

| Contacts | ES12DX ^{a)} ES12-200 ^{a)} ES12-110 ^{a)} | ESR12NP | ESR12DDX ^{b)} | ES12Z ^{b)} ESR12Z-4DX ^{b)} | ES61 ^{a)} ESR61M ^{a)} | ESR61NP ^{b)} |
|--|--|--|---|--|--|---|
| Contact material/contact gap | AgSnO ₂ /0.5 mm | AgSnO ₂ /0.5 mm | AgSnO ₂ /0.5 mm | AgSnO ₂ /0.5 mm | AgSnO ₂ /0.5 mm | AgSnO ₂ /0.5 mm |
| Spacing of control connections/contact control connections C1-C2 or A1-A2/contact | 6 mm – | 3 mm 6 mm | 6 mm – | 6 mm – | 3 mm ESR61M: 6 mm | 3 mm 6 mm |
| Test voltage contact/contact | ES12-200/110: 2000 V | – | 4000 V | 4000 V | ESR61M: 2000 V | – |
| Test voltage control connection/contact Test voltage C1-C2 or A1-A2/contact | 4000 V – | 2000 V 4000 V | 4000 V – | 4000 V – | 2000 V 4000 V | 2000 V 4000 V |
| Rated switching capacity | 16A/250V AC | 16A/250V AC | 16A/250V AC | 16A/250V AC | 10A/250V AC | 10A/250V AC |
| Incandescent lamp and halogen lamp load ¹⁾ 230 V | 2000 W | 2000 W | 2000 W | 2000 W | 2000 W | 2000 W |
| Fluorescent lamp load with KVG* in lead-lag or non compensated | 1000 VA | 1000 VA | 1000 VA | 1000 VA | 1000 VA | 1000 VA |
| Fluorescent lamp load with KVG* shunt-compensated or with EVG* | 500 VA | 500 VA | 500 VA | 500 VA | 500 VA | 500 VA |
| Compact fluorescent lamps with EVG* and energy saving lamps ESL | I on ≤ 70 A/ 10 ms ^{2) 3)} ES12DX: 15x7 W 10x20 W ³⁾ | 15x7 W 10x20 W | I on ≤ 70 A/ 10 ms ²⁾ | I on ≤ 70 A/ 10 ms ^{2) 3)} ESR12Z-4DX: 15x7 W 10x20 W ³⁾ | I on ≤ 70 A/ 10 ms ²⁾ | 15x7 W 10x20 W |
| Max. switching current DC1: 12 V/24 V DC | 8 A | – | 8 A | 8 A | 8 A | – |
| Life at rated load, cos φ = 1 resp. for incandescent lamps 1000 W at 100/h | > 10 ⁵ | > 10 ⁵ | > 10 ⁵ | > 10 ⁵ | > 10 ⁵ | > 10 ⁵ |
| Life at rated load, cos φ = 0.6 at 100/h | > 4 x 10 ⁴ | > 4 x 10 ⁴ | > 4 x 10 ⁴ | > 4 x 10 ⁴ | > 4 x 10 ⁴ | > 4 x 10 ⁴ |
| Max. operating cycles | 10 ³ /h | 10 ³ /h | 10 ³ /h | 10 ³ /h | 10 ³ /h | 10 ³ /h |
| Maximum conductor cross-section (3-fold terminal) | 6 mm ² (4 mm ²) | 6 mm ² (4 mm ²) | 6 mm ² (4 mm ²) | 6 mm ² (4 mm ²) | 4 mm ² | 4 mm ² |
| Two conductors of same cross-section (3-fold terminal) | 2.5 mm ² (1.5 mm ²) | 2.5 mm ² (1.5 mm ²) | 2.5 mm ² (1.5 mm ²) | 2.5 mm ² (1.5 mm ²) | 1.5 mm ² | 1.5 mm ² |
| Screw head | slotted/crosshead, pozidriv | | | slotted/crosshead | | |
| Type of enclosure/terminals | IP50/IP20 | | | IP30/IP20 | | |
| Electronics | | | | | | |
| Time on (also for central on/off) | 100% | 100% | 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 | +50°C/-20°C | +50°C/-20°C |
| Standby loss (active power) 230V | – | 0.5 W | 0.4 W | 0.4 W | – | 0.7 W |
| Standby loss (active power) 12V ⁴⁾ | – | – | 0.03 W | 0.03 W | – | – |
| Control current 230V-control input local (<10 s) | 25 mA | 10 mA | – | – | 25 mA ESR61M: – | 10 mA |
| Control current universal control voltage all control voltages (<5 s) ± 20% 8/12/24/230V (<10 s) ± 20% | 1.5 mA (15 mA) ⊕ 30 (23) mA | – 2/4/9/5 (100) mA | – 2/3/7/3 (50) mA | – 0.1/0.1/0.2/1 (30) mA | 1.5 mA (15 mA) ESR61M: 4 mA | – 2/4/9/5 (100) mA |
| Control current central 8/12/24/230V (<10 s) ± 20% | – | – | – | 2/4/9/5 (100) mA | – | – |
| Max. parallel capacitance (approx. length) of single control lead at 230 V AC | ⊕ 0.3 μF (1000 m) A1-A2: 0.06 μF (200 m) | ES: 0.3 μF (1000 m) ER: 3 nF (10 m) C1-C2: 15 nF (50 m) | 0.3 μF (1000 m) | 0.3 μF (1000 m) | ⊕ : 0.3 μF (1000 m) A1-A2: 0.06 μF (200 m) ESR61M: 0.5 nF (2 m) | ⊕ 0.06 μF (200 m) A1-A2: 0.3 μF (1000 m) |
| Max. parallel capacitance (approx. length) of central control lead at 230 V AC | – | – | – | 0.9 μF (3000 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⁾ Standby loss at 24 V approx. two times greater than at 12 V.