

CLEARSY

Safety Solutions Designer

SIL4 VITAL LATCHING INTERFACE SYSTEM RS4.B.24.0.24

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*RS4.B.24.0.24 Module
24 NO contacts per position
6U card packaging
SIL4
19" rack compatible
Low power consumption
Up to 10 modules per system
Up to 200 useful contacts*



VITAL LATCHING INTERFACE SYSTEM RS4.B.24.0.24 SIL4



DESCRIPTION SYSTEM

The Vital latching interface system RS4.B.24.0.24 is a latching relay used in Railway wayside applications where an operator command will allow changing wiring configuration following 2 distinct and exclusive positions. The system latching feature allows keeping the status imposed by the latest command.

One of the system key features is his modular design providing the operator opportunities to program large number of contacts (Left/Day or Right /Night).

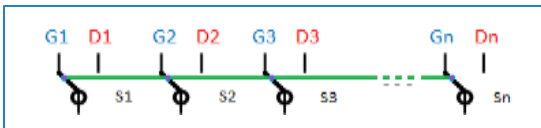
SYSTEM ARCHITECTURE

The system architecture includes:

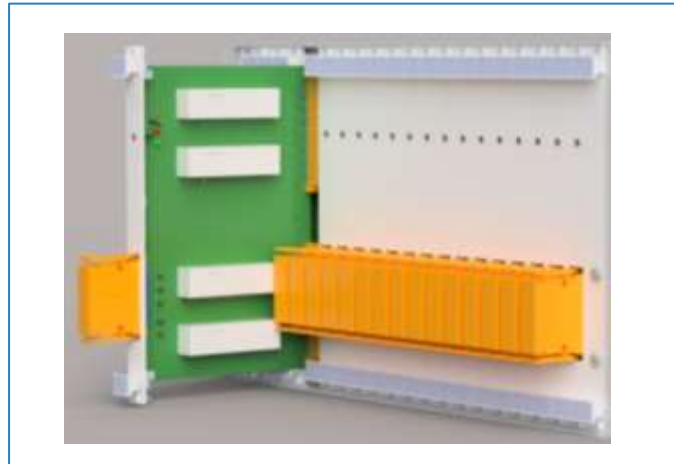
- **One or many sub-systems**, wired to wayside equipment depending on the user preference mapping.
- **One or two 19" Rack**, handle the different sub-systems
- **Control unit** localized on the left of the rack ensure that every contact have been made in both Day and Night mode.

APPLICATIONS:

- DAY/NIGHT switch (change over latch) function used for interlocking modification.
- Route latch function
- Switch machine safety latch



■ Block diagram



■ Integrated module in rack

SIL4 SAFETY PROPERTIES

The system is designed to comply with safety level SIL4 according to CENELEC EN 50129 for the following properties:

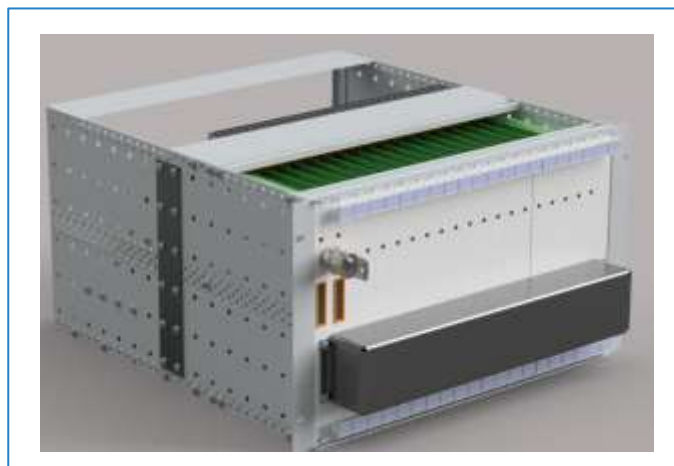
- If no contact is made (Left / Day OR Right / Night), no opposite contact can be made.
- If one contact is made (Left / Day OR Right / Night), only switch active command can involve opposite contact to be made.

The Vital latching interface system RS4.B.24.0.24 incorporates latching relays compliant to the EN61810-3 standard. The contacts of these relays are weld no transfer contacts. The galvanic isolation between coil/contacts and contacts/contacts is 1,500 ACV.

TECHNICAL FEATURES

Example of use in a weighing system (Y-shaped):

- Card in 6 U format
- SIL4 switching system
- Compatible with a 19" rack
- Low power consumption
- Up to 10 cards per system
- Up to 200 contacts
- Can be controlled by a PLC
- Suitable for Y-positioning functions
- 24VDC power supply - EN50155 compliant



■ Switching system with local control key



Design examination type certificate

Certificat de type par examen de la conception

N° 9628/0265 edition 1

Attributed to

Délivré à

CLEARSY

320 Av. Archimède - Pléiades III

F-13100 Aix-en-Provence

par
by

CERTIFER

18 Rue Edmond Membrée

F-59300 VALENCIENNES

Which certifies that the design of the following product :

Qui certifie que la conception du produit suivant :

GENERIC PRODUCT

VITAL LATCHING INTERFACE SYSTEM RS4.B.24.0.24

MODULE BASCULEUR RS4.B.24.0.24

(REFERENCE: MB008 REV3.2)

Meets SIL4 requirements of the standards

Est conforme aux exigences SIL4 des normes

CENELEC EN 50126 :2017, EN 50129 :2018

This certificate includes appendix EC_9628_0266 version 1

L'annexe EC_9628_0266 version 1 fait partie intégrante du présent certificat

The scope of this certificate is limited to the design of the product referenced in the appendix and its description file.

Ce certificat ne s'applique qu'à la conception du produit référencé en annexe et au dossier descriptif en résultant.

This certification was performed in accordance with CERTIFER repository RF0015 version 3.

La présente certification a été conduite en conformité avec le référentiel CERTIFER RF0015 version 3.

Date of certification: March 17th, 2021

Date de certification : 17 Mars 2021



Issued at Valenciennes on March 17th 2021

Délivré à Valenciennes

The Chief Executive Officer

Le Directeur Général

Pierre KADZIOLA

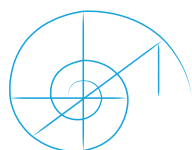


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Formulaire 31.001/13

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