

# Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>IDEC Corporation</b>
<b>Address</b>	2-6-64, Nishimiyahara, Osaka-shi, 532-0004, Japan
<b>Place of Production</b>	IDEC CORPORATION TAKINO PLANT 355-18, Aza-Kuroishi, Kotaka, Kato-shi, Hyogo, 679-0221, Japan
<b>Place of Production</b>	IDEC IZUMI TAIWAN CORP HO FA MFG FACTORY No.85, Heye 3rd RD., Daliao Dist, Kaohsiung, 831, Taiwan
<b>Place of Production</b>	IDEC ASIA (THAILAND) Co., Ltd. 62 Moo. 4 Tambon Bualoy, Amphur Nongkhae, Saraburi Province, 18230, Thailand
<b>Place of Production</b>	IDEC IZUMI SUZHOU CO.,LTD 165 Jinfeng Road, Suzhou New District, Suzhou City, 215011, China
<b>Type</b>	Relays - Magnetic
<b>Description</b>	Magnetic Relay and Relay Socket
<b>Trade Name</b>	RH/RU/RJ Series Relay SH/SJ/SY/SM/SU Series Socket (See Appendix for more details)

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## Type Approval Certificate

<b>Application</b>	Marine and offshore application for use in environmental categories ENV1, ENV2 and ENV3 as defined in LR Type Approval System Test Specification No. 1-2020 including Notice No.1 for the Specification where the Test Specification is satisfactory for the intended operation.
<b>Ratings</b>	See Appendix

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Group Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** 07/10021(E4)-02

The Design Appraisal Document 07/10021(E4)-04 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

## Appendix

### TRADE NAME

RH Series, Comprising:-

RH 2 B - U L W E DC6

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series

RH: RH Series

② Number of Poles

2: 2 Poles                      4: 4 Poles

③ Terminal type

B: Blade type, mounted through adapter or solder connection

V2: Printed wiring board type

④ Approval Standards

U: UL, CSA, TUV Recognition

Blank: Without UL, CSA, TUV Recognition

⑤ Additional Functions

Blank: Without additional function

C: With a button to check working

CD: With a button to check working & with a diode against surge voltage of DC coil

D: With a diode against surge voltage of DC coil

L: With indicator light

LC: With indicator light & with a button to check working

LD: With indicator light & with a diode against surge voltage of DC coil

LCD: With indicator light, with a button to check working & with a diode against surge voltage of DC coil

T: With top flange

TD: With top flange & with a diode against surge voltage of DC coil

⑥ Contact Material

Blank: Silver Cadmium oxide (AgCdO)

W: Silver tin oxide indium oxide (Ag-SnO-InO)

⑦ Color of enclosure

E: Color less, transparent

Blank: Yellow, transparent

⑧ Operating Coil Voltages

For RH2

DC6: DC 6 V              DC12: DC 12 V              DC24: DC 24 V              DC48: DC 48 V

DC100-110: DC 100-110 V

AC6: AC 6V              AC12: AC 12 V              AC24: AC 24V              AC48: AC 48V

AC50: AC 50V              AC100-110: AC 100-110V              AC110-120: AC 110-120V

AC200-220: AC 200-220V              AC 220-240: AC 220-240V

For RH4

DC6: DC 6 V              DC12: DC 12 V              DC24: DC 24 V              DC48: DC 48 V

DC100: DC 100V              DC110: DC 110 V

AC6 :	AC 6V	AC12 :	AC 12 V	AC24 :	AC 24V	AC48 :	AC 48V
AC50 :	AC 50V	AC100 :	AC 100V	AC110 :	AC 110V	AC115 :	AC 115V
AC120 :	AC 120V	AC200 :	AC 200V	AC220 :	AC 220V	AC230 :	AC 230V
AC240 :	AC 240V						

Socket : SH Series

For RH2B relay Surface Mount Type

SH2B-05A    SH2B-05B    SH2B-05C    SH2B-05D    SH2B-05U

For RH2B relay Panel Mount Type

SH2B-51

For RH2B relay PC Board Mount Type

SH2B-62

For RH4B relay Surface Mount Type

SH4B-05A    SH4B-05B    SH4B-05C    SH4B-05U

For RH4B relay Panel Mount Type

SH4B-51

For RH4B relay PC Board Mount Type

SH4B-62

RJ Series, Comprising:-

RJ 1    S - C L    - D5

① ② ③ ④    ⑤ ⑥ ⑦ ⑧

① Series

RJ : RJ Series

② Number of Poles

1: 1 Pole    2: 2 Poles

③ Contact Type

Blank : Standard type

2 : Bifurcated Type

④ Terminal type

S : Soldering and Plug-in type

V : Printed wiring board type

⑤ Contact Arrangement

C : Form C    A : Form A

⑥ Additional Functions

Blank : Without additional function

D : With a diode against surge voltage of DC coil (normal polarity)

D1 : With a diode against surge voltage of DC coil (reverse polarity)

L : With indicator light

LD : With indicator light & with a diode against surge voltage of DC coil (normal polarity)

LD1 : With indicator light & with a diode against surge voltage of DC coil (reverse polarity)

LR : With indicator light & with CR circuit against surge voltage of AC coil

R : With CR Circuit against surge voltage of AC coil

⑦ Contact Capacity

Blank : Standard type

H : High contact capacity type

⑧ Operating Coil Voltages

D5 : DC 5 V	D6 : DC 6 V	D12 : DC 12 V	D24 : DC 24 V
D48 : DC 48 V	D100 : DC 100-110 V	A12 : AC 12 V	A24 : AC 24V
A100 : AC 100V-(110)V60Hz		A110 : AC 110V	A115 : AC 115V
A120 : AC 120V	A200 : AC 200V-(220)V60Hz		A220 : AC 220V
A230 : AC 230V	A240 : AC 240V		

Socket : SJ Series

For RJ1S relay Surface Mount Type

SJ1S-05B SJ1S-07L

For RJ1S relay PC Board Mount Type

SJ1S-61 SJ1S-61G

For RJ2S and RJ22S relay Surface Mount Type

SJ2S-05B SJ2S-07L

For RJ2S and RJ22S relay PC Board Mount Type

SJ2S-61 SJ2S-61G

RU Series, Comprising:-

RU 2 S - C D E - D6

① ② ③ ④ ⑤ ⑥ ⑦

① Series

RU : RU Series

② Number of Poles

2 : 2 Poles 4 : 4 Poles

42 : 4 Poles with Twin Contact

③ Terminal type

S : Soldering & Plug -in type

V : Printed wiring board type

④ Structure

Blank : Enclosure with latching lever & mechanical indicator

C : Enclosure without latching lever & with mechanical indicator

M : Enclosure with momentary lever & mechanical indicator

N : Enclosure without latching lever & mechanical indicator

T : Top flange enclosure

⑤ Additional Functions

Blank : With bipolar indicator light

D : With indicator light & with a diode against surge voltage of DC coil (normal polarity)

D1 : With indicator light & with a diode against surge voltage of DC coil (reverse polarity)

F : Without indicator light

FD: Without indicator light & with a diode against surge voltage of DC coil (normal polarity)  
 FD1: Without indicator light & with a diode against surge voltage of DC coil (reverse polarity)  
 FR: Without indicator light & with CR circuit against surge voltage of AC coils  
 R: With indicator light & with CR circuit against surge voltage of AC coils

⑥ Color of enclosure

E: Colorless, transparent  
 Blank: Yellow, transparent

⑦ Operating Coil Voltages

D6: DC 6 V	D9: DC 9 V	D12: DC 12 V	D24: DC 24 V
D48: DC 48 V	D100: DC 100V	D110: DC 110 V	D125: DC 125 V
D220: DC 220 V			
A6: AC 6V	A12: AC 12 V	A24: AC 24V	A48: AC 48V
A50: AC 50V	A100: AC 100-110V	A110: AC 110-120V	A200: AC 200V-220V
A220: AC 220-240V			

Socket: SJ Series

For RU2S relay Surface Mount Type

SM2S-05A	SM2S-05B	SM2S-05C	SM2S-05D	SM2S-05U	SM2S-05DF
SM2S-05DN	SU2S-11L				

For RU2S relay Panel Mount Type

SM2S-51

For RU2S relay PC Board Mount Type

SM2S-61 SM2S-62

For RU4S & RU42S relay Surface Mount Type

SY4S-05A	SY4S-05B	SY4S-05C	SY4S-05D	SY4S-05U	SY4S-05DF
SY4S-05DN	SU4S-11L				

For RU4S & RU42S relay Panel Mount Type

SY4S-51

For RU4S & RU42S relay PC Board Mount Type

SY4S-61 SY4S-62

## RATINGS

### Contact Rating : RH Series

No. of Pole(s)	Continuous Current	Allowable Contact Power		Rated Load		
		Resistive Load	Inductive Load	Voltage (V)	Res. Load	Ind. Load
2, 4	10A	1650VA AC 300W DC	1100VA AC 225W DC	110 AC	10A	7.5A
				220 AC	7.5A	5A
				30 DC	10A	7.5A

### Contact Rating : RJ Series

No. of Poles	Contact	Allowable Contact Power		Rated Load			Allowable Switching Current	Allowable Switching Voltage	Minimum Applicable Load*
		Resistive Load	Inductive Load	Voltage (V)	Res. Load	Ind. Load			
1	NO	3000VA AC 360W DC	1875VA AC 180W DC	250V AC	12A	7.5A	12A	250V AC 125V DC	5V DC, 100mA **
				30V DC	12A	6A			
	NC	3000VA AC 180W DC	1875VA AC 90W DC	250V AC	12A	7.5A			
				30V DC	6A	3A			
2	NO	2000VA AC 240W DC	1000VA AC 120W DC	250V AC	8A	4A	8A	250V AC 125V DC	5V DC, 10mA**
				30V DC	8A	4A			
	NC	2000VA AC 120W DC	1000VA AC 60W DC	250V AC	8A	4A			
				30V DC	4A	2A			
1 High Capacity Type	NO	4000VA AC 480W DC	2000VA AC 240W DC	250V AC	16A	8A	16A	250V AC 125V DC	5V DC, 100mA **
				30V DC	16A	8A			
	NC	4000VA AC 240W DC	2000VA AC 120W DC	250V AC	16A	8A			
				30V DC	8A	4A			
2 Bifurcated Type	NO	250VA AC 30W DC	100VA AC 15W DC	250V AC	1A	0.4A	1A	250V AC 125V DC	1V DC, 100µA **
				30V DC	1A	0.5A			
	NC	250VA AC 30W DC	100VA AC 15W DC	250V AC	1A	0.4A			
				30V DC	1A	0.5A			

Note \*: Measured at operating frequency of 120 operations per minute (failure rate level P, reference value)

Note \*\*: Reference value

### Contact Rating : RU Series

No. of Pole(s)	Continuous Current	Allowable Contact Power		Rated Load		
		Resistive Load	Inductive Load	Voltage (V)	Res. Load	Ind. Load
2	10A	2500VA AC 300W DC	1250VA AC 150W DC	250 AC	10A	5A
				30 DC	10A	5A
4	6A	1500VA AC 180W DC	600VA AC 90W DC	250 AC	6A	2.6A
				30 DC	6A	2.7A
42***	3A	750VA AC 90W DC	200VA AC 45W DC	250 AC	3A	0.8A
				30 DC	3A	1.5A

Note \*\*\* : with twin Contact

-End of Appendix-