

1545 Commercial St NE
Salem, Oregon 97301

Model 4LS-Busbar Split Core Current Transformer

AC Current Input, 50/60Hz 600VAC Rated
UL Recognized to C57.13-2008 and CSA60044-1



- Standard and Custom window sizes
- Universal Molded Housing Construction
- Snap Top or Nylon Screws
- Select 100A to 6000A FLA
- Select AC Volts or Current Ratio Output
- Standard Accuracy +/-1.2% C57-13-2008
- Option 1 Accuracy +/- 0.6% C57.13-2008

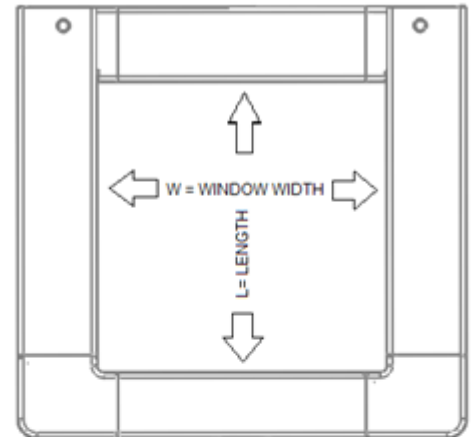
The 4LS split current transformers, available in standard or custom sizes for busbar or multiconductor installations, designed to meet UL requirements of C57.13-2008 and CSA 60044-1 up to 600VAC. The transformers are provided with internal burden resistors to set the mVAC output voltage, or with a straight current ratio for 0.1A output with internal shock protection – no shorting blocks required. Customer provides the external burden value to limit output current to 0.1A; selects full scale input current and window size. Custom split sizes have been manufactured for multiconductors up to 8" x 24" windows – contact Sentran Corporation for others.

Specifications

Input Current	AC current, <u>sinewave</u> , single phase 50/60Hz
Voltage Rating	600Vac tested to 10KV BIL
Bandwidth	50Hz to 400Hz.
Output Voltage	(with internal resistor) up to 333mV
Current Turns Ratio	No internal burden resistor – customer provides burden for 0.1A max
Output Limiting	Set by internal resistor or TVS on current ratio type
Standard Accuracy	+/-1.2% per C57.13-2008 Figure 2 (**)
Option 1 Accuracy	+/- 0.6 % per C57.13-2008 Figure 2 (**)
Output Resistance	less than 10 Ohms for mV output models
Interface Resistance	Must be >50K ohms for CTs with internal burden resistor
Temperature Range	-40° to +55°C
Temperature Class	Equal to or greater than 105°C for all internal parts
Continuous Current Rating Factor	1X
Crest factor	2x FLA
Shorted Output Capability	continuous short at FLA without exceeding rated temperature
Dynamic Rating	50 times FLA for 1 second
Altitude	2000 meters Pollution Degree
Construction	UL Approved. Plastic housing rated to 85° C
Lead Wires	black & white, twisted, 20/22AWG MTW, UL1015, 600V, 105°C
Installation Label	towards source (H1) for positive output voltage on (X1)

Footnote (**) Conductor must be located in the center and perpendicular through the window.

SEE PAGE 3 for
DIMENSIONS




OUTPUT TABLE

4LS milivolt Outputs	4LS milliamp Ratio Output
50mV	100mA
100mV	↓
200mV	
250mV	
333mV	
500mV	
1000mV	

See Output Table

Part Numbers: **4LS-XXXX:YYYY-WL** | Width & Length from Page 2

FLA Table Page 2

Example: 1000A with 333mV out and window 2.5"x5.5":
 Order PN: **4LS-1000A:333mV-2.5X2.5**

Model 4LS-Busbar Page 2 of 3

Split Core Current Transformer

AC Current Input, 50/60Hz 600VAC Rated
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SELECT ANY FULL LOAD AMPS (FLA) UP TO MAXIMUM PER WINDOW
 AND
 WINDOW IS WxL = W=WIDTH, L= LENGTH

4LS/4LSF SMALL SIZES		4LS/4LSF SMALL SIZES		4LS/4LSF LARGE SIZES			
WINDOW W x L	ANY FLA TO THIS MAXIMUM	WINDOW W x L	ANY FLA TO THIS MAXIMUM	WINDOW W x L	ANY FLA TO THIS MAXIMUM	WINDOW W x L	ANY FLA TO THIS MAXIMUM
0.75 x 0.75	200	2.0 x 2.5	600	1.5 x 6.0	3000	4.0 x 10.0	6000
1.0 x 1.0	300	2.0 x 3.5	1000	1.5 x 7.0	4000	4.0 x 12.0	6000
1.0 x 1.25	400	2.5 x 2.5	600	2.0 x 12.0	6000	4.5 x 12.0	6000
1.0 x 2.0	500	2.5 x 3.0	1200	2.0 x 15.0	6000	4.5 x 4.5	6000
1.0 x 2.5	600	3.0 x 3.0	1200	2.0 x 6.0	3000	5.0 x 6.0	3000
1.0 x 3.0	600			2.0 x 7.0	4000	5.0 x 7.0	4000
1.0 x 3.5	600			2.0 x 8.0	4500	5.0 x 8.0	4500
1.0 x 4.0	800			2.0 x 9.0	5000	5.0 x 10.0	6000
4.0 x 4.25	800			2.5 x 15.0	6000	5.0 x 10.0	6000
1.0 x 4.5	800			2.5 x 5.5	3000	5.0 x 12.0	6000
1.0 x 5.0	1000			3.0 x 10.0	6000	5.5 x 5.5	3000
1.0 x 6.0	1200			3.0 x 11.0	6000	6.0 x 6.0	3000
1.0 x 7.0	1500			3.0 x 14.0	6000	6.0 x 8.0	4000
1.25 x 1.25	400			3.0 x 6.0	3000	6.0 x 10.0	6000
1.25 x 2.5	600			3.0 x 7.0	4000	6.0 x 12.0	6000
1.25 x 4.5	800			3.0 x 8.0	4500	7.0 x 7.0	4000
1.5 x 1.5	800			3.5 x 10.0	600	7.0 x 10.0	6000
1.5 x 2.0	800			3.5 x 6.0	3000	8.0 x 8.0	6000
1.5 x 2.5	600			3.5 x 7.0	4000	8.0 x 10.0	6000
1.5 x 3.0	600			3.5 x 8.0	4500	8.0 x 12.0	6000
1.5 x 3.5	600			3.5 x 9.0	5000	8.0 x 15.0	6000
1.5 x 4.0	800			4.0 x 6.0	3000	9.0 x 9.0	6000
1.5 x 5.0	1000			4.0 x 7.0	4000	10.0 x 10.0	6000
2.0 x 2.0	600			4.0 x 8.0	4000	11.0 x 11.0	6000
				4.0 x 9.0	5000	12.0 x 12.0	6000

Model 4LS Busbar

Split Core Current Transformer

for Energy Monitoring and Sensing (XOBA, XOBA7)
 AC Current Input, 50/60Hz 600VAC Rated, CAT IV
 Listed to UL2808 & CSA C22.2 No. 61010-1

HOW TO DETERMINE FINAL OUTSIDE DIMENSIONS:

Example of a 6000A, 6.0"x8.0 current transformer part number

4LS-6000A:333mV-6x8

The large size universal housing will be required. The 6" is the width W and the 8" is the length L of the window opening. adding 1.63" + 1.63" + W 6" = 9.26" outside width and for the outside length add 0.95" + 1.63" = 10.58"

Final OD is 9.26" wide and 10.58" long
 ID window is 6.0" x 8.0"

