

## Ready for new machinery regulation

### EC type-examination certificate available for rotary SIL-encoders made by TR Electronic

For many years, TR Electronic has been pursuing the strategy of making TR's robust encoder technology available for applications that require functional safety in accordance with SIL2 / PLd or SIL3 / PLe. The innovative CD\_582 series offers safe absolute encoder values via PROFINet/PROFIsafe, FailSafe over EtherCAT, Powerlink openSAFETY, CIPsafety over Ethernet/IP and CANopen safety in the standard installation space of 58 mm encoders.

Both the safe encoders and the machines and systems in which these devices are used are generally currently subject to the Machinery Directive that has been introduced. The transition period for the new Machinery Directive (2023/1230) will now expire shortly. TR Electronic components are ideally prepared for this change. For example, the encoders have the necessary EC type examination certificate, which is then included in the overall assessment of the system or machine. Users can obtain all the necessary documents directly from the TR Electronic website based on their article numbers; this means that the documentation requirements can be met with a manageable amount of effort.

TR is also working continuously to meet the requirements of IEC 62443 for cyber security and will achieve the legally required certification for operational technology components by the target date of 2027. The various requirements and attack scenarios are already being taken into account in all developments and the corresponding risk assessments have shown that the series currently being delivered already meet many of the conditions. Of course, TR (like many of its market competitors) hopes that the relevant standard will soon be harmonized so that it can also serve as a binding basis for certification.

The fact that Siemens, for example, has created an application note for the connection of F encoders to an F controller based on the PROFINet/PROFIsafe CD\_582 EPN+FS encoders also shows how standard setting TR Electronic's work is.



CD\_582 + FS Safe absolute encoders with the latest interfaces in hollow shaft, blind shaft and solid shaft versions with radial and axial connections.

Technical data for Safety-Encoders made by TR Electronic:

<https://www.tr-electronic.com/s/S025833>

Application Note „Safety position, standstill, direction and speed detection“ by Siemens (© 2024 Siemens AG)

<https://support.industry.siemens.com/cs/document/49221879/safety-position-standstill-direction-and-speed-detection>