

### MAGNUM MCH/ MMK-1 THREE PHASE SUBMERSIBLE PUMP CONTROLLER - EXECUTIVE



MAGNUM Three Phase Submersible Pump CONTROLLER EXECUTIVE is a powerful controlling device for your submersible pump made with heavy duty components, it protects your pump from hazards caused due to over-current and voltage.

#### APPLICATIONS

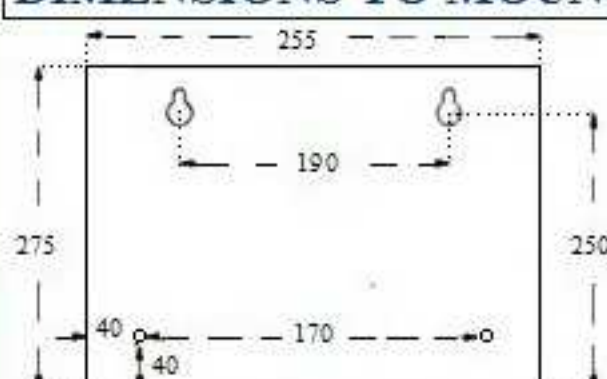
Magnum Three Phase Submersible Control Panels are powerful controlling devices for your submersible pumps which are used for domestic & agricultural installations. Magnum panels controls submersible pumps found in many applications such as,

- drainage
- sewage pumping
- general industrial pumping
- slurry pumping

#### SALIENT FEATURES

- Seven tank treated MS powder coated enclosure to provide better corrosion resistance.
- Rugged MCH / MMK-1 Contactor with wide voltage band (380V to 440V).
- Fitted with MCH / MMK-1 type relay for reliable overload protection.
- Fitted with ammeter to inspect the motor current.
- Option to switch off the incoming power supply completely.
- Indication lamp for motor running.
- Fitted with Single Phasing Preventer and Auto start Unit which is used to switch on three phase motor / pump automatically & to protect them against under/high voltage, wrong phase sequence and single phasing.

#### DIMENSIONS TO MOUNT THE PANEL



#### SELECTION & ORDERING RATINGS

Sl. No.	Catalogue No.	Type	Power (HP)	Relay Range (A)	Recommended MCB/ Fuse (A) (HRC)
1	AM80/ 83	MCH/ MMK-1	1	1.58-2.5/ 1.5-2.5	4/ 12
2	AM88/ 74	MCH/ MMK-1	2	2.4-3.8/ 2.5-4	6/ 16
3	AM69/ 75	MCH/ MMK-1	3	3.8-6/ 4-6.5	10/ 20
4	AM70/ 76	MCH/ MMK-1	5	6-9.3/ 6-10	16/ 25
5	AM71/ 77	MCH/ MMK-1	7.5	8.9-13.5/ 9-14	25/ 36
6	AM72/ 78	MCH/ MMK-1	10	13.2-20/ 13-21	32/ 50
7	AM73/ 79	MCH/ MMK-1	12.5	13.2-20/ 13-21	32/ 50

#### TECHNICAL SPECIFICATIONS

- Power range : 1, 2, 3, 5, 7.5, 10, 12.5, 15 and 20 H.P
- Three phase : 4 Poles - Coil voltage 380/415V
- Wide band of operating Voltage : 70% to 110% of rated coil
- Pick up voltage : Minimum 70% of coil rating
- Drop off voltage : Below 40% of coil rating
- Contactor : MCH/MMK-1 Contactor 4P 16/25/40A
- Relay : MCH /MMK-1 Relay 4P
- Area : 275mm \* 255mm \* 130mm
- Weight : MCH - 4.290 Kilo grams  
MMK-1 - 4.489 Kilo grams
- Rated Operational Voltage : 380-415V, 50Hz
- Insulation Voltage Ac (Vi) : 660V
- Ambient Temperature : -25°C to +55°C
- Terminal Capacity : 1 \* 16 (mm)<sup>2</sup> or 2 \* 10 (mm)<sup>2</sup>

#### FUNCTIONS

- Switches your pump/motor on and off.
- Protects the pump from
  - Over-Current
  - Low Voltage below 180V
  - High Voltage more than 440V
  - Phase Sequence Reversal
  - Single Phasing Condition
- Indication of current drawn by the motor.
- Indication of power supply.
- Option of automatically switching on the pump when power supply resumes.

#### MAGNUM PRODUCT RANGE

##### Major Product Lines

- Submersible Pump Panels (DOL - S.P & T.P)
- Open Well Pump Panels
- DOL Motor Starters

##### Sub - Assemblies

- MCH & MMK-1 Contactors
- MCH & MMK-1 Relays
- Run & Start Capacitors
- Preventer & Auto Start - Voltage Sensing

##### Spares

- Buttons
- MCH Contactor Coil
- Connector
- E-Core (Contactor Magnet)
- Indicator Lamp APL-21
- Panel Meters
- MCH Contactor Spare Part Kit

#### Magnum Switch Gear (India)