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



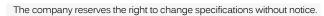


#### **ELECTRICAL SPECIFICATIONS**

- 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 $\Omega$  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

	APPROVED RATINGS				
	Functions	600H - 600NH			
Models		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	ON - ON (6)			10(4) A 400 VAC T 85/55 (600H)	
double pole	Other (4-5-7-8-9)	10 A 1/2 HP 125-250 VAC			
Thursus	ON - OFF (1) & ON - ON (6)	15 A 1/2 HP 125-250 VAC		T 125/55	
Three pole	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			





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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**









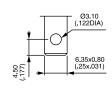
EN 61058-1 EN 61058-1

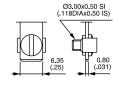
Availability: see chart on previous page.

Marking: approved models are standard marked.



#### **TERMINALS**





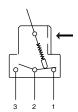
600H/2 & 600NH/2

600H & 600NH



#### **ELECTRICAL FUNCTIONS**

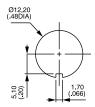
→ KEYWAY

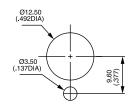




#### PANEL CUT-OUT



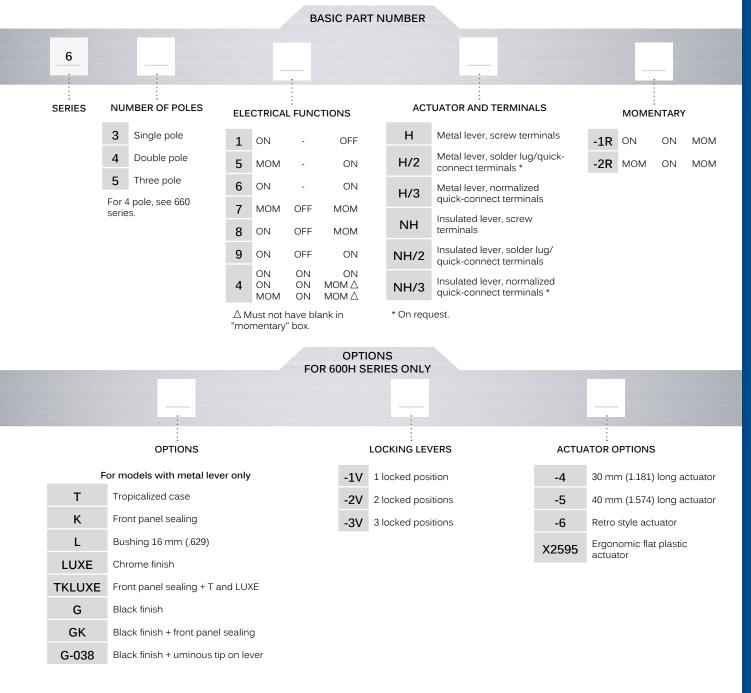




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#### **BUILD YOUR PART NUMBER**





#### **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.

- (1) 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.
- (2) 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	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**



r - DOUBL	III 2-1 5-4	II	2-3 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

III

Ш

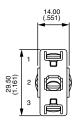
#### **INSULATED LEVER - SINGLE POLE**

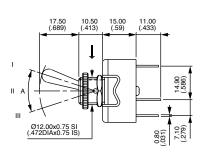


		2-1	11	2-3
Solder lug	Screw	Α		
631NH/2	631NH	28° ON	-	OFF
635NH/2	635NH	24° MOM	-	ON
636NH/2	636NH	28° ON	-	ON
637NH/2	637NH	33° MOM	OFF	MOM
638NH/2	638NH	33° ON	OFF	MOM
639NH/2	639NH	33° ON	OFF	ON

#### → KEYWAY

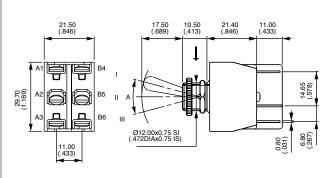
#### A = Angle of throw





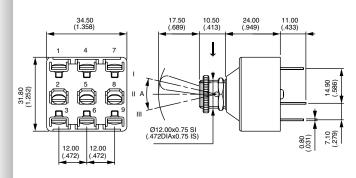
Angle of throw with K sealing option : functions 1, 5, 6, 7 : 26° - functions 8, 9 : 32°

#### → KEYWAY

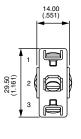


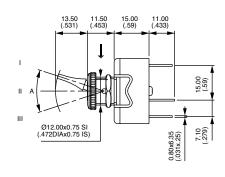
\* Function 4 : SP in DP case - see "Technical information" on website

#### → KEYWAY



#### - KEYWAY

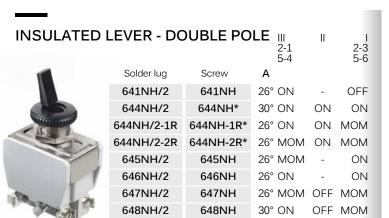




# **APEM**

# 600H-600NH series

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649NH

30° ON

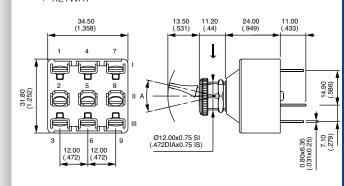
OFF

ON

# 21.50 (.846) (.531) (.452) (.466) (.433) (.433) (.472DIAx0.75 IS) (.472DIAx0.75 IS) (.472DIAx0.75 IS) (.472DIAx0.75 IS) (.472DIAx0.75 IS) (.472DIAx0.75 IS) (.472DIAx0.75 IS)

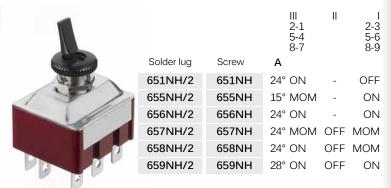
\* Function 4 : SP in DP case - see "Technical information" on website

#### → KEYWAY



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

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

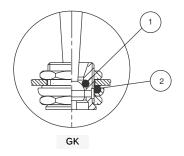
TK LUXE Options T, K and LUXE.

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.



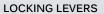
(1) O-ring

(2) Sealing washer



G-38

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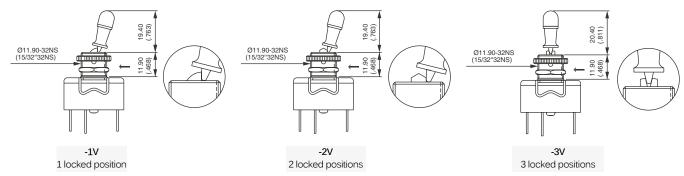


BASIC P/N

#### 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
- Retro style actuator (gold plated or chrome plated : on -6

X2595 Ergonomic flat plastic actuator

