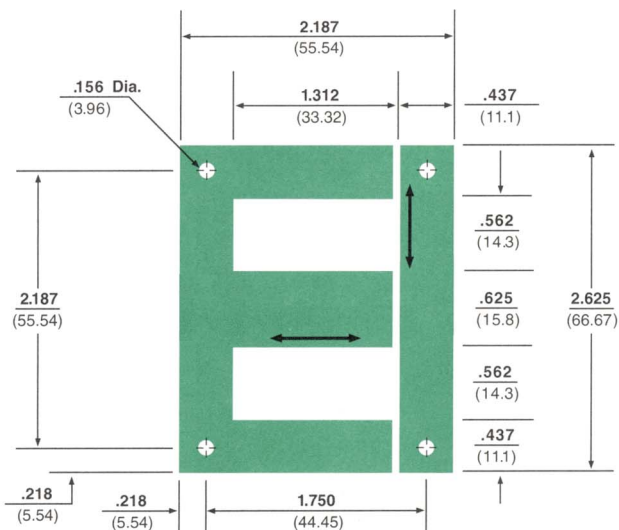


# SINGLE PHASE— $\frac{5}{8}$ LW

(16mm) FERRO-RESONANT



Note: Specify if center mounting slots are required.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	15.39	6.971	64.9	142.78
.011	0.28	12.092	5.486	82.7	182.3
.009	0.23	9.894	4.489	101.1	222.8
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
2.48	40.6	0.687	312	0.737	4.76

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 5.37 \text{ in.} = 13.64 \text{ cm.}$$

$$A = 0.39 \text{ in.}^2 = 2.52 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

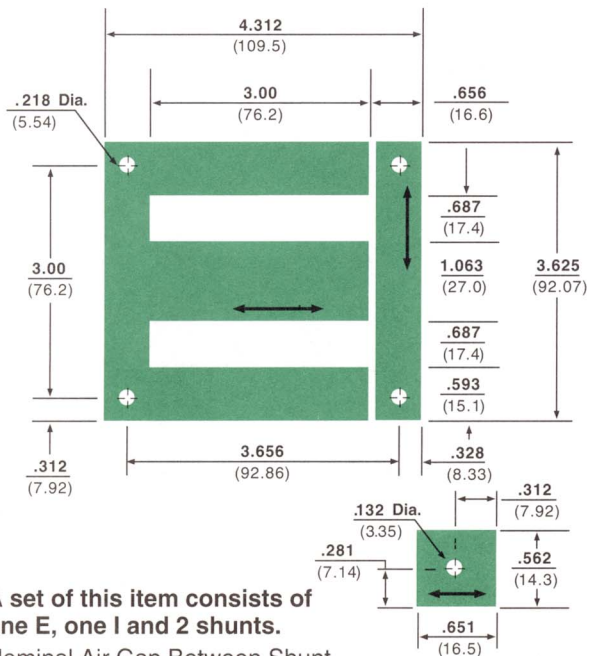
$$B_{\max} = \frac{149 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$$H_o = (.092 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.24 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—1 $\frac{1}{16}$ LW

(27mm) FERRO-RESONANT



**A set of this item consists of one E, one I and 2 shunts.**  
 Nominal Air Gap Between Shunt and Window—.010" to .036"

**Single-Phase**

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	46.86	21.21	21.36	46.992
.011	0.28	6.819	16.706	27.2	59.9
.009	0.23	30.124	13.668	33.2	73.2
.007	0.18				
.006	0.15				
.004	0.10				

### CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
12.19	199.80	3.37	1528	2.062	13.30

### MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 9.81 \text{ in.} = 24.92 \text{ cm.}$$

$$A = 1.13 \text{ in.}^2 = 7.29 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

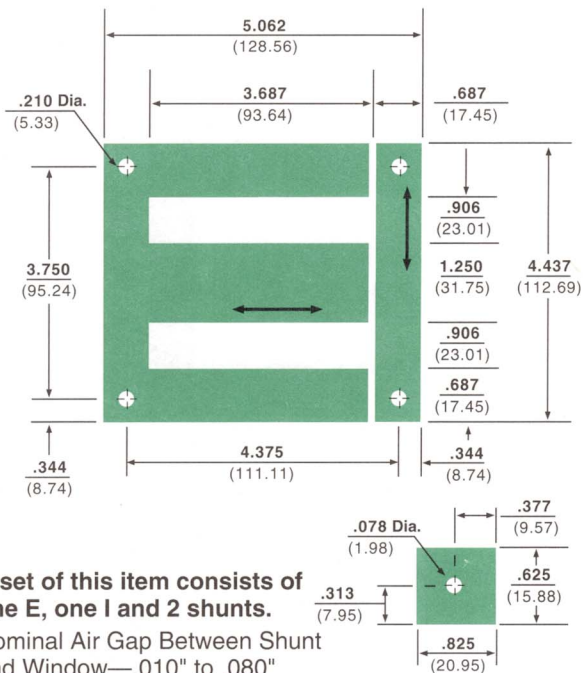
$$B_{\text{max}} = \frac{51.5 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$$H_o = (.050 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.39 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—1¼ (2) HLW

(32mm) FERRO-RESONANT



A set of this item consists of one E, one I and 2 shunts.

Nominal Air Gap Between Shunt and Window—.010" to .080"

Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	64.63	29.31	15.47	34.12
.011	0.28	50.781	23.040	19.7	43.4
.009	0.23	41.548	18.851	24.1	53.0
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
18.57	304.3	5.46	2478	3.340	21.55

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 11.873 \text{ in.} = 30.16 \text{ cm.}$$

$$A = 1.56 \text{ in.}^2 = 10.08 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

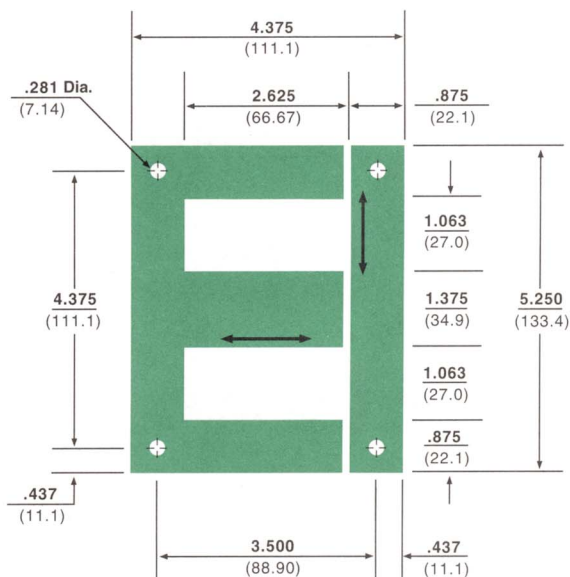
$$B_{\max} = \frac{37.2 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$$H_o = (.042 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.44 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—1<sup>3</sup>/<sub>8</sub>HXW

(35mm) FERRO-RESONANT



Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	63.10	28.58	15.80	34.76
.011	0.28	49.579	22.495	20.2	44.4
.009	0.23	40.564	18.404	24.7	54.3
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
23.6	366	6.52	2950	2.789	17.99

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 10.68 \text{ in.} = 27.15 \text{ cm.}$$

$$A = 1.89 \text{ in.}^2 = 12.20 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

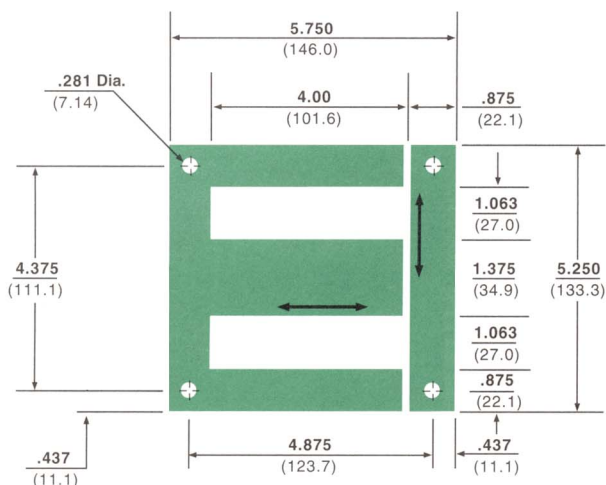
$$B_{\max} = \frac{30.7 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.046 \times 10^{-3}) N$  Oersteds per milliampere of direct current

$$L_a = (.59 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—1<sup>3</sup>/<sub>8</sub>LW

(35mm) FERRO-RESONANT



Note: Specify if center mounting slots are required.  
Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	81.89	37.09	12.02	26.444
.011	0.28	64.342	29.193	15.5	34.3
.009	0.23	52.644	23.804	19.0	42.0
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
29.3	480.5	8.12	3683	4.250	27.4

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 13.44 \text{ in.} = 34.13 \text{ cm.}$$

$$A = 1.89 \text{ in.}^2 = 12.20 \text{ cm.}^2$$

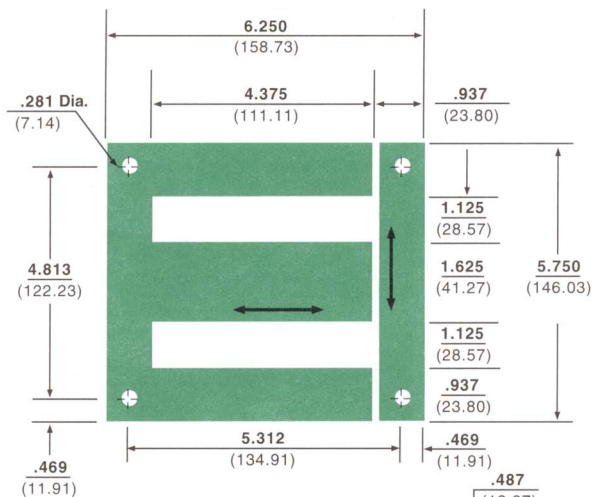
60 Hertz Reactance (N = number of turns)

$$B_{\max} = \frac{30.7 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$$H_o = (.037 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.47 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

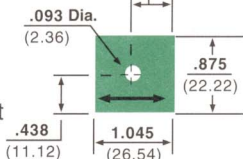
# SINGLE PHASE EI—1 $\frac{5}{8}$ (2) HLW (41mm) FERRO-RESONANT



A set of this item consists of one E, one I and 2 shunts.

Nominal Air Gap Between Shunt and Window—.010" to .080"

Also available in Centra-Gap. See page 7.



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	107.71	48.85	9.28	20.47
.011	0.28	84.621	38.394	11.8	26.0
.009	0.23	69.342	31.414	14.4	31.8
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
40.05	656.3	11.77	5341	4.922	31.75

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 14.624 \text{ in.} = 37.14 \text{ cm.}$$

$$A = 2.64 \text{ in.}^2 = 17.04 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

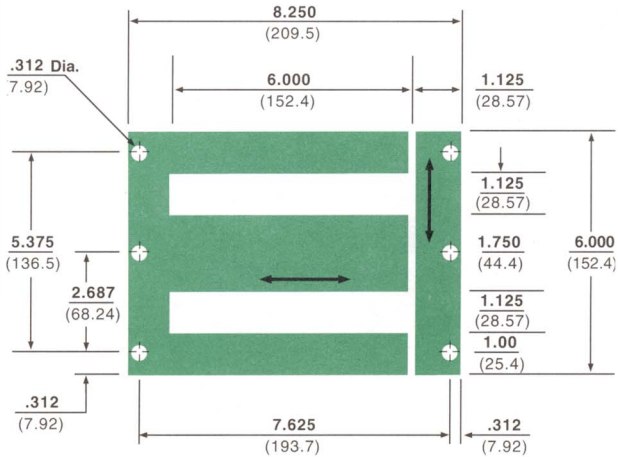
$$B_{\max} = \frac{22.0 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$$H_o = (.034 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

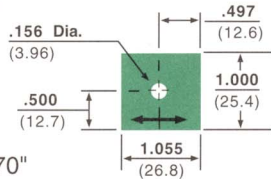
$$L_a = (.60 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE—1<sup>3</sup>/<sub>4</sub> (3) HLW

(44mm) FERRO-RESONANT



A set of this item consists of one E, one I and 4 shunts.



Nominal Air Gap Between Shunt and Window—.010" to .070"

Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	154.3	69.88	6.48	14.25
.011	0.28	121.236	55.007	8.2	18.2
.009	0.23	99.193	45.006	10.1	22.2
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
62.2	1019	17.2	7796.8	6.75	43.54

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 18.38 \text{ in.} = 46.67 \text{ cm.}$$

$$A = 3.062 \text{ in.}^2 = 19.75 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

$$B_{\max} = \frac{19 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

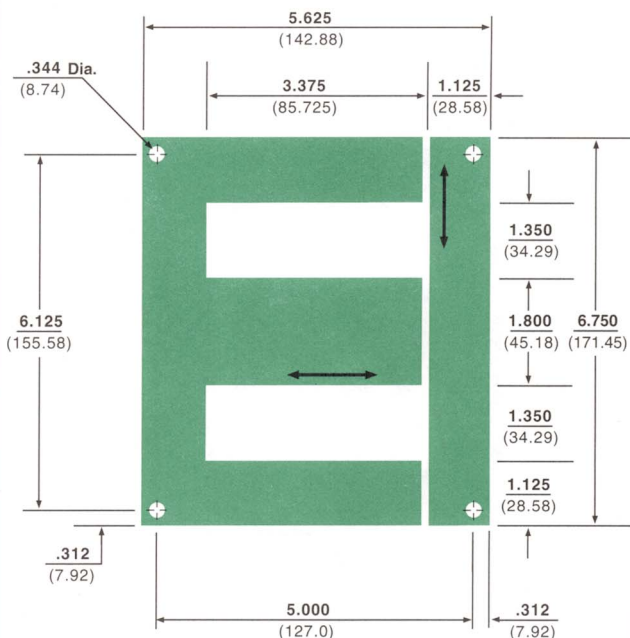
$$H_o = (.027 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.56 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—1.80HW

(46mm)

FERRO-RESONANT



Single-Phase

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	105.6	47.90	9.47	20.88
.011	0.28	82.971	37.646	12.1	26.6
.009	0.23	67.886	30.801	14.7	32.5
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
46.57	763.2	12.90	5850	4.556	29.39

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 13.725 \text{ in.} = 34.86 \text{ cm.}$$

$$A = 3.240 \text{ in.}^2 = 20.90 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

$$B_{\max} = \frac{17.95 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

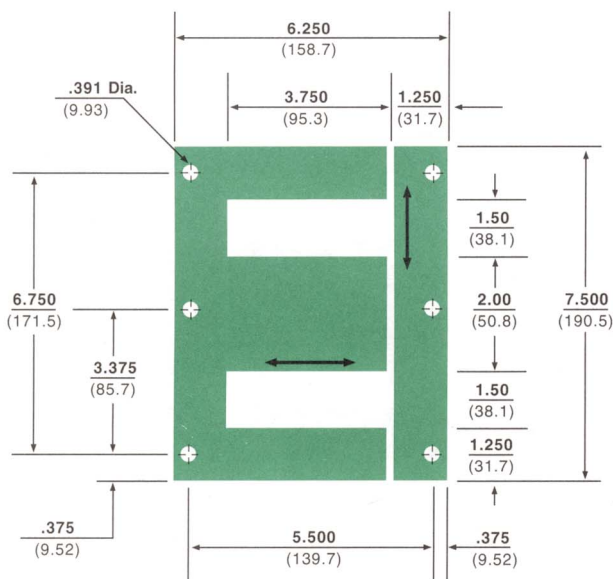
$$H_o = (.036 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.78 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—2 (3) HW

(51mm)

FERRO-RESONANT



Note: Specify if center mounting holes are not required.  
Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	127.1	57.55	7.86	17.292
.011	0.28	99.864	45.310	10.0	22.1
.009	0.23	81.707	37.072	12.2	27.0
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
69.8	1145	19.4	8810	5.625	36.28

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 15.25 \text{ in.} = 38.7 \text{ cm.}$$

$$A = 4.0 \text{ in.}^2 = 25.8 \text{ cm.}^2$$

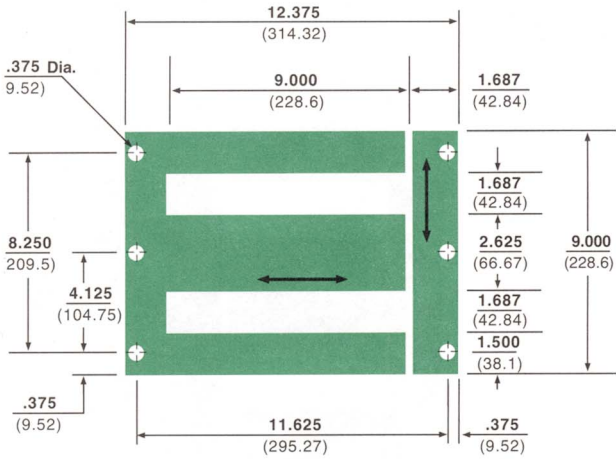
60 Hertz Reactance (N = number of turns)

$$B_{\max} = \frac{14.5 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$$H_o = (.032 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.88 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

# SINGLE PHASE EI—2<sup>5</sup>/<sub>8</sub>(3)HLW (67mm) FERRO-RESONANT

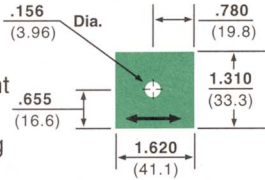


A set of this item consists of one E, one I and 4 shunts.

Nominal Air Gap Between Shunt and Window—.010" to 070"

Note: Specify if center mounting slots are not required.

Also available in Centra-Gap. See page 7.



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	344.9	156.2	2.89	6.358
.011	0.28	270.993	122.955	3.7	8.1
.009	0.23	222.721	101.053	4.5	9.9
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
211	3456	58.2	26420	15.19	97.96

## MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$$Q = 27.56 \text{ in.} = 70.00 \text{ cm.}$$

$$A = 6.89 \text{ in.}^2 = 44.44 \text{ cm.}^2$$

60 Hertz Reactance (N = number of turns)

$$B_{\max} = \frac{8.4 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

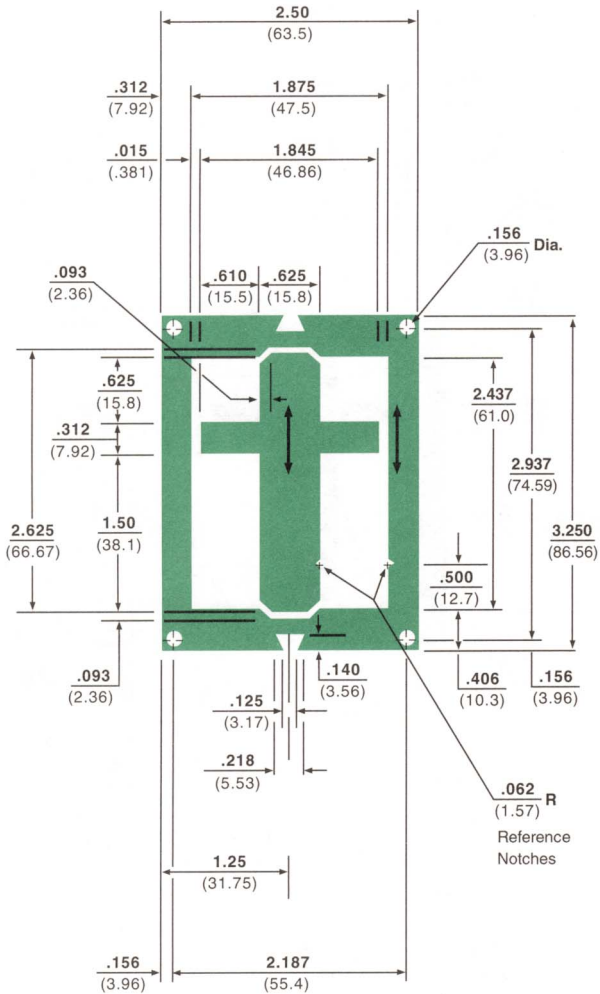
$$H_o = (.018 \times 10^{-3}) N \text{ Oersteds per milliampere of direct current}$$

$$L_a = (.84 \times 10^{-8}) K_1 N^2 \mu_{ac} \text{ Henrys}$$

Single-Phase

# CRUCIFORM TO— $\frac{5}{8}$

(16mm) FERRO-RESONANT



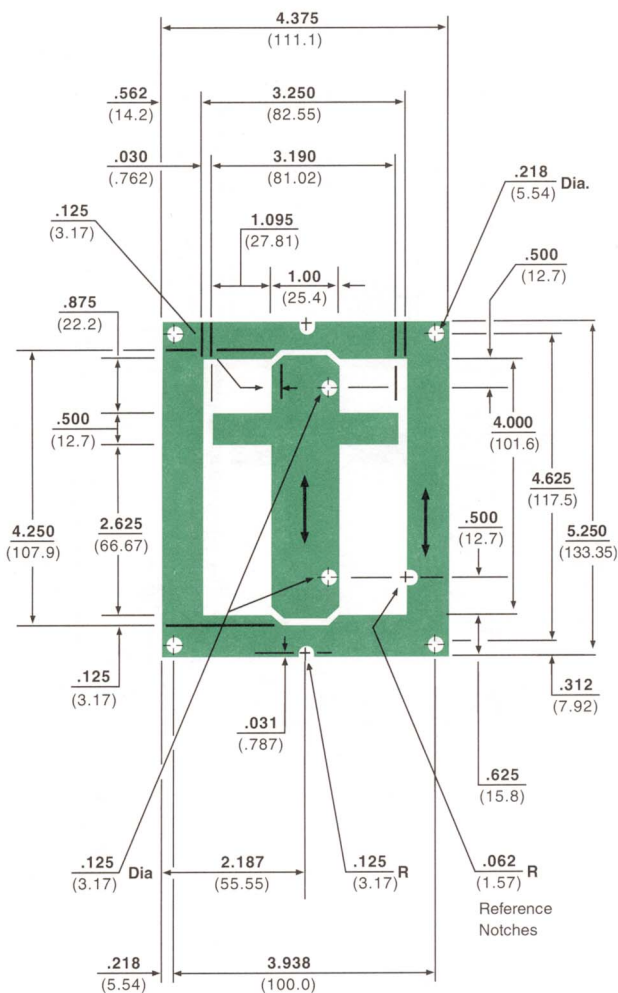
THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	20.64	9.35	46.2	101.64
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
3.23	52.5	.895	405	1.317	8.5

# CRUCIFORM TO—1

(25mm) FERRO-RESONANT



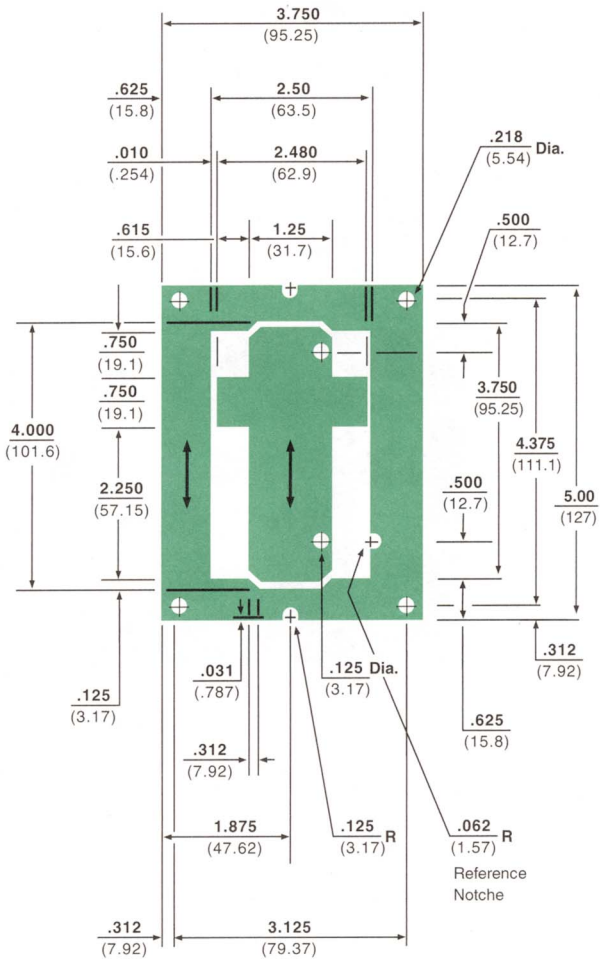
THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	57.49	26.04	17.4	38.28
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
14.816	243	4.12	1875	3.875	24.99

# CRUCIFORM TO—1¼

(32mm) FERRO-RESONANT



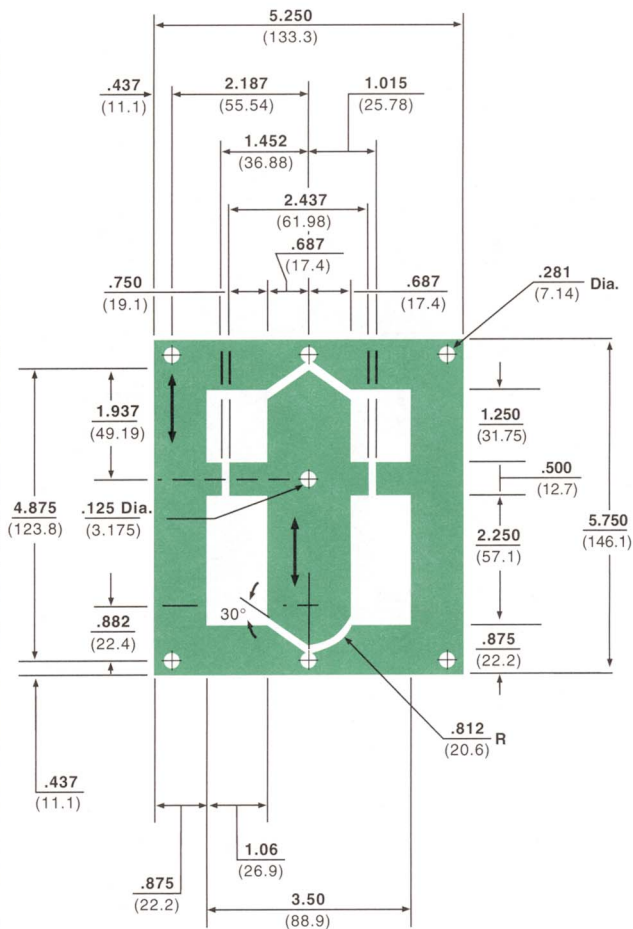
THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	69.13	31.31	14.45	31.79
.014	0.35				
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
18.31	300.10	4.78	2160	1.875	12.10

# CRUCIFORM TO—1<sup>3</sup>/<sub>8</sub>

(35mm) FERRO-RESONANT



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	86.72	39.28	11.53	25.366
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

## CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
30.73	503.612	8.49	3853	3.72	23.99