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 : $10 \text{ m}\Omega$ max.
- Insulation resistance : 1,000 M Ω 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

APPROVED RATINGS					
		600H - 600NH			
Models	Functions	UL	CSA	NF-VDE	
		UL 1054	CSA 22-2	EN 61058-1	
	ON - OFF (1)	15 A 1/2 HP 125-250 VAC			
Single and double pole	ON - ON (6)			10(4) A 400 VAC	
	Other (4-5-7-8-9)	10 A 1/2 HP 125-250 VAC		T 85/55 (600H)	
Three pole	ON - OFF (1) & ON - ON (6)		./2 HP 50 VAC	T 125/55	
	Other (4-5-7-8-9)	10 A 1/2 HP 125-250 VAC		(600NH)	

FOR INFORMATION Max. current/voltage rating w. resistive load				
Functions	Ratings	Electrical life		
ON - OFF ON - ON	15 A 250 VAC 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.



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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 :
- 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









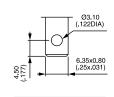
EN 61058-1 EN 61058-1

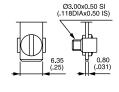
Availability: see chart on previous page.

Marking: approved models are standard marked.



TERMINALS





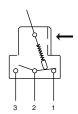
600H/2 & 600NH/2

600H & 600NH



ELECTRICAL FUNCTIONS

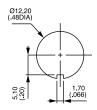
→ KEYWAY

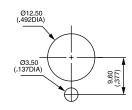




PANEL CUT-OUT



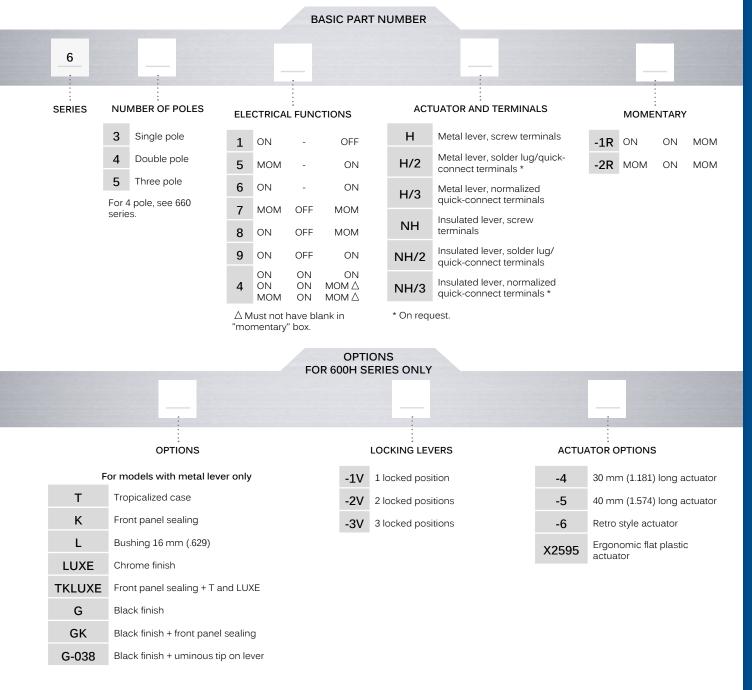




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BUILD YOUR PART NUMBER





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.
- 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.
- Mounting accessories: standard hardware supplied with all models:
 - 600H and series: 1 hex nut U166 and 1 knurled nut U411
 - 600NH series : 1 hex nut U166 and 1 knurled nut U522

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METAL LEVER - SINGLE POLE



		III 2-1	II	1 2-3	
Solder lug	Screw	Α			
631H/2	631H	30° ON	-	OFF	
635H/2	635H	26° MOM	-	ON	
636H/2	636H	30° ON	-	ON	
637H/2	637H	30° MOM	OFF	MOM	
638H/2	638H	36° ON	OFF	MOM	
639H/2	639H	36° ON	OFF	ON	

METAL LEVER - DOUBLE POLE



		5-4		5-6
Solder lug	Screw	Α		
641H/2	641H	26° ON	-	OFF
644H/2	644H*	33° ON	ON	ON
644H/2-1R	644H-1R*	33° ON	ON	MOM
644H/2-2R	644H-2R*	33° MOM	ON	MOM
645H/2	645H	26° MOM	-	ON
646H/2	646H	26° ON	-	ON
647H/2	647H	26° MOM	OFF	MOM
648H/2	648H	26° ON	OFF	MOM
649H/2	649H	32° ON	OFF	ON

METAL LEVER - THREE POLE



		2-1 5-4 8-7		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

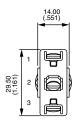
INSULATED LEVER - SINGLE POLE

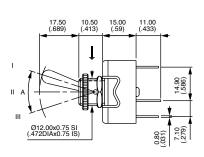


		2-1	"	2-3
Solder lug	Screw	Α		
631NH/2	631NH	28° ON	-	OFF
635NH/2	635NH	24° MOM	-	ON
636NH/2	636NH	28° ON	-	ON
637NH/2	637NH	33° MOM	OFF	MOM
638NH/2	638NH	33° ON	OFF	MOM
639NH/2	639NH	33° ON	OFF	ON

→ KEYWAY

A = Angle of throw



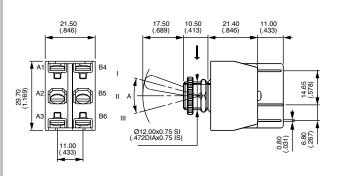


Angle of throw with K sealing option : functions 1, 5, 6, 7 : 26° - functions 8, 9 : 32°

→ KEYWAY

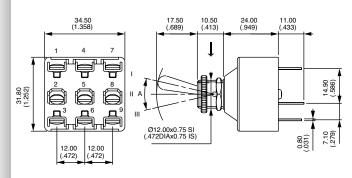
2-3

Ш

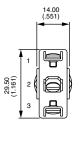


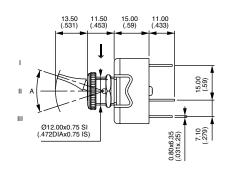
* Function 4 : SP in DP case - see "Technical information" on website

→ KEYWAY



→ KEYWAY





APEM

600H-600NH series

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648NH

649NH

30° ON

30° ON

OFF

OFF

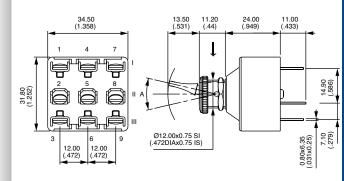
MOM

ON

21.50 (846) (11.00

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

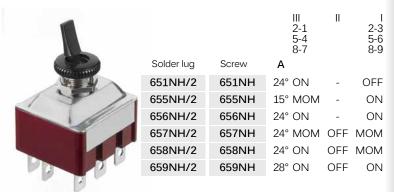
→ KEYWAY



INSULATED LEVER - THREE POLE

648NH/2

649NH/2



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

OPTIONS

BASIC P/N

For 600H series only

T Tropicalized diallylphthalate case (-40 °C to +85 °C) (-40 °F to +185 °F)

K 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

L Special threaded bushing, length 16 mm (.629)

LUXE Chrome plated lever and cap nut U117

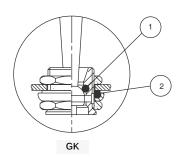
TK LUXE Options T, K and LUXE.

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.

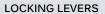


1 O-ring

(2) Sealing washer



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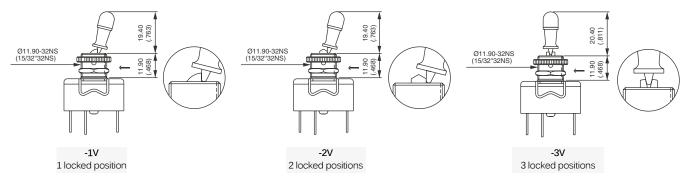


BASIC P/N

For 600H series only For 1 and 2 pole models.

For 3-pole models, refer to 6000 series.





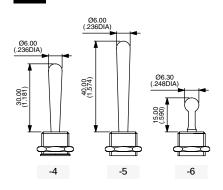
ACTUATOR OPTIONS

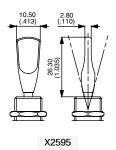
BASIC P/N

For 600H series only For 1 and 2 pole models.

- -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





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/2KZ 631H/25 631H 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/2 631H/21V 631H/21V 631H/21V 631H/2K 635H/2K 635H/2T 636H/21V 636H/22V 636H/2T 636H2V 637H/2K 639H/2K 647H/2KX2126 648HK 649H/23V 649H/2G 649H/2GK3V 649H3V 649HK 651H/22V 641H/2K 631HLUXE 646HLUXE 639H/23V 637H/25V 655HK 647HK