



MOTOR STARTING AUTO TRANSFORMERS

MSAT SERIES

HITRAN's MSAT Series is recommended for AC Motor applications that require reduced voltage starting. It is designed for use with either magnetic or manually operated motor controllers.

The MSAT's primary function is to limit inrush current and starting torque in AC Motors under starting or locked rotor conditions. This eliminates the problems associated with line voltage drop, resulting from high inrush currents.

Motor Starting Auto Transformers are designed to meet NEMA ICS2-214 Medium Duty service. This includes motor applications for driving fans, pumps, compressors, line shafts, etc. Note that these standards are for applications where the windings are in the circuit only during starting.

Standard Features:

- Open Frame Construction
- Three Coil Design, Three Phase, 50/60 Hertz
- UL Recognized Insulation System
- Taps @ 50-65-80-100% of Nominal Line Voltage
- Coil-face Mounted Terminations

Nominal Motor Voltages:

- Specify 240, 480, or 600 Volts Nominal

Optional Features:

- NEMA 1 Enclosed Construction
- Larger Size Ratings to 2000 HP
- Non-standard and Higher Nominal Voltage Ratings to 5KV Class
- NEMA ICS2-214 Heavy Duty Service
- Automatic Reset Thermal Overload Switches to Prevent Excessive Coil Heating



MOTOR STARTING AUTO TRANSFORMERS

MSAT SERIES

3 Phase, 50/60hz, 600 Volts Class, Dry Type
 Taps at 50%, 65%, 80% and 100% Nominal Line Voltage
 NEMA ICS 2-214 Medium Duty
 Three Coil, Open Frame Construction

| SIZE HP | WT. LBS. | APPROXIMATE DIMENSIONS | | | MOUNTING SLOTS F |
|----------------------|----------------------|---------------------------|------|------|------------------------|
| | | A | B | C | |
| 5 7.5 | 30 35 | 9.5 | 6.7 | 6.5 | .28125 x .5625 |
| 10 15 20 25 | 40 45 50 55 | | | | |
| 30 40 50 | 65 75 85 | 11.0 | 9.0 | 7.5 | .28125 x .5625 |
| 60 75 100 | 100 110 120 | | | | |
| 125 150 | 130 140 | 13.0 | 11.7 | 8.0 | .50 x .6250 |
| 200 300 400 | 265 295 325 | | | | |
| 500 600 | 410 430 | 18.5 | 15.2 | 10.0 | .50 x .6520 |
| 700 800 900 | 540 560 580 | | | | |
| | | 19.5 | 19.5 | 10.0 | .6250 x 1.0 |
| | | 22.0 | 20.5 | 12.0 | .6250 x 1.0 |

NOTE: Specify Nominal Motor Voltage of 240, 480 or 600 Volts when ordering.

