## Appendix: Relay contact rating

| Contact type | Normally open contact | Normally closed contact | Normally open contact | Normally closed contact | Normally open contact | Normally closed contact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated current (max. continuous current) | 16 A | 16 A | 10 A | 10 A | 6 A | 6 A |
| Contact material | AgSnO2 |  |  |  |  |  |
| Contact gap | 0.5 mm |  |  |  |  |  |
| min. switching voltage / switching current (\#3) | $5 \mathrm{~V} / 10 \mathrm{~mA}$ |  |  |  | $12 \mathrm{~V} / 500 \mathrm{~mA}$ |  |
| max. switching voltage | 440 V / 250 V- |  |  |  | $250 \mathrm{~V} \sim$ |  |
| max. inrush current (1ms) | 50 A |  | 30 A |  | 18 A |  |
| max. inrush current (5s) | 25 A |  | 14 A |  | 8 A |  |
| max. switching capacity 230 V~ resistive load (nominal load) | 3500 W |  | 2000 W |  | 1300 W |  |
| max. switching capacity 230 V ~ incandescent lamps | 1000 W |  | 600 W |  | 500 W |  |
| max. switching capacity $230 \mathrm{~V} \sim$ fluorescent lamps (\#1) | 250 VA |  | 140 VA |  | 90 VA |  |
| max. switching capacity $230 \mathrm{~V} \sim$ ECG's (\#1) | 100 VA |  | 60 VA |  | 30 VA |  |
| max. switching capacity 230 V~ fluorescent lamps, ECGs with EBN 2 | 1000 VA |  | 600 VA |  | 400 VA |  |
| max. switching capacity $230 \mathrm{~V} \sim$ inductive load $(\cos \varphi=0.6)$ | 650 VA |  | 370 VA |  | 220 VA |  |
| max. capacitive load | 30 uF |  | 15 uF |  | 10 uF |  |
| max. switching capacity DC (\#2) | 350 W |  | 250 W |  | 150 W |  |
| Mechanical service life (switching cycles) | $10^{7}$ |  |  |  |  |  |
| Service life at rated load[switching cycles] | $10^{5}$ |  |  |  |  |  |
| max. switching frequency | 900/h |  | 900/h |  | 360/h |  |

\#1 With capacitive inrush current (parallel-compensated LS lamps, ECGs), contact protection is required from maximum capacitive load e.g. EBN 2 (inrush current limiter connected downstream; series resistor $12 \Omega$ bridged after 15 ms ) for ECGs typically $3 . . .6$ uF are parallel to the input
\#2 with sufficient spark suppression (see load limit curve for DC voltage)
\#3 depending on switching frequency and ambient conditions

## Appendix: Relay contact rating

The following diagrams are typical for the NO contact 16A


Contact service life with resistive load at 230 V~


Contact service life with capacitive load at 230 V~


Reduced contact life under inductive load


Load limit curve for DC voltage

