

4. PRODUCT SPECIFICATIONS

Performance Specifications

Table 4-1: Performance Specifications

Service Load Condition	Conventional 3 phase motors operating in volts per Hertz mode Standard step-up transformer
Voltage	380V - 480V +/- 10%
Input Voltage Wave Form	PWM
Harmonic Voltage Distortion	5% maximum @ 2kHz
Inverter Switching Frequency	2kHz – 8kHz
Inverter Operating Frequency	6Hz to 75Hz, >75Hz to 120Hz with derating
Maximum Ambient Temperature	-40C to +60C Modular Filter -40C to +55C Enclosed Filter -40C to +90C Storage
Insertion Loss (Voltage)	6% maximum @ 60Hz
Efficiency	>98%
Current range	2A – 1500A
Available form factors	Modular NEMA 1 & 2 NEMA 3R
Altitude without derating	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet
Relative Humidity	0% to 95% non-condensing
Current Rating	100% RMS Continuous 150% for 1 minute Intermittent
Audible Noise	75dB A at 1 meter

Filter does not mitigate any DC bus ripple that may be present.

Enclosures

MTE enclosures are designed to provide a degree of protection for electrical components and prevent incidental personnel contact with the enclosed equipment. Depending on the enclosure selected, these enclosures meet the requirements of NEMA 1, 2 or 3R.

An approximate cross reference guide between NEMA, UL, CSA and IEC enclosure follows.

Type 1 NEMA / IEC IP20 Enclosure:

Are designed for indoor use and will provide protection against contact with the enclosed equipment.

Type 2 NEMA / IEC IP20 Enclosure:

Are designed for indoor use and will provide protection against contact with the enclosed equipment and provide a degree of protection against limited amounts of falling water and dirt.

Type 3R NEMA / IEC IP21 Enclosure:

Are designed for outdoor use primarily to provide protection against contact with the enclosed equipment and provide a degree of protection against falling rain sleet and external ice formation.

Agency Approvals

UL and cUL listed to UL508 Type MX and CSA-C22.2 No 14-95
File E180243

Warranty

Three years from the date of shipment. See www.mtecorp.com for details.

Over Temperature Switch

Table 4-2: Over Temperature Switch

NC Switch opens at 180 Deg. +/- 5 Deg. C		
Current Amps	Voltage	Contact Load
6	120 AC	Resistive Loads
3	120 AC	Inductive Loads
3	240 AC	Resistive Loads
2.5	240 AC	Inductive Loads
8	12 VDC	Resistive Loads
4	24 VDC	Resistive Loads

MTE highly recommends the use of the over temperature switch to prevent damage to the filter in rare instances of overheating from abnormal operating conditions.