

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 12 ATEX 7199 X

Issue: 01

- (4) Equipment: **Safety function within the PowerFlex 525 25B, 120V, 240V, 400-480V and 600V**
- (5) Manufacturer: **Rockwell Automation**
- (6) Address: **1201 South Second Street
Milwaukee, WI 53204-2496, USA**

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex199.01/12

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 50495: 2010

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II (2) GD

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2018-01-25

Dipl.-Ing. Andreas Maschke

This EU-Type Examination Certificate without signature and stamp shall not be valid
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114



(13)

Annex

(14)

EU Type Examination Certificate

TÜV 12 ATEX 7199 X

Issue: 01

(15) Description of equipment

15.1 Equipment and type:

PowerFlex 525 25B, 120V, 240V, 400-480V and 600V

15.2 Description / Details of Change

General product information

The PowerFlex 525 Adjustable Frequency AC Drive is a low voltage speed motor drive. It is intended for speed control of AC induction motors and AC permanent motors in the range of 0.5 to 30 HP, primary used in process control and industrial automation machines.

A protective system is required to stop current flow to the motor when an over temperature condition has been sensed in the motor. When sensed, the drive will go into a fault stop condition.

The PowerFlex 525 provides the Safe-Torque-Off (STO) function defined in EN IEC 61800-5-2.

The functional safety of the safety function is certified under certification number 01/205/5249.01/17. The realization of the Safe-Torque-Off function is a safety and control device according to the directive 2014/34/EU and is in the scope of this report.

Short description of the STO function: The output IGBTs of the driver can only be activated if the control signals S1, S2 are at high level (see Figure 1).

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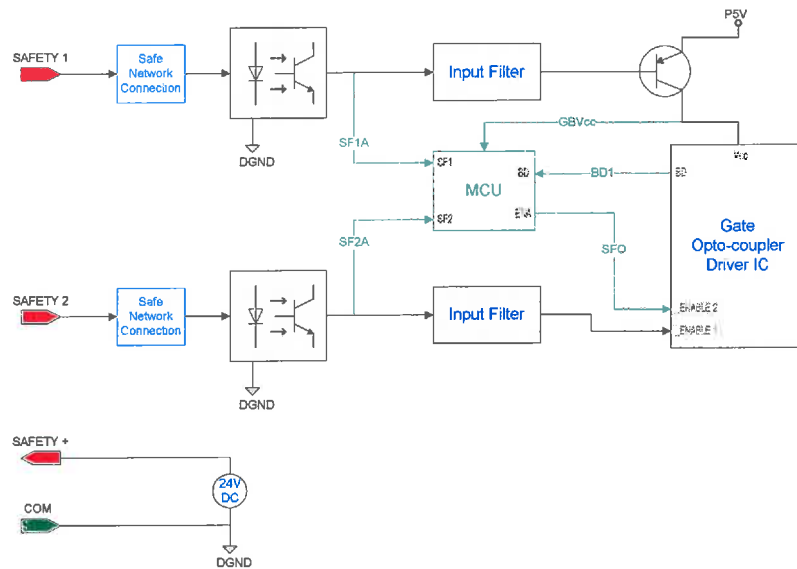


Figure 1: Functional Block Diagram of STO

The Ex protected motor itself can be placed in a defined hazardous area, while the PowerFlex 525 Adjustable Frequency AC Driver has to be placed outside of the hazardous area.

Details of change:

1. Compliance with directive 2014/34/EU.
2. Changes to the firmware.

Technical Data

Safety Inputs:

S1/S2 nominal high Level input voltage: 24V

S1/S2 minimum high Level input voltage: 19,2V

S1/S2 maximum withstand high Level input voltage: 114V

Operating Ambient Temperature:

$-20^{\circ}\text{C} < T_{\text{amb}} < 50^{\circ}\text{C}$

$-20^{\circ}\text{C} < T_{\text{amb}} < 70^{\circ}\text{C}$ with external cooling fan installed.

(16) Test-Report No. 557/Ex199.01/12

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(17) Special Conditions for safe use

1. Operating Ambient Temperature:
-20°C < T_{amb} < 50°C
-20°C < T_{amb} < 70°C with external cooling fan installed.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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