

TOSHIBA

SOLID STATE STARTERS

TE-B Series

**LOW
VOLTAGE**



INDUSTRIAL SOLUTIONS WITH ECONOMICAL BENEFITS

The TE-B Series incorporates Toshiba's TE2 Series SSS into a heavy-duty industrial enclosure that is ready to work right out-of-the-box. Expect the full benefits of reliable soft starting, unsurpassed motor/load protection, and control flexibility - all in one complete package that is practical and cost-effective. The standard TE-B packaged unit includes:

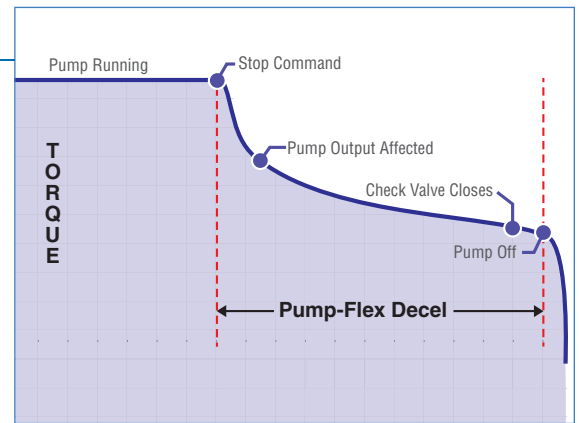
- NEMA Type 4/12 Enclosure
- Main Lug Configuration, with optional upgrades Fused Disconnect (Models 21 to 40) or Circuit Breaker (Model 45 to 600)
- 120 V Control Voltage (CPT Included)
- Command Center Door
- Communications: RS485 Modbus RTU
- Surge Arrestors
- 65 kAIC Rating Option
- Bimetallic Class 20 Overload Relay for Across the Line Full Voltage Start
- 7" Full Color Touchscreen Keypad Option



PUMP-FLEX APPLICATION FEATURES

The Pump-Flex Deceleration Control helps protect equipment used in applications, such as centrifugal pumps, conveyors, and material handlers, from damages caused by abrupt stopping conditions. When a stop command is given, the deceleration feature gradually extends the stopping time by decreasing the voltage applied to the motor. The check valve then safely and gently closes and the Pump-Flex circuit automatically turns off. Additional features include:

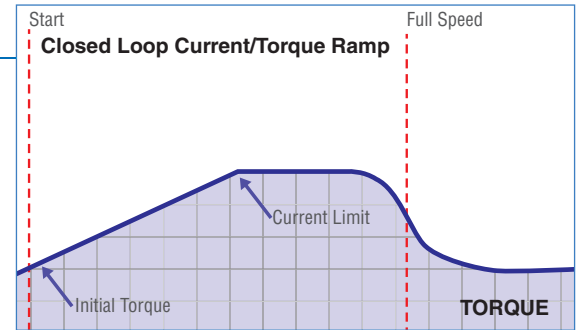
- Pump-Flex Deceleration Control Eliminates Damaging Effects of "Water Hammer"
- Ideal for Irrigation Pumps when Specific Amount of Water Needs to be Pumped if Power Failure or Fault Trip Occurs During Operation
- Elapsed Time Meter, Run-Cycle Counter, Remaining Lock Out Time, & Fault History for Maximum Monitoring & Control of Pumps or Processes



Pump-Flex Decel Feature

PUMPS, FANS, BLOWERS, & CONVEYORS

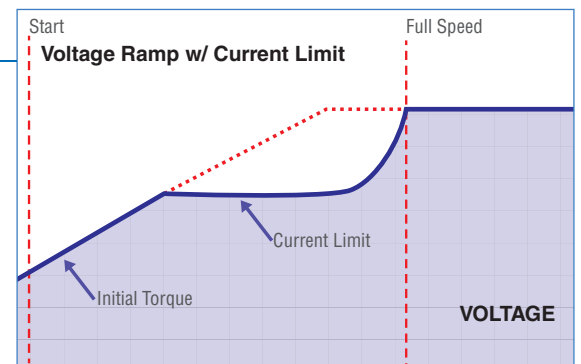
Closed loop torque/current ramping provides a linear increase in output torque during acceleration. It maximizes the available torque using an internal PID feedback loop, ensuring a smooth and linear ramp-up to full speed. It is ideal for low pressure pumps where slight surges at the end of the ramp may pose mechanical problems or on fans and mixers where blade warping can be an issue.



Closed Loop Current/Torque Ramp

COMPRESSORS & CHILLERS

The TE-B offers voltage ramping with current limiting for applications that need the smoothness of voltage ramping while maintaining the ability to start in limited power environments. For maximum motor power where the available power supply is severely limited, a current limit/current step start can be used.



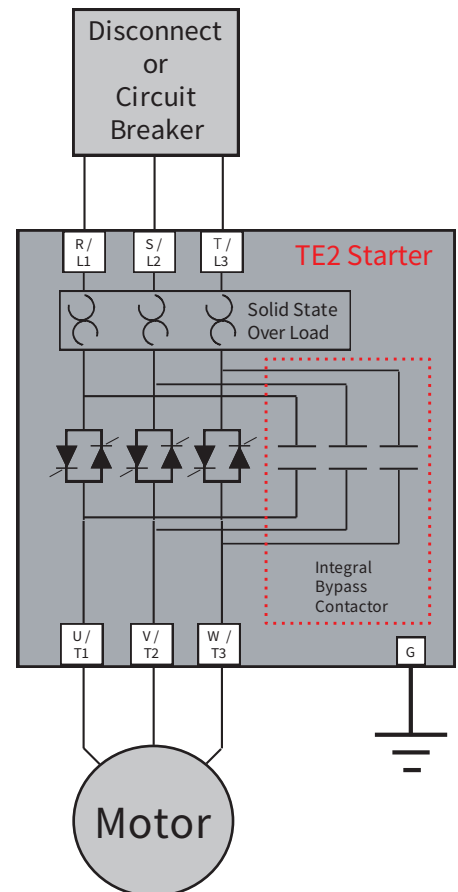
Voltage Ramp with Current Limit



Remote-Mounted Keypad Option



7" Touchscreen Option



INDUSTRIES SERVED

- Oil & Gas
- Aggregate
- Bottling & Canning
- HVAC
- Irrigation

APPLICATIONS

- Blowers
- Bow Thrusters
- Compressors
- Conveyors
- Fans
- Mixers
- Chippers
- Pumps
- Crushers



COMMAND CENTER FEATURES

- Start/Stop Pushbutton
- Local/Off/Remote Selector Switch
- Reset Pushbutton
- Pilot Lights
 - Illuminated E-Stop Pushbutton
 - Run (Green)
 - Power On (White)
 - Fault (Red)

DIMENSIONS

Frame Size	Enclosure	Dimensions (HxWxD) in. (mm)	Rating
1	Wall Mount	37 (940) x 15 (381) x 12 (432)	4/12
2	Wall Mount	48 (1219) x 33 (838) x 16 (406)	4/12



RATINGS

Model Number	Nominal Motor HP Rating				Frame Size
	208 V/HP	240 V/HP	480 V/HP	575 V/HP	
TE-B-21-##-*	7.5	7.5	15	20	1
TE-B-27-##-*	10	10	25	30	1
TE-B-40-##-*	10	15	30	30	1
TE-B-45-##-*	15	20	40	50	1
TE-B-55-##-*	20	25	50	60	1
TE-B-68-##-*	25	30	60	75	1
TE-B-96-##-*	30	30	75	75	1
TE-B-125-##-*	40	50	100	75	1
TE-B-156-##-*	60	60	150	150	2
TE-B-220-##-*	60	75	150	150	2
TE-B-248-##-*	100	125	250	300	2
TE-B-400-##-*	125	150	300	300	2
TE-B-480-##-*	150	200	400	500	2
TE-B-600-##-*	200	200	500 ^	600 ^	2

- MLO (Main Lug Only), FS (Fused Switch), CB (Circuit Breaker)

***Line & Control Voltage (50/60 Hz)**

- 1 = 208 V, 120 V Ctrl
- 2 = 230 V, 120 V Ctrl
- 3 = 380 V, 220 V Ctrl
- 4 = 460 V, 120 V Ctrl
- 5 = 575 V, 120 V Ctrl
- 6 = 415 V, 220 V Ctrl
- 7 = 220 V, 220 V Ctrl

Note: ^ - Model 600 @ 480 and 575 V is 1.0 SF. Consult factory if 1.15 SF is required.

