CERTIFICATE

Issued to:
Applicant:
Santon International B.V.
Hekendorpstraat 69
3079 DX Rotterdam, The Netherlands

Manufacturer/Licensee:
Santon International B.V.
Hekendorpstraat 69
3079 DX Rotterdam, The Netherlands

Product(s) : rotary switch-disconnector
Trade name(s) : SANTON
Type(s)/model(s) : X100.40D4-(B)-69.60.4-.....
The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:
- a type test according to the standard EN 60947-3:2009;
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 901095

DEKRA hereby grants the right to use the KEMA-KEUR 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: 13 July 2012 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 2151827.02

DEKRA Certification B.V.

drs. G.J. Zoetbrood
Managing Director

C.A. Valencia
Certification Manager

All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group.

ACCREDITED BY
THE DUTCH COUNCIL
FOR ACCREDITATION

PRODUCTS
RvA C 001

KEMA KEUR

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

product	:	rotary switch-disconnector
trade name(s)	:	SANTON
type(s)	:	X100.40D4-(B)-69.60.4-…..
rated insulation voltage (Ui)	:	1000 V ac
conventional free air thermal current (Ith)	:	32 A and 60 A
ratings/utilization category (Ue-Ie)	:	AC-22B 690 V 32 A 690 V 60 A DC-21B 1000 V 40 A
rated short-time withstand current (Icw)	:	720 A - 1 s
rated short-circuit making capacity (Icm)	:	1015 A peak
rated impulse withstand voltage (Uimp)	:	8 kV
operational performance	:	category B
without current	:	1700 operating cycles
with current	:	300 operating cycles
connection capacity	:	6 mm² -10 mm² flexible
method of operation	:	independent operation, rotary,
number of position of contacts	:	4 positions (0°, 90°, 180°, 360°)
number of poles	:	maximum 13 poles, and 16 contact layers
type of contact composition	:	contact composition AC ratings - 32 A one contact in each pole. - 60 A two contacts parallel in each pole. DC rating 2 contacts in the +(plus) pole and 1 in the - (min) pole.
degree of potection	:	IP20 or IP66 when mounted in an enclosure of ≥ IP66 with gland of the shaft for panel mounting
For use in ambient temperatures	:	-40 °C to 70 °C

Additionally technical data:

Nomenclature breakdown

Example (a more complicated combination): **X100.40DL2C2H-B35E-69.60.4-XZZZZ**

Example	Description	Options (explanations on the next pages)
X	X-type	X
100	Rated operational DC Voltage divided by ten [V]	100
.	Separator	.
40	Rated operational DC Current [A]	40
D	Mounting possibility, (D= Double mounting)	B, D, P, R
L	Long gland panel mounting, the thickness of the panel is between 3 and 6,5mm	L, or nothing
2	The number of DC poles	2, 4, 6, 8
C	Auxiliary contact(s)	C, O, R, S, W or nothing
2	The number of auxiliary contacts	1, 2, 3, 4 or nothing
H	Positions and blockings	E, F, G, H, J, K, L, M, N, T, U, or nothing
-	Separator	-
B	Knob type	A, B, C, D, O, P, Q, R, S. For switches to be supplied without a knob it is needed to specify the shaft. This is done by mentioning the knob type between brackets, for instance (A) means: shaft suitable for knob type A.
35	Shaft length from top plate to top shaft in mm.	Any length in mm up to 99 mm. The standard length is 19 mm, does not have to be mentioned. The maximum shaft length is limited also by the number of contacts
H	Position indication plate	E,F,G,H,J,K,L,M,N,T,U,V,W, X, Y, Z, or nothing
-	Separator	-
69	Rated operational AC voltage divided by ten	69 or nothing
.	Separator	.
60	Rated operational AC nominal current	60 or 32, or nothing
.	Separator	.
4	The number of AC poles	4, or nothing (3 phase and neutral. The neutral has a 32Amp. rating)
-	Separator	-
XZZZZ	Sequential number for customer specific assemblies	Any text or number up to maximum 5 digits or nothing. (XS..... is reserved for Short switches with cut off terminals in the bottom level)

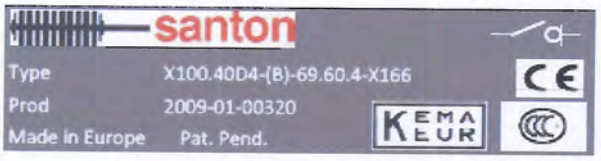
As soon as the code includes more than 16 digits, before the last hyphen, the type number becomes the type description and the Sequential number is the type code. In this case the type code for ordering the

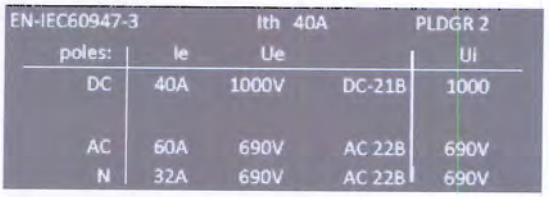
switch therefore will be: **XZZZZ**

And the description: **X100.40DL2C2H-B35H-69.60.4-XZZZZ**

Example of marking plate

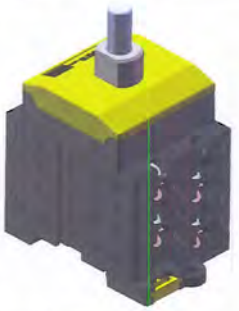
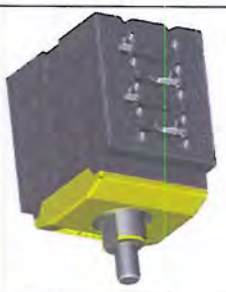
Labels for IEC and CCC certified switches with mounting types B, P and D





Mounting possibilities

There are seven different mounting possibilities:

Code	Description	Picture
B	Bottom mounting and DIN rail mounting	
D	Double mounting, Bottom and Panel side	
P	Panel mounting	
R	Reverse panel mounting. The screws in the terminals are accessible from the bottom side.	

Auxiliary contacts

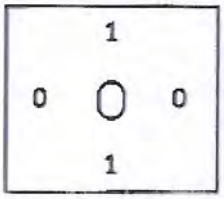
There are 8 different auxiliary contacts possible:

Code	Description with main contacts	Terminal marking
C	normally open	13 – 14
O	normally closed	11 – 12
R	both normally open and closed in one chamber	13 – 14, 11 - 12
S	normally closed and normally open	11 – 12, 13 - 14
W	2 normally open and 1 normally closed	13 – 14, 23 – 24, 11 - 12

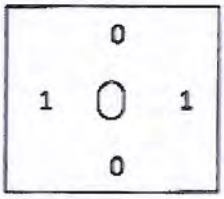
Switch positions and blockings

Standard ON-OFF

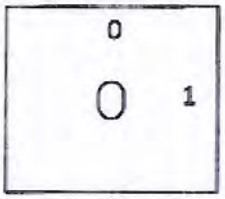
No code



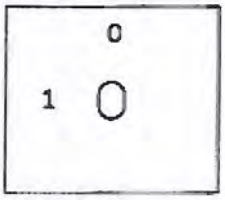
Type U



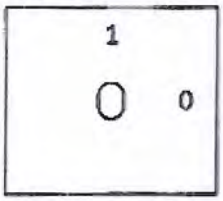
Type E



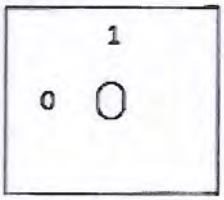
Type F



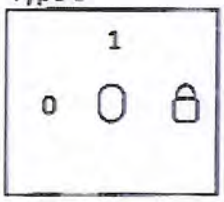
Type G



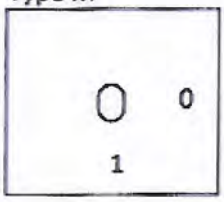
Type H



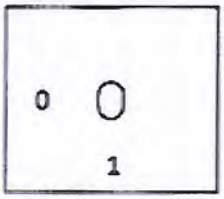
Type L



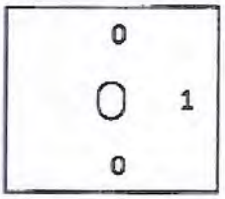
Type M



Type N



Type T



Knob types

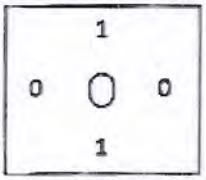
A = standard black knob
B = pad lockable knob grey/grey
C = pad lockable knob black/grey
D = standard black, with thread through the shaft
O = pad lockable knob, for single hole mounting
P = motor driven switch without a knob
Q = motor driven switch with black knob
R = pad lockable knob in red
S = special lockable knob in black

Shaft lengths available for the B mounting types

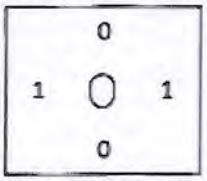
Length measured from the top plate
19mm, 35mm, 56mm, 67mm, any other length in custom made special

Position indication plates

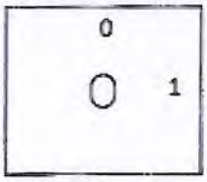
Type Z (21A1109.00)



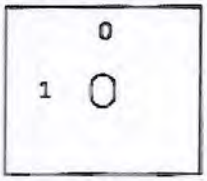
Type U (21A1110.00)



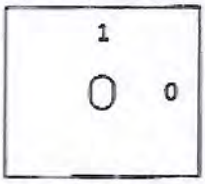
Type E (21A1111.00)



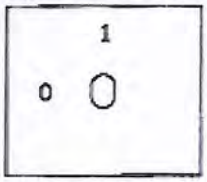
Type F (21A1112.00)



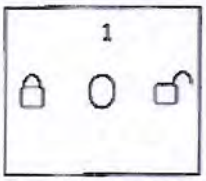
Type G (21A1113.00)



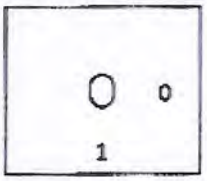
Type H (21A1114.00)



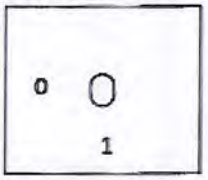
Type L (21A1117.00)



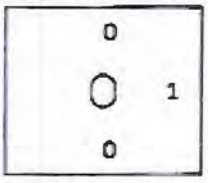
Type M (21A1118.00)



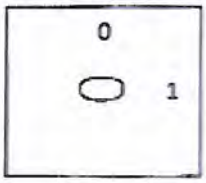
Type N (21A1119.00)



Type T (21A1120.00)



Type V (21A1121.00)



TESTS

Test requirements
EN 60947-3:2009

Test result
The test results are laid down in DEKRA test file 2151827.02 and this certificate replaces certificate 2151827.02 (dated 19 June 2012).

Conclusion
The examination proved that all test requirements were met.

Tested by : M.T. H. van Gemen

Checked by : H.L. Schendstok

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