## **Industrial Power saver**

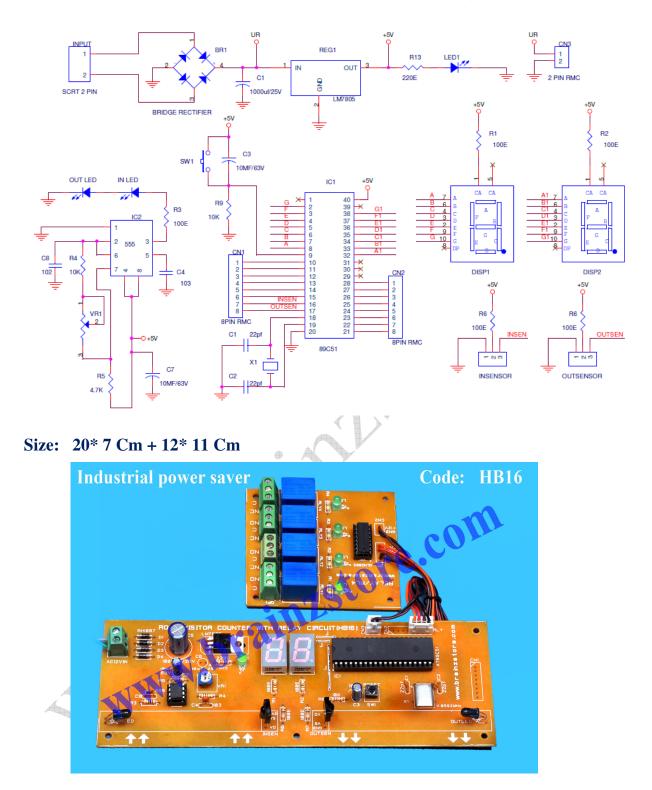
## Code: HB16

This project "Industrial Power Saver" deals with giving intelligence to any particular plant of an industry. The micro controller acts as a brain of the project keep in track number of persons entering and leaving the plant. If number of persons inside the plant is '0' the micro controller switches off the whole power. The power will be switched on depending upon the number of persons entering the industry

This circuit divided in four parts: sensor, controller, counter display and Relay circuit. The sensor would observe an interruption and provide an input to the controller which would run the counter in up/down mode depending upon the selector setting. The same count is displayed on a set of 7-segment displays through the controller. IF the count value is Zero, All relays will retain in OFF position.

First relay will be switched when counter value reaches to '09' and thereby second relay for '19' and so on. Simultaneously whenever persons leaves from Exit gate counter value decremented and switch off Corresponding relays.

This project makes use of AT89c51 Microcontroller to accept inputs from Up/Down sensors (TSOP1738) and Increment / Decrement Count Respectively. The whole circuit requires +5V regulated power supply which is served by Power supply unit, comprises of Bridge Rectifier, filter, Regulator (7805).



\*\*\*\*\* Caution Apply 12 AC via 12-0-12 V Step down transformer or battery \*\*\*\*\* Need to purchased Electrical holders separately which connects Relay and Loads.