Bulletin 154 Starting Torque Controllers

Allen-Bradley

Cost-effective Soft Starting for Single- and Three-Phase Low Horsepower Motors

Features and Benefits

- Reliable proven technology with solid state power poles
- Simple commissioning with only two adjustments:
  - Initial Torque Setting (10%....80%)
  - Duration of Ramp (0.5…5sec)
- Energy savings
- Less wear and tear on mechanical systems
- RoHS compliant, China RoHs
- cULus approved

Starting Torque Controllers help reduce mechanical and electrical stress on motor circuits and systems by limiting the torque surge at start-up.

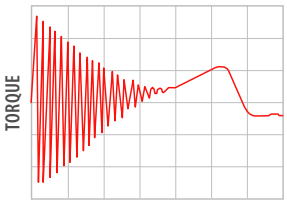
SINGLE PHASE

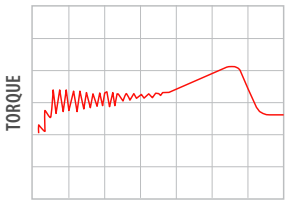
THREE PHASE
(1 control phase)

THREE PHASE
(2 control phases)

Reduce Mechanical and Electrical Stress

The Starting Torque Controller (STC) provides a cost-effective basic soft-starting solution for low horsepower single and three phase squirrel cage induction motors. Models are available to work with single-phase motors, as well as one or two control phase versions for three-phase motors.





Starting Torque Controllers help reduce mechanical and electrical stress on motor circuits and systems by limiting the torque surge at start-up.

Starting torque controllers are ideal for adding on to existing across the line starters. They allow for adjustable initial torque and ramp time.

Ideal applications include basic material handling, fans, pumps, and single phase reduced voltage starting applications.

LISTEN. THINK. SOLVE.®

Single-Phase with single control phase Starting Torque Controllers

	Rated Power @ 40C (104 F)			Control Voltage	
Current Rating [A]		115V	230V	24V AC/DC	100…240VAC
12	Hp	0.5	2	154-SP1C12NAR	154-SP1C12NAD
	kW	0.55	1.1		
16	Hp	0.5	2	154-SP1C16NAR	154-SP1C16NAD
	kW	0.75	1.5		
25	Hp	1	3	154-SP1C25NAR	154-SP1C25NAD
	kW	1.5	3		

Three-Phase with one control phase Starting Torque Controllers

	Rated Power @ 40C (104 F)					Control Voltage	
Current Rating [A]		220V	400V	460V	575V	24V AC/DC	100…240VAC
12	Hp	3	5	7.5	10	154-TP1C12NCR	154-TP1C12NCD
	kW	3	5.5	6.3	6.3		
16	Hp	5	7.5	10	10	154-TP1C16NCR	154-TP1C16NCD
	kW	4	7.5	7.5	7.5		
25	Hp	7.5	10	15	20	154-TP1C25NCR	154-TP1C25NCD
	kW	6.3	11	13	15		

Three-Phase with two control phases Starting Torque Controllers

	Rated Power @ 40C (104 F)					Control Voltage	
Current Rating [A]		220V	400V	460V	575V	24V AC/DC	100…240VAC
12	Hp	3	5	7.5	10	154-TP2C12NCR	154-TP2C12NCD
	kW	3	5.5	6.3	6.3		
16	Hp	5	7.5	10	10	154-TP2C16NCR	154-TP2C16NCD
	kW	4	7.5	7.5	7.5		
25	Hp	7.5	10	15	20	154-TP2C25NCR	154-TP2C25NCD
	kW	6.3	11	13	15		

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Publication 154-PP001A-EN-P – June 2018