

CERTIFICATE

KEMA no.: 97.4789.02

Issued to:
Applicant:

Santon Holland B.V.
Willingestraat 2
ROTTERDAM, The Netherlands

Manufacturer/Licensee:

Santon Holland B.V.
Willingestraat 2
ROTTERDAM, The Netherlands

Product : main switches and disconnectors

Trade names : SANTON, SAHO
Types/models : BC1H..., RP1H.

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

KEMA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard EN 60947-3:1992
- an inspection of the production location according to CCA Group Operational Document CCA 204
- a certification agreement with the number 901095.

KEMA hereby grants the right to use the KEMA certification mark



The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on: April 17, 1998

A handwritten signature in black ink, appearing to read "C.M. Boschloo".

C.M. Boschloo
Certification Manager

© Integral publication of this certificate is allowed

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ACCREDITED BY
THE DUTCH COUNCIL
FOR ACCREDITATION

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data	
product	: main switches and disconnectors
trade names	: SANTON, SAHO
types	: BC1H.., RP1H..
rated insulation voltage	: 440 V~ (pollution degree 3 - 2)
rated thermal current	: 25 A enclosed
ratings/utilization category (Ue-Ie)	: $\frac{DC-23 A}{25 A (5 kW)}$ $\frac{AC-23 A}{25 A (14 kW)}$
rated frequency	: 50-60 Hz
rated short-time withstand current (Icw)	: 0,75 kA - 1,0 s
rated short-circuit making capacity (Icm)	: 1,4 kA peak
rated impulse withstand voltage	: 6 kV
method of operation	: independent manual operation
switching positions	: 4 (2 times on and off)
number of poles	: 1-4 poles
operational performance	: category A
without current	: 8500 operating cycles
with current	: 1500 operating cycles
mechanical durability	: 20 000 operating cycles
connection	: 0,2 mm ² - 4 mm ² flexible or rigid
number of conductors simultaneously	:
connectable to the terminal	: 2
enclosure	: insulation material, type 1K7 inside dimensions
degree of protection	: 88 * 88 * 91 mm enclosure IP 55 - 67

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Additional information

Type reference of type BC1H.. and RP1H..: see NTR-NL 3696 page 1.

Markings:

Trade name, type designation and the complete electrical ratings are shown on the body.

TESTS**Test requirements**
EN 60947-3;1992.**Test results**

The test results are laid down in NTR-NL 3696 and TRF no. 97.4789.52.

Remarks

This certificate replaces certificate 92.5274.04

Conclusion

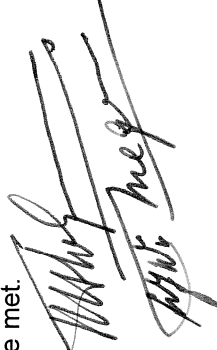
The examination proved that all test requirements were met.

Tested by

: M.T.H. van Gemen

Checked by

: L.J.W. van Megen

**FACTORY-LOCATION**

Santon Holland B.V.
Willingestraat 2, Rotterdam, The Netherlands

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Type coding system for packet switches

The type code starts with a combination of the following symbols:

S	=	semi independent manual operation for AC current. If the "S" fails then the switch has independent manual operation for both AC and DC current.
BC	=	bottom mounting.
RP	=	panel mounting.
A	=	replaces the above mentioned C or P for switches with "FASTON" terminals.
C	=	both bottom and panel mounting (for switches with $I_{the} > 40 A$).

The code continues with one of the following symbols for the I_{the} :

1	=	16 A
1H	=	25 A
3	=	40 A
6H	=	63 A
10H	=	100 A
20H	=	250 A

Then the number of poles:

1	=	1 pole
2	=	2 poles
3	=	3 poles
4	=	4 poles

Then the number of isolation discs:

2	=	the switch contains 2 isolation discs
3	=	the switch contains 3 isolation discs
4	=	the switch contains 4 isolation discs, and so on.

Then symbols for the diagram.

If there is more than one symbol, they are separated by "/":

A	=	the on - off switch, four positions, O-1-O-1 (no symbol)
	=	changeover switch, without zero position 1-2-1-2, may not be used for switching supplies!
B	=	changeover switch, with zero position O-1-O-2
C	=	stepswitch, with zero position O-1-2-3
D	=	stepswitch, without zero position 1-2-3-4
E	=	group switch O-1-(1 + 2)-(1 + 2 + 3)
GB	=	group switch O-1-(1 + 2)-2
J	=	group switch O-(A par. with B)-B-(A in series with B)
TA	=	blocked, switch has 3 positions
TB	=	blocked, switch has 2 positions
TC	=	blocked, switch has 4 positions

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In case of a combination with an accessory the code continues after a "/". with 4 characters. With such a unique 4 digit code the whole switch is determined (not the enclosure) and other parts of the code in front of the 4 digit code may be left out.

Then symbols for a glass fiber reinforced Citadel enclosure (outside dimensions) may follow:

OK	=	82 x 80 x 75,5 mm
1K	=	100 x 100 x 132 mm
2K	=	100 x 100 x 160 mm
5K	=	160 x 160 x 148 mm
6K	=	160 x 160 x 110 mm
7K	=	160 x 160 x 188 mm
8K	=	210 x 210 x 188 mm
9K	=	400 x 400 x 320 mm

Then the IP rating:

5	=	IP55
6	=	IP66
7	=	IP67

Finally symbols for knobs and padlocking:

=	(no symbol) standard black knob, no padlocking.
K	yellow plastic padlocking plate with red knob.
G	grey plastic padlocking plate with grey knob.
R	stainless steel padlocking plate, with black standard knob, lockable in horizontal and vertical position.
R1	stainless steel padlocking plate, with black standard knob, lockable in vertical position.
R2	stainless steel padlocking plate, with black standard knob, lockable in vertical position.

Example 1:

SBC1H35/01PA 1K6 = packet switch with semi independent manual operation, bottom mounting, lth = 25 A, 3 poles, 5 isolation discs, in 1K Citadel enclosure with standard knob and IP66 protection.

Example 2:

01PA 1K6 = the same switch as example 1.

Example 3:

01PA = the same switch as example 1, suitable to build in the 1K enclosure but supplied without enclosure.

C20H42C/TA = packet switch with independent manual operation, bottom and panel mounting, lth = 250 A, 4 poles, 21 discs, stepswitch with zero position and blocked to 3 positions 0-1-2.

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