Features/Benefits<br>- Chassis or panel mount<br>- Various buttons<br>- Various contact configurations<br>- RoHS compliant

## Typical Applications

- Mains/power switching
- Consumer electronics
- Audio equipment
- Digital products



## Specifications

ELECTRICAL RATING:
NE18 Series:
8A GP, 125 VAC, $50 / 60 \mathrm{~Hz}, 1 \mathrm{E} 4$, T70
6 A GP, 250 VAC, $50 / 60 \mathrm{~Hz}, 1 \mathrm{E} 4$, T70
6(4)A RM, 250 VAC, $50 / 60 \mathrm{~Hz}, 1 \mathrm{E} 4$, T70
6/48A RC, $250 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}, 1 \mathrm{E} 4$, T70
1RA, 100 VDC, 1E4, T70
8RA, 30VDC, 1E4, T70
NE18CTII Series:
4A GP, 250 VAC, $50 / 60 \mathrm{~Hz}, 1 \mathrm{E} 4$, T70
4/48A RC, $250 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}, 1 \mathrm{E} 4$, T70
1RA, 100 VDC, 1E4, T70
4RA, 30VDC, 1E4, T70
DIELECTRIC STRENGTH ( $50 \mathrm{~Hz}, 1 \mathrm{~min}$.): 2000 V
OPERATING LIFE AT MAX. LOAD AND AT MAX. INRUSH
CURRENT: ${ }^{\wedge} 10^{4}$ operations ${ }^{5}$ )
CONTACT RESISTANCE: Initial: $50 \mathrm{~m} \Omega$; After $10^{4}$ operations: $70 \mathrm{~m} \Omega$.
INSULATION RESISTANCE: $\wedge 10^{12} \Omega$ chassis - nearest contact;
$\wedge 10^{12} \Omega$ mains contact - mains contact; $\wedge 10^{12} \Omega$ mains contact mains contact after $10^{4}$ operations.
LOW VOLTAGE CONTACT:
SWITCHING POWER MAX.: 12W
SWITCHING VOLTAGE MAX.: 24 V

SWITCHING CURRENT MAX.: 0.5A
TOTAL TRAVEL: 4.7 mm (. 185 inch)
LATCHING TRAVEL: 3.3 mm (. 130 inch)
OPERATING FORCE: Without auxiliary low voltage contacts:
NE18: 7N (700 grams); NE18CTII: 9.5N (950 grams).
With auxiliary low voltage contacts: NE18: 8 N ( 800 grams).
SEALING: Dust proof.

## Materials

HOUSING, ACTUATOR \& TERMINAL BOARD: Thermoplastic polyester (UL 94V-0).
MOVABLE CONTACT: Silver nickel alloy, silver plated.
FIXED CONTACTS: Silver nickel alloy, silver plated.
COMMON CONTACTS \& TERMINALS: Copper alloy, silver plated. RETURN SPRING: Music wire.

NOTE: All models arer RoHS compliant and compatible.
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-97 thru A-104. For additional options not shown in catalog, consult Customer Service Center.

If requesting only a switch, select the switch as noted below. Buttons are sold separately.

$\square$

## Order Code - Buttons

## Solid Buttons

|  | - |
| :---: | :---: |
| Style |  |
| F01 FMR | Button Color |
| F02 FG* | 01 Black |
| F12 FSC | 02 White |
| F13 FSD | 03 Red |
| F14 FU12 | 04 Light gray |
| F15 FSB |  |
| F16 FE |  |
| F19 FA |  |
| F21 F001 |  |

*Button options for central mounting configurations,
use 'FG' for central mount with chrome dress nut, use 'FA200' for central mount with black dress nut.

## Mechanical Indicator Buttons



## BUTTON REMOVAL

A button of a push-push switch should only be removed in the "OFF" non-latching position.

## NE1838EE



## DESIGNATION \& SWITCHES WITH STANDARD OPTIONS $\square \square$

## NE1839EE



## NE1846EE



# NE-18 Series Mains / Power Switches 

## ZNE1838EECF0201




| OPTION CODE <br> Contact capacity <br> and availability | STYLE | ELECTRICAL <br> CIRCUIT |
| :---: | :---: | :---: |
| 37 | NE18 -2 AX | DPST |
| 38 | NE18 -2 UX | DPDT |
| 51 | $2 U+$ NE18 -2 AX | DPST* $^{*}$ |
| $52(4 A / 64)$ | NE18CTII -2 AX | DPST |
| 39 | $2 U+$ NE18 $-2 U X$ | DPDT* $^{*}$ |
| 41 | NE18 -2 AP | DPST |
| 42 | NE18 $-2 U P$ | DPDT |
| 43 | NE18 - 2AW | DPST |
| 44 | NE18 - 2UW | DPDT |
| 45 | NE18 - 2ASX | DPST |

* 2 U + Denotes auxiliary set of low current contacts DPDT
$2 \mathrm{~A}=\mathrm{DPST}$
$2 \mathrm{~A}=\mathrm{DPST}$
$2 \mathrm{U}=\mathrm{DPDT}$
$2 U=$ Snap-in mounting
X = Solder lug/PC pins
W = Solder lugs only
$P=P C$ pins only

| OPTION CODE <br> Contact capacity <br> and availability | STYLE | ELECTRICAL <br> CIRCUIT |
| :---: | :---: | :---: |
| 46 | NE18 - 2USX | DPDT |
| 47 | NE18 -2 ASP | DPST |
| 48 | NE18 -2 USP | DPDT |
| 49 | NE18 -2 ASW | DPST |
| 50 | NE18 $-2 U S W$ | DPDT |
| 54 | $2 U+N E 18-2 A W$ | DPST |
| 55 | $2 U+N E 18-2 A P$ | DPST |
| 56 | $2 U+N E 18-2 U W$ | DPDT |
| 57 | $2 U+N E 18-2 U P$ | DPDT |

## NOTES

1. Contact plating is silver on all Power Switches.
2. The electrical function is Break Before Make (BBM) on all Power Switches.
3. The terminals will be epoxy sealed.

| TYPE | POSSIBLE CONTACT ARRANGEMENT |  | CONTACT SPACING | PROTECTION CLASS <br> (CEE 24) | APPROVALS |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | POWER CONTACTS ${ }^{1}$ | AUXILIARY CONTACTS |  |  |  |
| NE18 | $2 A^{2}$ | 2 U | $\begin{gathered} >3 \mathrm{~mm} \\ (.118 \mathrm{inch}) \end{gathered}$ | 11 | $\mathrm{N}_{\text {UL }}$ |
| NE18 | $\begin{aligned} & 2 A^{2} \\ & 2 U \end{aligned}$ | 2 U | $\begin{gathered} >3 \mathrm{~mm} \\ (.118 \mathrm{inch}) \end{gathered}$ | 1 |  |
| NE18CTII | $2 A^{2}$ |  | $\begin{gathered} >3 \mathrm{~mm} \\ (.118 \mathrm{inch}) \end{gathered}$ | 11 | $\mathrm{c}_{\text {UL61058-1 }}$ |

1) $A=$ make contact, $U=$ changeover contact
2) With $2 A$ mains contacts: Mounting only by PC pins is not sufficient.

MECHANICAL FUNCTION

| OPTION CODE | FUNCTION |
| :---: | :---: |
| OA | Momentary |
| EE | Alternate (push-push) |



03 SPECIAL CHASSIS (CONSULT FACTORY)

## DRESS NUT

B BLACK


NOTE: Available with ZNE18 designation and FA200 buttons.

C сhrome


PANEL CUTOUT


NOTE: Available with ZNE18 designation and FG button.

NE-18 Series
Mains / Power Switches
SOLID BUTTON $\square$ प $\square \square \square$

## STYLE



## STYLE



| OPTION CODE | COLOR |
| :---: | :---: |
| 01 | BLACK |
| 02 | WHITE |
| 03 | RED |
| 04 | LT. GRAY |
| 09 | BLACK/CHROME <br> (FO3,FO6 \& F07 <br> buttons only |

## MECHANICAL BUTTON

$\square$ $\square$ Inte -aurpostion Eoton

## STYLE

> F01 FA100


F02
FA101



NE-18 Series
Mains / Power Switches


## OUT POSITION COLOR

01 BLACK

| OPTION CODE | COLOR |
| :---: | :---: |
| 02 | WHITE |
| 06 | YELLOW |
| 07 | BLUE |
| 08 | GREEN |
| 12 | ORANGE |

