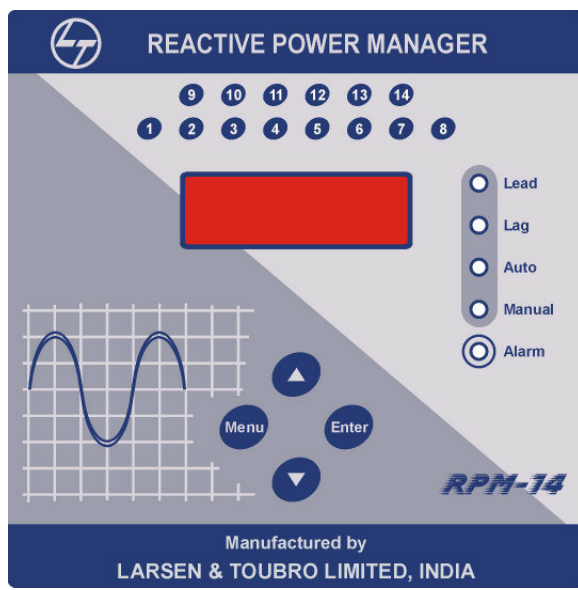


REACTIVE POWER MANAGER RELAY TYPE RPM-14

Reactive power manager Relay (Model RPM-14) is designed for automatic control of capacitor banks in 3 phase 4 wire LT distribution systems. The relay maintains the system power factor at a set value, under fluctuating load conditions, by connecting or disconnecting capacitor banks to the 415V bus. The relay employs state of the art micro controller design for measurement of reactive power compensation required, system power factor, voltage and current. A specially formulated optimization program for capacitor bank switching ensures accurate power factor control at the set point and hunt free operation.



Salient Features:

- Micro controller based design**
- Effective PF control**
- Auto / Manual operation**
- Suitable for Non-uniform Banks**
- Automatic C/K selection**
- Optimisation of Connected Banks**
- Hunt Free Operation**
- Measurement sensitivity of 1%**
- Multi parameter Front panel digital display of PF, kVAR, Current & Capacitor Values.**
- Alarms for 5 abnormal conditions**

Technical Specifications:

1	Voltage Input	240V AC \pm 15%, 50 Hz.
2	Current Input	5A / 1A from CT secondary (Field selectable)
3	Rated Frequency	50 Hz \pm 2.5%.
4	Accuracy	1% \pm 1 digit in 0.7 lag to 0.8 lead.
5	PF Display range	2% \pm 1 digit in other ranges.
6	Accuracy of other parameters	2% \pm 1 digit (Voltage and Current).
7	Parameter Display	PF, kVAR, Current, Voltage, Capacitor Bank Values, Target PF, CT Ratio, Alarm Condition (OvOL, OCPn, uCrr, Ctrv).
8	Target PF setting	0.7 lag to 0.9 lead.

Technical Specifications (Contn.):

9	Threshold reactive	Auto Selection.
10	C/K Ratio	Auto Selection.
11	Bank selection	Relay will recognize number of connected banks automatically.
12	Bank configuration	Suitable for non-uniform capacitor banks.
13	Safety lock out time	60 sec \pm 10%.
14	Auto / Manual operation	Selectable.
15	Capacitor bank Switching on delay	a) 1 to 250 sec in steps of 1 sec for switching between two different banks. b) 60 sec + above setting, for same bank switching. (Timing Accuracy \pm 20%)
16	Operational Indicators	a) 14 LEDs for indicating status of Capacitor bank selection Relays b) 1 LED for indicating 'ALARM' c) 2 LEDs for indicating Auto or Manual operating mode d) 2 LEDs for indicating Lead or Lag Power Factor
17	Power Factor Control Range	From 1% to 120% of rated current.
18	Alarm Signal	For CT polarity reversal, Undercurrent, Under Compensation, Over Compensation, Over Voltage.
19	Burden	< 0.3 VA at CT input at nominal voltage. < 10VA at PT input at nominal voltage.
20	Out put Terminals	a) 14 Terminals as Relay N/O contact for Capacitor Bank Selection b) 01 Terminal as Common terminal for Capacitor Bank switching c) 03 Terminals for Alarm Relay (N/O, N/C & Common) d) 03 Terminals for CT connections (1A, 5A & Return) e) 02 Terminals for Voltage Connection f) 01 Terminal for Earth Connection
21	Contact rating	250V AC, 5A for bank contactor switching. 250V AC , 6A for alarm.
22	Resistance to Vibration & Shocks	As per IEC 255-21-1/2 Class 1.
23	Temperature	Operating Temperature 0 ⁰ to 60 ⁰ C. Storage temperature -20 ⁰ to 70 ⁰ C.
24	Case	Front Bezel 144 x 144 mm Panel Cutout 138 x 138 mm Dept 100 mm
25	Weight	2 kg approx.

CATALOG No. : MRPM1400000

