



Hammond  
Power Solutions

595 Southgate Drive  
Guelph, Ontario, N1G 3W6  
Tel. 519 822 2441

Issued 2015-08-21  
Rev. 2: 2016-03-28



### Typical Performance @ 75<sup>0</sup> C of LVDT Transformers, Model Sentinel G, 480V Delta - 208 Wye/120V, 60 Hz, Copper Windings

#### Meets DOE 10 CFR Part 431 - 2016 Energy Efficiency Regulation for LVDT Transformers

kVA	No Load Loss Watts	Load Loss Watts	Impedance	Regulation				% Efficiency at different % of rated load						
				at 35% load		at 100% load		15%	25%	35%	50%	65%	75%	100%
				pf = 1	pf = 0.8	pf = 1	pf = 0.8							
15	64	400	3.9%	0.93%	1.10%	2.68%	3.15%	96.86%	97.68%	97.89%	97.86%	97.67%	97.50%	97.00%
30	96	760	4.0%	0.89%	1.17%	2.57%	3.35%	97.56%	98.13%	98.23%	98.13%	97.90%	97.72%	97.22%
45	135	990	3.7%	0.77%	1.12%	2.22%	3.20%	97.72%	98.28%	98.40%	98.33%	98.15%	98.00%	97.57%
75	194	1470	3.5%	0.69%	1.05%	1.98%	3.02%	98.02%	98.50%	98.60%	98.53%	98.36%	98.22%	97.84%
112.5	275	1850	3.5%	0.58%	1.04%	1.68%	2.97%	98.16%	98.63%	98.74%	98.70%	98.57%	98.46%	98.14%
150	335	2330	3.8%	0.55%	1.12%	1.61%	3.21%	98.31%	98.73%	98.83%	98.79%	98.66%	98.56%	98.25%
225	440	3300	3.8%	0.52%	1.11%	1.52%	3.18%	98.50%	98.86%	98.94%	98.89%	98.76%	98.66%	98.36%
300	560	3930	4.0%	0.47%	1.14%	1.38%	3.26%	98.58%	98.94%	99.02%	98.98%	98.87%	98.78%	98.53%
500	808	5860	4.5%	0.42%	1.23%	1.26%	3.53%	98.76%	99.07%	99.14%	99.10%	99.00%	98.92%	98.68%
750	980	8710	5.2%	0.42%	1.37%	1.28%	3.96%	98.97%	99.19%	99.23%	99.16%	99.05%	98.97%	98.72%
1000	1250	10400	5.2%	0.38%	1.36%	1.16%	3.91%	99.02%	99.25%	99.28%	99.24%	99.14%	99.07%	98.86%



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### Typical Performance @ 75<sup>0</sup> C of LVDT Transformers, Model Sentinel G, 480V Delta - 208 Wye/120V, 60 Hz, Aluminum Windings

#### Meets DOE 10 CFR Part 431 - 2016 Energy Efficiency Regulation for LVDT Transformers

kVA	No Load Loss Watts	Load Loss Watts	Impedance	Regulation				% Efficiency at different % of rated load						
				at 35% load		at 100% load		15%	25%	35%	50%	65%	75%	100%
				pf = 1	pf = 0.8	pf = 1	pf = 0.8							
15	62	420	4.0%	0.98%	1.12%	2.81%	3.21%	96.92%	97.70%	97.89%	97.82%	97.61%	97.42%	96.89%
30	86	840	4.1%	0.98%	1.19%	2.82%	3.40%	97.72%	98.19%	98.23%	98.06%	97.79%	97.58%	97.00%
45	120	1110	4.5%	0.87%	1.36%	2.51%	3.89%	97.90%	98.35%	98.40%	98.27%	98.03%	97.84%	97.34%
75	190	1490	5.0%	0.71%	1.46%	2.08%	4.18%	98.05%	98.51%	98.60%	98.52%	98.35%	98.20%	97.81%
112.5	226	2260	5.0%	0.71%	1.46%	2.10%	4.18%	98.38%	98.71%	98.74%	98.61%	98.41%	98.26%	97.84%
150	315	2500	5.0%	0.60%	1.42%	1.77%	4.07%	98.38%	98.76%	98.83%	98.76%	98.61%	98.49%	98.16%
225	405	3580	5.4%	0.57%	1.51%	1.72%	4.33%	98.58%	98.89%	98.94%	98.86%	98.70%	98.59%	98.26%
300	540	4040	4.8%	0.48%	1.32%	1.45%	3.79%	98.62%	98.95%	99.02%	98.98%	98.86%	98.77%	98.50%
500	840	5590	5.2%	0.41%	1.37%	1.24%	3.95%	98.73%	99.06%	99.14%	99.11%	99.02%	98.95%	98.73%
750	1020	8370	5.8%	0.41%	1.50%	1.27%	4.35%	98.94%	99.18%	99.23%	99.18%	99.07%	98.99%	98.76%
1000	1180	11180	5.8%	0.41%	1.50%	1.28%	4.35%	99.05%	99.25%	99.28%	99.21%	99.10%	99.01%	98.78%



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Typical Impedance & Inrush Current Range for LVDT Transformers

Model Sentinel G, Aluminum or Copper Windings, 80 to 150° C Rise

Primary Delta & Secondary Wye connected,  $V_{line}$  Range 208 to 600V

Meets DOE 10 CFR Part 431 - 2016 Energy Efficiency Regulation for LVDT

kVA	Efficiency at 35% of Rated Load, @ 75° C	Impedance	Peak Inrush Current Multiple of RMS current
15	97.89%	1.8 - 6%	12 to 15
30	98.23%		
45	98.40%		
75	98.60%	2 - 6%	10 to 12
112.5	98.74%		
150	98.83%		
225	98.94%		
300	99.02%		
500	99.14%	4 - 6%	8 to 10
750	99.23%	4.5 - 6.5%	8 to 10
1000	99.28%		