# 5<sup>M 600H</sup> 600H-600NH series

Toggle switches • high amperage



# DISTINCTIVE FEATURES

Robust mechanism High current/voltage rating Insulated or metal lever UL, CSA and NF-VDE (EN 61058-1) approved



# ELECTRICAL SPECIFICATIONS

- Max. current/voltage ratings : see tables below
- Peak current : 30 A max. during 1/2 sine, 250 VAC
- Initial contact resistance : 10 m $\Omega$  max.
- Insulation resistance : 1,000  $\text{M}\Omega$  min. at 500 VDC
- Dielectric strength :
  2,000 Vrms 50 Hz min. between terminals
  2,500 Vrms 50 Hz min. between terminals and frame
- Electrical life : 10,000 cycles at full load

	APPR	OVED R	ATINGS			
			600H - 600NH			
Models	lodels Functions	UL CSA		NF-VDE		
		UL 1054	CSA 22-2	EN 61058-1		
ON - OFF (1)			15 A 1	L/2 HP	10(4) A 400 VAC	
Single and	ON - ON (6)		125-250 VAC			
double pole Other 10 A 1/2 HP (4-5-7-8-9) 125-250 VAC			Т 85/55 (600Н)			
	ON - OFF (1) & ON - ON (6)		15 A 1/2 HP 125-250 VAC		T 125/55 (600NH)	
Three pole	Other (4-5-7-8-9)					
	FOR Max. current/volt	INFORM tage rati		ve load		
Functions		Rating	tings Electrical life		ctrical life	
ON - OFF ON - ON	1	15 A 250 VAC 10 A 24 VDC 10,000 cy 15 A 12 VDC		00 cycles		

ON - ON	10 A 24 VDC 15 A 12 VDC	10,000 cycles
ON OFF ON	15 A 250 VAC 5 A 24 VDC	6,000 cycles 10,000 cycles
Other	15 A 125 VAC 12 A 250 VAC 5 A 24 VDC	10,000 cycles

The company reserves the right to change specifications without notice.



1

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# () GENERAL SPECIFICATIONS

- Torque : 1.50 Nm (1.10 Ft.lb) max. applied to nut
- Panel thickness : 4.5 mm (.177) max. between 2 nuts
- Operating temperature : -20 °C to +55 °C (-4 °F to +131 °F)

# MATERIALS

- Case : polyester UL94-V0
- Actuator :

D

- 600H : brass, nickel plated
- 600NH : black polyamide
- Bushing : brass, nickel plated
- Contacts : silver/nickel alloy

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

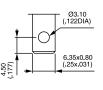
## AGENCY APPROVALS

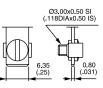






EN 61058-1 EN 61058-1

Availability : see chart on previous page. Marking : approved models are standard marked. 

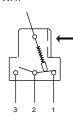


600H/2 & 600NH/2

600H & 600NH



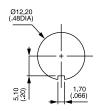


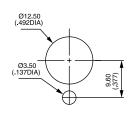




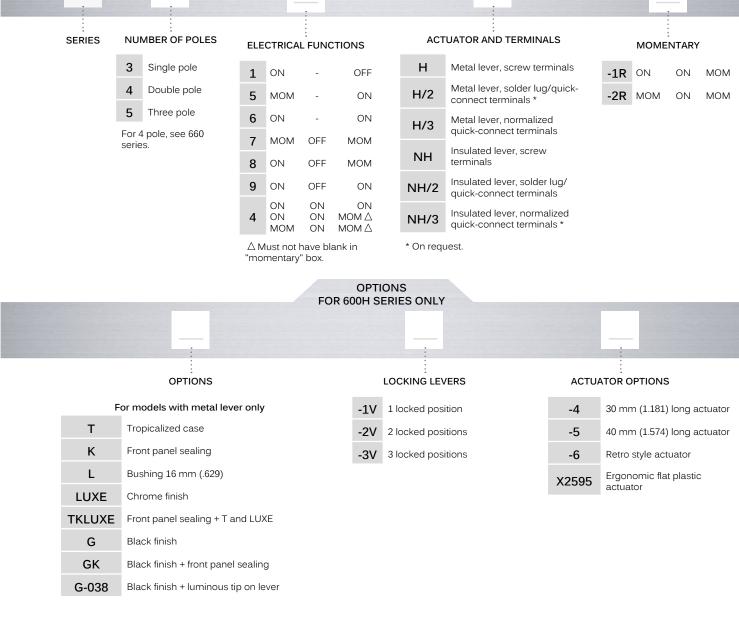








# Toggle switches • high amperage



BASIC PART NUMBER

# ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- () Notice : please note that not all combinations of above numbers are available. Refer to following pages for further information.
- (3) Switch guards are available to prevent inadvertent lever operation. See "Switch Guards" section on website.
- () Sealing boots are available on 600H series to protect the switches against dust and water. See "Sealing Boots" section of website.
- (b) Mounting accessories : standard hardware supplied with all models :
  - 600H and series : 1 hex nut U166 and 1 knurled nut U411

**BUILD YOUR PART NUMBER** 

6

- 600NH series : 1 hex nut U166 and 1 knurled nut U522

APEN

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638H/2

639H/2

### **METAL LEVER - SINGLE POLE**

ST.
L P

#### Ш Ш 2-1 Solder lug Screw A 631H/2 631H 30° ON 635H/2 635H 26° MOM 636H/2 636H 30° ON OFF MOM 637H/2 637H 30° MOM

36° ON

36° ON

638H

639H

KEYWAY A = Angle of throw 14.00 þ

ð

→ KEYWAY

2-3

OFF

ON

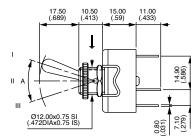
ON

ON

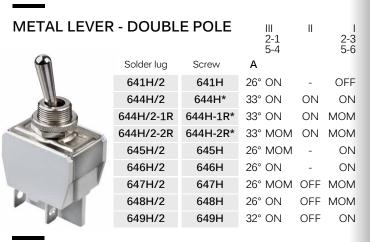
OFF MOM

OFF

29.50



Angle of throw with K sealing option : functions 1, 5, 6, 7 : 26° - functions 8, 9 : 32°



### **METAL LEVER - THREE POLE**



		III 2-1 5-4 8-7	II	 2-3 5-6 8-9
Solder lug	Screw	Α		
651H/2	651H	24° ON	-	OFF
655H/2	655H	15° MOM	-	ON
656H/2	656H	24° ON	-	ON
657H/2	657H	24° MOM	OFF	MOM
658H/2	658H	24° ON	OFF	MOM
659H/2	659H	28° ON	OFF	ON

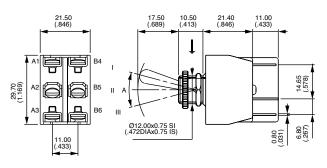
# **INSULATED LEVER - SINGLE POLE**



		2-1	Ш	2-3
Solder lug	Screw	А		
631NH/2	631NH	28° ON	-	OFF
635NH/2	635NH	24° MOM	-	ON
636NH/2	636NH	28° ON	-	ON
637NH/2	637NH	33° MOM	OFF	MOM
638NH/2	638NH	33° ON	OFF	MOM
639NH/2	639NH	33° ON	OFF	ON

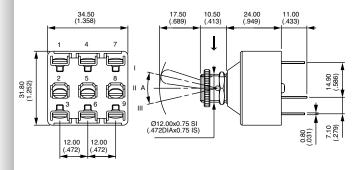
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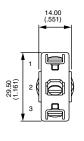


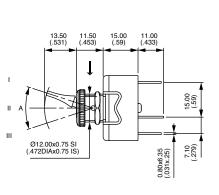
\* Function 4 : SP in DP case - see "Technical information" on website

→ KEYWAY



KEYWAY





4

KEYWAY

21.50 (.846)

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11.50 (.452)

21.50 (.846)

11.00

INSULATED I	LEVER - DC	OUBLE PO	LE     2-1 5-4	II	 2-3 5-6
	Solder lug	Screw	A		50
	641NH/2	641NH	26° ON	-	OFF
35	644NH/2	644NH*	30° ON	ON	ON
	644NH/2-1R	644NH-1R*	26° ON	ON	MOM
- Con	644NH/2-2R	644NH-2R*	26° MOM	ON	MOM
	645NH/2	645NH	26° MOM	-	ON
	646NH/2	646NH	26° ON	-	ON
to la	647NH/2	647NH	26° MOM	OFF	MOM
	648NH/2	648NH	30° ON	OFF	MOM
	649NH/2	649NH	30° ON	OFF	ON

### **INSULATED LEVER - THREE POLE**

L			III 2-1 5-4 8-7	II	 2-3 5-6 8-9
and the second	Solder lug	Screw	A		
See 1	651NH/2	651NH	24° ON	-	OFF
1 9 11	655NH/2	655NH	15° MOM	-	ON
	656NH/2	656NH	24° ON	-	ON
	657NH/2	657NH	24° MOM	OFF	MOM
	658NH/2	658NH	24° ON	OFF	MOM
	659NH/2	659NH	28° ON	OFF	ON

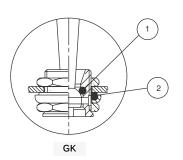
All models also available with normalized guick-connect terminals H/3 or NH/3.

		 BASIC P/N	
	••••••	 BASIC P/N	

OPTIONS

### For 600H series only

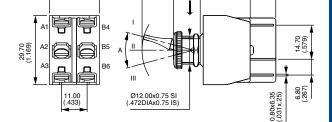
- Tropicalized diallylphthalate case (-40 °C to +85 °C) т (-40 °F to +185 °F)
- Κ Front panel sealing by 1 O-ring and sealing washer. Protects the switch against water and dust. Panel seal withstands 1 bar pressure and remains sealed even when switch is operated
- Special threaded bushing, length 16 mm (.629) L
- LUXE Chrome plated lever and cap nut U117
- TK LUXE Options T, K and LUXE.
- G Black finish on bushing, lever and nuts. Includes tropicalization (option T) and locking ring U12.
- GK Option G + front panel sealing by O-ring and sealing washer (as described in option K)
- G-038 Option G + fluorescent tip on lever. White fluorescent tip becomes luminous when submitted to ultra violet rays.



G-38

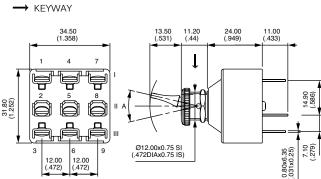
(1) O-ring 2 Sealing washer

Ø12.00x0.75 SI (.472DIAx0.75 IS) 0.80x6.35 .031x0.25)

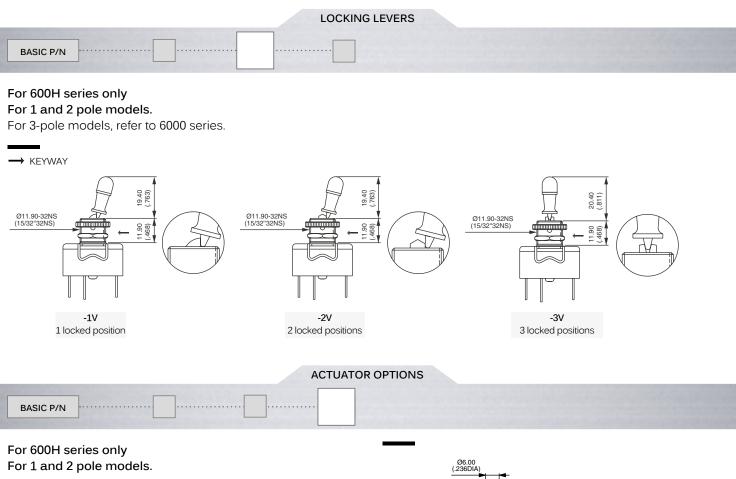


13.50 (.531)

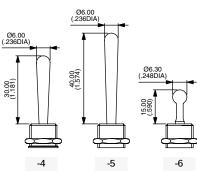
\* Function 4 : SP in DP case - see "Technical information" on website

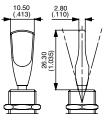






- -4 30 mm (1.181) long actuator
- -5 40 mm ( 1.574) long actuator
- -6 Retro style actuator (gold plated or chrome plated : on request)
- X2595 Ergonomic flat plastic actuator





X2595

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### Apem:

657H/2 636NH/2 648H/2 644H/2 635H 638NH/2 631H/2 651H/2 639H/2 639NH/2 647H/2 659H/2 656H/2 637H/2 658H/2 637NH/2 641H/2 649H/2 638H/2 636H/2 646H/2 644H 631NH/2 647H/2K4 631H/25 631H 631H/22V 631NH 635H/2 635NH 635NH/2 636H 637H 638H 639H 641H 641H/22V 641NH/2 644H/21R 644H/22R 644H1R 644NH/2 645H 645H/2 645NH 645NH/2 646H 646NH/2 647H 647NH/2 648H 648NH/2 649H 649NH/2 651H 651NH 651NH/2 655H 656H 656NH 656NH/2 657H 657NH/2 658H 659H 659NH 659NH 659NH/2 631H/21V 631H/2K 635H/2K 635H/2K 635H/2T 636H/21V 636H/22V 636H/2T 636H2V 637H/2K 639H/2K 641H/21V 641H/2TKLUXE 641HK 644H3V 645H/2TKLUXE 646H/22V 646H/2G 646H/2G 646H/2TKLUXE 646H2V 647H/2KX2126 648HK 649H/23V 649H/2G 649H/2G 649H3V 649HK 651H/22V 641H/2K 631HLUXE 639H/23V 637H/25V 655HK 647HK