| Type | F4HK14 <br> FHK14 <br> FSB14 <br> FSR14-4x | FUD14 ${ }^{1)}$ <br> FUD14/800W ${ }^{177}$ <br> FRGBW14 | FSG14/1-10V b) | $\begin{aligned} & \text { F2L14 }{ }^{\mathrm{b}} \\ & \text { F4SR14-LED } \\ & \text { FFR14, FMS14 } \\ & \text { FMZ14, FSR14-2x } \\ & \text { FTN14 } \\ & \text { FSR14M-2x } \end{aligned}$ | FSR14SSR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Contacts |  |  |  |  |  |
| Contact material/contact gap | $\mathrm{AgSnO}_{2} / 0.5 \mathrm{~mm}$ | Power MOSFET | $\mathrm{AgSnO}_{2} / 0.5 \mathrm{~mm}$ | $\mathrm{AgSnO}_{2} / 0.5 \mathrm{~mm}$ | pto-Triac |
| Test voltage control connections/contact | - | - | - | 2000 V | 4000 V |
| Rated switching capacity each contact | 4A/250 V AC | - | $600 \mathrm{VA}{ }^{5}$ | 16A/250V AC; FMZ14: 10A/250V AC <br> F4SR14: 8A/250V AC | p to $400 W^{6)}$ |
| 230 V LED lamps ${ }^{9)}$ | up to 200W | Trailing edge up to 400W Leading edge up to 100 W FUD14/800W: <br> Trailing edge up to 800 W Leading edge up to 200W | - | up to 400 W FSR14M: up to 600 W I on $\leq 120 \mathrm{~A} / 5 \mathrm{~ms}$ | up to $400 W^{6)}$ |
| Dimmable LED lamps 12-24V DC |  | FRGBW14: $4 \times 4 \mathrm{~A}$ |  |  |  |
| incandescent lamps and halogen lamp load 230V ${ }^{21}$ | $\begin{aligned} & 1000 \mathrm{~W} \\ & \text { I on } \leq 10 \mathrm{~A} / 10 \mathrm{~ms} \end{aligned}$ | up to 400 W; FUD14/800 W: up to $800 \mathrm{~W}^{13 / 44)}$ | - | $\begin{aligned} & 2000 \mathrm{~W} \\ & \text { F4SR14: } 1800 \mathrm{~W} \\ & \text { I on } \leq 70 \mathrm{~A} / 10 \mathrm{~ms} \end{aligned}$ | up to $400 \mathrm{~W}^{61}$ |
| Fluorescent lamp load with KVG* in lead-lag circuit or non compensated | 500 VA | - | - | 1000 VA | - |
| Fluorescent lamp load with KVG* shunt-compensated or with EVG* | $\begin{aligned} & 250 \mathrm{VA}, \\ & 1 \text { on } \leq 10 \mathrm{~A} / 10 \mathrm{~ms} \end{aligned}$ | - | $600 \mathrm{VA}{ }^{5}$ | 500 VA | up to $400 \mathrm{VA}{ }^{6)}$ |
| Compact fluorescent lamps with EVG* and energy saving lamps ESL | up to 200W ${ }^{9}$ | up to $400 \mathrm{~W}^{\text {911) }}$ | - | up to $400 \mathrm{~W}^{91}$ | up to $400 \mathrm{~W}^{619)}$ |
| Inductive load $\cos \varphi=0,6 / 230 \mathrm{VAC}$ inrush current $\leq 35 \mathrm{~A}$ | $650 W^{81}$ | - | - | $650 W^{81}$ | - |
| Max. switching current DC1: $12 \mathrm{~V} / 24 \mathrm{~V}$ DC | 4A | - | - | 8A(not FTN14 and FZK14) | - |
| Life at rated load, $\cos \varphi=1$ or for incandescent lamps 500W at 100/h | $>10^{5}$ | - | $>10^{5}$ | $>10^{5}$ | $\infty$ |
| Service life at rated load, $\cos \varphi=0,6$ at 100/h | $>4 \times 10^{4}$ | - | $>4 \times 10^{4}$ | $>4 \times 10^{4}$ | $\infty$ |
| Max. operating cyles | $10^{3} / \mathrm{h}$ | - | $10^{3} / \mathrm{h}$ | $10^{3} / \mathrm{h}$ | 10\%/h |
| Maximum conductor cross-section (3-fold terminal) | $6 \mathrm{~mm}^{2}\left(4 \mathrm{~mm}^{2}\right)$ | $6 \mathrm{~mm}^{2}\left(4 \mathrm{~mm}^{2}\right)$ | $6 \mathrm{~mm}^{2}\left(4 \mathrm{~mm}^{2}\right)$ | $6 \mathrm{~mm}^{2}\left(4 \mathrm{~mm}^{2}\right)$ | $6 \mathrm{~mm}^{2}$ |
| Two conductors of same cross-section (3-fold terminal) | $2.5 \mathrm{~mm}^{2}\left(1.5 \mathrm{~mm}^{2}\right)$ | $2.5 \mathrm{~mm}^{2}\left(1.5 \mathrm{~mm}^{2}\right)$ | $2.5 \mathrm{~mm}^{2}\left(1.5 \mathrm{~mm}^{2}\right)$ | $2.5 \mathrm{~mm}^{2}\left(1.5 \mathrm{~mm}^{2}\right)$ | $2.5 \mathrm{~mm}^{2}\left(1.5 \mathrm{~mm}^{2}\right)$ |
| Screw head | slotted/crosshead, pozidriv | slotted/crosshead, pozidriv | slotted/crosshead, pozidriv | slotted/crosshead, pozidriv | slotted/crosshead, pozidriv |
| Type of enclosure/terminals | IP50/IP20 | IP50/IP20 | IP50/IP20 | IP50/IP20 | IP50/IP20 |
| Electronics |  |  |  |  |  |
| Time on | 100\% | 100\% | 100\% | 100\% | 100\% |
| Max./min. temperature at mounting location | $+50^{\circ} \mathrm{C} /-20^{\circ} \mathrm{C}$ | $+50^{\circ} \mathrm{C} /-20^{\circ} \mathrm{C}$ | $+50^{\circ} \mathrm{C} /-20^{\circ} \mathrm{C}$ | $+50^{\circ} \mathrm{C} /-20^{\circ} \mathrm{C}$ | $+50^{\circ} \mathrm{C} /-20^{\circ} \mathrm{C}$ |
| Standby loss (active power) | 0.1W | 0.3W | 0.9W | 0.05-0.5W | 0.1W |
| Local control current at 230 V control input | - | - | - | 5 mA | - |
| Max. parallel capacitance (approx. length) of local control lead at 230V AC | - | - | - | $\begin{aligned} & \text { FTN14: } \\ & 0.3 \mu \mathrm{~F}(1000 \mathrm{~m}) \end{aligned}$ | - |

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

* EVG $=$ electronic ballast units; $\mathrm{KVG}=$ conventional ballast units
b) Bistable relay as relay contact. After installation, wait for short automatic synchronisation before teaching-in the wireless pushbuttons.
${ }^{11}$ If the load exceeds 200W (FUD14/800W:400W), a ventilation clearance of $1 / 2$ pitch unit to adjacent devices must be maintained via the spacer DS14.
${ }^{2)}$ Applies to lamps of max. 150 W .
${ }^{3)}$ Per dimmer or capacity enhancer it is only allowed to use max. 2 inductive (wound) transformers of the same type, furthermore no-load operation on the secondary part is not permitted. The dimmer might be destroyed. Therefore do not permit load breaking on the secondary part. Operation in parallel of inductive (wound) and capacative (electronic) transformers is not permitted!
${ }^{4)}$ When calculating the load a loss of $20 \%$ for inductive (wound) transformers and a loss of $5 \%$ for capacitive (electronic) transformers must be considered in addition to the lamp load.
${ }^{5)}$ Fluorescent lamps or LV halogen lamps with electronic ballast
${ }^{6}$ Applies to one contact and the sum of both contacts.
${ }^{7}$ Capacity increase for all dimmable lamp types with Capacity Enhancer FLUD14.
${ }^{8)}$ All actuators with 2 contacts: Inductive load $\cos \varphi=0.6$ as sum of both contacts 1000 W max.
${ }^{9}$ Generally applies to 230 V LED lamps and energy saving lamps (ESL). Due to different lamp electronics, switch on/off problems and a restriction in the maximum number of lamps, however, the dimming ranges may be limited depending on the manufacturer; in particular when the connected load is very low (e.g. with 5 W LEDs). The dimmer switch comfort settings EC1, EC2, LC1, LC2 and LC3 optimise the dimming range however, the maximum power is then only up to 100 W . In these comfort settings, no inductive (wound) transformers may be dimmed.

