



# Encapsulated Forms

## 50-3000VA

The same high-quality electrical performance you've come to expect in GE Type IP transformers now comes in encapsulated designs. The transformer coil is completely surrounded by epoxy, making the unit impervious to external elements.

Terminations are made of a new, rugged, high-impact plastic terminal strip. Full head #8 brass screws assure quick, easy terminations with maximum connection integrity.

The encapsulated design retains dimensions and footprints similar to our previous style core and coil units for easy exchange.

### Machine Tool Applications Single-Phase

Continuous KVA	Frame Size	Inrush VA at 20 PF, 95% sec. volt	Catalog Number Terminal Strip	Wiring Diagram No. Page 17-7	List Price, GO-80
<b>220/440, 230/460, 240/480 Volts Primary — 110, 115, 120 Volts Secondary — 60 Hertz</b>					
.050	611	160	9T58K0042	1	\$ 25.00
.075	612	270	9T58K0043	1	29.00
.100	811	420	9T58K0044	1	33.00
.150	813	640	9T58K0045	1	37.00
.200	814	860	9T58K4135	1	46.00
.250	815	980	9T58K0047	1	54.00
.300	817	1380	9T58K0048	1	60.00
.375	817	1750	9T58K0049	1	69.50
.500	1016	1980	9T58B0050	1	79.00
<b>230/460/575 Volts Primary — 115/95 Volts Secondary — 50/60 Hertz</b>					
.050	613	200	9T58K0062	2	36.00
.075	811	300	9T58K0063	2	42.00
.100	813	380	9T58K0064	2	45.00
.150	815	730	9T58K0065	2	57.50
.200	815	760	9T58K0066	2	65.00
.250	817	830	9T58K0067	2	77.00
.300	1016	1040	9T58K0068	2	87.00
.375	1016	1400	9T58K0069	2	96.00
.500	1016	1740	9T58K0070	2	104.00
<b>208/277/380 Volts Primary — 115/95 Volts Secondary — 50/60 Hertz</b>					
.050	613	200	9T58K0082	3	36.00
.075	811	300	9T58K0083	3	42.00
.100	813	380	9T58K0084	3	45.00
.150	815	730	9T58K0085	3	57.50
.200	815	760	9T58K0086	3	65.00
.250	817	830	9T58K0087	3	77.00
.300	1016	1040	9T58K0088	3	87.00
.375	1016	1400	9T58K0089	3	96.00
.500	1016	1740	9T58K0090	3	104.00
<b>55°C rise, all copper 220/240, 230/460, 240/480 Volts Primary — 110, 115, 120 Volts Secondary — 60 Hertz</b>					
.050	611	160	9T58K0042	1	25.00
.075	612	270	9T58K0043	1	29.00
.100	811	420	9T58K0044	1	33.00
.150	813	640	9T58K0045	1	37.00
.250	817	980	9T58K3135	1	60.00
.300	1016	1380	9T58K3331	1	75.50
.375	1016	1750	9T58K3332	1	89.00
.500	1219	1980	9T58B3301	1	98.50

### Control Power Applications Single-Phase

Continuous KVA	Frame Size	Catalog Number		Wiring Diagram No. Page 17-7	List Price, GO-80
		Terminal Strip	With Primary and Secondary Leads Out		
<b>240/480 Volts Primary — 120/240 Volts Secondary — 60 Hertz</b>					
.050	611	9T58K2802	9T58K1802	4	\$ 36.00
.075	612	9T58K2803	9T58K1803	4	42.00
.100	811	9T58K2804	9T58K1804	4	45.00
.150	813	9T58K2805	9T58K1805	4	57.50
.200	814	9T58K2806	9T58K1806	4	65.00
.250	815	9T58K2807	9T58K1807	4	73.00
.300	815	9T58K2808	9T58K1808	4	76.00
.375	817	9T58K2809	9T58K1809	4	96.00
.500	1016	9T58K2810	9T58K1810	4	104.00
<b>600 Volts Primary — 120/240 Volts Secondary — 60 Hertz</b>					
.100	911	9T58K2824	9T58K1824	5	45.00
.200	814	9T58K2826	9T58K1826	5	65.00
.300	815	9T58K2828	9T58K1828	5	73.00
.500	1016	9T58K2830	9T58K1830	5	104.00
<b>120/240 Volts Primary — 120/240 Volts Secondary — 60 Hertz</b>					
.100	811	9T58K2907	—	6	44.00
.200	814	9T58K2909	—	6	65.50
.300	815	9T58K2911	—	6	72.00
.500	1016	9T58K2913	—	6	101.00
<b>120/240 Volts Primary — 12/24 Volts Secondary — 60 Hertz</b>					
.050	611	9T58K2873	9T58K1873	7	29.00
.075	612	9T58K2874	9T58K1874	7	35.00
.100	811	9T58K2875	9T58K1875	7	39.00
.150	813	9T58K2876	9T58K1876	7	48.50
.200	814	9T58K2877	9T58K1877	7	58.50
.250	815	9T58K2878	9T58K1878	7	62.50
.300	815	9T58K2879	9T58K1879	7	67.00
.500	1016	—	9T58K1881	7	93.00
<b>240/480 Volts Primary — 120/240 Volts Secondary — 50/60 Hertz</b>					
.500	1016	9T58K2930	—	4	104.00
<b>380/400/416 Volts Primary — 115/230 Volts Secondary — 50/60 Hertz</b>					
.500	1016	9T58K2978	—	8	104.00

Continuous KVA	Frame Size	Catalog Number — Terminal Strip	List Price, GO-80
<b>240/480 Volts Primary — 12/24 Volts Secondary — 60 Hertz</b>			
.050	611	9T58K3164	\$34.50
.100	811	9T58K4132	40.50
.150	813	9T58K4133	48.50
.250	815	9T58K3024	62.50
<b>208/240 Volts Primary — 12/24 Volts Secondary — 60 Hertz</b>			
.050	611	9T58K4050	34.50
.100	811	9T58K4051	40.50
.150	813	9T58K4052	48.50
.250	815	9T58K4053	62.50

① Secondary fusing not available.      ② Nonencapsulated.

### Options

**Secondary fusing:** Factory- or field-installed secondary fuse clips are available. They are restricted to units with terminal strips and a single secondary voltage.

**Dual primary and secondary fusing:** Factory- or field-installed dual primary and secondary fusing is available on all units, including leads out and multiple secondary voltages.

**Leads out:** Terminal strip is replaced by rugged primary and secondary leads emanating from the top of the encapsulated coil.





### Description

Type IP transformers are core and coil units designed for machine tool, industrial control, panelboard, and general-purpose applications.

Several types of terminations are available to simplify installation. These include primary and secondary leads out, integral fuse, and spade-type terminals. Top-mounted terminal boards are also offered for complex multiple terminals and other special applications. Consult your nearest GE Industrial Systems—Electrical Distribution and Control Representative for complete technical applications data.

**Standards:** Type IP units conform to ANSI C89.2. They are UL listed under UL-506, File E2739 and C-UL listed.

**Insulation classes:** Generally, 150 VA and below are 105°C insulation class, 55°C rise. 200 VA and above are 185°C (NEMA), 180°C (UL) insulation class, 115°C rise. Maximum surface temperature is 65°C.

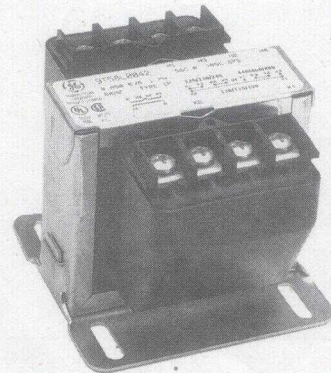
**Frequency:** 60 Hertz is standard; 50 Hertz is available as an option.

**Voltage regulation:** All designs 2.0 KVA and below are compensated for voltage drop. Generally, this compensation ranges from 10% in the smallest rating to 3% for the largest. All machine tool designs meet or exceed NMTBA regulation requirements.

**Series-multiple secondary connections:** Transformers with 120/240 V secondaries (series-multiple) may be connected for 120 V, 240 V or 240/120 V three-wire. Jumpers are provided.

**Overcurrent protection:** Type IP transformers are low impedance transformers that require overcurrent protection for most applications. They provide for optional integral primary and/or secondary fusing.

**Mounting dimensions:** Type IP transformers are lightweight, small and designed for minimum mounting dimensions. Many units will fit competitors' mounting footprints.



**Type IP—Encapsulated  
50 VA—3000 VA**

Type IP Core and Coil Transformers	
Encapsulated Forms . . . . .	17-1 to 17-6
Wiring Diagrams . . . . .	17-7
Universal Voltage/Multi-Tap . . . . .	17-8
CE Approved Designs . . . . .	17-9, 17-10, 17-13
Dry-Type General-Purpose Transformers . . . . .	17-11, 17-12

**References:**  
See Publication Index, Section 18.



# Type IP Core and Coil Transformers

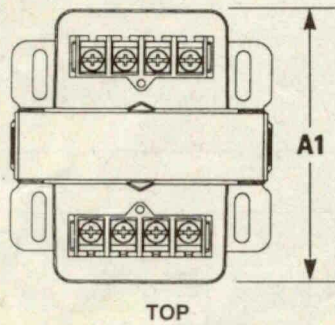
50-3000 VA, Encapsulated

## Encapsulated Transformer Dimensions and Weights

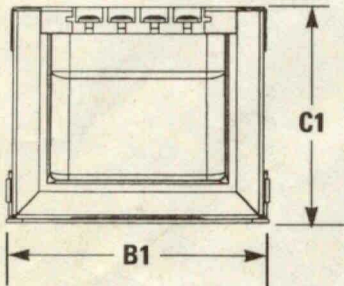
Frame	Ref 60 Hz kVA	Approx. Weight (Lbs.)	Maximum Envelope						Mounting		
			Depth		Width		Height		Depth	Width	Slot
			A1	A2	B1	B2	C1	C2	E	F	G
611	.050	2.6	3.97	3.18	3.29	3.29	2.79	2.64	2.16	2.50	.219 x .750
612	.075	3.0	4.22	3.43	3.29	3.29	2.79	2.64	2.41	2.50	.219 x .750
613	.087	3.4	4.47	3.68	3.29	3.29	2.79	2.64	2.66	2.50	.219 x .750
811	.100	3.9	4.17	3.18	4.04	4.04	3.29	3.29	2.16	3.12	.219 x .750
813	.150	5.5	4.67	3.68	4.04	4.04	3.29	3.29	2.66	3.12	.219 x .750
814	.200	6.3	4.92	3.93	4.04	4.04	3.29	3.29	2.91	3.12	.219 x .750
815	.250	7.0	5.17	4.18	4.04	4.04	3.29	3.29	3.16	3.12	.219 x .750
817	.375	8.3	5.67	4.68	4.04	4.04	3.29	3.29	3.66	3.12	.219 x .750
1016	.500	11.6	5.82	5.82	4.79	4.79	3.92	3.92	3.31	3.79	.297 x .590 <sup>ⓐ</sup>

ⓐ The mounting slots on the 1016 frame run side-to-side (parallel to the "F" dimension rather than front-to-rear (parallel to the "E" dimension), as shown.

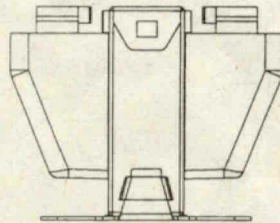
### Terminal Block



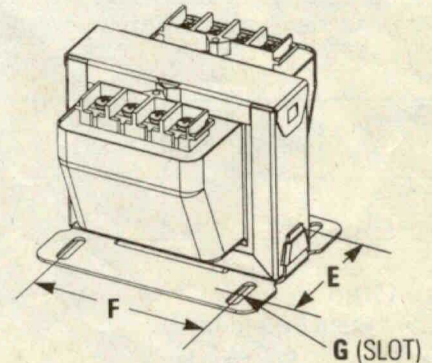
TOP



FRONT

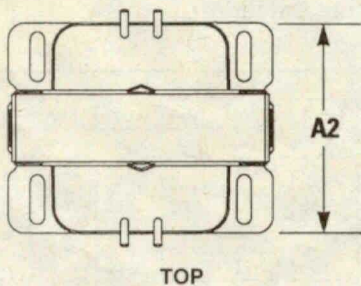


SIDE

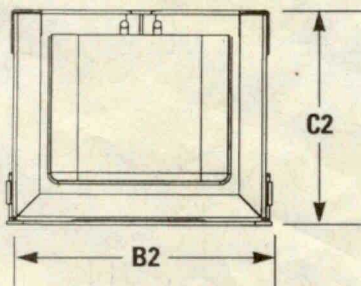


MOUNTING

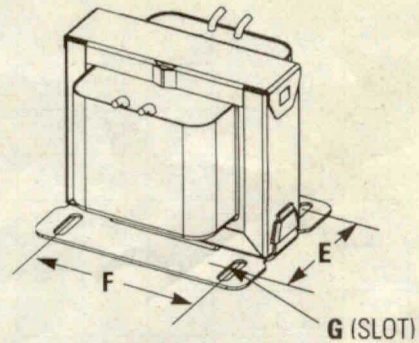
### Leads Out



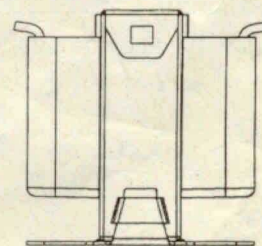
TOP



FRONT



MOUNTING



SIDE