

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Electromechanical Relays**

with type designation(s)

RH(SH), RJ(SJ) and RU(SM and SY)

Issued to

IDEC Corporation**Osaka City Osaka Pref., Japan**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards**Application :****Location classes:**

Temperature	B
Humidity	B
Vibration	A
EMC	A
Enclosure	Required protection according to DNV Rules shall be provided upon installation onboard

This Certificate is valid until **2017-06-30**.Issued at **Busan** on **2015-09-21**DNV GL local station: **Kobe**for **DNV GL**Approval Engineer: **Eun Sook Kim**

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Baeg Soon Choi
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id:
Certificate No: **TAA000002U**

Product description

Magnetic Relays and Relay Sockets

1. Relay Type: RH (2B, 4B, 2V2 and 4V2), RJ (1S, 2S, 1V and 2V) and RU (2S, 4S, 42S, 2V, 4V and 42V) Series
2. Relay Socket Type: SH (2B and 4B), SJ (1S and 2S), SM2S, SU (2S and 4S) and SY4S Series

Places of Manufacturer

1. IDEC Corporation Takino Plant in Japan: Electromechanical relays
355-18, Aza-Kuroishi, Kohtaka, Kato-Shi, Hyogo 679-0211 Japan
2. IDEC Izumi Taiwan Corporation: Electromechanical relays
No.87, Swi Kuan Road, Chu Hou Village, Jen Wu Country, Kaohsiung, Hsien 814 Taiwan
3. IDEC Izumi Suzhou Co., Ltd.: Electromechanical relays
5 Huojia Road, Suzhou new District, Suzhou Jiangsu, 215009, China

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Type Approval documentation

Tests carried out

Applicable tests according to Standard for Certification No.2.4, April 2006.

Periodical assessment

The scope of the retention/renewal survey is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the survey are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE