



**Medium voltage features  
in a low voltage starter design**

by  **MOTORTRONICS**

### Acceleration Adjustments

Ramp types	Voltage ramp or current ramp
Starting torque	0 - 100% of line voltage or 0 - 600% of FLA
Ramp time	1 to 120 seconds
Current limit	200 - 600%

### Dual Ramp Settings\*

Four (4) programmable ramp options

### Deceleration Adjustments

Begin decel level	0 - 100% of line voltage
Stop level	0 to 1% less than begin decel
Decel time	1 - 60 seconds

### Jog Settings\*

Voltage jog	5 - 100%
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\* Separate external control inputs

### Kick Start Settings

Kick Voltage	10 - 100%
Kick start time	0.1 - 2 seconds

### Programmable Output Relays

4 relays; 1 Form C (DPDT), 3 Form A (SPST NO)  
5A 240VAC max. (1200VA),  
Individually programmable to 19 functions

### Protection

#### Start & Run Protection

Two programmable overload trip curves allow for the thermal capacity required to start the load while providing motor overload protection needed during the run time.

Start:	Programmable for Class 5 - 30
Run:	Programmable for Class 5 - 30, enabled when starter detects motor is "At-Speed"
Reset:	Manual or automatic, selectable via programming

The **DXT Series** recognizes motor cool-down rates are a function of the run time and that sometimes a motor will cool faster if allowed to run.

#### Retentive Thermal Memory

Overload circuit retains thermal condition of the motor regardless of control power status. Unit uses real time clock to adjust for off time.

#### Dynamic Reset Capacity

Overload will not reset until thermal capacity in the motor is sufficient for a successful restart. Starter learns and retains this information from previous starts.

#### Phase Current Imbalance/Loss Protection

Imbalance trip level	5 - 30% current between any two phases
Imbalance trip delay	1 - 20 seconds

#### Electronic Shear Pin Protection

Shear pin trip level	100 - 300% of motor FLA
Shear pin trip delay	1 - 20 seconds

#### Load Loss Trip Protection

Under current trip level	10 - 90% of motor FLA
Under current trip delay	1 - 60 seconds

#### Coast Down (Back Spin) Lockout Timer

Coast down time	1 - 60 minutes
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#### Starts-per-Hour Lockout Timer

Starts-per-hour	1 - 10 successful starts per hour
Time between starts	1 - 60 min. between start attempts

#### Event History

Up to 60 events; data includes event, time, date and current for each phase and ground fault current at time of event

#### Options

Ground Fault	Residual or Zero Sequence
RTD Inputs	Up to 12 RTD's of any type with biasing or override protection curve

#### Metering Functions

Motor Load	Percent of FLA
Current Data	A, B, C Phase Current, Avg Current, Ground Fault
Thermal Data	Remaining thermal register; thermal capacity to start
Start Data	Avg Start time, Avg Start Current, Measured Capacity to start, time since last start
RTD Data (Option)	Temperature readings from up to 12 RTDs (6 stator RTDs)
Voltage Metering	V, KW, KVAR, PF, KWH, Demand