## Flush Silhouette LW Series Control Units

## Flush bezel projects only 2 mm from front of panel

ø28 round and $28-\mathrm{mm}$ square black plastic bezels. Round metallic bezels are also available.

- ø25.3-mm round panel cut-out, $24.5-\mathrm{mm}$ square panel cut-out.
- Collective mounting is possible.
- Pushbuttons, pilot lights, illuminated pushbuttons, selector switches, key selector switches, and illuminated selector switches are available. Square pushbuttons also available with switchguards.
- Key selector switches with high-security lock mechanism. Over 60 different key variations available to choose from.
- Separate type control units with a locking lever enable easy installation even when mounted collectively.
- Gold (gold-clad silver) or silver contacts.
- Degree of protection: IP65 (IEC 60529)
- UL recognized and CSA certified. EN compliant.

| Safety Standards |  | File No. or Organization |
| :--- | :--- | :--- |
| UL | UL Recognition <br> File No. E55996 |  |
| CSA | 166730 (LR21451) |  |
| EN | EN60947-1 <br> EN60947-5-1 | EUV Rheinland |
|  |  | EC Low Voltage Directive |



## Specifications and Ratings

## Contact Ratings

- Gold Contacts (switch base: blue)

| Maximum Voltage | $250 \mathrm{~V} \mathrm{AC/DC}$ |  |
| :--- | :--- | :--- |
| Thermal Current | 3 A |  |
| Operating Voltage | 125 V AC | 30 V DC |
| Operating Current <br> (resistive load) | 0.1 A | 0.1 A |
| Contact Material | Gold-clad silver |  |

Minimum applicable load (reference value): 5V AC/DC, 1 mA (Applicable range is subject to the operating conditions and load.)

- Silver Contacts (switch base: gray)

| Operating Voltage |  |  | 30 V | 125 V | 250 V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Current | $\begin{aligned} & \mathrm{AC} \\ & 50 / 60 \mathrm{~Hz} \end{aligned}$ | Resistive Load | - | 3A | 2A |
|  |  | Inductive Load | - | 2A | 1.5A |
|  | DC | Resistive Load | 2 A | 0.4A | - |
|  |  | Inductive Load | 1A | 0.2A | - |
| Thermal Current |  |  | 5A |  |  |
| Contact Material |  |  | Silver |  |  |

AC inductive load: $\mathrm{PF}=0.6$ to 0.7
$D C$ inductive load: $L / R=7 \mathrm{~ms}$ max.

Specifications

| Operating Temperature |  | -25 to $+60^{\circ} \mathrm{C}$ (no freezing) Illuminated units: -25 to $+50^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: |
| Storage Temperature |  | -40 to $+80^{\circ} \mathrm{C}$ |
| Operating Humidity |  | 45 to 85\% RH (no condensation) |
| Contact Resistance |  | $50 \mathrm{~m} \Omega$ maximum (initial value) |
| Insulation Resistance |  | $100 \mathrm{M} \Omega$ minimum (500V DC megger) |
| Dielectric Strength | Switch Unit | Between live part and ground: <br> $2,500 \mathrm{~V}$ AC, 1 minute <br> Between terminals of different poles: <br> $2,500 \mathrm{~V}$ AC, 1 minute <br> Between terminals of the same poles: <br> 1,000V AC, 1 minute |
|  | Illumination Unit | Between live part and ground: $2,500 \mathrm{~V}$ AC, 1 minute |
| Vibration Resistance |  | Operating extremes: <br> 5 to 55 Hz , amplitude 0.5 mm |
| Shock Resistance |  | Damage limits: $1,000 \mathrm{~m} / \mathrm{s}^{2}(100 \mathrm{G})$ <br> Operating extremes: $100 \mathrm{~m} / \mathrm{s}^{2}(10 \mathrm{G})$ |
| Mechanical Life (minimum operations) |  | Momentary: $1,000,000$ <br> Maintained: 500,000 <br> Selector switches: 250,000 <br> Key selector switches: 100,000 <br> llluminated selector switches: 250,000 |
| Electrical Life (minimum operations) |  | Momentary: $100,000(* 1)$ <br> Maintained: $100,000(* 2)$ <br> Selector switches: $100,000(* 2)$ <br> Key selector switches: $100,000(* 2)$ <br> Illuminated selector switches: $100,000(* 2)$  <br> $* 1$ Switching frequency 1,800 operations/h  <br> *2 Switching frequency 900 operations/h  |
| Degree of Protection |  | IP65 (IEC 60529) |
| Terminal Style |  | Solder/tab terminal \#110 PC board terminal Screw terminal |
| Bezel Material |  | Metal bezel: diecast aluminum <br> Black plastic bezel:  <br> polyamide  |
| Weight (app | prox.) | $\begin{aligned} & \text { 25g (LW6MB-M1C3) } \\ & 22 \mathrm{~g} \text { (LW6B-M1C3) } \\ & 20 \mathrm{~g} \text { (LW6MP-14) } \\ & 18 \mathrm{~g} \text { (LW6P-14) } \\ & 29 \mathrm{~g} \text { (LW6ML-M1C34) } \\ & 26 \mathrm{~g} \text { (LW6L-M1C34) } \\ & \hline \end{aligned}$ |

