

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	2000 V	4000 V, ER61: 2000 V	2000 V	4000 V
Test voltage C1-C2 or A1-A2/contact	4000 V	–	ESR61NP+M+ETR61NP: 4000V	–
Rated switching capacity	16 A/250 V AC	16 A/250 V AC <sup>4)</sup>	10 A/250 V AC	6 A/250 V AC
Incandescent lamp and halogen lamp load <sup>1)</sup> 230 V, I <sub>on</sub> ≤ 70 A/10ms	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> ≤ 70 A/ 0ms <sup>2)3)</sup> When using DX types 15x7W, 10x20W <sup>3)</sup>	I <sub>on</sub> ≤ 70 A/ 0ms <sup>2)</sup> ESR61NP: 15x7W, 10x20W	52 W
Max. switching current DCI: 12 V/24 V DC	–	8 A	not ESR: 8 A	6 A
Life at rated load, cosφ = 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, cosφ = 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>6</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			
Electronics				
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: 10 mA/24V DC	–/15/ 10/11
Max. parallel capacitance (approx. length) of control lead at 230V 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

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

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

1) For lamps with 150 W max.

2) A 40-fold inrush current must be expected 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.

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

4) For ER12-200 maximum current across both contacts 16 A for 230 V.