

# ABB i-bus® KNX

## Outputs – Professional Switch Actuators

1) = The number of ballasts is limited by the protection with B16/B20 circuit-breakers.

2) = For multiple element lamps or other types, the number of electronic ballasts must be determined using the peak inrush-current of the electronic ballasts.

3) = The maximum peak inrush-current may not be exceeded.

4) = Not intended for AC3 operation, see Technical Data for maximum AC3 current.

The following table provides an overview of the rated values, switching performance, lamp loads or the number of lamps, which can be connected to a contact:

	SA/S 2.16.5.2	SA/S 2.16.6.2
	SA/S 4.16.5.2	SA/S 4.16.6.2
	SA/S 8.16.5.2	SA/S 8.16.6.2
	SA/S 12.16.5.2	SA/S 12.16.6.2
<b>Range</b>	Professional	Professional with Energy Function
<b>I<sub>n</sub> rated current (A)<sup>3)</sup></b>	16/20 A C-Load	16/20 A C-Load
<b>U<sub>n</sub> rated voltage (V)</b>	230 V AC	230 V AC
<b>AC1 operation (cos φ = 0.8) acc. to EN 60947-4-1</b>	20 A	20 A
<b>AC3 operation (cos φ = 0.45) acc. to EN 60947-4-1</b>	16 A	16 A
<b>C-Load switching capacity (200 μF)</b>	20 A	20 A
<b>Fluorescent lighting load AX acc. to EN 60669-1</b>	20 AX (200 μF) <sup>3)</sup>	20 AX (200 μF) <sup>3)</sup>
<b>Minimum switching capacity</b>	100 mA/12 V	100 mA/12 V
<b>DC current switching capacity (resistive load)</b>	20 A/24 V =	20 A/24 V =
<b>Mechanical service life</b>	> 10 <sup>6</sup>	> 10 <sup>6</sup>
<b>Electronic endurance acc. to IEC 60947-4-1:</b>		
– Rated current AC1 (240 V/cos φ = 0.8)	100,000	100,000
– Rated current AC3 (240 V/cos φ = 0.45)	30,000	30,000
– Rated current AC5a (240 V/cos φ = 0.45)	30,000	30,000
<b>Incandescent lamp load at 230 V AC</b>	3,680 W	3,680 W
<b>Fluorescent lamp T5 / T8:</b>		
– Uncorrected	3,680 W	3,680 W
– Parallel compensated	2,500 W	2,500 W
– DUO circuit	3,680 W	3,680 W
<b>Low-voltage halogen lamps:</b>		
– Inductive transformer	2,000 W	2,000 W
– Electronic transformer	2,500 W	2,500 W
<b>Halogen lamp 230 V</b>	3,680 W	3,680 W
<b>Dulux lamps:</b>		
– Uncorrected	3,680 W	3,680 W
– Parallel compensated	3,000 W	3,000 W
<b>Mercury-vapour lamps:</b>		
– Uncorrected	3,680 W	3,680 W
– Parallel compensated	3,000 W	3,000 W
<b>LED lamps/energy-saving lamps</b>	650 W	650 W
<b>Rated motor power</b>	3,680 W	3,680 W
<b>Max. peak inrush current I<sub>p</sub> (150 μs)</b>	600 A	600 A
<b>Max. peak inrush current I<sub>p</sub> (250 μs)</b>	480 A	480 A
<b>Max. peak inrush current I<sub>p</sub> (600 μs)</b>	300 A	300 A
<b>Number of ballasts (T5/T8, single element):<sup>2)</sup></b>		
<b>18 W (ABB ballasts 1 x 18 SF)</b>	26 <sup>1)</sup> ballasts	26 <sup>1)</sup> ballasts
<b>24 W (ABB ballasts 1 x 24 CY)</b>	26 <sup>1)</sup> ballasts	26 <sup>1)</sup> ballasts
<b>36 W (ABB ballasts 1 x 36 CF)</b>	22 ballasts	22 ballasts
<b>58 W (ABB ballasts 1 x 58 CF)</b>	12 <sup>1)</sup> ballasts	12 <sup>1)</sup> ballasts
<b>80 W (Helvar EL 1 x 80 SC)</b>	12 <sup>1)</sup> ballasts	12 <sup>1)</sup> ballasts

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## Outputs – Professional Switch Actuators

- = Function is supported
- = Function is not supported

The following table provides an overview of the functions possible with the Switch Actuators and their application programs:

	SA/S 2.16.5.2 SA/S 4.16.5.2 SA/S 8.16.5.2 SA/S 12.16.5.2	SA/S 2.16.6.2 SA/S 4.16.6.2 SA/S 8.16.6.2 SA/S 12.16.6.2
<b>Range</b>	Professional	Professional with Energy Function
Type of installation	DIN-Rail	DIN-Rail
Number of outputs	2/4/8/12	2/4/8/12
Module width (space unit)	2/4/8/12	2/4/8/12
Manual operation	■	■
Switching position indication	■	■
I <sub>n</sub> rated current (A)	16/20 A C-Load	16/20 A C-Load
Current measurement	–	■
<b>Switch function</b>		
– Central On/Off	■	■
– Staircase lighting	■	■
– Staircase lighting advance warning	■	■
– Change staircase lighting time via group object	■	■
– Flashing	■	■
– Selection of N.O./N.C. contact	■	■
– Switching on/off delay	■	■
<b>Energy Function</b>	–	■
– Current measurement	–	■
– Power calculation	–	■
– Energy consumption calculation	–	■
– Load monitoring	–	■
<b>Load control integration</b>	■	■
<b>Priority objects/forced operation/blocking</b>	■	■
<b>Function Scene</b>	■	■
<b>Blind/shutter function</b>	–	–
<b>Function Logic (independent of output)</b>		
– Logic AND function	■	■
– Logic OR function	■	■
– Logic exclusive OR function	■	■
– Gate function	■	■
– 1 bit Inverter	■	■
<b>Function Threshold (independent of output)</b>	■	■
<b>Additional functions</b>		
– Request status values	■	■
– Template parameter windows	■	■
– Reaction on bus voltage failure/recovery	■	■
– Advanced status group objects	■	■