

# SUBMERSIBLE PUMP STARTERS for Single Phase Pumps



# BCH ELECTRIC LIMITED we care for you

# 1- Phase Submersible Pump Starter (with Mini Manual DOL Starter)







#### The product Offer

- 1. 1- Phase SPS with Mini- Manual DOL Starter up to a maximum relay range of 11.0-20.0 Amp. in Economy, Standard and Premium versions.
- 2. 1- Phase SPS with 2 Pole Contactor and Relay (maximum relay range up to 17.4-24.0 Amp.) in Economy and Standard versions.

### Type of Submersible Pumps

- 1. Oil Cooled
- 2. Water Cooled

In Oil cooled Submersible pumps, because of lesser starting torque requirements, RUN Capacitor alone is sufficient and a separate START capacitor is not required.

SPS with Mini-Manual DOL starter is specifically designed for oil cooled submersible pumps and equipped with RUN capacitor.

These SPS starters are available in 3 versions:

- 1. Economy (without meters),
- 2. Standard (with Ammeter)
- 3. Premium (with Ammeter and voltmeter)

Salient features of Submersible Pump Starter with Mini-Manual DOL Starter.

### Features of Mini DOL Starter

Ref Standard : IS 13947-4-1

No of Poles : 2

Operating Temp Limits : -20° C to +60° C Ambient

Rated Current (Ie) Amps : 16A, AC 3 Operational Voltage (Ue) : 240V Rated Thermal Current (Ith) : 20 Amps Rated Insulation Voltage : 600 V

Mechanical life : 1 lakh operation

Frequency of operation : 15/hr.

Version : Single-phase
Operation : Manual

### **Termination**

Separate conveniently located terminal block for easy termination.

### **Enclosure**

Enclosures are made out of CRCA steel sheets. These are powder coated to provide better corrosion resistance.

A special hinge construction allows the door to open 180°.

It facilitates easy maintenance.

Bakelite knob is used for door locking.

Conduit entry is provided at the bottom.

Enclosures are dust proof.

### **Run Capacitor**

Run Capacitor is provided in a plastic enclosure, is of reputed brand.

### Mounting

Direct mounting on 2 nails. A paper template is provided to help in drilling holes on the wall. Alternatively, the starter can be mounted on 2 diagonally opposite mounting holes.

- 1. Indicating Light
- 2. 2- Earthing Points



# 1- Phase

# Submersible Pump Starter (with 2 Pole Contactor & Relay)







Submersible pump starters with 2 pole contactor and relay are specifically designed to address

Water cooled submersible pumps and equipped with a run capacitor and 1/2 start capacitors.

### 2 Pole Contactor

- 1. Conforms to IS13947-4-1.
- 2. Field proven 2 Pole NHD contactor for reliable performance and long life
- 3. Encapsulated coil.
- 4. Wide band coil of 160-220V as standard
- 5. Complete isolation of Supply to motor when the starter is off with the help of auxiliary Contact block
- 6. Spare contact kit & coil.

# 2 Pole Over Load Relay

- 1. Highly sensitive over load relay
- 2. Operating Temperature 5° to +50° C
- 3. Auto/Manual reset facility after trip

### **Termination**

Separate Terminal block for easy termination.

#### **Enclosure**

Enclosures are made out of CRCA steel sheets. These are powder coated to provide better corrosion resistance.

A special hinge construction allows the door to open  $180^{\circ}$ . It facilitates easy maintenance.

Bakelite knob is used for door locking.

Conduit entry is provided at the bottom.

Enclosures are dust proof.

## **Starting and Running Capacitors**

One Starting and (1/2) Running Capacitors of reputed brand are provided depending upon the HP of the SPS. Up to 1.5 HP, 1 Starting and 1 running capacitor is provided, while in 2 and 3 HP, 1 Starting and 2 running capacitors are provided in a bigger enclosures. Starting Capacitors are in double aluminum can with built-in discharge resistors. Capacitors are held in position with the help of very sturdy metallic clamps.

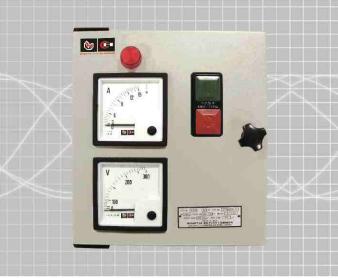
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