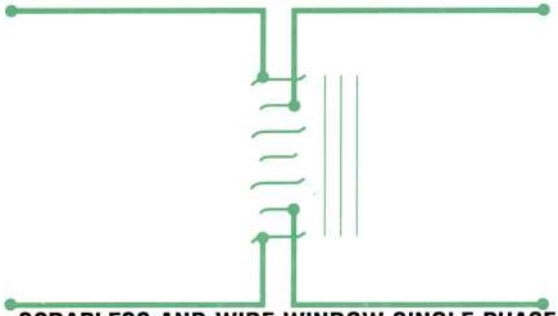
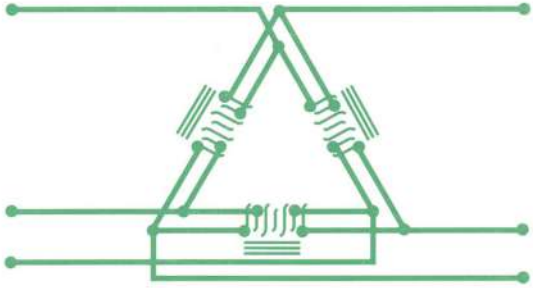
MINI-LOG VI

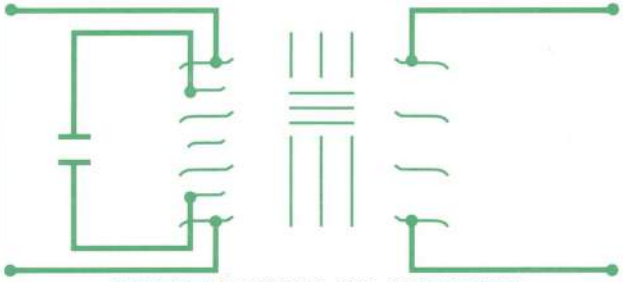
ELECTRICAL LAMINATION CATALOG



SCRAPLESS AND WIDE WINDOW SINGLE PHASE



THREE PHASE



FERRO-RESONANT AND CRUCIFORM

Thomas & Skinner, Inc.

1120 EAST 23rd St., INDIANAPOLIS, INDIANA 46205
MAIL P.O. Box 150, ZIP 46206 · 317/923-2501
· FAX 3179235919

MASTER MAGNETICIANS SINCE 1901.

Thomas & Skinner is one of the oldest manufacturers of Permanent Magnets in the United States Its origins trace back to the Magnet Department of the Esterline Company before the partnership of J. R. Thomas and O. H. Skinner acquired it in 1923.

From the beginning Thomas & Skinner has been a consistent leader in developing new magnetic materials: Transformer Laminations of all types, Alnico 5Cb, Alnico 8C, Alnico 9 and 9Nb.

From initial transformer lamination production in 1927 to serve the infant radio industry, Thomas & Skinner's EI Transformer Lamination operation led the way pioneering large three-phase, wide-window, and "thin-gauge" laminations. From thin (4 to 6 mil) laminations to Orthosil squared hysteresis loop silicon iron alloys, the current product line has grown into seven distinct families, comprising the largest size range available from any manufacturer.

Most recently, the Thomas & Skinner tradition of superior quality and performance has been further enhanced with the acquisition of Ceramic Magnetics, Inc., the premiere supplier of high quality soft ferrites, also joined the T&S family.

Today Thomas & Skinner operates from 3 warehouses, and 5 manufacturing facilities, serving industry in the United States and worldwide.

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LOW PROFILE LAMINATIONS

Mr. Magnetician

Thomas & Skinner, Inc.

DISTRIBUTION

Thomas and Skinner's Indianapolis plant is centrally located for quick nationwide distribution. Additional warehouse facilities on the east coast (New Jersey) and the west coast (California), backed up by a nationwide sales organization, permit overnight shipment practically anywhere in the United States.

CERTIFICATION OF MAGNETIC QUALITY

Thomas and Skinner is the first manufacturer to provide certification of magnetic quality with each lamination shipment. All T & S laminations are tested and certified under ASTM A-346 specification. The T & S material certifications provide volt amperes per pound, core loss and material lot number. The material lot number identifies and serves as a control on each lot. The material certification is included with the packing slip covering the shipment. Our quality control system conforms to MIL-T9858.

TEST PROCEDURES FOR STANDARD EI LAMINATIONS

Thomas and Skinner EI Laminations are tested under standards set up by ASTM A-346. A reprint of the standard method of test entitled "Alternating-Current Magnetic Performance Of Laminated Core Specimens Using The Modified Hay Bridge Method" is available from ASTM. For reprints and prices, write to:

American Society for Testing Materials
1916 Race Street
Philadelphia, PA 19103
USA

MIL-T-27 LAMINATIONS

Recognizing the need for uniform laminations, the U.S. Signal Corps has specified tooling for the production of laminations to MIL-T-27 specifications. The laminations have the mounting holes offset in the corners, to permit an uninterrupted magnetic path. The lamination sizes available under this program are listed below. The series is designed for .014" Orthosil® M-6. Some sizes are available in 0.004" and 0.006". Also SuPer Orthosil® .007, .009, .011.

MIL-T-27 Holes W/Center Slots	Holes Only	Thickness Available			See Page
EI- 7/8MHS	EI- 7/8MH	.014"			51
EI-1 MHS	EI-1 MH	.004"	.006"	.014"	55
EI-1 1/8MHS	EI-1 1/8MH	.014"			59
EI-1 1/4MHS	EI-1 1/4MH	.006"	.014"		62
EI-1 3/8MHS	EI-1 3/8MH	.006"	.014"		65
EI-1 1/2MHS	EI-1 1/2MH	.014"			70

ORTHOSIL

.004″—.006″—.014″ LAMINATIONS

SuPer Orthosil® .007, .009, .011

Thomas and Skinner—first to offer oriented electrical transformer irons (Orthosil®) in .004″, .006″ and .014″ thicknesses for your lamination requirements—has led the field in employing this material for lamination manufacture. Orthosil®—a squared hysteresis loop iron-silicon alloy—was expressly developed to provide lower core loss with higher permeability in the rolling direction. The elementary patterns of crystals in the material are "oriented", or so arranged that the axis of easiest magnetization is nearly parallel and aligned in the direction of rolling. The alignment is accomplished by special cold-rolling and annealing processes.

Design and economic advantages in using Thomas and Skinner Orthosil® .004″, .006″ and .014″ laminations in punched and stacked cores are:

1. Lower core losses as a consequence of design.
2. Higher initial permeability.
3. Higher permeability at higher inductions.
4. Controlled gauge uniformity.
5. More compact design—easier installation and mounting of transformers.
6. More economical than cut, tape-wound "C" cores.
7. VA/Temperature relationship is much more stable over a wide range of ambient temperatures as compared to cut, tape-wound "C" cores.
8. Withstands more severe vibration and shock than cut, tape-wound "C" cores.

THREE PHASE LAMINATIONS

The three phase concept for transformers is relatively old. Nevertheless, it was not until 1950 that the lamination problem had become acute. Thomas and Skinner, working with several transformer manufacturers in the aerospace industry, established a thin lamination concept to meet the objectives of these transformer manufacturers.

1. High performance at 400-cycle and higher frequencies.
2. Balanced three phase windings.
3. Transformer cores which could withstand temperature, shock and other severe environmental conditions.
4. Stacked cores which would lend themselves to transformer manufacturing with repeatable performance levels, guaranteeing reliability.

As a result of this program, new designs were developed and the manufacturing problems of thin silicon iron laminations were solved. This original concept at Thomas and Skinner has been extended until today a complete range of sizes, gauges and grades of material are offered. This is the culmination of 30 years of development.

Available sizes run from the small EI—¼ three phase rated at approximately 10.0 watts power handling capacity for a square stack at power line frequencies, to the EI—3.60 three phase lamination rated at 25.0 kilowatts power handling capacity for a square stack at power line frequencies. In between is a complete range of sizes that allows the transformer designer wide latitude in selection of design parameters.

Three phase laminations are available in thin-gauge Orthosil® .004" and .006" thickness from EI—¼ three phase to EI—1.80 three

phase. Most sizes are available in .014" Orthosil® and high permeability M-15 and SuPer Orthosil® .007", .009" and .011".

Special advantages that will ensue from using Thomas and Skinner three phase laminations are:

1. Wider variety of sizes, gauges and grades.
2. Consistent high magnetic quality.
3. Certification of magnetic quality for every lot.
4. Widest experience in manufacturing and design of three phase laminations insures most modern product line available.

T & S WIDE WINDOW® LAMINATIONS

Thomas and Skinner recognized the need for laminations that would permit the designer of high frequency transformers to improve the copper/iron loss ratios . . . to utilize fully the improved core loss characteristics of existing core materials . . . and to allow the use of more insulation in high voltage applications, using copper or aluminum conductors. The result is a complete series of laminations with expanded windows which give this increased winding area.

CRUCIFORM LAMINATIONS

These laminations have been found to be especially suitable for constant voltage, reactor and ferro-resonant transformers . . . such as those used for supplying rectified loads with capacitor filters. T & S makes them of grain-oriented silicon steels which are selected for their high permeability at high flux densities. This is a prime requirement in the operation of these transformer types.

Full die-cut Cruciform Laminations permit controlled assembly line technology, affording dramatic savings in labor assembly costs. Standard design Cruciform Laminations are available from stock dies. In addition, T & S welcomes the opportunity to assist in the design and manufacture of custom laminations to your specifications.

SHUNTS & I-STRIPS

These laminations provide you with design versatility. You can use individual Shunt Laminations with Single Phase Standard and Wide Window® Laminations for cruciform-type construction transformer cores. "I" Laminations can be used for custom-stacked cores. Precision die-cut Shunt & I Laminations provide for mechanical uniformity in assembly of transformer stacks, and have the design flexibility necessary for short or long-run production quantities.

Material Certifications can be provided on request with each shipment of these laminations. You are guaranteed the uniformity of consistency so important in the manufacture of these special transformers. We welcome the opportunity to quote on custom Shunt & I Laminations, or assist you by recommending the proper lamination for your specific design.

LARGE LAMINATIONS

Thomas and Skinner, realizing the need for Large Laminations, adopted a program of constructing stock tooling using the standard EI lamination design concept. The size range has been extended upward in graduated steps in both single phase and three phase designs, starting with EI—1⅝″ through EI—5″ single phase, and EI—1.00″ through EI—3.60″ three phase. T&S precision die-cut EI

Large Laminations provide the transformer design engineer with scrapless and expanded window designs utilizing the most economic and efficient aspect of today's improved core materials.

CENTRA-GAP® LAMINATIONS

Specifically engineered and precision die-cut air gap makes possible the unique reactor construction that greatly reduces the problematic hum and vibrations normally associated with filter chokes.

Using Centra-Gap® Laminations reduces the stray fields of the reactor to practically zero. No chance of stray ferrous particles collecting around the air gap, causing possible electrical shorting and a change in the operating inductance. Stable operating inductance over the expectant life of the unit is further assured by the inherent shielding effect of the Centra-Gap® feature. Magnetic coupling to associated components or cabinet structure is reduced to a level of minimum concern.

Where stability and low mechanical hum levels are required, as in filtered DC power supplies, the Centra-Gap® Laminations are the answer. These same laminations are designed primarily as a companion to T & S Large Laminations.

Centra-Gap® Laminations are manufactured to your specific gap and design requirement, using most listed Thomas and Skinner EI type laminations. Available in stock grade silicon steel, oriented "Orthosil"® or non-oriented grades and gauges .004", .006", .014", .0185". Also SuPer Orthosil® .007", .009" & .011".

VARI-GAP® SYSTEM

The Vari-Gap® System (Pat Nos. 4,081,777 & 4,080,725) is a new shunt assembly method introduced by Thomas & Skinner to allow the transformer designer and manufacturer complete flexibility in adjusting or "tuning" a ferro-resonant transformer.

Great economic advantage to the transformer builder is provided by the following features:

1. The shunts are supplied with each E and I lamination set at no extra cost to the transformer manufacturer.
2. The shunt system supplied allows the manufacturer to adjust the air gap from the maximum provided to a value approximately 20% of this maximum.
3. The Vari-Gap® System provides an "isthmus" shunt configuration whose permeance is sensitive to induction. This feature gives a higher degree of stability at low-line voltage and low-load conditions than otherwise possible.

Bulletin L558 describes in detail the design theory and assembly methods recommended for proper application of the Vari-Gap® shunt system to your ferro-resonant transformer production needs.

UI DESIGNS

Recent Thomas & Skinner innovations make the use of UI laminations more economical and allows versatility in transformer design. The traditional UI lamination designs have been used for many years, but these older designs do not make efficient use of the material. Thomas & Skinner's new MH designs are scrapless and consequently less costly than the old traditional designs. Also, the new MHW configurations have non-uniform leg width and a wider window which provides the engineer many new options for the design of ferro-resonant and special transformers.

STACKING FACTORS

The following stacking factors are suggested for design purposes.

Thickness	Stacking Factor, K_1
Butt Joint	
.004, .006, .007, .009	.90
.011 & .014	.95
.0185	.95
Interleaved	
.004, .006, .007, .009	.80
.011 & .014	.90
.0185	.90

HOW TO ORDER

H = Holes Only
HS = Holes & Slots
HX = Modified Hole Location
MH = Mil-T-Holes
MHS = Mil-T-Holes & Slots
2MH = Mil-T-(Type) Hole Location (2 Holes)
3MH = Mil-T-(Type) Hole Location (3 Holes)
L = Long Legs
HW = Wide Window (Holes Only)
HSW = Wide Window, Holes & Slots
LW = Wide Window, Long Legs (Holes Only)
LSW = Wide Window, Long Legs, Holes & Slots
3ϕ = Three Phase
TO = Cruciform Type

ORDERING EXAMPLES

SINGLE PHASE LAMINATIONS

EI	4	3(2)MH	M-6	29 Ga.
Set	Dimension (center leg)	Holes	Material Grade	Thickness

EI	1½	HS	M-19	26 Ga.
Set	Dimension (center leg)	Holes & Slots	Material Grade	Thickness

WIDE WINDOW® LAMINATIONS

EI	⅞	HW	SuPer Orthosil®	9-mil
Set	Dimension (center leg)	Holes Only	Material Grade	Thickness

EI	1⅜	HSW	M-6	29 Ga.
Set	Dimension (center leg)	Holes & Slots	Material Grade	Thickness

THREE PHASE LAMINATIONS

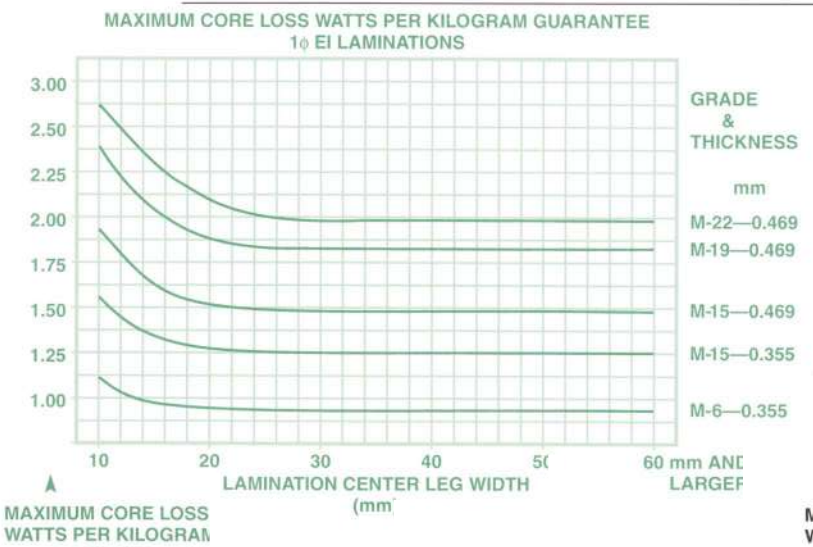
EI	¼	3ϕ	Orthosil®	4-mil
Set	Dimension (center leg)	Type	Material Grade	Thickness

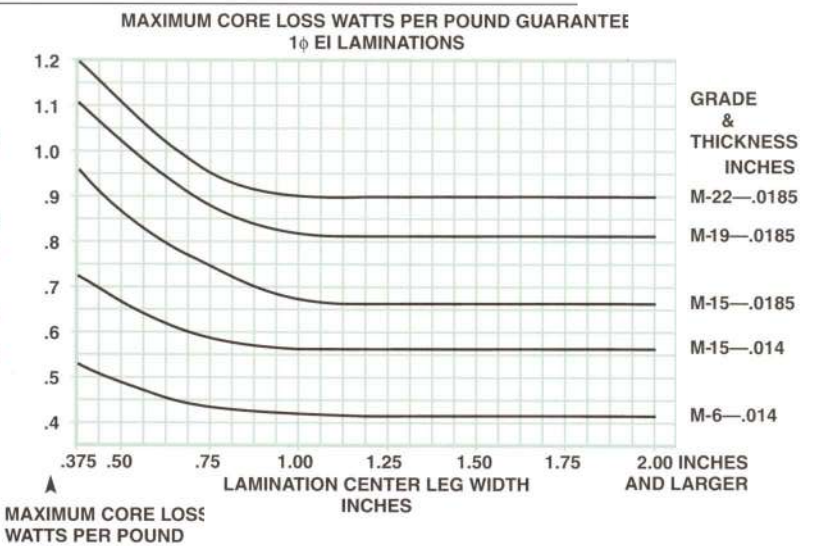
EI	1.20	3ϕ	M-6	29 Ga.
Set	Dimension (center leg)	Type	Material Grade	Thickness

MATERIAL APPLICATIONS

Grade	General Applications	Description
Orthosil® M-6 29 Gauge - .014" (0.355 mm)	Audio amplifiers; current, output, power transformers; chokes and saturable reactors; ferro-resonant regulators.	Has directional electrical characteristics. Extreme high permeability and low core loss.
Orthosil® 4-mil - (0.101 mm) 6-mil - (0.152 mm)	High performance @ 400 Hz or higher frequencies	Has directional electrical characteristics. Extreme high permeability and low core loss.
T&S M-15 26 Gauge - .0185" (0.469 mm) 29 Gauge - .014" (0.355 mm)	Audio and filter transformers (general). High efficiency rotating machines.	High permeability at low inductions; low core loss.
T&S M-19 26 Gauge - .0185" (0.469 mm)	Television, radio and electronic power transformers, chokes and special transformers, continuous duty vibrators, solid state inverters.	A transformer grade with both good magnetic and physical properties.

• MAXIMUM CORE LOSS GUARANTEE 1ϕ EI LAMINATIONS TESTED PER ASTM-A346 10 KG 60 Hz LAMINATIONS INTERLEAVED 1 x •





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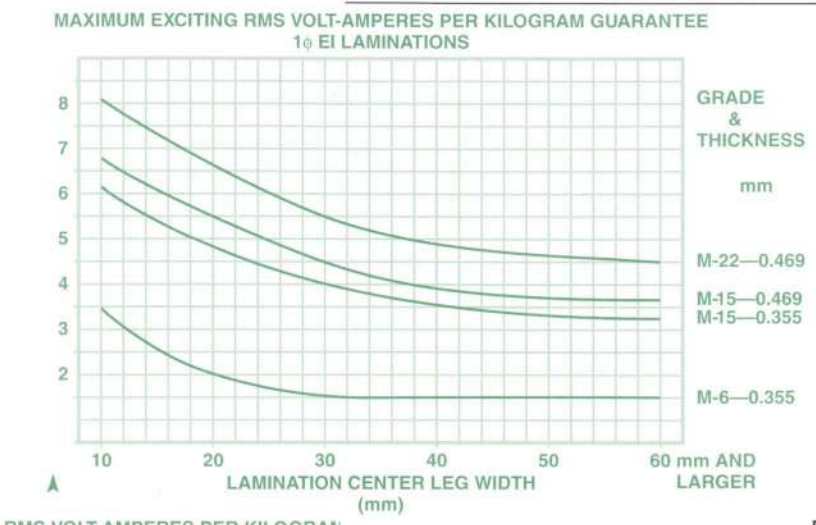
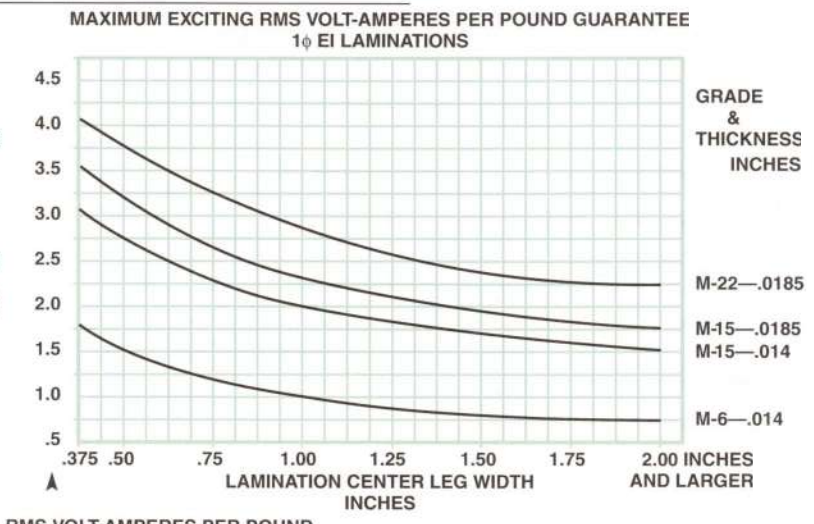


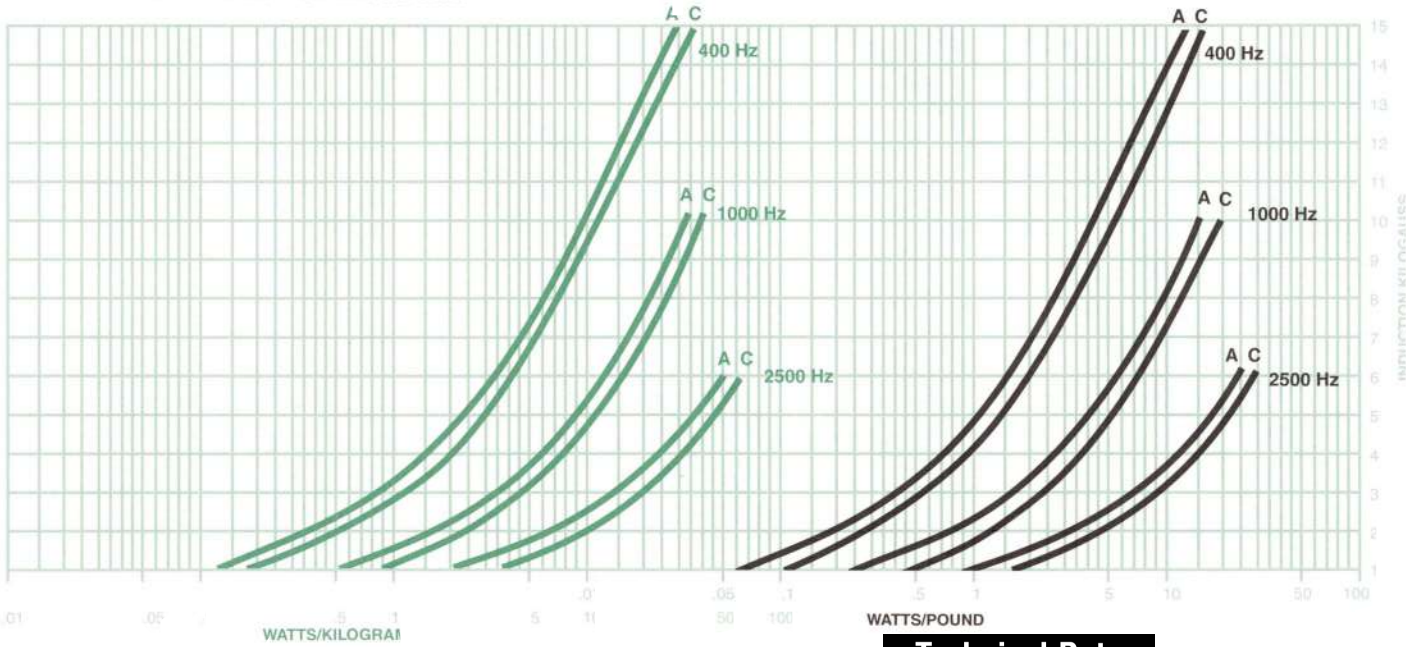


EE 24-25, EI-1 Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



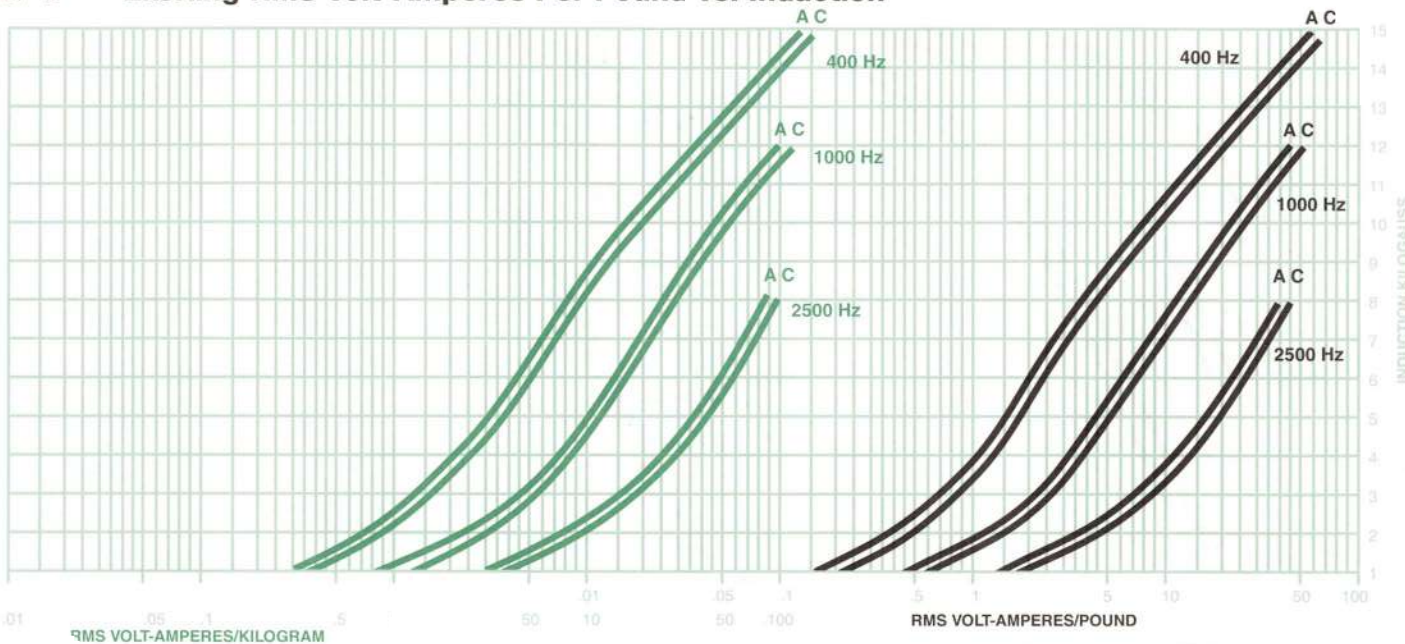
EE 24-25, EI-1

Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

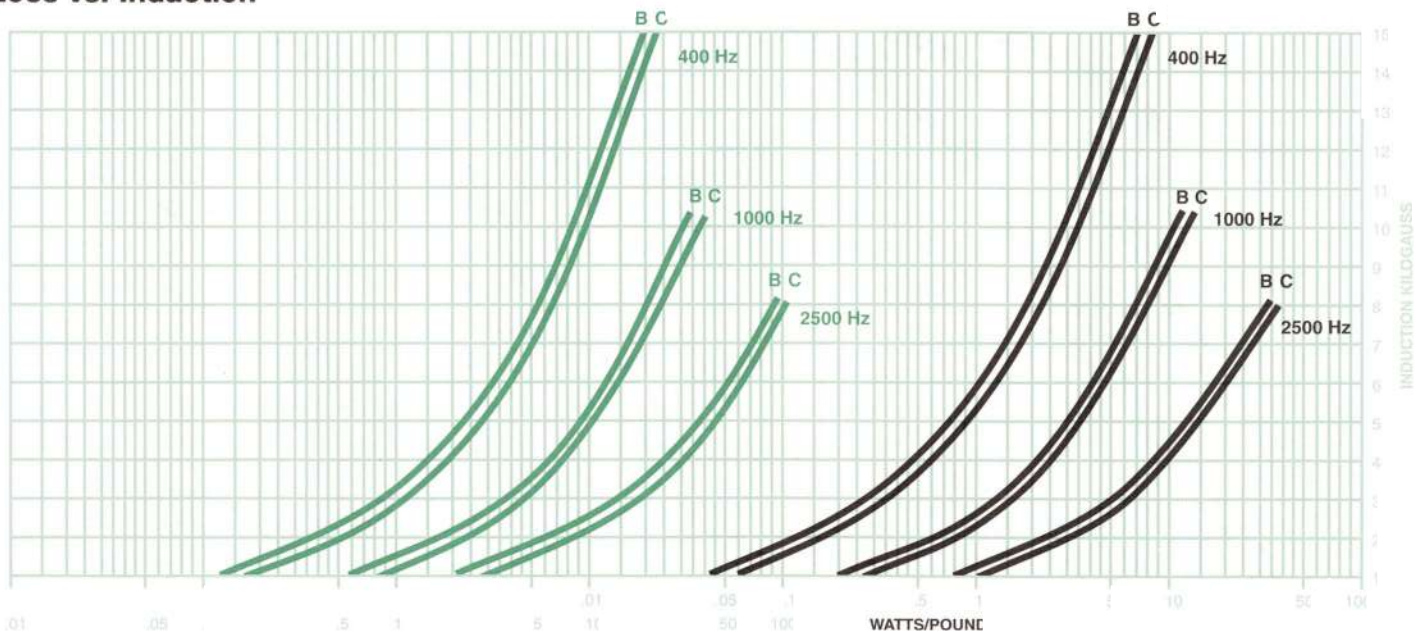


EI-⅞ Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



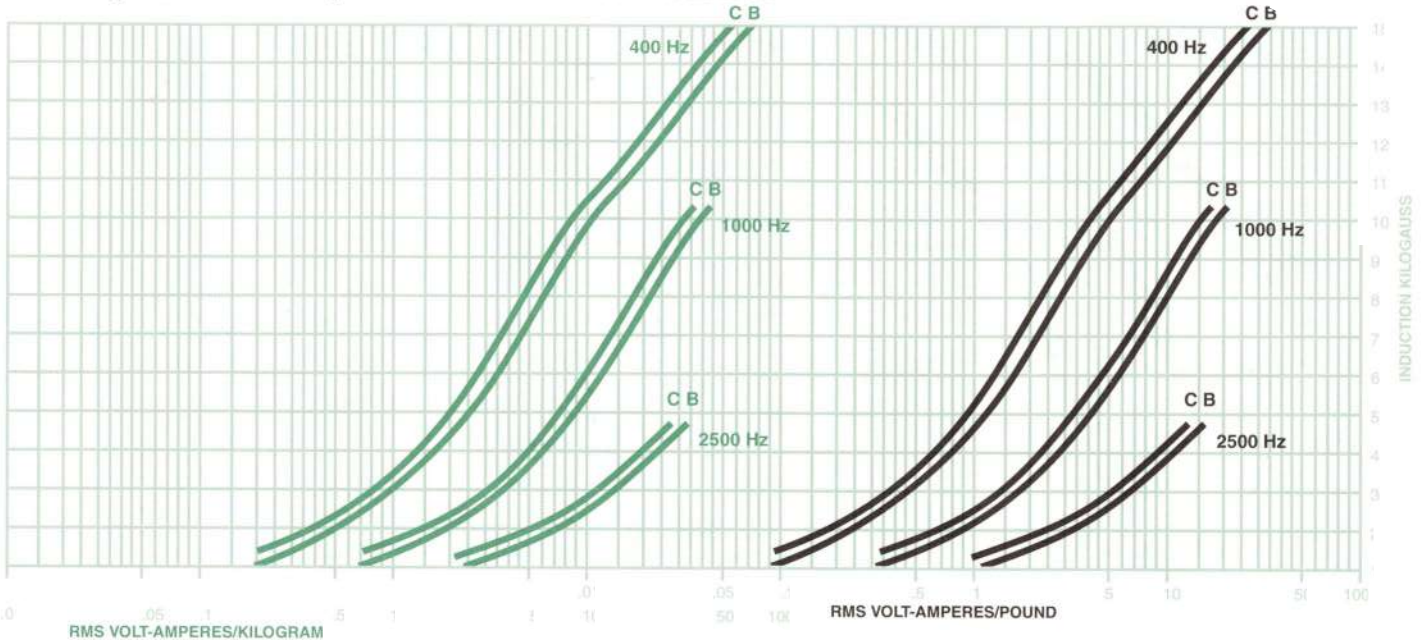
EI-½, EI-⅞

Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

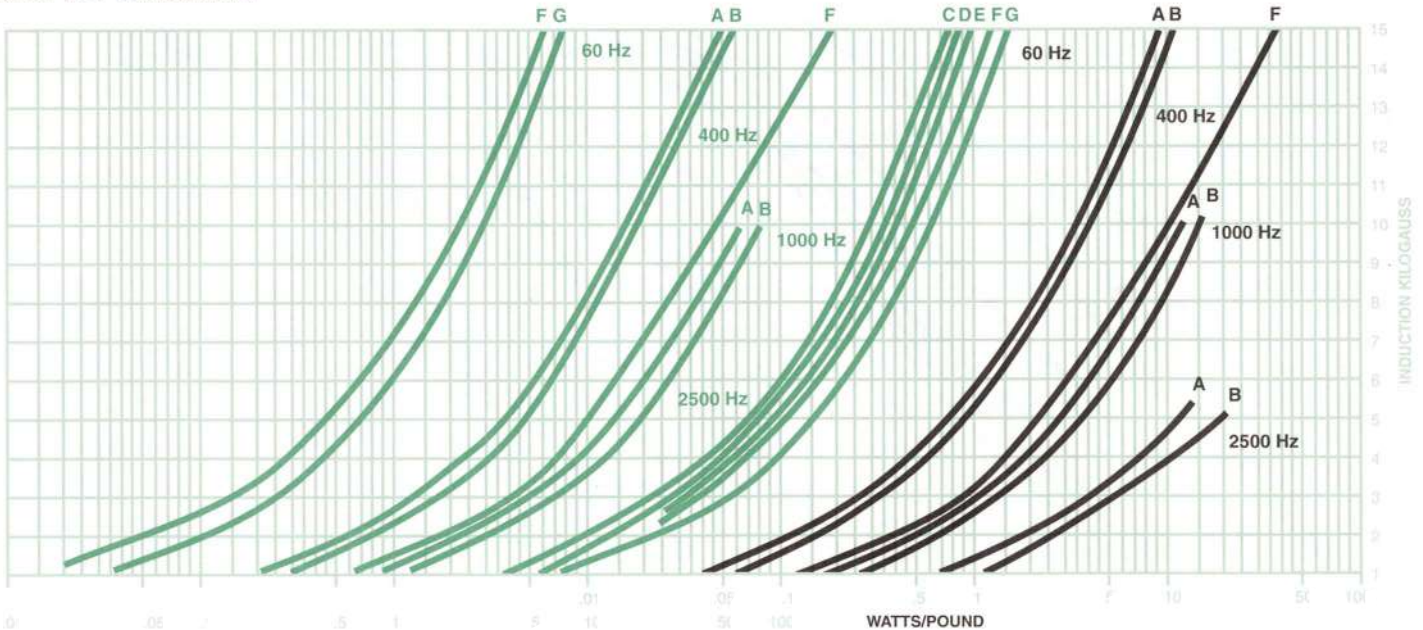


EI-½ Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil
G) 26 Gauge M-19

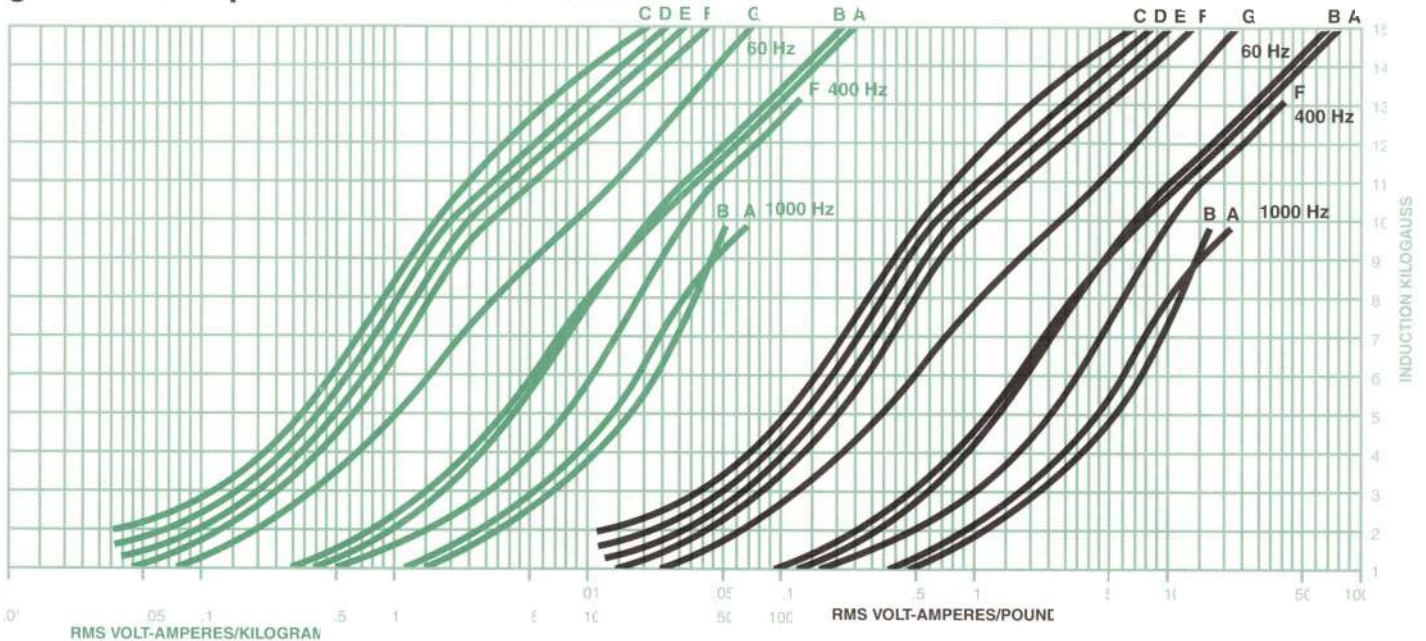


EI-½ Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil
G) 26 Gauge M-19

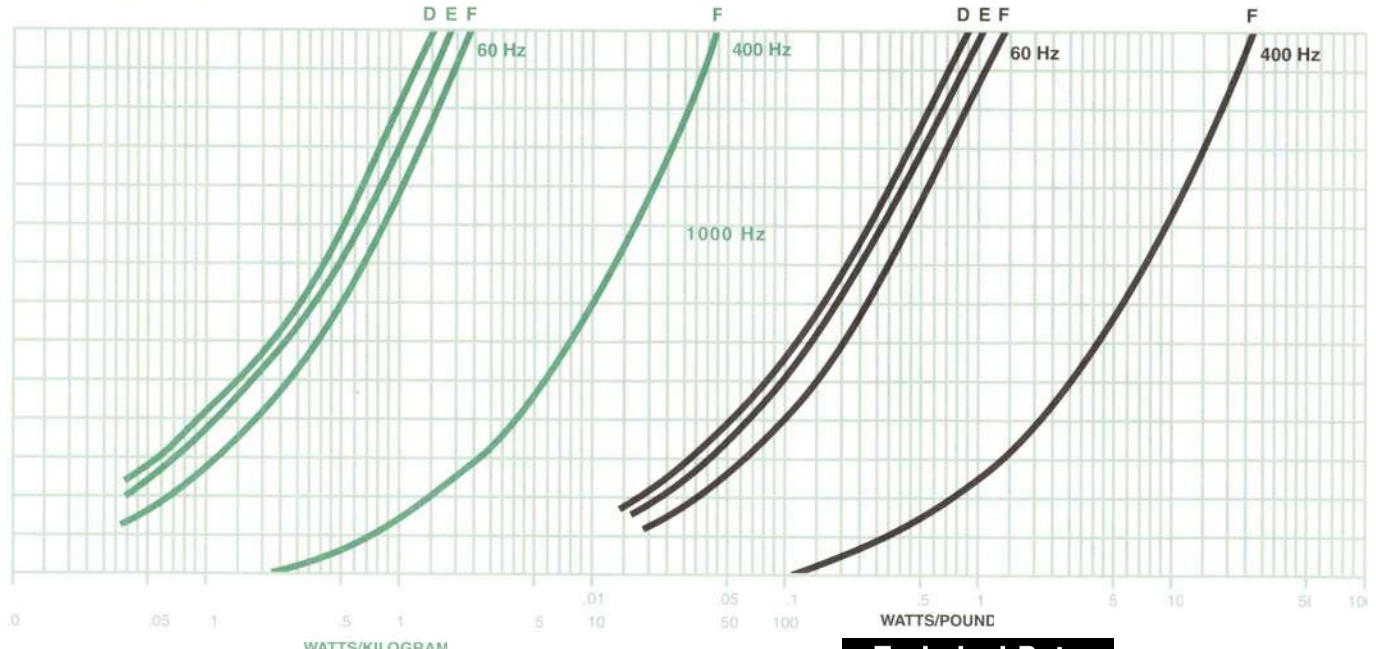


EI-1⅛ Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

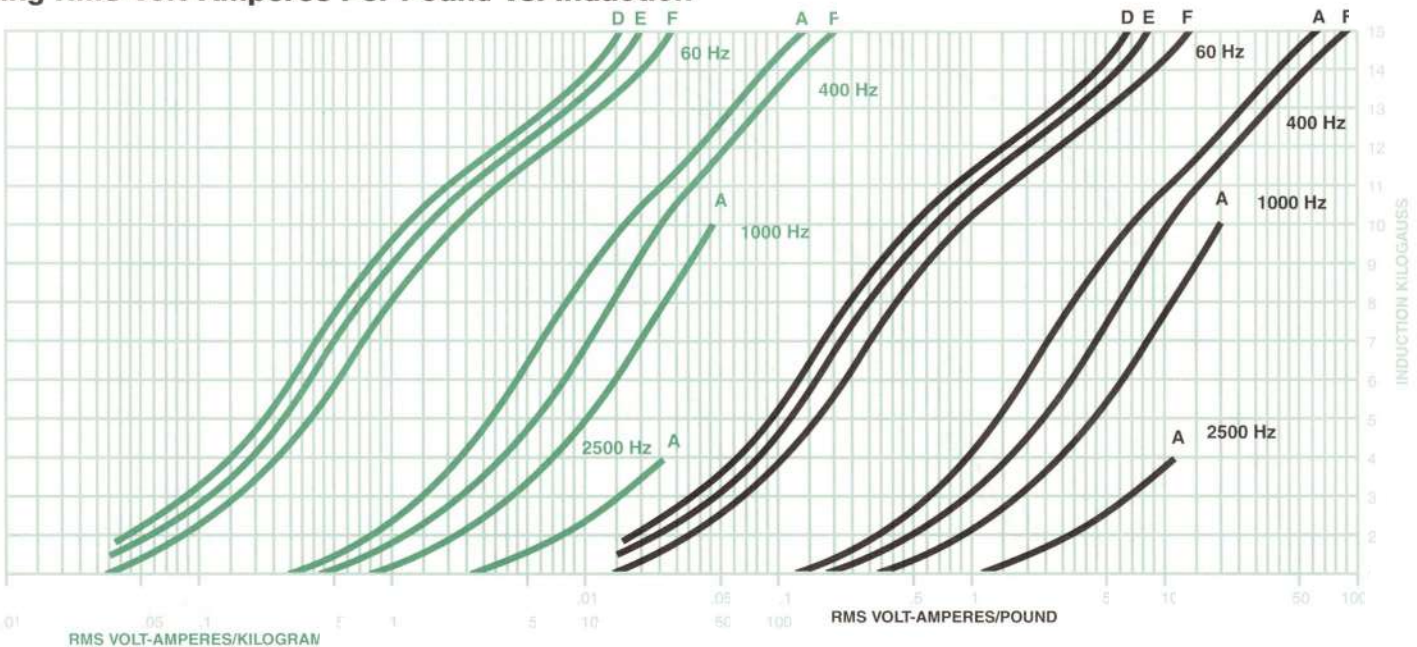


EI-1⅛ Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

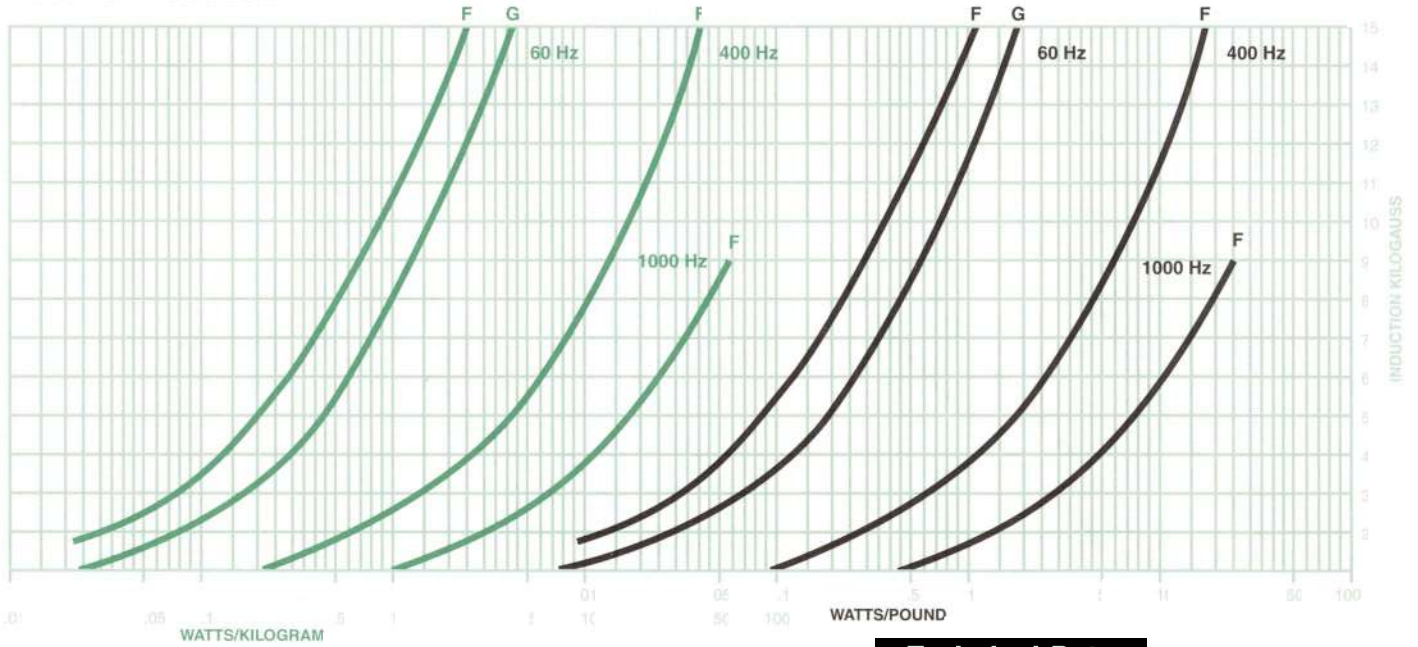


EI-1½ Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil
G) 26 Gauge M-19

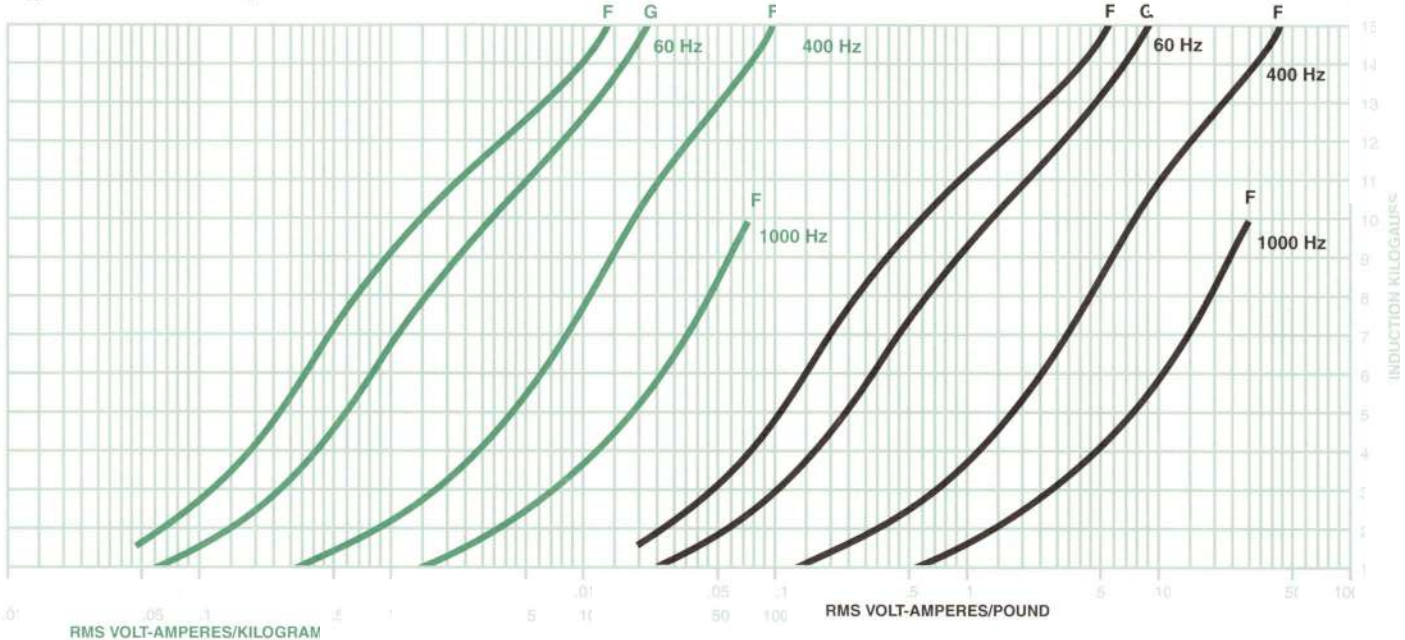


EI-1½ Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil
G) 26 Gauge M-19



EI-1½ Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil

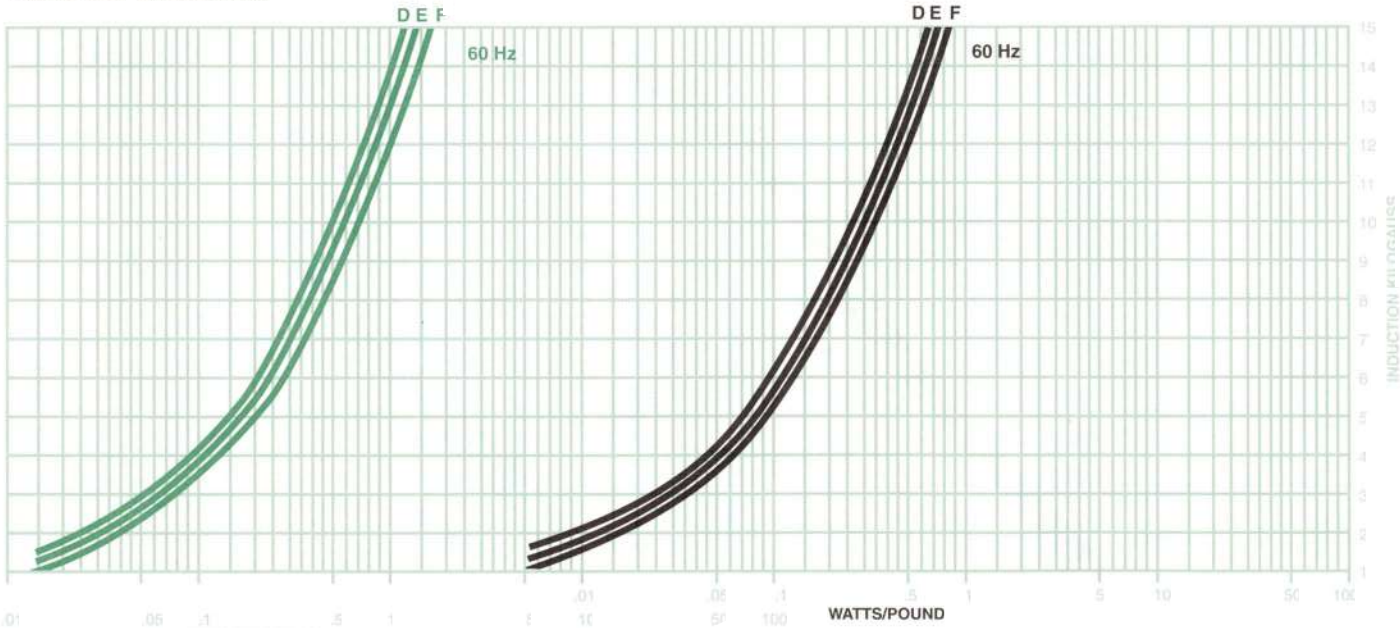
B) .006" Orthosil

C) .007" SuPer Orthosil

D) .009" SuPer Orthosil

E) .011" SuPer Orthosil

F) 29 Gauge M6 Orthosil

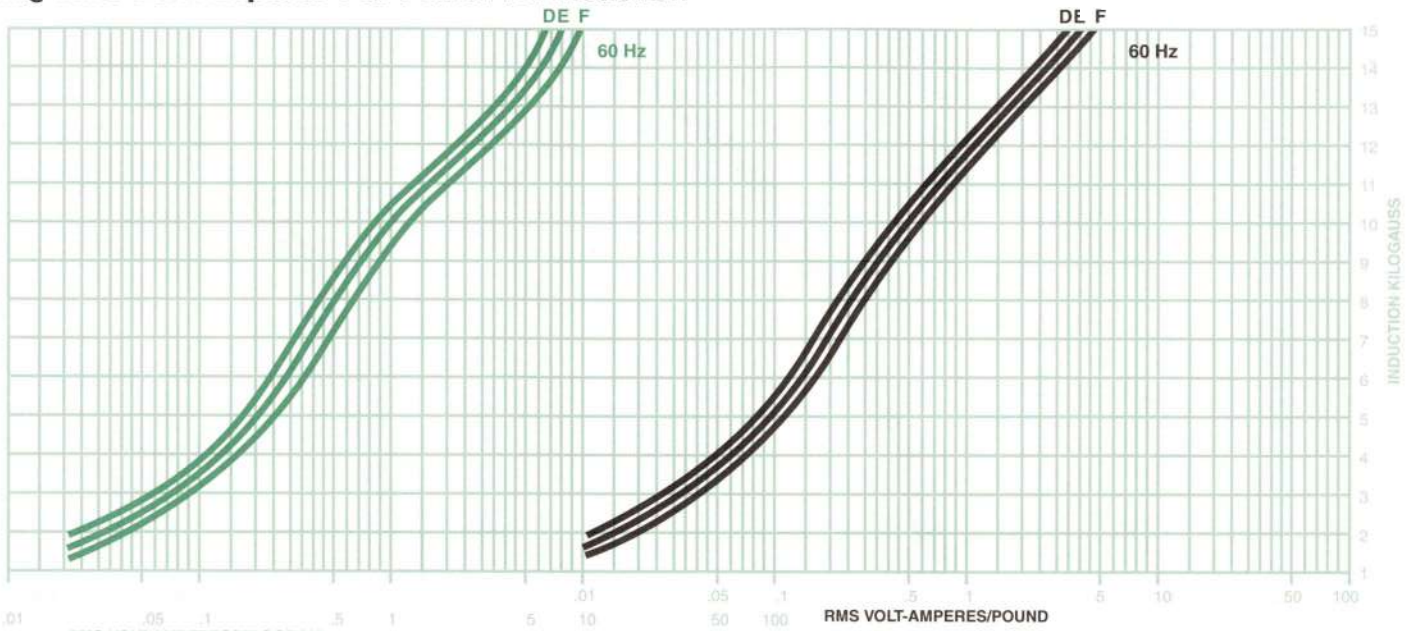


EI-1½ Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

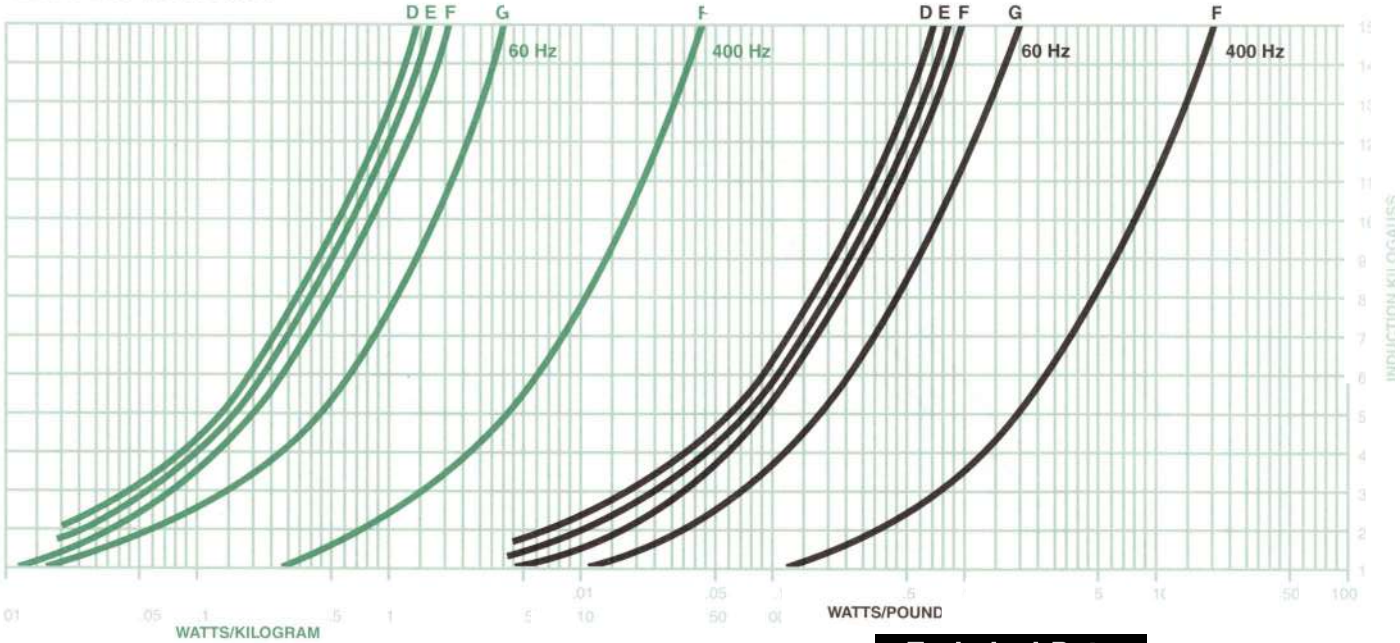


EI-2¼ Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil
G) 26 Gauge M-19

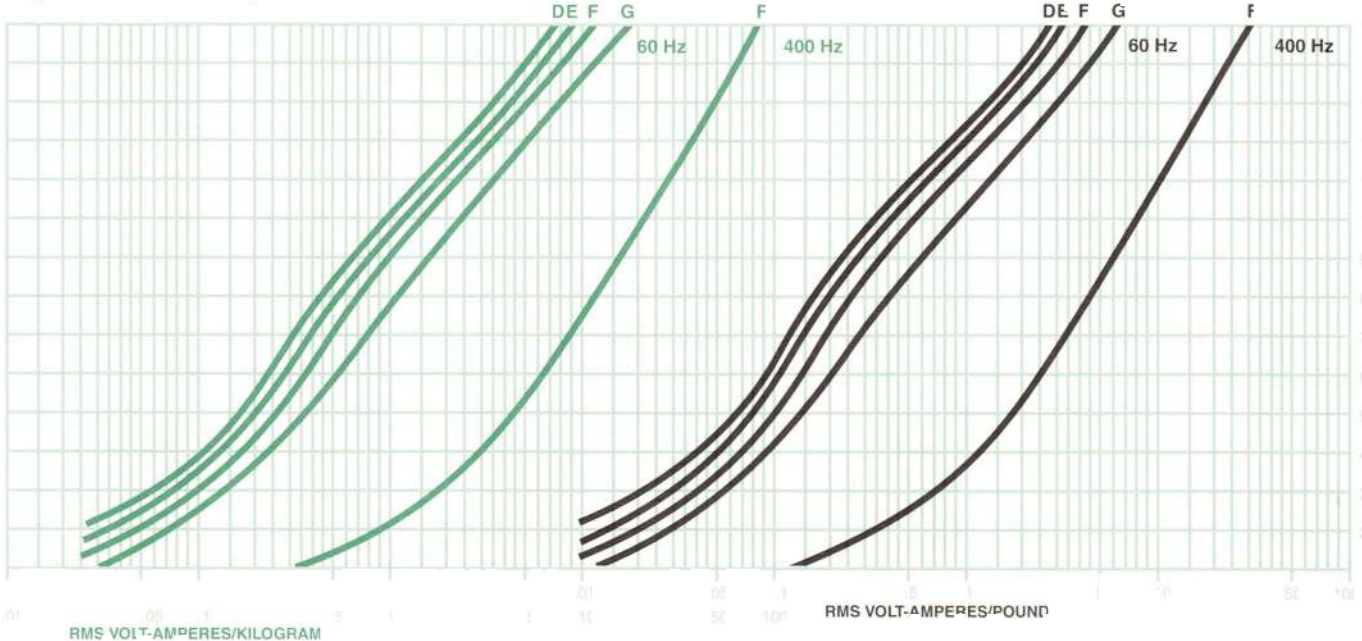


EI-2¼ Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil
G) 26 Gauge M-19



EI-3 Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil

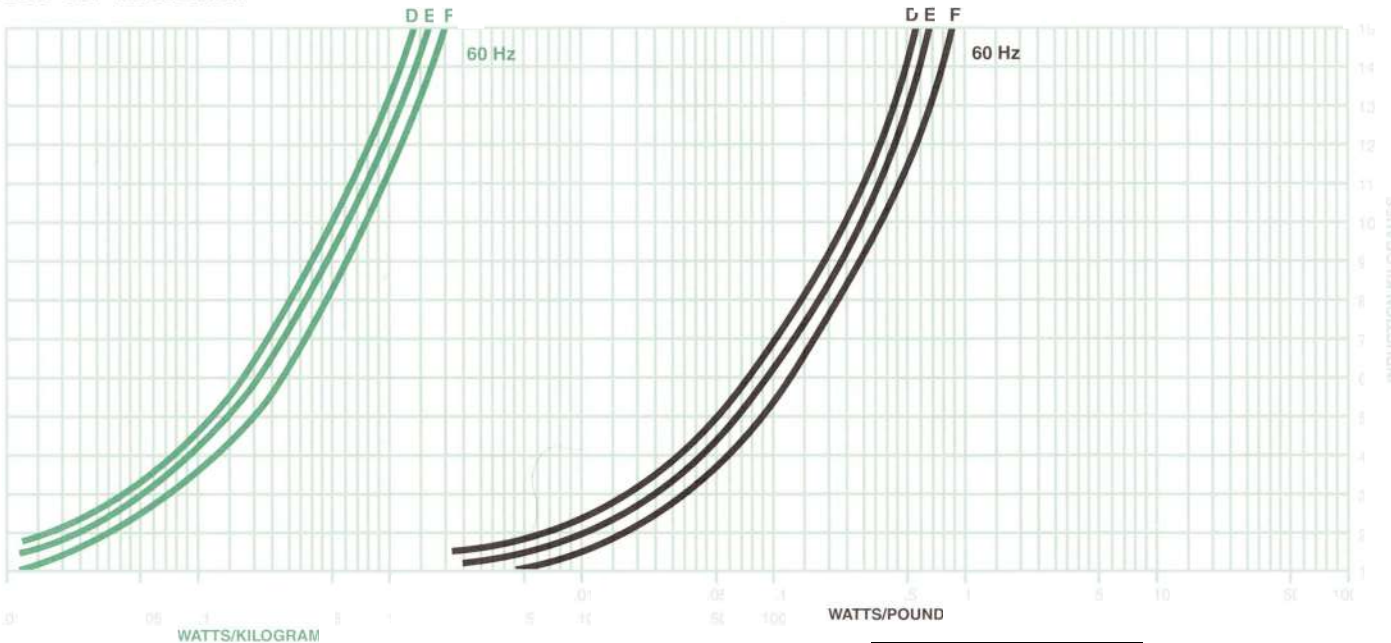
B) .006" Orthosil

C) .007" SuPer Orthosil

D) .009" SuPer Orthosil

E) .011" SuPer Orthosil

F) 29 Gauge M6 Orthosi

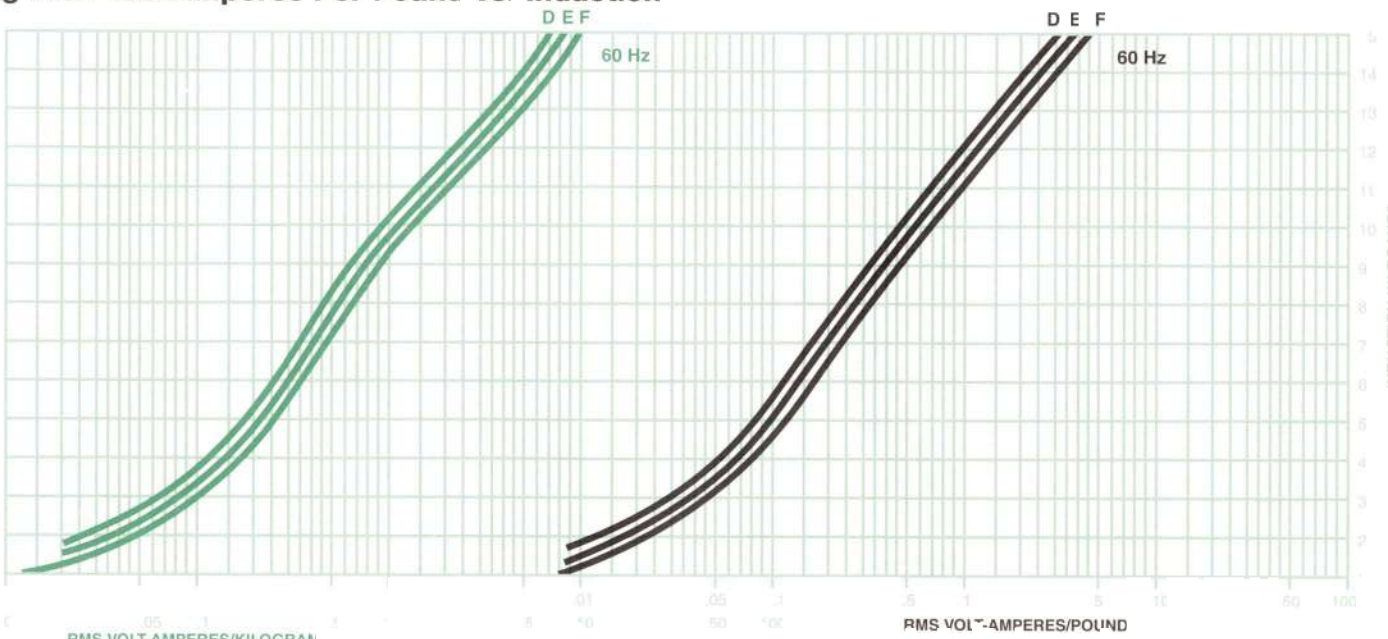


EI-3 Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthos

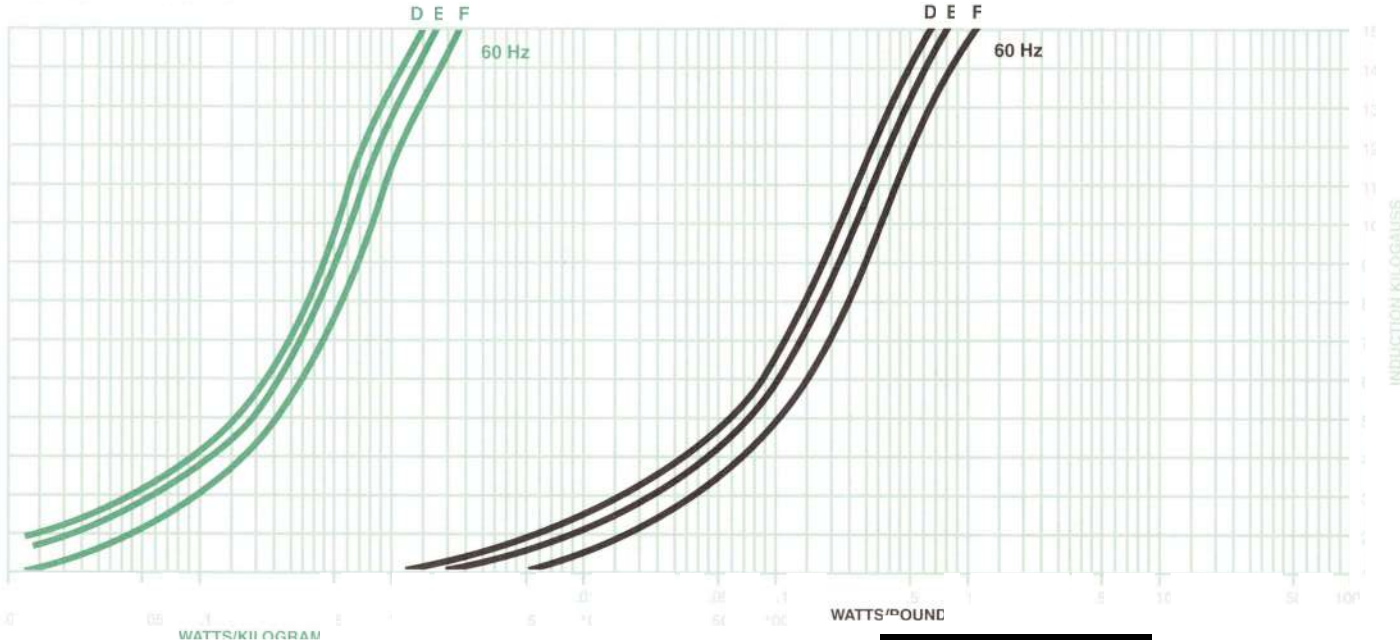


EI-4 Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosi

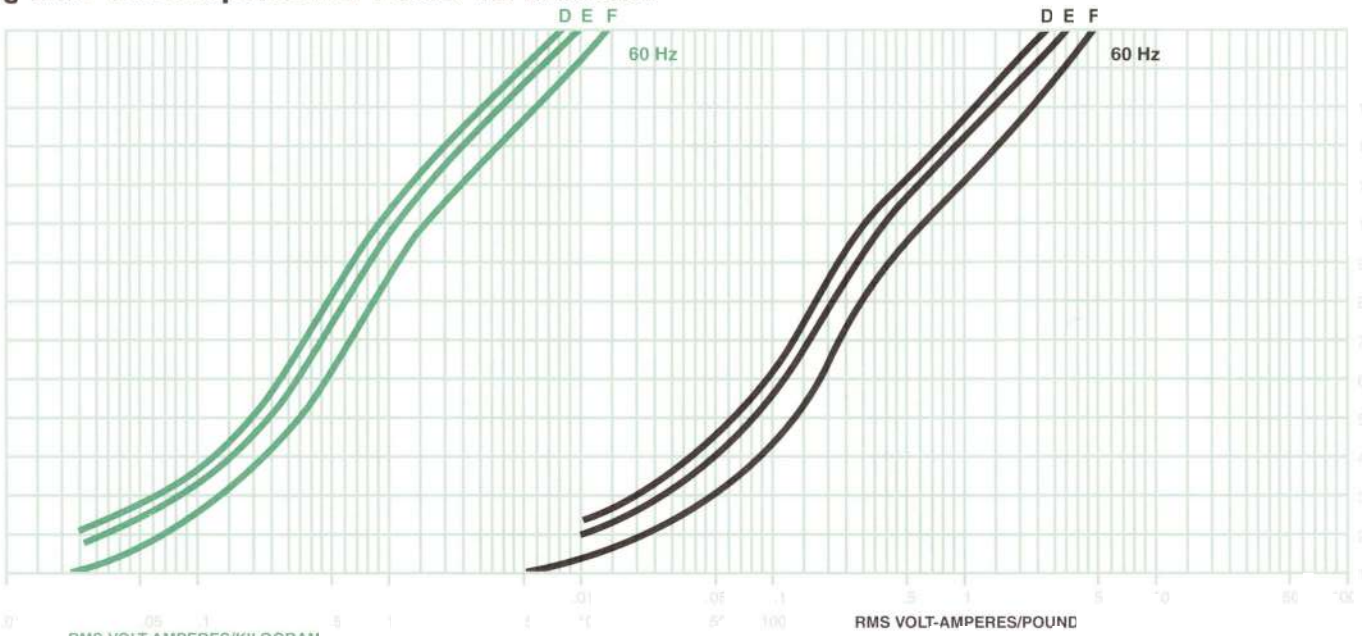


EI-4 Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

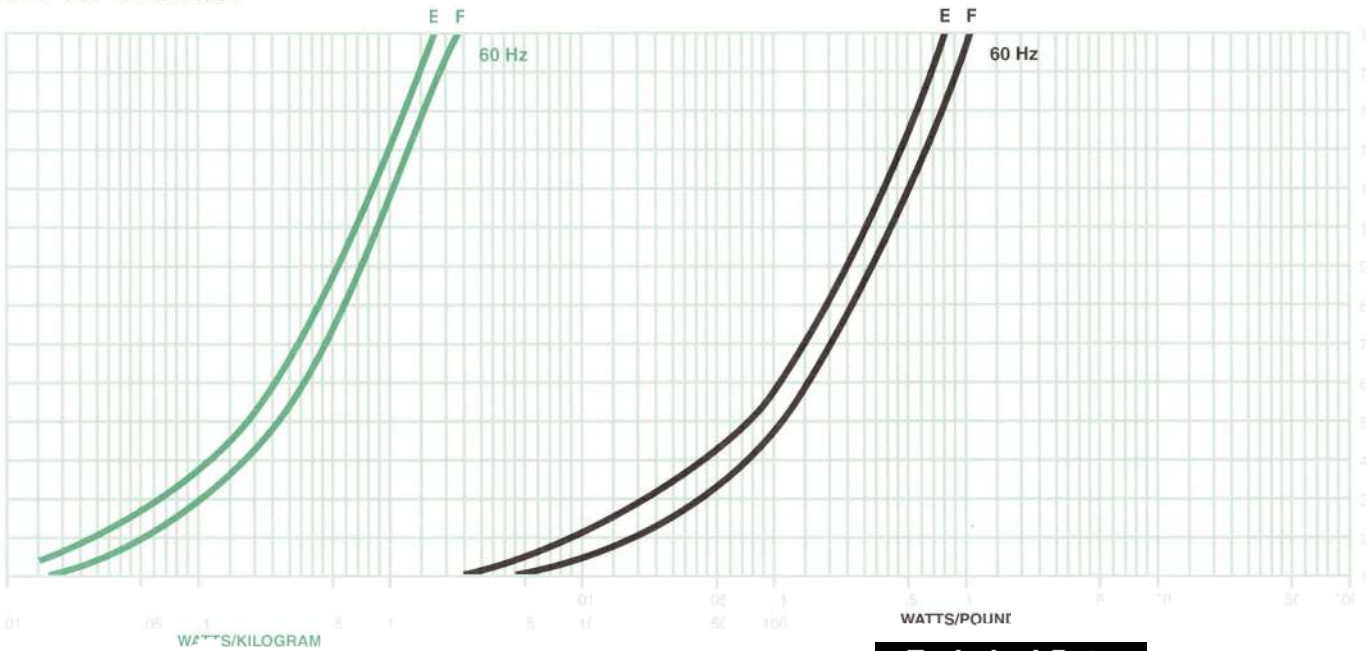


EI-5 Core Loss vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

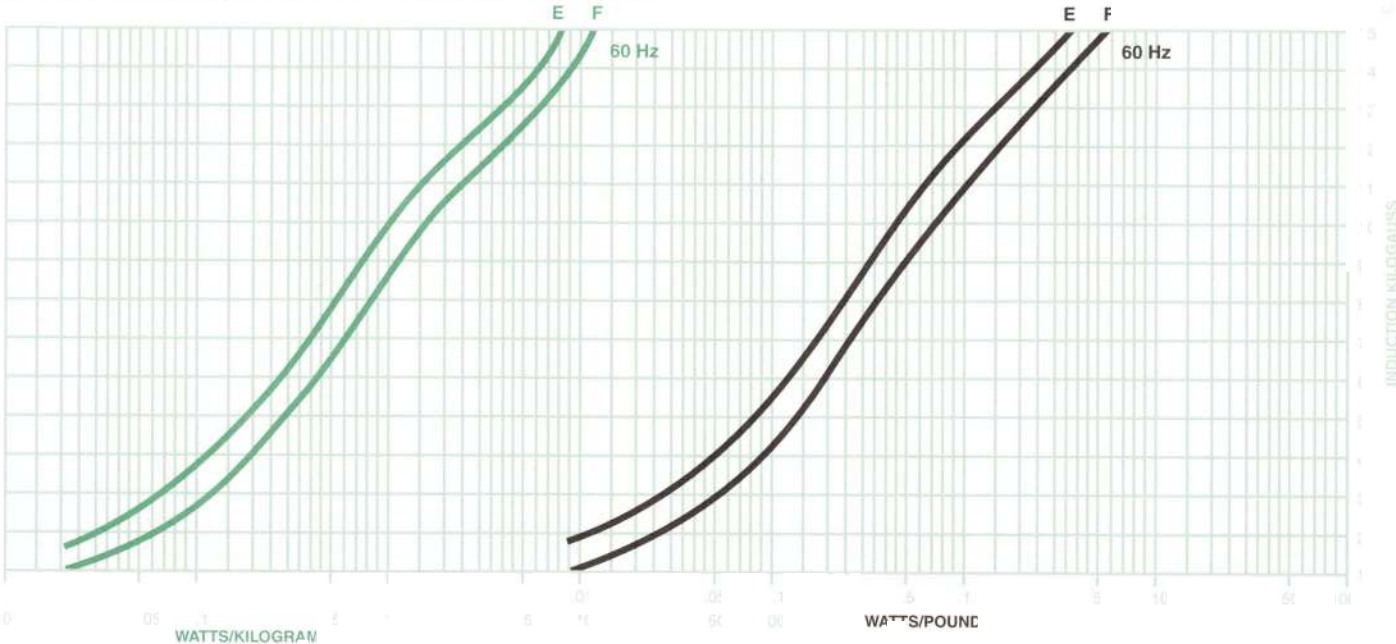


EI-5 Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
1ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil

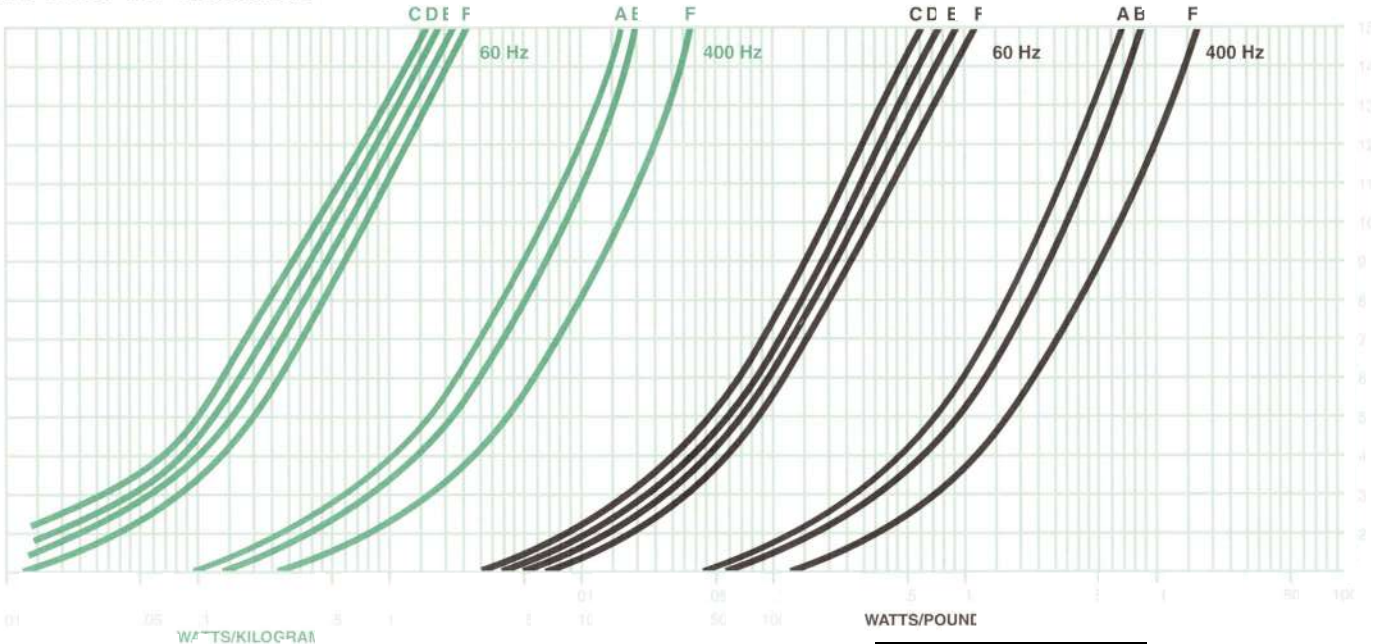


EI-⅝ 3¢ Core Loss vs. Induction

Tested per ASTM-A346
3¢ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthos



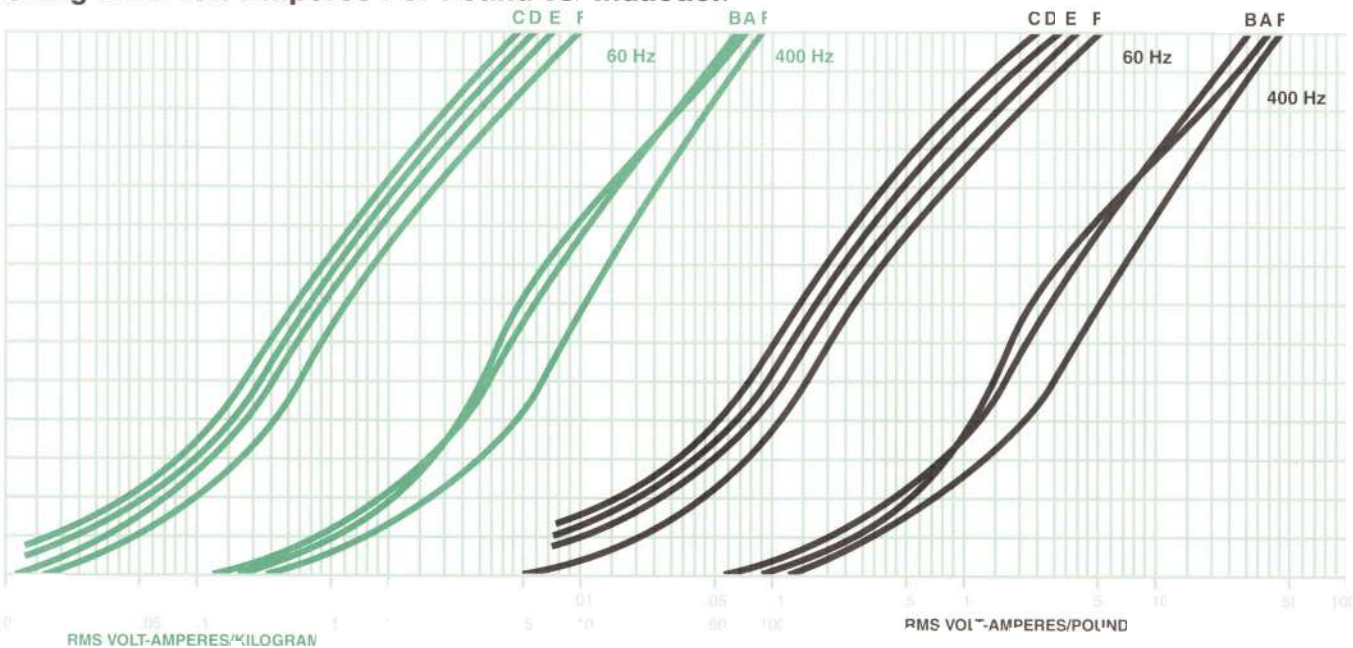
EI-⅝ 3φ

Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
3φ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



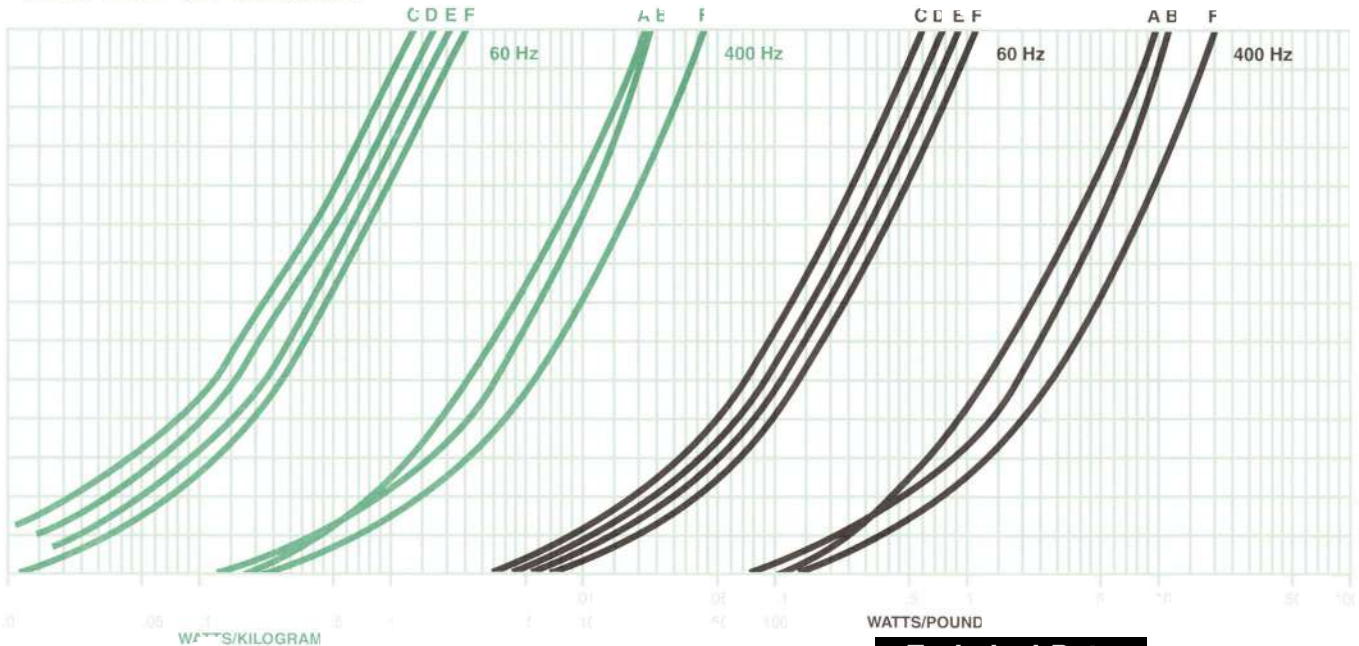
EI-1.20 3ϕ

Core Loss vs. Induction

Tested per ASTM-A346
3ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



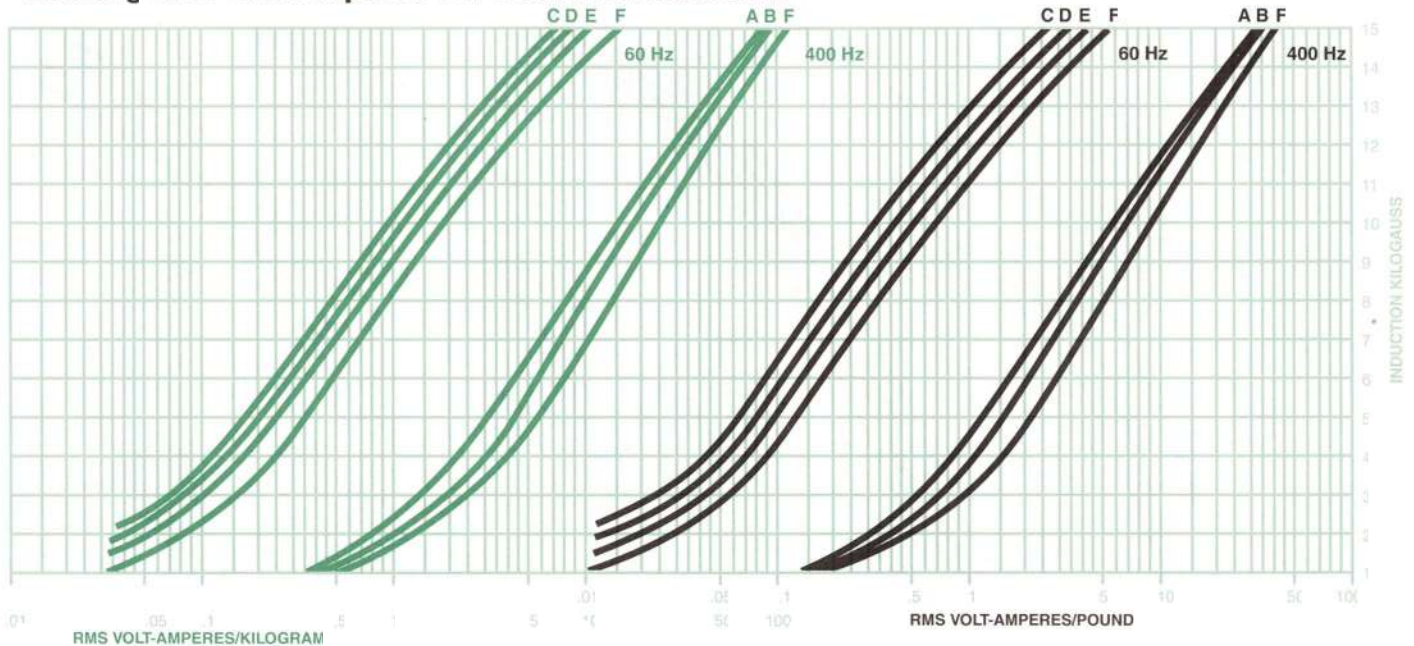
EI-1.20 3ϕ

Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
3ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



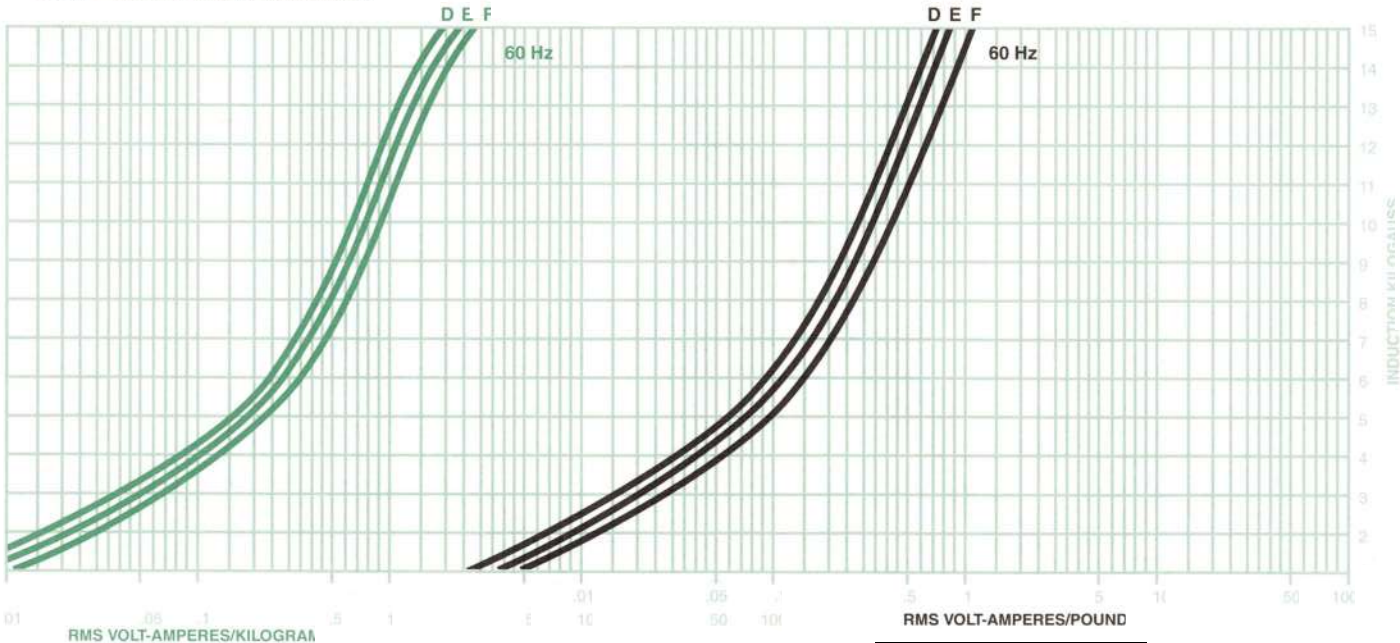
EI-2.40 3ϕ

Core Loss vs. Induction

Tested per ASTM-A346
3ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



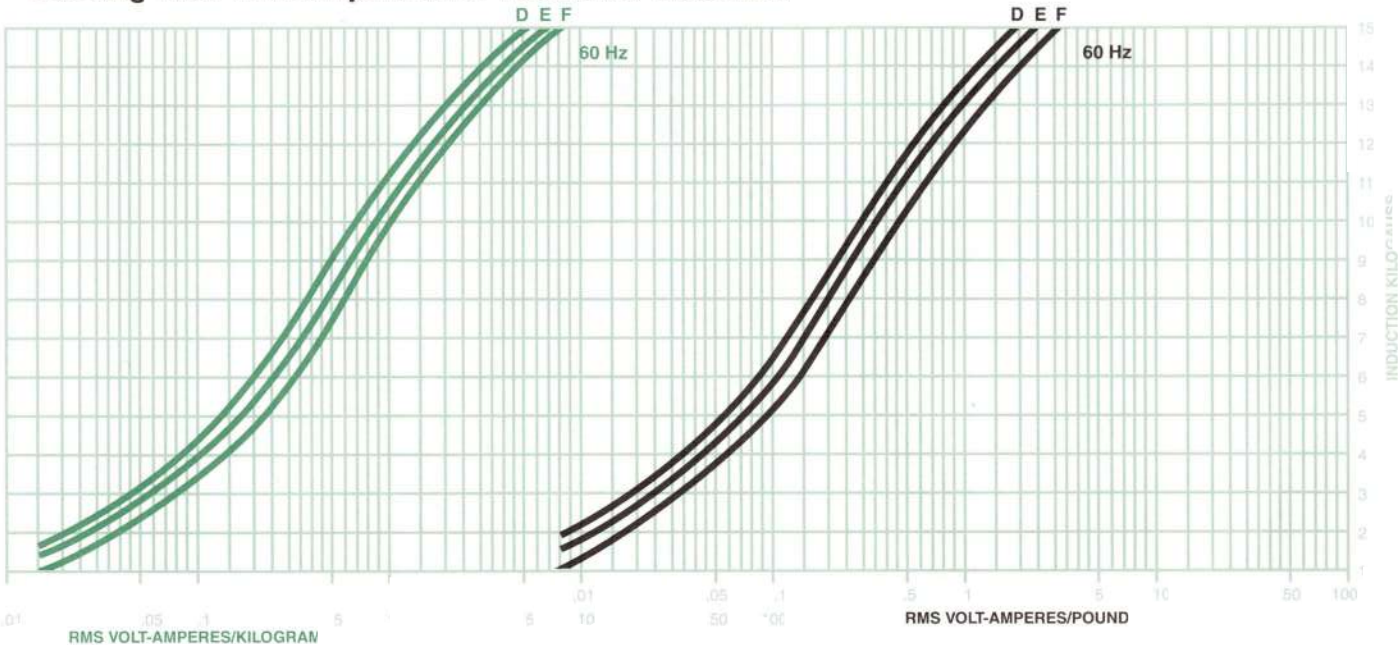
EI-2.40 3ϕ

Exciting RMS Volt-Amperes Per Pound vs. Induction

Tested per ASTM-A346
3ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosi



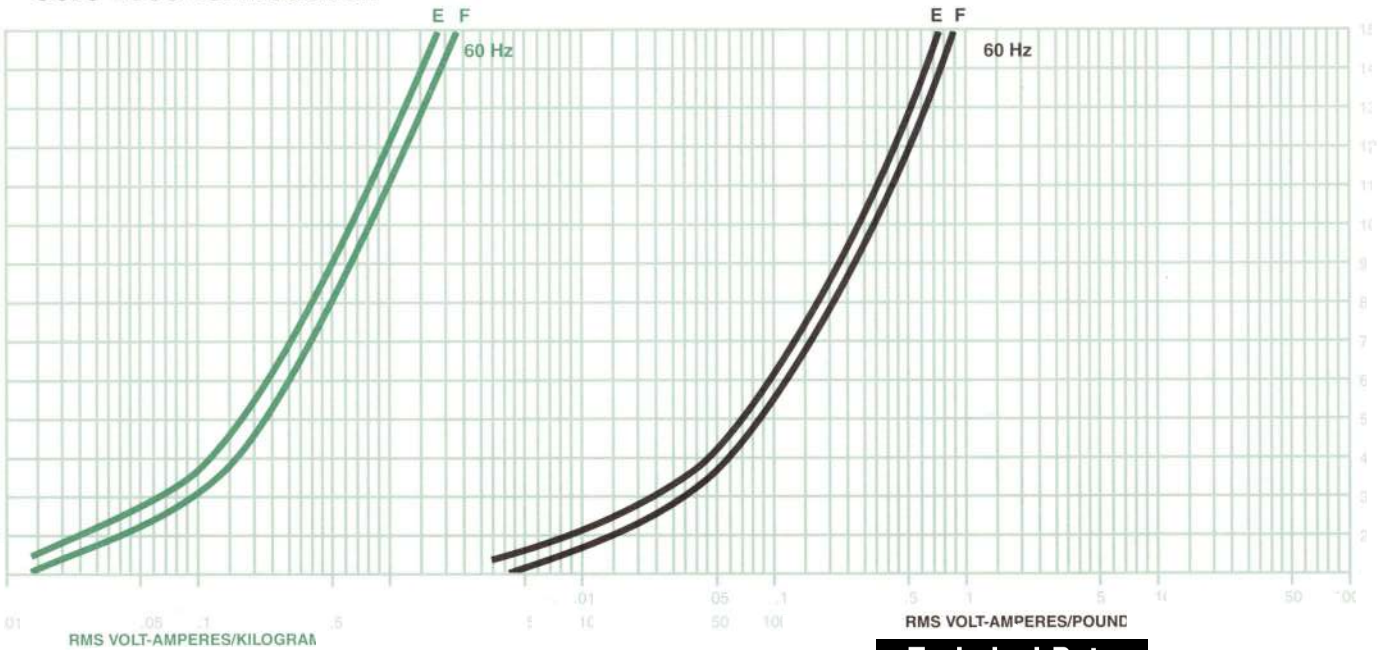
EI-3.60 3ϕ

Core Loss vs. Induction

Tested per ASTM-A346
3ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



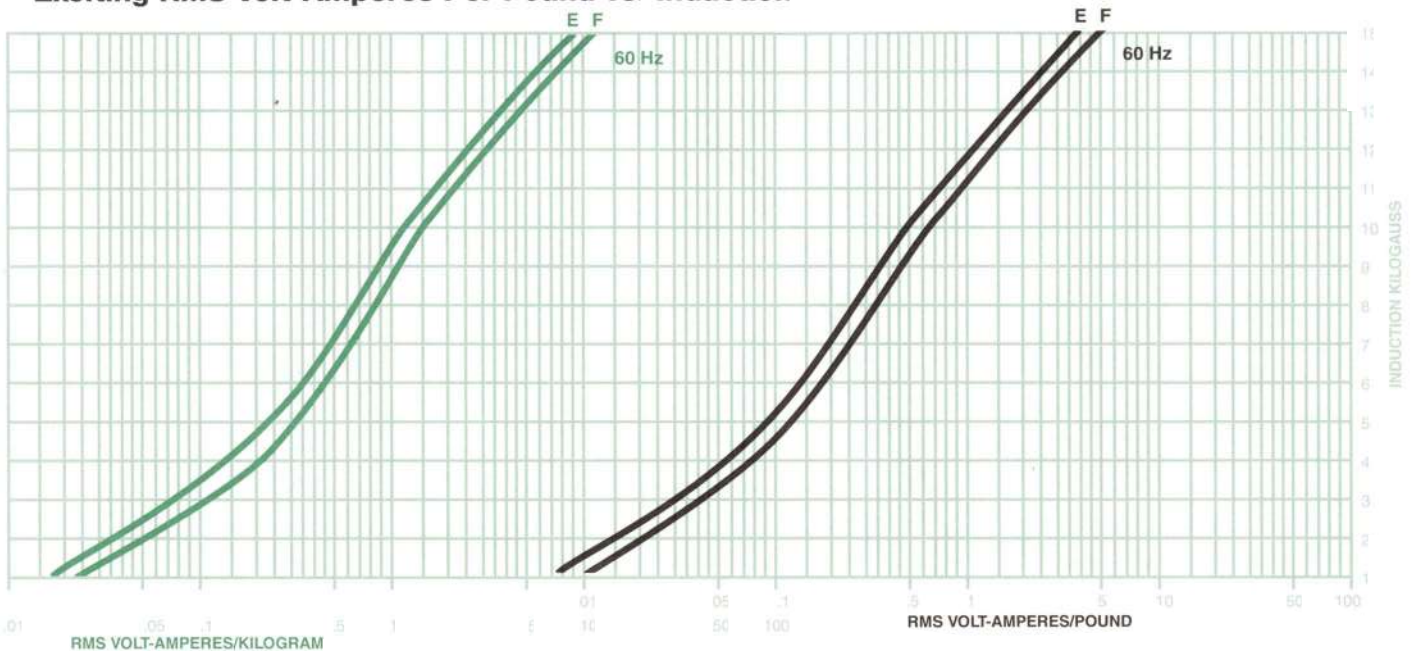
EI-3.60 3ϕ

Exciting RMS Volt-Amperes Per Pound vs. Induction

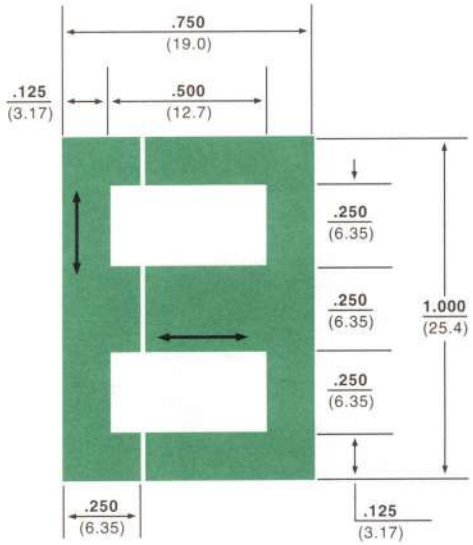
Tested per ASTM-A346
3ϕ EI Lamination
Interleaved 1 x 1

LEGEND:

A) .004" Orthosil
B) .006" Orthosil
C) .007" SuPer Orthosil
D) .009" SuPer Orthosil
E) .011" SuPer Orthosil
F) 29 Gauge M6 Orthosil



SINGLE PHASE EE—24-25
(6mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	1.870	0.847	534.7	1179
.011	0.28	1.469	0.667	680.7	1499.3
.009	0.23	1.202	0.545	831.9	1834.9
.007	0.18	0.935	0.424	1069.5	2358.5
.006	0.15	0.772	0.350	1295	2856
.004	0.10	0.554	0.250	1805	3979

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
0.125	2.05	0.034	15.4	0.125	0.807

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 2.0 in. = 5.08 cm.

A = 0.063 in.^{2} = 0.406 cm.^{2}

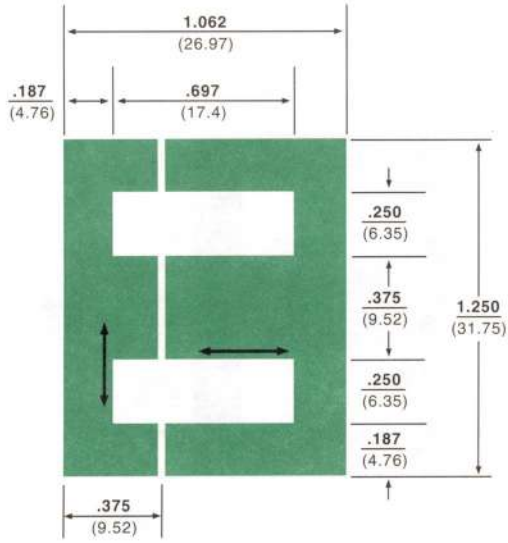
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{923.6 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.247 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.11 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EE—26-27
(10mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	4.80	2.174	208.3	458.26
.014	0.35	3.55	1.608	281.7	619.74
.011	0.28	2.789	1.265	358.6	790.5
.009	0.23	2.282	1.035	438.2	966.2
.007	0.18	1.775	0.805	563.4	1242.2
.006	0.15	1.52	0.689	658	1450
.004	0.10	1.28	0.580	781	1722

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
0.37	6.07	0.10	45.4	0.172	1.11

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 2.63 in. = 6.67 cm.

A = 0.141 in.^{2} = 0.91 cm.^{2}

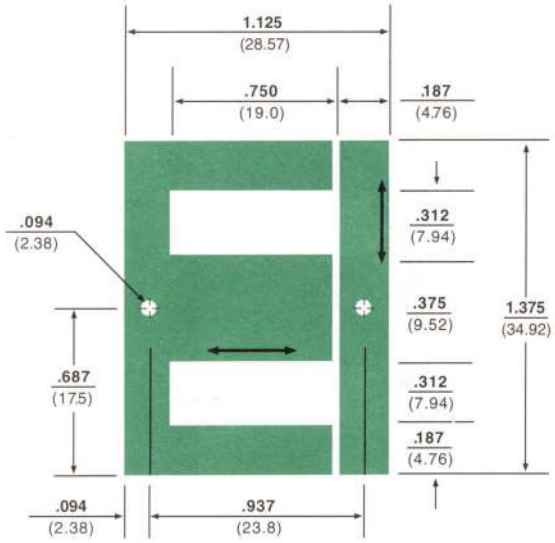
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{412.1 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.188 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.18 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—⅜H
(10mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	5.22	2.36	191.6	421.52
.014	0.35	3.90	1.77	256.4	564.08
.011	0.28	3.064	1.390	326.4	719.4
.009	0.23	2.507	1.137	398.9	879.5
.007	0.18	1.950	0.885	512.8	1129.9
.006	0.15	1.635	0.741	612.5	1347.5
.004	0.10	1.09	0.494	918	2019.6

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
0.405	6.63	0.108	49	2.34	1.52

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 2.88 in. = 7.32 cm.

A = 0.141 in.^{2} = 0.91 cm.^{2}

60 Hertz Reactance (N = number of turns)

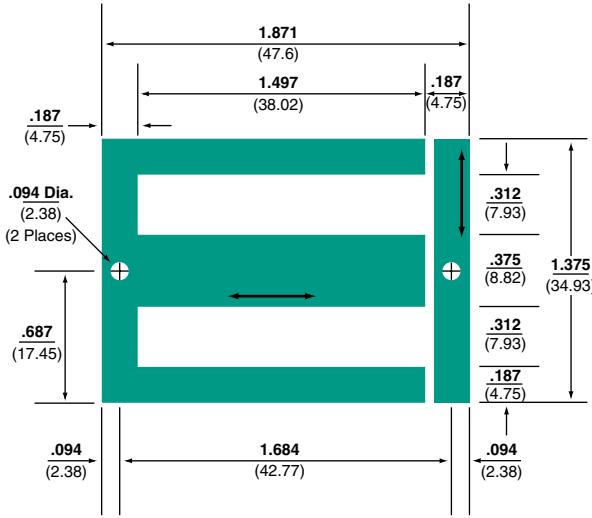
$$B_{max} = \frac{412 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.172 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.16 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—3/8H

(10mm) **LOW PROFILE**



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg./1 K	EI's/lb.	EI's/kg
0.0185	0.47				
0.014	0.35	6.29918	2.857245056	158.7508215	349.9874811
0.011	0.28	4.9468045	2.243821053	202.1507015	445.6683382
0.009	0.23	4.0473855	1.835853589	247.0730796	544.7057467
.007	0.18				
.006	0.15				
.004	0.10				

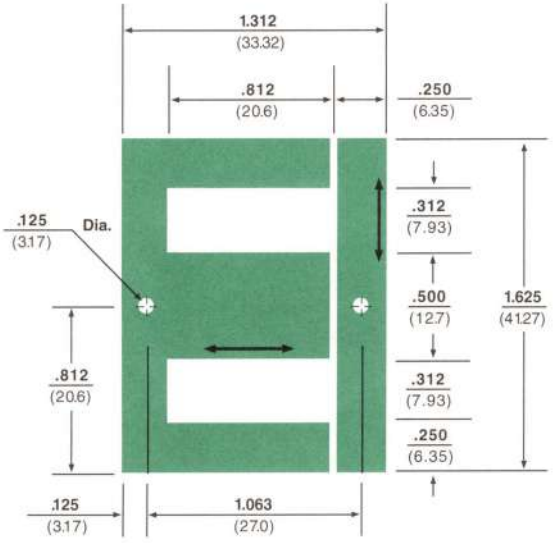
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
0.6088125	9.976671319	0.168641063	76.49389954	0.467064	3.013310102

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Area = 0.140625 in.^{2} = 0.90725625 cm.^{2}

SINGLE PHASE EI—½H
(13mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	7.80	3.53	128.2	282.04
.014	0.35	5.80	2.63	172.4	379.28
.011	0.28	4.557	2.068	219.4	483.6
.009	0.23	3.729	1.692	268.2	591.0
.007	0.18	2.900	1.316	344.8	759.8
.006	0.15	2.47	1.12	405	891
.004	0.10	1.65	0.75	605	1331

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
0.810	13.1	0.216	98.1	0.254	1.635

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 3.25 in. = 8.26 cm.

A = 0.25 in.^{2} = 1.61 cm.^{2}

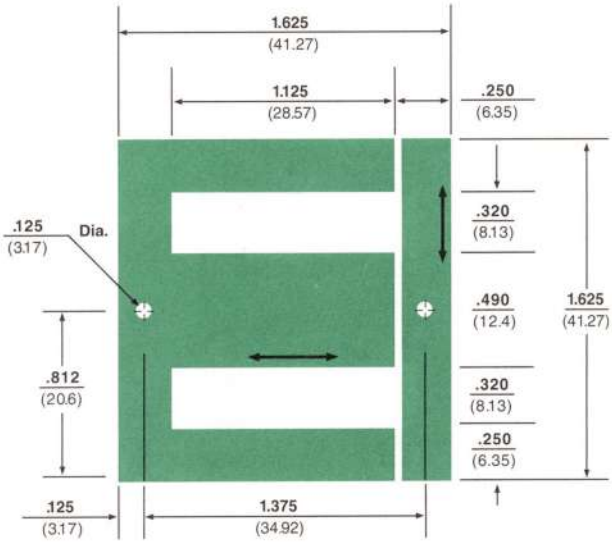
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{233 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.152 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.26 \times 10^{-8})\, K_1 N^2\, \mu_{ac}$ Henrys

SINGLE PHASE EI—½L
(13mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	9.87	4.48	101.3	223.33
.014	0.35	7.10	3.22	140.8	309.76
.011	0.28	5.579	2.531	179.2	395.1
.009	0.23	4.564	2.071	219.1	482.8
.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.
0.928	15.2	0.253	115	0.36	2.32

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 3.89 in. = 9.88 cm.

A = 0.24 in.^{2} = 1.55 cm.^{2}

60 Hertz Reactance (N = number of turns)

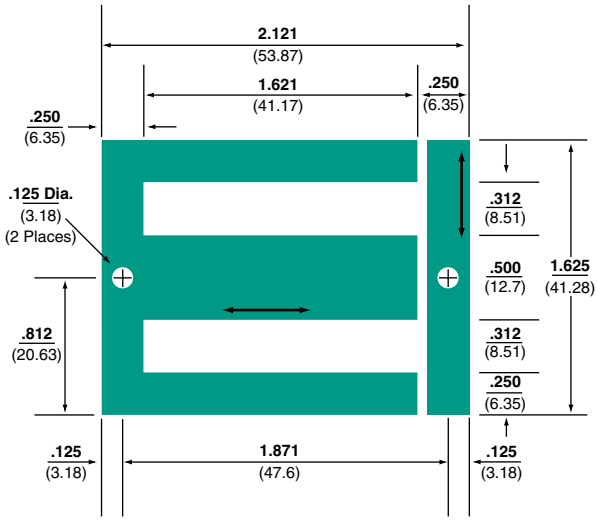
$$B_{max} = \frac{241.8 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.127 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.21 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—½H

(13mm) **LOW PROFILE**



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg./1 K	EI's/lb.	EI's/kg
0.0185	0.47				
0.014	0.35	9.3469588	4.239687042	106.9866704	235.8664661
0.011	0.28	7.3402535	3.329465585	136.2350769	300.3485017
0.009	0.23	6.0056619	2.724108181	166.5095399	367.0926165
.007	0.18				
.006	0.15				
.004	0.10				

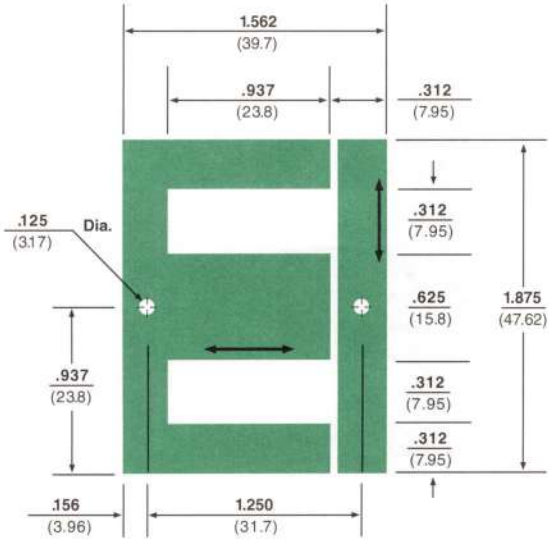
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
1.204505	19.73834389	0.333647885	151.3393442	0.505752	3.262909603

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Area = 0.25 in.^{2} = 1.6129 cm.^{2}

SINGLE PHASE EI—⅝H
(16mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	11.30	5.119	88.50	194.70
.014	0.35	8.40	3.80	119.0	261.8
.011	0.28	6.600	2.995	151.5	333.9
.009	0.23	5.400	2.450	185.2	408.2
.007	0.18	4.200	1.906	238.1	524.7
.006	0.15	3.58	1.62	279	613.8
.004	0.10	2.70	1.22	370	814

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
1.45	23.8	0.392	178	0.293	1.89

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 3.75 in. = 9.53 cm.

A = 0.39 in.^{2} = 2.52 cm.^{2}

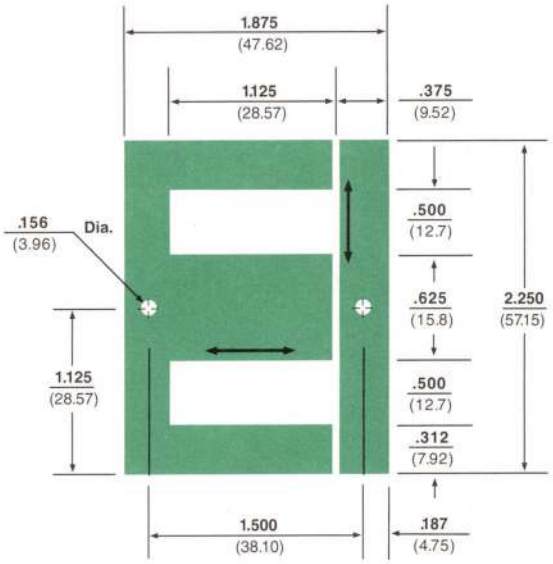
60 Hertz Reactance (N = number of turns)

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

$H_o = (.132 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.35 \times 10^{-8}) K_1 N^2 \mu_{ac}$ Henrys

WIDE WINDOW EI—5/8HW
(16mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	11.40	5.164	87.72	192.894
.011	0.28	8.957	4.064	111.6	246.1
.009	0.23	7.329	3.325	136.4	300.8
.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.
1.91	31.30	0.528	39.4	0.563	3.63

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 4.63 in. = 11.75 cm.

A = 0.39 in.^{2} = 2.52 cm.^{2}

60 Hertz Reactance (N = number of turns)

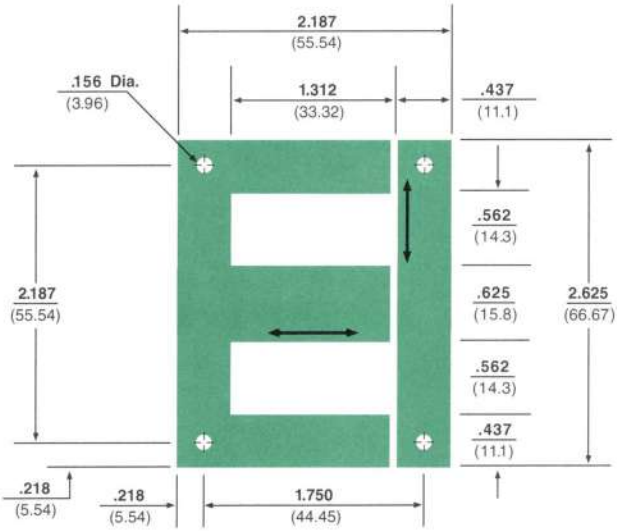
$$B_{max} = \frac{149 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.107 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.28 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE—⅝LW

(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

ℓ = 5.37 in. = 13.64 cm.

A = 0.39 in.^{2} = 2.52 cm.^{2}

60 Hertz Reactance (N = number of turns)

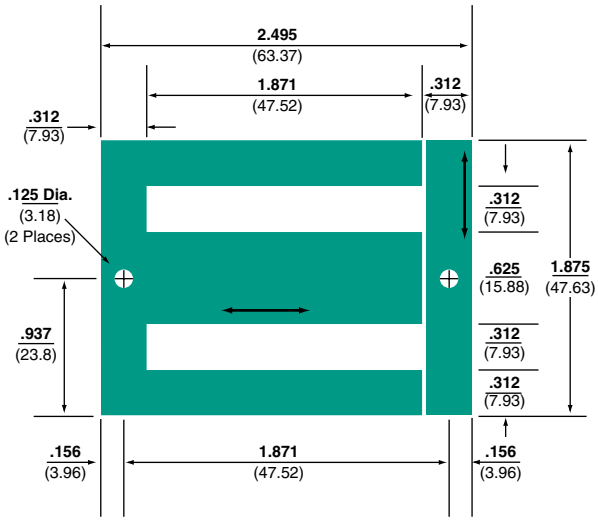
$B_{max} = \frac{149 \times 10^3}{K_1 N}$ Gauss per volt

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

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

SINGLE PHASE EI—⅝H

(16mm) **LOW PROFILE**



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg./1 K	EI's/lb.	EI's/kg
0.0185	0.47				
0.014	0.35	13.52568	6.135113191	73.93343625	162.9961777
0.011	0.28	10.621842	4.817961313	94.14562936	207.5566687
0.009	0.23	8.690598	3.941968347	115.0668803	253.6803729
.007	0.18				
.006	0.15				
.004	0.10				

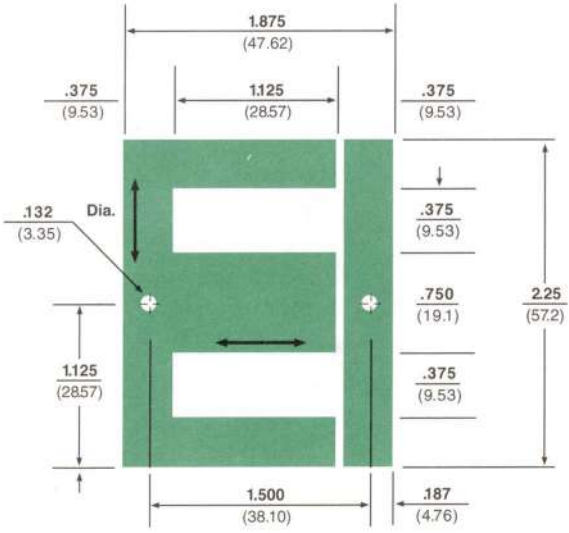
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
2.17875	35.70339413	0.60351375	273.7478019	0.583752	3.766134403

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Area = 0.390625 in.^{2} = 2.52015625 cm.^{2}

SINGLE PHASE EI—¾H
(19mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	16.35	7.406	61.16	134.55
.014	0.35	12.15	5.503	82.30	181.06
.011	0.28	9.546	4.331	104.8	230.9
.009	0.23	7.811	3.544	128.0	282.2
.007	0.18	6.075	2.756	164.6	362.8
.006	0.15	5.18	2.35	193	424.6
.004	0.10	3.60	1.63	278	611.6

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
2.51	41.2	0.678	308	0.422	2.72

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 4.50 in. = 11.43 cm.

A = 0.562 in.^{2} = 3.62 cm.^{2}

60 Hertz Reactance (N = number of turns)

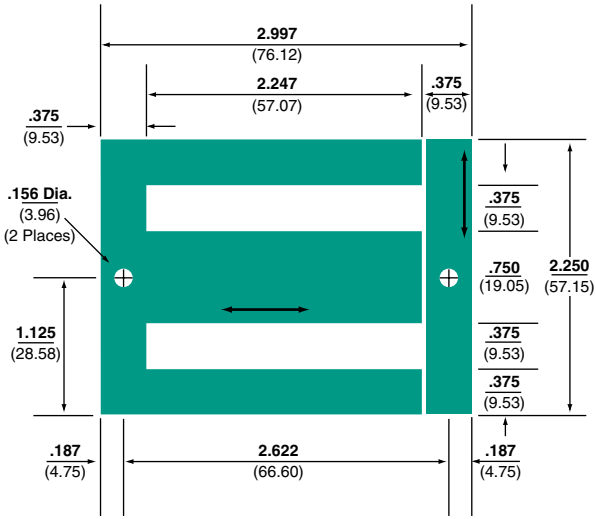
$B_{max} = \frac{103.6 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.110 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.42 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—¾H

(19mm) **LOW PROFILE**



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg./1 K	EI's/lb.	EI's/kg
0.0185	0.47				
0.014	0.35	19.477212	8.834668591	51.34205039	113.1904372
0.011	0.28	15.295635	6.93794708	65.37812912	144.1348555
0.009	0.23	12.514611	5.676502403	79.90659877	176.1648157
.007	0.18				
.006	0.15				
.004	0.10				

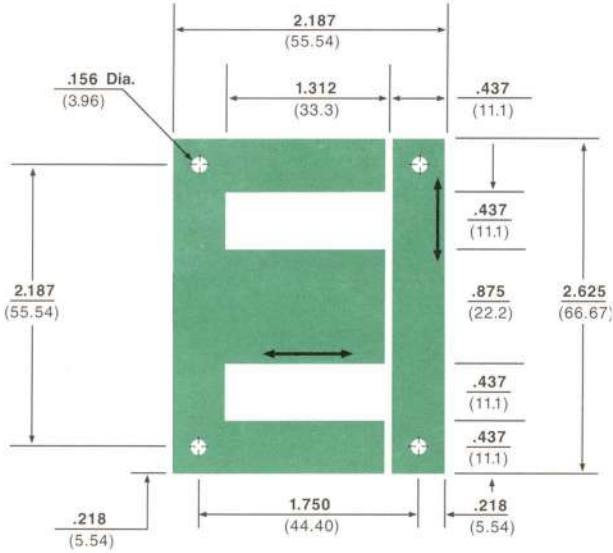
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
3.764925	61.69620247	1.042884225	473.0418556	0.842625	5.43627945

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Area = 0.5625 in.^{2} = 3.629025 cm.^{2}

SINGLE PHASE EI—⅞H
(22mm)



Note: Specify if center mounting slots are required.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	21.85	9.898	45.77	100.694
.014	0.35	16.25	7.361	61.54	135.388
.011	0.28	12.768	5.793	78.3	172.6
.009	0.23	10.446	4.740	95.7	210.9
.007	0.18	8.125	3.686	123.1	271.3
.006	0.15	6.92	3.135	144	319
.004	0.10	4.61	2.091	217	478

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
3.88	63.6	1.09	477	0.574	3.70

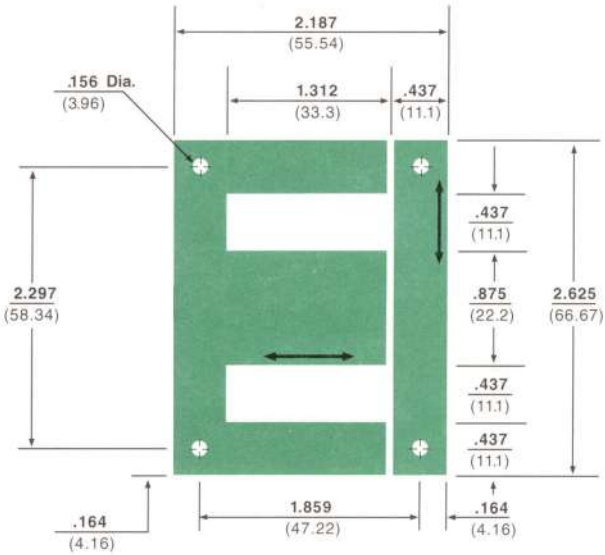
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 5.25 in. = 13.34 cm.
A = 0.766 in.^{2} = 4.94 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{76 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.094 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.49 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—⅞MH
(22mm)



Note: Specify if center mounting slots are required.
Meets Specification MIL-T-27. See page 2.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	21.85	9.898	45.77	100.694
.014	0.35	16.25	7.361	61.54	135.388
.011	0.28	12.768	5.793	78.3	172.6
.009	0.23	10.446	4.740	95.7	210.9
.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.
3.88	63.6	1.09	477	0.574	3.70

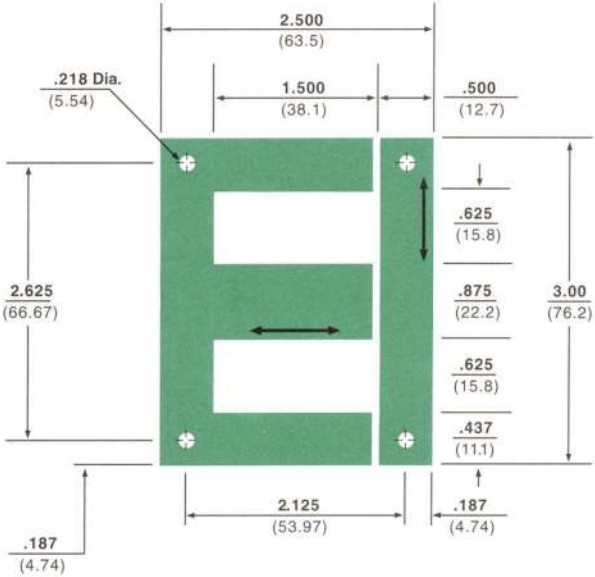
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 5.25 in. = 13.34 cm.
A = 0.766 in.^{2} = 4.94 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{76 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.094 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.49 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

WIDE WINDOW EI—⅞HW
(22mm)



Note: Specify if center mounting slots are required.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	18.00	8.154	55.56	122.232
.011	0.28	14.143	6.417	70.7	155.8
.009	0.23	11.571	5.250	86.4	190.5
.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.
4.69	76.89	1.297	588.2	.937	6.05

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 6.13 in. = 15.59 cm.

A = 0.766 in.^{2} = 4.94 cm.^{2}

60 Hertz Reactance (N = number of turns)

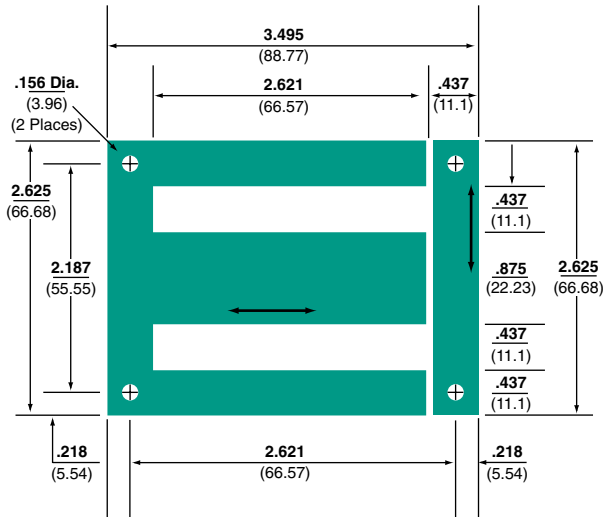
$$B_{max} = \frac{75.9 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0807 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.42 \times 10^{-8})\, K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—7/8H

(22mm) **LOW PROFILE**



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg./1 K	EI's/lb.	EI's/kg
0.0185	0.47				
0.014	0.35	26.41182	11.98013743	37.8618361	83.47149651
0.011	0.28	20.741447	9.408112945	48.21264399	106.291241
0.009	0.23	16.970275	7.697547037	58.92656424	129.9115153
.007	0.18				
.006	0.15				
.004	0.10				

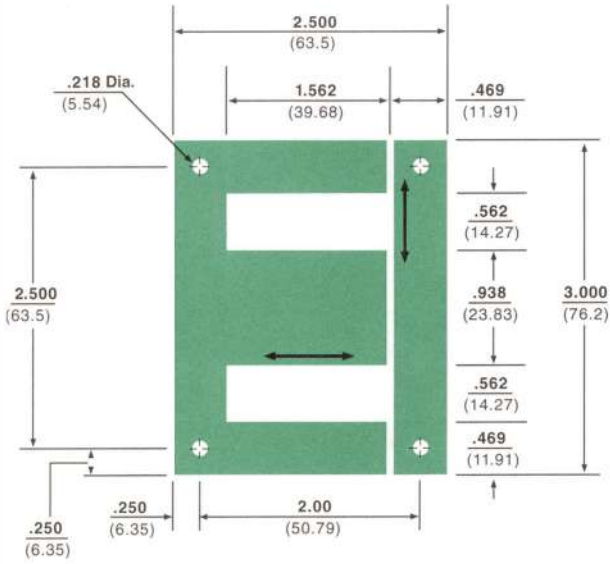
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
5.95627375	97.60605357	1.649887829	748.3726202	1.145377	7.389514253

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Area = 0.765625 in.^{2} = 4.93950625 cm.^{2}

SINGLE PHASE EI—15/16H
(24mm)



Note: Specify if center mounting slots are required.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	21.26	9.64	47.04	103.71
.011	0.28	16.70	7.58	59.88	131.98
.009	0.23	13.67	6.20	73.15	161.22
.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.
4.89	80.1	1.35	613	.878	5.66

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 6.124 in. = 15.55 cm.

A = .880 in.^{2} = 5.68 cm.^{2}

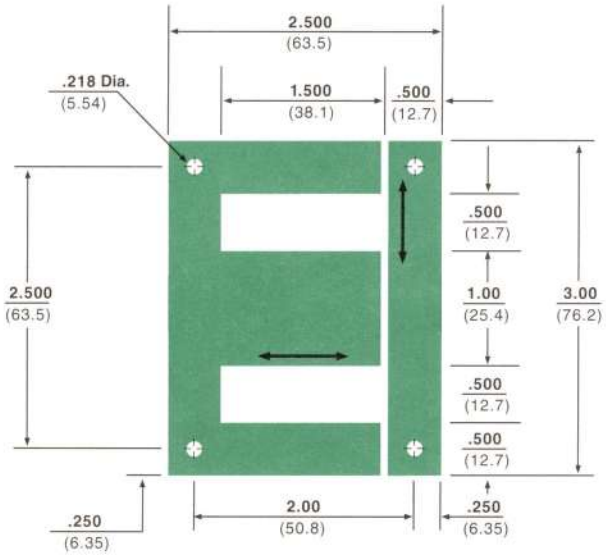
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{66.1 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.081 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.48 \times 10^{-8})\ K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—1H
(25mm)



Note: Specify if center mounting slots are required.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	28.00	12.68	35.71	78.562
.014	0.35	20.80	9.422	48.08	105.776
.011	0.28	16.342	7.415	61.2	134.9
.009	0.23	13.371	6.067	74.8	164.8
.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.
5.74	94.1	1.55	704	0.75	4.83

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 6.0 in. = 15.25 cm.

A = 1.0 in.^{2} = 6.45 cm.^{2}

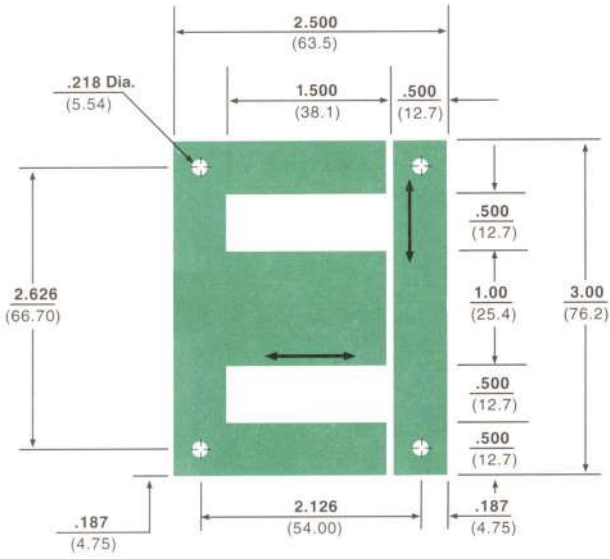
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{58.1 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.082 \times 10^{-3})$ N Oersteds per milliampere of direct current

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

SINGLE PHASE EI—1MH
(25mm)



Note: Specify if center mounting slots are required.
Meets Specification MIL-T-27. See page 2.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	28.00	12.68	35.71	78.562
.014	0.35	20.80	9.422	48.08	105.776
.011	0.28	16.342	7.415	61.2	134.9
.009	0.23	13.371	6.067	74.8	164.8
.007	0.18	10.400	4.719	96.2	211.9
.006	0.15	9.72	4.40	102.9	226.38
.004	0.10	6.48	2.93	154.3	339.46

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
5.74	94.1	1.55	704	0.75	4.83

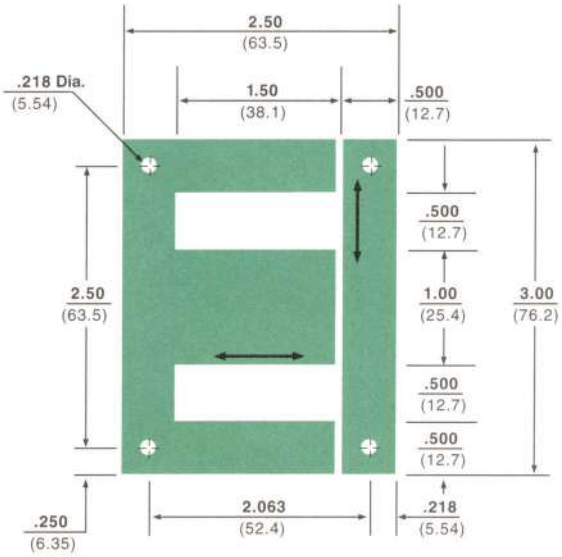
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 6.0 in. = 15.25 cm.
A = 1.0 in.^{2} = 6.45 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{58.1 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.082 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.56 \times 10^{-8})\, K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—1HX
(25mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	28.00	12.68	35.71	78.562
.014	0.35	20.80	9.422	48.08	105.776
.011	0.28	16.342	7.415	61.2	134.9
.009	0.23	13.371	6.067	74.8	164.8
.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.
5.74	94.1	1.55	704	0.75	4.83

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

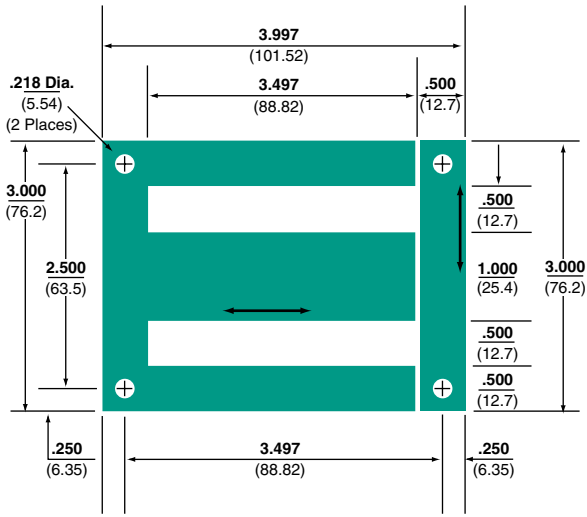
ℓ = 6.0 in. = 15.25 cm.
A = 1.0 in.^{2} = 6.45 cm.^{2}
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{58.1 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.082 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.56 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1H

(25mm) **LOW PROFILE**



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg./1 K	EI's/lb.	EI's/kg
0.0185	0.47				
0.014	0.35	33.952134	15.40034846	29.45322966	64.93359566
0.011	0.28	26.662926	12.0940366	37.50526105	82.68537898
0.009	0.23	21.815121	9.895120734	45.83976408	101.0599089
.007	0.18				
.006	0.15				
.004	0.10				

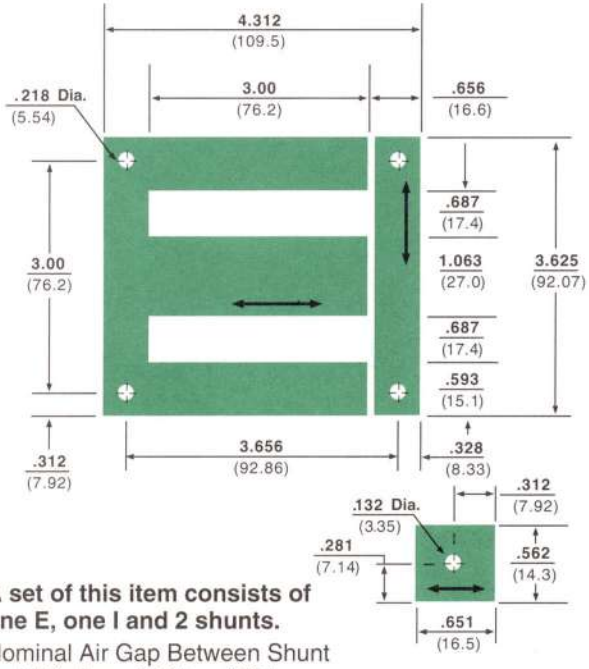
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
8.75055	143.3961379	2.42390235	1099.457867	1.4985	9.6677226

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Area = 1 in.^{2} = 6.4516 cm.^{2}

SINGLE PHASE EI—1 1/16LW
(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"

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI'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

ℓ = 9.81 in. = 24.92 cm.

A = 1.13 in.^{2} = 7.29 cm.^{2}

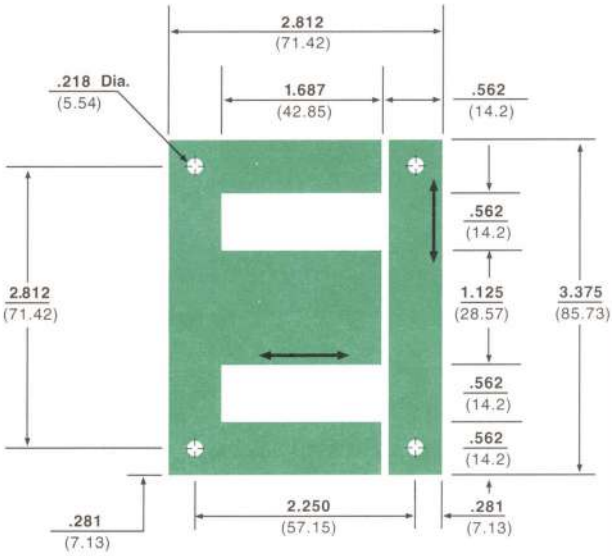
60 Hertz Reactance (N = number of turns)

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

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

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

SINGLE PHASE EI—1⅛H
(29mm)



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	35.95	16.29	27.82	61.204
.014	0.35	26.65	12.07	37.52	82.544
.011	0.28	20.939	9.500	44.8	105.3
.009	0.23	17.132	7.773	58.4	128.6
.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.
8.29	136	2.24	1017	.949	6.12

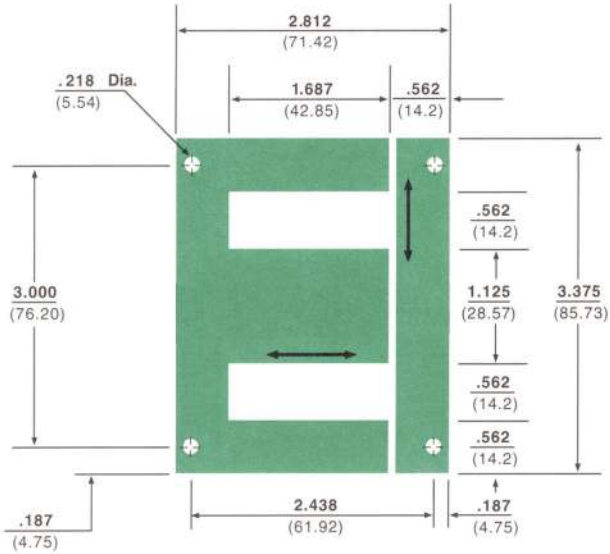
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Q = 6.75 in. = 17.15 cm.
A = 1.27 in.^{2} = 8.19 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{45.8 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.073 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.63 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1⅛MH
(29mm)



Note: Specify if center mounting slots are required.
Meets Specification MIL-T-27. See page 2.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	35.95	16.29	27.82	61.204
.014	0.35	26.65	12.07	37.52	82.544
.011	0.28	20.939	9.500	44.8	105.3
.009	0.23	17.132	7.773	58.4	128.6
.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.
8.29	136	2.24	1017	.949	6.12

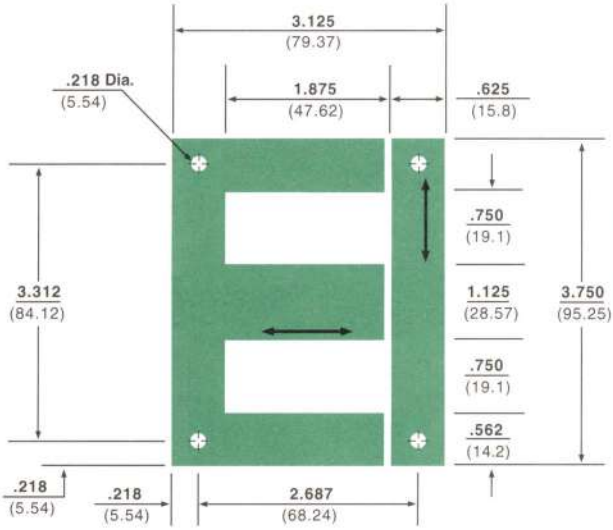
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 6.75 in. = 17.15 cm.
A = 1.27 in.^{2} = 8.19 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{45.8 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_c = (.073 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.63 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

WIDE WINDOW EI—1⅛HW
(29mm)



Note: Specify if center mounting slots are required.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	32.80	14.86	30.49	67.078
.011	0.28	25.771	11.693	38.8	85.5
.009	0.23	21.086	9.567	47.4	104.5
.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.
9.72	159.2	2.68	1218	1.41	9.07

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 7.63 in. = 19.37 cm.

A = 1.27 in.^{2} = 8.19 cm.^{2}

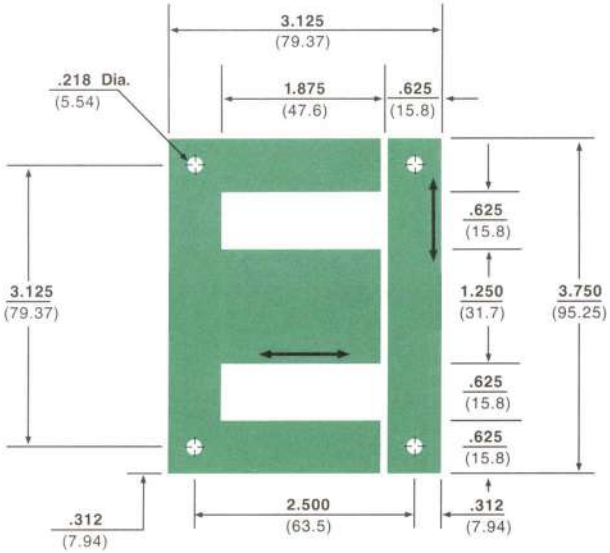
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{45.9 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0648 \times 10^{-3})$ N Oersteds per milliampere of direct current

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

SINGLE PHASE EI—1¼H
(32mm)



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	EI's/lb.	EI's/Kg
.0185	0.47	44.50	20.16	22.47	49.434
.014	0.35	33.00	14.95	30.30	66.66
.011	0.28	25.929	11.765	38.6	85.0
.009	0.23	21.214	9.625	47.1	103.9
.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.
11.40	187	3.08	1398	1.17	7.57

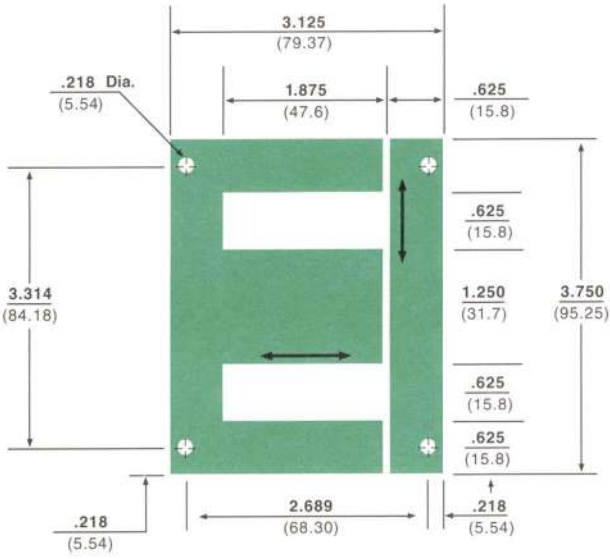
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Q = 7.50 in. = 19.05 cm.
A = 1.56 in.^{2} = 10.08 cm.^{2}
60 Hertz Reactance (N = number of turns)

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

$H_o = (.0659 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.70 \times 10^{-8}) K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—1¼MH
(32mm)



Note: Specify if center mounting slots are required.
Meets Specification MIL-T-27. See Page 2.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	44.50	20.16	22.47	49.434
.014	0.35	33.00	14.95	30.30	66.66
.011	0.28	25.929	11.765	38.6	85.0
.009	0.23	21.214	9.625	47.1	103.9
.007	0.18	16.500	7.486	60.6	133.6
.006	0.15	14.80	6.704	67.5	148.5
.004	0.10				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
11.40	187	3.08	1398	1.17	7.57

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

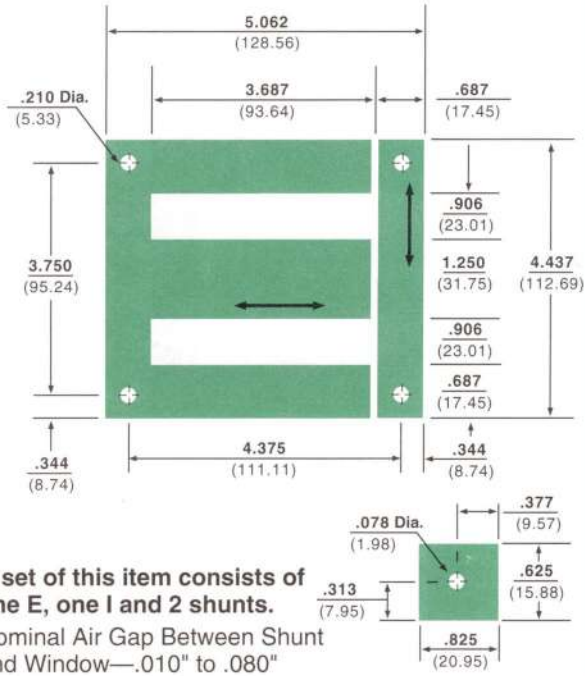
ℓ = 7.50 in. = 19.05 cm.
A = 1.56 in.^{2} = 10.08 cm.^{2}
60 Hertz Reactance (N = number of turns)

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

$H_o = (.0659 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.70 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ 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	EI's/lb.	EI'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

ℓ = 11.873 in. = 30.16 cm.

A = 1.56 in.^{2} = 10.08 cm.^{2}

60 Hertz Reactance (N = number of turns)

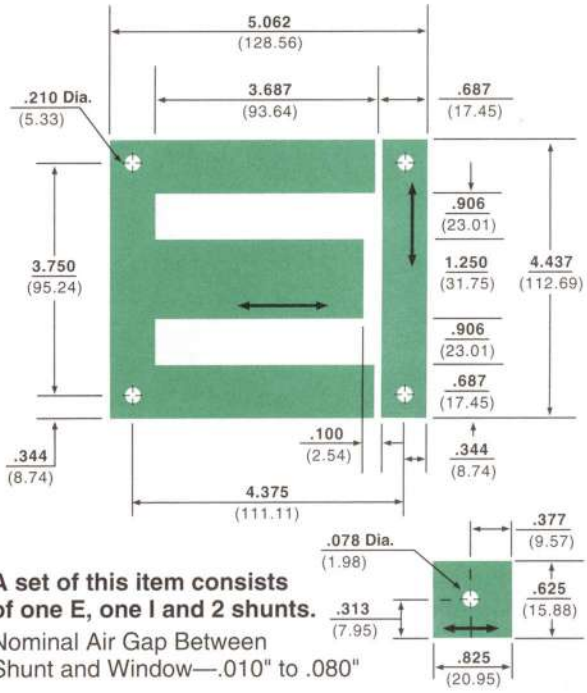
$$B_{max} = \frac{37.2 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

H_o = (.042 × 10^{-3}) N Oersteds per milliampere of direct current

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

SINGLE PHASE EI—1¼ (2) HLC

(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"

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	64.16	29.10	15.59	34.36
.011	0.28	50.411	22.873	19.8	43.7
.009	0.23	41.246	18.714	24.2	53.4
.007	0.18				
.006	0.15				
.004	0.10				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

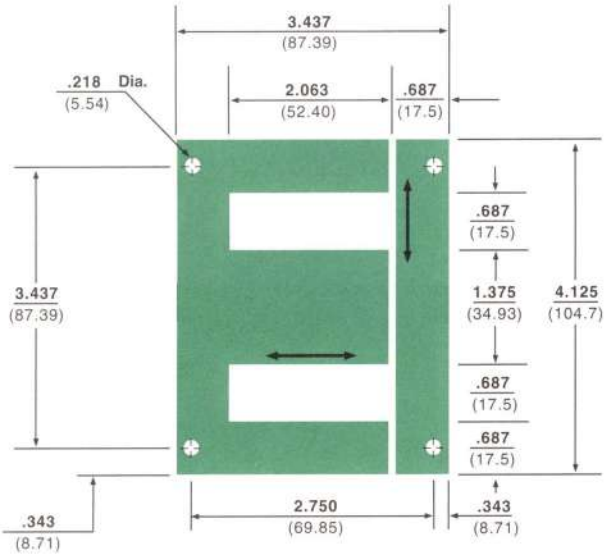
VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
18.42	302	5.41	2455	3.340	21.55

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 11.873 in. = 30.16 cm.

A = 1.56 in.^{2} = 10.08 cm.^{2}

SINGLE PHASE EI—1⅜H
(35mm)



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	54.10	24.51	18.48	40.656
.014	0.35	40.10	18.17	24.94	54.868
.011	0.28	31.507	14.295	31.7	69.9
.009	0.23	25.779	11.696	38.8	85.5
.007	0.18				
.006	0.75				
.004	0.10				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
15.46	253.5	4.17	1893	1.42	9.2

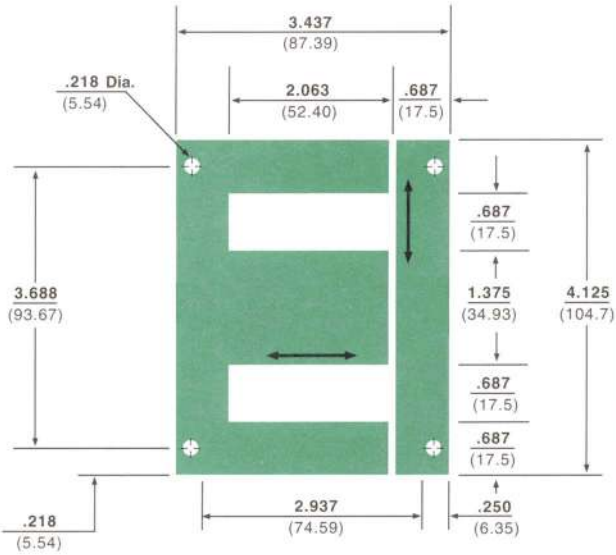
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 8.25 in. = 20.96 cm.
A = 1.89 in.^{2} = 12.20 cm.^{2}
60 Hertz Reactance (N = number of turns)

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

$H_o = (.060 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.77 \times 10^{-8})\ K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—1⅜MH
(35mm)



Note: Specify if center mounting slots are required.
Meets Specification MIL-T-27. See page 2.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	54.10	24.51	18.48	40.656
.014	0.35	40.10	18.17	24.94	54.868
.011	0.28	31.507	14.295	31.7	69.9
.009	0.23	25.779	11.696	38.8	85.5
.007	0.18	20.050	9.097	49.9	109.9
.006	0.15	17.10	7.746	58.5	128.7
.004	0.10				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
15.46	253.5	4.17	1893	1.42	9.2

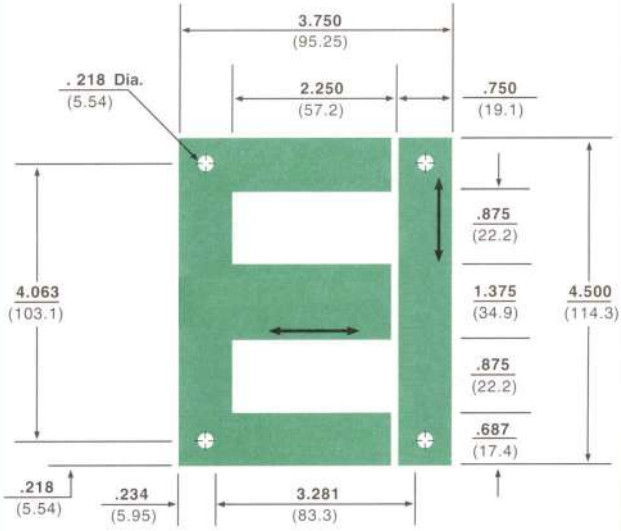
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 8.25 in. = 20.96 cm.
A = 1.89 in.^{2} = 12.20 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{30.07 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.060 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.77 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

WIDE WINDOW EI—1⅜HW
(35mm)



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	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	45.36	20.55	22.0	48.4
.011	0.28	35.640	16.171	28.1	61.8
.009	0.23	29.160	13.230	34.3	75.6
.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.
17.32	283.77	4.79	2171	1.97	12.70

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

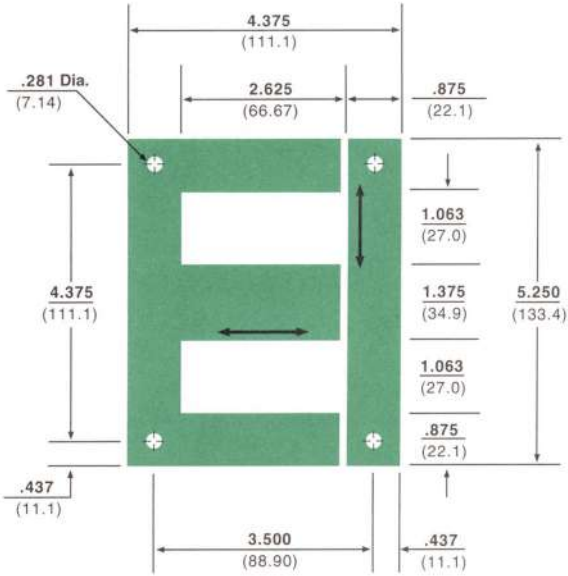
ℓ = 9.13 in. = 23.18 cm.
A = 1.89 in.^{2} = 12.20 cm.^{2}
60 Hertz Reactance (N = number of turns)

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

$H_o = (.0542 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.69 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1⅜HXW

(35mm) FERRO-RESONANT



Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI'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

ℓ = 10.68 in. = 27.15 cm.

A = 1.89 in.^{2} = 12.20 cm.^{2}

60 Hertz Reactance (N = number of turns)

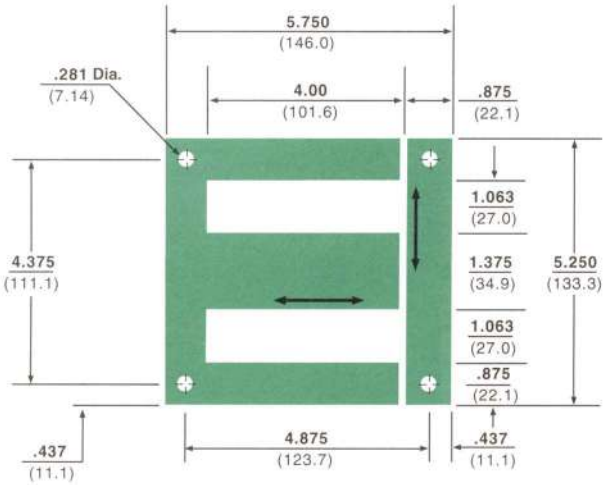
$$B_{max} = \frac{30.7 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

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

$L_a = (.59 \times 10^{-6})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1⅜LW

(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	EI's/lb.	EI'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

ℓ = 13.44 in. = 34.13 cm.

A = 1.89 in.^{2} = 12.20 cm.^{2}

60 Hertz Reactance (N = number of turns)

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

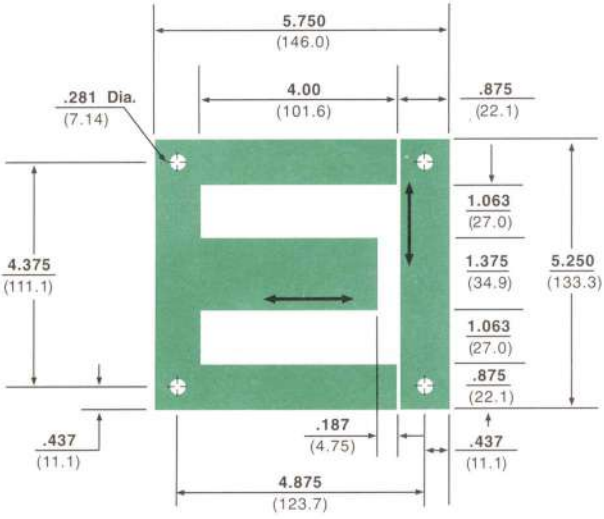
$H_o = (.037 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.47 \times 10^{-6})\, K_1 N^2\, \mu_{ac}$ Henrys

Single-Phase

SINGLE PHASE EI—1⅜ (2) HLC

(35mm) FERRO-RESONANT



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	80.89	36.69	12.36	27.255
.011	0.28	63.556	28.837	15.7	34.7
.009	0.23	52.001	23.594	19.2	42.4
.007	0.18				
.006	0.15				
.004	0.10				

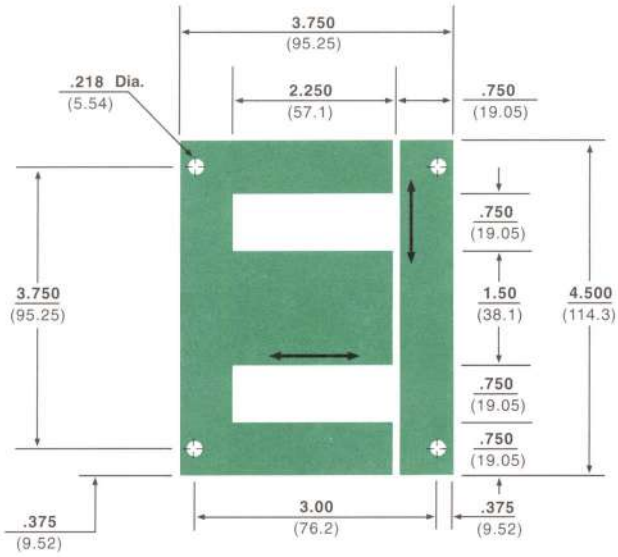
VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
28.923	474.2	8.01	3634	4.250	27.4

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 13.44 in. = 34.13 cm.

A = 1.89 in.^{2} = 12.20 cm.^{2}

SINGLE PHASE EI—1½H
(38mm)



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	EI's/lb.	EI's/Kg
.0185	0.47	64.40	29.17	15.43	33.946
.014	0.35	47.80	21.65	20.92	46.024
.011	0.28	37.557	17.040	26.6	58.7
.009	0.23	30.729	13.942	32.5	71.7
.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.
19.8	325	5.35	2429	1.69	10.89

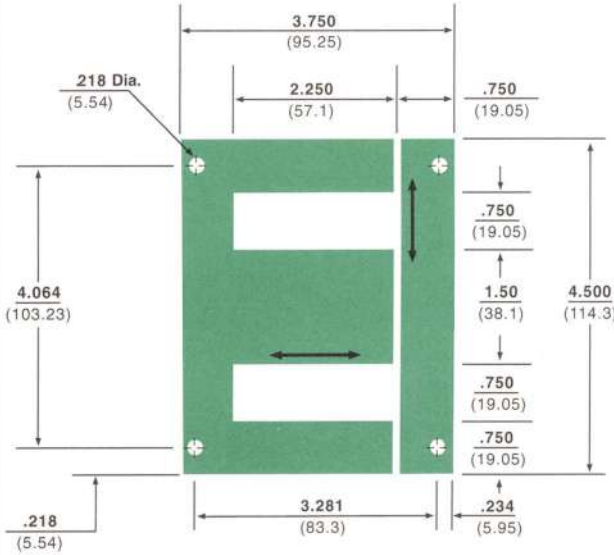
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 9.0 in. = 22.86 cm.
A = 2.25 in.^{2} = 14.51 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{25.84 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.055 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.84 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1½MH
(38mm)



Note: Specify if center mounting slots are required.
Meets Specification MIL-T-27. See page 2.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	64.40	29.17	15.43	33.946
.014	0.35	47.80	21.65	20.92	46.024
.011	0.28	37.557	17.040	26.6	58.7
.009	0.23	30.729	13.942	32.5	71.7
.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.
19.8	325	5.35	2429	1.69	10.89

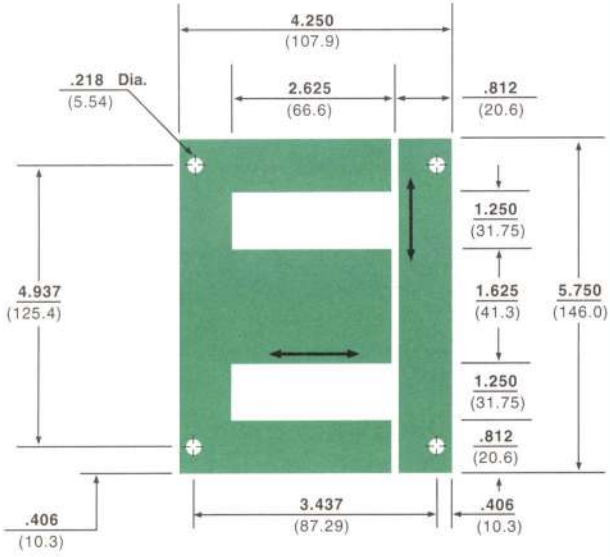
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 9.0 in. = 22.86 cm.
A = 2.25 in.^{2} = 14.51 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{25.84 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.055 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.84 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1⅝H
(41mm)



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	86.50	39.18	11.56	25.432
.014	0.35	64.15	29.06	15.59	34.298
.011	0.28	50.404	22.869	19.8	43.7
.009	0.23	41.239	18.711	24.2	53.4
.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.
28.8	472.3	7.78	3532	3.28	21.16

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

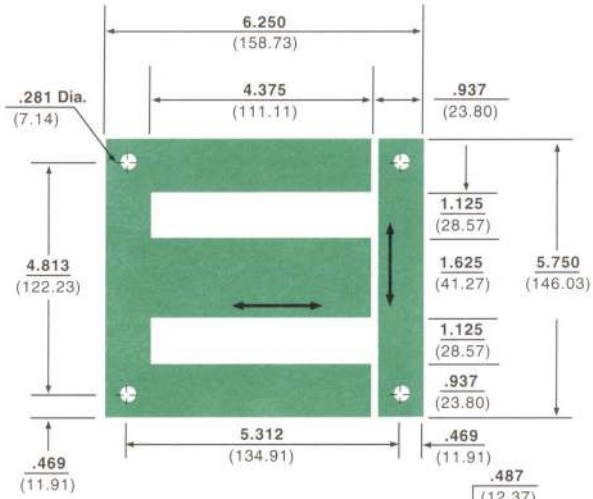
$\mathcal{Q}$ = 11.0 in. = 27.9 cm.
A = 2.64 in.^{2} = 17.04 cm.^{2}
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{22 \times 10^3}{K_1 N}$ Gauss per volt

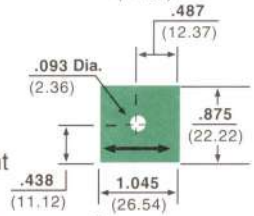
$H_o = (.045 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.80 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—1⅝ (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	EI's/lb.	EI'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

ℓ = 14.624 in. = 37.14 cm.

A = 2.64 in.^{2} = 17.04 cm.^{2}

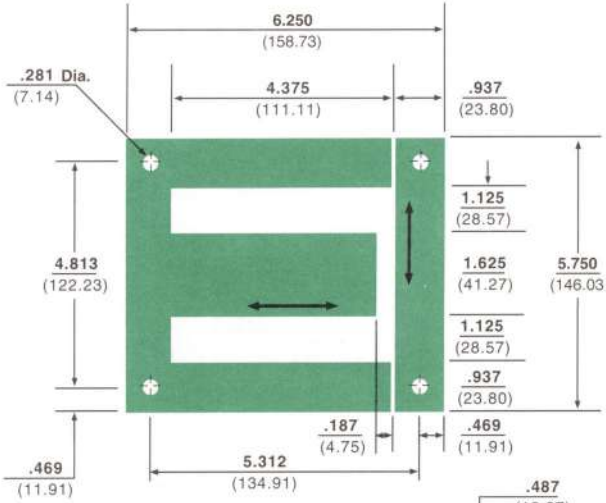
60 Hertz Reactance (N = number of turns)

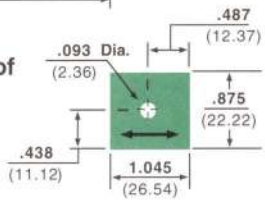
$$B_{max} = \frac{22.0 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

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

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

SINGLE PHASE EI—1⅝ (2) HLC
(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"

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	106.53	48.32	9.39	20.70
.011	0.28	83.702	37.977	11.9	26.3
.009	0.23	68.484	31.075	14.6	32.2
.007	0.18				
.006	0.15				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

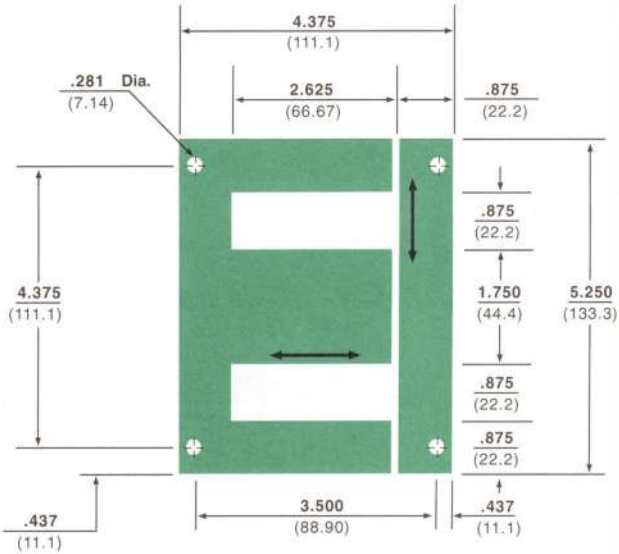
VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
39.8	652.5	11.63	5277	4.922	31.75

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 14.624 in. = 37.14 cm.

A = 2.64 in.^{2} = 17.04 cm.^{2}

SINGLE PHASE EI—1¾H
(44mm)



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	EI's/lb.	EI's/Kg
.0185	0.47	90.00	40.77	11.11	24.442
.014	0.35	65.10	29.49	15.36	33.792
.011	0.28	51.150	23.208	19.6	43.1
.009	0.23	41.850	18.988	23.9	52.7
.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.
31.9	523	8.61	3910	2.297	14.8

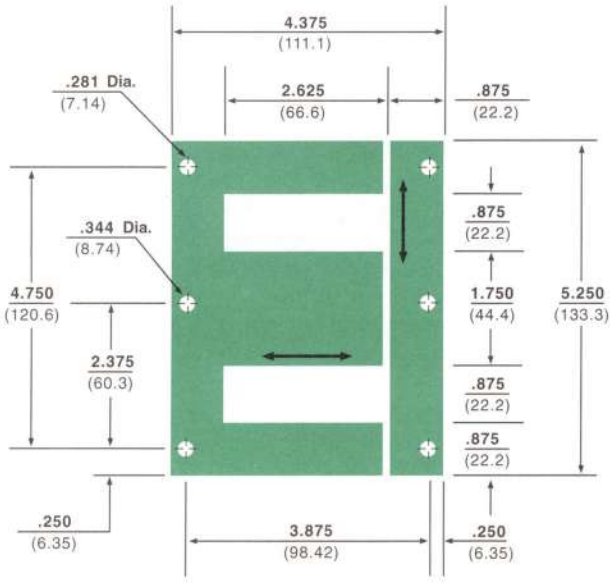
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 10.5 in. = 26.67 cm.
A = 3.063 in.^{2} = 19.76 cm.^{2}
60 Hertz Reactance (N = number of turns)

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

$H_o = (.047 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.98 \times 10^{-8})\ K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—1¾ (3) MH
(44mm)



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	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	65.10	29.49	15.36	33.792
.011	0.28	51.150	23.208	19.6	43.1
.009	0.23	41.850	18.988	23.9	52.7
.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.
31.9	523	8.61	3910	2.297	14.8

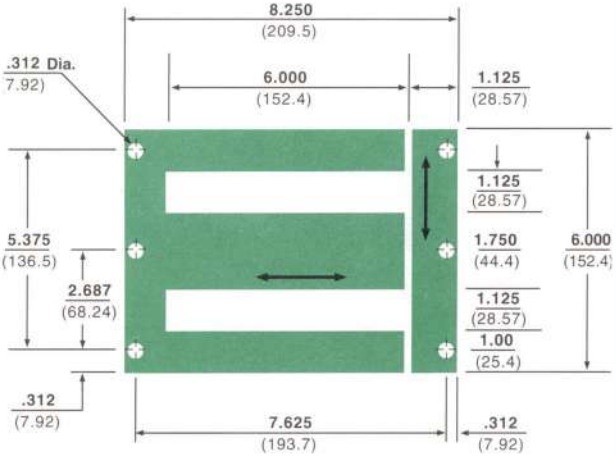
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 10.05 in. = 26.67 cm.
A = 3.06 in.^{2} = 19.8 cm.^{2}
60 Hertz Reactance (N = number of turns)

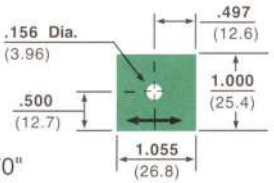
$B_{max} = \frac{19 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.047 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.98 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE—1¾ (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	EI's/lb.	EI'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

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

A = 3.062 in.^{2} = 19.75 cm.^{2}

60 Hertz Reactance (N = number of turns)

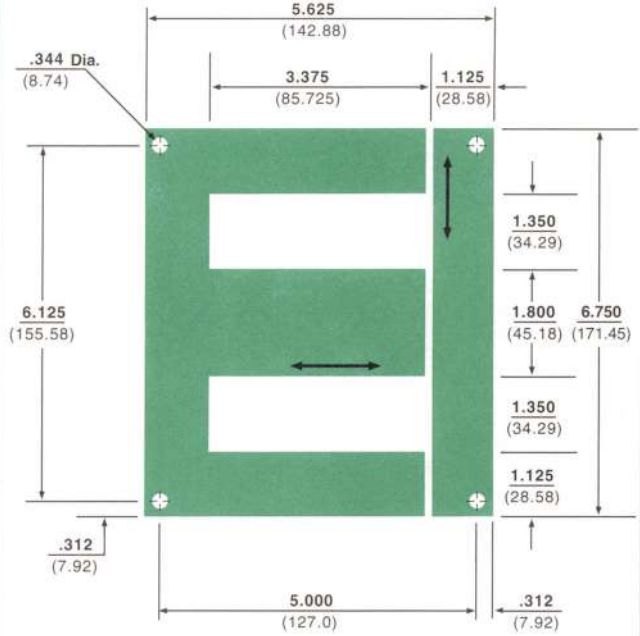
$B_{max} = \frac{19 \times 10^3}{K_1 N}$ Gauss per volt

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

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

SINGLE PHASE EI—1.80HW

(46mm) FERRO-RESONANT



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI'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

ℓ = 13.725 in. = 34.86 cm.

A = 3.240 in.^{2} = 20.90 cm.^{2}

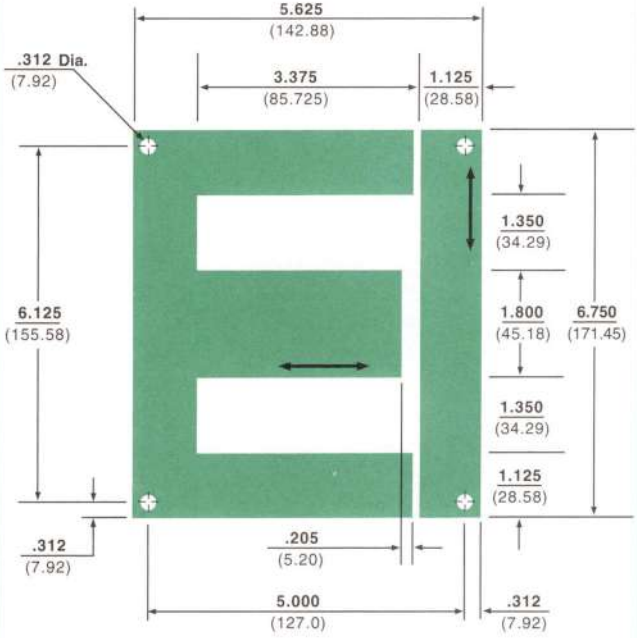
60 Hertz Reactance (N = number of turns)

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

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

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

SINGLE PHASE EI—1.80MHC
(46mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	103.81	47.09	9.63	21.24
.011	0.28	81.565	37.008	12.3	27.00
.009	0.23	66.735	30.279	15.0	33.0
.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.
45.64	748.15	12.61	5723	4.556	29.39

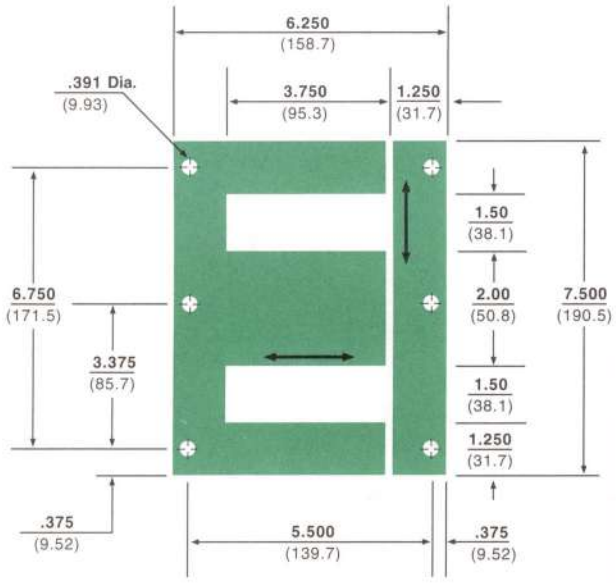
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 13.725 in. = 34.86 cm.

A = 3.240 in.^{2} = 20.90 cm.^{2}

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	EI's/lb.	EI'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

ℓ = 15.25 in. = 38.7 cm.

A = 4.0 in.^{2} = 25.8 cm.^{2}

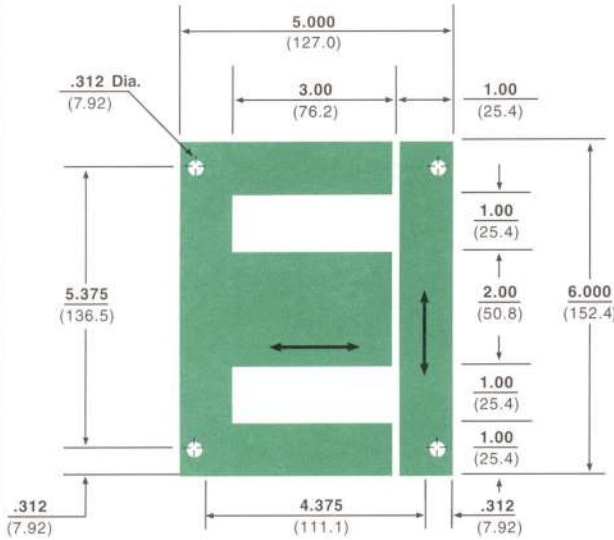
60 Hertz Reactance (N = number of turns)

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

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

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

SINGLE PHASE EI—2MH
(51mm)



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	116.9	53.03	8.55	18.85
.014	0.35	88.50	40.09	11.30	24.86
.011	0.28	69.536	31.550	14.4	31.7
.009	0.23	56.893	25.813	17.6	38.7
.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.
47.38	771	13.1	5960	3.0	19.35

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 12.0 in. = 30.5 cm.

A = 4.0 in.^{2} = 25.8 cm.^{2}

60 Hertz Reactance (N = number of turns)

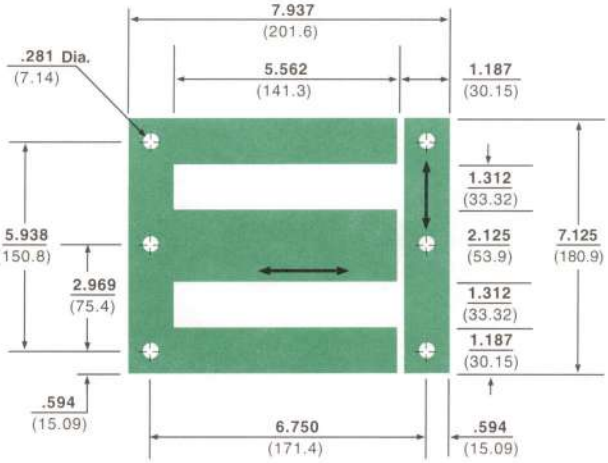
$$B_{max} = \frac{14.5 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

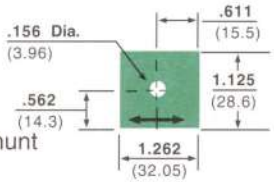
$H_o = (.0412 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (1.12 \times 10^{-8}) K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—2⅛ (3) HLW

(53mm) FERRO-RESONANT





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	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	172.7	78.33	5.79	12.7
.011	0.28	135.693	61.567	7.4	16.2
.009	0.23	111.021	50.373	9.0	19.9
.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.
88.55	1452	24.74	11223	7.29	47.08

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 16.81 in. = 42.70 cm.

A = 4.51 in.^{2} = 29.1 cm.^{2}

60 Hertz Reactance (N = number of turns)

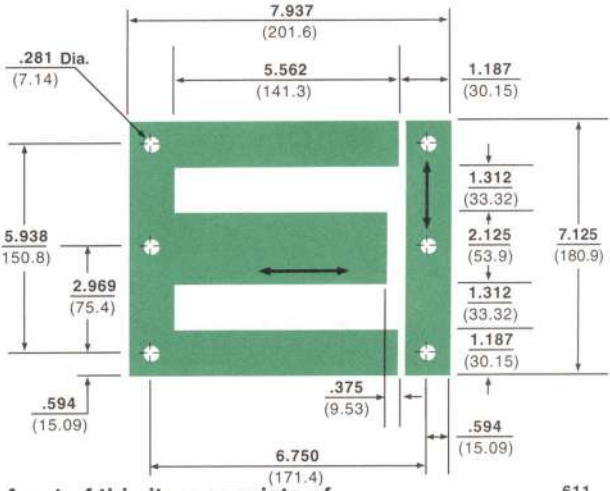
$B_{max} = \frac{13 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.029 \times 10^{-3})$ N Oersteds per milliampere of direct current

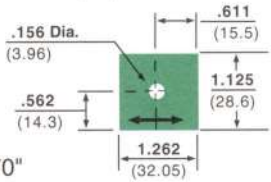
$L_a = (.90 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—2⅛ (3) HLC

(53mm) 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 .070"

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	169.6	76.93	5.90	13.0
.011	0.28	133.257	60.461	7.5	16.5
.009	0.23	109.029	49.469	9.2	20.2
.007	0.18				
.006	0.15				
.004	0.10				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

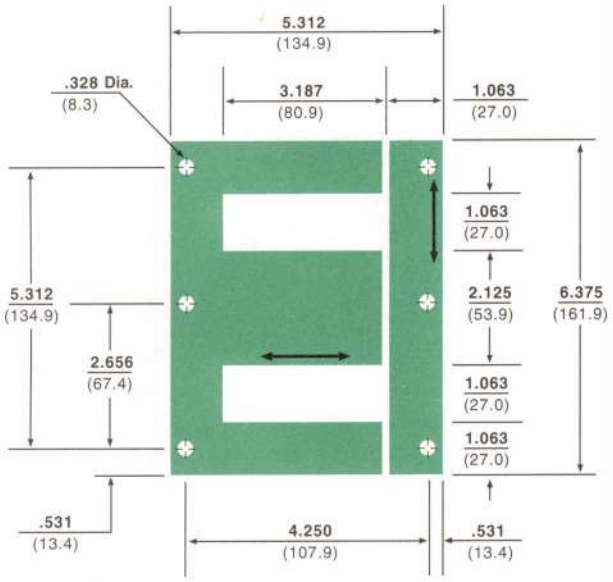
VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
86.86	1423	24.263	11009	7.29	47.08

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 16.81 in. = 42.70 cm.

A = 4.51 in.^{2} = 29.1 cm.^{2}

SINGLE PHASE EI—2⅛H
(54mm)



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	137.1	62.11	7.29	16.038
.014	0.35	103.8	47.02	9.63	21.186
.011	0.28	81.565	37.008	12.3	27.0
.009	0.23	66.735	30.279	15.1	33.0
.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.
56.86	931.76	15.71	7128	3.386	21.84

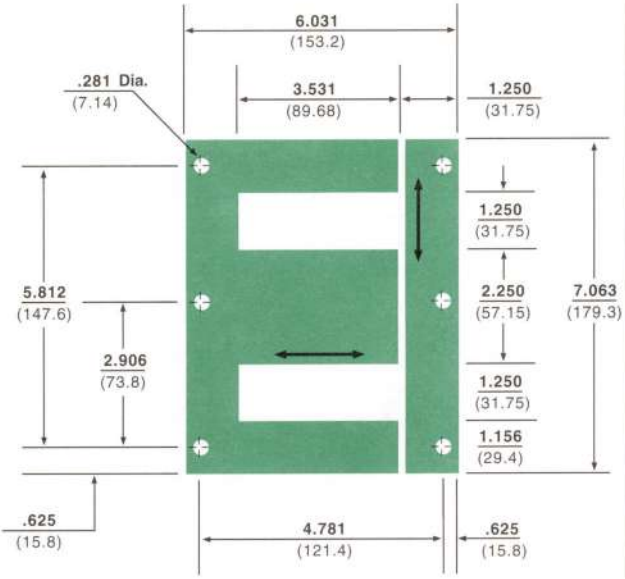
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 12.75 in. = 32.38 cm.
A = 4.51 in.^{2} = 29.1 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{13 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.039 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (1.19 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—2¼ Short
(57mm)



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	171.8	77.82	5.82	12.804
.014	0.35	121.4	54.97	8.24	18.128
.011	0.28	95.386	43.279	10.5	23.1
.009	0.23	78.043	35.410	12.8	28.2
.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.
75.4	1235.9	19.41	8800	4.41	28.4

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

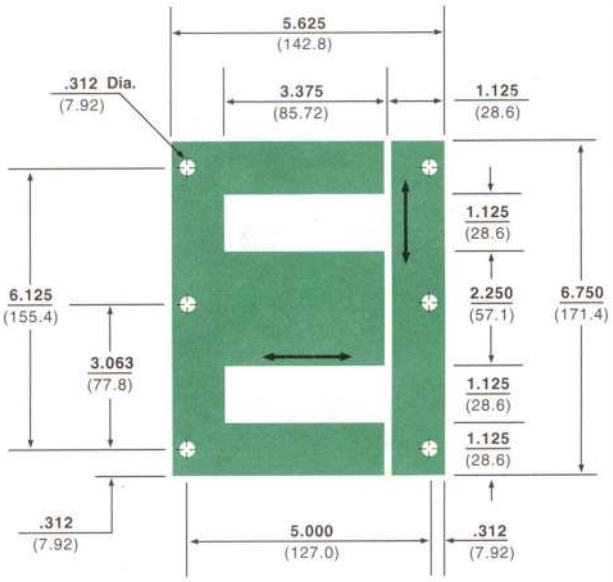
ℓ = 14.38 in. = 36.4 cm.
A = 5.06 in.^{2} = 32.6 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{11.5 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0346 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (1.18 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—2¼ (3) MH

(57mm)



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	146.7	66.47	6.81	14.982
.014	0.35	108.8	49.30	9.19	20.218
.011	0.28	85.525	38.804	11.7	25.8
.009	0.23	69.975	31.749	14.3	31.5
.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.
67.6	1108	18.5	8380	3.79	24.4

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 13.5 in. = 34.4 cm.

A = 5.06 in.^{2} = 32.5 cm.^{2}

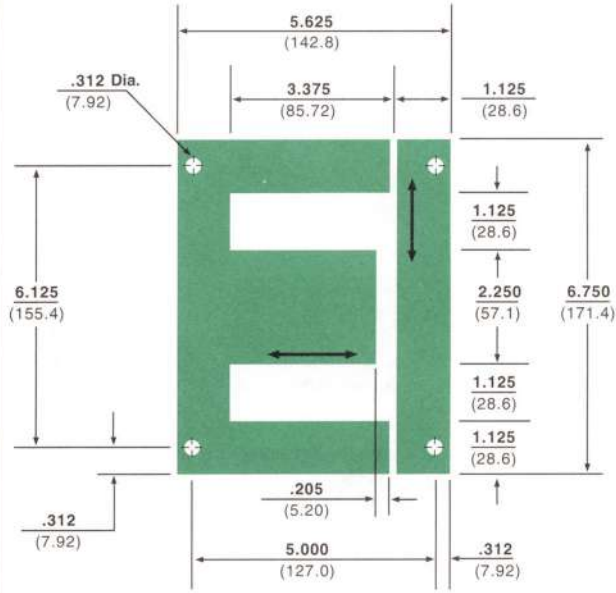
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{11.51 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0365 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (1.26 \times 10^{-8}) K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—2¼MHC
(57mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	107.06	48.56	9.34	20.59
.011	0.28	84.119	38.167	11.9	16.5
.009	0.23	68.824	31.227	14.5	32.0
.007	0.18				
.006	0.15				
.004	0.10				

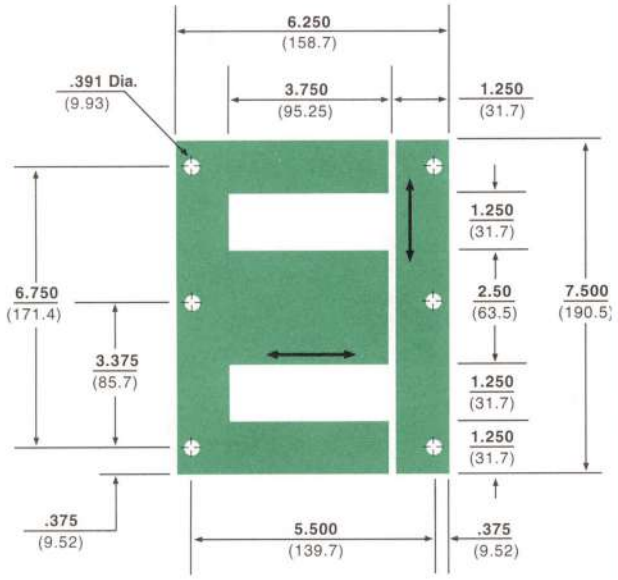
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
59.95	982.69	16.57	7517	3.79	24.4

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 13.5 in. = 34.4 cm.
A = 5.06 in.^{2} = 32.5 cm.^{2}

SINGLE PHASE EI—2½ (3) MH
(64mm)



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	EI's/lb.	EI's/Kg
.0185	0.47	179.5	81.31	5.60	12.32
.014	0.35	133.1	60.31	7.51	16.522
.011	0.28	104.61	47.464	9.6	21.1
.009	0.23	85.59	38.834	11.7	25.8
.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.
91.95	1508	25.40	11530	4.69	30.3

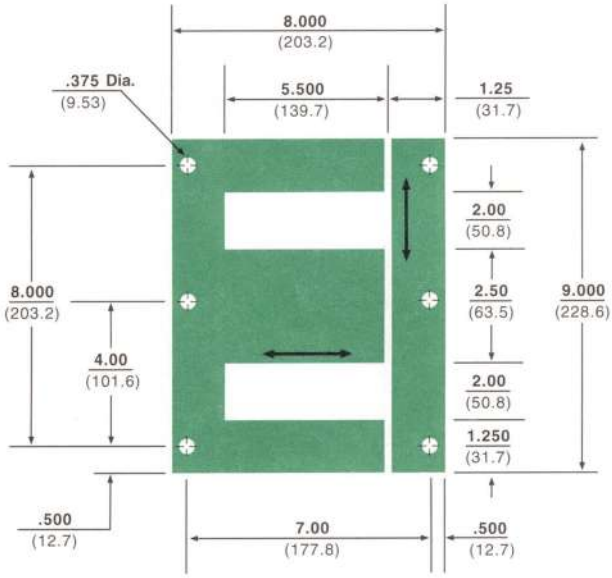
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 15.0 in. = 38.1 cm.
A = 6.25 in.^{2} = 40.3 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{9.3 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.033 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (1.40 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

WIDE WINDOW EI—2½ (3) HW
(64mm)



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	240.6	108.9	4.16	9.152
.014	0.35	185.0	83.80	5.41	11.902
.011	0.28	145.357	65.951	6.9	15.2
.009	0.23	118.929	53.961	8.4	18.5
.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.
123.5	2020	34.05	15420	11.0	71.0

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

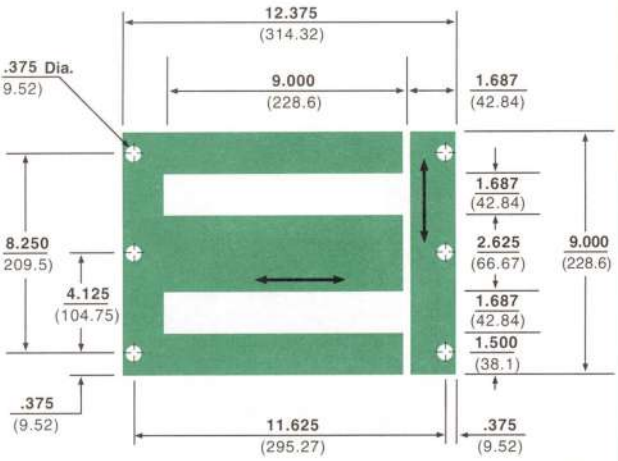
ℓ = 20.0 in. = 50.8 cm.
A = 6.25 in.^{2} = 40.3 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{9.3 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0247 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (1.05 \times 10^{-8}) K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE EI—2⅝(3)HLW

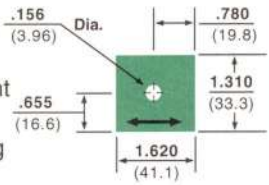
(67mm) FERRO-RESONANT



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	EI's/lb.	EI'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

ℓ = 27.56 in. = 70.00 cm.

A = 6.89 in.^{2} = 44.44 cm.^{2}

60 Hertz Reactance (N = number of turns)

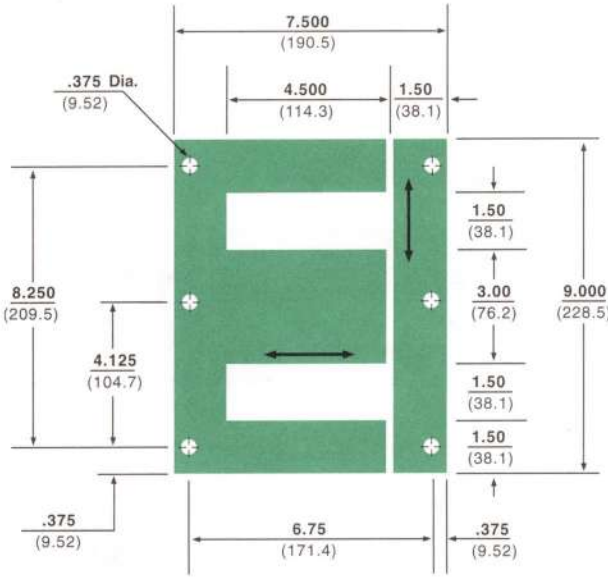
$$B_{max} = \frac{8.4 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

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

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

SINGLE PHASE EI—3(3)MH

(76mm)



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	EI's/lb.	EI's/Kg
.0185	0.47	274.48	124.76	3.64	8.01
.014	0.35	207.81	94.46	4.81	10.58
.011	0.28	163.279	74.083	6.1	13.5
.009	0.23	133.592	60.613	7.5	16.5
.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.
160.0	2620	43.7	19800	6.75	43.5

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 18.0 in. = 45.8 cm.

A = 9.0 in.^{2} = 58.0 cm.^{2}

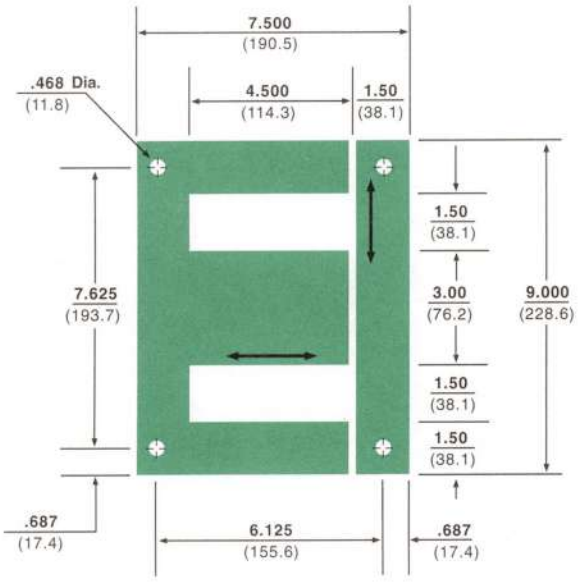
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{6.46 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0274 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (1.68 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—3H
(76mm)



Also available in Centra-Gap. See page 7.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	269.1	121.9	3.72	8.184
.014	0.35	203.8	92.30	4.91	10.802
.011	0.28	160.129	72.654	6.2	13.8
.009	0.23	131.014	59.444	7.6	16.8
.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.
159.94	2620	43.61	19781	6.75	43.5

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 18 in. = 45.8 cm.

A = 9 in.^{2} = 58 cm.^{2}

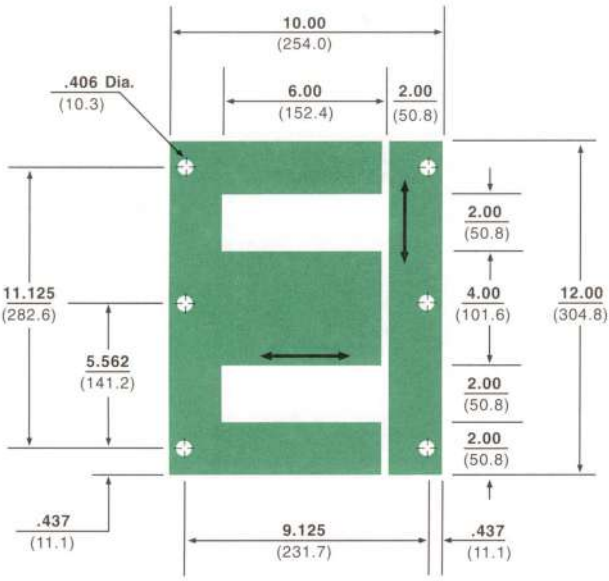
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{6.46 \times 10^3}{K_1 N}$ Gauss per volt

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

$L_a = (1.68 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—4(3)MH
(102mm)



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	EI's/lb.	EI's/Kg
.0185	0.47	475.1	215.2	2.10	4.62
.014	0.35	357.5	161.9	2.80	6.16
.011	0.28	280.893	127.447	3.6	7.8
.009	0.23	229.821	104.275	4.4	9.6
.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.
381	6191	105.5	47897	12.0	77.4

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 24.0 in. = 61.0 cm.

A = 16.0 in.^{2} = 103 cm.^{2}

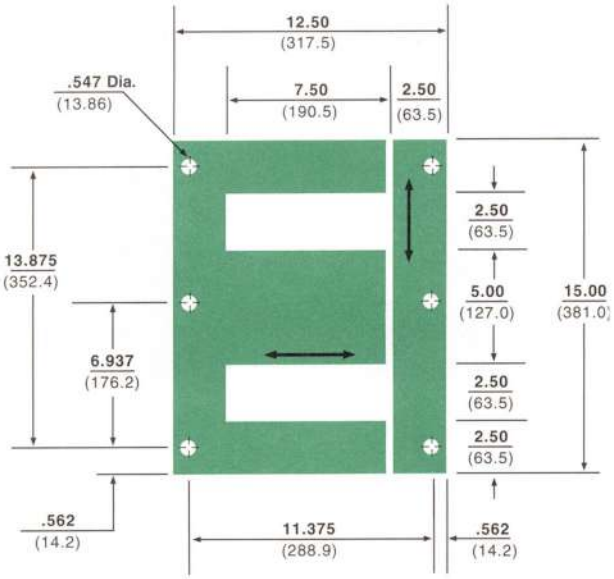
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{3.63 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0206 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (2.23 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE EI—5(3)MH
(127mm)



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	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	555	251	1.80	3.96
.011	0.28	436.071	197.854	2.3	5.1
.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.
743	12064	205.8	93433	18.75	120.9

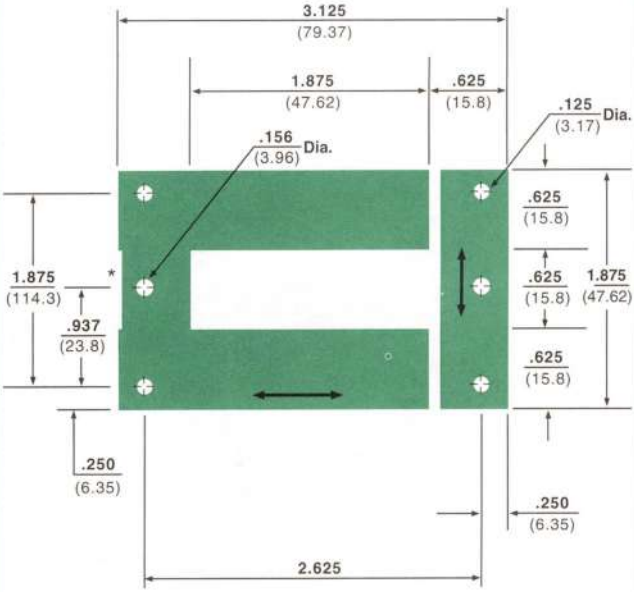
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

Q = 30.0 in. = 76.2 cm.
A = 25.0 in.^{2} = 161.0 cm.^{2}
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{2.33 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.0165 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (2.79 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE UI—⅝H
(16mm)



*Due to method of manufacturing, there will be a .007/.010 × .625 notch in this area.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	17.81	8.08	56.15	123.80
.011	0.28	13.99	6.35	71.48	157.60
.009	0.23	11.45	5.19	87.34	192.50
.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.
2.93	48	.80	363	1.17	7.55

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 7.5 in. = 19.05 cm.

A = .391 in.^{2} = 2.52 cm.^{2}

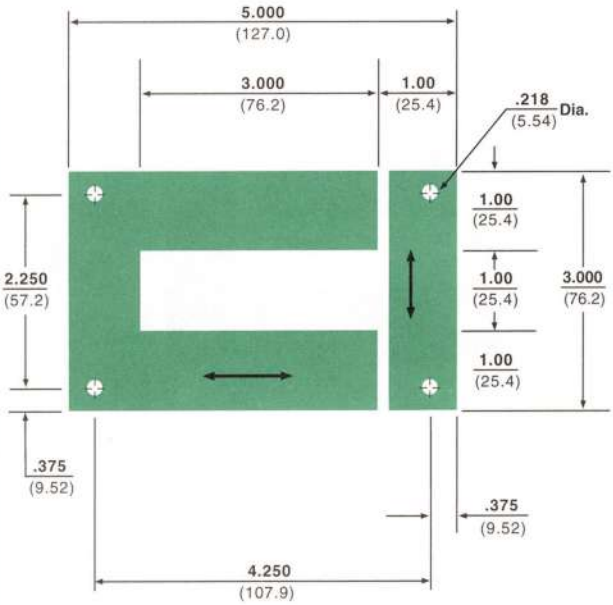
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{146.1 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.066 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.19 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE UI—1MH
(25mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	45.98	20.86	21.75	47.95
.011	0.28	36.13	16.39	27.68	61.02
.009	0.23	29.56	13.41	33.83	74.58
.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	196.7	3.31	1502	3.0	19.35

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 12 in. = 30.48 cm.

A = 1.0 in.^{2} = 6.71 cm.^{2}

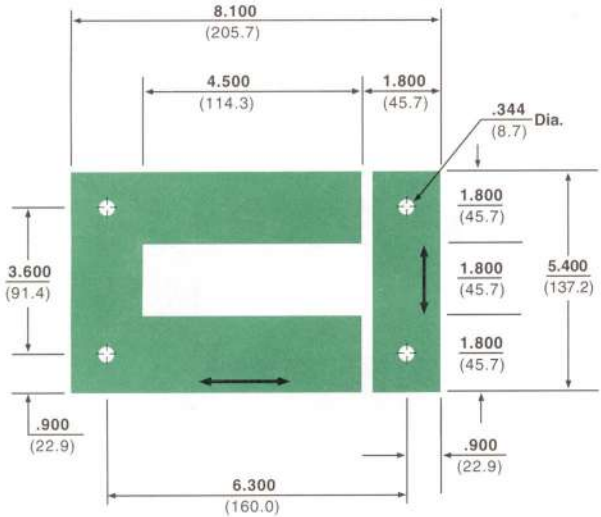
60 Hertz Reactance (N = number of turns)

$B_{max} = \frac{58.16 \times 10^3}{K_1 N}$ Gauss per volt

$H_o = (.0412 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.304 \times 10^{-8}) K_1 N^2 \mu_{ac}$ Henrys

SINGLE PHASE UI—1.80H
(46mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	136.8	62.0	7.31	16.12
.011	0.28	107.49	48.8	9.30	20.50
.009	0.23	87.94	39.9	11.37	25.06
.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.
60.31	990	16.71	7580	8.10	52.3

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 19.80 in. = 50.29 cm.

A = 3.24 in.^{2} = 20.95 cm.^{2}

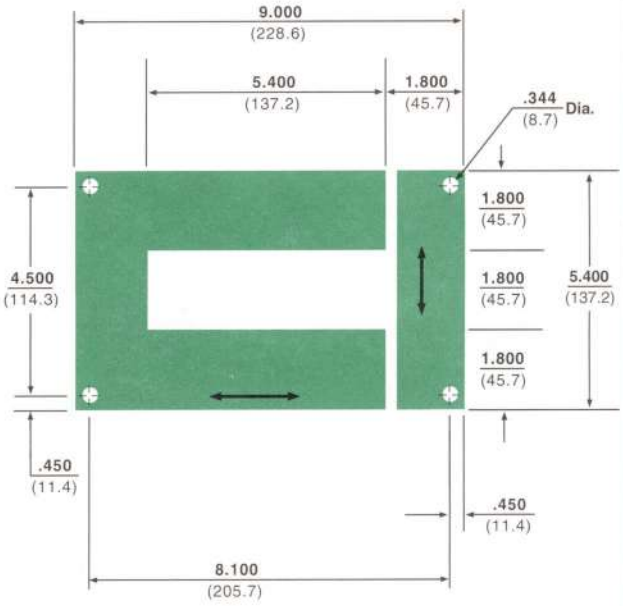
60 Hertz Reactance (N = number of turns)

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

$H_o = (.025 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.548 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE UI—1.80MH
(46mm)



Due to method of manufacturing, there will be a .010 inch indentation the width of the window where (*) appears.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	149.3	67.7	6.70	14.77
.011	0.28	117.31	53.23	8.52	18.78
.009	0.23	95.98	43.55	10.42	22.97
.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.
65.81	1080	18.23	8270	9.72	62.7

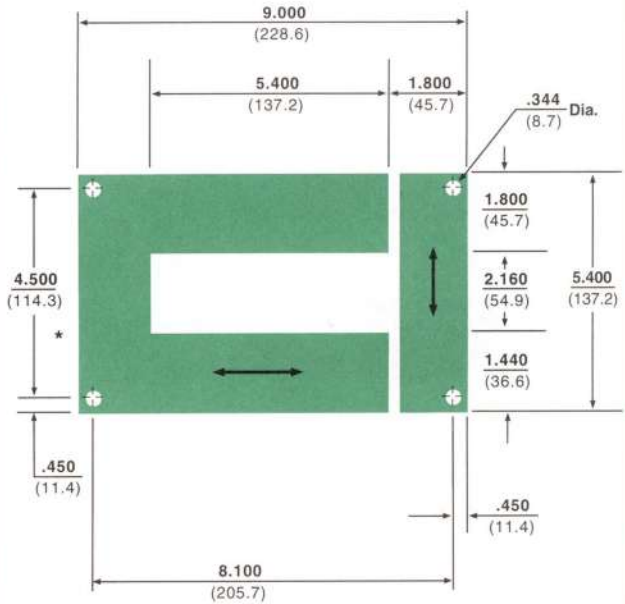
MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 21.60 in. = 54.86 cm.
A = 3.24 in.^{2} = 20.90 cm.^{2}
60 Hertz Reactance (N = number of turns)

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

$H_o = (.023 \times 10^{-3})$ N Oersteds per milliampere of direct current
$L_a = (.503 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

WIDE WINDOW UI—1.80MHW
(46mm)



Due to method of manufacturing, there will be a .010 inch indentation the width of the window where (*) appears.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	141.7	64.3	7.06	15.56
.011	0.28	111.34	50.52	8.98	19.79
.009	0.23	91.09	41.33	10.98	24.20
.007	0.18				
.006	0.15				
.004	0.10				

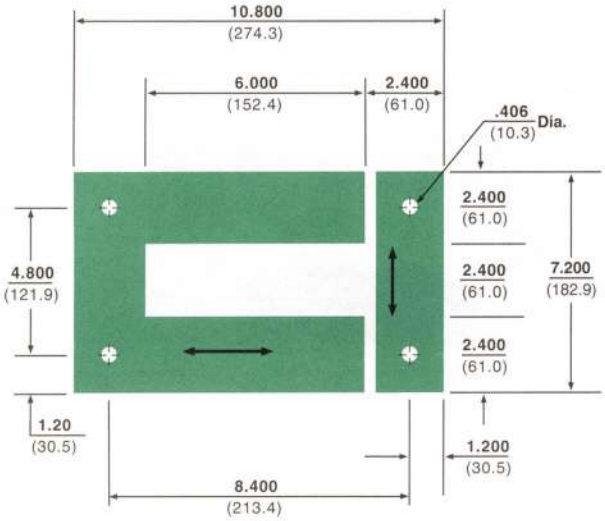
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
62.50	1020	17.31	7850	11.66	75.3

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 21.96 in. = 55.78 cm.

SINGLE PHASE UI—2.40H
(61mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	243.7	110.5	4.10	9.05
.011	0.28	191.48	86.88	5.22	11.50
.009	0.23	156.66	71.08	6.38	14.06
.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.
143.28	2350	39.69	18000	14.40	92.9

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 26.40 in. = 67.06 cm.

A = 5.76 in.^{2} = 37.2 cm.^{2}

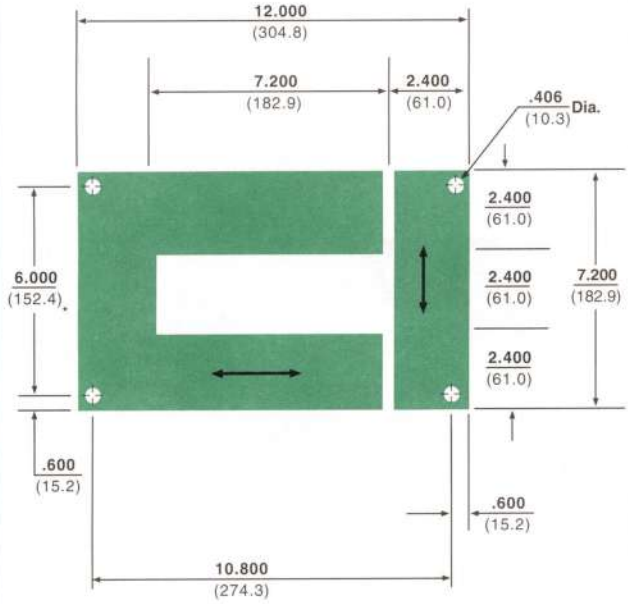
60 Hertz Reactance (N = number of turns)

$$B_{max} = \frac{10.10 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.019 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.731 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

SINGLE PHASE UI—2.40MH
(61mm)



Due to method of manufacturing, there will be a .010 inch indentation the width of the window where (*) appears.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	266.1	120.7	3.76	8.29
.011	0.28	209.08	94.86	4.78	10.54
.009	0.23	171.06	77.61	5.85	12.89
.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.
156.44	2560	43.33	19660	17.28	111.5

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 28.80 in. = 73.15 cm.

A = 5.76 in.^{2} = 37.2 cm.^{2}

60 Hertz Reactance (N = number of turns)

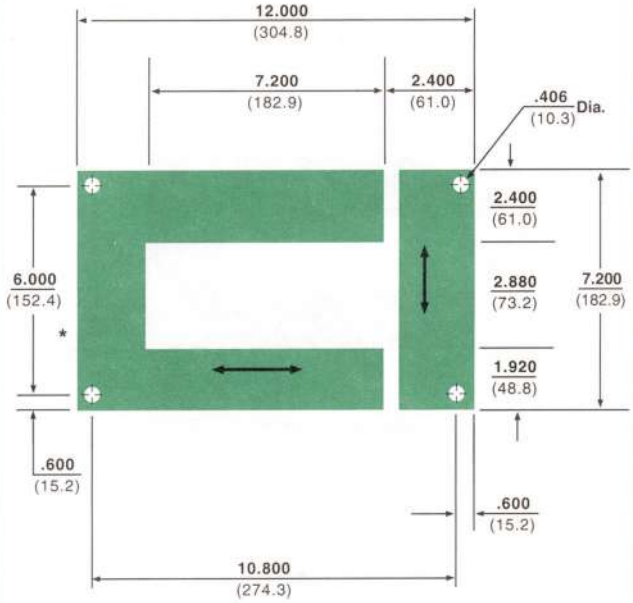
$$B_{max} = \frac{10.10 \times 10^3}{K_1 N} \text{ Gauss per volt}$$

$H_o = (.017 \times 10^{-3})$ N Oersteds per milliampere of direct current

$L_a = (.670 \times 10^{-8})\ K_1 N^2\ \mu_{ac}$ Henrys

WIDE WINDOW UI—2.40MHW

(61mm)



Due to method of manufacturing, there will be a .010 inch indentation the width of the window where (*) appears.

THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	252.5	114.5	3.96	8.73
.011	0.28	198.39	90.01	5.04	11.11
.009	0.23	162.32	73.65	6.16	13.58
.007	0.18				
.006	0.15				
.004	0.10				

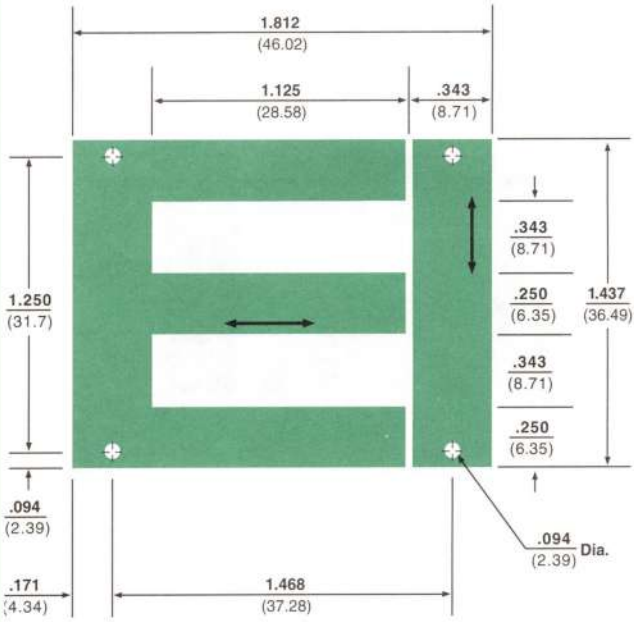
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
148.46	2430	41.12	18650	20.74	133.8

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

ℓ = 29.28 in. = 74.37 cm.

THREE PHASE EI—¼
(6mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	6.65	3.01	150.4	330.88
.011	0.28	5.225	2.371	191.4	421.8
.009	0.23	4.275	1.940	233.9	515.5
.007	0.18	3.325	1.509	300.8	662.7
.006	0.15	2.85	1.29	351	772.2
.004	0.10	1.90	0.861	526	1160

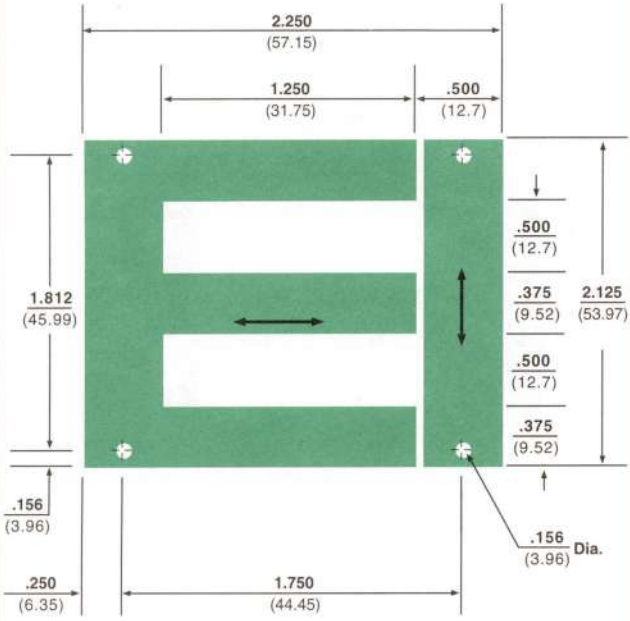
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
0.451	7.39	0.125	56.5	0.387	2.49

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 0.062 in.^{2} = 0.403 cm.^{2}

THREE PHASE EI—3/8
(10mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	12.70	5.753	78.74	173.228
.011	0.28	9.979	4.528	100.2	220.8
.009	0.23	8.160	3.702	122.5	270.1
.007	0.18	6.350	2.881	157.5	347.1
.006	0.15	5.42	2.45	185	407
.004	0.10	3.62	1.64	276	609

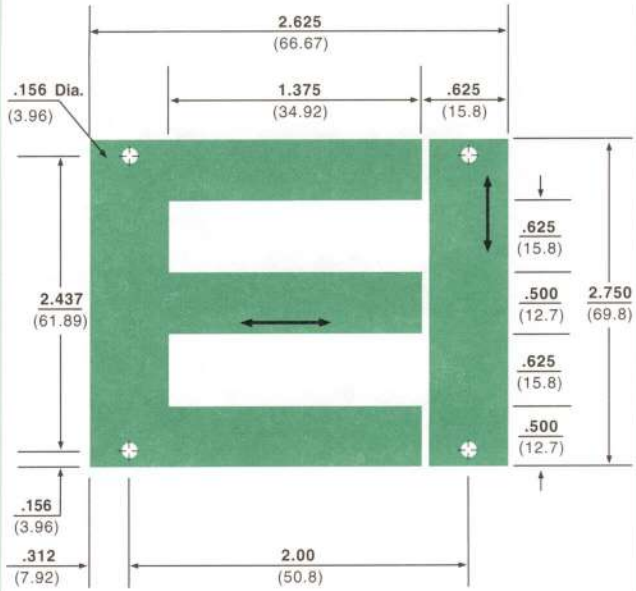
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
1.295	21.20	0.358	162.5	0.625	4.035

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 0.141 in.^{2} = 0.908 cm.^{2}

THREE PHASE EI—½
(13mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	20.65	9.354	48.43	106.546
.011	0.28	16.225	7.362	61.6	135.8
.009	0.23	13.275	6.023	75.3	166.0
.007	0.18	10.325	4.685	96.9	213.4
.006	0.15	8.84	4.00	113	248.6
.004	0.10	5.90	2.67	170	374

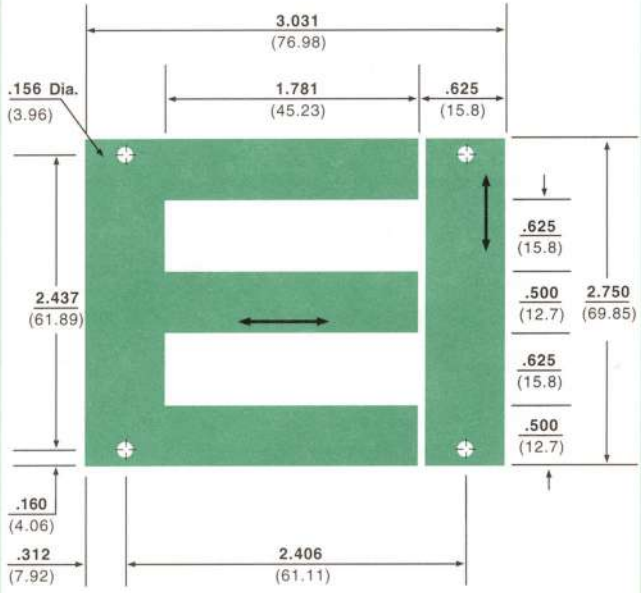
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
2.72	44.60	0.752	341	0.859	5.55

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 0.250 in.^{2} = 1.615 cm.^{2}

THREE PHASE EI—½L
(13mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35				
.011	0.28				
.009	0.23				
.007	0.18	11.678	5.299	85.6	188.7
.006	0.15	10.01	4.53	100	220
.004	0.10	6.68	3.03	150	330

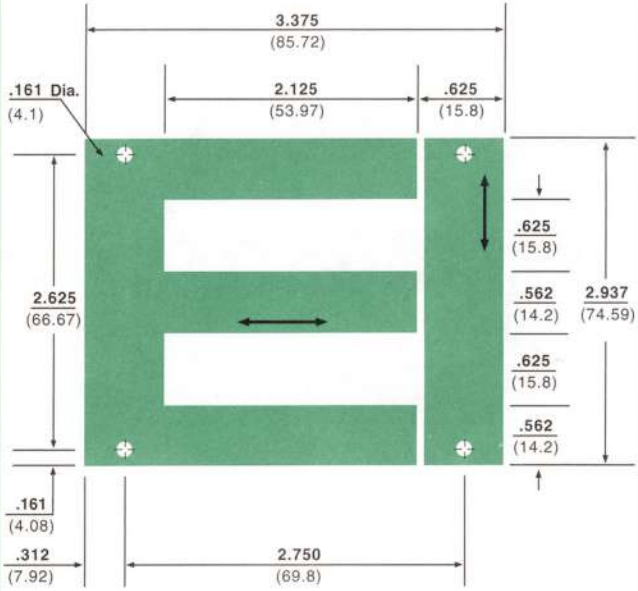
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
3.017	49.43	0.834	378	1.113	7.18

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 0.250 in.^{2} = 1.615 cm.^{2}

THREE PHASE EI—9/16
(14mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35				
.011	0.28				
.009	0.23				
.007	0.18	15.687	7.113	63.7	140.6
.006	0.15	13.36	6.05	74.50	163.9
.004	0.10	7.92	3.59	126.0	277.2

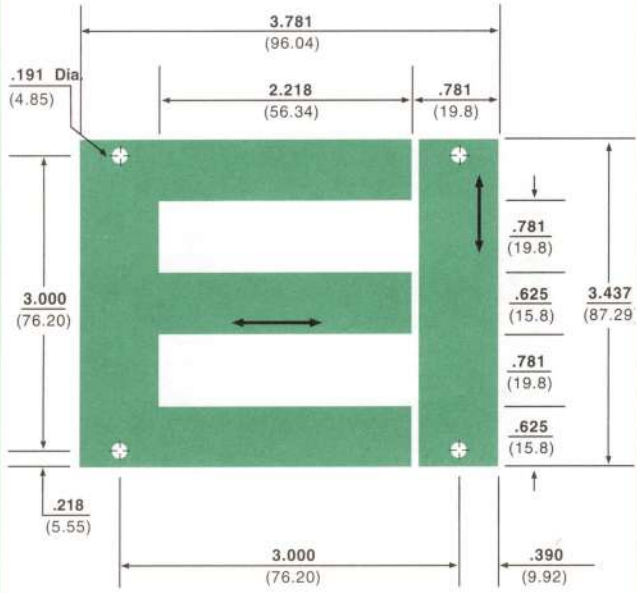
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
3.53	57.40	0.978	443	1.328	8.575

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

$A = 0.316.^2 = 2.04\ cm.^2$

THREE PHASE EI—5/8
(16mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	36.90	16.71	27.10	59.62
.011	0.28	28.993	13.155	34.5	76.0
.009	0.23	23.721	10.763	42.2	94.7
.007	0.18	18.450	8.371	54.2	119.5
.006	0.15	15.82	7.166	63.21	139.062
.004	0.10	10.54	4.774	94.87	208.714

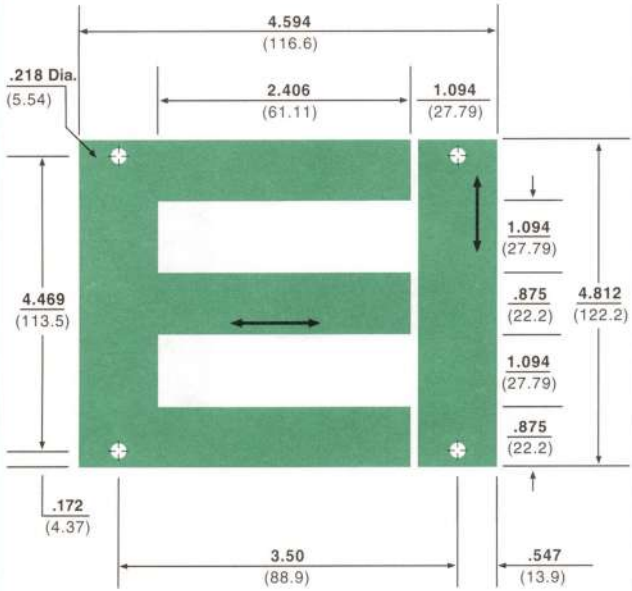
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
5.91	97.0	1.64	743	1.74	11.30

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 0.391 in.^{2} = 2.52 cm.^{2}

THREE PHASE EI—⅞
(22mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	61.20	27.72	16.30	35.86
.011	0.28	48.086	21.818	20.8	45.8
.009	0.23	39.343	17.851	25.4	56.0
.007	0.18	30.600	13.884	32.7	72.0
.006	0.15	26.18	11.86	38.19	84.018
.004	0.10	17.43	7.895	57.36	126.192

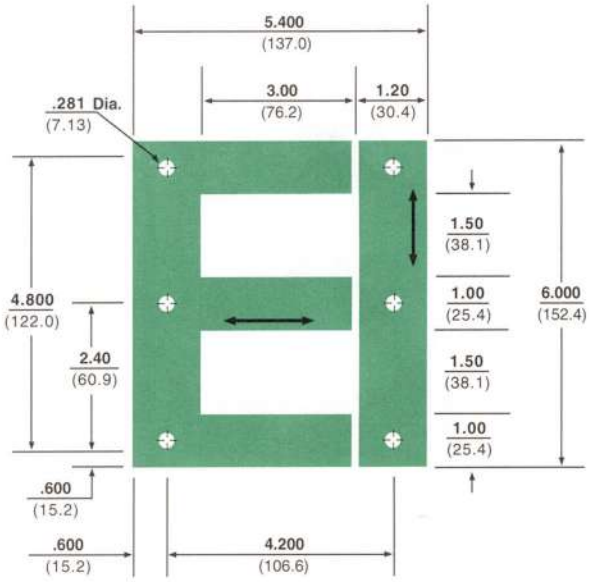
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
14.62	240	4.05	1835	2.625	16.95

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = .765 in.^{2} = 4.94 cm.^{2}

THREE PHASE EI—1.00
(25mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	87.0	39.4	11.49	25.278
.011	0.28	68.357	31.015	14.6	32.2
.009	0.23	55.929	25.376	17.9	39.4
.007	0.18	43.500	19.737	23.0	50.7
.006	0.15	36.7	16.6	27.24	59.928
.004	0.10				

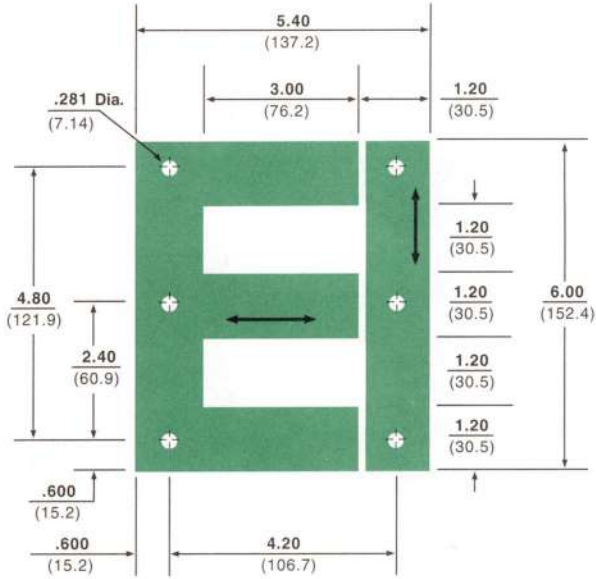
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
23.03	373	6.38	2896	4.50	29.0

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 1.00 in.^{2} = 6.45 cm.^{2}

THREE PHASE EI—1.20
(30mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	97.0	43.9	10.3	22.66
.011	0.28	76.214	34.580	13.1	28.9
.009	0.23	62.357	28.293	16.0	35.3
.007	0.18	48.500	22.005	20.6	45.4
.006	0.15	39.4	17.8	25.0	55
.004	0.10	26.3	11.9	38.0	83.6

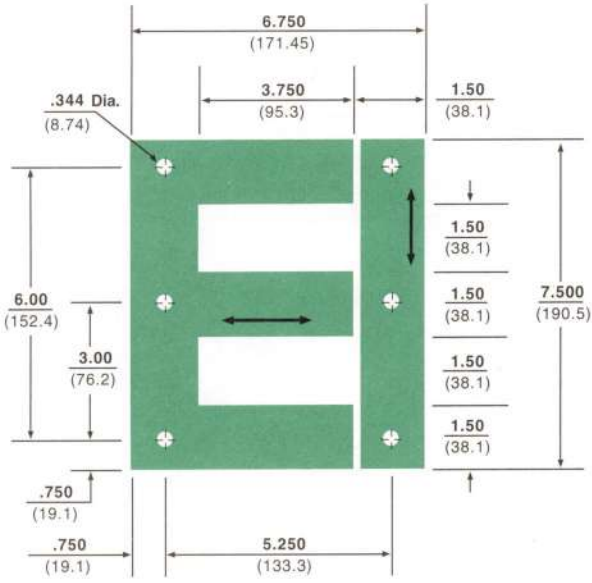
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
29.8	488	8.23	3733	3.60	23.25

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 1.44 in.^{2} = 9.30 cm.^{2}

THREE PHASE EI—1.50
(38mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	151.0	68.40	6.62	14.56
.011	0.28	118.643	53.832	8.4	18.6
.009	0.23	97.071	44.043	10.3	22.7
.007	0.18				
.006	0.15				
.004	0.10				

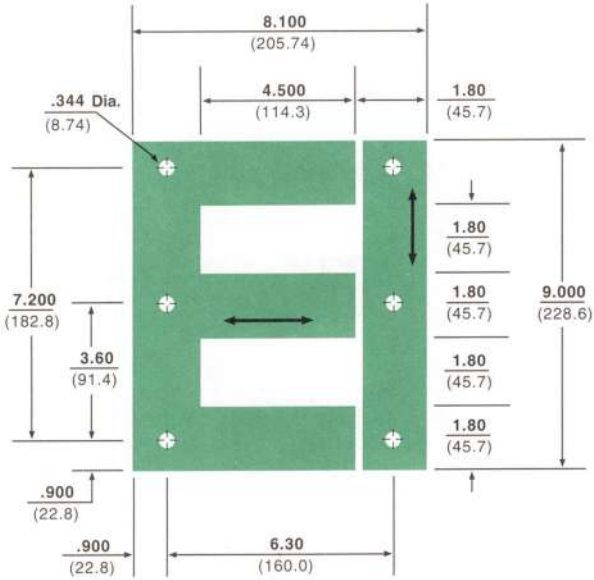
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
59.20	946	16.30	7323	5.62	36.28

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 2.25 in.^{2} = 14.52 cm.^{2}

THREE PHASE EI—1.80
(46mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	274.0	124.1	3.65	8.03
.014	0.35	203.2	92.07	4.92	10.82
.011	0.28	159.657	72.440	6.3	13.8
.009	0.23	130.629	59.269	7.7	16.9
.007	0.18	101.600	46.098	9.8	21.7
.006	0.15	92.0	41.7	11.0	24.2
.004	0.10				

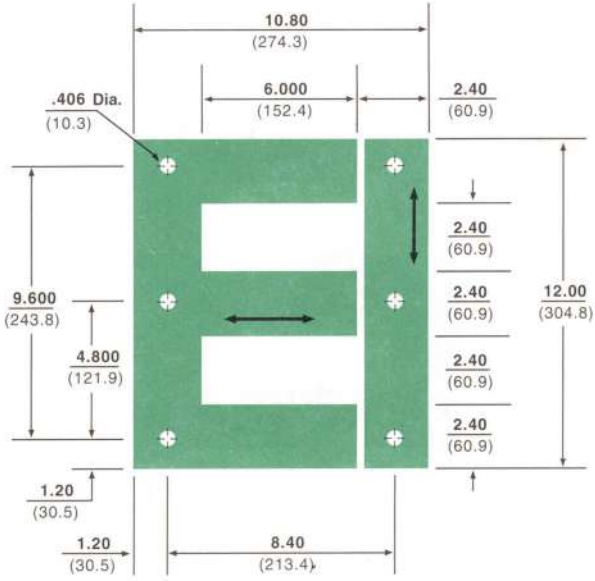
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
101	1656	27.9	12650	8.1	52.25

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 3.24 in.^{2} = 20.90 cm.^{2}

THREE PHASE EI—2.40
(61mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47	504.8	228.3	1.98	4.356
.014	0.35	362.1	164.0	2.76	6.072
.011	0.28	284.507	129.087	3.5	7.7
.009	0.23	232.779	105.617	4.3	9.5
.007	0.18				
.006	0.15				
.004	0.10				

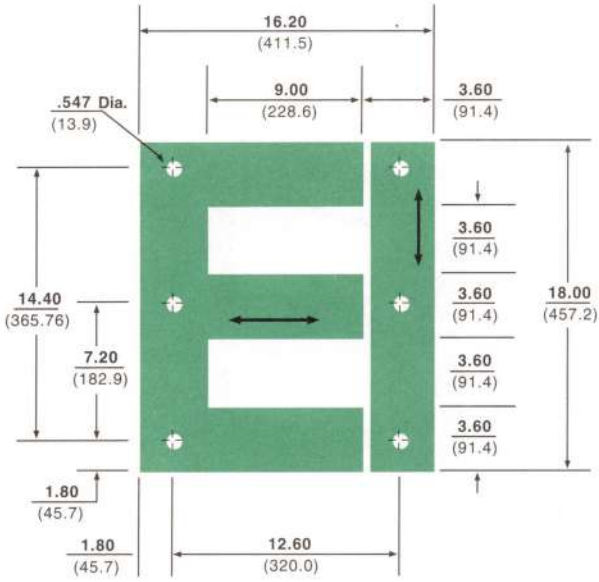
CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
240	3940	66.4	30141	14.4	93.0

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 5.77 in.^{2} = 37.3 cm.^{2}

THREE PHASE EI—3.60
(91mm)



THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	EI's/lb.	EI's/Kg
.0185	0.47				
.014	0.35	815.9	369.6	1.225	2.695
.011	0.28	641.064	290.864	1.6	3.4
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

CHARACTERISTICS OF CORE STACK HAVING SQUARE CENTER

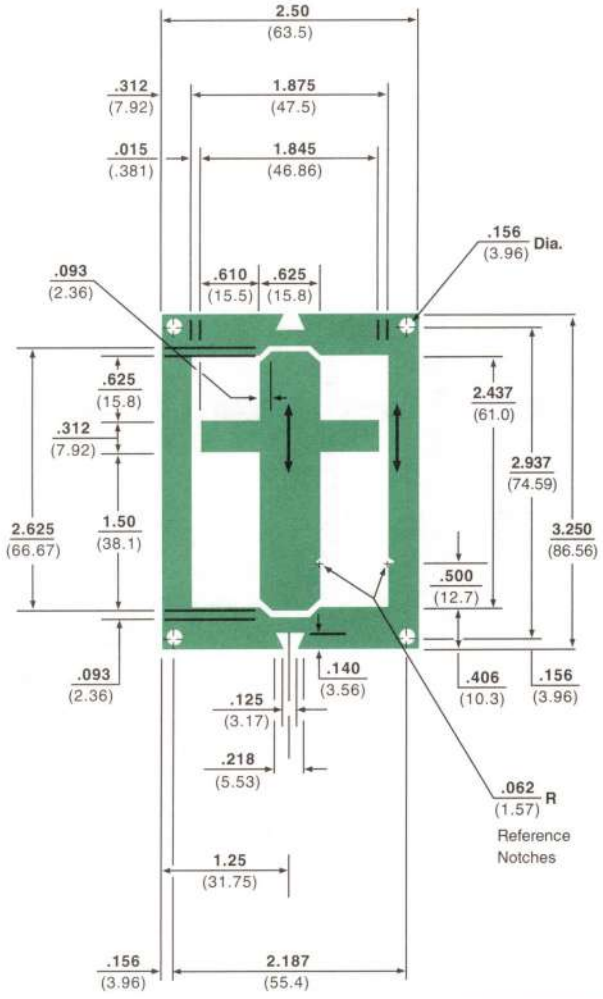
VOLUME		WEIGHT		WINDOW AREA	
cu. in.	cu. cm.	lbs.	grams	sq. in.	sq. cm.
811.5	13320	224	101900	32.4	209

MAGNETIC PATH DIMENSIONS AND DESIGN FORMULAS

A = 12.96 in.^{2} = 83.61 cm.^{2}

CRUCIFORM TO—5/8

(16mm) FERRO-RESONANT



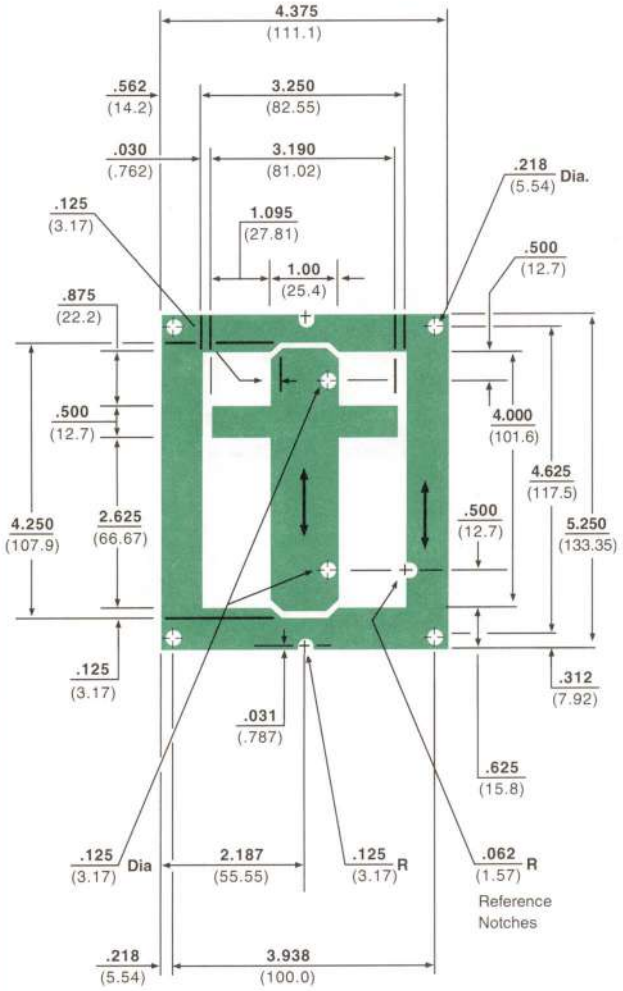
THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	20.64	9.35	46.2	101.64
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

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

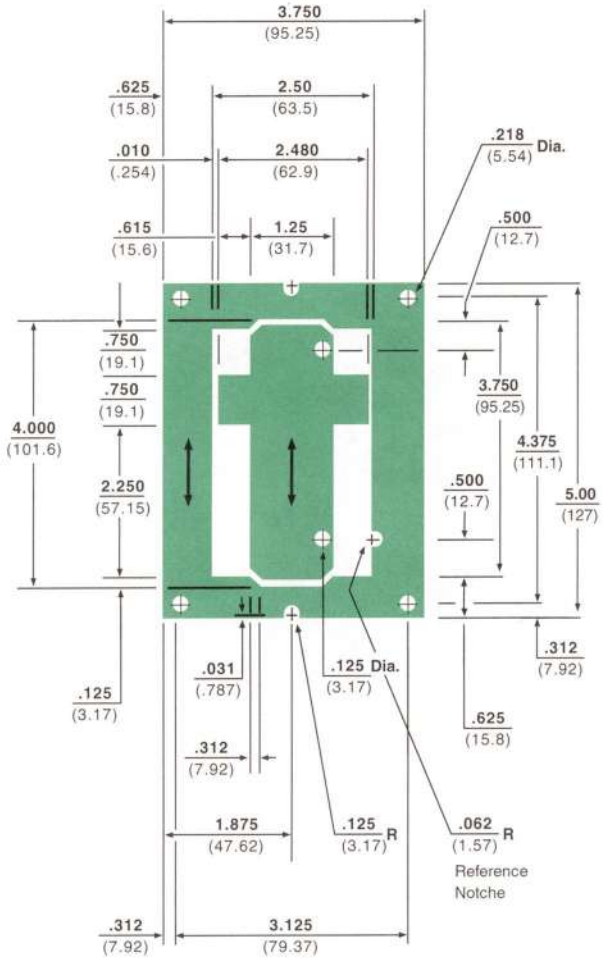


THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47				
.014	0.35	57.49	26.04	17.4	38.28
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

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



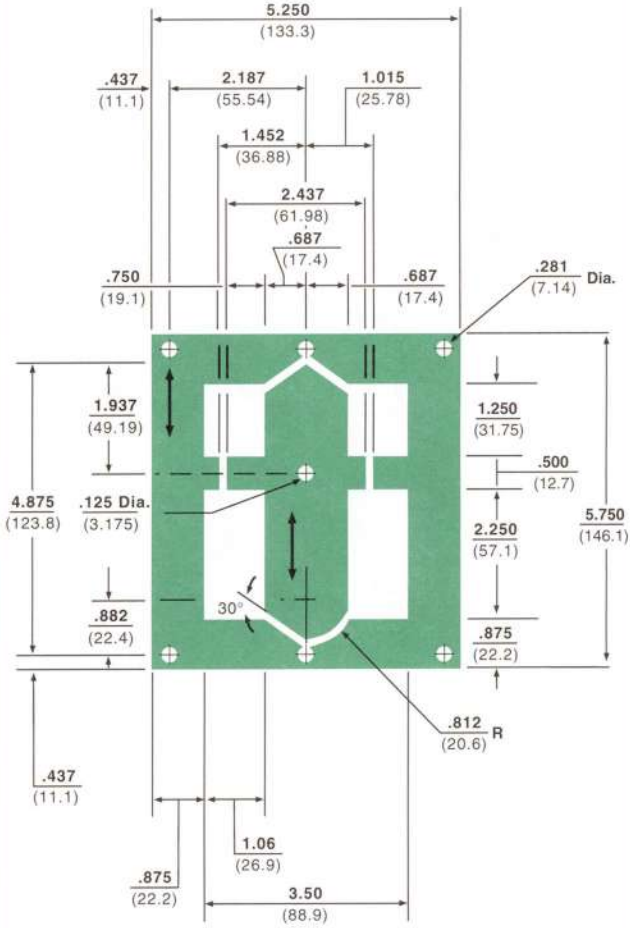
THICKNESS		LAMINATION WEIGHTS			
in.	mm.	lb./1 K	Kg/1 K	El's/lb.	El's/Kg
.0185	0.47	69.13	31.31	14.45	31.79
.014	0.35				
.011	0.28				
.009	0.23				
.007	0.18				
.006	0.15				
.004	0.10				

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—1⅜

(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

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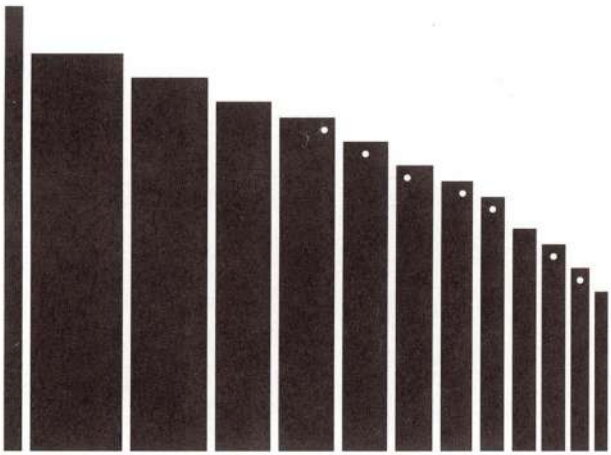

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- Can be supplied with any size holes, positioned as required, and/or mitered corners.

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