

TOSHIBA
Leading Innovation >>>



TE SERIES >>>>
SOLID STATE STARTERS

INNOVATED DESIGN SAVES SPACE, TIME, & MONEY

Toshiba's TE low voltage motor starter series is a high-end, digitally programmable, reduced voltage solid state starter. This heavy-duty starter provides stepless soft starting of three-phase AC induction motors, which protects mechanical components from excessive torque stress as well as electrical systems from the effects of high motor inrush currents.

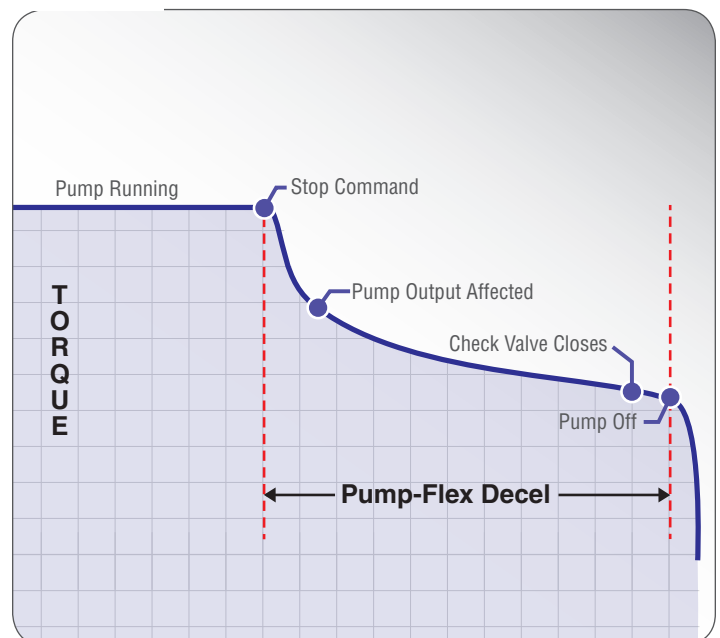
- Integrated Bypass Contactor
- 120 V Control (240 V Option)
- UL Listed in US & Canada
- Easy Assembly & Wiring
- Narrow Width for Motor Control Center (MCC) Mounting
- Remote Keypad Mounting
- Unique Built-In Features Eliminate Adding Discreet Devices
- Pull-Apart Control Terminals
- Four Digit LED Display
- RS485 MODBUS RTU
- Multiple Ramp Types to Start Any Load
- Two-Wire/Three-Wire Control
- Equipment Ground Fault
- Retentive Thermal Memory
- Real-Time Thermal Modeling



> PUMP APPLICATION FEATURES

A gradual reduction in the output torque of your pump motor is provided when a stop signal is initiated. When the motor output reaches a point where the check valve can be safely and gently closed, the Pump-Flex™ circuit automatically turns itself off.

- Pump-Flex Decel Control Eliminates Damaging Effects of "Water Hammer"
- Process Control Timer
- Ideal for Irrigation Pumps when Specific Amount of Water Needs to be Pumped if Power Failure or Fault Trip Occurs During Operation
- Batch Process Timer Runs for a Set Time After Starting, Even After Power Outage
- Elapsed Time Meter, Run-Cycle Counter, Remaining Lock Out Time, & Fault History for Maximum Monitoring & Control of Pumps or Processes



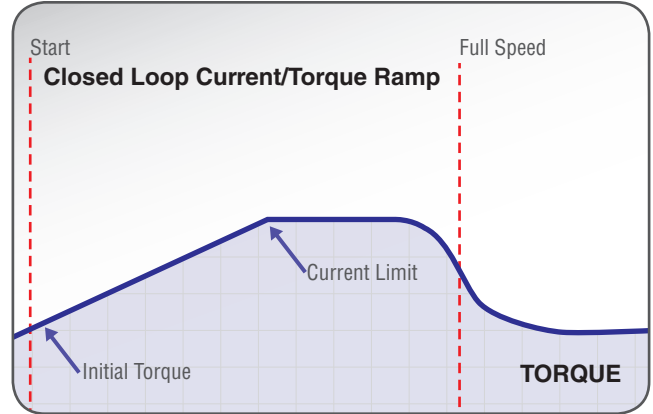
Pump-Flex Decel Feature

> PUMPS, FANS, BLOWERS, & CONVEYORS

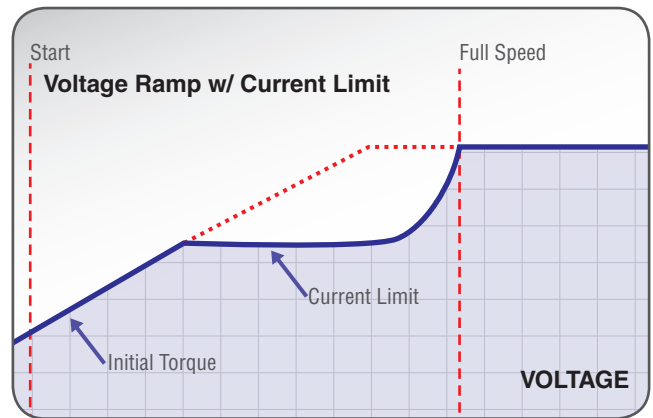
Closed loop torque/current ramping provides a linear increase in output torque during acceleration. It maximizes the available torque using an internal PID feedback loop, ensuring a smooth and linear ramp-up to full speed. It is ideal for low pressure pumps where slight surges at the end of the ramp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

> COMPRESSORS & CHILLERS

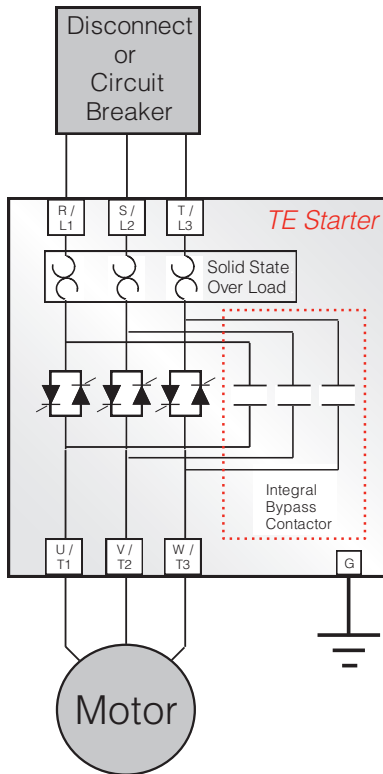
The TE offers voltage ramping with current limiting for applications that need the smoothness of voltage ramping while maintaining the ability to start in limited power environments. For maximum motor power where the available power supply is severely limited, a current limit/current step start can be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



Closed Loop Current/Torque Ramp



Voltage Ramp with Current Limit



Remote-Mounted Keypad Option

APPLICATIONS

- Blowers
- Compressors
- Fans
- Process Machinery
- Chillers
- Conveyors
- Mixers
- Pumps



> DIMENSIONS

Model No.	H (in.)	W (in.)	D (in.)
TE-18-BP through TE-48-BP	9.25	8.00	6.65
TE-62-BP through TE-112-BP	14.88	8.00	6.65
TE-150-BP through TE-160-BP	19.63	8.00	6.65
TE-210-BP through TE-275-BP	29.00	12.50	9.10
TE-361-BP through TE-450-BP	29.75	12.50	9.10
TE-550-BP through TE-660-BP	30.00	12.50	9.10
TE-862-BP through TE-900-BP	44.50	25.50	11.86
TE-1006-BP through TE-1250-BP	46.56	28.20	13.25

Dimensions are for reference only and are subject to change without notice. Consult factory for exact dimensions.



> TE SERIES SOFT STARTER WITH INTEGRAL BYPASS CONTACTOR

- Data Based on NEC Table 430-150, Full-Load Current Three-Phase Motors
- Size Soft Starter Based on Actual Motor Nameplate FLA
- Heavy Duty Rating
 - 500% for 60 Seconds
 - 1.15 SF

> RATINGS

Model Number	Max. Amps	Nominal Motor Rating (50/60 Hz)							
		208 V/HP		230 V/HP		460 V/HP		575 V/HP	
		Shunt Bypass	Start Bypass	Shunt Bypass	Start Bypass	Shunt Bypass	Start Bypass	Shunt Bypass	Start Bypass
TE-18-BP	18	5	3	5	5	10	10	15	10
TE-28-BP	28	7.5	7.5	7.5	7.5	20	15	25	20
TE-39-BP	39	10	10	10	10	25	25	30	30
TE-48-BP	48	15	10	15	15	30	30	40	30
TE-62-BP	62	20	15	20	20	40	40	60	50
TE-78-BP	78	25	20	25	25	60	50	75	60
TE-92-BP	92	30	25	30	30	60	60	75	75
TE-112-BP	112	30	30	40	30	75	75	100	75
TE-150-BP	150	40	40	50	50	100	100	125	—
TE-160-BP	160	50	40	60	50	125	100	150	—
TE-210-BP	210	60	60	75	60	150	150	200	150
TE-275-BP	275	75	60	100	75	200	150	200	150
TE-361-BP	361	125	75	125	125	300	250	350	300
TE-450-BP	450	150	125	150	150	350	300	450	300
TE-550-BP	550	150	150	200	200	450	400	500	500
TE-600-BP	600	200	200	200	200	500	500	600	600
TE-862-BP	862	250	250	300	300	600	500	700	600
TE-900-BP	900	300	250	350	300	700	600	900	600
TE-1006-BP	1006	350	300	400	400	800	800	1000	900
TE-1250-BP	1250	450	350	500	450	1000	900	1200	1000

TOSHIBA TRANSMISSION & DISTRIBUTION DIVISION

- Motor Controls
- Vacuum Contactors
- Vacuum Circuit Breakers

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