

5000 series

Toggle switches

Distinctive features

UG1006-A

THE WIDEST RANGE IN MINIATURE SWITCHES



- 17 actuators including toggles, paddle levers and locking levers in different lengths.
- 5 contact materials from dry circuit to 6A 125VAC and high inrush up to 120A 2 ms.
- 8 functions including maintained and momentary versions.
- 1 to 4 pole configurations.
- 12 terminal types including 9 for PC board mounting. Other types include quick-connect and wire-wrap.
- 6 bushing styles from 6 (.236) plain to 11,9 (15/32) threaded.
- 3 types of finish including military black.
- 4 approvals (UL - CSA - VDE - CECC) and 3 listings.
- 4 types of sealing for terminal or front panel requirements.
- Numerous accessories available for actuator and bushing options.

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Specifications

ELECTRICAL SPECIFICATIONS

- Current/voltage rating with resistive load :

Contact	Maximum	Minimum	Level*
Silver (A)	3A 250VAC - 6A 125VAC - 4A 30VDC	50mA 10VDC	III and IV
Silver, gold plated (AD)	3A 250VAC - 6A 125 VAC - 4A 30VDC Gold plating withstands up to 100mA 30VDC	10mA 50mV 10µA 5V	I to IV
Brass, gold plated (CD)	0,4 VA at 20VAC or DC	10mA 50mV 10µA 5V	I and II

- For inductive, lamp or capacitive load, consult factory. * For details, see Technical Information, end of catalogue.
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength :
 - 1.000 Vrms 50 Hz min. between terminals
 - 1.500 Vrms 50 Hz min. between poles
 - 1.500 Vrms 50 Hz min. between terminals and frame
- Contact bounce : 2 ms max.
- Electrical life at full load :
 - 50.000 cycles for single and double pole
 - 40.000 cycles for 3 pole
 - 30.000 cycles for 4 pole
- Low level or mechanical life : 100.000 cycles

MATERIALS

- Case : diallylphthalate (DAP) or high temperature plastic material (UL94-V0)
- Actuator : brass, nickel plated
- Paddles : UL94HB polyamide
- Lever caps : vinyl
- Bushing : brass, nickel plated
- Housing : stainless steel or steel tin plated
- Contacts
 - A : silver
 - AD : silver, gold plated
 - CD : brass, gold plated
 - X814 : for peak currents, see "Special options".
- Terminal seal : epoxy

GENERAL SPECIFICATIONS

- Torque : 1,25 Nm (.922 Ft.lb) max. applied to nut
- Panel thickness : 2,5 mm (.098) with 2 nuts - 4 mm (.157) with 1 nut
- Operating temperature : -40°C to +85°C

AGENCY APPROVALS/PREFERENTIAL LIST



CECC 96201-007

For VDE, refer to 55000 series.

NATO

Availability : consult factory for details of approved models.

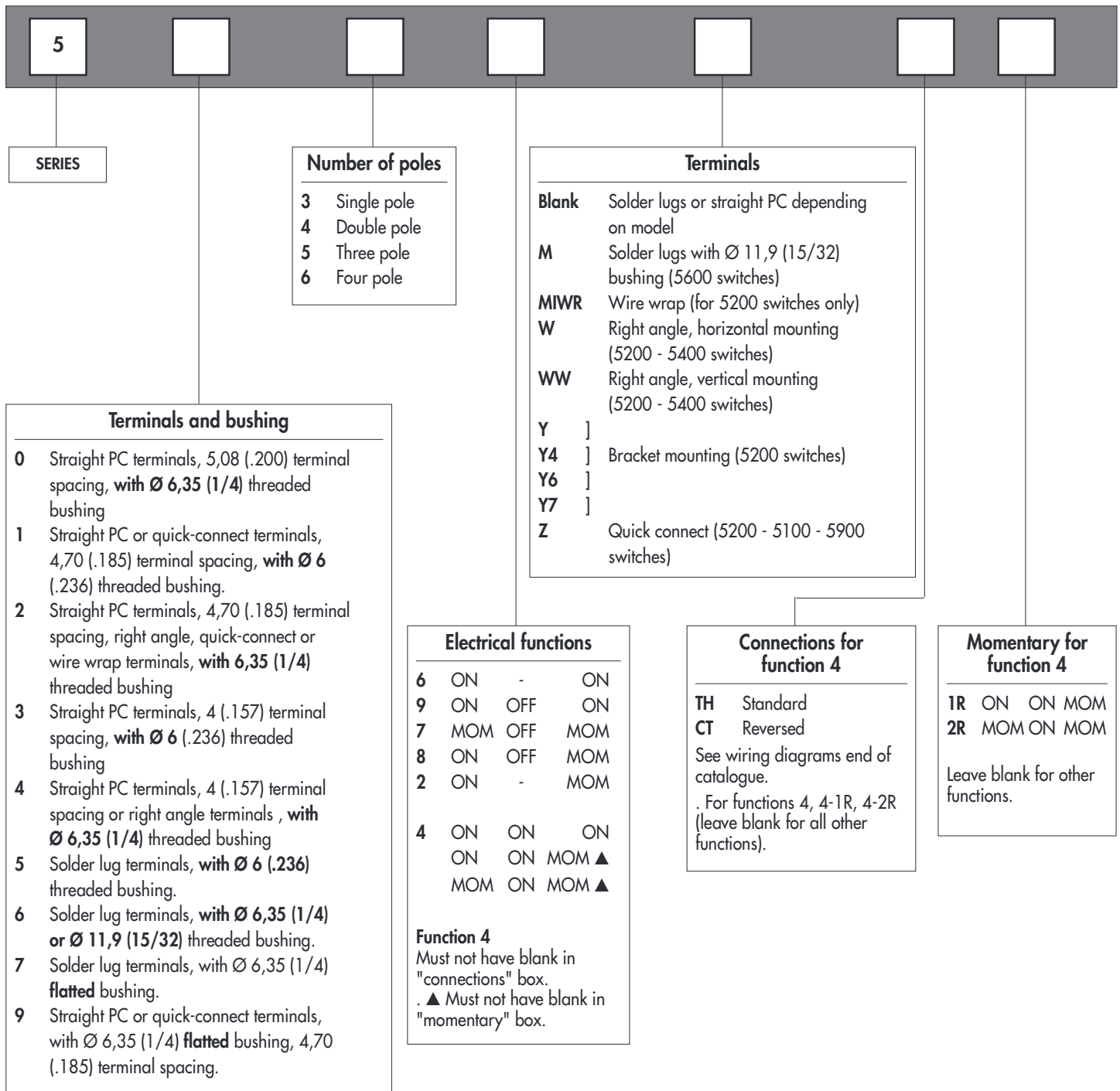
Marking : to order switches marked UL, CSA or CECC, complete appropriate box of ordering format. The preferential list does not appear on the switches.

5000 series

MODEL
STRUCTURE

Toggle switches

Overview



ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches with threaded bushing
- model structure of switches with plain bushing
- options in the same order as in above chart

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



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



5000 series

Toggle switches

Overview



Finish

Blank Bright chrome finish
G Matt black finish on bushing, actuator and hardware.

Fluorescent tip

Blank None
038 White fluorescent tip to lever
 Available with matt black finish (G) only.

Special options

Blank No special requirement
X408 Front panel sealing by two O-rings
X404 Horizontal right angle with reduced overall dimensions
 Other : specific bushing height, PC terminal length, finish, ratings, etc... See following pages.

Caps and paddles

Caps	Length
U270	11 (.433)
U1710	7,3 (.287)
Paddles	
U240N	12,4 (.488)
U290N	20 (.787)
U390N	21,5 (.846)

Contact materials

A Silver
AD Silver, gold plated
CD Brass, gold plated
 For peak currents, see X814, under Special Options.

Sealing

Blank No sealing except where standard
B Epoxy sealed terminals
K Front panel sealing by one O-ring and sealing washer
 Sealing by two O-rings, see X408 under "Special options".

Levers

Length with	threaded bushing	plain bushing
Blank (std)	10,5 (.413)	13,5 (.531)
-2	16 (.629)	19 (.748)
-7	-	6,6 (.259)
-8 (flat)	21,3 (.838)	-
-9 (flat)	11,4 (.448)	-
-12 (flat)	6,3 (.248)	-
-16	5,5 (.216)	8,5 (.334)
-17	7 (.275)	10 (.393)
-21 (+ U640)	21,3 (.838)	-
insulated		
-22	21,3 (.838)	-
-23	14 (.551)	-
Blank (large)	17,5 (.688)	-
-25	16,30 (.642)	-
-27 (large)	11,7 (.460)	-
-4N	9 (.354)	12 (.472)
4N for use with paddle actuators only.		

Approvals

VDE
UL
CSA
CECC
 Availability :
 Consult factory for details of approved models.

Locking levers

-1V 1 locked position
-2V 2 locked positions
-3V 3 locked positions
 Other, consult factory.
 For models with Ø 6,35 (1/4) bushing.



Sealing boots are available. They are presented in section H.



Mounting accessories : standard hardware supplied with all models with Ø 6,35 (1/4) or Ø 6 (.236) threaded bushing : 2 hex nuts 8 mm (.314) across flats, 1 locking ring and 1 lockwasher. Standard and special hardware available are presented in section I.



Packaging unit : 25 pieces or 50 pieces depending on models.

5000 series

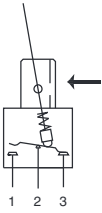
Toggle switches - solder lug terminals

Threaded bushing $\varnothing 6,35$ (1/4) : 5600

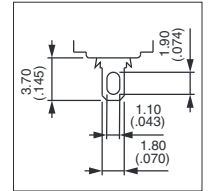
MODEL
STRUCTURE

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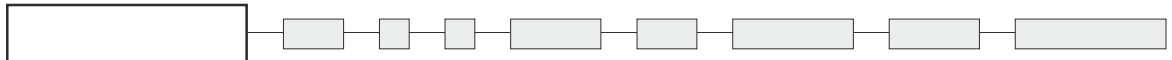
→ Keyway



• 1, 2, 3 and 4 pole configurations



MODEL
STRUCTURE



Shown with standard lever

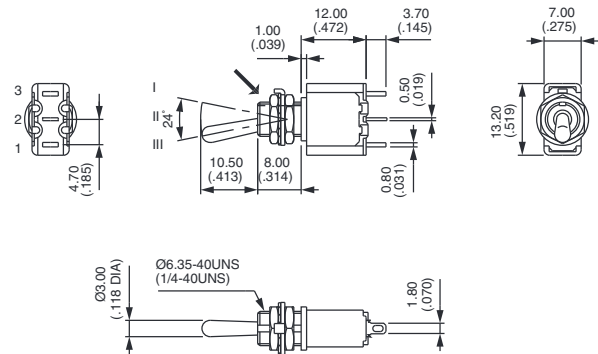
Single pole



5636
5639
5637
5638
5632

III	II	I
2-3		1-2
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM
ON	-	MOM

→ Keyway



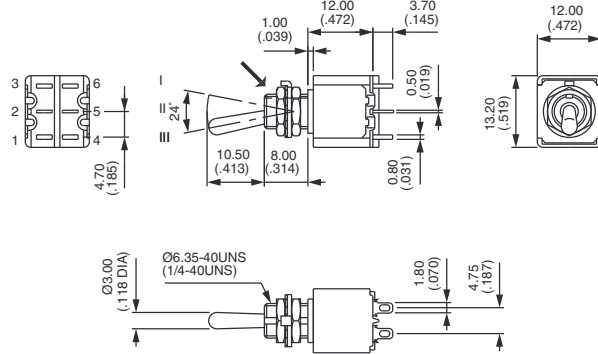
Double pole



5646
5649
5647
5648
5642
5644*
5644 1R*
5644 2R*

III	II	I
2-3		1-2
5-6		4-5
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM
ON	-	MOM
ON	ON	ON
ON	ON	MOM
MOM	ON	MOM

→ Keyway



* Function 4 : SP in DP case - specify CT or TH connections, see end of catalogue.

Three pole



5656
5659
5657
5658
5652

III	II	I
2-3		1-2
5-6		4-5
8-9		7-8
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM
ON	-	MOM

→ Keyway

