

# SYCON-2220

## Intelligent Motor Protection Relay



Electric motors are crucial component in virtually every industrial automation application or environment. Therefore optimizing their performance and reliability can play a major role in reducing costs and improving overall plant efficiency. Electric motors fail and about half of them fail because of overheating through overload, phase failure or insulation breakdown. There are wide ranges of motors and motor characteristics in existence, because of numerous duties for which they are used and all of them need protection. Fortunately, the more fundamental problems affecting the choice of protection are independent on the type of motor and the type of load to which it is connected. Motor characteristics must be carefully considered when applying protection. It is emphasized because it applies more to motor than other items of power system plant. Protection of motor exists in any form, a variety of designs & either packaged individually or in different combinations. The fundamental and basic aim should be permit the motor to operate up to, but not to exceed its thermal and mechanical limits for overloads and abnormal operation conditions and to provide maximum sensitivity to faults.

### General Features

- Advance Microcontroller based state-of-art technology.
- Selectable inverse time curves.
- Protection against:
  - Unbalance
  - Single phasing
  - Reverse phasing
  - Overload
  - Stalling
  - Undercurrent
  - Earth fault
- Common tripping for all protective function. Thermal overload protection.
- Alarm for tripping.
- Ultra Compact size.

### Electrical Specifications

CT Input	/5, 15VA
Auxiliary supply	440V Ac $\pm$ 15%
Frequency	50 Hz $\pm$ 5%
AC burden	10 VA at rated current
Relay Output	10amp at 250V

### Overload Characteristics

Overload setting	30 % to 110%
Tripping time	<b>Inverse time:</b> as per thermal curve <b>Definite time:</b> (0 to 30 sec)
Under current	20%-50 %, tripping time: 30 sec
Motor stall	200-600 %, tripping time 30 -300 Sec
Earth fault	1 A-3 A, tripping time: 1 Sec -20 Sec
Unbalance	25-100 %, Inverse
Phase Failure	tripping time: 5 sec
Reverse Phase	tripping time: 0.1 sec
Motor start time	0-10 sec
Reset	Manual reset



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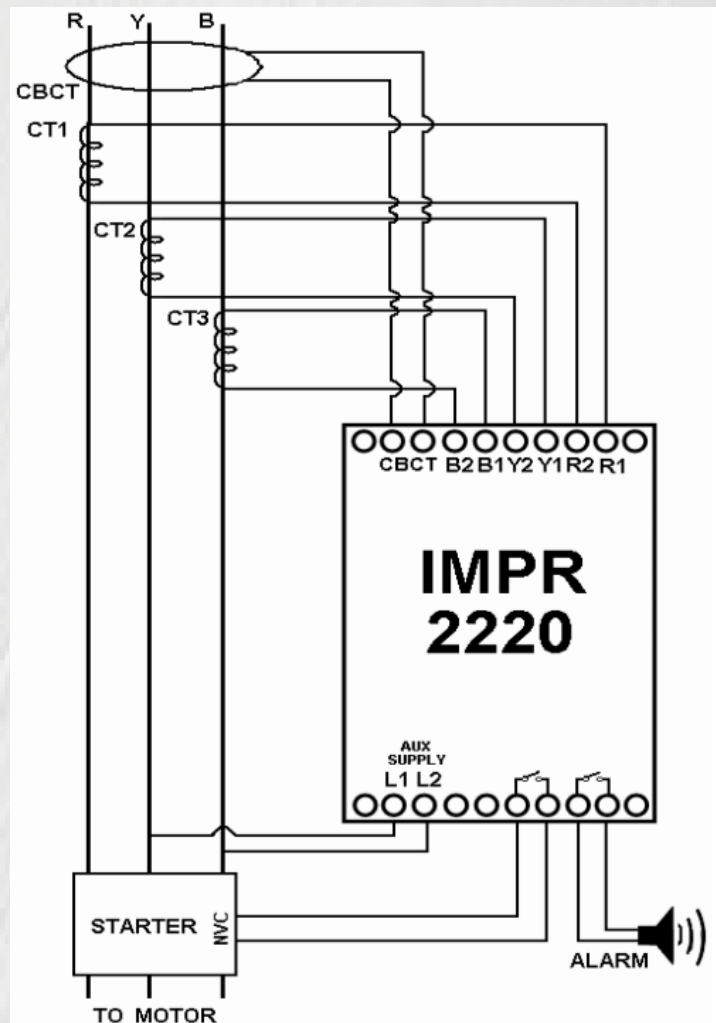
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## Mechanical Specifications:

Dimensions	Panel Mounting: 144 (W) x 144 (H) x 80(D) Wall Mounted: 115 (W) x 115 (H) x 75 (D)
Panel Cutout	138 X 138 mm
Weight	450 gm



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