SIEMENS

Data Sheet

Sentron Sensitrip IV

SLD 600A Frame
With Optional DAS / Maintenance Mode

usa.siemens.com/sensitrip

Interrupting Ratings

Breaker Type	RMS Symmetrical kA UL 489 (File E10848)		
	240V AC	480V AC	600V AC
SLD6-B	65	35	25
SHLD6-B	100	65	35
SCLD6-B	200	150	100

Trip Unit Adjustable Functions

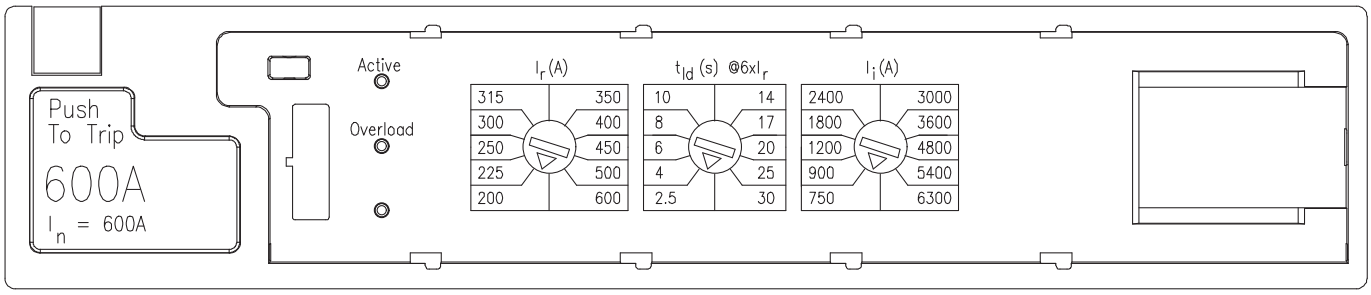
Trip Type	Continuous Current Setting	Long Time Delay	Instantaneous Pick Up	Short Time Pick Up	Short Time Fixed Delay	Short Time I^2t Delay	Ground Fault Pick Up	Ground Fault Delay
LI	✓	✓	✓					
LIG	✓	✓	✓				✓	✓
LSI	✓	✓	✓	✓	✓	✓		
LSIG	✓	✓	✓	✓	✓	✓	✓	✓

Electronic Trip Unit, LI Model

	I_n - Maximum trip unit rating (amps)	I_r - Continuous current rating (amps)									
Switch 1	300	120	135	150	165	180	190	210	240	270	300
	400	150	160	175	200	225	250	300	315	350	400
	500	200	225	250	275	300	315	350	400	450	500
	600	200	225	250	300	315	350	400	450	500	600

	I_n - Maximum trip unit rating (amps)	t_{ld} - Long time delay (seconds @ 6 x I_r)									
Switch 2	300, 400, 500, 600	2.5	4	6	8	10	14	17	20	25	30

	I_n - Maximum trip unit rating (amps)	I_i - Instantaneous pickup (amps)									
Switch 3	300	375	450	600	900	1200	1500	1800	2400	3000	3150
	400	500	600	800	1200	1600	2000	2400	3200	4000	4200
	500	625	750	1000	1500	2000	2500	3000	4000	4500	5250
	600	750	900	1200	1800	2400	3000	3600	4800	5400	6300



References

I_n = Maximum circuit breaker ampere rating

I_r = Continuous current rating expressed in amperes

I_i = Instantaneous pickup expressed in amperes

I_{sd} = Short time pickup expressed in multiples of I_r

I_g = Ground fault pickup expressed in amperes

t_{sd} = Short time delay - either fixed or I^2t time delay function

t_{ld} = Long time delay - I^2t time delay function

t_g = Ground fault delay - I^2t time delay function

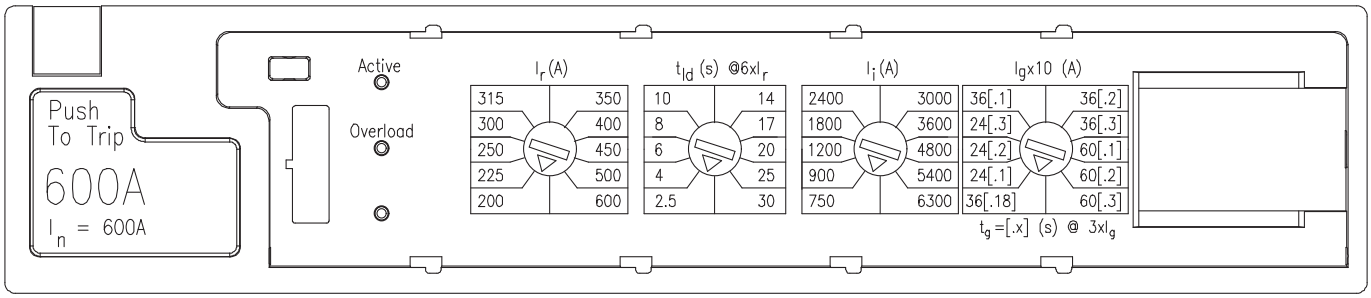
Electronic Trip Unit, LIG Model

	I_n - Maximum trip unit rating (amps)	I_r - Continuous current rating (amps)									
Switch 1	300	120	135	150	165	180	190	210	240	270	300
	400	150	160	175	200	225	250	300	315	350	400
	500	200	225	250	275	300	315	350	400	450	500
	600	200	225	250	300	315	350	400	450	500	600

	I_n - Maximum trip unit rating (amps)	t_{ld} - Long time delay (seconds @ 6 x I_r)									
Switch 2	300, 400, 500, 600	2.5	4	6	8	10	14	17	20	25	30

	I_n - Maximum trip unit rating (amps)	I_i - Instantaneous pickup (amps)									
Switch 3	300	375	450	600	900	1200	1500	1800	2400	3000	3150
	400	500	600	800	1200	1600	2000	2400	3200	4000	4200
	500	625	750	1000	1500	2000	2500	3000	4000	4500	5250
	600	750	900	1200	1800	2400	3000	3600	4800	5400	6300

	I_n - Maximum trip unit rating (amps)	I_g - Ground fault pickup (amps)									
Switch 4	300	240	120	120	120	180	180	180	300	300	300
	400	320	160	160	160	240	240	240	400	400	400
	500	340	200	200	200	300	300	300	500	500	500
	600	360	240	240	240	360	360	360	600	600	600
	I_n - Maximum trip unit rating (amps)	t_g - Ground fault delay (seconds)									
	300	0.1	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3
	400	0.11	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3
	500	0.15	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3
	600	0.18	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3



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I_g = Ground fault pickup expressed in amperes

t_{sd} = Short time delay - either fixed or I^2t time delay function

t_{ld} = Long time delay - I^2t time delay function

t_g = Ground fault delay - I^2t time delay function

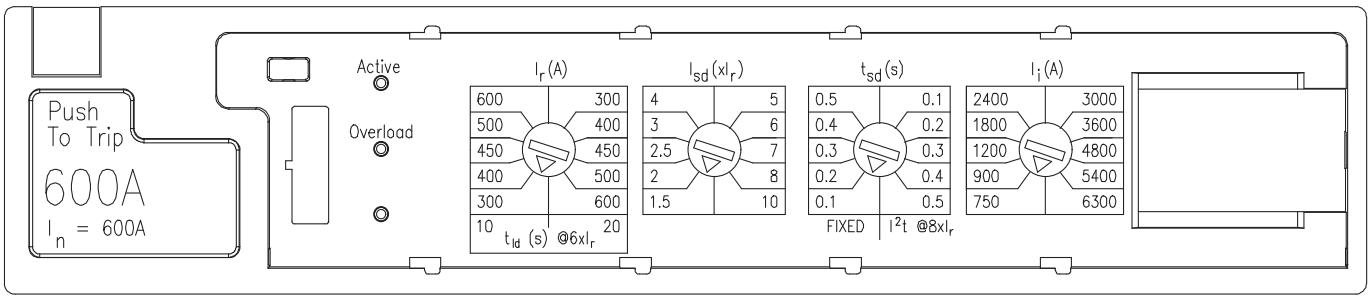
Electronic Trip Unit, LSI Model

Switch 1	**I_n - Maximum trip unit rating (amps)**	**I_r - Continuous amp (amps)**									
	300	150	180	210	240	300	150	180	210	240	300
	400	200	250	300	350	400	200	250	300	350	400
	500	250	300	350	400	500	250	300	350	400	500
	600	300	400	450	500	600	300	400	450	500	600
	I_n - Maximum trip unit rating (amps)	**t_{ld} - Long time delay (seconds @ 6 x I_r)**									
	300, 400, 500, 600	10	10	10	10	10	20	20	20	20	20

Switch 2	**I_n - Maximum trip unit rating (amps)**	**I_{sd} - Short time pickup (amps) x I_r**									
	300, 400, 500, 600	1.5	2	2.5	3	4	5	6	7	8	10

Switch 3	**I_n - Maximum trip unit rating (amps)**	**t_{sd} - Short time delay (seconds)**									
	300, 400, 500, 600	0.1-FIXED	0.2-FIXED	0.3-FIXED	0.4-FIXED	0.5-FIXED	0.1 - 8xIr	0.2 - 8xIr	0.3 - 8xIr	0.4 - 8xIr	0.5 - 8xIr

Switch 4	**I_n - Maximum trip unit rating (amps)**	**I_i - Instantaneous pickup (amps)**									
	300	375	450	600	900	1200	1500	1800	2400	3000	3150
	400	500	600	800	1200	1600	2000	2400	3200	4000	4200
	500	625	750	1000	1500	2000	2500	3000	4000	4500	5250
	600	750	900	1200	1800	2400	3000	3600	4800	5400	6300



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t_{sd} = Short time delay - either fixed or I^2t time delay function

t_{ld} = Long time delay - I^2t time delay function

t_g = Ground fault delay - I^2t time delay function

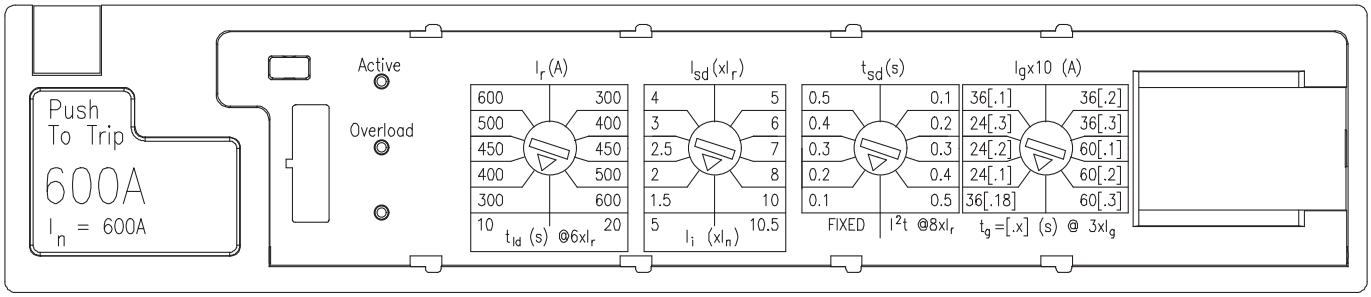
Electronic Trip Unit, LSIG Model

	I_n - Maximum trip unit rating (amps)	I_r - Continuous amp (amps)									
Switch 1	300	150	180	210	240	300	150	180	210	240	300
	400	200	250	300	350	400	200	250	300	350	400
	500	250	300	350	400	500	250	300	350	400	500
	600	300	400	450	500	600	300	400	450	500	600
	I_n - Maximum trip unit rating (amps)	t_{ld} - Long time delay (seconds @ 6 x I_r)									
	300, 400, 500, 600	10	10	10	10	10	20	20	20	20	20

	I_n - Maximum trip unit rating (amps)	I_{sd} - Short time pickup (amps) x I_r									
Switch 2	300, 400, 500, 600	1.5	2	2.5	3	4	5	6	7	8	10
	I_n - Maximum trip unit rating (amps)	I_i - Instantaneous pickup (amps)									
	300	1500	1500	1500	1500	1500	3150	3150	3150	3150	3150
	400	2000	2000	2000	2000	2000	4200	4200	4200	4200	4200
	500	2500	2500	2500	2500	2500	5250	5250	5250	5250	5250
	600	3000	3000	3000	3000	3000	6300	6300	6300	6300	6300

	I_n - Maximum trip unit rating (amps)	t_{sd} - Short time delay (seconds)									
Switch 3	300, 400, 500, 600	0.1-FIXED	0.2-FIXED	0.3-FIXED	0.4-FIXED	0.5-FIXED	0.1 - 8xIr	0.2 - 8xIr	0.3 - 8xIr	0.4 - 8xIr	0.5 - 8xIr

	I_n - Maximum trip unit rating (amps)	I_g - Ground fault pickup (amps)									
Switch 4	300	240	120	120	120	180	180	180	300	300	300
	400	320	160	160	160	240	240	240	400	400	400
	500	340	200	200	200	300	300	300	500	500	500
	600	360	240	240	240	360	360	360	600	600	600
	I_n - Maximum trip unit rating (amps)	t_g - Ground fault delay									
	300	0.1	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3
	400	0.11	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3
	500	0.15	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3
	600	0.18	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3



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t_{ld} = Long time delay - I^2t time delay function

t_g = Ground fault delay - I^2t time delay function

Shipping Weights

Breaker Type	Number per Carton	Shipping Weight (lbs)
SLD6-B	1	20
SHLD6-B	1	20
SCLD6-B	1	33

Accessories

Shunt Trip Combinations

Control Voltage		1 Shunt Trip	1 Shunt Trip and 1 Auxiliary Switch
AC	DC	Catalog Number	Catalog Number
24		**S17JLD6**	-
48		**S18JLD6**	-
120		**S01JLD6**	**S01JLD62A**
240		**S03JLD6**	**S03JLD62A**
277		**S15JLD6**	**S15JLD64A**
480		**S04JLD6**	-
	12	**S16JLD6**	**S16JLD62A**
	24	**S07JLD6**	**S07JLD62A**
	48	**S09JLD6**	**S09JLD62A**
	125	**S11JLD6**	**S11JLD62A**
	250	**S13JLD6**	**S13JLD62A**

Lugs for 75°C Wire

Catalog Number	No of Cables per Connector	Wire Range
TA2J6500	1, 2	#3/0-500 kcmil Cu
	2	#4/0-500 kcmil Al
TA1L6750	1	500-750 kcmil Al
	1	500-600 kcmil Cu
TC1J6600	1	#3/0-600 kcmil Cu
TC2J6500	2	#3/0-500 kcmil Cu
Compression Lug		
CCL600	(1 pc.)	500 kcmil Cu/Al

Undervoltage Trip Combinations

Control Voltage		1 Undervoltage Trip	1 Undervoltage Trip and 1 Auxiliary Switch	1 Undervoltage Trip and 2 Auxiliary Switches
AC	DC	Catalog Number	Catalog Number	Catalog Number
120		**U01JLD6**	**U01JLD62A**	**U01JLD62AA**
208		**U02JLD6**	**U02JLD62A**	**U02JLD62AA**
240		**U03JLD6**	**U03JLD62A**	**U03JLD62AA**
480		**U06JLD6**	**U06JLD64A**	**U06JLD64AA**
	24	**U13JLD6**	**U13JLD62A**	**U13JLD62AA**
	48	**U14JLD6**	**U14JLD62A**	**U14JLD62AA**
	125	**U10JLD6**	**U10JLD62A**	**U10JLD62AA**
	250	**U12JLD6**	**U12JLD62A**	**U12JLD62AA**

Neutral Transformers

Ampere Rating	Catalog Number
300	**N03SJD**
400	**N04SJD**
500	**N05SLD**
600	**N06SLD**

Note: Accessory modules can only be added to right side pole of solid state SJD and SLD frame circuit breakers. No accessories can be added if mechanical interlock is used.

Accessories

Auxiliary Switch Combinations

Maximum Voltage		1 Form C	2 Form C
AC	DC	Catalog Number	Catalog Number
480	250	**A01JLD64**	**A02JLD64**
-	12	**A01JLDLV**	**A02JLDLV**

Alarm Switch Combinations

Maximum Voltage		1 Alarm Switch	1 Alarm Switch and 1 Auxiliary Switch	1 Alarm Switch and 2 Auxiliary Switches
AC	DC	Catalog Number	Catalog Number	Catalog Number
480	**250**	**B01JLD64**	**A01JLD64B**	**A02JLD64B**

ETU Testing Unit

Breaker Type	Description	Catalog Number
SJD, SLD, SMD, SND, SPD	Power Stick	**EPSP18V**
	Spare cable for Power Stick	**COMPCA**

The EPSP18V Power Stick is a hand-held, battery-operated power supply that can be used for trip testing the Sensitrip IV electronic trip units. Requires two 9V batteries.

Note: Accessory modules can only be added to right side pole of solid state SJD and SLD frame circuit breakers. No accessories can be added if mechanical interlock is used.

DAS / Maintenance Mode Option and ZSI

- Optional advanced trip units incorporate DAS (Dynamic Arc Flash Sentry) / Maintenance Mode capability and integrated ZSI (Zone Selective Interlocking)
- Advanced trip units are NEC 240.87 code compliant for arc energy reduction
- Activation of DAS / Maintenance Mode capability requires customer-supplied 24V class II power supply, remote maintenance switch and light
- Trip unit type (Basic or Advanced) is designated in the catalog number as follows:
  - B = Basic – standard ETU (example: SLD6B400LSIG)
  - A = Advanced – ETU with DAS / Maintenance Mode & ZSI (example: SLD6A400LSIG)

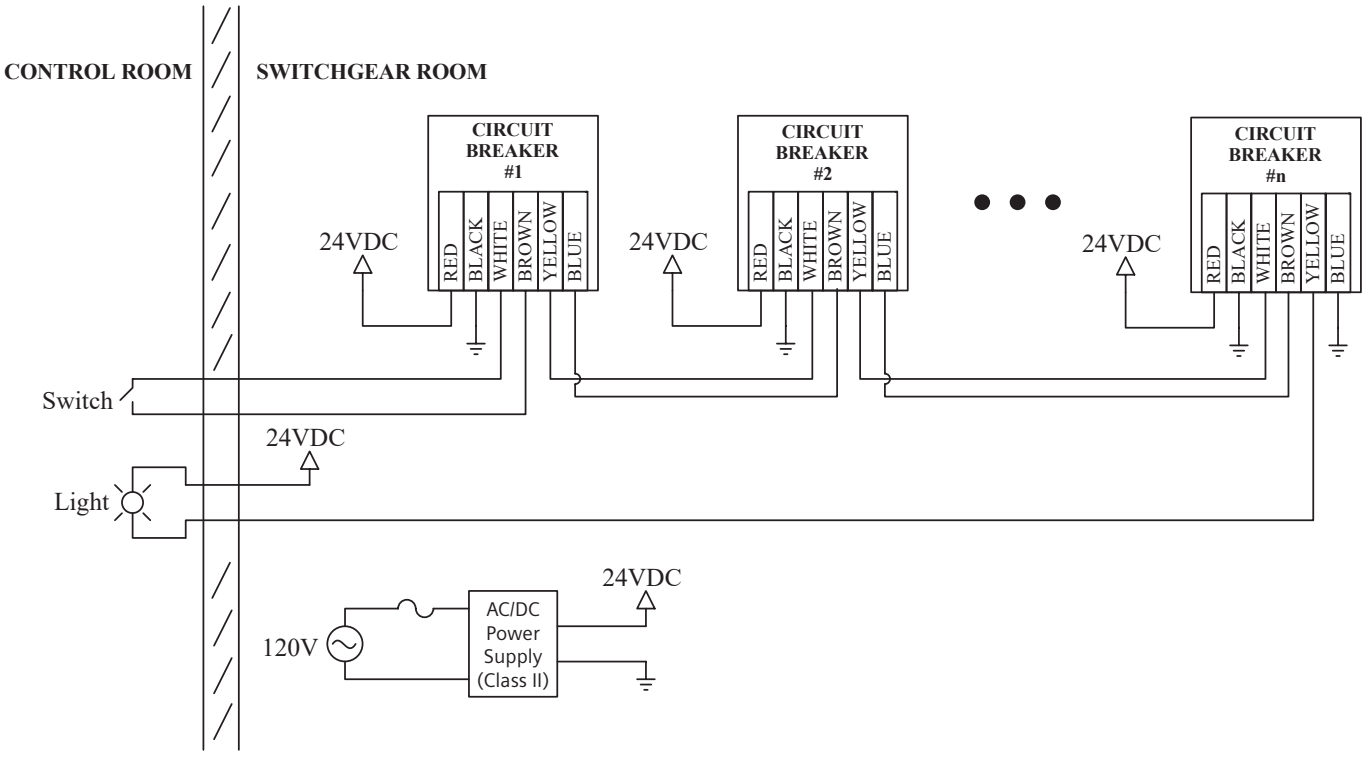
Advanced ETU

Basic ETU

Recommended Components for DAS / Maintenance Mode

Component		Catalog Number
AC/DC Power Supply		**6EP3331-6SB00-0AY0**
Maintenance Light		**3SU1102-6AA50-1AA0**
Maintenance Switch	Keyed	**3SU1100-4BF11-1BA0**
	Non-keyed	**3SU1100-2BF60-1BA0**

Wiring Diagram for DAS / Maintenance Mode

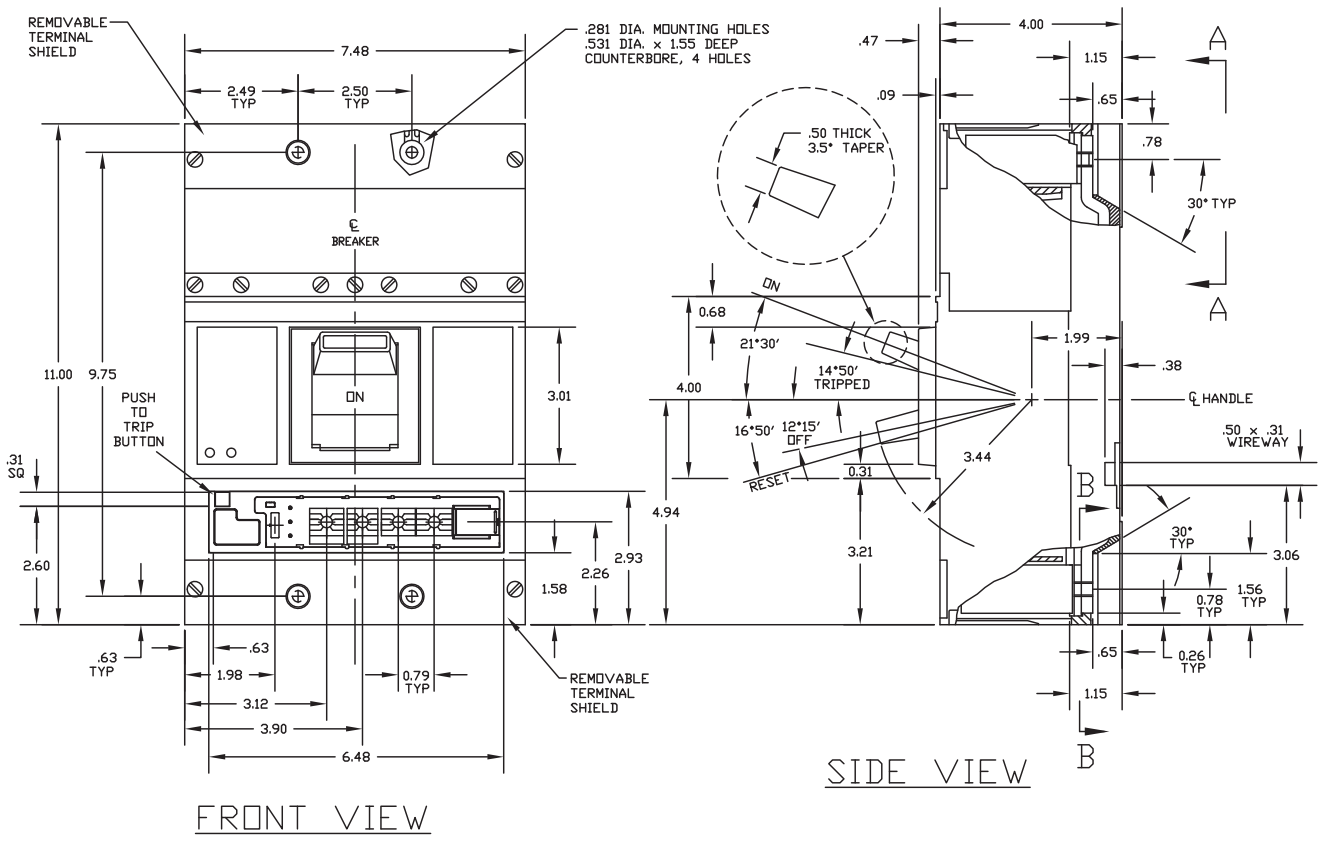


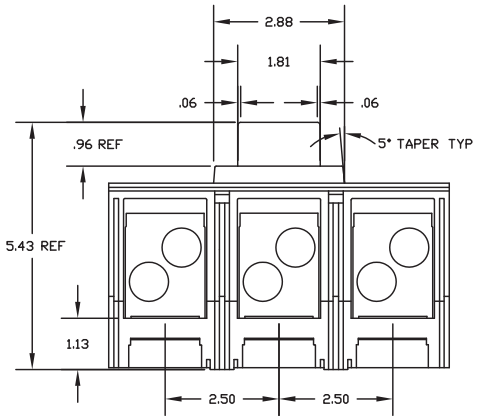
Note: See breaker instruction sheet for further information. Available at www.usa.siemens.com/sensitrip.

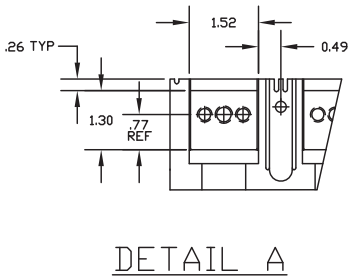
Dimensional Drawing

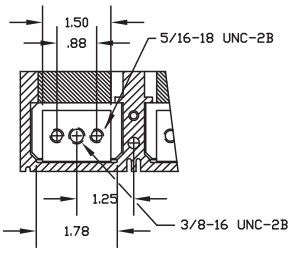
Sentron Sensitrip IV Outline Drawing

JD and LD Frame Types SJD6–B, SHJD6–B, SLD6–B, SHLD6–B









HANDLE OPERATING FORCES		
OPERATION	JD-FRAME (lb.)	LD-FRAME (lb.)
OFF TO ON	44	44
ON TO OFF	50	44
TRIPPED TO RESET	60	60

① All drawing dimensions are shown in inches.

Notes:

Notes:

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