Gutachten *Technical Report*

mit Fertigungsüberwachung *with Production Inspection*

TÜV Rheinland

Registrier Nr. *Registration No.* **Blatt** *Page*

J 9551803 01

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum** *Date of Issue (day/mo/yr)*
95-306-055	943-MM/yy-E 9561116E01	25.10.1995

Anstragsteller *Applicant*

Idec Izumi Corp.

1-7-31 Nishi-Miyahara
Yodogawa-ku, Osaka 532
Japan

Fertigungsstätte *Manufacturing Plant*

Idec Izumi Corp.
Kyoto Plant
20 Ohari, Kotari
Nagaokakyo-shi, Kyoto 617
Japan

COPY
Q.A.CENTER

Geprüft nach *Tested acc. to*

EN 60947-1:1991+A11 (excluding Sub-clause 7.1.10.1)
EN 60947-5-1:1991 (excluding Sub-clauses 6.3.1 and 6.3.2)

Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

HILFSSTROMSCHALTER (Control switch)

Model	:	TW/TWS series	5
Type designation	:	abcdefghijklmno (see appendix 1)	5
Anticipated field of application	:	For installation through the panel of an enclosure of unspecified size	
Switching units	:	HW-C01, HW-F01, HW-C10, HWF10	
Utilization category	:	AC-15 DC-13	
Operational voltage	:	250V 125V	
Operational current	:	3A 1,1A	
Switching units	:	HW-CO1R, HW-FO1R, HW-C10R, HW-F10R	
Utilization category	:	AC-15 DC-13	
Operational voltage	:	250V 125V	
Operational current	:	3A 0,9A	

10

Product Safety • Quality Assurance
TÜV Rheinland
Approved

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle
Der Stellvertreter

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Dipl. - Ing. K. Heinz

Gutachten *Technical Report*

mit Fertigungsüberwachung *with Production Inspection*

TÜV Rheinland

Registrier Nr. *Registration No.* J 9551803

Blatt *Page* 02

Ihr Zeichen *Client Reference* 95-306-199

Unser Zeichen *Our Reference* 00943-MM/elu- E9561116E01

Ausstellungsdatum *Date of Issue (day/mo/yr)* 11.03.96

Antragsteller *Applicant*
Idec Izumi Corp.
Standards & Records

1-7-31 Nishi-Miyahara
532 Yodogawa-ku, Osaka
Japan

Fertigungsstätte *Manufacturing Plant*
Idec Izumi Taiwan Corp.

No. 87
Swi Kuan Road, Chu Hou Village
Jen Wu Country
Kaohsiung Hsien 814
TAIWAN

Geprüft nach *Tested Acc. to*

EN 60947-1:1991+A11 (excluding Sub-clause 7.1.10.1)
EN 60947-5-1:1991 (excluding Sub-clause 6.3.1)

Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)* **Lizenzentgelte - Einheit** *License Fee - Unit*

Control Switch

Addition

Factory : see above

COPY
Q.A.CENTER

ANLAGE (Appendix): 1

Product Safety • Quality Assurance !!! TÜV Rheinland Approved

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde. Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht. This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle
Der Stellvertreter

Dipl.-Ing. K. Heinz

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Zertifikat *Certificate*

mit überwachter Konformität *of surveyed conformity*

TÜV Rheinland

Zertifikat Nr. *Certificate No.* J 9551803

Blatt *Page* 03

Ihr Zeichen *Client Reference* 98-306-020

Unser Zeichen *Our Reference* 00143-CSH/nta E9561116Z02

Ausstellungsdatum *Date of Issue (day/mo/yr)* 12.03.98

Genehmigungsinhaber *License Holder*
Idec Izumi Corp.

1-7-31 Nishi-Miyahara
Yodogawa-ku, Osaka 532-0009
Japan

Fertigungsstätte *Manufacturing Plant*
Idec Izumi Taiwan Corp.
No. 87
Swi Kuan Road, Chu Hou Village
Jen Wu Country
Kaohsiung Hsien 814
TAIWAN, R.O.C.

TÜV Rheinland

Geprüft nach *Tested Acc. to*

EN 60947-1:1991+A11 excluding Sub-clause 7.1.10.1
EN 60947-5-1:1991 excluding Sub-clauses 6.3.1

Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)* **Lizenzentgelte - Einheit** *License Fee - Unit*

Control Switch

Addition

Switching Units

Type designation	: HW-G01,	HW-G10	2
Utilization Category	: AC-15	DC-13	
Operational Voltage	: 250V	125V	
Operational Current	: 3A	1,1A	
Type designation	: HW-G01R,	HW-G10R	2
Utilization Category	: AC-15	DC-13	
Operational Voltage	: 250V	125V	
Operational Current	: 3A	0,9A	
			4

COPY Q.A.CENTER

ANLAGE (Appendix): 1, 1.1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Dipl.-Ing. M. Borgmann

10/020 7.95Q

Zertifikat *Certificate*

mit überwachter Konformität *of surveyed conformity*

Zertifikat Nr. *Certificate No.*
J 9551803

Blatt *Page*
04

TÜV Rheinland

Ihr Zeichen *Client Reference*
98-306-020

Unser Zeichen *Our Reference*
00143-CSH/nta E9561116Z02

Ausstellungsdatum *Date of Issue (day/mo/yr)*
12.03.98

Genehmigungsinhaber *License Holder*
Idec Izumi Corp.

1-7-31 Nishi-Miyahara
Yodogawa-ku, Osaka 532-0009
Japan

Fertigungsstätte *Manufacturing Plant*
Idec Izumi Taiwan Corp.
No. 87
Swi Kuan Road, Chu Hou Village
Jen Wu Country
Kaohsiung Hsien 814
TAIWAN, R.O.C.

TÜV Rheinland

Geprüft nach *Tested Acc. to*

EN 60947-1:1991+A11 excluding Sub-clause 7.1.10.1
EN 60947-5-1:1991 excluding Sub-clause 6.3.1

Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)* **Lizenzentgelte - Einheit** *License Fee - Unit*

Control Switch

Addition

Direct Adapter

Type designation: HW-GA1 1

Rated Operational Voltge: 30V

1

ANLAGE (Appendix): 1, 1.1

COPY Q.A.CENTER

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Dipl.-Ing. M. Borgmann

10/020 7.95Q

Zertifikat *Certificate*

mit überwachter Konformität *of surveyed conformity*

TÜV Rheinland

Zertifikat Nr. *Certificate No.* J 9551803

Blatt *Page* 05

Ihr Zeichen *Client Reference* 99-306-008

Unser Zeichen *Our Reference* 00143-THI/sot E9561116Z03

Ausstellungsdatum *Date of Issue (day/mo/yr)* 03.03.99

Genehmigungsinhaber *License Holder*
Idec Izumi Corp.

1-7-31 Nishi-Miyahara
Yodogawa-ku, Osaka 532-8550
JAPAN

Fertigungsstätte *Manufacturing Plant*
Idec Izumi Taiwan Corp.
No. 87
Swi Kuan Road, Chu Hou Village
Jen Wu Country
Kaohsiung Hsien 814
TAIWAN, R.O.C.

TÜV Rheinland

Geprüft nach *Tested Acc. to*

EN 60947-1:1991+A11 excluding Sub-clause 7.1.10.1
EN 60947-5-1:1991 excluding Sub-clause 6.3.1

Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)* **Lizenzentgelte - Einheit** *License Fee - Unit*

Control Switch

Additions

Dummy Block

Type Designation : HW-GD

LED Lamp

Type Designations: LSTD-6 (AC/DC 6V, 0,5W) 1
LSTD-1 (AC/DC 12V, 0,5W)
LSTD-2 (AC/DC 24V, 0,5W)

1

ANLAGE (Appendix): 1, 1.1

IDEC IZUMI CORPORATION QUALITY ASSURANCE CENTER COPY

TÜV Rheinland Product Safety GmbH Zertifizierungsstelle TÜV Rheinland

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

Dipl.-Ing. W. Herlitschke

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

TÜV Rheinland
Product Safety GmbH
Am Grauen Stein
D - 51105 Köln

Certificate No. J 9551803
Our reference 0143-CSH/mta E 9561116E01
Appendix No. 1

(To be filled in by TÜV Rheinland)

TÜV Rheinland

Constructional Data Form

Type Designation for pushbutton switches (Operator + Contact block and/or Transformer/Direct adaptor, Lamp)

A	O	L	F	W	1	B	2 3	6	S	1 1	D	N	E	R
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑪	⑫	⑬	⑭	⑮	⑯

① Degree of protection
- A —— IP65
- U —— IP40

② Operator function
- B —— Non-illuminated pushbutton, momentary
- O —— Alternate
- J —— Push turn lock
- K —— Key on/OFF lock *
- T —— Lever/Wobble stick
- Y —— Push-pull
- Z —— Pull
- S B —— Selector pushbutton
- None —— Illuminated, momentary

③ Non-illuminated or illuminated
- None —— Non-illuminated type
- L —— Illuminated type

④ Bezel shape
- None —— Round/Octagonal
- F —— Full shroud
- G —— Mushroom shroud/Half shroud
- H —— Square with round operator
- Q —— Square with square operator

⑤ Series
- W —— TW series, Mounting hole; 22 mm
- WD —— TW series (operator sleeve constructed of die-cast zinc), Mounting hole; 22 mm
- S —— TWS series, Mounting hole; 25 mm

⑥ Operator shape
- 1 —— Flush/Wobble stick
- 2 —— Extended/Key operator
- 3 —— Mushroom
- 4 —— Jumbo mushroom/Lever operator

COPY Q.A.CENTER

To be continued on page 6

Köln, den 20 8.'97. CSH TÜV Rheinland Product Safety GmbH

Osaka, Japan (Place)

25 06 1997 (Date)

IDEC IZUMI CORP. (Stamp and Signature of Applicant)

TÜV Rheinland
Product Safety GmbH
Am Grauen Stein
D - 51105 Köln

Certificate No. J 9551803
Our reference 0143-CSH/mta E 9561116E01
Appendix No. 1

(To be filled in by TÜV Rheinland)

TÜV Rheinland

Constructional Data Form

⑦ Marking type lens

B	——	Marking type lens
None	——	Non-marking type lens

⑧ Primary voltage

1	——	100/110V	
1 1	——	115V	
1 2	——	120V	
2	——	200/220V or Without transformer, 24V (LED lamp)	*
2 3	——	230V	
2 4	——	240V	
3 8	——	380V	
4	——	400/440V	
4 8	——	480V	
6	——	Without transformer, 6V	
8	——	Without transformer, 12V	
3	——	Without transformer, 24V (Incandescent lamp)	*
9	——	Without transformer, without lamp	
None	——	Non-illuminated type	

COPY Q.A.CENTER

⑨ Applicable lamp

6	——	6V LED lamp/6.3V incandescent lamp	
8	——	12V LED lamp/18V incandescent lamp	
2	——	24V LED lamp	*
3	——	30V incandescent lamp	*
9	——	Without lamp	
None	——	Non-illuminated type	

⑩ Applicable transformer

S	——	Type TWS
None	——	Type TW

⑪ Contact configuration (Applicable contact block)

1 0	——	1 × HW-C10 or 1 × HW-F10
0 1	——	1 × HW-C01 or 1 × HW-F01
2 0	——	2 × HW-C10 or 2 × HW-F10
1 1	——	1 × HW-C10 + 1 × HW-C01 or 1 × HW-F10 + 1 × HW-F01
0 2	——	2 × HW-C01 or 2 × HW-F01
3 0	——	3 × HW-C10 or 3 × HW-F10
2 1	——	2 × HW-C10 + 1 × HW-C01 or 2 × HW-F10 + 1 × HW-F01
1 2	——	1 × HW-C10 + 2 × HW-C01 or 1 × HW-F10 + 2 × HW-F01
0 3	——	3 × HW-C01 or 3 × HW-F01
4 0	——	4 × HW-C10 or 4 × HW-F10

To be continued on page 7

Köln, den 20 8.'97. CSH

TÜV Rheinland Product Safety GmbH

Osaka, Japan
(Place)

25 06 1997
(Date)

IDEC IZUMI CORP.
(Stamp and Signature of Applicant)

TÜV Rheinland
Product Safety GmbH
Am Grauen Stein
D - 51105 Köln

Certificate No. J 9551803
Our reference 0143-CSH/mta E 9561116E01
Appendix No. 1

(To be filled in by TÜV Rheinland)

TÜV Rheinland

Constructional Data Form

3 1 —— 3 × HW-C10 + 1 × HW-C01 or 3 × HW-F10 + 1 × HW-F01
2 2 —— 2 × HW-C10 + 2 × HW-C01 or 2 × HW-F10 + 2 × HW-F01
1 3 —— 1 × HW-C10 + 3 × HW-C01 or 1 × HW-F10 + 3 × HW-F01
0 4 —— 4 × HW-C01 or 4 × HW-F01
1 S —— 1 × HW-C10 + 1 × HW-C10R or 1 × HW-F10 + 1 × HW-F10R
2 S —— 1 × HW-C01 + 1 × HW-C01R or 1 × HW-F01 + 1 × HW-F01R
5 S —— 1 × HW-C10 + 1 × HW-C01 + 1 × HW-C10R + 1 × HW-C01R
or 1 × HW-F10 + 1 × HW-F01 + 1 × HW-F10R + 1 × HW-F01R
6 S —— 2 × HW-C10 + 1 × HW-C01 + 1 × HW-C01R
or 2 × HW-F10 + 1 × HW-F01 + 1 × HW-F01R
7 S —— 1 × HW-C10R + 1 × HW-C01R or 1 × HW-F10R + 1 × HW-F01R
8 S —— 2 × HW-C10R + 2 × HW-C01R or 2 × HW-F10R + 2 × HW-F01R
9 S —— 1 × HW-C10 + 2 × HW-C01 + 1 × HW-C10R
or 1 × HW-F10 + 2 × HW-F01 + 1 × HW-F10R

⑫ Applicable lamp
None —— Incandescent lamp
D —— LED lamp

⑬ Series
None —— TW series
N —— TWS series

⑭ Ring material
None —— Aluminium or Plastic
E —— Plastic (Round and Full shroud bezel only)

⑮ Lens color/button color
B —— Black
R —— Red
G may be followed by D —— Green for LED lamp *
G may be followed by L —— Green for incandescent lamp *
Y —— Yellow
A —— Amber
W —— White
S —— Blue

COPY
Q.A.CENTER

To be continued on page 8

Köln, den 20 8.'97. CSH
TÜV Rheinland Product Safety GmbH

Osaka, Japan
(Place)

25 06 1997
(Date)

IDEC IZUMI CORP.
(Stamp and Signature of Applicant)

Type Designation for selector switches (Operator + Contact block and/or Transformer/Direct adaptor, Lamp)

A	S	L	H	W	2	1	L	2 3	6	1 1	N	E	R
①	②	③	④	⑤	⑥	⑦	⑧	⑩	⑪	⑫	⑬	⑭	⑮

① Degree of protection
- A ——— IP65
- U ——— IP40

② Operator function
- S ——— Selector

③ Non-illuminated or illuminated
- None ——— Non-illuminated type
- L ——— Illuminated type

④ Bezel shape
- None ——— Round/Octagonal
- H ——— Square with round operator
- Q ——— Square with square operator

⑤ Series
- W ——— TW series, Mounting hole; 22mm
- WD ——— TW series (operator sleeve constructed of die-cast zinc), Mounting hole; 22mm
- S ——— TWS series, Mounting hole; 25mm

⑥ Position code for selector switches
- 2 ——— 2 positions
- 3 ——— 3 positions
- 4 ——— 4 positions
- 5 ——— 5 positions

⑦ Function code for selector switches
- None ——— Maintained
- 1 ——— spring return from right
- 2 ——— spring return from left
- 3 ——— 2-way spring return

COPY
Q.A.CENTER

To be continued on page 9

⑧ Operator shape

- None — Knob handle
- L — Lever handle
- M — Round handle
- K — Key handle

⑩ Primary voltage

- 1 — 100/110V
- 1 1 — 115V
- 1 2 — 120V
- 2 — 200/220V
- 2 3 — 230V
- 2 4 — 240V
- 3 8 — 380V
- 4 — 400/440V
- 4 8 — 480V

-- TW TRANSFORMER ONLY

- 6 — Without transformer, 6V
- 8 — Without transformer, 12V
- 3 — Without transformer, 24V
- 9 — Without transformer, without lamp
- None — Non-illuminated type

⑪ Applicable lamp

- 6 — 6V LED lamp / 6.3V incandescent lamp
- 8 — 12V LED lamp / 18V incandescent lamp
- 3 — 24V LED lamp / 30V incandescent lamp
- 9 — without lamp
- None — Non-illuminated type

⑫ Contact configuration (Applicable contact block)

- 1 0 — 1 ×HW-C10 or 1 ×HW-F10
- 0 1 — 1 ×HW-C01 or 1 ×HW-F01
- 2 0 — 2 ×HW-C10 or 2 ×HW-F10
- 1 1 — 1 ×HW-C10 + 1 ×HW-C01 or 1 ×HW-F10 + 1 ×HW-F01
- 0 2 — 2 ×HW-C01 or 2 ×HW-F01
- 3 0 — 3 ×HW-C10 or 3 ×HW-F10
- 2 1 — 2 ×HW-C10 + 1 ×HW-C01 or 2 ×HW-F10 + 1 ×HW-F01
- 1 2 — 1 ×HW-C10 + 2 ×HW-C01 or 1 ×HW-F10 + 2 ×HW-F01
- 0 3 — 3 ×HW-C01 or 3 ×HW-F01
- 4 0 — 4 ×HW-C10 or 4 ×HW-F10
- 3 1 — 3 ×HW-C10 + 1 ×HW-C01 or 3 ×HW-F10 + 1 ×HW-F01

COPY
Q.A.CENTER

To be continued on page 10

2 2 — 2 ×HW-C10 + 2 ×HW-C01 or 2 ×HW-F10 + 2 ×HW-F01
1 3 — 1 ×HW-C10 + 3 ×HW-C01 or 1 ×HW-F10 + 3 × HW-F01
0 4 — 4 ×HW-C01 or 4 ×HW-F01
1 S — 1 ×HW-C10 + 1 ×HW-C10R or 1 ×HW-F10 + 1 ×HW-F10R
2 S — 1 ×HW-C01 + 1 ×HW-C01R or 1 ×HW-F01 + 1 ×HW-F01R
5 S — 1 ×HW-C10 + 1 ×HW-C01 + 1 ×HW-C10R + 1 ×HW-C01R
or 1 ×HW-F10 + 1 ×HW-F01 + 1 ×HW-F10R + 1 ×HW-F01R
6 S — 2 ×HW-C10 + 1 ×HW-C01 + 1 ×HW-C01R
or 2 ×HW-F10 + 1 ×HW-F01 + 1 ×HW-F01R
7 S — 1 ×HW-C10R + 1 ×HW-C01R or 1 ×HW-F10R + 1 ×HW-F01R
8 S — 2 × HW-C10R + 2 ×HW-C01R or 2 ×HW-F10R + 2 ×HW-F01R
9 S — 1 ×HW-C10 + 2 ×HW-C01 + 1 ×HW-C10R
or 1 ×HW-F10 + 2 ×HW-F01 + 1 ×HW-F10R

⑬ Series
None — TW series
N —— TWS series

⑭ Ring material
None — Aluminium
E —— Plastic (Round bezel only)

⑮ Handle color
R —————— Red
G —————— Green
Y —————— Yellow
A —————— Amber
W —————— White
S —————— Blue
None —————— Black handle with white cap

COPY
Q.A.CENTER

To be continued on page 11

Constructional Data Form

Type designation for pushbutton switches (Operator + Contact block and /or Transformer/Direct adapter, Lamp)

A	O	L	F	W	1	B	23	6	S	11	D	N	E	R
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮

① Degree of protection
- A ---------- IP65
- U ---------- IP40

② Operator function
- B ---------- Non-illuminated pushbutton, momentary
- O ---------- Alternate
- J ---------- Push turn lock
- K ---------- Key ON/Off lock
- T ---------- Lever/Wobble stick
- Y ---------- Push-pull
- Z ---------- Pull
- S B --------- Selector pushbutton
- None -------- Illuminated, momentary

COPY
Q.A.CENTER

③ Non-illuminated or illuminated
- None -------- Non-illuminated type
- L ---------- Illuminated type

④ Bezel shape
- None -------- Round/Octagonal
- F ---------- Full shroud
- G ---------- Mushroom shrould/half shroud
- H ---------- Square with round operator
- Q ---------- Square with square operator

⑤ Series
- W ---------- TW series, Mounting hole: 22mm
- WD --------- TW series (operator sleeve construction of die-cast zinc), Mounting hole: 22mm
- S ---------- TWS series, Mounting hole: 25mm

⑥ Operator shape
- 1 ----------Flush/wobble stick
- 2 ----------Extended/Key operator
- 3 ----------Mushroom
- 4 ----------Jumbo mushroom/Lever operator

Köln, den 12 3. 98
CSH
TÜV Rheinland
Product Safety GmbH

Osaka
(Place)

29.01.1998
(Date)

Yoshida
(Stamp and Signature of Applicant)

Constructional Data Form

⑦ Marking type lens
- B - - - - - - - -Marking type lens
- None - - - - -Non-marking type lens

⑧ Primary voltage
- 1 - - - - - - - 100/110V
- 1 1 - - - - - - 115V
- 1 2 - - - - - - 120V
- 2 - - - - - - 200/220Vor without transformer
- 2 3 - - - - - - 230V
- 2 4 - - - - - - 240V
- 3 8 - - - - - - 380V - - - - - -HW-L only
- 4 - - - - - - 400/440V- - - - - -HW-L only
- 4 8 - - - - - - 480V - - - - - -HW-L only
- 6 - - - - - - Without transformer, 6V
- 1 - - - - - - Without transformer, 12V for LED lamp
- 8 - - - - - - Without transformer, 12V for incandescent lamp
- 2 - - - - - - Without transformer, 24V for LED lamp
- 3 - - - - - - Without transformer, 24V for incandescent lamp
- 9 - - - - - - Without transformer, without lamp

COPY
Q.A.CENTER

⑨ Applicable lamp
- 6 - - - - - - -6V LED lamp / 6.3V incandescent lamp
- 1 - - - - - - -12V LED lamp
- 2 - - - - - - -24V LED lamp
- 2T - - - - - - -28V LED lamp
- 8 - - - - - - -18V incandescent lamp
- 3 - - - - - - -30V incandescent lamp
- 9 - - - - - - -Without lamp

⑩ Applicable transformer
- None - - - - - Type HW-L or HW-T

⑪ Contact configuration (Applicable contact block)
- 1 0 - - - - - - 1 x HW-G10
- 0 1 - - - - - - 1 x HW-G01
- 2 0 - - - - - - 2 x HW-G10
- 1 1 - - - - - - 1 x HW-G10 + 1 x HW-G01
- 0 2 - - - - - - 2 x HW-G01
- 3 0 - - - - - - 3 x HW-G10
- 2 1 - - - - - - 2 x HW-G10 + 1 x HW-G01
- 1 2 - - - - - - 1 x HW-G10 +2 x HW-G01
- 0 3 - - - - - - 3 x HW-G01
- 4 0 - - - - - - 4 x HW-G10

Köln, den 12.3.'98 CSH
TÜV Rheinland
Product Safety GmbH

Osaka
(Place)

29.01.1998
(Date)

(Stamp and Signature of Applicant)

3 1 ------3 x HW-G10 + 1 x HW-G01
2 2 ------2 x HW-G10 + 2 x HW-G01
1 3 ------1 x HW-G10 + 3 x HW-G01
0 4 ------4 x HW-G01
1 S------ 1 x HW-G10 + 1 x HW-G10R
2 S/3S/4S - -manufacturer's control no., any contact blocks (max. 4 pcs.) are stacked.
5 S------ 1 x HW-G10 + 1 x HW-G01 + 1 x HW-G10R + 1 x HW-G01R
6 S------ 2 x HW-G10 + 1 x HW-G01 + 1 x HW-G01R
7 S------ 1 x HW-G10R + 1 x HW-G01R
8 S------ 2 x HW-G10R + 2 x HW-G01R
9 S------ 1 x HW-G10 + 2 x HW-G01 + 1 x HW-G10R
2 R------ 1 x HW-G10R + 1 x HW-G01R
4 R------ 2 x HW-G10R + 2 x HW-G01R

⑫ Applicable lamp
None ----- Incandescent lamp
D ------- LED lamp

COPY
Q.A.CENTER

⑬ Series
None ----- TW series
N ------- TWS series

⑭ Ring material
None ------Aluminum
E ------- Plastic (Round and Full shroud bezel only)

⑮ Lens color/button color
B --------Black
R -------- Red
G may be followed by D ----- Green for LED lamp
G may be followed by L ----- Green for incandescent lamp
Y -------- Yellow
A -------- Amber
W -------- White
S -------- Blue

Köln, den 12.3.'98 CSH
TÜV Rheinland Product Safety GmbH

Osaka
(Place)

29.01.1998
(Date)

(Stamp and Signature of Applicant)

Constructional Data Form

Type Designation for selector switches (Operator + Contact block and/or Transformer/Direct adapter, Lamp)

A	S	L	H	W	2	1	L	23	6	11	N	E	R
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭

① Degree of protection
A - - - - - - -IP 65
U - - - - - - -IP 40

② Operator function
S - - - - - - -Selector

③ Non-illuminated or illuminated
None - - - -Non-illuminated type
L - - - - - - - Illuminated type

④ Bezel shape
None - - - - Round/Octagonal
H - - - - - - - Square with round operator
Q - - - - - - - Square with square operator

⑤ Series
W - - - - - - TW series, Mounting hole: 22mm
WD - - - - -TW series (operator sleeve construction of die-cast zinc), mounting hole: 22mm
S - - - - - - -TWS series, Mounting hole: 25mm

⑥ Position code for selector switches
2 - - - - - - -2 position
3 - - - - - - -3 position
4 - - - - - - -4 position
5 - - - - - - -5 position

⑦ Function code for selector switches
None - - - Maintained
1 - - - - - - Spring return from right
2 - - - - - - Spring return from left
3 - - - - - - 2 -way spring return

COPY
Q.A.CENTER

Köln, den 12 3.'98 CSH

TÜV Rheinland
Product Safety GmbH

Osaka
(Place)

29.01.1998
(Date)

(Stamp and Signature of Applicant)

Constructional Data Form

⑧ Operator shape

None --------Knob handle
L ---------- Lever handle
M ---------- Round handle
K ---------- key handle

⑨ Primary voltage

1 ---------- 100/110V
1 1 ---------- 115V
1 2 ---------- 120V
2 ---------- 200/220V or without transformer, 24V for LED lamp
2 3 ---------- 230V
2 4 ---------- 240V
3 8 ---------- 380V ----- HW-L only
4 ---------- 400/440V ----- HW-L only
4 8 ---------- 480V ----- HW-L only
6 ---------- Without transformer, 6V
1 ---------- Without transformer, 12V for LED lamp
8 ---------- Without transformer, 12V for incandescent lamp
2 ---------- Without transformer, 24V for LED lamp
3 ---------- Without transformer, 24V for incandescent lamp
9 ---------- Without transformer, without lamp

COPY
Q.A.CENTER

⑩ Applicable lamp

6 ---------- 6V LED lamp / 6.3V incandescent lamp
1 ---------- 12V LED lamp
2 ---------- 24V LED lamp
2T ----------28V LED lamp
8 ----------18V incandescent lamp
3 ----------30V incandescent lamp
9 ---------- Without lamp

⑪ Contact configuration (Applicable contact block)

1 0 ---------- 1 x HW-G10
0 1 ---------- 1 x HW-G01
2 0 ---------- 2 x HW-G10
1 1 ---------- 1 x HW-G10 + 1 x HW-G01
0 2 ---------- 2 x HW-G01
3 0 ---------- 3 x HW-G10
2 1 ---------- 2 x HW-G10 + 1 x HW-G01
1 2 ---------- 1 x HW-G10 + 2 x HW-G01
0 3 ---------- 3 x HW-G01
4 0 ---------- 4 x HW-G10
3 1 ----------3 x HW-G10 + 1 x HW-G01

Köln, den 12 3.'98 CSH
TÜV Rheinland Product Safety GmbH

Osaka
(Place)

29.01.1998
(Date)

Yoshida
(Stamp and Signature of Applicant)

Constructional Data Form

2 2 ------2 x HW-G10 + 2 x HW-G01
1 3 ------1 x HW-G10 + 3 x HW-G01
0 4 ------4 x HW-G01
1 S ------ 1 x HW-G10 + 1 x HW-G10R
2 S/3S/4S - -manufacturer's control no., any contact blocks (max. 4 pcs.) are stacked.
5 S ------ 1 x HW-G10 + 1 x HW-G01 + 1 x HW-G10R + 1 x HW-G01R
6 S ------ 2 x HW-G10 + 1 x HW-G01 + 1 x HW-G01R
7 S ------ 1 x HW-G10R + 1 x HW-G01R
8 S ------ 2 x HW-G10R + 2 x HW-G01R
9 S ------ 1 x HW-G10 + 2 x HW-G01 + 1 x HW-G10R
2 R ------ 1 x HW-G10R + 1 x HW-G01R
4 R ------ 2 x HW-G10R + 2 x HW-G01R

⑫ Series
None ----- TW series
N ------- TWS series

⑬ Ring material
None ------Aluminum
E ------- Plastic (Round bezel only)

⑭ Handle color
R --------Red
G --------Green
Y -------- Yellow
A -------- Amber
W ------- White
S -------- Blue
None ----- Black handle with white cap

COPY
Q.A.CENTER

Final page

Köln, den 12 3. '98
CSH
TÜV Rheinland
Product Safety GmbH

Osaka
(Place)

29.01.1998
(Date)

(Stamp and Signature of Applicant)