



S12-100-230 V

Manuals and documents in further languages:
https://eltako.com/redirect/S12-100-*200-*110

Technical data page 18-7.

S12-100-/200-/110-

1- and 2-pole 16 A/250 V AC

Modular devices for DIN 60715 TH35 rail mounting with manual control and switch position indicator.
1 module = 18 mm wide, 55 mm deep.
100% time on. Control power demand 5–6 W only. Contacts 1 NO, 2 NO, 1 NO + 1 NC. Contact gap 3 mm.
Spacing of control connections/contact > 6 mm.
Devices for 25 A XS12, page 18-5. Retrofittable auxiliary contact KM12, page 18-3.
The pin-compatible ES12DX-UC, ES12DX/110-240V, ES12-200-UC, ES12-110-UC and ES12-100-230V electronic impulse switches can also be used. Their universal control voltage UC covers the voltage ranges of 12 to 230 V AC at 50-60 Hz and 12 to 230 V DC.

S12-100-12V	1 NO 16 A	**Art. No. 21100011**	
S12-100-230V	1 NO 16 A	**Art. No. 21100030**	
S12-100-8V, 24V, 12V DC, 24V DC	1 NO 16 A	**Art. No. 21100010, 21100020, 21100054, 21100055**	
S12-200-12V	2 NO 16 A	**Art. No. 21200011**	
S12-200-230V	2 NO 16 A	**Art. No. 21200030**	
S12-200-8V, 24V, 12V DC, 24V DC	2 NO 16 A	**Art. No. 21200010, 21200020, 21200054, 21200055**	
S12-110-12V	1 NO + 1 NC 16 A	**Art. No. 21110011**	
S12-110-230V	1 NO + 1 NC 16 A	**Art. No. 21110030**	
S12-110-8V	1 NO + 1 NC 16 A	**Art. No. 21110010**	
S12-110-24V, 12V DC, 24V DC	1 NO + 1 NC 16 A	**Art. No. 21110020, 21110054, 21110055**	

TECHNICAL DATA ELECTROMECHANICAL IMPULSE SWITCHES

Type	S09/S12/SS12	S91/S81	XS12
Contacts			
Contact material/contact gap	$AgSnO_2$/3 mm	$AgSnO_2$/2 mm	$AgSnO_2$/3 mm [1]
Spacing of control connections/contact	> 6 mm	> 6 mm	> 6 mm
Test voltage contact/contact Test voltage control connections/contact	2000 V 4000 V	2000 V 4000 V	2000 V 4000 V
Rated switching capacity	16 A/250 V AC 10 A/400 V AC	10 A/250 V AC 6 A/400 V AC	25 A/250 V AC 16 A/400 V AC
230 V LED lamps	up to 200 W [5]	up to 200 W [5]	up to 200 W [5]
Incandescent lamp and halogen lamp load [2] 230 V	2300 W	2300 W	2300 W
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	2300 VA	2300 VA	3600 VA
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	500 VA	500 VA	1000 VA
Compact fluorescent lamps with EVG* and energy saving lamps ESL	I on ≤ 140 A/10 ms [3]	I on ≤ 70 A/10 ms [3]	I on ≤ 140 A/10 ms [3]
HQL and HQI non compensated	500 W	–	500 W
Max. switching current DC1: 12 V/24 V DC	8 A	8 A	12 A
Life at rated load cos φ = 1 or incandescent lamps 1000 W at 100/h	> 10^5	> 10^5	> 10^5
Life at rated load, cos φ = 0.6 at 100/h	> 4x10^4	> 4x10^4	> 4x10^4
Max. operating cycles	10^3/h	10^3/h	10^3/h
Switch position indication	yes	yes	yes
Manual control	yes	yes	yes
Maximum conductor cross-section	6 mm^2	4 mm^2	6 mm^2
Two conductors of same cross-section	2.5 mm^2	1.5 mm^2	2.5 mm^2
Screw head	slotted/crosshead, pozidriv	slotted/crosshead, pozidriv	slotted/crosshead, pozidriv
Type of enclosure/terminals	IP50/IP20	IP50/IP20	IP50/IP20
Solenoid			
Time on at rated voltage 1- and 2-pole, without S09	100% [4]	100%	100% [4]
Time on at rated voltage 4-pole as well as S09	impulse control	–	impulse control
Max./min. temperature at mounting location	+50°C/-5°C	+50°C/-5°C	+50°C/-5°C
Control voltage range	0.9 to 1.1 x rated voltage	0.9 to 1.1 x rated voltage	0.9 to 1.1 x rated voltage
Coil power loss AC+ DC ±20%	1- and 2-pole 5 - 6 W; 4-pole 12 - 15 W	S81: 5 W S91: 2.5 W	1- and 2-pole 5 - 6 W; 4-pole 12 - 15 W
Min. command duration	50 ms	50 ms	50 ms
Max. parallel capacitance (length) of single control lead at 230 V AC	0.06 µF (approx. 200 m)	0.06 µF (approx. 200 m)	0.06 µF (approx. 200 m)
Max. voltage induced at the control inputs	0.2 x rated voltage	0.2 x rated voltage	0.2 x rated voltage
Glow lamps in parallel with the 230 V control switches	5 mA	5 mA	5 mA
With 1 µF/250 V AC capacitor in parallel with coil	10 mA	10 mA	10 mA
With 2.2 µF/250 V AC capacitor in parallel with coil	15 mA	15 mA	15 mA

* EVG = electronic ballast units; KVG = conventional ballast units
[1] Conctact distance of the NC contacts 1.2 mm.
[2] For lamps with 150 W max.
[3] A 40-fold inrush current must be calculated for electronic ballast devices. For steady loads of 1200 W or 600 W use the current-limiting relay SBR12 or SBR61. See chapter 14, page 14-8.
[4] Whenever several impulse switches are continuously energised make sure there is adequate ventilation and, in addition, a ventilation clearance of approx. half a module. Use the DS12 spacer as necessary.
[5] Due to different lamp electronics and depending on the manufacturer, the maximum number of lamps may be limited, especially if the wattage of the individual lamps is very low (e.g. with 2 W LEDs).

According to DIN VDE 0100-443 and DIN VDE 0100-534, the installation of a surge arrester (SPD) is mandatory.
ELTAKO offers suitable, standard-compliant surge arresters of types 1, 2, and 3 – see Chapter 8, "Surge Arresters."

Compliance with: EN 60 669