

4600 and 4400 series

Toggle switches

Distinctive features and specifications



- High current/voltage rating in a small case
- Butt action contacts
- Insulated or metal lever
- UL, CSA and VDE (EN 61058-1) approved

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load (silver contacts A) : 4A 250VAC - 6A 125VAC
- Approved electrical ratings : see table below
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength :
 - 2.000 Vrms 50 Hz min. between terminals
 - 2.500 Vrms 50 Hz min. between poles and between terminals and frame
- Electrical life : 10.000 cycles at full load

| APPROVALS | MODELS | POLES | FUNCTIONS | APPROVED RATINGS |
|---------------------|--------|-------|-----------|-----------------------|
| UL/CSA | 4600A | 1-2 | 1-6-9 | 3A 250VAC - 6A 125VAC |
| VDE (EN 61058-1) | 4400A | 1-2 | 1-6 | 4(2)A 250VAC |
| | 4600A | 1-2-3 | 1-6 | 4(2)A 250VAC |

MATERIALS

- Case : melamine phenolic
- Actuator :
 - insulated : polyamide ,6-6
 - non-insulated : brass, nickel plated
- Bushing :
 - insulated : polyamide 6-6
 - non-insulated : brass, nickel plated
- Contacts : silver

GENERAL SPECIFICATIONS

- Torque : 0,95 Nm (.70 Ft.lb) max. applied to nut
- Panel thickness : 5 mm (.196) between 2 nuts
- Operating temperature : -20°C to +55°C
- Hand soldering : 270°C max. for 10 seconds max. - iron Ø3 (.118)

AGENCY APPROVALS



EN 61058-1

Availability : see above chart.

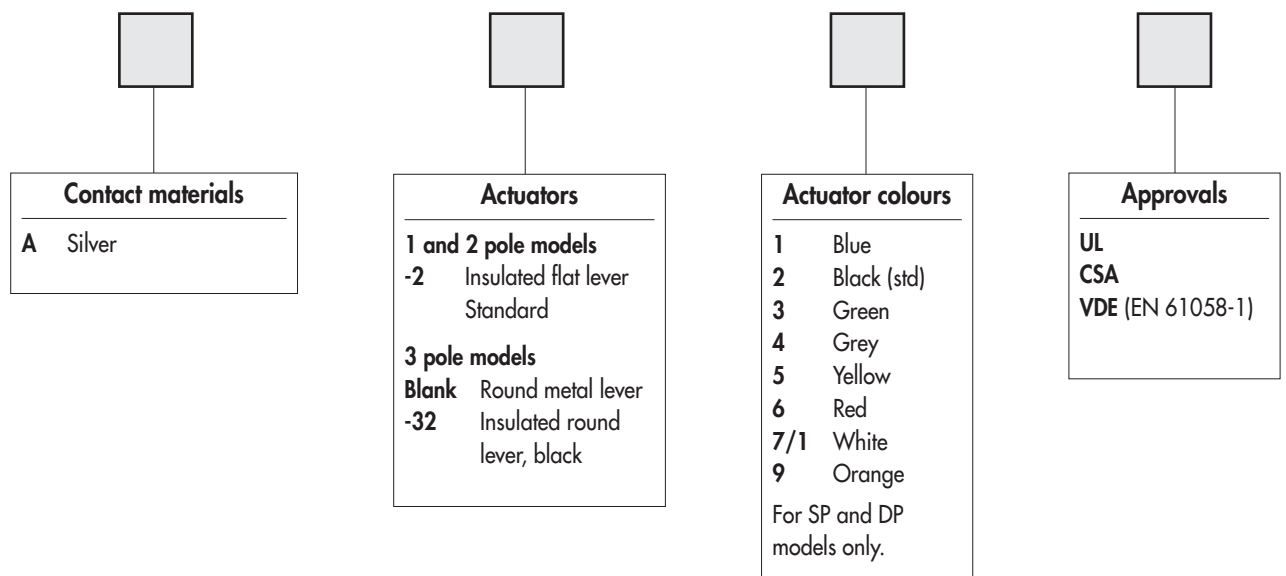
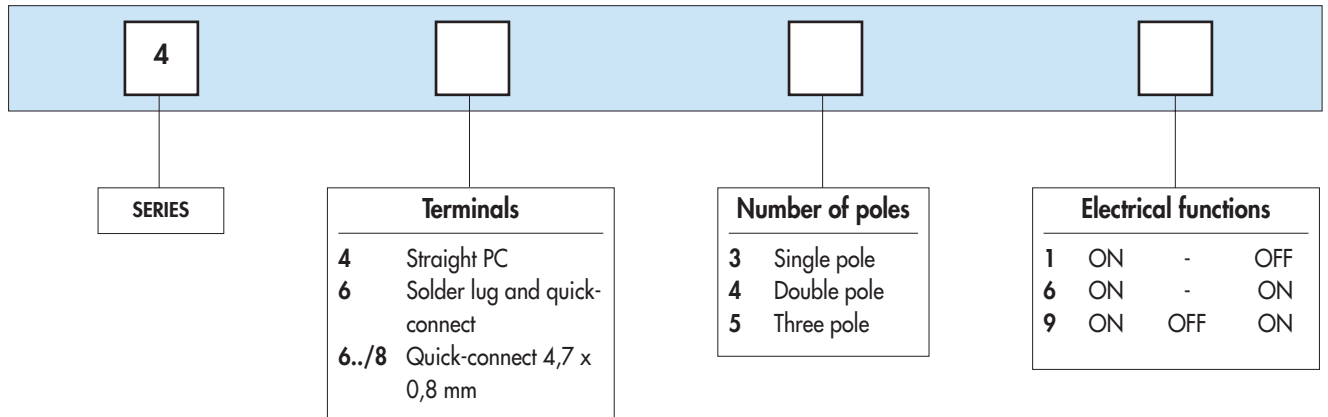
Marking : VDE approved models are standard marked.

To order switches marked UL-CSA, complete appropriate box of ordering format.

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Overview



ABOUT THIS SERIES

Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.



NOTICE : please note that not all combinations of above numbers are available. Refer to the following pages for further information.



Sealing boots are available on 3 pole models to protect the switches against dust and water. They are presented in section H.



Mounting accessories : standard hardware supplied with all models : 1 hex nut U166 and 1 knurled nut U520 in the same colour as the lever (insulated models) or U411 nickel plated (metal lever models). Standard and special hardware available are presented in section I.



Packaging unit : 20 pieces.

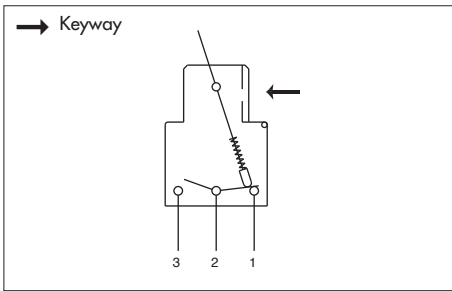
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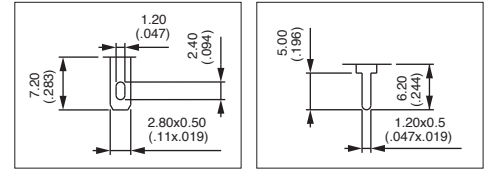
Insulated flat lever



A



- Solder lug/quick-connect terminals 2,8 x 0,5 (.110 x .019)
- Straight PC terminals or quick-connect terminals 4,7 x 0,8 (.185 x .031)
- 2 and 3 maintained positions
- 1 and 2 pole configurations



MODEL STRUCTURE



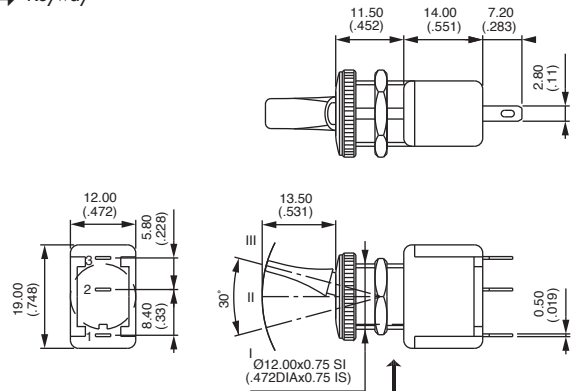
Solder lug/quick-connect terminals - single pole

→ Keyway



4631 -2
4636 -2
4639 -2

| | III | II | I |
|---------|-----|-----|-----|
| 4631 -2 | ON | - | OFF |
| 4636 -2 | ON | - | ON |
| 4639 -2 | ON | OFF | ON |



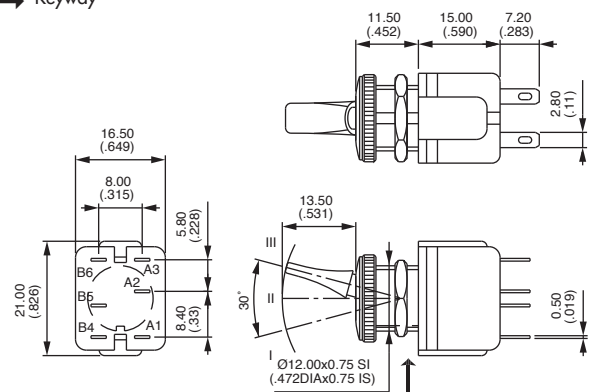
Solder lug/quick-connect terminals - double pole

→ Keyway



4641 -2
4646 -2
4649 -2

| | III | II | I |
|---------|-----|-----|-----|
| 4641 -2 | ON | - | OFF |
| 4646 -2 | ON | - | ON |
| 4649 -2 | ON | OFF | ON |



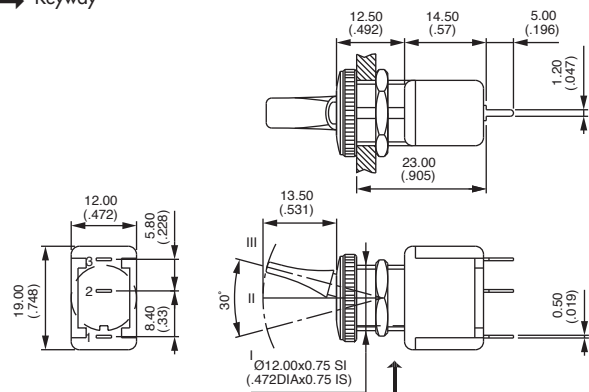
Straight PC terminals - single pole

→ Keyway



4431 -2
4436 -2
4439 -2

| | III | II | I |
|---------|-----|-----|-----|
| 4431 -2 | ON | - | OFF |
| 4436 -2 | ON | - | ON |
| 4439 -2 | ON | OFF | ON |





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Insulated flat lever

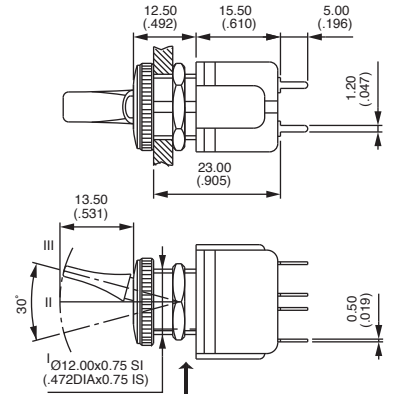
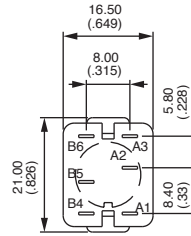
Straight PC terminals - double pole

→ Keyway



4441 -2
4446 -2
4449 -2

| | | |
|-----|-----|-----|
| III | II | I |
| ON | - | OFF |
| ON | - | ON |
| ON | OFF | ON |



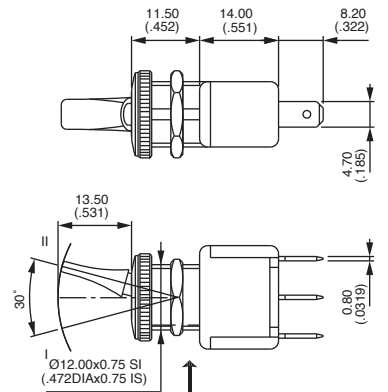
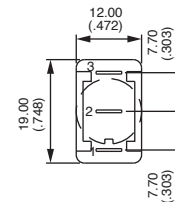
Quick-connect terminals 4,7 x 0,8 (.185 x .031) - single pole

→ Keyway

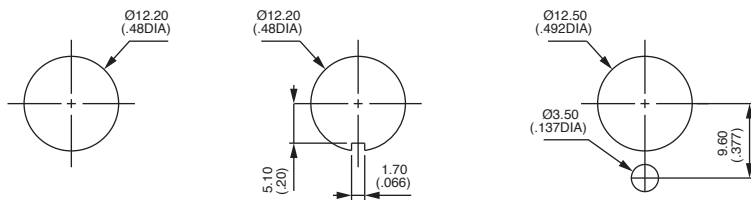


4631/8 -2
4636/8 -2

| | | |
|----|----|-----|
| I | II | |
| ON | - | OFF |
| ON | - | ON |



PANEL CUT-OUT



A

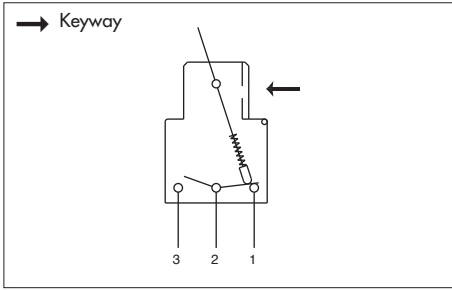
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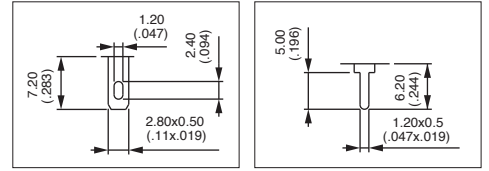
Round lever - three pole



A



- Solder lug or straight PC terminals
- 2 and 3 maintained positions



MODEL STRUCTURE



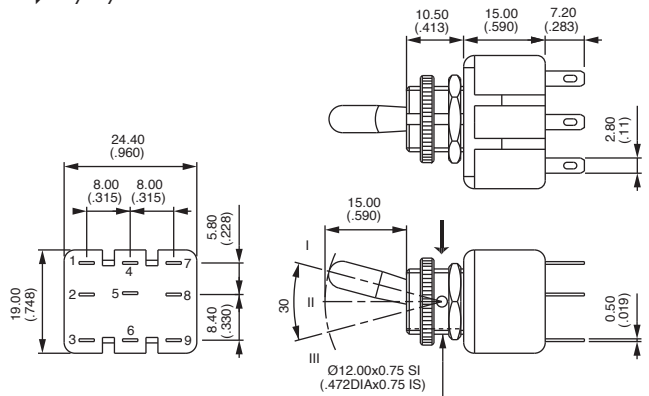
Solder lug terminals - metal lever

→ Keyway



4651
4656
4659

| III | II | I |
|-----|-----|-----|
| ON | - | OFF |
| ON | - | ON |
| ON | OFF | ON |



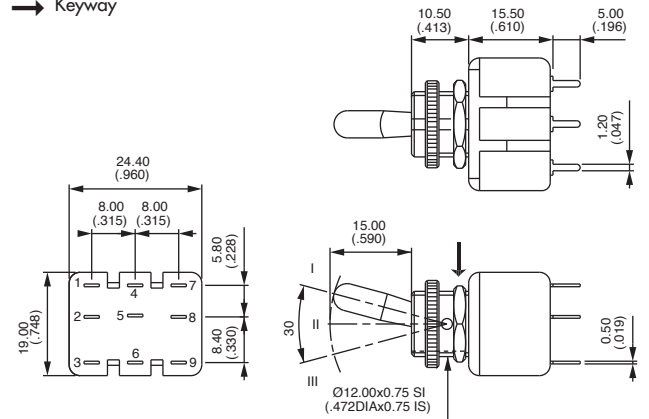
Straight PC terminals - metal lever

→ Keyway



4451
4456
4459

| III | II | I |
|-----|-----|-----|
| ON | - | OFF |
| ON | - | ON |
| ON | OFF | ON |



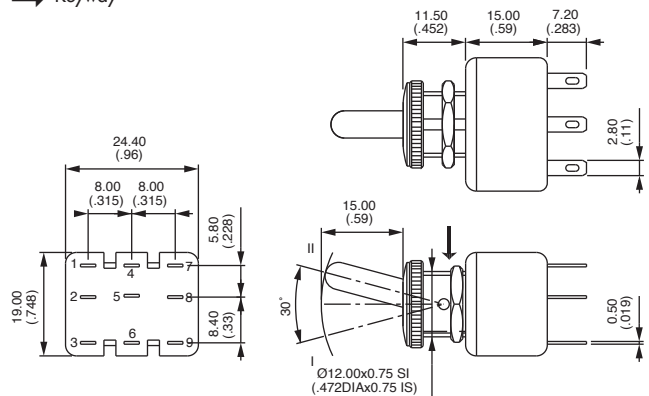
Solder lug terminals - insulated lever - silver contacts

→ Keyway



4651A-32
4656A-32

| I | II | |
|----|----|-----|
| ON | - | OFF |
| ON | - | ON |

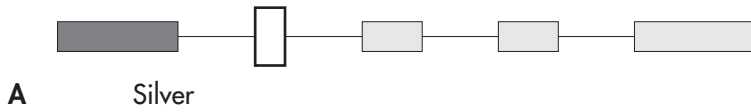




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CONTACT MATERIAL

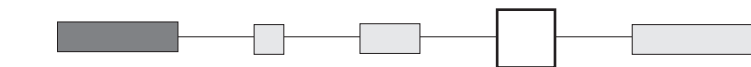


ACTUATORS



- Blank** Round, metal lever for 3 pole only
- 2** Insulated flat lever (for single and double pole only)
- 32** Black insulated round lever (for 3 pole only)

ACTUATOR COLOURS

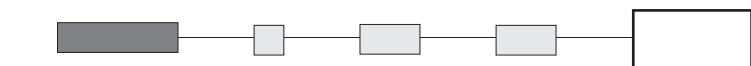


- 1** Blue
- 2** Black (standard)
- 3** Green
- 4** Grey
- 5** Yellow
- 6** Red
- 7/1** White
- 9** Orange



For insulated flat lever
 Black : standard colour - reduced delivery time
 Minimum order of 500 pieces for non-standard colours.

APPROVALS



UU (UL-CSA) Single and double pole only

Availability : see specifications for details of approved models.

Marking : to order switches marked UL-CSA, complete above box with 'UU'.
 Other approvals available as standard, see specifications.