






4. WORKING SITUATION


The AUTOMATIC (default condition when switching on the regulator) or MANUAL working condition are obtained by pushing the button .

- **AUTOMATIC** working

This is the standard condition when switching on the regulator. When the network is inductive (motors, transformers, fluorescent lamps, etc.), the red led  is on and the regulator begins to connect capacitor banks.


If too many capacitor banks are connected, the red led  will be on and the regulator will begin to switch off banks. The preset PF value will be achieved when both Led's  and  are off.

- **MANUAL** working

Press button . When the regulator is in the manual mode the red Led on the button will be on. In manual mode, the regulator will not operate without an external control (both inductive and capacitive Led's are off). By pressing either the "+" or "-" buttons all banks will be connected or disconnected one step at a time. Each button must be pressed for at least 25 secs. Operating banks will be shown by the red Led's corresponding to numbers 1 - 2 - 3 When a power loss occurs, all capacitor banks will be switched off automatically. When the power returns, the regulator will again insert all banks step by step.

5. DIGITAL DISPLAY

It is possible to read the values of PF, VOLTAGE, CURRENT and TEMPERATURE μC on the digital display. The current value should be multiplied by the CT ratio to determine the actual load current. The TEMPERATURE reading is as measured at the point of external control by the sensor - MPR8 range only.

Pressing the  button it will cycle around the options. On power up PF is displayed automatically


The - led near the two numbers display is illuminate if the P.F. value is more than 1.00.

6. SETTINGS ON REGULATOR


After making the required connections to the regulator, the following adjustments should be made.

Note: In the presence of alarms, the settings mode is forbidden.

- **C/K setting**

By pressing the  button for 4 secs in MANUAL mode, the "SETTING MODE" will be entered. The

C/K

red led  will illuminate and, at the same time, a number (d.0.1_d.0.5) will appear in the digital




display. To release the  button and use the  or  buttons to change the selection. The suggested value to set is given on the table "C/K VALUES" (see table on the next page). The number will represent the range (positive/negative) of the PF values possible to obtain.


TABLE for medium current values of 2,5 Amps

C/K		C = First bank power expressed in kvar (400V)								
T.A.	K	2,5	5	6	10	12,5	20	25	40	50
30/5	6	0.3	0.5	0.5	-	-	-	-	-	-
50/5	10	0.3	0.3	0.4	0.5	-	-	-	-	-
60/5	12	0.3	0.3	0.4	0.5	0.5	-	-	-	-
80/5	16	0.2	0.3	0.3	0.5	0.5	0.5	-	-	-
100/5	20	0.2	0.3	0.3	0.3	0.4	0.5	0.5	-	-
150/5	30	0.2	0.2	0.3	0.3	0.3	0.5	0.5	0.5	-
200/5	40	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5
250/5	50	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.5
300/5	60	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5
400/5	80	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4
500/5	100	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
600/5	120	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
800/5	160	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3
1000/5	200	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3
1200/5	240	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
1500/5	300	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
2000/5	400	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
2500/5	500	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
3000/5	600	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
4000/5	800	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
5000/5	1000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

When the CT secondary current signal is lower than 2 amps, the C/K value should be increased by 0,1

- When using the regulator on 220/230 Vac networks the C/K values should be doubled.
- - means installation of C.T. with primary value too small.

• **PF setting**

After setting the C/K value, press the button again for 4 secs to indicate the selected PF required. At the same the red led  will illuminate. To release the button and use the or buttons to change the selection. A PF of 0.95 is recommended.

Example: setted C/K = "0.3" setted PF = "0.97"
 The regulator will switch bank to achieve a PF value within 0.94 and 1.00 (0.97 – 0.03)

The - led near the two numbers display is illuminate if the P.F. value is more than 1.00.

6.1 SAVING the SET VALUES

By pressing the button the C/K and P.F. values which have been selected will be saved and the Regulator works in AUTOMATIC condition.