



Product Service

# CERTIFICATE

No. B 013332 0185 Rev. 02

**Holder of Certificate:** IDEC CORPORATION  
2-6-64 Nishimiyahara, Yodogawa-Ku  
Osaka  
532-0004 JAPAN

**Certification Mark:**



**Product:** Switches  
Three Position Enabling Switches

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 73583246-01

**Valid until:** 2026-10-04

**Date,** 2023-03-27

( Shigehisa Ishikawa )

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**Model(s):** HE1G, HE2G series

## Nomenclature

HE1G - L 2 1S M C AB - 1N - x - x XXXXX  
I II III IV V VI VII VIII IX X XI

### I. Basic Model Designation:

HE1G: HE1G series

### II. Operating Force:

Blank: Normal

L: Light

### III. Number of Enable Switch Contacts:

2: 2 contacts

### IV. Number of Monitor Switch Contacts \*1:

0: Not provided

1: 1 contact (on / off / off)

1S: 1 contact (on / on / off)

2: 2 contacts (on / off / off)

2S: 2 contacts (on / on / off)

11S: 1 contact (on / off / off) and 1 contact (on / on / off)

21S: 2 contacts (on / off / off) and 1 contact (on / on / off)

12S: 1 contact (on / off / off) and 2 contacts (on / on / off)

22S: 2 contacts (on / off / off) and 2 contacts (on / on / off)

Note \*1: When additional switch is mounted, configuration of monitor switch is limited to "0", "1" or "1S" in case of Screw terminal.

### V. Applicable Conduit Size:

M: M20

### VI. Connection Type of Terminal:

Blank: Screw terminal / Push-in terminal (Screwless terminal)

C: Connector

### VII. Additional Switch:

Blank: Not provided

E: HA1E / XA1E series Emergency Stop switch is provided \*2

B: AB6 series switch with momentary action is provided

AB: AB6 series switch with alternate action is provided

L: AL6 series Illuminated switch with momentary action is provided

AL: AL6 series Illuminated switch with alternate action is provided

P: AL6 series Pilot Light is provided

Note \*2: When additional switch of "E" type is selected, Actuator color is limited to "R", and Guard color is limited to "Y" or guard is not applied.  
HA1E / XA1E series has been certified by TÜV SÜD as Emergency Stop Switches.



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## **VIII. Rubber Boot Material and Color:**

Blank: Silicon, Yellow

1Y: NBR/PVC polyblend, Yellow

B: Silicon, Black

1B: NBR/PVC polyblend, Black

N: Silicon, Gray

1N: NBR/PVC polyblend, Gray

## **IX. Actuator Color of Additional Switch:**

Blank: Not provided

Y: Yellow

B: Black

N: Gray

R: Red

W: White

## **X. Guard Color of Additional Switch:**

Blank: Not provided

Y: Yellow

B: Black

N: Gray

R: Red

W: White

## **XI. Additional Number(s) and/or Letter(s) (non-critical):**

Manufacturer Control Number(s) and/or Letter(s)

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HE2G - 2 1S H E - 1N - x - x XXXXX  
I II III IV V VI VII VIII IX

## I. Basic Model Designation:

HE2G: HE2G series

HE2G-X: HE2G-X series

## II. Number of Enable Switch Contacts:

2: 2 contacts

## III. Number of Monitor Switch Contacts:

0: Not provided

1: 1 contact (on / off / off)

1S: 1 contact (on / on / off)

2: 2 contacts (on / off / off)

2S: 2 contacts (on / on / off)

11S: 1 contact (on / off / off) and 1 contact (on / on / off)

21S: 2 contacts (on / off / off) and 1 contact (on / on / off)

12S: 1 contact (on / off / off) and 2 contacts (on / on / off)

22S: 2 contacts (on / off / off) and 2 contacts (on / on / off)

## IV. Connection Type of Terminal:

H: Solder terminal

C: Connector

## V. Additional Emergency Stop Switch \*3:

Blank: Not provided

E: Emergency Stop Switch, XA1E-BV3U02R

EH: Emergency Stop Switch, XA1E-BV3U02RH

EY: Emergency Stop Switch, XA1E-BV3U02Y

EN: Emergency Stop Switch, XA1E-BV3U02N

Note \*3: XA1E series has been certified by TÜV SÜD as Emergency Stop Switches.

## VI. Rubber Boot Material and Color:

Blank: Silicon, Yellow

1Y: NBR/PVC polyblend, Yellow

B: Silicon, Black

1B: NBR/PVC polyblend, Black

N: Silicon, Gray

1N: NBR/PVC polyblend, Gray

## VII. Additional Switch (Left side) or Additional Pilot Light (Top of Left side):

e.g.

Blank: Not provided

L: Momentary Pushbutton switch, AB6M-M2PLW

K: Key Selector switch, AS6M-2KT2PA

P: Pilot Light, UP9P-2498G for HE2G series, UP9P-98G for HE2G-X series

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## VIII. Additional Switch (Right side) or Additional Pilot Light (Top of Right side):

e.g.

Blank: Not provided

L: Momentary Pushbutton switch, AB6M-M2PLW

K: Key Selector switch, AS6M-2KT2PA

P: Pilot Light, UP9P-2498G for HE2G series, UP9P-98G for HE2G-X series

## IX. Additional Number(s) and/or Letter(s) (non-critical):

Manufacturer Control Number(s) and/or Letter(s)

## Parameters:

Conventional free air thermal current (I <sub>th</sub> ):	3 A (for HE1G, HE2G) 2.5 A (for HE1G-L)
Rated Insulation voltage (U <sub>i</sub> ):	250 V (except for Momentary pushbutton) 125 V (for Momentary pushbutton)
Rated impulse withstand voltage (U <sub>imp</sub> ):	2.5 kV
Protection class:	II (except for Pilot Light) III (for Pilot Light)
Protection degree:	IP66 or IP67(HE2G) (without additional switch or Pilot Light) IP65 (with additional switch or Pilot Light)
Pollution degree:	3 (outside panel), 2 (inside panel)
Overvoltage category:	II
Conditional short circuit current:	50 A
Mechanical durability (position 1→2→1):	1 000 000 cycles
Mechanical durability (position 1→2→3→1):	100 000 cycles
Electrical durability:	100 000 cycles
Ambient Temperature Range:	-25 to 60 °C
Max. Altitude:	2000 m

Remark:

When installing/inserting the equipment all requirements of the mentioned test standards must be fulfilled.

## Electrical Ratings

### HE1G series

Type of switch	Utilization category	Rated current (I <sub>e</sub> )		
		30 V	125 V	250 V
Rated Voltage (U <sub>e</sub> )				
3-position switch	AC-12	--	3 A	1.5 A
	AC-15	--	1.5 A	0.75 A
	DC-12	2 A	0.4 A	0.2 A
	DC-13	1 A	0.22 A	0.1 A
Monitor switch	AC-12	--	2 A	1 A
	AC-15	--	1 A	0.75 A
	DC-12	2 A	0.4 A	0.2 A
	DC-13	2.3 A	0.22 A	0.1 A
Momentary push button switch	AC-12	--	0.5 A	--
	AC-15	--	0.3 A	--
	DC-12	1 A	0.2 A	--
	DC-13	0.7 A	0.1 A	--

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## HE1G-L series

Type of switch	Utilization category	Rated current (Ie)		
		30 V	125 V	250 V
Rated Voltage (Ue)		30 V	125 V	250 V
3-position switch	AC-12	--	1 A	0.5 A
	AC-15	--	0.7 A	0.5 A
	DC-12	1 A	0.2 A	--
	DC-13	0.7 A	0.1 A	--
Monitor switch	AC-12	--	2.5 A	1.5 A
	AC-15	--	1.5 A	0.75 A
	DC-12	2.5 A	1.1 A	0.55 A
	DC-13	2.3 A	0.55 A	0.27 A
Emergency stop switch	AC-12	--	2.5 A	2.5 A
	AC-15	--	2.5 A	1.5 A [0.5 A]
	AC-12	2 A	0.44 A	0.2 A
	AC-13	1 A	0.22 A	0.1 A [0.1 A]
Momentary push button switch	AC-12	--	0.5 A	--
	AC-15	--	0.3 A	--
	DC-12	1 A	0.2 A	--
	DC-13	0.7 A	0.1 A	--

## HE2G series

Type of switch	Utilization category	Rated current (Ie)		
		30 V	125 V	250 V
Rated Voltage (Ue)		30 V	125 V	250 V
3-position switch	AC-15	--	--	0.5 A
	DC-13	0.7 A	0.1 A	--
Monitor switch	AC-15	--	--	0.75 A
	DC-13	2.3 A	0.22 A	--
Emergency stop switch	AC-12	--	2.5 A	2.5 A
	AC-15	--	2.5 A	1.5 A
	DC-12	2 A	0.44 A	0.2 A
	DC-13	1 A	0.22 A	0.1 A
Pilot Light for 3-position switch	DC-13	0.7 A	--	--
Pilot Light for Monitor switch	DC-13	2.3 A	--	--

**Tested according to:** EN 60947-5-1:2017  
 EN IEC 60947-5-8:2021  
 GS-ET-22:2016