voltage release
Power consumption	6.2 VA
Burden on CT	0.65 VA
Dimensions	etaCON L3, L5, L7: 96 x 96 x 71 mm
	etaCON L8, L12: 144 x 144 x 69.7 mm
Panel cutout	etaCON L3, L5, L7: 92 x 92 mm
	etaCON L8, L12: 138.5 x 138.5 mm

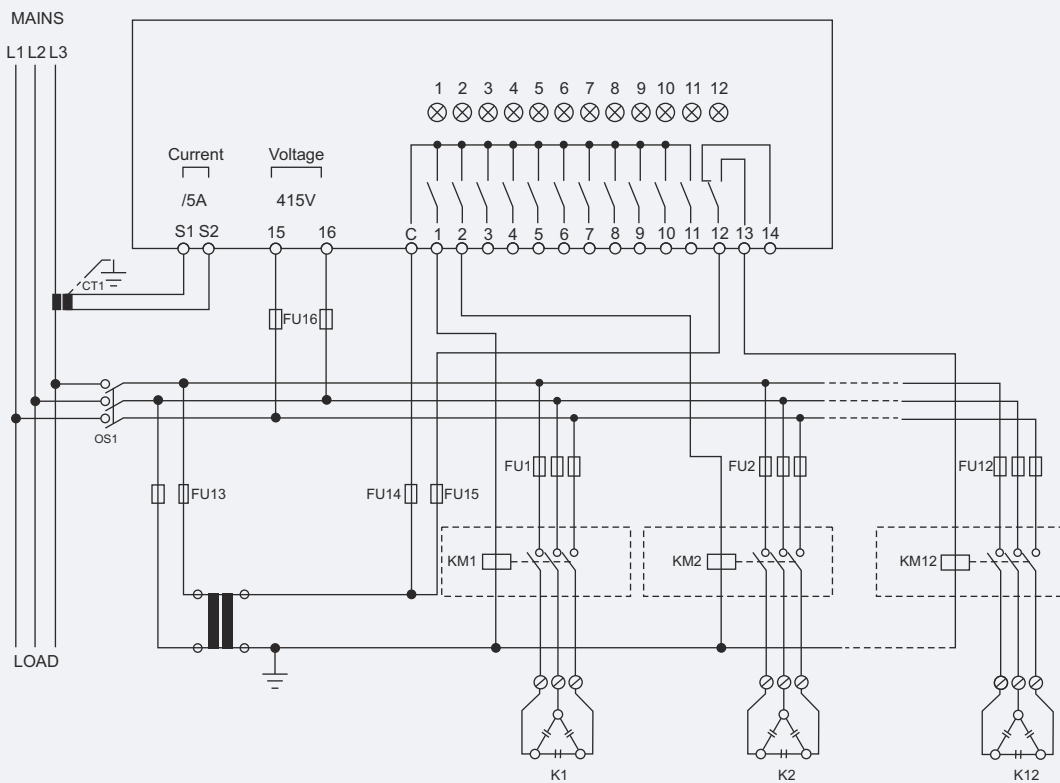
Ordering Information	etaCON series APFC relay
Voltage Input	415V AC
CT Input	5A secondary
No.of steps	3 / 5 / 7 / 8 / 12

Wiring Diagrams

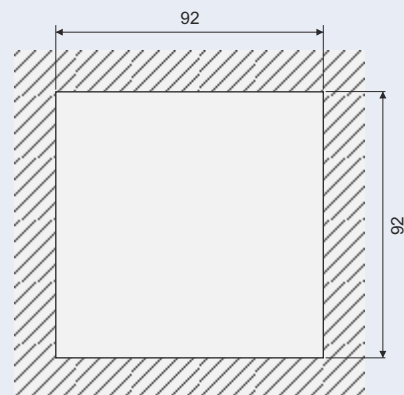
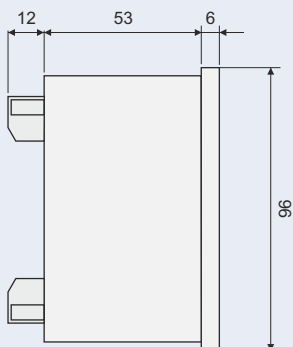
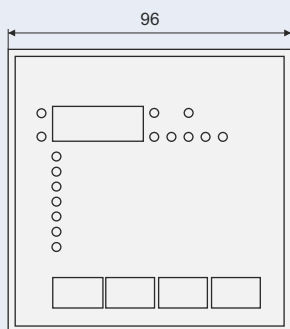
etaCON L3/L5/L7



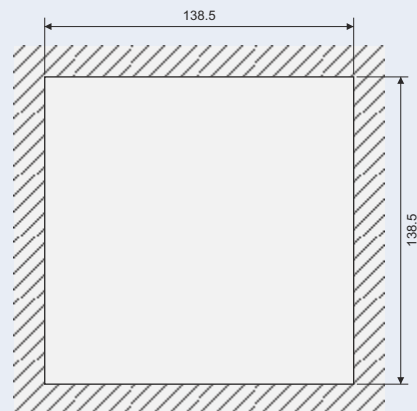
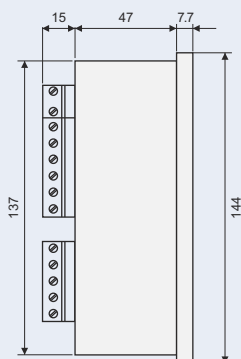
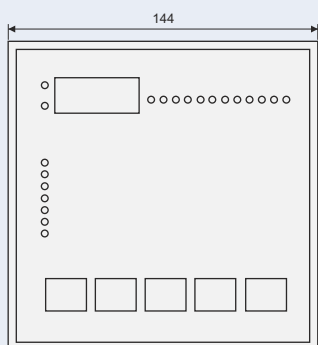
etaCON L8/L12



etaCON L3 / etaCON L5 / etaCON L7



etaCON L8 / etaCON L12



Dimensions in mm

etaCON L Variants

Cat. No.	Description	CT/Voltage Input	No. of steps
ERPML03D500	etaCONL3; 3 stage APFC relay	5A/ 415V	3
ERPML05D500	etaCONL5; 5 stage APFC relay	5A/ 415V	5
ERPML07D500	etaCONL7; 7 stage APFC relay	5A/ 415V	7
ERPML08D500	etaCONL8; 8 stage APFC relay	5A/ 415V	8
ERPML12D500	etaCONL12; 12 stage APFC relay	5A/ 415V	12

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