GENERAL SPECIFICATIONS FOR \$301 ~ \$339

Electrical Capacity (Resistive & Inductive Load)

Power Level: Shown in the following tables

Other Ratings

10 milliohms maximum **Contact Resistance:**

1,000 megohms minimum @ 500V DC **Insulation Resistance: Dielectric Strength:** 2,000V AC minimum for 1 minute minimum

Mechanical Life: 50,000 operations minimum

Electrical Life: 6,000 operations minimum for S331F; 15,000 operations minimum for all other S331s;

25,000 operations minimum for all others

Angle of Throw (α) : Shown on following tables

Materials & Finishes

PBT for flatted lever; brass with chrome plating for all others Toggle:

Bushing: Brass with chrome plating

Case: Melamine phenol Steel with zinc plating Case Cover: Movable Contactor: Copper with silver plating

Movable & Stationary Contacts: Silver alloy capped on copper with silver plating

> Terminals: Brass with tin plating

Environmental Data

Operating Temperature Range: -10°C ~ +70°C (+14°F ~ +158°F)

Installation

2.94Nm (26 lb•in) for double nut; 1.47Nm (13 lb•in) for single nut **Mounting Torque:**

Soldering Time & Temperature: Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

UL: File No. E44145 - Recognized only when ordered with marking on switch.

Add "/U" or "/CUL" to end of part number to order UL recognized switch. UL or cULus recognition designated beside part numbers on following pages.

See Supplement section to find UL or cULus rating details.

File No. 023535_0_000 - Certified only when ordered with marking on switch. CSA:

Add "/C" to end of part number to order CSA certified switch.

CSA certification designated beside part numbers on following pages.

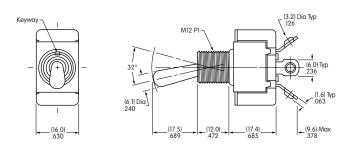
See Supplement section to find CSA rating details

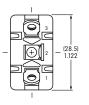
SINGLE POLE WITH SOLDER LUG *

UL, cULus & with mar				hen ordered ral Specs)	Tog	gle Posit (ion/Connect) = Moment		nals		Electrical	Capacity		
	* 4	pprove	ıls	D.I. 0	Dov	wn	Center	U	р		Resistive		Inductive	
Model	lR.	c 911 °us	40	Pole & Throw	Keywo	ay-\	-			AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
S301	/	/	/	SPST	ON	1-3	NONE	OFF	_	15A	6A	20A	10A	32°
S302	/	/	/	SPDT	ON	2-3	NONE	ON	2-1	15A	6A	20A	10A	32°
S303	/	/	/	SPDT	ON	2-3	OFF	ON	2-1	15A	6A	20A	10A	32°
S305	_	_	/	SPDT	ON	2-3	NONE	(ON)	2-1	15A	6A	20A	8A	32°
S308	_	_	/	SPDT	(ON)	2-3	OFF	(ON)	2-1	15A	6A	20A	8A	32°
S309	_	_	/	SPDT	ON	2-3	OFF	(ON)	2-1	15A	6A	20A	8A	32°
Throw &			SPST	1.	INTERI CONN	NAL IECTION	SPD	· T , _/	• 1		١		al numbers ar y on the switc	

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.

Wire harness & cable assemblies offered only in Americas.





S301 does not

have terminal 2







S301

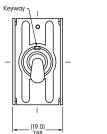
Maximum Panel Thickness: .185" (4.7mm)

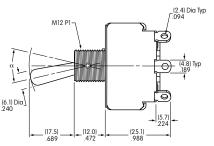
DOUBLE POLE WITH SOLDER LUG*

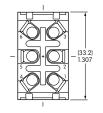
* UL, cULus & with marl					T	oggle Positi (on/Connect) = Moment		inals		Electrico	ıl Capacity		
	* A	pprova	ls		D	own	Center		Up		Resistive		Inductive	α =
Model	<i>LR</i> 。	c 711 °us	(P)	Pole & Throw	Key	way ¬	-	•	-	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
S331	/	/	/	DPST	ON	1-3 4-6	NONE	OFF	_	25A	25A	25A	10A	25°
S332	/	/	/	DPDT	ON	2-3 5-6	NONE	ON	2-1 5-4	25A	15A	25A	10A	25°
S333	/	/	/	DPDT	ON	2-3 5-6	OFF	ON	2-1 5-4	25A	15A	25A	10A	30°
S335	/	/	/	DPDT	ON	2-3 5-6	NONE	(ON)	2-1 5-4	15A	6A	20A	8A	25°
S338	/	/		DPDT	(ON)	2-3 5-6	OFF	(ON)	2-1 5-4	15A	6A	20A	8A	25°
S339	/	/		DPDT	ON	2-3 5-6	OFF	(ON)	2-1 5-4	15A	6A	20A	8A	25°
Throw &	-	DPST	1 -	3 4		— INTERNAL CONNECTIO	N DPD1	3.	2 (COM)	5 • 4	N		al numbers a y on the switc	

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.

^{*} Wire harness & cable assemblies offered only in Americas.







S331 does not have terminals 2 & 5



Maximum Panel Thickness: .185" (4.7mm)



S331

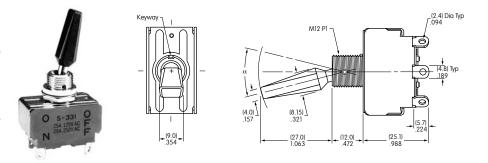


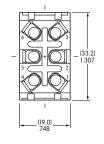
Ė

					DOUB	LE PO	OLE WIT	'H SOL	DER L	UG & F	LATTED	LEVER	*		
	* UL & cU	with mo	gnized on Irking on General Sp	świtch	ordered	Ţ	oggle Positio	on/Connect) = Momento		nals		Electrico	l Capacity		
		* 4	Approvo	ıls		C	Oown	Center		Up		Resistive		Inductive	
	Model	<i>LR</i> 。	c 913 °us	(P)	Pole & Throw	Ke	yway¬	-		—	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	α = Angle of Throw
•	S331R	/	/	_	DPST	ON	1-3 4-6	NONE	OFF	_	25A	25A	25A	10A	25°
	S332R	/	/	_	DPDT		2-3 5-6	NONE	ON	2-1 5-4	25A	15A	25A	10A	25°
	S333R	/	/		DPDT	ON	2-3 5-6	OFF	ON	2-1 5-4	25A	15A	25A	10A	30°
	S338R	/	/	_	DPDT	(ON)	2-3 5-6	OFF	(ON)	2-1 5-4	15A	6A	20A	8A	25°
	S339R	/	/	_	DPDT	ON	2-3 5-6	OFF	(ON)	2-1 5-4	15A	6A	20A	8A	25°
	Throw &		DPST		3 4	^ 6	-INTERNAL CONNECTION	DPDT 3	Ž	(COM) 5 •	• 4	N		al numbers a y on the switc	

Notes: Standard Hardware: AT504M Knurled Nut, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.

^{*} Wire harness & cable assemblies offered only in Americas.







S331R does not have terminals 2 & 5

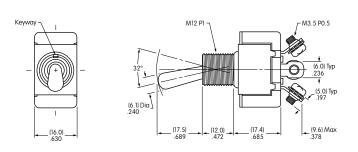
Maximum Panel Thickness: .220" (5.6mm)

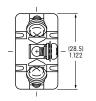
Supplement | Accessories

SINGLE POLE WITH SCREW LUG

* UL, cULus & with mar				hen ordered al Specs)	Tog	gle Posit (ion/Connect) = Momento		nals		Electrical	Capacity		
	* A	pprovo	ıls		Do	wn	Center	U	lp		Resistive		Inductive	α =
Model	lR.	c 911 °us	(1)	Pole & Throw	Keywo	² y - 1	-		=	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
\$301T	/	/	/	SPST	ON	1-3	NONE	OFF	_	15A	6A	20A	10A	32°
S302T	/	/	/	SPDT	ON	2-3	NONE	ON	2-1	1 <i>5</i> A	6A	20A	10A	32°
S303T	/	/	/	SPDT	ON	2-3	OFF	ON	2-1	15A	6A	20A	10A	32°
S305T			/	SPDT	ON	2-3	NONE	(ON)	2-1	1 <i>5</i> A	6A	20A	8A	32°
S308T			/	SPDT	(ON)	2-3	OFF	(ON)	2-1	15A	6A	20A	8A	32°
S309T			/	SPDT	ON	2-3	OFF	(ON)	2-1	1 <i>5</i> A	6A	20A	8A	32°
Throw &	-	S	PST	1.	INTERN CONNE		SPD		9 2 (COM)		٨		al numbers ar	

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.









S301T does not have terminal 2

Maximum Panel Thickness: .185" (4.7mm)

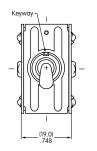
S301T

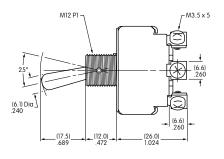
DOUBLE POLE WITH SCREW LUG

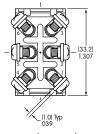
	s recogning on sw			ordered with Specs)	To	oggle Positio	on/Connect = Momento		inals		Electrica	l Capacity		
	*A	pprove	ıls		D	own	Center		Up		Resistive		Inductive	α =
Model	<i>L</i> R.	c 91 0°us	(P)	Pole & Throw	Key	way-\	-		-	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
S331T	/	/		DPST	ON	1-3 4-6	NONE	OFF	_	15A	15A	15A	10A	25°
S332T	/	/	_	DPDT	ON	2-3 5-6	NONE	ON	2-1 5-4	15A	15A	15A	10A	25°
S333T	/	/	_	DPDT	ON	2-3 5-6	OFF	ON	2-1 5-4	15A	15A	15A	10A	30°
S335T	/	/	_	DPDT	ON	2-3 5-6	NONE	(ON)	2-1 5-4	15A	6A	20A	8A	25°
S338T	/	/		DPDT	(ON)	2-3 5-6	OFF	(ON)	2-1 5-4	15A	6A	20A	8A	25°
S339T	/	/	_	DPDT	ON	2-3 5-6	OFF	(ON)	2-1 5-4	15A	6A	20A	8A	25°
Throw &		DPST	•		^	– INTERNAL	DPDT	. •	2 (COM)	5 9	N	ote: Termin	al numbers a	re

actually on the switch **Schematics:**

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.







S331T does not have terminals 2 & 5



Maximum Panel Thickness: .185" (4.7mm)

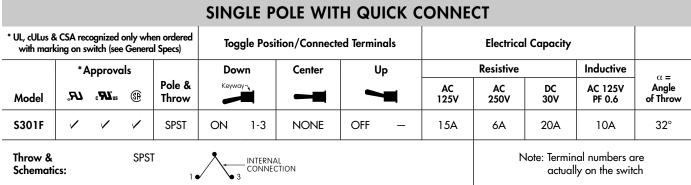


S331T



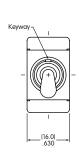
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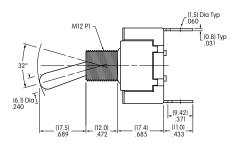
Supplement | Accessories

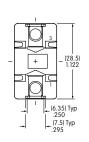


Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.











S301F

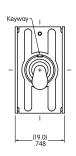
Maximum Panel Thickness: .185" (4.7mm)

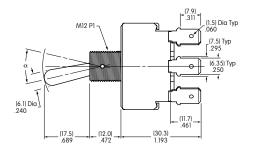
					DOU	IBLE PO	LE WIT	TH QU	JICK CC	DNNEC	T			
* UL & cULus markin		zed only v tch (see G			To	oggle Positio	on/Connec = Moment		inals		Electrica	l Capacity		
	* A	pprova	ıls		0	Oown	Center		Up		Resistive		Inductive	α =
Model	<i>LR</i> .	c 911 °us	(1)	Pole & Throw	Ke	yway¬	-	•	—	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
S331F	/	/	_	DPST	ON	1-3 4-6	NONE	OFF	_	25A	25A	25A	10A	25°
S332F	/	/	_	DPDT	ON	2-3 5-6	NONE	ON	2-1 5-4	25A	15A	25A	10A	25°
S333F	/	/	_	DPDT	ON	2-3 5-6	OFF	ON	2-1 5-4	25A	15A	25A	10A	30°
S335F	/	/	_	DPDT	ON	2-3 5-6	NONE	(ON)	2-1 5-4	15A	6A	20A	8A	25°
Throw & Schematic														

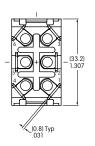
Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.



S332F









S331F does not have terminals 2 & 5





GENERAL SPECIFICATIONS FOR S31 ~ S49

Electrical Capacity (Resistive & Inductive Load)

Power Level: Shown in the following tables

Other Ratings

Contact Resistance: 10 milliohms maximum

Insulation Resistance: 1,000 megohms minimum @ 500V DC **Dielectric Strength:** 2,000V AC minimum for 1 minute minimum

Mechanical Life: 50,000 operations minimum Electrical Life: 25,000 operations minimum **Angle of Throw** (α): Shown on following tables

Materials & Finishes

PBT resin for flatted lever; brass with chrome plating for all others

Brass with chrome plating Bushing:

Case: Phenolic resin

Case Cover: Steel with chromate plating over zinc plating

Movable Contactor: Copper with silver plating

Movable Contacts: Silver alloy capped on copper with silver plating Stationary Contacts: Silver alloy capped on copper with silver plating

Terminals: Brass with tin plating

Environmental Data

Operating Temp Range: -10°C through +70°C (+14°F through +158°F)

Installation

Mounting Torque: 2.94Nm (26 lb•in) for double nut

Maximum Panel Thickness: Shown beneath panel cutout in switch dimension drawings **Soldering Time & Temperature:** Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

File No. E44145 - Recognized only when ordered with marking on switch.

Add "/U" or "/CUL" to end of part number to order UL recognized switch. UL or cULus recognition designated beside part numbers on following pages.

See Supplement section to find UL or cULus rating details.

CSA: File No. 023535_0_000 - Certified only when ordered with marking on switch.

Add "/C" to end of part number to order CSA certified switch. CSA certification designated beside part numbers on following pages.

See Supplement section to find CSA rating details.



Toggles

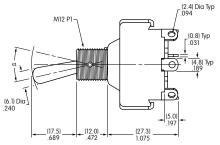
UL, cULus & CSA recognized only when ordered with marking on switch (see General Specs) Toggle Position/Connected Terminals **Electrical Capacity**) = Momentary Resistive Inductive * Approvals Down Center Up α = Pole & Angle **AC 125V** c**PL**°us *U*R. 4 of Throw 125V 250V **30V** PF 0.6 Model Throw **S31** 3PST ON 1-3 4-6 7-9 NONE OFF 25A 9A 20A 10A 25° 2-3 5-6 8-9 3PDT ON NONE ON 2-1 5-4 8-7 25A 9A 20A 10A 25° **S32 S33** 3PDT ON 2-3 5-6 8-9 OFF ON 2-1 5-4 8-7 25A 9A 20A 10A 30° 25° **S35** 3PDT ON 2-3 5-6 8-9 NONE (ON) 2-1 5-4 8-7 15A 20A 8A **S38** 3PDT (ON) 2-3 5-6 8-9 OFF 2-1 5-4 8-7 15A 15A 25° (ON) 6A 8A **S39** 3PDT 2-3 5-6 8-9 OFF (ON) 2-1 5-4 8-7 15A 15A 25° A8 (COM) Throw & Note: Terminal numbers **Schematics:** CONNECTION are on the switch 6 • 4

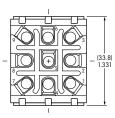
THREE POLE WITH SOLDER LUG*

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.

* Wire harness & cable assemblies offered only in Americas.









S31 does not have terminals 2, 5, & 8

Maximum Panel Thickness: .181" (4.6mm)

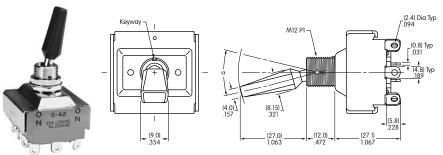
FOUR POLE WITH SOLDER LUG*

* UL, cULus & C with markin							Toggl		n/Conne = Momei		rmino	als			E	lectrico	al Cap	acity	
Model	* A	pprovo	ıls	_		Do	wn		Center			Up			R	Resistiv	е	Inductive	α=
Suffix R = Flatted Lever	<i>LR</i> .	c 91 0°us	(1)	Pole & Throw		Keywo	JY-V		-		•	7			AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
S41/S41R	/	/	/	4PST	ON	1-3 4	-6 7-9	10-12	NONE	OFF				_	25A	9A	20A	10A	25°
S42/S42R	/	/	/	4PDT	ON	2-3 5	-6 8-9	11-12	NONE	ON	2-1	5-4	8-7	11-10	25A	9A	20A	10A	25°
S43/S43R	/	/	/	4PDT	ON	2-3 5	-6 8-9	11-12	OFF	ON	2-1	5-4	8-7	11-10	25A	9A	20A	10A	30°
S45 -	/	/	_	4PDT	ON	2-3 5	-6 8-9	11-12	NONE	(ON)	2-1	5-4	8-7	11-10	15A	6A	20A	8A	25°
S48/S48R	/	/		4PDT	(ON)	2-3 5	-6 8-9	11-12	OFF	(ON)	2-1	5-4	8-7	11-10	15A	6A	20A	8A	25°
S49/S49R	/	/	_	4PDT	ON	2-3 5-	-6 8-9	11-12	OFF	(ON)	2-1	5-4	8-7	11-10	15A	6A	20A	8A	25°
Throw &	4PST	•		•	,	\	•	, INI	ITEDNIAL	4PDT	9 ²		5 9	(COM)	9 8	119		Note: Terr	ninal

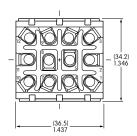
Notes: Standard Hardware for Bat Lever: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut; for Flatted Lever (R): AT504M Knurled Face Nut, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies (only for bat lever models): AT401 & AT4181 boots plus hex nut and o-ring. See Accessories & Hardware section.

CONNECTION

Wire harness & cable assemblies offered only in Americas.



9 10 •





Max. Panel Thickness:



Max. Panel Thickness: .181" (4.6mm)

S42R

Schematics:

Bat lever dimensions are same as on S30 models above.

S41 and S41R do not have terminals 2, 5, 8, & 11.

numbers are

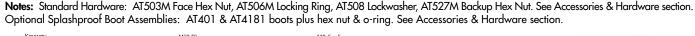
on the switch

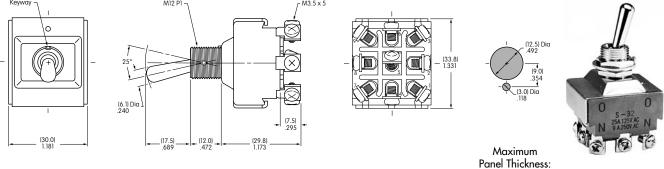
(11.5)

THREE POLE WITH SCREW LUG

* UL, cULus & with marki	CSA reco	ognized vitch (see	only wh Gener	nen ordered al Specs)		Toggle Position	n/Connect	ed Terr	ninals			Ele	ectrical	Capacity		
	*A	pprove	als			Down	Center		Up		F	Resistiv	е	Indu	ıctive	
Model	<i>L</i> R。	c 91 0°us	48	Pole & Throw		Keyway¬	-		~	•	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	AC 250V PF 0.6	α = Angle of Throw
S31T	/	/	/	3PST	ON	1-3 4-6 7-9	NONE	OFF		_	25A	9A	20A	10A	5A	25°
S32T	/	/	/	3PDT	ON	2-3 5-6 8-9	NONE	ON	2-1 5	-4 8-7	25A	9A	20A	10A	5A	25°
S33T	/	/	/	3PDT	ON	2-3 5-6 8-9	OFF	ON	2-1 5	-4 8-7	25A	9A	20A	10A	5A	30°
Throw &	31	PST	•	•		\$	3	PDT	9 2	5 9	(COM)	98		Nata.	Tarminal n	

Note: Terminal numbers **Schematics:** are on the switch





S31T does not have terminals 2, 5, & 8 .181" (4.6mm)

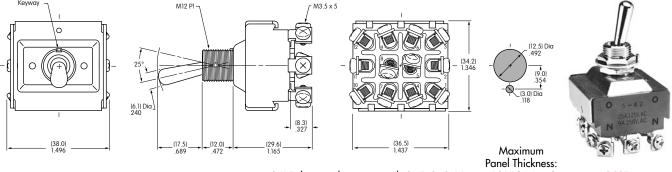
S32T

FOUR POLE WITH SCREW LUG

* UL, cULu: ordered	with m		on swi				Togg	le Positio	on/Conne	cted Te	rmino	ıls			Elect	rical Co	apacity		
	*A	pprov	als			D	own		Center			Up		F	Resistive	•	Indu	ctive	~ -
Model	<i>L</i> R。	c 711 ° us	(B)	Pole & Throw		Key	way-		-		•	7		AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	AC 250V PF 0.6	α = Angle of Throw
S41T	/	/	/	4PST	ON	1-3 4	1-6 7-9	10-12	NONE	OFF		_		25A	9A	20A	10A	5A	25°
\$42T	/	/	/	4PDT	ON	2-3 5	5-6 8-9	11-12	NONE	ON	2-1	5-4 8	-7 11-10	25A	9A	20A	10A	5A	25°
S43T	/	/	/	4PDT	ON	2-3 5	5-6 8-9	11-12	OFF	ON	2-1	5-4 8	-7 11-10	25A	9A	20A	10A	5A	30°

4PST 4PDT Throw & Terminal numbers INTERNAL CONNECTION **Schematics:** are on the switch

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.



S41T does not have terminals 2, 5, 8, & 11

.181" (4.6mm)

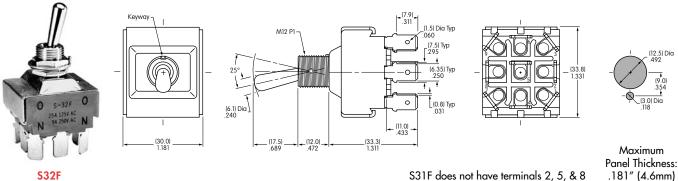
S42T



Touch

						TH	IREE POLE	WITH	QUI	ск со	NN	ECT				
•	UL, cULus & with marki						Toggle Position	on/Connec	ted Teri	minals			Electrica	l Cap	acity	
Ī		*A	pprova	ls			Down	Center		Up			Resistive		Inductive	
	Model	<i>U</i> R。	c FLL °us	(P)	Pole & Throw		Keyway¬	-		7		AC 125V	AC 250V	30) DC		α = Angle of Throw
	S31F	/	/	/	3PST	ON	1-3 4-6 7-9	NONE	OFF		_	25A	9A	20,	A 10A	25°
	S32F	/	/	/	3PDT	ON	2-3 5-6 8-9	NONE	ON	2-1 5-4	8-7	25A	9A	20,	A 10A	25°
	S33F	/	/	/	3PDT	ON	2-3 5-6 8-9	OFF	ON	2-1 5-4	8-7	25A	9A	20,	A 10A	30°
_	Throw & Schematic		3PST 1 €	Å	3 4	• 6		TERNAL DNNECTION	3PD	OT 2	<u>2</u> ●1 6	5 • (CO)	M) • 8			al numbers the switch

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.

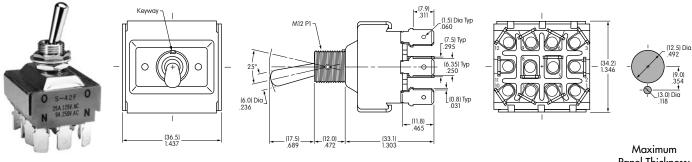


S31F does not have terminals 2, 5, & 8

Pole & Keyway AC AC DC AC 125V A	Electrical Capacity	cted Terminals	n/Connec						
Pole & Keywayn AC AC DC AC 125V AI			, 55111100	Toggle Position	en ordered Il Specs)	nly who Genera	ognized o vitch (see	CSA reco	UL, cULus & with mark
Pole & Keyway AC AC DC AC 125V A		Up	Center	Down		ls	pprova	*A	
		-	-	Keyway ¬,		(1)	c 711 °us	lR.	Model
S41F / / / 4PST ON 1-3 4-6 7-9 10-12 NONE OFF - 25A 9A 20A 10A 2	– 25A 9A 20A 10A 25°	OFF –	NONE	ON 1-3 4-6 7-9 10-12	4PST	/	/	/	\$41F
\$42F / / / 4PDT ON 2-3 5-6 8-9 11-12 NONE ON 2-1 5-4 8-7 11-10 25A 9A 20A 10A 2	8-7 11-10 25A 9A 20A 10A 25°	ON 2-1 5-4 8-7 11-10	NONE	ON 2-3 5-6 8-9 11-12	4PDT	/	/	/	S42F
S43F / / / 4PDT ON 2-3 5-6 8-9 11-12 OFF ON 2-1 5-4 8-7 11-10 25A 9A 20A 10A 3		ON 2-1 5-4 8-7 11-10	OFF	ON 2-3 5-6 8-9 11-12	4PDT	/	/	/	S43F



Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.



S41F does not have terminals 2, 5, 8, & 11





S42F

Rockers

Keylocks Programmable Illuminated PB Pushbuttons

Electrical Capacity (Resistive & Inductive Load)

Power Level: Shown in the following tables

Other Ratings

10 milliohms maximum **Contact Resistance:**

Insulation Resistance: 1,000 megohms minimum @ 500V DC **Dielectric Strength:** 2,000V AC minimum for 1 minute minimum

GENERAL SPECIFICATIONS FOR \$421 ~ \$429

Mechanical Life: 50,000 operations minimum **Electrical Life:** 15,000 operations minimum Angle of Throw (α): Shown in tables on following pages

Materials & Finishes

Toggle: Brass with chrome plating **Bushing:** Brass with chrome plating

Case: Melamine phenol

Case Cover: Steel with chromate plating over zinc plating

Movable Contactor: Copper with silver plating

Movable Contacts: Silver alloy capped on copper with silver plating Silver alloy capped on copper with silver plating **Stationary Contacts:**

Terminals: Brass with tin plating

Environmental Data

Operating Temp Range: -10°C through +70°C (+14°F through +158°F)

Installation

Mounting Torque: 2.94Nm (26 lb•in) for double nut

Maximum Panel Thickness: Shown beneath panel cutout in switch dimension drawings Manual Soldering: See Profile A in Supplement section. Soldering Time & Temperature:



A111 www.nkk.com

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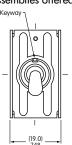
DOUBLE POLE WITH SOLDER LUG* **Toggle Position/Connected Terminals Electrical Capacity** () = Momentary Motor **Approvals** Down Center Resistive Inductive Load Pole & AC PF 0.75 - 0.8 Angle AC *U*R. **Throw** Model of Throw 125V 125V 250V AC 125V AC 250V 750W 24° **S421 DPST** ON 1-3 4-6 NONE OFF 25A 25A 25A 25A 2-1 5-4 750W **S422 DPDT** ON 2-3 5-6 NONE ON 25A 25A 25A 25A 24° DPDT 28° **S423** ON 2-3 5-6 OFF ON 2-1 5-4 25A 25A 25A 25A 750W **S425 DPDT** ON 2-3 5-6 NONE (ON) 2-1 5-4 15A 15A 15A 15A 400W 24° **S428 DPDT** (ON) 2-3 5-6 OFF (ON) 2-1 5-4 15A 15A 15A 15A 400W 24° **S429** DPDT ON 2-3 5-6 **OFF** (ON) 2-1 5-4 15A 400W 24° 15A 15A 15A Throw & **DPDT** Note: Terminal numbers DPST INTERNAL CONNECTION **Schematics:** are on the switch • 4

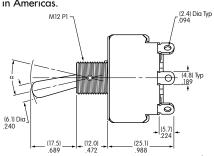
Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.

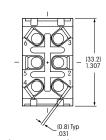
* Wire harness & cable assemblies offered only in Americas.



S422







(12.5) Dia .492

S421 does not have terminals 2 & 5

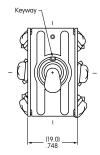
Maximum Panel Thickness: .185" (4.7mm)

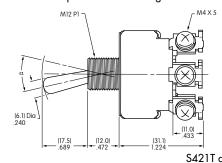
DOUBLE POLE WITH SCREW LUG

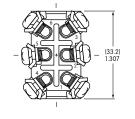
					Toggle Positi	on/Connect) = Moment		als		Electri	cal Capaci	ty		
	Appr	ovals		D	own	Center		Up	Resi	stive	Indu	ıctive	Motor Load	α =
		_	Pole &	Ke	yway¬				AC	AC	PF 0.7	75 - 0.8	AC	Angle
Model	<i>L</i> R。	(1)	Throw	•					125V	250V	AC 125V	AC 250V	125V	of Throw
S421T			DPST	ON	1-3 4-6	NONE	OFF	_	20A	20A	20A	20A	750W	24°
S422T	_	_	DPDT	ON	2-3 5-6	NONE	ON	2-1 5-4	20A	20A	20A	20A	750W	24°
S423T	_	_	DPDT	ON	2-3 5-6	OFF	ON	2-1 5-4	20A	20A	20A	20A	750W	28°
S425T			DPDT	ON	2-3 5-6	NONE	(ON)	2-1 5-4	15A	15A	1 <i>5</i> A	15A	400W	24°
S428T			DPDT	(ON)	2-3 5-6	OFF	(ON)	2-1 5-4	15A	15A	15A	15A	400W	24°
\$429T	_	_	DPDT	ON	2-3 5-6	OFF	(ON)	2-1 5-4	15A	15A	1 <i>5</i> A	15A	400W	24°
Throw & Schemati	cs:	DPST	1.	→ 3 4 • ∕	INTER	RNAL NECTION	DPDT	3 • 1	OM) 5	• 4	1		nal numbe in the switc	

Notes: Standard Hardware: AT503M Face Hex Nut, AT506M Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section. Optional Splashproof Boot Assemblies: AT401 & AT4181 boots plus hex nut & o-ring. See Accessories & Hardware section.











Maximum

Panel Thickness: S421T does not have terminals 2 & 5 .185" (4.7mm)

