



Product Service

CERTIFICATE

No. B 09 09 13332 084

Holder of Certificate: **IDEC CORPORATION**

1-7-31 Nishimiyahara, Yodogawa-Ku
Osaka
532-8550 JAPAN

Production Facility(ies): 16295, 52105

Certification Mark:



Product: **Switches**
Model(s): **CW series**
see enclosed nomenclature

Parameters:

Kind:	Electrical switch with/without lighting
Model:	CW
Contacts:	1-6 NC, 0-3 NO, Total 6 contacts max.
Rated voltage (Ui):	300 V switch 250 V illuminated part
Rated current (Ith):	10 A
Utilization category:	AC-15, DC-13
Degree of protection:	AC-12, DC-12 IP65 (Panelfront) IP20 (terminal side)
Protection class:	II (live parts - Bezel (Panel front))
Mechanical durability:	2,000,000 operations min.
Electrical durability:	100,000 operations min. (1800 operations / hour)

See enclosure for more details.

Tested according to: EN 60947-5-1:2004

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. See also notes overleaf.

Test report no.: 71358024

Date, 2009-10-01

Page 1 of 8



Enclosure to Certificate No. B 09 09 13332 084



Product Service



2. Ratings

<Contact block>

- Rated Insulation voltage (Ui): 300V
- Conventional free air thermal current (Ith): 10 A (AC/DC)
- Rated operational voltage (Ue) and Rated operational current (Ie):

A300 (based on Annex A of IEC 60947-5-1) and the following table.

Rated operational voltage (Ue)		24V	120V	240V	Spec*	
Rated operational current (Ie)	AC (50/60 Hz)	Resistive load (AC-12)	10A	10A	6A	Spec 1
			5A	5A	3A	Spec 2
	Inductive load (AC-15)	10A	6A	3A	Spec 1	
		5A	3A	1,5A	Spec 2	
	DC	Resistive load (DC-12)	8A	2.2A	1.1A	Spec 1
			4A	1.1A	0.55A	Spec 2
Inductive load (DC-13)		4A	1.1A	0.55A	Spec 1	
		2A	0.55A	0.27A	Spec 2	

- * Electrical Durability Spec 1 50,000 operation minimum (1800 operation/h)
- Spec 2 100,000 operation minimum (1800 operation/h)

<Lamps>

- Rated Insulation voltage (Ui): 250V
- Rated voltage (V): See sheet lamp designations

3. Specifications

- Operating Temperature: -25 to +60° C (non-illuminated type) (no freezing)
-25 to +55° C (illuminated type) (no freezing)
- Operating Humidity: 45 to 85% RH (no condensation)
- Impulse withstand voltage: 2.5kV
- Electrical durability: 100,000 operation min (1800operation/h)
- Mechanics durability: 2,000,000 operation min
- IP code: IP65 (From Panel front)
IP20 (Terminal side)
- Contact configuration: NC contact 0 to 6, NO contact 0 to 3
(Total 6 contact max)
- Applicable Wire Size: 2 WIRE MAX / TERMINAL
2.0 mm² (1.6 mm diam. Solid wire) max.
(AWG 14 to 16)

Ri

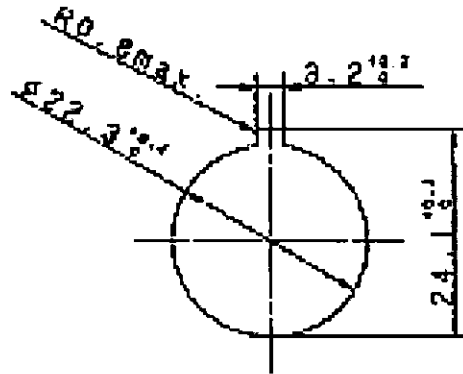
Enclosure to Certificate No. B 09 09 13332 084



Product Service

4. Installation

- Panel thickness: 0.8 to 3.2mm
- Panel cut-out:



- Mounting nut tightening torque: 1.2N*m



re

Enclosure to Certificate No. B 09 09 13332 084



Product Service

NOMENCLATURE:

1. Switch:

- CW-E01: 1 normally closed contact (direct opening) ⊖
- CW-E10: 1 normally open contact
- CW-EW02: 2 normally closed contacts in one body (direct opening) ⊖

Additional letters and/or digits denoting customer code may be followed.

2. Direct Adapter Pilot Light:

- CW-EAQ2: 6V ac/dc direct
- CW-EAQ3: 12V ac/dc direct
- CW-EAQ4: 24V ac/dc direct
- CW-EAQH: 100/120V ac direct
- CW-EAQM: 200/220V ac direct
- CW-EAQM4: 230/240V ac direct

Additional letters and/or digits denoting illumination color code and/or customer code may be followed.



Enclosure to Certificate No. B 09 09 13332 084



Product Service

3. Pushbutton Switch:

CW 1 B - M 1 E 1 1 R - **
 1 2 3 4 5 6 7 8 9 10


- 1 - Series
CW
- 2 - Flange
 - 1 - Round (Black color)
 - 4 - Round (Metal color)
- 3 - Category
B - Pushbutton
- 4 - Operation
M - Momentary
- 5 - Button Style
 - 1 - Flush
 - 2 - Extended
- 6 - Terminal Configuration
E - Screw Terminal
- 7 - NO Contact Arrangement
 - 0 - None
 - 1 - 1 NO Contact
 - 2 - 2 NO Contacts
 - 3 - 3 NO Contacts
- 8 - NC Contact Arrangement (direct opening) ☹
 - 0 - None
 - 1 - 1 NC Contact
 - 2 - 2 NC Contacts
 - 3 - 3 NC Contacts
 - 4 - 4 NC Contacts
 - 5 - 5 NC Contacts
 - 6 - 6 NC Contacts
- 9 - Button Color Code
One or two letters denoting color
- 10 - Additional letters and/or digits denoting customer code may be followed.





4. Illuminated Pushbutton Switch:

CW 1 L - M 1 E 1 1 Q2 R - **
 1 2 3 4 5 6 7 8 9 10 11

- 1 - Series
CW
- 2 - Flange
1 - Round (Black color)
4 - Round (Metal color)
- 3 - Category
L - Illuminated Pushbutton
- 4 - Operation
M - Momentary
- 5 - Button Style
1 - Flush
2 - Extended
- 6 - Terminal Configuration
E - Screw Terminal
- 7 - NO Contact Arrangement
0 - None
1 - 1 NO Contact
2 - 2 NO Contacts
- 8 - NC Contact Arrangement (direct opening) 
0 - None
1 - 1 NC Contact
2 - 2 NC Contacts
3 - 3 NC Contacts
4 - 4 NC Contacts
- 9 - Input Style
Q2 - 6V ac/dc direct
Q3 - 12V ac/dc direct
Q4 - 24V ac/dc direct
QH - 100/120V ac direct
QM - 200/220V ac direct
QM4 - 230/240V ac direct
- 10 - Button or Illumination Color Code
One or two letters denoting color
- 11 - Additional letters and/or digits denoting customer code may be followed.



Enclosure to Certificate No. B 09 09 13332 084



Product Service

5. Selector Switch, Key Selector Switch:

$\frac{CW}{1}$ $\frac{1}{2}$ $\frac{S}{3}$ - $\frac{2}{4}$ $\frac{—}{5}$ $\frac{E}{6}$ $\frac{1}{7}$ $\frac{1}{8}$ $\frac{N1}{9}$ - $\frac{1H}{10}$ - $\frac{**}{11}$

- 1 - Series
CW
- 2 - Flange
 - 1 - Round (Black color)
 - 4 - Round (Metal color)
- 3 - Category
 - S - Selector Switch
 - K - Key Selector Switch
- 4 - Notch
 - 2 - 2 Notch (Latching)
 - 3 - 3 Notch (Latching)
 - 21 - 2 Notch (Momentary, spring return from right)
 - 31 - 3 Notch (Momentary, spring return from right)
 - 32 - 3 Notch (Momentary, spring return from left)
 - 33 - 3 Notch (Momentary, spring return right and left)
- 5 - Handle Style or Key Removable Position Code
 - Handle Style(Selector Switch):
 - Blank - Knob Operator
 - L - Lever Operator
 - Key Removable Position Code(Key Selector Switch):
 - A - Removable in all positions
 - B - Irremovable in right position
 - C - Irremovable in left position
 - D - Removable in center position only (for 3 notch)
 - E - Irremovable in center position (for 3 notch)
 - G - Removable in left only (for 3 notch)
 - H - Removable in right only (for 3 notch)
- 6 - Terminal Configuration
 - E - Screw Terminal
- 7 - NO Contact Arrangement
 - 0 - None
 - 1 - 1 NO Contact
 - 2 - 2 NO Contacts
 - 3 - 3 NO Contacts
- 8 - NC Contact Arrangement (direct opening) ☹
 - 0 - None
 - 1 - 1 NC Contact
 - 2 - 2 NC Contacts
 - 3 - 3 NC Contacts
 - 4 - 4 NC Contacts
 - 5 - 5 NC Contacts
 - 6 - 6 NC Contacts
- 9 - Contact Block Mounting Position
 - None - Standard
 - N# - Arranged (# any digit)



Enclosure to Certificate No. B 09 09 13332 084



Product Service

- 10 - Key Number Code(Key Selector Switch)
 - None - Standard
 - #H - Arranged key number code (# any digit)
- 11 - Additional letters and/or digits denoting customer code may be followed.

6. Pilot Light:

CW	$\frac{1}{2}$	P	-	$\frac{1}{4}$	E	Q2	R	-	$\frac{**}{8}$
1	2	3		4	5	6	7		8

- 1 - Series
CW
- 2 - Flange
 - 1 - Round (Black color)
 - 4 - Round (Metal color)
- 3 - Category
P - Pilot Light
- 4 - Lens Style
 - 1 - Flush
 - 2 - Extended
- 5 - Terminal Configuration
E - Screw Terminal
- 6 - Input Style
 - Q2 - 6V ac/dc direct
 - Q3 - 12V ac/dc direct
 - Q4 - 24V ac/dc direct
 - QH - 100/120V ac direct
 - QM - 200/220V ac direct
 - QM4 - 230/240V ac direct
- 7 - Lens Color Code
One or two letters denoting color
- 8 - Additional letters and/or digits denoting customer code may be followed.

