



SMART POWER

## Product environmental information

Plastic enclosed and safety switches,  
BA\_, BAS\_, BW\_ and BWS\_

### Product Conformity & Compliance

#### REACH and SVHC (Regulation EC 1907/2006)

With reference to the Regulation (EC) No. 1907/2006 issued by the European Union for the Registration, Authorization and Restriction of Chemicals (REACH), please be aware that:

- During normal and reasonably foreseeable conditions use, BA\_/BAS\_/BW\_/BWS\_ enclosed and safety switches manufactured by ABB Oy, Smart Power do not internationally release any substance or preparation;
- ABB Oy, Smart Power continuously assessment

BA\_/BAS\_/BW\_/BWS\_ enclosed and safety switches were classified as Articles and during normal reasonably foreseeable conditions of use, do not internationally release any substance or preparation.

ABB Oy, Smart Power continuously undertake communication throughout its supply chain in order to collect information about suppliers' compliance with REACH regulation.

**RoHS and RoHS II**

Based on the information provided by our suppliers, and to the best of our knowledge, ABB Oy Smart Power designates that the BA\_/BAS\_/BW\_/BWS\_ enclosed and safety switches are RoHS Compliant and conform to Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) amended by the EU Directive 2015/863.

**SVHC (Regulation EC 1907/2006 REACH)**

ABB Oy, Smart Power continuously assesses its products for content of Substances of Very High Concern (SVHC), as included in the "Candidate List" by the European Chemicals Agency (ECHA). According to our best knowledge, BA\_/BAS\_/BW\_/BWS\_ do not contain SVHC substances exceeding 0.1% w/w.

**WEEE**

BA\_/BAS\_/BW\_/BWS\_ are compliant and in the scope Waste of Electrical and Electronics equipment (WEEE) Directive 2012/19/EU.

**Product Safety**

The product has been tested according to standards:

IEC/EN60947-1

IEC/EN60947-3

IEC/EN60529

Directives:

"Low Voltage Directive" (LDV) 2014/35/EC

"Electromagnetic Compatibility Directive" (EMC) 2014/30/EC

Material declaration

The charts below the constituents of BA\_/BAS\_/BW\_/BWS\_ enclosed and safety switches. The constituent materials are distributed as follows.

The total weight of the products is the follows:

BA\_/BAS\_/BW\_/BWS\_16: 290g (2 pole), 310 g (3 pole), 320 g (4 pole), 540 g (6 pole)

BA\_/BAS\_/BW\_/BWS\_25: 290g (2 pole), 410 g (3 pole), 420 g (4 pole), 540 g (6 pole)

Material declaration

Material	BW_316, 3 pole Weight (g)	BW_316, 3 pole Weight (%)
PC	185,9	60,6
PA	66,8	21,8
PE	6,3	2,0
Fe	11,8	3,9
Zn	8,4	2,7
St Fe	12,5	4,1
Cu	14,0	4,6
Ag	0,9	0,3
Ni	0,1	0,04
NBR	0,01	0,003

Material	BA316, 3 pole Weight (g)	BA316, 3 pole Weight (%)
PC	185,9	58,3
PA	66,8	21,0
PE	7,8	2,5
Fe	13,8	4,3
Zn	11,2	3,5
St Fe	13,2	4,1
Cu	18,7	5,9
Ag	1,2	0,4
Ni	0,2	0,05
NBR	0,01	0,003

Material	BAS316, 3 pole Weight (g)	BAS316, 3 pole Weight (%)
PC	185,9	60,3
PA	66,8	21,7
PE	6,3	2,5
Fe	11,8	3,9
Zn	8,4	2,7
St Fe	12,5	4,1
Cu	14,0	4,5
Ag	0,9	0,3
Ni	0,1	0,04
NBR	0,01	0,003

CAS numbers

Polyamide PA	25038-54-4
Polycarbonate PC	25766-59-0
Stainless Steel St Fe	12597-68-1
Steel Fe	12597-69-2
Zinc Zn	7440-66-6
Copper Cu	7440-50-8
Silver Ag	7440-22-4
Nickel Ni	7440-02-0
Rubber NBR	9003-18-3
Polyethylene PE	9002-88-4

Packaging

The total weight for BWS 3 pole enclosed switch model packing material is about 20 g. The cardboard are used in the packaging materials, which are recyclable.

Cardbox: 100 %



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**> Low Voltage Products and Systems**