Cutler-Hammer

Current Transformers

Technical Data

Supersedes TD.17.08.T.E
dated May 1999, page 4

Application Description

For new construction and retrofit applications where no current transformer exists, Eaton's Cutler-Hammer business offers a complete selection of low voltage (up to 600V) current transformers. These current transformers can be used in commercial grade applications such as control panels and panelboards. Additionally, they can be used for most industrial metering and relaying applications in switchboards, switchgear, and motor control centers.

General Description

The Cutler-Hammer low voltage current transformers are available in both solid core and split core designs. Engineered for electronic metering applications, all solid core designs and selected split core designs offer ANSI metering quality accuracy. The solid core designs also meet ANSI C57.13 relay accuracy requirements including over-ranging capabilities. The current transformer offering has a 5 ampere secondary at the rated primary current.

Split core CTs are specifically designed to be installed around primary conductors without disconnecting wires or breaking the circuit to be monitored. These current transformers are perfect solutions for energy management applications and are manufactured for installation ease.

Dimensional Data

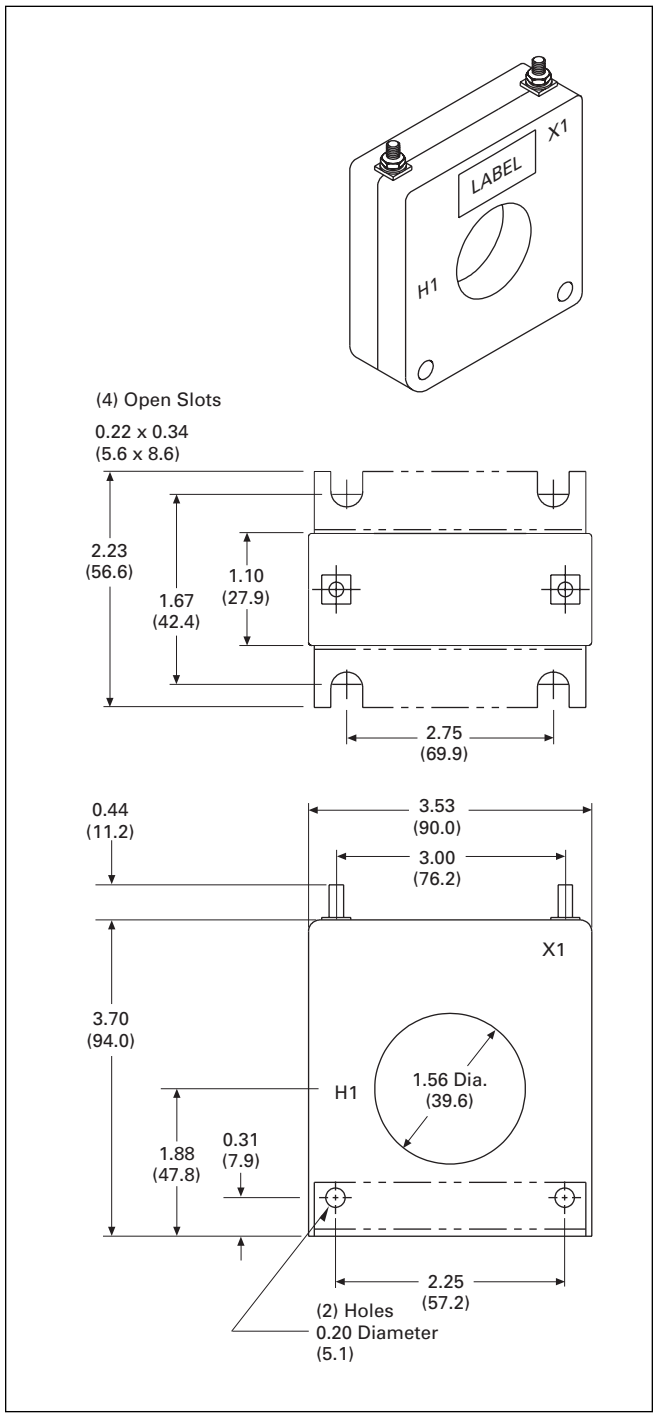

Figure 1. S050 Dimensional Data in Inches (mm)

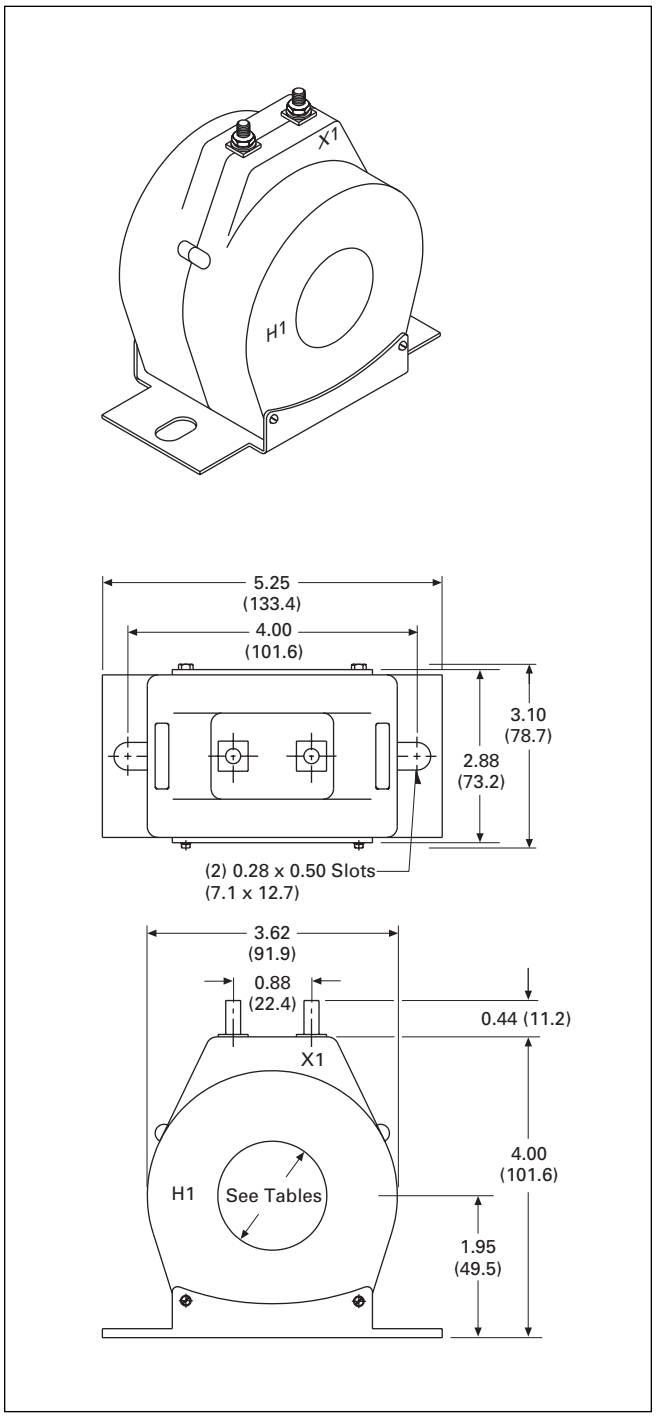

Figure 2. S060 Dimensional Data in Inches (mm)

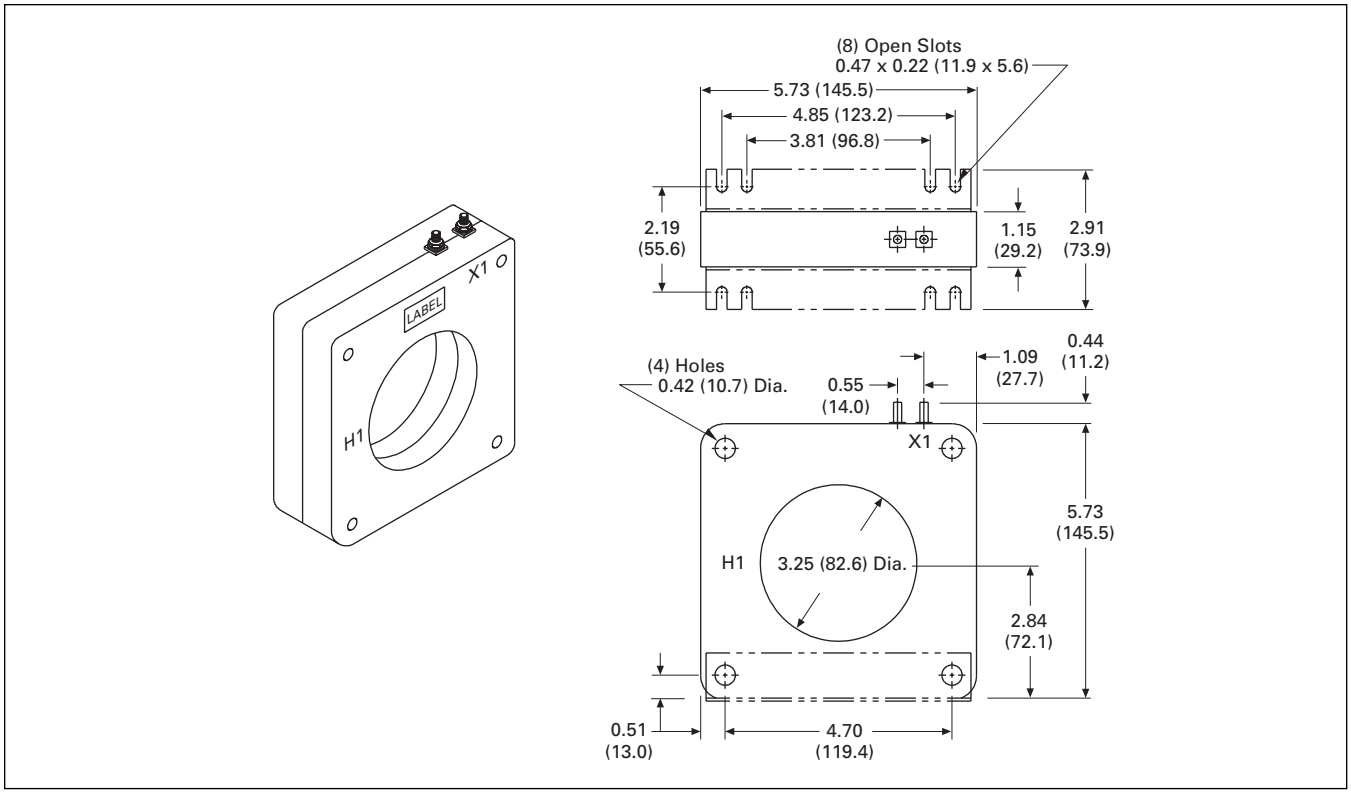

Figure 3. S080 Dimensional Data in Inches (mm)

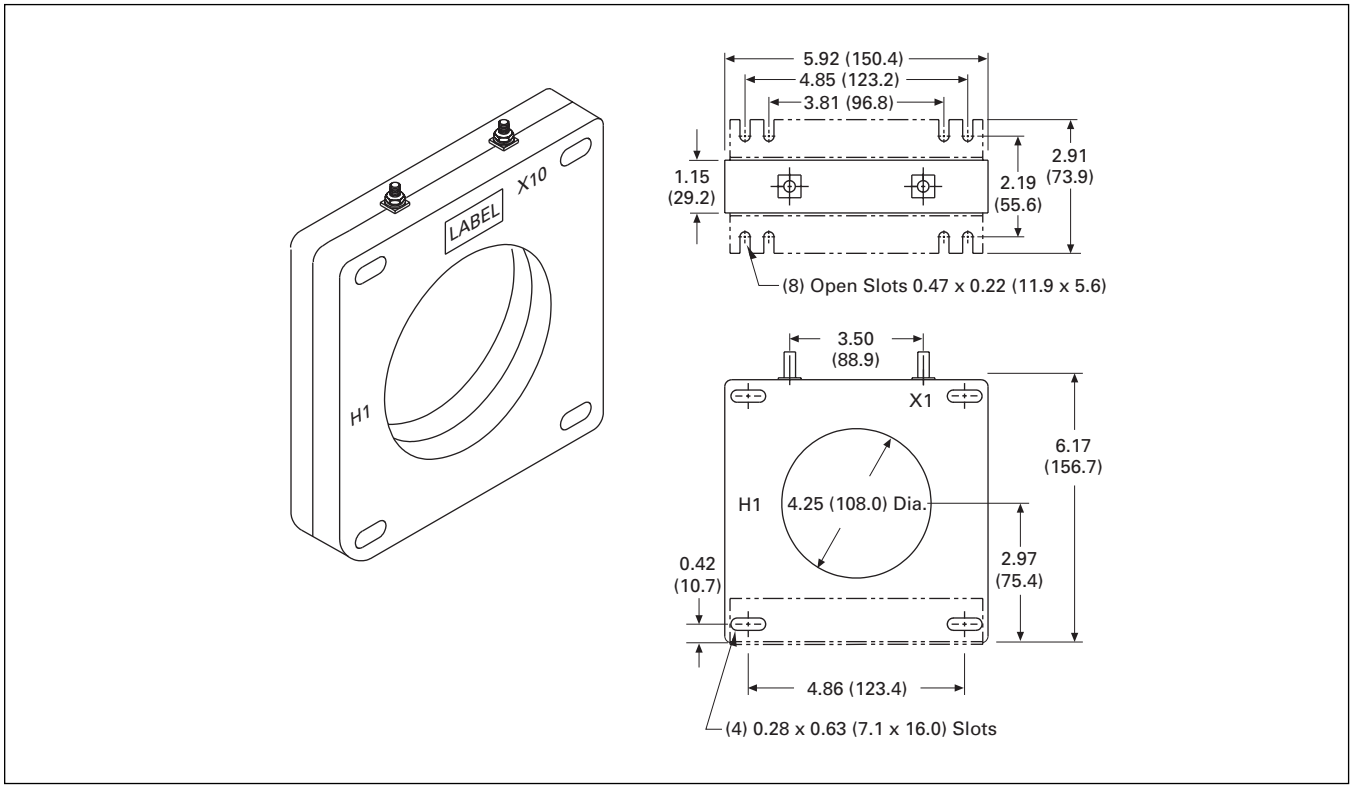

Figure 4. S090 Dimensional Data in Inches (mm)

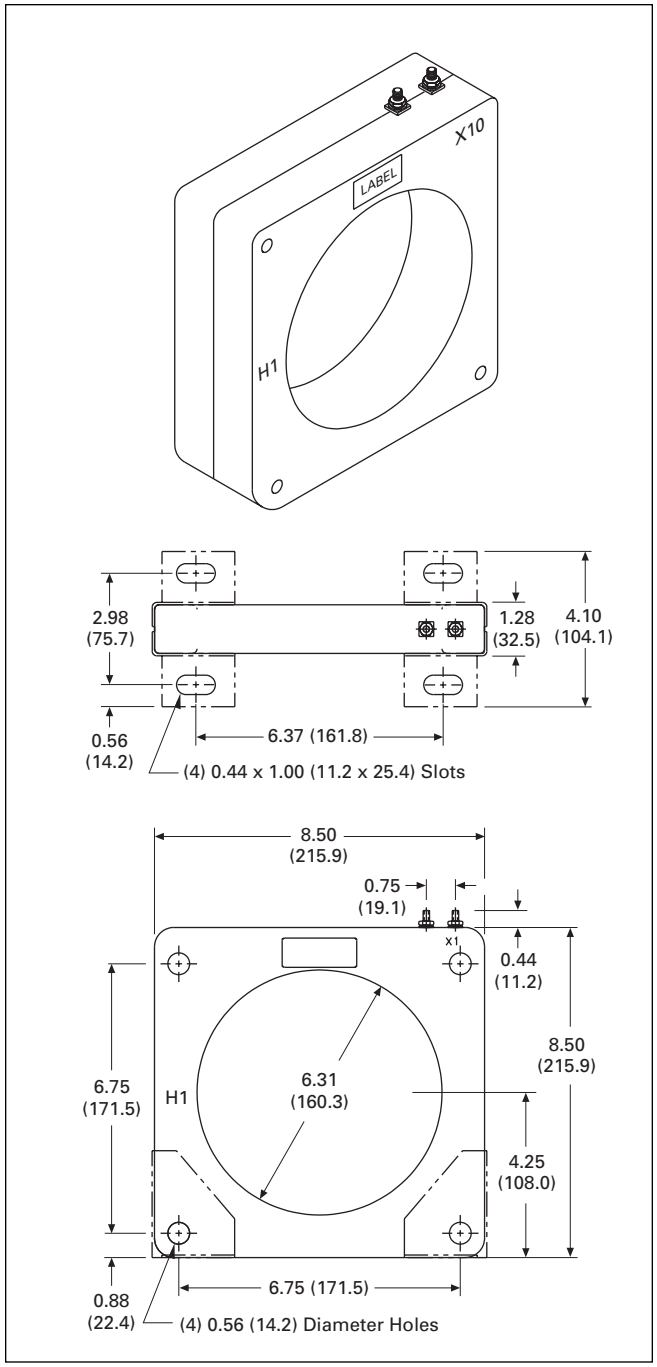

Figure 5. S025 Dimensional Data in Inches (mm)

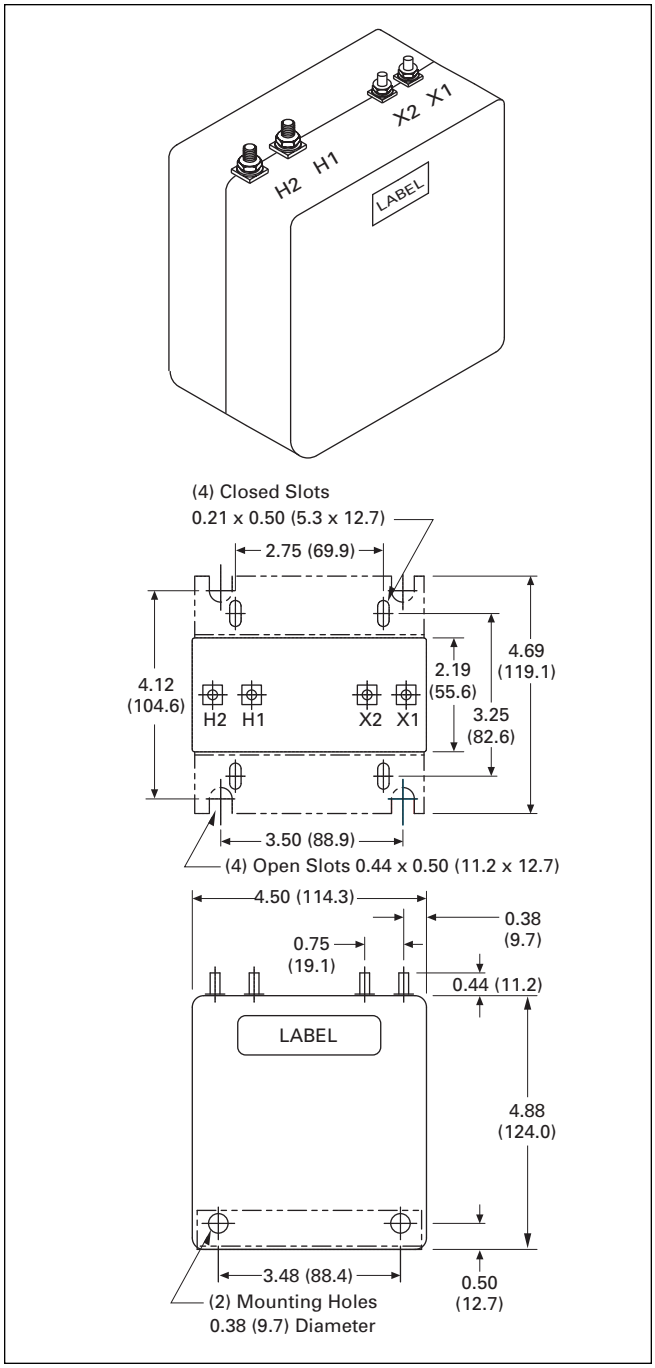

Figure 6. W190 Dimensional Data in Inches (mm)

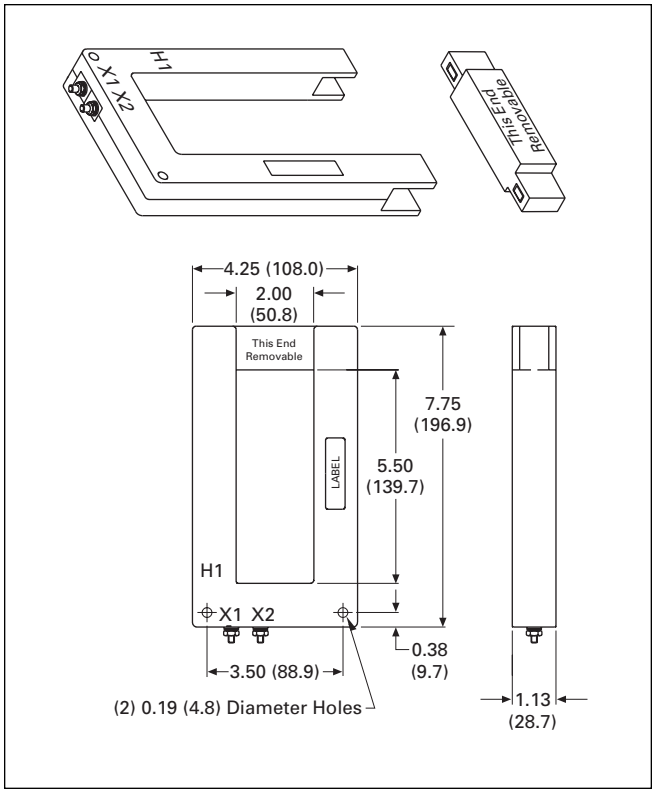

Figure 7. M000 Dimensional Data in Inches (mm)

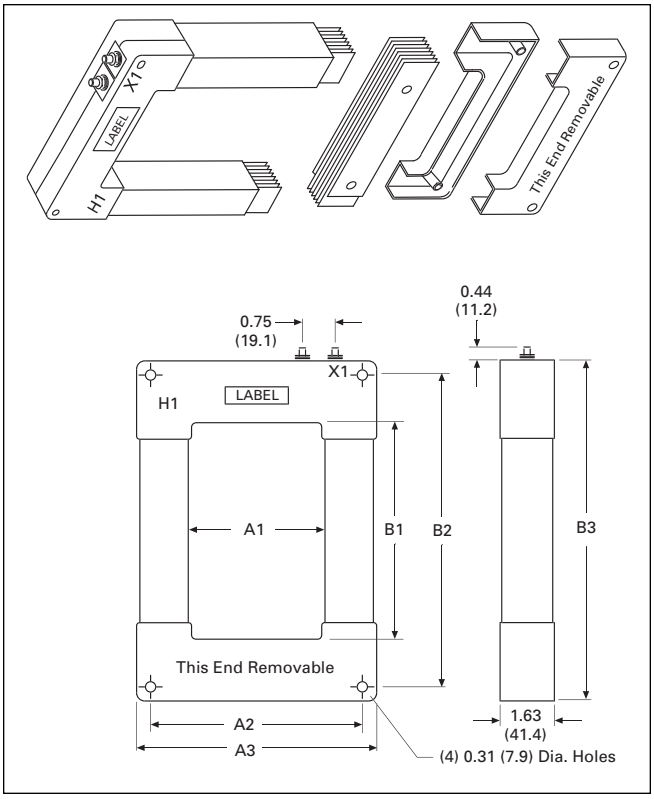

Figure 8. M050 Dimensional Data in Inches (mm)

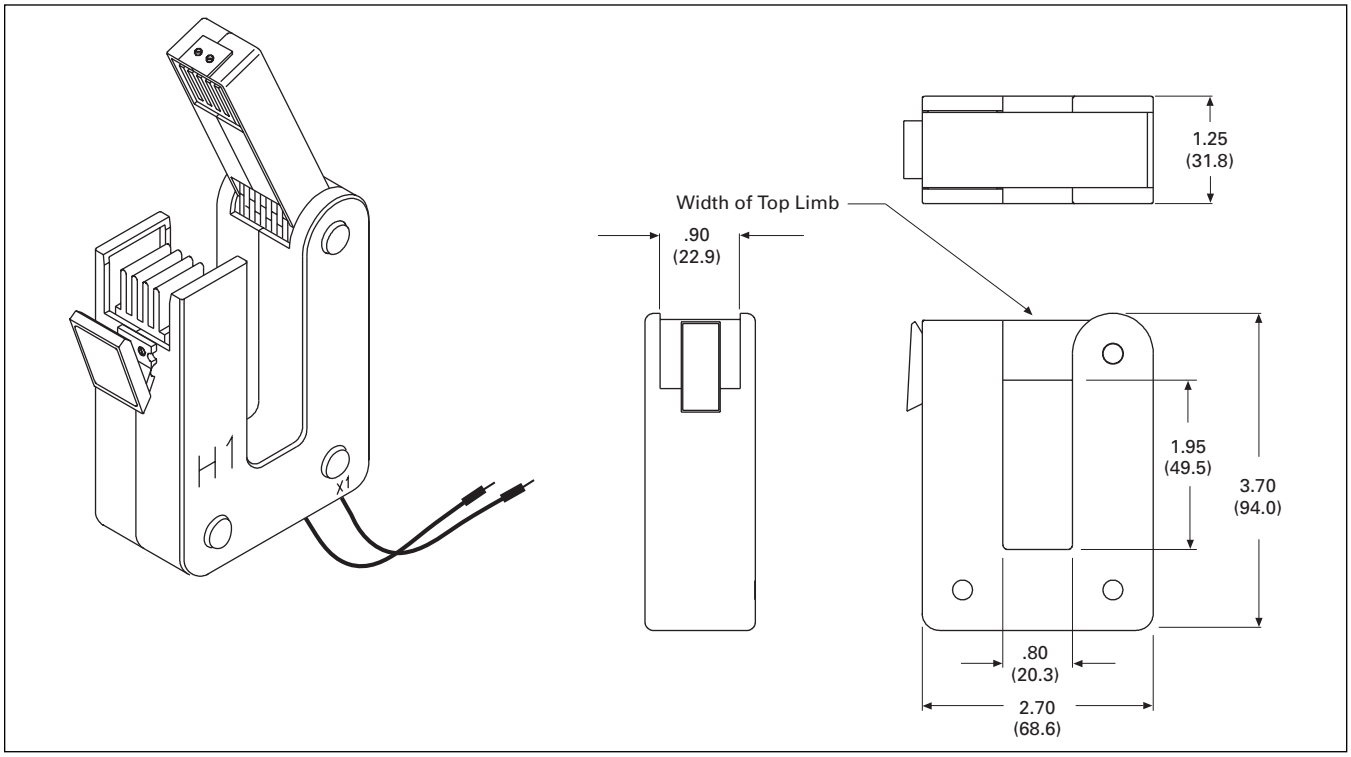

Figure 9. M030 Dimensional Data in Inches (mm)

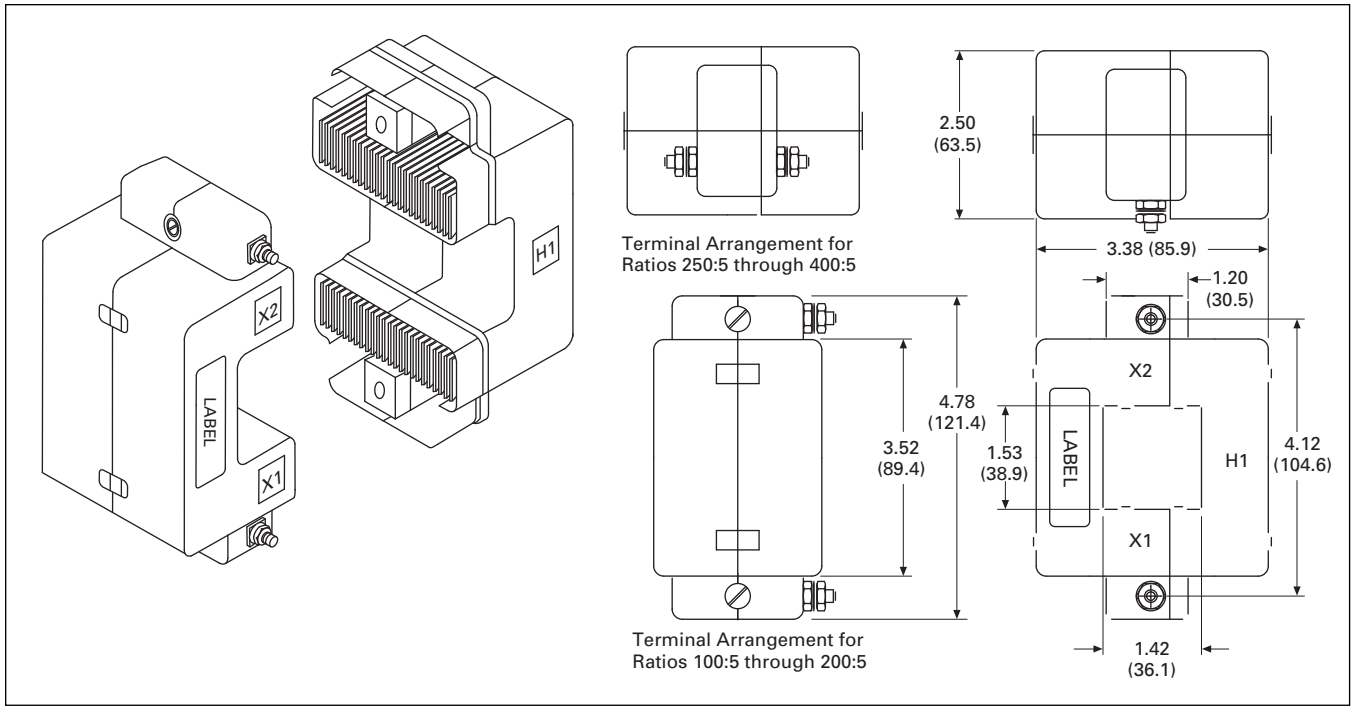

Figure 10. M040 Dimensional Data in Inches (mm)

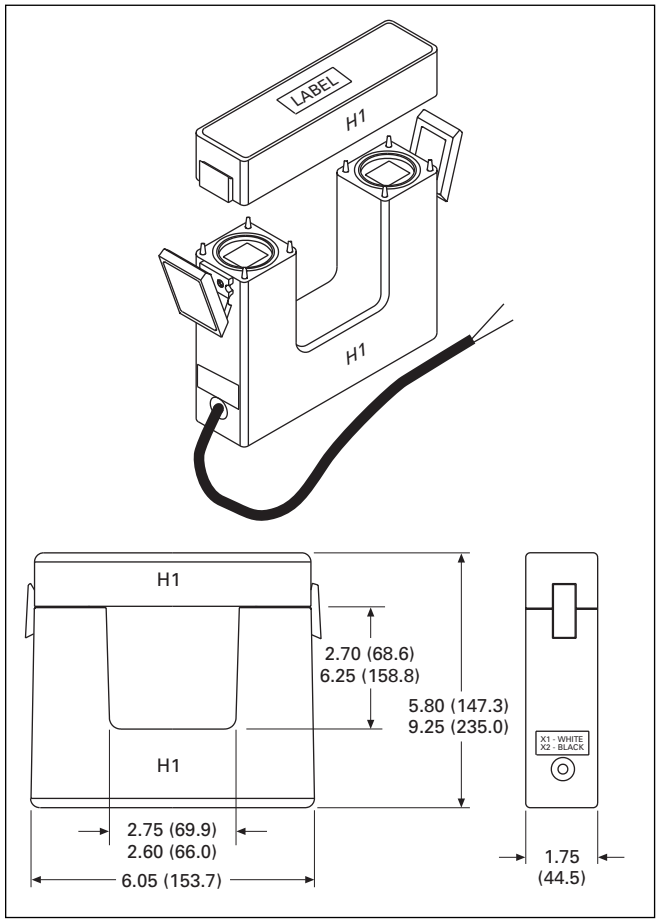

Figure 11. M060 Dimensional Data in Inches (mm)

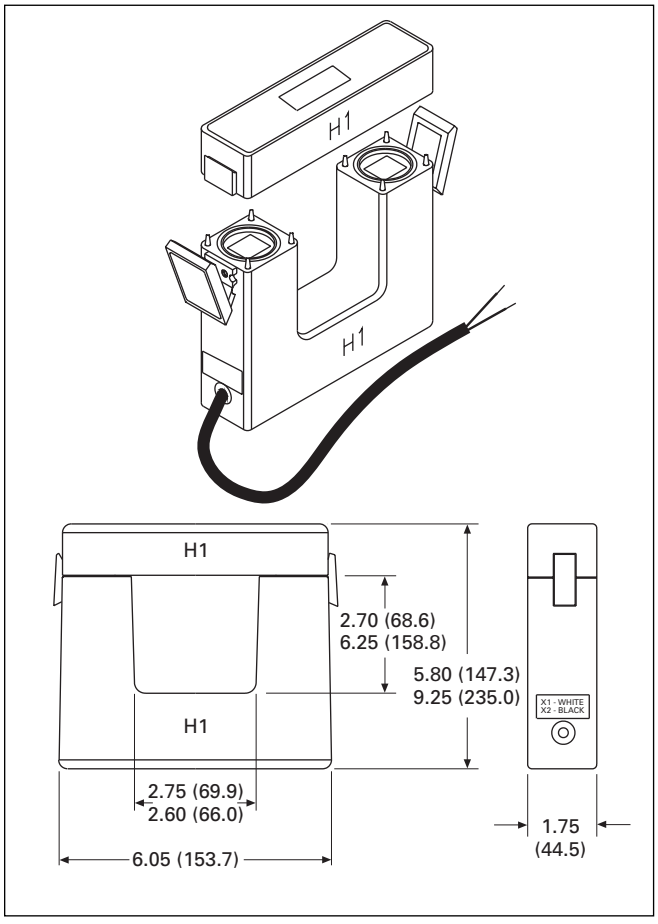

Figure 12. M080 Dimensional Data in Inches (mm)

Ordering Information

Table 1. Solid Core ANSI Metering Accuracy

Primary Current Rating	ANSI B0.1 Metering Class at 60 Hz (Accuracy in %)	Window Size in Inches (mm) Diameter	Catalog Number	Figure Number for Dimensional Data	Mounting Bracket Catalog Number
300	0.3	1.56 (39.6)	**S050-301**	1	**S050BRAC**
400			**S050-401**		**S050BRAC**
500			**S050-501**		**S050BRAC**
600			**S050-601**		**S050BRAC**
750			**S050-751**		**S050BRAC**
800			**S050-801**		**S050BRAC**
1000			**S050-102**		**S050BRAC**
1200			**S050-122**		**S050BRAC**
50	1.2	1.25 (31.8)	**S060-500**	2	①
100	0.6		**S060-101**		①
150	0.3		**S060-151**		①
200	0.3		**S060-201**		①
400	0.3	3.25 (82.6)	**S080-401**	3	**S080BRAC**
500			**S080-501**		**S080BRAC**
600			**S080-601**		**S080BRAC**
750			**S080-751**		**S080BRAC**
800			**S080-801**		**S080BRAC**
1000			**S080-102**		**S080BRAC**
1200			**S080-122**		**S080BRAC**
500	0.3	4.25 (108.0)	**S090-501**	4	**S090BRAC**
600			**S090-601**		**S090BRAC**
750			**S090-751**		**S090BRAC**
800			**S090-801**		**S090BRAC**
1000			**S090-102**		**S090BRAC**
1200			**S090-122**		**S090BRAC**
1500			**S090-152**		**S090BRAC**
1600			**S090-162**		**S090BRAC**
2000			**S090-202**		**S090BRAC**
2500			**S090-252**		**S090BRAC**
3000			**S090-302**		**S090BRAC**
600	0.3	6.31 (160.3)	**S025-601**	5	**S025BRAC**
750			**S025-751**		**S025BRAC**
800			**S025-801**		**S025BRAC**
1000			**S025-102**		**S025BRAC**
1200			**S025-122**		**S025BRAC**
1500			**S025-152**		**S025BRAC**
1600			**S025-162**		**S025BRAC**
2000			**S025-202**		**S025BRAC**
2500			**S025-252**		**S025BRAC**
3000			**S025-302**		**S025BRAC**
3500			**S025-352**		**S025BRAC**
4000			**S025-402**		**S025BRAC**
25	0.3	Wound Primary	**W190-025**	6	**W190BRAC**
50			**W190-050**		**W190BRAC**

① No mounting bracket required.

Table 2. Split Core ANSI Metering Accuracy

Primary Current Rating	ANSI B0.1 Metering Class at 60 Hz (Accuracy in %)	Window Size in Inches (mm)	Figure Number for Dimensional Data	Catalog Number
400	2.4	2.00 x 5.50 (50.8 x 139.7)	7	**M000-401**
500	2.4			**M000-501**
600	2.4			**M000-601**
800	1.2			**M000-801**
1000	1.2			**M000-102**
1200	0.6			**M000-122**
1500	0.6			**M000-152**
1600	0.6			**M000-162**
2000	0.6			**M000-202**
600	4.8	4.10 x 7.10 (104.1 x 180.3)	8	**M050-601**
750	4.8			**M050-751**
800	2.4			**M050-801**
1000	2.4			**M050-102**
1200	1.2			**M050-122**
1500	1.2			**M050-152**
2000	0.6			**M050-202**
2500	0.6			**M050-252**
3000	0.6			**M050-302**
3500	0.6			**M050-352**
4000	0.3			**M050-402**

Table 3. Split Core Current Transformers

Primary Current Rating	Accuracy at 60 Hz (in %)	Window Size in Inches (mm)	Figure No. for Dimensional Data	Catalog Number
100	5.0	0.80 x 1.95 (20.3 x 49.5)	9	**M030-101**
150	5.0			**M030-151**
200	4.0			**M030-201**
300	2.0			**M030-301**
400	2.0			**M030-401**
100	5.0	1.42 x 1.53 (36.1 x 38.9)	10	**M040-101**
150	4.0			**M040-151**
200	1.5			**M040-201**
300	1.5			**M040-301**
400	1.5			**M040-401**
200	1.0	2.60 x 2.75 (66.0 x 69.9)	11	**M060-201**
300				**M060-301**
400				**M060-401**
500				**M060-501**
600				**M060-601**
750				**M060-751**
800				**M060-801**
1000				**M060-102**
1200				**M060-122**
500	1.0	2.60 x 6.25 (66.0 x 158.8)	12	**M080-501**
600				**M080-601**
800				**M080-801**
1000				**M080-102**
1200				**M080-122**
1500				**M080-152**
1600				**M080-162**
2000				**M080-202**
2500				**M080-252**
3000				**M080-302**

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