

Current Sense Transformers

Current range of 3.5 to 800 A

Features

- Measures electrical current by transforming current from high to low measurable values
- 50 Hz to 100 kHz operating frequency
- Available totally encapsulated, with or without wound primary turns and loading resistor
- Built to meet UL, MIL, VDE, CE specs
- EMRL current transformers meet UL1244
- Ideal for amp meters, wattmeters, relays, and cross current compensation

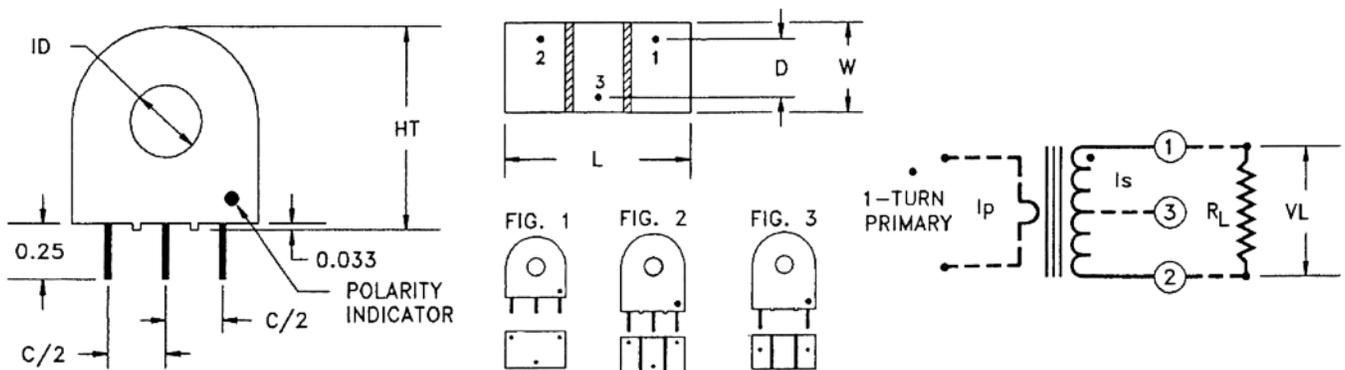


Applications

- Advanced fault-tolerant computers and workstations
- Control panels reading current flowing to transformers
- Telecom and communications systems

Spectrum Control offers a wide range of current sense transformers that measure electrical current (AC and DC) and can transform current from high to low measurable values. Series 5300 current sense transformers are available with current ranges from 3.5 to 800 A in six subcategories of current sense transformers. You will find current sense transformers in advanced fault-tolerant computers and workstations, control panels reading current flowing to an electric transformer, telecom, and communications.

Outline Drawing



Current Sense Transformers

5300 Series

Part #	VL	Ip	V/A	RL Ω	Watt	RS	RCF @ 10%	I _{ex} μARMS	V _{ex} VRMS	Wt. lbs.	Length	ID (Min)	Potted Dimensions				Fig.
													HT	W	C	D	
Standard Accuracy Mini CT																	
5300-0005	2.0	5	0.4000	400	0.0100	79	1.093	572	2.38	0.019	0.660	0.177	0.795	0.37	0.50	-	3
5300-0010	2.0	10	0.2000	200	0.0200	83	1.048	608	2.83	0.019	0.660	0.177	0.795	0.37	0.50	-	3
5300-0020	2.0	20	0.1000	100	0.0400	85	1.027	731	3.70	0.019	0.660	0.177	0.795	0.37	0.50	-	3
5300-1030	3.0	30	0.1000	100	0.0900	44	1.023	853	4.32	0.040	0.931	0.370	0.990	0.50	0.60	0.30	2
5300-2050	2.5	50	0.0500	33	0.1890	17	1.015	1510	3.76	0.062	0.931	0.370	0.990	0.72	0.60	0.30	2
5300-3011	2.5	100	0.0250	15	0.4170	8	1.009	1650	3.88	0.117	1.187	0.500	1.219	0.72	0.80	0.40	2
5300-0405	0.5	5	0.1000	100	0.0025	84	1.064	281	0.92	0.019	0.660	0.177	0.795	0.37	0.50	-	3
5300-0410	1.0	10	0.1000	100	0.0100	85	1.050	440	1.85	0.019	0.660	0.177	0.795	0.37	0.50	-	3
5300-0420	2.0	20	0.1000	100	0.0400	86	1.040	689	3.72	0.019	0.660	0.177	0.795	0.37	0.50	-	3
5301	0.5	5	0.1000	100	0.0025	42	1.041	237	0.66	0.040	0.931	0.370	0.990	0.47	0.60	0.30	2
5302R	1.0	10	0.1000	100	0.0100	42	1.034	386	1.32	0.040	0.931	0.370	0.990	0.47	0.60	0.30	2
5303	1.5	15	0.1000	100	0.0230	42	1.030	512	1.99	0.040	0.931	0.370	0.990	0.47	0.60	0.30	2
5304	2.0	20	0.1000	100	0.0400	42	1.028	628	2.65	0.040	0.931	0.370	0.990	0.47	0.60	0.30	2
5305R	2.5	25	0.1000	100	0.0630	46	1.020	566	3.65	0.088	1.188	0.500	1.188	0.56	0.80	0.40	1
5306R	3.0	30	0.1000	100	0.9000	46	1.018	644	4.38	0.088	1.188	0.500	1.188	0.56	0.80	0.40	1
5307R	4.0	40	0.1000	100	0.1600	46	1.020	914	5.82	0.105	1.375	0.625	1.375	0.56	1.00	0.40	1
5308R	5.0	50	0.1000	100	0.2500	46	1.019	1090	7.28	0.105	1.375	0.625	1.375	0.56	1.00	0.40	1
5309	6.0	60	0.1000	100	0.3600	24	1.018	1250	7.41	0.129	1.500	0.688	1.500	0.56	1.20	0.40	1
5310	7.5	75	0.1000	100	0.5700	24	1.016	1520	9.26	0.129	1.500	0.688	1.500	0.56	1.20	0.40	1
5311	10.0	100	0.1000	100	1.0000	21	1.014	1740	12.00	0.191	1.750	0.750	1.750	0.56	1.40	0.40	1
5312	15.0	150	0.1000	100	2.2500	11	1.011	1820	16.60	0.442	2.188	0.938	2.188	0.81	1.80	0.50	1
5313	20.0	200	0.1000	100	4.0000	11	1.009	2340	22.20	0.300	2.188	0.938	2.188	0.81	1.80	0.50	1
5326	0.7	3.5	0.2000	200	0.0025	76	1.030	88	0.97	0.028	0.660	0.177	0.795	0.72	0.50	0.32	2
5327	0.5	5.0	0.1000	100	0.0025	49	1.015	183	0.74	0.015	0.660	0.177	0.795	0.37	0.50	-	3
5328	1.0	5.0	0.2000	200	0.0050	61	1.013	158	1.31	0.028	0.660	0.177	0.795	0.72	0.50	0.32	2
5329	0.5	10.0	0.0500	100	0.0025	213	1.006	74	1.57	0.015	0.660	0.177	0.795	0.37	0.50	-	3
5330	1.0	10.0	0.1000	200	0.0050	252	1.009	58	2.26	0.028	0.660	0.177	0.795	0.72	0.50	0.32	2
5351	0.5	5	0.1000	100	0.0025	42	1.033	65	0.707	0.055	1.060	0.188	1.060	0.56	0.80	0.40	1
5352	1.0	10	0.1000	100	0.0100	42	1.019	108	1.41	0.055	1.060	0.188	1.060	0.56	0.80	0.40	1
5353	1.5	15	0.1000	100	0.0230	45	1.016	143	2.13	0.082	1.250	0.375	1.250	0.56	1.00	0.40	1
5354	2.0	20	0.1000	100	0.0400	45	1.011	189	2.89	0.082	1.250	0.375	1.250	0.56	1.00	0.40	1
5355	2.5	25	0.1000	100	0.0630	53	1.009	193	3.83	0.120	1.370	0.500	1.370	0.62	1.00	0.50	1
5356	3.0	30	0.1000	100	0.0900	53	1.008	249	4.60	0.120	1.370	0.500	1.370	0.62	1.00	0.50	1
5300-4240	2.0	40	0.0500	100	0.0400	127	1.012	267	4.54	0.120	1.870	1.000	1.870	0.56	1.50	0.50	1
5300-4250	2.5	50	0.5000	100	0.0630	127	1.010	542	5.65	0.120	1.870	1.000	1.870	0.56	1.50	0.50	1
5381	0.2	60	0.0033	1	0.0400	2.1	1.013	1230	0.62	0.100	1.500	0.688	1.500	0.56	-	-	-
5382	0.2	120	0.0017	1	0.0400	4.5	1.006	520	2.64	0.120	1.500	0.688	1.500	0.56	-	-	-
5383	0.5	100	0.0050	5	0.0500	11	1.008	200	2.14	0.320	2.370	0.770	2.370	0.75	-	-	-
5384	0.5	200	0.0025	5	0.0500	27	1.004	97	2.40	0.390	2.370	0.770	2.370	0.75	-	-	-
5385	0.5	100	0.0050	5	0.0500	17	1.009	450	2.15	0.120	1.870	1.000	1.870	0.56	-	-	-
53FT01	1.3	20	0.0667	22	0.0100	120	1.030	20	2.07	0.230	1.750	0.380	1.800	0.85	-	-	-
53FT02	2.5	100	0.0250	25	0.2500	22	1.014	22	4.64	0.350	1.800	0.812	2.300	0.85	-	-	-

- Ip: Primary current
- V/A: Output volts per input amps
- RL: Terminating resistor
- N: Nominal turns
- Rs: Winding resistance
- RCF (Ratio Correction Factor): Current readings should be multiplied by this factor to compensate for the effect of transformer loss
- I_{ex} and V_{ex}: Excitation Current and Voltage at rated operating condition
- WT: Net weight in pounds
- Unless requested, the terminating resistor and one-turn primary are customer supplied
- Pin 3: Nominally for mechanical support only, will be used for center-topped designs