

Contacts	R12	R81/R91	XR12
Contact material/contact gap	AgSnO <sub>2</sub> /3 mm	AgSnO <sub>2</sub> /2 mm	AgSnO <sub>2</sub> /3 mm <sup>1)</sup>
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
Incandescent lamp and halogen lamp load <sup>1)</sup> 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 <sub>on</sub> ≤ 140 A/10 ms <sup>2)</sup>	I <sub>on</sub> ≤ 70 A/10 ms <sup>2)</sup>	I <sub>on</sub> ≤ 140 A/10 ms <sup>2)</sup>
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 <sup>5</sup>	> 10 <sup>5</sup>	> 10 <sup>5</sup>
Life at rated load, cos φ = 0.6 at 100/h	> 4 x 10 <sup>4</sup>	> 4 x 10 <sup>4</sup>	> 4 x 10 <sup>4</sup>
Max. operating cycles	10 <sup>3</sup> /h	10 <sup>3</sup> /h	10 <sup>3</sup> /h
Closing time	10-20 ms	10-20 ms	10-20 ms
Opening time	5-15 ms	5-15 ms	5-15 ms
Switch position indication	yes	yes	yes
Manual control	yes	yes	yes
Maximum conductor cross-section	6 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>
Two conductors of same cross-section	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Screw head	slotted/crosshead, pozidriv	slotted/crosshead, pozidriv	slotted/crosshead, pozidriv
Type of enclosure/terminals	IP50/IP20	IP50/IP20	IP50/IP20
<b>Solenoid System</b>			
Time on	100% <sup>3)</sup>	100% <sup>3)</sup>	100% <sup>3)</sup>
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 1.9 W 4-pole 4 W	R81: 5 W R91: 2.5 W	1- and 2-pole 1.9 W 4-pole 4 W
Total power loss with continuous excitation at rated voltage and rated contact load	1- pole 4 W, 2-pole 6 W 4-pole 12 W	1-pole 7 W 2-pole 9 W	1- pole 4 W, 2-pole 6 W 4-pole 12 W
Max. parallel capacitance (length) of control lead	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

\* EVG = electronic ballast units; KVG = conventional ballast units

<sup>1)</sup> Contact spacing of NC contacts 1.2 mm.

<sup>2)</sup> A 40-fold inrush current has to be calculated for electronic ballast devices. For steady loads of 1200 W or 600 W use the current-limiting relay SBR12 or SBR61. Product group G, page G4.

<sup>3)</sup> Whenever several impulse switches are continuously energised make sure there is adequate ventilation as a function of the calculated power loss.