

**ENERGY SAVER (DELTA - STAR CONVERTOR) DP - 500**

96(W) X 96(H) X 120(D) mm.

**CLASSIC FEATURES:-**

- \* Used latest microcontroller based technology.
- \* Programmable range of 25/5, 50/5, 100/5, 150/5, 200/5.
- \* Automatic C.T ratio selector so that same unit can be used upto C.T ratio 250 / 5 Amp.
- \* Smooth and reliable change over to delta, when load goes above set current.
- \* Compact size and easy to instal.
- \* "ADD ON" unit between existing star delta starter & motor.
- \* Built-in watch-dog circuit for fail safe operation.
- \* Program setting by three soft membrane keys on the front panel.
- \* Advance microcontroller based technology, inherently more reliable and accurate.
- \* Direct digital display of current drawn by load.
- \* Built-in time totalizer for star running time to know saving
- \* Delay timer 1-99 second for delta to star change over.
- \* Star run indication on front.

**TECHNICAL DETAIL:-**

In any industries electrical motors accounts for 55% to 60% of the electrical energy consumption Induction motors operate efficiently as long as they are loaded upto 60% to 85% loading. When these motors are operated below 50% loading the efficiency and power factor is very low. During lightly loaded condition (less than 50% loading), it is preferable to run motors in star instead of delta which makes you reduce your electrical bill.

**ADVANTAGES:-**

- \* Voltage across winding reduces to 58% of rated voltage and line current reduces to 1/3rd  
Thus reduction in iron and copper losses, hence less power consumption, reduce power bills.
- \* Improvement in power factor and efficiency or no need of power factor correction capacitor.
- \* Energy saving from 5% to 35% depending on % loading of motor (no load to 50% loading. At 50% load minimum saving and at no load maximum saving).
- \* Decrease in line current which gives additional savings in cable losses and losses in switch gears.
- \* No need of changing motor to lower KW.

**APPLICATION:-**

- \* Under loaded equipment like pumps, blowers, agitators, ball and roll mills etc. or In process where load varies at different stages (3 phase machines only).
- \* Machine shop industries: Like lath M/C, power press, drill M/C, Boaring M/C, etc. (3 phase machine only).
- \* I/D fan, F/D fan.
- \* AHU blower fan etc.

## TECHNICAL SPECIFICATIONS:-

<b>Load Sense</b>	:	0 to 5 Amp from current transformer C.T
<b>Range</b>	:	Programmable range is possible with built in scale factor. 25/5, 50/5, 100/5, 150/5, 200/5.
<b>Setting</b>	:	By 3 keys on front panel i.e., (+), (-) and (SET) keys.
<b>Display</b>	:	5 digits of 13 mm. Bright height L.E.D. Display. 2 no red L.E.D. For Relay ON indication.
<b>Hysterisis</b>	:	0 to 99 Count.
<b>Delta star Change over time</b>	:	1 to 99 Second delay for OFF to ON relay action.
<b>Star Delta Changeover time</b>	:	ON to OFF action is immediate.
<b>Output Relay 2.</b>	:	1 NO/C Relay contact rated 230 V/6A for both Relay 1 and Relay 2.
<b>Supply</b>	:	230VAC $\pm$ 10% 50Hz.
<b>Mounting</b>	:	Panel mounting.
<b>Dimension</b>	:	96(W) X 96(H) X 120(D) in mm.
<b>Cutout</b>	:	92(W) X 92(H) in mm.
<b>Cabinet</b>	:	ABS Plastic, White colour. Black
<b>Terminals mm. Wire.</b>	:	12 number PBT terminal for 2.5 sq mm. Lugs pin type or 2.5 mm. Wire.

### Ordering Information:

\* CT Ratio

\* Supply

\* Detail application

## BACK VIEW

BACK VIEW								
					INPUT			
					+	-		
⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
SR. NO: INPUT					MODEL NO. DP-500 SUPPLY			
<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
<b>NC2</b>	<b>C2</b>		<b>F</b>	<b>C1</b>	<b>NO1</b>	<b>E</b>	<b>N</b>	<b>P</b>
<b>RELAY</b>			<b>RELAY</b>			<b>230VAC</b>		