

Product Details and Certifications

Cross Reference RA Part Number: PN-395432



Product: **20-750-S3**

Description: PowerFlex 750 Network Safe Torque Off Option Module



Representative Photo Only (actual product may vary based on configuration sections)

OPTION INFORMATION

Communication Kits

PowerFlex 750-Series AC Drives

Accessory Selection

Individual Accessory Selection

SELECTION

Safety Kits



Safety Options

Three safety options are available for the PowerFlex 750-Series drives:

- Safe Torque Off
- Safe Speed Monitor
- Integrated Safety - Safe Torque Off

Safe Torque Off is ideal for safety-related applications that require the removal of rotational power to the motor without shutting down the drive. Safe Torque Off functionality offers the benefit of quick start-up after a demand on the safety system. Safe Torque Off helps reduce wear from repetitive start-up, and provides safety ratings up to and including SIL CL3, PLe, and category 3.

Safe Speed Monitor is ideal for applications where the speed is controlled and monitored. The Safe Speed Monitor option combines Safe Torque Off capability with integrated safety relay functionality and the Safe Speed control technology in one hardware option. The Safe Speed Monitor option provides safety ratings up to and including SIL CL3, PLe, and category 4.


With the Safe Speed Monitor option, you can safely monitor and control the speed of your application, which allows operators to perform process or maintenance work without stopping the machine.

Cat. No.	Description
20-750-S ⁽¹⁾	Safe Torque Off (hardwired)
20-750-S1 ⁽¹⁾⁽²⁾	Safe Speed Monitor (hardwired)
20-750-S3 ⁽¹⁾	Integrated Safety - Safe Torque Off (networked or hardwired)

(1) Drive can accommodate only one option.

(2) Requires the dual incremental encoder or universal feedback option. Also requires catalog number 20-750-EMCSSM1-F8 EMC Option Kit with Frame 8...9 drives.

Integrated Safety Safe Torque Off Specifications

Attribute	 20-750-S3 Integrated Safety Safe Torque Off
Standards	EN 60204-1, IEC 61508, EN 61800-3, EN 61800-5-1, EN 61800-5-2, EN 62061, EN ISO 13489
Safety category	Cat. 3 and PL _e per ISO 13849-1; SIL CL3 per IEC 61508 and EN 62061
Power supply (user I/O)	24V DC ±10%, 0.8...1.1 x rated voltage ⁽²⁾ protected extra low voltage (PELV) or safety extra low voltage (SELV)
Input type	Current sinking
Voltage, on-state input	11...30V, 3.5 mA DC
Voltage, off-state input, max	5V, 3.5 mA DC
Current, on-state input, min	3.3 mA
Current, off-state, max	1.3 mA
IEC 61131-2 (input type)	Type 3
Conductor type	Multi-conductor shielded cable
Conductor size ⁽¹⁾	0.3...0.8 mm ² (28...18 AWG)
Strip length	10 mm (0.39 in.)

(1) See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

(2) Safety outputs need additional fuse for reverse voltage protection of the control circuit. Install a 6 A slow-blow or 10 A fast-acting fuse.