## A22NE－P

## Specifications

## Certified Standard Ratings

－UL508（File No．E76675），CSA C22．2 No． 14
6 A at 240 VAC， 10 A at 120 VAC
－TÜV（EN60947－5－1）－Certified direct opening－
（EN60947－5－5）
AC－15 3 A at 240 VAC
DC－13 4 A at 24 VDC
－CCC（GB14048．5）
AC－15 3 A at 240 VAC
DC－13 4 A at 24 VDC

## Applicable Standards

UL1059，UL486E（Push－in Plus Terminal Block Types）
Note：Use a 10 A fuse type gl or gG that conforms to IEC60269 as a short－circuit protection device．This fuse is not provided in the main unit．

## Ratings

Contacts（Standard Load）

| Rated insulation voltage（V） | Rated carry current（A） | Rated voltage （V） | Rated current（A） |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | AC15 （Inductive load） | AC12 （Resistive load） | DC13 （Inductive load） | DC12 （Resistive load） |
| 600 | 10 | 24 VAC | 10 | 10 | －－－ | －－－ |
|  |  | 120 VAC | 6 | 10 |  |  |
|  |  | 240 VAC | 3 | 6 |  |  |
|  |  | 380 VAC | 1.9 | 2 |  |  |
|  |  | 440 VAC | 1.6 | 2 |  |  |
|  |  | 24 VDC | －－－ | －－－ | 4 | 8 |
|  |  | 120 VDC |  |  | 1.1 | 2.2 |
|  |  | 240 VDC |  |  | 0.55 | 1.1 |

Note：1．The above ratings were obtained by conducting tests under the following conditions．
（1）Ambient temperature： $20^{\circ} \pm 2^{\circ} \mathrm{C}$
（2）Ambient humidity： $65 \pm 5 \%$
（3）Operating frequency： 20 operations／minute
2．Minimum applicable load： 10 mA at 5 VDC（Resistive load） The operating range may vary depending on the usage conditions and type of load．

## Certified Standards

| Certification <br> body | Standards | File No． |
| :---: | :---: | :---: |
| UL＊ | UL508，C22．2 No．14 | E76675 |
| TÜV SÜD | EN60947－5－1 <br> （Certified direct opening）， <br> EN60947－5－5 | Consult your OMRON <br> representative for details． |
| CQC（CCC） | GB14048．5 | 2017010305959182 |

Note：Only models with NC contacts have a direct opening mechanism．
＊UL－certification for CSA C22．2 No． 14 has been obtained．

## LED Lamp

| Rated voltage | Operating voltage | Current value |
| :---: | :---: | :---: |
| 6 VAC／VDC | $6 \mathrm{VAC/VDC} \pm 10 \%$ | Approx． 11 mA |
| 12 VAC／VDC | $12 \mathrm{VAC/VDC} \pm 10 \%$ | Approx． 12 mA |
| 24 VAC／VDC | 24 VAC／VDC $\pm 10 \%$ | Approx． 12 mA |
| 100 VAC | 100 VAC $\pm 10 \%$ | Approx． 12 mA |
| 110 VAC | 110 VAC $\pm 10 \%$ |  |
| 120 VAC | 100 VAC to 130 VAC |  |
| 200 VAC | 200 VAC $\pm 10 \%$ | Approx． 12 mA |
| 220 VAC | 220 VAC $\pm 10 \%$ |  |
| 230 VAC | 230 VAC $\pm 10 \%$ |  |
| 240 VAC | 220 VAC to 250 VAC |  |

## Characteristics

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{Operation

Item}} \& \multicolumn{2}{|r|}{Turn-reset} \& \multicolumn{2}{|r|}{Pull-reset} <br>
\hline \& \& Non-lighted model \& Lighted Model \& \multicolumn{2}{|r|}{Non-lighted model} <br>
\hline \& \& A22NE- $\square$-P $\square \square \square$-N \& A22NE-M-P $\square \square \square-\square$ \&  \& A22NE-MP-P $\square \square \square-\mathrm{N}-69 \mathrm{~K}$ <br>
\hline \multirow[t]{2}{*}{Allowable operating frequency} \& Mechanical \& \multicolumn{4}{|l|}{30 operations/minute or less (One operation consists of set and reset operations.)} <br>
\hline \& Electrical \& \multicolumn{4}{|l|}{30 operations/minute or less (One operation consists of set and reset operations.)} <br>
\hline \multicolumn{2}{|l|}{Insulation resistance *1} \& \multicolumn{4}{|l|}{$100 \mathrm{M} \Omega \mathrm{min}$. (at 500 VDC )} <br>
\hline \multicolumn{2}{|l|}{Contact resistance} \& \multicolumn{4}{|l|}{$100 \mathrm{~m} \Omega$ max. (initial value)} <br>
\hline \multirow[t]{2}{*}{Dielectric strength} \& Between terminals of same polarity*1 \& \multicolumn{4}{|l|}{2,500 VAC, $50 / 60 \mathrm{~Hz} 1$ minute (initial value)} <br>
\hline \& Between each terminal and ground \& \multicolumn{4}{|l|}{2,500 VAC, $50 / 60 \mathrm{~Hz} 1$ minute (initial value)} <br>
\hline Vibration resistance \& Malfunction \& \multicolumn{4}{|l|}{10 to $55 \mathrm{~Hz}, 1.5 \mathrm{~mm}$ double amplitude (contact separation within 1 ms )} <br>
\hline Shock resistance \& Malfunction \& \multicolumn{4}{|l|}{$250 \mathrm{~m} / \mathrm{s}^{2} \mathrm{max}$. (contact separation within 1 ms )} <br>
\hline \multirow[b]{2}{*}{Durability} \& Mechanical \& \multicolumn{3}{|l|}{300,000 operations min. (One operation consists of set and reset operations.)} \& 100,000 operations min. (One operation consists of set and reset operations.) <br>
\hline \& Electrical \& \multicolumn{3}{|l|}{300,000 operations min. (One operation consists of set and reset operations.)} \& 100,000 operations min. (One operation consists of set and reset operations.) <br>
\hline \multicolumn{2}{|l|}{Ambient operating temperature $* 2$} \& -20 to $+70^{\circ} \mathrm{C}$ \& -20 to $+55^{\circ} \mathrm{C}$ \& \multicolumn{2}{|l|}{-20 to $+70^{\circ} \mathrm{C}$} <br>
\hline \multicolumn{2}{|l|}{Ambient operating humidity} \& \multicolumn{4}{|l|}{35 to 85\% RH} <br>
\hline \multicolumn{2}{|l|}{Ambient storage temperature $* 2$} \& \multicolumn{4}{|l|}{-40 to $+70^{\circ} \mathrm{C}$} <br>
\hline \multicolumn{2}{|l|}{Degree of protection*3} \& IP65 oil-resistant models *4 \& IP65 \& IP65 oil-resistant models *4 \& IP69K <br>
\hline \multicolumn{2}{|l|}{Electric shock protection class} \& \multicolumn{4}{|l|}{Class II} <br>
\hline \multicolumn{2}{|l|}{PTI (tracking characteristic)} \& \multicolumn{4}{|l|}{175} <br>
\hline \multicolumn{2}{|l|}{Degree of contamination} \& \multicolumn{4}{|l|}{3 (EN 60947-5-1)} <br>
\hline \multicolumn{2}{|l|}{Minimum direct opening stroke} \& \multicolumn{4}{|l|}{11 mm} <br>
\hline \multicolumn{2}{|l|}{Minimum direct opening force} \& \multicolumn{4}{|l|}{45 N} <br>
\hline \multicolumn{2}{|l|}{Conditional short-circuit current} \& \multicolumn{4}{|l|}{100 A (EN 60947-5-1)} <br>
\hline \multicolumn{2}{|l|}{Wight (for a 40-dia. head 1NC/1NO Operation Unit)} \& Approx. 55g \& Approx. 60g \& Approx. 85 g \& Approx. 115 g <br>
\hline
\end{tabular}

*1. State when an LED is not added between terminals of the same polarity on a lighting unit. Does not apply to lighted-type 100 to 200 V lighting units. *2. With no icing or condensation.
*3. The degree of protection from the front of the panel.
*4. The degree of protection is IP65 even with an integrated control box, but the system is not oil resistant.

## Operating Characteristics

| Item | Turn-reset | Pull-reset |  |
| :--- | :--- | :--- | :--- |
|  | Lighted / non-lighted models | Non-lighted model | Non-lighted model (Models with IP69K) |
| Total travel force (TTF) | $45 \mathrm{~N} \mathrm{max}$. | 60 N max. | 70 N max. |
| Return force (RF) | $0.25 \mathrm{~N} \cdot \mathrm{~m} *$ max. | $60 \mathrm{~N} \mathrm{max}$. | $70 \mathrm{~N} \mathrm{max}$. |
| Total travel (TT) | $10 \pm 1 \mathrm{~mm}$ | $5.5 \pm 1 \mathrm{~mm}$ | $5.5 \pm 1 \mathrm{~mm}$ |

* Rotation torque value.

Terminal Arrangement (BOTTOM VIEW)


