

Contacts	ESR12NP-230V+UC <sup>a)</sup>	ESR12DDX-UC <sup>b)</sup> , ER12DX-UC <sup>a)</sup> , ER12-200-UC <sup>a)</sup> , ER12-110-UC <sup>a)</sup> , ER12-001-UC <sup>a)</sup> , ER12-002-UC <sup>a)</sup> , ER61-UC <sup>a)</sup>	ESR61NP-230V+UC <sup>b)</sup> , ESR61M-UC <sup>a)</sup> , ETR61NP-230V	KR09 -12V UC, -24V UC, -230V
Contact material/contact gap	AgSnO <sub>2</sub> / 0,5 mm			
Spacing of control connections/contact	3 mm	6 mm, ER61: 3 mm	6 mm	6 mm
Spacing of control connections C1-C2 or A1-A2/contact	6 mm	6 mm	ESR61NP+M: 6 mm	–
Test voltage contact/contact	–	ESR12DDX: 4000V ER12-200/110: 2000V	ESR61M: 2000V	–
Test voltage control connections/contact Test voltage C1-C2 or A1-A2/contact	2000V 4000V	4000V, ER61: 2000V –	2000V ESR61NP+M+ETR61NP: 4000V	4000V –
Rated switching capacity	16 A/250 V AC	16 A/250 V AC	10 A/250 V AC	6 A/250V AC
Incandescent lamp and halogen lamp load <sup>1)</sup> 230 V	2300 W	2000 W	2000 W	500 W
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	1000 VA	1000 VA	1000 VA	600 VA
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	500 VA	500 VA	500 VA	300 VA
Compact fluorescent lamps with EVG* and energy saving lamps ESL	15x7 W 10x20 W	I <sub>on</sub> ≤ 70A/ 10ms <sup>2)</sup> 3) When using DX types: 15x7W, 10x20W <sup>3)</sup>	I <sub>on</sub> ≤ 70A/10ms <sup>2)</sup> ESR61NP: 15x7 W, 10x20 W	52 W
Max. switching current DCI: 12 V/24 V DC	–	8 A	not ESR: 8 A	6 A
Life at rated load, cos φ = 1 or for incandescent lamps 1000 W at 100/h	> 10 <sup>5</sup>	> 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,	10 <sup>4</sup> /h
Contact position indication	LED (not series 61)			
Maximum conductor cross-section	series 12: 6 mm <sup>2</sup> (3-fold terminal 4 mm <sup>2</sup> ), series 61: 4 mm <sup>2</sup>			
Two conductors of same cross-section	series 12: 2.5 mm <sup>2</sup> (3-fold terminal 1.5 mm <sup>2</sup> ), series 61: 1.5 mm <sup>2</sup>			
Screw head	series 12: slotted/crosshead, pozidriv, series 61: slotted/crosshead			
Type of enclosure/terminals	series 12: IP50/IP20, series 61: IP30/IP20			
<b>Electronics</b>				
Time on	100 %	100 %	100 %	100 %
Max./min. temperature at mounting location	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C
Stand by loss (active power)	0.5 W	–; ESR12DDX: 0.4 W	–; ESR61NP: 0.7 W, ETR61NP: 0.5 W	–
Control current 230 V control input local ± 20 %	10 mA	–	10 mA, ESR61M: –	–
Control current universal control voltage all control voltages mA ± 20 %	–	4 (not ESR12DDX)	ER61: 2, ESR61M: 4	–
Control current at 8/12/24/230V (<10s) mA ± 20 %	2/4/9/5(100)	only ESR12DDX: 2/3/7/3(50)mA	only ESR61NP: 2/4/9/5(100) only ETR61NP: 10mA/24V DC	–/15/ 10/11
Max. parallel capacitance (approx. length) of control lead at 230 V AC	ES: 0,3 μF (1000 m) ER: 3 nF (10 m) C1-C2: 15 nF (50 m)	0,06 μF (200 m) ESR12DDX: 0,3 μF (1000 m)	0,06 μF (200 m)	0.06 μF (200 m)

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

<sup>a)</sup> Bistable relay as relay contact. The relay contact can be open or closed when putting into operation. It will be synchronised at first operation.

<sup>b)</sup> Bistable relay as relay contact. The switched consumer may not be connected to the mains before the short automatic synchronisation after installation has terminated.

<sup>1)</sup> For lamps with 150W max.

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

<sup>3)</sup> When using DX types close attention must be paid that zero passage switching is activated!