### 出廠測試報告等資料意見及辦理情形

- 1. 電子聯鎖裝置設備型錄 D 版, 附件一 EI32-FA 認証內容? A:承包商提出之資料為認証證明書,驗證內容包括保安單元 EN50126(IEC62278)及 EN50129(IEC62425),內建軟體 EN50128(IEC62279) 詳閱附件 1。
- 2. 出廠測試報告

電子聯鎖裝置 EI32-FA2 內容?為何只有數量/外觀/尺寸檢查? A:電子聯鎖裝置 EI32-FA2 在國外 SGS 已施作數量/外觀/尺寸檢查等測試,功能部份已於 4/26~4/27(枋寮、佳冬)、5/24(南州)進行電子聯鎖設備 EI32-FA2 功能模擬測試及出廠測試完畢。

3. 號誌聯鎖主要設備數量為何沒有安全繼電器?型錄?

A: SGS 抽測各種繼電器數量如下表,測試表單請見附件 4.1.1~4.1.7, SGS 整體報告請見附件 4.2,繼電器型錄 G 版請見附件 4.3。

2017年12月27日

安全リレー 立会検査

項番	会社形式	立会対象		2000000000000	外観および特性検査	
		台数	製造番号	員数確認	抜取 台数	抜取製造番号
1	CD1004A+00000001	96	K0000001~K0000096	別紙チェックシートによる	2	K0000001, K0000045
2	CD3002C+00000001	7	K0000001~K0000007	別紙チェックシートによる	1	K0000001
3	CE1002C+00000001	98	K0000001~K0000052	別紙チェックシートによる	2	K0000193, K0000216
			K0000171~K0000216			
4	CK1004A+00000001	650	K0000075~K0000724	別紙チェックシートによる	14	K0000075, K0000100, K0000115, K0000150, K0000200, K0000250, K0000315, K0000350, K0000400, K0000450, K0000514, K0000550, K0000600, K0000650
(5)	CK1010A+00000001	155	K0000085~K0000239	別紙チェックシートによる	4	K0000085, K0000150, K0000155, K0000239
6	CF1006A+00000001	104	K0000110~K0000213	別紙チェックシートによる	3	K0000110, K0000200, K0000213
7	CF1008A+00000001	123	K0000001~K0000123	別紙チェックシートによる	3	K0000001, K0000050, K0000100
合計		1,233				

- 4. 業主需求書(六)號誌聯鎖軟體包括下列3種,如何驗證?
  - (1)商用套裝軟體.(2)專用標準軟體(3)工程開發軟體.

A: 號誌聯鎖系統軟體分屬上述 3 大類, 3 大類構成之完整軟體應符合 EN50128(IEC 62279)標準定義之 SSIL4 等級, 廠商須取得第三方公證單位之 SSIL4 等級證明書以驗證其軟體功能符合 EN50128(IEC 62279)標準。

- 5. 業主需求書(六)P74. 電子聯鎖工廠試驗有下列 3 種, 如何驗證? (1)型式及例行試驗. (2)模擬測試. (3)出廠測試.
  - A: 已於 4/26~4/27(枋寮、佳冬)、5/24(南州)進行電子聯鎖設備功能模擬測試及出廠測試完畢,上述測試均照電子聯鎖工廠測試程序執行;型式及例行測試應為原型機測試。
- 6. 附錄 3 第 16623 章電子聯鎖規範第 6.3.1 系統安全等級, 保安單元應參照 EN50126(IEC62278)及 EN50129(IEC62425)標準定義 SIL4,內建軟體應參照 EN50128(IEC62279)標準定義 SIL4,如何驗證? A:已於期中設計時強烈要求提出相關報告,承包商說明日本方面目前 SIL4 認証進行中,7月底 SIL4 認証將會有初步結果,認証項目如上述 EN50126(IEC62278)、EN50129(IEC62425)、EN50128(IEC62279)。



# 附件一 Ei32-FA Cartificate

# Certificate



Certificate Number and Date NRCC-2015-006, 9 October 2015

Certification Body Railway Certification Center.

National Traffic Safety and Environment Laboratory (NRCC)

7-42-27, Jindaiji-higashi-machi, Chofu-shi, Tokyo, 182-0012, Japan

Certificate Holder Nippon Signal Co., Ltd.

1-5-1, Marunouchi, Chiyoda-ku, Tokyo, 100-6513, Japan

Nippon Signal Co., Ltd. Product Supplier

1-5-1, Marunouchi, Chiyoda-ku, Tokyo, 100-6513, Japan

Product Factory Kuki Plant, Nippon Signal Co., Ltd.

1836-1 Aza-Ooya, Ezura, Kuki-shi, Saitama, 346-8524, Japan

Electronic Interlocking Device EI32FA manufactured by Nippon Signal Co., Ltd. Assessed Product

(Including interfaces between electronic interlocking device and external system/equipment)

Applied Standard

IEC 62425 Ed. 1.0:2007

IEC 62278 Ed. 1.0:2002, IEC 62279 Ed. 1.0:2002 Referenced Standards

Normative Documents and Certification Scheme

· Safety integrity level SIL4 defined in the applied standard.

· Documents which are: based on the applied standard and the referenced standards; developed through the life-cycle stage of Concept, System definition and application conditions, Risk analysis, System requirements, Apportionment of system requirements and Design and implementation; and listed in the assessment report shown below. The valid documents are only of the listed versions in the report.

- Certification scheme type 1a which is defined in the Railway Product Certification System

designed by NRCC as the certification scheme owner.

It was confirmed in the assessment report below that the design and implementation of the Result of Assessment

> product was in conformity with the SIL4 safety requirements as specified under the applied standard and was developed in accordance with the plans on the basis of the Normative

Documents above.

Assessment Report of Conformity Certification for Electronic Interlocking Device EI32FA, Assessment Report

Commission No. 10, Fiscal Year 2015, NTSEL, 9 October 2015

Independent Administrative Institution National Traffic Safety and Environment Laboratory

President

Osamu



The scope of the certification in Japanese remains the definitive version.

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#### Cautions

- This certificate shows that the assessed product has conformity with the applied standard.
- This certificate and the assessment report are valid only for products of the same configuration of the assessed product.
- This certificate is not a warranty by National Traffic Safety and Environment Laboratory for the assessed product.
   The certification body does not guarantee the assessed product regardless of explicit or suggestive ways.
- It may lead to withdrawal of this certificate in case that this certificate is used wrongfully (such as usage for a product different from the assessed product) and/or is used in misleading manner for publicity information work or advertisement.
- The content of this document is the translation from Japanese certificate revised from the certificate issued on 9
   October 2015.

#### Revision history

· Issued on 9 October 2015.

#### Preconditions

This certificate is valid only under the following conditions.

- The safety plan shall be carried out as planned after the Manufacture phase.
- With respect to the modifications raised at the reviews held at each phase till the Design and implementation, the
  modifications shall be carried out after the Manufacture phase.

(end)

The scope of the certification in Japanese remains the definitive version.

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