



SIL

Functional Safety Certificate

No. 61260416.PEMUN12

Test Report / Technical Construction File no. RBT260641002SIL

Certificate's Holder: PRODUTOS ELETRONICOS METALTEX LTDA
RUA JOSE RAFAELLI, 221 - SOCORRO - CEP: 04763-280 SAO PAULO - SP BRAZIL
CNPJ: 60.864.428/0001-04

Product: Safety components Electronic Safety Relay

Model(s): RPE8-1A, RPE8-1AR, RPE8-1AR1B, RPE8-1B, RPE8-2A2B, RPE8-2AE, RPE8-3A1B, RPE-A, RPE-AM, RPE-AS, RPE-B, RPE-BM, RPE-BS, RPE-M, RPE-MS, RPE-N, RPE-P, RPE-HC

Standard: Has been assessed per the relevant requirements of:
IEC 61508:2010 Parts 1-7
And meets requirements providing a level of integrity to:
Systematic Capability: SC 3 (SIL 3 Capable)
Random Capability: Type A Element
SIL 3@ HFT=0;
PFD_{avg} and Architecture Constraints must be verified each application
* Safety Function:
This product is a kind of Safety components Electronic Safety Relay.
* Application Restrictions:
The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.
*Is suitable to be safety function according to the description and the configuration defined in Annex I.

Verification Mark:



The Verification Mark can be affixed on the product. It is NOT permitted to alter the Verification Mark in any way

Remark: This SIL Verification of Compliance has been issued on a voluntary basis. ECM confirms that a Test Report is existent for the above listed product(s) and found to meet the requirements of above standards for application in safety related system up to Safety Level of **SIL 3**. The unit must be properly designed into a Safety Instrument Function as per the requirements in the Safety Manual. The Verification Mark shown above can be affixed on the product. It is NOT permitted to alter the Verification Mark in any way. In addition the Verification's Holder is NOT allowed to transfer the Verification to third parties. This certificate can be checked for validity at www.entecerma.it

Date of issue 16 April 2026

Expiry date 15 April 2031

For online check:



Approver
Ente Certificazione Macchine
Legal Representative
Luca Bedonni



Annex I

No. 6I260416.PEMUN12

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1. The use of the product [Safety components Electronic Safety Relay] must obey the required rules to conservation of SIL 3 properties. These rules are recalled in the §6 of the Assessment Report reference: [SIL Capability assessment report].

2. The product version of hardware components used for validation and type tests are the following:

Product:	Safety components Electronic Safety Relay
Model(s):	RPE8-1A, RPE8-1AR, RPE8-1AR1B, RPE8-1B, RPE8-2A2B, RPE8-2AE, RPE8-3A1B, RPE-A, RPE-AM, RPE-AS, RPE-B, RPE-BM, RPE-BS, RPE-M, RPE-MS, RPE-N, RPE-P, RPE-HC

3. Acceptable environmental constraints for the system are recalled in the safety Manual. These elements must be checked for each integration operation of the product.

4. The product has met manufacturer design process requirements of Safety Integrity Level(SIL)3. These are intended to achieve enough integrity against systematic errors of design by the manufacturer.

5. ICE 61508 Failure Rates:

Failure Rates For the product in FIT*

λ_{sD}	λ_{sU}	λ_{DD}	λ_{Du}	SFF
178.16FIT	442.27FIT	176.42FIT	183.36FIT	90.07%

*FIT=1 failure/10⁹ hours

6. SIL Verification:

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of PFD avg considering redundant architectures, proof test interval, proof test effectiveness, any Automatic diagnostics, average repair time and the specific failure rates of all products included in the SIF. Each subsystem must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.