# RS300/400/500 series 

## Outline

Our RS series embody the manufacturing history of our company. All series are sturdy and solid with high dependability designed for control units of plants, installations, audio equipments, etc.

## Features

- Free to change the number of switch positions by replacing self-tapping screws
- Various combinations of double shafted model available
- RoHS compliant


## Specifications

|  | RS300 | RS400 | RS500 |
| :---: | :---: | :---: | :---: |
| Step Angles | 15/20/30/60 | 30/60 | 15/20/30/45/60 |
| Switching Mechanism | $15 / 20$ : Shorting 30/60: Non-shorting | Shorting and Non-shorting selectable | 15/20: Shorting 30/45/60: Non-shorting |
| Water Proofing | -------------- | Adapter panel and rubber o-rings provided at requests |  |
| Gold Contacts | Available |  |  |
| High-Voltage Withstanding | Available (Up to 6,000V) | ------------ |  |
| Operating Temperature | $-20^{\circ} \mathrm{C}+70^{\circ} \mathrm{C}$ |  |  |
| Storage Temperature | $-40^{\circ} \mathrm{C}+\mathrm{C} 70^{\circ} \mathrm{C}$ |  |  |
| Rotational Torque | $0.12 \mathrm{~N} \cdot \mathrm{~m} \sim 0.35 \mathrm{~N} \cdot \mathrm{~m}$ | $0.10 \mathrm{~N} \cdot \mathrm{~m} \sim 0.25 \mathrm{~N} \cdot \mathrm{~m}$ |  |
| Terminal Strength | 10N |  |  |
| Nut Tightening Torque | $2 \mathrm{~N} \cdot \mathrm{~m}$ |  |  |
| Vibration Resistance | $10 \mathrm{~Hz} \sim 55 \mathrm{~Hz} \sim 10 \mathrm{~Hz} / \mathrm{min}$ (vibrated for 1.5 mm to each XYZ direction) No defect found under conditions above |  |  |
| Heat Resistance of Solder | $350 \pm 10^{\circ} \mathrm{C}, 3$ seconds $\pm 1$ |  |  |
| Contact Resistance | (1kHz 200 Hz of voltage 20 mV .50 mA or less) |  |  |
| Contact Resistance | $5 \mathrm{~m} \Omega$ max. | $15 \mathrm{~m} \Omega$ max. | $10 \mathrm{~m} \Omega$ max. |
| Insulation Resistance | $\begin{array}{ll}\text { After } 1 \text { min. of } 500 \mathrm{VDC} & \begin{array}{l}\text { Phenol } 1,000 \mathrm{M} \Omega \leqq \\ \\ \\ \text { Epoxy } 50,000 \mathrm{M} \Omega \leqq\end{array}\end{array}$ |  |  |
| Withstanding Voltage | 1,000VAC 1min. | 500 VAC 1 min . |  |
| Rated Value AC | $30 \mathrm{~V} 3.0 \mathrm{~A} / 200 \mathrm{~V} 0.5 \mathrm{~A}$ | $30 \mathrm{~V} 1.0 \mathrm{~A} / 200 \mathrm{~V} 0.2 \mathrm{~A}$ | $30 \mathrm{~V} 1.5 \mathrm{~A} / 200 \mathrm{~V} 0.2 \mathrm{~A}$ |
| Rated Value DC | $20 \mathrm{~V} 3.0 \mathrm{~A} / 200 \mathrm{~V} 0.2 \mathrm{~A}$ | $20 \mathrm{~V} 1.0 \mathrm{~A} / 200 \mathrm{~V} 0.1 \mathrm{~A}$ | $20 \mathrm{~V} 1.5 \mathrm{~A} / 200 \mathrm{~V} 0.1 \mathrm{~A}$ |
| Durability | at least 50,000 strokes |  |  |

Part Number Designation


## Bushing



Panel Mounting Hole $\underline{\underline{\text { Dimensions (mm) }}}$


RS300/400/500N accessories M9 Nut ( $t=2 \mathrm{~mm}$ )
M9 Toothed lock washer ( $\mathrm{t}=1 \mathrm{~mm}$ ) Washer ( $t=0.5 \mathrm{~mm}$ )


| Number of Layers | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $(\mathrm{~mm})$ | 27 | 38 | 49 | 60 |

## RS400_Dimensions (mm)

## Bushing



Panel Mounting Hole Dimensions (mm)

$* \phi 3.2$ hole not needed for waterproof
RS300/400/500N accessories M9 Nut (t=2mm)
M9 Toothed lock washer ( $\mathrm{t}=1 \mathrm{~mm}$ )
Washer ( $t=0.5 \mathrm{~mm}$ )

Two screws fix

Panel Mounting Hole Dimensions (mm)
Noct for M2.3 screw
RS400V accessory
Two M2.3×6 screw

