



## Magnum Vajra MaU Star -Delta Control Panel

### Introduction

Magnum Vajra MaU Star -Delta Control Panel is a controlling device for higher H.P of motors. These are made from quality raw materials, enabling them to protect and control your motor consistently.

### Applications

Magnum Vajra MaU Star-Delta Control Panels are powerful switching & controlling devices which are used for agricultural and industrial installations. These are found in applications such as,

- \*Three Phase Submersible Pumps only
- \*Three Phase Pumps
- \*Big Electric Motors
- \*Induction Motors

### Functions

- 1.Switches your pump ON and OFF.
- 2.Being based on Star-Delta mechanism the starting torque & current is considerably reduced on the motor.
- 3.Protects the pump from:
  - Over - Current
  - Single phasing condition
  - Phase Reversal
  - Phase Unbalanced Condition
- 4.Enables Motor to automatically Switch-On if power resumes when kept in Auto-mode.
- 5.Indication of power supply to the panel.
- 6.Indicates current drawn by the motor.
- 7.Indicates voltage supplied to the panel.

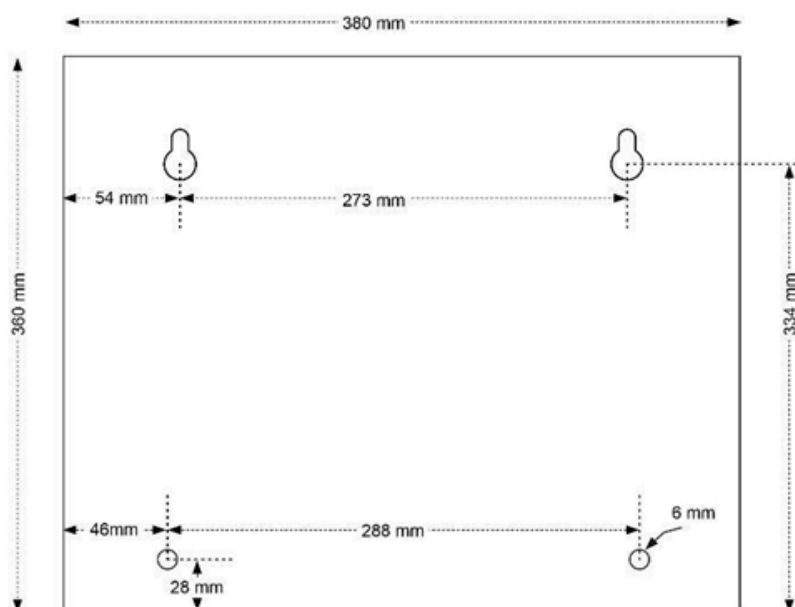
### Salient Features

- 1.Powder coated MS enclosure for corrosion resistance & sturdiness.
- 2.Rugged MaU Contactor with wide voltage band (250V to 440V).
- 3.Fitted with MaU type relay for reliable Over Load Protection.
- 4.A latch on the push button can be used to keep the stop button locked, thus preventing accidental starting.
- 5.Manual reset facility after overload protection.
- 6.Fitted with SDz5 type preventor with inbuilt Star Delta Timer used for protection from Single Phasing, Phase Reversal and Voltage Imbalance Conditions to the motor.
- 7.SDz5 Preventor can be chosen to run in three modes.
  - Auto + SPP - To automatically start the motor after the power resumes and for SP prevention
  - SPP - For Single Phasing prevention only.
  - Bypass - This can be used if you want to turn-off single phasing protection and Auto Feature. (This is not Recommended)
- 8.There is a provision in the preventor to have a ON Time Delay Start ranging from 30 seconds to 5 minutes (before the motor starts)
- 9.There is a provision in the SDz5 to have a time delay from 6 to 30 seconds during Star-Delta Conversion.
- 10.All connections are terminated through appropriate crimping Luggs.
- 11.Fitted with Digital Meter to show the Voltage and Current.
- 12.Indication lamps for Power On status and Pump Run Status.
- 13.There is a provision to connect a Dry-Run Preventor in the panel. [D1, D2]
- 14.Ergonomic design with aesthetic looks, Easy & quick mounting.
- 15.No screw protrusion from the panel, hence additional safety from water, dust, corrosion and electric shock.
- 16.There is a provision for using an auxiliary contact block with configuration 1NO + 1NC.
- 17.Gasketed enclosure for protection from ingress of dirt and water

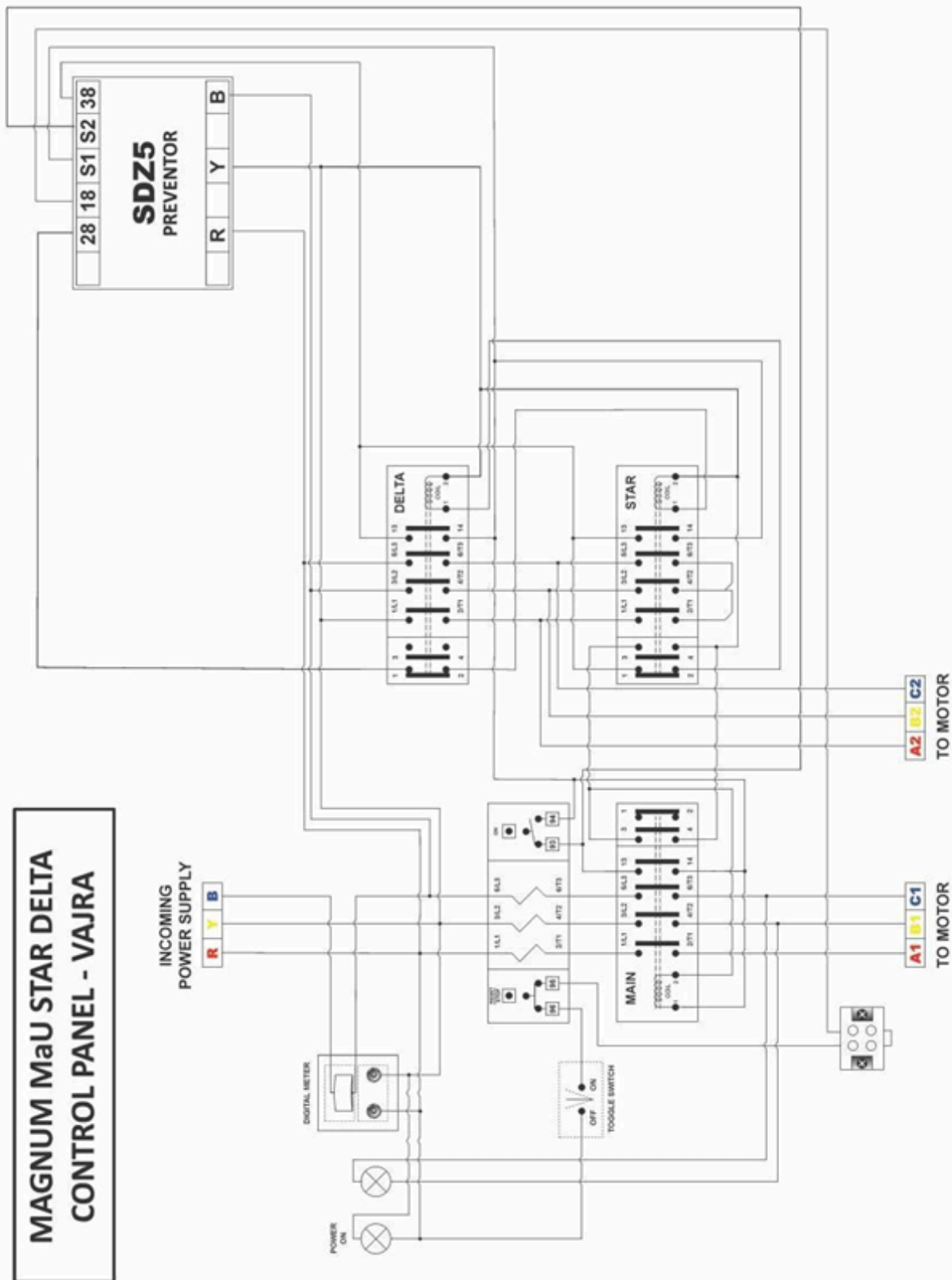
## Technical Specifications

1. Enclosure: Powder Coated Mild Steel
2. Current: AC
3. Operating Voltage: 70% to 105% of coil voltage
4. Pick up voltage: Minimum 60% of coil voltage
5. Drop off voltage: Below 50% of coil voltage
6. Contactor: MaU-1 4 Pole (16A, 25A, 32A, 40A)
7. Relay: MaK-1 4 Pole
8. Area: (360 \* 380 \* 143) mm
9. Net Weight: 9.9 – 10.0 Kilograms
10. Insulation Voltage AC (Vi): 660V
11. Frequency & Ambient Temperature: 50Hz & (-25°C to +55°C)
12. Terminal Capacity: 1 \* 16 mm<sup>2</sup> or 2 \* 10 mm<sup>2</sup>
13. Power range: Up to 20 HP
14. Coil Voltage: 440 V
15. Phase: 3 Phase
16. Number of cable entries: 1+3 (top+bottom)
17. Enclosure cover: Fixed
18. Country of origin: **MADE IN INDIA**

## Mounting Template (mm): (Not to Scale)



**Circuit Diagram**



## Selection & Ordering info.

<b>Relay Range (Amps)</b>	06-10	09-14	11-18	13-21	20-32	20-32	28-42
<b>Power in H.P.</b>	7.5	10	12.5	15	17.5	20	20
<b>MaU</b>	PSDU7H	PSDU10	PSDU12H	PSDU1521	PSDU17H	PSDU2032	PSDU2042
<b>Std. Pkg.</b>	2/ range						

## Links

Product page - <https://kalpcontrols.com/product/vajra-star-delta-control-panel-mau/>  
 Video url - <https://www.youtube.com/watch?v=TgDhxxLTdoQ>