

ABB i-bus® KNX

Outputs – Combi 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.

5) = Max. load current per device:
8-fold = 100 A,
16-fold = 160 A,
24-fold = 200 A

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:

	SAH/S 8.6.7.1	SAH/S 8.10.7.1	SAH/S 8.16.7.1
	SAH/S 16.6.7.1	SAH/S 16.10.7.1	SAH/S 16.16.7.1
	SAH/S 24.6.7.1	SAH/S 24.10.7.1	SAH/S 24.16.7.1
Range	Combi	Combi	Combi
I_n rated current (A)³⁾	6 A	10 A ⁵⁾	16 A ⁵⁾
U_n rated voltage (V)	230 V AC	230 V AC	230 V AC
AC1 operation (cos φ = 0.8) acc. to EN 60947-4-1	6 A	10 A	16 A
AC3 operation (cos φ = 0.45) acc. to EN 60947-4-1	6 A	6 A	6 A
C-Load switching capacity (200 μF)	–	–	–
Fluorescent lighting load AX acc. to EN 60669-1	6 AX (140 μF) ¹⁾	10 AX (140 μF) ¹⁾	10 AX (140 μF) ¹⁾
Minimum switching capacity	100 mA/12 V	100 mA/12 V	100 mA/12 V
DC current switching capacity (resistive load)	6 A/24 V =	6 A/24 V =	6 A/24 V =
Mechanical service life	> 10 ⁶	> 10 ⁶	> 10 ⁶
Electronic endurance to IEC 60947-4-1:			
– Rated current AC1 (240 V/cos φ = 0.8)	100,000	100,000	100,000
– Rated current AC3 (240 V/cos φ = 0.45)	6,000	6,000	6,000
Incandescent lamp load at 230 V AC	1,200 W	1,200 W	1,200 W
Fluorescent lamp T5 / T8:			
– Uncorrected	800 W	800 W	800 W
Low-voltage halogen lamps:			
– Inductive transformer	800 W	800 W	800 W
– Electronic transformer	1,000 W	1,000 W	1,000 W
Halogen lamp 230 V	1,000 W	1,000 W	1,000 W
Mercury-vapour lamps:			
– Uncorrected	1,000 W	1,000 W	1,000 W
– Parallel compensated	800 W	800 W	800 W
LED lamps/energy-saving lamps	250 W	250 W	250 W
Rated motor power	1,380 W	1,380 W	1,380 W
Max. peak inrush-current I_p (150 μs)	200 A	200 A	200 A
Max. peak inrush-current I_p (250 μs)	160 A	160 A	160 A
Max. peak inrush-current I_p (600 μs)	100 A	100 A	100 A
Number of ballasts (T5/T8, single element):²⁾			
18 W (ABB ballasts 1 x 18 SF)	10 ballasts	10 ballasts	10 ballasts
24 W (ABB ballasts 1 x 24 CY)	10 ballasts	10 ballasts	10 ballasts
36 W (ABB ballasts 1 x 36 CF)	7 ballasts	7 ballasts	7 ballasts
58 W (ABB ballasts 1 x 58 CF)	5 ballasts	5 ballasts	5 ballasts
80 W (Helvar EL 1 x 80 SC)	3 ballasts	3 ballasts	3 ballasts

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Outputs – Combi 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:

	SAH/S 8.6.7.1 SAH/S 16.6.7.1 SAH/S 24.6.7.1	SAH/S 8.10.7.1 SAH/S 16.10.7.1 SAH/S 24.10.7.1	SAH/S 8.16.7.1 SAH/S 16.16.7.1 SAH/S 24.16.7.1
Range	Combi	Combi	Combi
Type of installation	DIN-Rail	DIN-Rail	DIN-Rail
Number of outputs (Switch [Blind])	8 [4]/16[8]/24 [12]	8 [4]/16[8]/24 [12]	8 [4]/16[8]/24 [12]
Module width (space unit)	4/8/12	4/8/12	4/8/12
Manual operation	■	■	■
Switching position indication	■	■	■
I _n rated current (A)	6 A	10 A	16 A
Current measurement	–	–	–
Switch function			
– 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	■	■	■
Energy Function	–	–	–
Load control integration	–	–	–
Priority objects/forced operation/blocking	■	■	■
Function Scene	■	■	■
Blind/shutter function			
– Central up/down/position/stop	■	■	■
– Blind/shutter control	■	■	■
– Wind/Rain/Frost alarm	■	■	■
– Automatic sun protection	■	■	■
– Parameterizable reversing time	■	■	■
– Reference movement	■	■	■
– Travel range limitation	■	■	■
– Adjustable delay time for drives	■	■	■
Function Logic (independent of output)			
– Logic AND function	■	■	■
– Logic OR function	■	■	■
– Logic exclusive OR function	■	■	■
– Gate function	■	■	■
– 1 bit Inverter	–	–	–
Function Threshold (independent of output)	■	■	■
Additional functions			
– Request status values	■	■	■
– Template parameter windows	■	■	■
– Reaction on bus voltage failure/recovery	■	■	■
– Advanced status group objects	■	■	■