

# Universal Motor Starting Relay Series UMSR



**Reduce Inventory!  
Wire-For-Wire Replacement For  
All Standard Potential Relays!**

**For any single phase motor application  
up to 10 HP...**

ICM's new **Universal Motor Starting Relay** incorporates patented differential voltage sensing and a non-positional mounting configuration to offer a single replacement for all standard potential relays. Great way to reduce inventory. Ideal for A/C, commercial refrigeration, heat pump or any single-phase motor application up to 10 HP.



## Features

- Replacement for all standard potential relays
- Patented differential voltage sensing
- No user-adjustments required
- Non-positional mounting configuration
- 30A and 50A switching capabilities
- Universal mounting bracket for easy installation
- .250" quick connect termination
- Safety timer
- Approvals: UL, CSA, cUL pending
- Ordering Info: UMSR30 (30A), UMSR50 (50A)

## Specifications

### General:

- Input:
  - Voltage Rating: 110-270 VAC, Single Phase
  - Maximum Voltage Contact Rating: 502 VAC (absolute)
- Motor Power Rating: Up to 10 HP
- Operating Position: Non-positional
- Safety Time Out: Approximately 1-second per 100 microfarads
- Consumption: 5VA max.
- Insulation: Class B (130°C); Conforms to IEC 1000- standards (6kV impulse / 6kV contact)

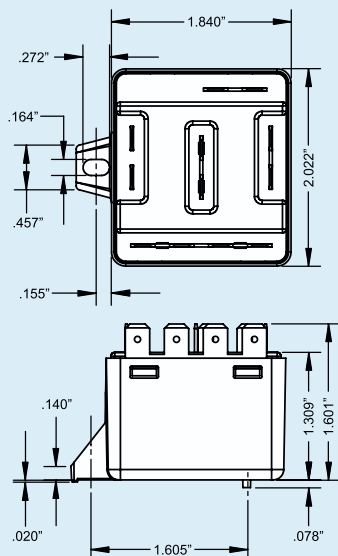
### Life Expectancy (minimum operations)

- Mechanical:  $1 \times 10^6$
- Electrical:  $1 \times 10^6$  at 16A 400VAC
- $5 \times 10^5$  at 35A 400VAC (break only)
- $5 \times 10^5$  at 50A 400VAC (break only)

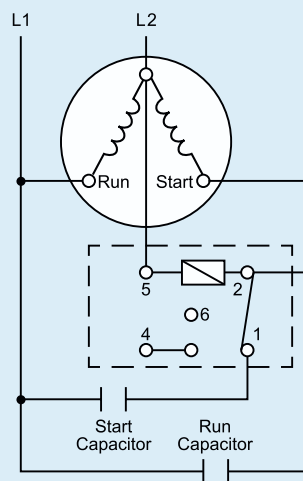
### Contacts:

- Contact Rating: 30A (break only), 400 VAC  $\cos \phi = 0.7$  to  $0.8$
- 50A (break only), 400 VAC  $\cos \phi = 0.7$  to  $0.8$

## Dimension Diagrams

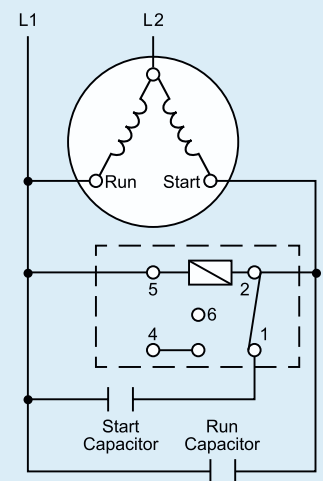


## Standard Wiring Diagram



Terminal 4 = Common Park Terminal  
Terminal 6 = Common Park Terminal

## Alternative Reduced Arcing Configuration



Terminal 4 = Common Park Terminal  
Terminal 6 = Common Park Terminal