

Steps for Selecting the Proper Transformer

SINGLE PHASE LOADS

1. Determine electrical load

- A. Voltage required by load.
- B. Amperes or KVA capacity required by load.
- C. Frequency in Hz (cycles per second).
- D. Verify load is designed to operate on a single phase supply.

All of the above information is standard data normally obtained from equipment nameplates or instruction manuals.

2. Determine supply voltage

- A. Voltage of supply (source).
- B. Frequency in Hz (cycles per second).

The frequency of the line supply and electrical load must be the same. Select single phase transformer designed to operate at this frequency, having a primary (input) equal to the supply voltage and a secondary (output) equal to the voltage required by the load.

3. If the load nameplate expresses a rating in KVA, a transformer can be directly selected from the charts. Choose from a group of transformers with primary and secondary voltages matching those you have just determined.

- A. Select a transformer with a standard KVA capacity **equal to or greater than** that needed to operate the load.
- B. Primary taps are available on most models to compensate for line voltage variations. (Refer to question #2 in the Transformer Question and Answer Section in the the back of this catalog.)
- C. When load ratings are given only in amperes, tables 1 and 2 or the following formulas may be used to determine proper KVA size for the required transformer.

- (1) To determine **KVA** when volts and amperes are known:

$$KVA = \frac{\text{Volts} \times \text{Amps}}{1000}$$

- (2) To determine **Amperes** when KVA and volts are known:

$$\text{Amps} = \frac{KVA \times 1000}{\text{Volts}}$$

Single Phase Example

Question:

Select a transformer to meet the following conditions. Load is single phase lighting using incandescent lamps. Each fixture requires 1.3 amps @ 120 volts, 1 phase, 60 Hz, power factor of unity. The installation requires 52-100 watt fixtures. The desired circuit distributing power to the light fixtures is 120/240 volt, three wire, single phase. The supply voltage is 460 volt, 3 phase.

Answer:

Compute the KVA required.

$$\frac{1.3 \text{ amps} \times 120 \text{ volts}}{1000} = .156 \text{ KVA}$$

For each lighting fixture

Always use amps x volts to compute VA, **never** use lamp wattage. .156 KVA/ Fixture x 52 Fixture = 8.11 KVA. The two sizes (KVA) nearest 8.11 KVA are 7.5 KVA and 10 KVA. Use the 10 KVA. This will not overload the transformer and allows some capacity, 1.89 KVA, for future loads. Since the supply is 460 V (not 480 V) use the 456 V tap. This will produce approximately 120 volts on output. If the tap is not used, the output will be 115 V compared to the desired 120 V. Note the transformer selected is single phase but the supply is 480 V, 3 phase. Single phase is obtained by using any 2 wires of the 3 phase supply.

TABLE 1

Full Load Current in Amperes—Single Phase Circuits

KVA	120V	208V	240V	277V	380V	440V	480V	600V
.050	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1
.100	0.8	0.5	0.4	0.3	0.2	0.2	0.2	0.2
.150	1.2	0.7	0.6	0.5	0.4	0.3	0.3	0.3
.250	2.0	1.2	1.0	0.9	0.6	0.5	0.5	0.4
.500	4.2	2.4	2.1	1.8	1.3	1.1	1.0	0.8
.750	6.3	3.6	3.1	2.7	2.0	1.7	1.6	1.3
1	8.3	4.8	4.2	3.6	2.6	2.3	2.1	1.7
1.5	12.5	7.2	6.2	5.4	3.9	3.4	3.1	2.5
2	16.7	9.6	8.3	7.2	5.2	4.5	4.2	3.3
3	25	14.4	12.5	10.8	7.9	6.8	6.2	5.0
5	41	24.0	20.8	18.0	13.1	11.3	10.4	8.3
7.5	62	36	31	27	19.7	17	15.6	12.5
10	83	48	41	36	26	22.7	20.8	16.7
15	125	72	62	54	39	34	31	25
25	208	120	104	90	65	57	52	41
37.5	312	180	156	135	98	85	78	62
50	416	240	208	180	131	114	104	83
75	625	360	312	270	197	170	156	125
100	833	480	416	361	263	227	208	166
167	1391	802	695	602	439	379	347	278
250	2083	1201	1041	902	657	568	520	416

TABLE 2

Full Load Amperes Single Phase A.C. Motors ①

HORSE-POWER	115 V	208 V	230 V	MIN. TRANSFORMER KVA
1/6	4.4	2.4	2.2	.53
1/4	5.8	3.2	2.9	.70
1/3	7.2	4.0	3.6	.87
1/2	9.8	5.4	4.9	1.18
3/4	13.8	7.6	6.9	1.66
1	16	8.8	8	1.92
1.5	20	11.0	10	2.40
2	24	13.2	12	2.88
3	34	18.7	17	4.10
5	56	30.8	28	6.72
7.5	80	44	40	9.6
10	100	55	50	12.0

① When motor service factor is greater than 1, increase full load amps proportionally.

Example: If service factor is 1.15, increase above amp values by 15%.

$$1 \text{ Phase KVA} = \frac{\text{Volts} \times \text{Amps}}{1000}$$

NOTE: If motors are started more than once per hour, increase minimum transformer KVA by 20%.

THREE PHASE LOADS

1. Determine electrical load

- A. Voltage required by load.
- B. Amperes or KVA required by load.
- C. Frequency in Hz (cycles per second).
- D. Verify load is designed to operate on three phase.

All the above information is standard data normally obtained from equipment nameplates or instruction manuals.

2. Determine supply voltage

- A. Voltage of supply (source).
- B. Frequency in Hz (cycles per second).

The frequency of the line supply and electrical load must be the same. A three phase transformer is selected which is designed to operate at this frequency having a primary (input) equal to the supply voltage and a secondary (output) equal to the voltage required by the load.

3. If the load nameplate expresses a rating in KVA, a transformer can be directly selected from the charts. Choose from the group of transformers with primary and secondary voltages matching that which you have just determined.

- A. Select a transformer with a standard KVA capacity **equal to or greater than** that needed to operate the load.
- B. Primary taps are available on most models to compensate for line voltage variations. (Refer to question #2 in the Transformer Question and Answer Section in the back of this catalog.)
- C. When load ratings are given only in amperes, tables 3 and 4 or the following formulas may be used to determine proper KVA size for the required transformer.

- (1) To determine three phase KVA when volts and amperes are known:

$$\text{Three Phase KVA} = \frac{\text{Volts} \times \text{Amps} \times 1.73}{1000}$$

- (2) To determine Amperes when KVA and volts are known:

$$\text{Amps} = \frac{3 \text{ Phase KVA} \times 1000}{\text{Volts} \times 1.73}$$

Three Phase Example

Question:

Select a transformer to fulfill the following conditions. Load is a three phase induction motor, 25 horsepower @ 240 volts, 60 Hz and a heater load of 4 kilowatts @ 240 volts single phase. The supply voltage is 480Y/277, three phase, 4 wire.

Answer:

Compute the KVA required. **Motor**—
From table 4 the current is 68 amps.

$$\frac{240 \text{ volts} \times 68 \text{ amps} \times 1.73}{1000} = 28.2 \text{ KVA}$$

(The KVA can also be obtained from table 4).

Heater — 4 KVA

A three phase transformer must be selected so that any one phase is not overloaded. Each phase should have the additional 4 KVA rating required by the heater even though the heater will operate on one phase only. So, the transformer should have a minimum KVA rating of 28.2 + 4 + 4 + 4 or 40.2 KVA. Refer to the appropriate selection chart. A 480 delta primary — 240 delta secondary transformer may be used on a 4 wire, 480Y/277 volt supply. The fourth wire (neutral) is not connected to the transformer. To not overload the transformer, a 45 KVA transformer should be selected.

NOTE: Any two wires of the 240 volts, 3 phase developed by the secondary of the transformer may be used to supply the heater. Any 2 wires of a 3 phase system is single phase.

TABLE 3

Full Load Current in Amperes— Three Phase Circuits

KVA	208 V	240 V	380 V	440 V	480 V	600 V
3	8.3	7.2	4.6	3.9	3.6	2.9
4.5	12.5	10.8	6.8	5.9	5.4	4.3
6	16.6	14.4	9.1	7.8	7.2	5.8
9	25	21.6	13.7	11.8	10.8	8.6
15	41	36	22.8	19.6	18.0	14.4
22.5	62	54	34.2	29	27	21.6
30	83	72	45.6	39	36	28
45	124	108	68.4	59	54	43
75	208	180	114	98	90	72
112.5	312	270	171	147	135	108
150	416	360	228	196	180	144
225	624	541	342	294	270	216
300	832	721	456	392	360	288
500	1387	1202	760	655	601	481
750	2081	1804	1139	984	902	721
1000	2775	2405	1519	1312	1202	962

TABLE 4

Full Load Amperes Three Phase A.C. Motors ①

HORSE-POWER	208 V	230 V	460 V	575 V	MIN. TRANSFORMER KVA
1/2	2.2	2.0	1.0	0.8	0.9
3/4	3.1	2.8	1.4	1.1	1.2
1	4.0	3.6	1.8	1.4	1.5
2	7.5	6.8	3.4	2.7	2.7
3	10.7	9.6	4.8	3.9	3.8
5	16.7	15.2	7.6	6.1	6.3
10	31	28	14	11	11.2
15	46	42	21	17	16.6
20	59	54	27	22	21.6
25	75	68	34	27	26.6
30	88	80	40	32	32.4
40	114	104	52	41	43.2
50	143	130	65	52	52
60	170	154	77	62	64
75	211	192	96	77	80
100	273	248	124	99	103
125	342	312	156	125	130
150	396	360	180	144	150
200	528	480	240	192	200

① When motor service factor is greater than 1, increase full load amps proportionally.
Example: If service factor is 1.15, increase above amp values by 15%.

$$\text{3 Phase KVA} = \frac{\text{Volts} \times \text{Amps} \times 1.73}{1000}$$

NOTE: If motors are started more than once per hour, increase minimum transformer KVA by 20%.

UL - 3R Enclosures

SINGLE PHASE, .05 to .150 KVA



FEATURES

- **UL listed, CSA certified and UL-3R enclosure** meets or exceeds all listing criteria including NEMA, ANSI and OSHA standards.
- **Easy and convenient installation** to meet your requirements, the transformer can be mounted in any position.
- **Long Life** UL class 130°C insulation system. Transformers can be banked for three phase service.
- **Large wiring compartment**, no conduit or pull boxes required. Front access for wiring ease. Wiring compartment remains cool.
- **Completely enclosed UL-3R enclosure** for indoor/outdoor service. Rugged non-ventilated construction.
- **Plenty of knockouts** for multi-directional entry.
- **All copper lead wire terminations.**
- **Ground studs** for use with non-metallic conduit.

SINGLE PHASE, .250 to 25 KVA



FEATURES

- **UL listed, CSA certified and UL-3R enclosures** meets or exceeds all listing criteria including NEMA, ANSI and OSHA standards.
- **Shielded** for cleaner power.
- **Encapsulated and completely enclosed design** electrical grade silica and resin compounds completely enclose the core and coil to seal out all moisture and air. UL Type 3R enclosure for indoor or outdoor service. Encapsulation eliminates corrosion and insulation deterioration.
- **Quiet operation** with sound levels well below NEMA standards.
- **Long life** UL class 155° C insulation system. 115° C rise thru .750 KVA; 180° C insulation system, 115° C rise, 1 KVA and above.
- **Installation** keyhole mounting slots for mounting bolts prior to installation. Mounting slots are accessible from the front. Lifting ears are included on 3 to 25 KVA units.
- **Wiring** flexible copper leadwire terminations for easy connections

outside the front access wiring compartment. Dual size knockouts in both sides and the bottom of the wiring compartment for greater wiring convenience and flexibility.



Shielded Power in Many Design Styles



THREE PHASE 3 to 75 KVA

FEATURES

- **UL listed, CSA certified and UL-3R enclosure** meets or exceeds all listing criteria including NEMA, ANSI and OSHA standards.
- **UL Class 180°C insulation system.** 115°C rise.
- **Extra large front access wiring compartment** through 9 KVA; top access through 75 KVA for easier installation and cooler case temperatures.
- **Completely enclosed** — suitable for indoor/outdoor service. Consult selection charts for details. Excellent for dust or lint laden atmosphere.
- **Encapsulated** — electrical grade silica and resin compound completely encloses the core and coil. Encapsulation seals out all moisture and air, eliminating corrosion and insulation deterioration.
- **High efficiency** and excellent regulation.



- Sound levels below NEMA standards.
- Keyhole mounting slots permit installation of mounting bolts prior to hanging transformer and are accessible from the front. Lifting ears for easy installation.
- Wiring connections can be made outside of wiring compartment due to the use of flexible leads.
- 3-9 KVA provided with dual size knockouts in sides and bottom of wiring compartment.
- Termination — copper lead wire.
- Electrostatic shielding provided on all 60 Hz isolation transformers.

NOTE: Units above 15 KVA apply to Groups F and K.

SINGLE PHASE 37.5 to 250 KVA THREE PHASE 25 to 1000 KVA

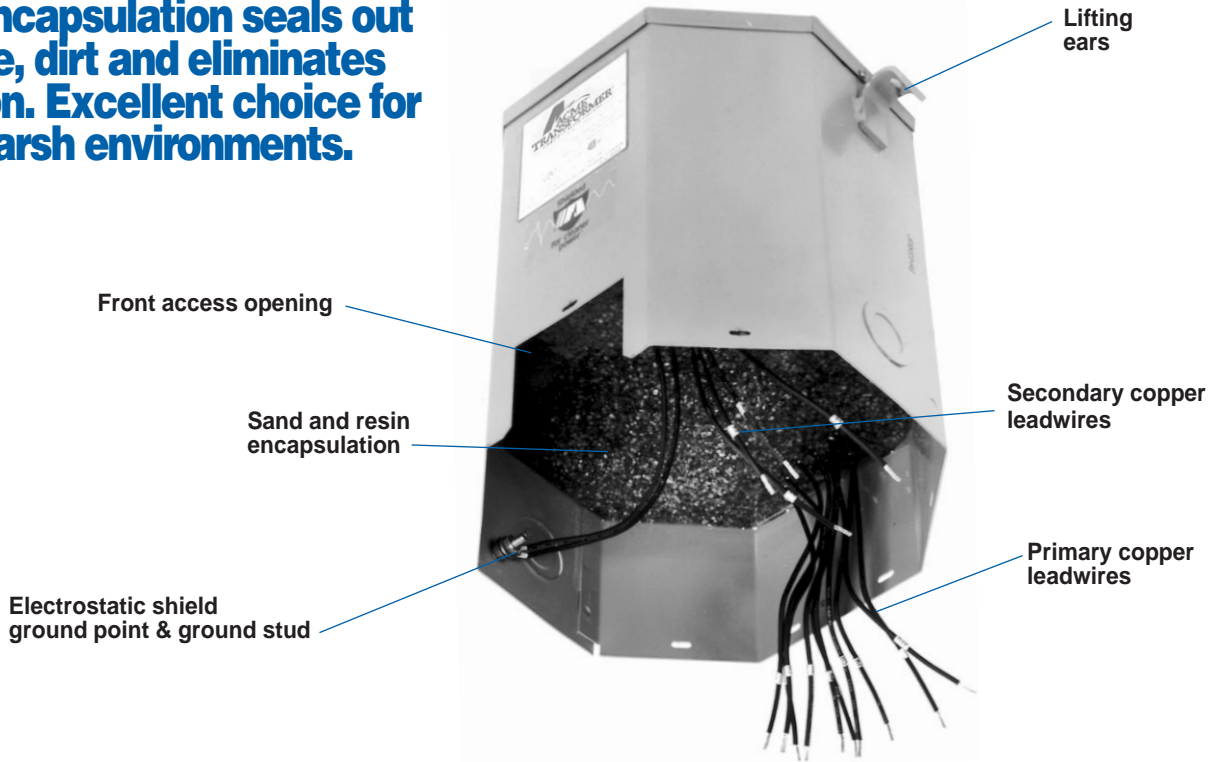
FEATURES

- **With weather shield, UL Type 3R enclosure** type 2 enclosure without weather shield. UL listed and CSA certified.
- **UL Class 220°C insulation system,** 150°C rise.
- **Extra large wiring compartment** for easier installation and cooler case temperatures.
- **NEMA standard bus bar terminals,** no special tools needed to make clearly marked connections. Tap changing easily accomplished with jumpers.
- **Aluminum windings** for increased insulation life, cooler operation, lower losses.
- Noise and vibration isolating pads standard to assure **quiet** operation.
- Large permanently legible nameplates on front.
- Single phase units can be banked for 3 phase service.



- All units have ground studs for use with non-metallic conduit.
- Suitable for wall or "trapeze" mounting. Wall brackets are available for units up to 50 KVA single and 75 KVA three phase.
- Other models are available with class 220°C insulation and either 115°C or 80°C rise operating temperature. Refer to Opti-Miser® Section.
- Termination — single phase 37.5 to 100 KVA, copper bus; 167 to 250 KVA, aluminum bus. Three phase 27 to 225 KVA, copper bus; 275 to 1000 KVA, aluminum bus.
- Electrostatic shielding provided on all 60 Hz isolation transformers.
- Electrostatic shielding not available on Groups D1 and G1.

Resin Encapsulation seals out moisture, dirt and eliminates corrosion. Excellent choice for use in harsh environments.



Wound Core construction for lower losses and quiet operation.

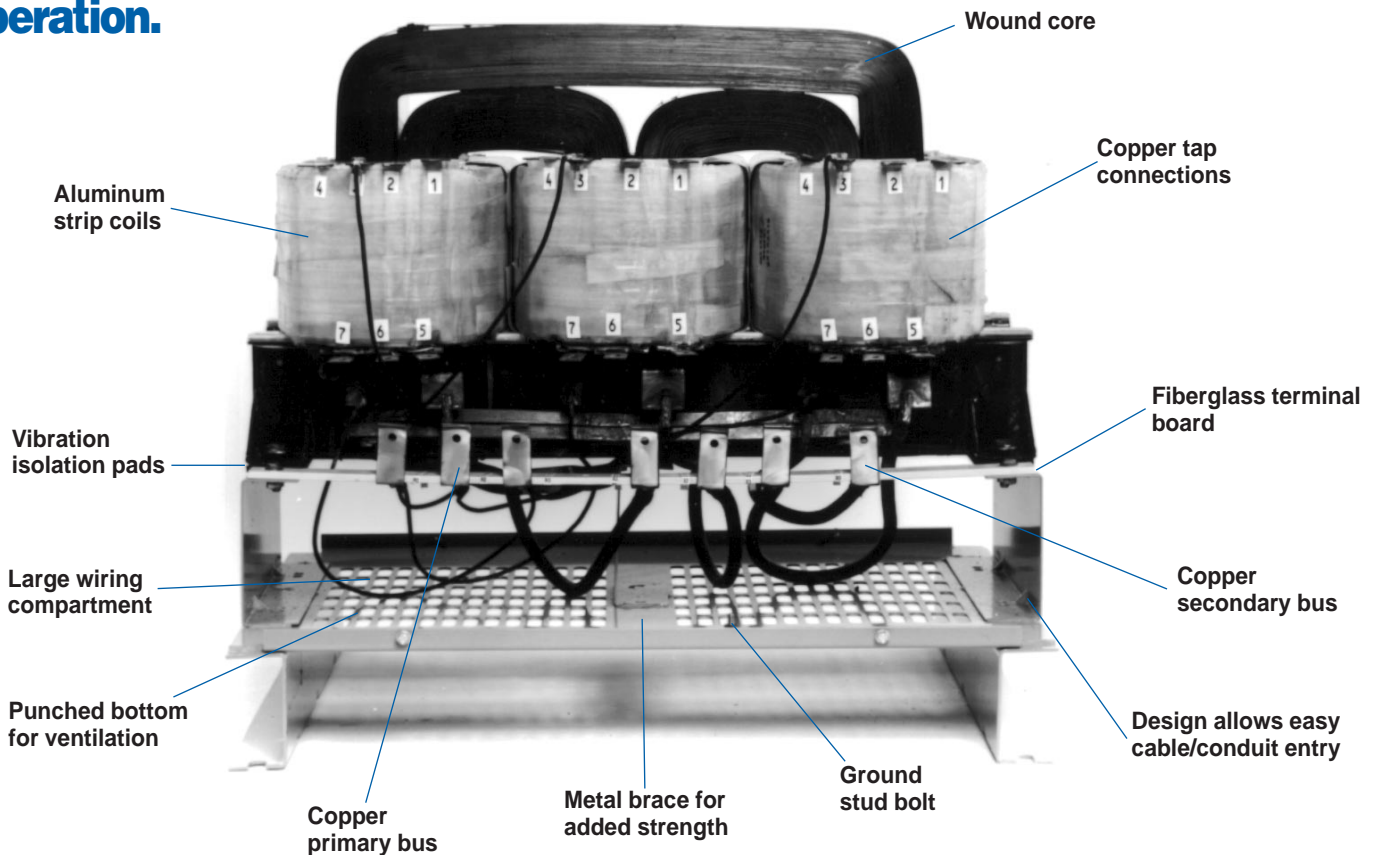


Photo representative of Drive Isolation Transformer

NOTE: These photographs are for illustration purposes only. Please contact factory for construction details.

SELECTION CHARTS

Single Phase

GROUP I



240 X 480 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — FOUR WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
⓪ .05	T-1-53004	6.41 (16.3)	3.14 (8.0)	3.05 (7.7)	4 (1.8)	W	0.875 (2.2)	NA	1-A
⓪ .10	T-1-53005	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	5 (2.3)	W	0.875 (2.2)	NA	1-A
⓪ .15	T-1-53006	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	7 (3.2)	W	0.875 (2.2)	NA	1-A
⓪ .25	T-2-53007-S	8.68 (22.0)	4.08 (10.4)	3.88 (9.9)	10 (4.5)	W	0.50-0.75 (1.3-1.9)	NA	2-B
⓪ .50	T-2-53008-S	9.06 (23.0)	4.37 (11.1)	4.20 (10.7)	15 (6.8)	W	0.50-0.75 (1.3-1.9)	NA	2-B
⓪ .75	T-2-53009-S	9.68 (24.6)	4.75 (12.1)	4.50 (11.4)	19 (8.6)	W	0.50-0.75 (1.3-1.9)	NA	2-B
1.00	T-2-53010-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	2-B
1.50	T-2-53011-S	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	2-B
2.00	T-2-53012-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	2-B
3.00	T-2-53013-S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	2-C
3.00	T-2-53013-4S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	3-C
5.00	T-2-53014-S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	2-C
5.00	T-2-53014-4S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	3-C
7.50	T-2-53515-3S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	4-D
10.00	T-2-53516-3S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	4-D
15.00	T-2-53517-3S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	4-D
25.00	T-2-53518-3S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	250 (113.0)	W	1.00-1.50 (2.5-3.8)	NA	4-D
37.50	T-2-53019-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	280 (127.0)	F⓪	NA	WS-A-1	5-E
50.00	T-2-53020-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	350 (158.8)	F⓪	NA	WS-A-1	5-E
75.00	T-2-53021-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	430 (195.0)	F	NA	WS-A-3	5-E
100.00	T-2A-53022-3S	41.52 (105.5)	32.90 (83.6)	29.87 (75.9)	525 (238.0)	F	NA	WS-A-4	5-E
167.00	T-1-53023-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	700 (318.0)	F	NA	WS-A-5	5-E
250.00	T-2-53024-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1440 (1306.0)	F	NA	WS-A-5	5-E

GROUP IA

240 X 480 PRIMARY VOLTS — COPPER WINDINGS — 120/240 SECONDARY VOLTS — FOUR WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
7.50	TC-53515-3S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	100 (45.4)	W	0.75-1.25 (1.9-3.2)	NA	4-D
10.00	TC-53516-3S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	120 (54.4)	W	0.75-1.25 (1.9-3.2)	NA	4-D
15.00	TC-53517-3S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	160 (72.6)	W	1.00-1.50 (2.5-3.8)	NA	4-D
25.00	TC-53518-3S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	250 (113.0)	W	1.00-1.50 (2.5-3.8)	NA	4-D
37.50	TC-53019-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	295 (133.8)	F⓪	NA	WS-A-1	5-E
50.00	TC-53020-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	378 (172.0)	F⓪	NA	WS-A-1	5-E
75.00	TC-53021-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	468 (212.3)	F	NA	WS-A-3	5-E
100.00	TC-53022-3S	41.52 (105.5)	32.90 (83.6)	29.87 (75.9)	768 (348.4)	F	NA	WS-A-4	5-E

GROUP II

NON-VENTILATED TRANSFORMERS — 240 X 480 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — FOUR WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
37.50	TE-2-53019-3S	35.40 (90.0)	31.90 (81.0)	26.90 (68.3)	430 (195.0)	F⓪	NA	NA	5-H
50.00	TE-2-53020-3S	35.40 (90.0)	31.90 (81.0)	26.90 (68.3)	430 (195.0)	F⓪	NA	NA	5-H
75.00	TE-2A-53021-3S	35.40 (90.0)	31.90 (81.0)	26.90 (68.3)	525 (238.0)	F	NA	NA	5-H
100.00	TE-1-53022-3S	42.00 (106.7)	40.00 (101.6)	30.00 (76.2)	775 (352.0)	F	NA	NA	5-H

⓪ Suitable for 50/60 Hz.

⓪ Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

GROUP III



120 X 240 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — FOUR WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
1.0	T-3-53040-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	13-B
1.5	T-3-53041-S	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	13-B
2.0	T-3-53042-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	13-B
3.0	T-3-53043-S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	13-C
5.0	T-3-53044-S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	13-C
7.5	T-3-53545-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	13-D
10.0	T-3-53546-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	13-D
15.0	T-3-53547-S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	13-D
25.0	T-3-53548-S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	250 (113.0)	W	1.00-1.50 (2.5-3.8)	NA	13-D

GROUP IV

600 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — THREE WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
⓪ .05	T-1-53104	6.41 (16.3)	3.14 (8.0)	3.05 (7.7)	4 (1.8)	W	0.875 (2.2)	NA	8-A
⓪ .10	T-1-53105	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	5 (2.3)	W	0.875 (2.2)	NA	8-A
⓪ .15	T-1-53106	7.16 (18.2)	3.89 (9.9)	3.67 (9.3)	7 (3.2)	W	0.875 (2.2)	NA	8-A
⓪ .25	T-2-53107-S	8.68 (22.0)	4.08 (10.4)	3.88 (9.9)	10 (4.5)	W	0.50-0.75 (1.3-1.9)	NA	9-B
⓪ .50	T-2-53108-S	9.06 (23.0)	4.37 (11.1)	4.20 (10.7)	15 (6.8)	W	0.50-0.75 (1.3-1.9)	NA	9-B
⓪ .75	T-2-53109-S	9.68 (24.6)	4.75 (12.1)	4.50 (11.4)	19 (8.6)	W	0.50-0.75 (1.3-1.9)	NA	9-B
1.00	T-2-53110-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	9-B
1.50	T-2-53111-S	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	9-B
2.00	T-2-53112-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	9-B
3.00	T-2-53113-1S	12.78 (32.5)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	10-C
5.00	T-2-53114-1S	15.66 (39.8)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	10-C
7.50	T-2-53615-1S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	10-D
10.00	T-2-53616-1S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	10-D
15.00	T-2-53617-1S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	10-D
25.00	T-2-53618-1S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	250 (113.0)	W	1.00-1.50 (2.5-3.8)	NA	10-D
37.50	T-2-53119-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	275 (125.0)	F Ⓜ	NA	WS-A-1	11-E
50.00	T-2-53120-3S	29.90 (76.0)	28.15 (71.5)	22.37 (56.8)	340 (154.0)	F Ⓜ	NA	WS-A-2	11-E
75.00	T-2-53121-3S	35.40 (90.0)	31.90 (81.0)	26.88 (68.3)	420 (191.0)	F	NA	WS-A-3	11-E
100.00	T-2A-53122-3S	41.52 (105.5)	32.90 (83.6)	29.87 (75.9)	525 (238.0)	F	NA	WS-A-4	11-E
167.00	T-1-53123-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	700 (318.0)	F	NA	WS-A-5	11-E

⓪ Suitable for 50/60 Hz.

Ⓜ Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

GROUP V



208 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — THREE WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
1.0	T-2-53140-1S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	6-B
1.5	T-2-53141-1S	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	6-B
2.0	T-2-53142-1S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	6-B
3.0	T-2-53143-1S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	6-C
5.0	T-2-53144-1S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	6-C
7.5	T-2-53645-1S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	6-D
10.0	T-2-53646-1S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	6-D
15.0	T-2-53647-1S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	6-D
25.0	T-2-53648-1S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	250 (113.0)	W	1.00-1.50 (2.5-3.8)	NA	6-D
37.5	T-2-53649-1S	25.48 (64.7)	24.39 (62.0)	19.37 (49.2)	257 (117.0)	F ⊕	N/A	WS-A-1	58-E
50.0	T-2-53650-3S	25.48 (64.7)	24.39 (62.0)	19.37 (49.2)	340 (154.2)	F ⊕	N/A	WS-A-1	17-E

GROUP VI

277 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — THREE WINDINGS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
1.0	T-2-53170-1S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	7-B
1.5	T-2-53171-1S	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	7-B
2.0	T-2-53172-1S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	7-B
3.0	T-2-53173-1S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	7-C
5.0	T-2-53174-1S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	7-C
7.5	T-2-53675-1S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	7-D
10.0	T-2-53676-1S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	7-D
15.0	T-2-53677-1S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	7-D
25.0	T-2-53678-1S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	250 (113.0)	W	1.00-1.50 (2.5-3.8)	NA	7-D

GROUP VII

120/208/240/277 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
1.0	T-2-79740-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	23 (10.4)	W	0.50-0.75 (1.3-1.9)	NA	23-B
1.5	T-2-79741-S	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	23-B
2.0	T-2-79742-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	37 (16.8)	W	0.50-0.75 (1.3-1.9)	NA	23-B
3.0	T-2-79743-S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	23-C
5.0	T-2-79744-S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	23-C
7.5	T-2-79745-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	105 (47.6)	W	0.75-1.25 (1.9-3.2)	NA	63-D
10.0	T-2-79746-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	124 (56.2)	W	0.75-1.25 (1.9-3.2)	NA	63-D
15.0	T-2-79747-S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	171 (77.6)	W	1.00-1.50 (2.5-3.8)	NA	63-D
25.0	T-2-79748-S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	261 (118.4)	W	1.00-1.50 (2.5-3.8)	NA	63-D

⊕ Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

GROUP VIII



AUTO-TRANSFORMERS

240 PRIMARY VOLTS — 120/240 SECONDARY VOLTS — 1Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
1.0	T-2-53060	9.06 (23.0)	4.37 (11.1)	4.20 (10.7)	15 (6.8)	W	0.50-0.75 (1.3-1.9)	NA	12-B
1.5	T-2-53061	9.68 (24.6)	4.75 (12.1)	4.51 (11.5)	19 (8.6)	W	0.50-0.75 (1.3-1.9)	NA	12-B
2.0	T-2-53062	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	12-B
3.0	T-2-53063	11.62 (29.5)	5.50 (14.0)	5.13 (13.0)	30 (13.6)	W	0.50-0.75 (1.3-1.9)	NA	12-B
5.0	T-2-53064	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	12-B
7.5	T-2-53065	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	12-C
10.0	T-2-53066	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	12-D
15.0	T-2-53067	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	12-D

GROUP IX

EXPORT MODEL ^①

190/200/208/220 X 380/400/416/440 PRIMARY VOLTS

120/240 SECONDARY VOLTS — 1Ø, 50/60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
*1.0	TF-2-17437-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	14-B
*2.0	TF-2-17439-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	14-B
*3.0	TF-2-49873-S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	14-C
*5.0	TF-2-52520-S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	14-C
*7.5	TF-2-52794-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	14-D
*10.0	TF-2-52795-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	14-D
*15.0	TF-2-52796-S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	14-D
*25.0	TF-2-52797-S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	300 (136.0)	W	1.00-1.50 (2.5-3.8)	NA	14-D
37.5	TF-2-69218-S	26.00 (66.0)	24.39 (62.0)	19.37 (49.2)	285 (129.0)	F ^②	NA	WS-A-1	15-E
50.0	TF-2-69219-S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	380 (172.0)	F ^②	NA	WS-A-2	15-E
75.0	TF-2-69220-S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	445 (201.8)	F	NA	WS-A-3	15-E
100.0	TF-2A-69221-S	41.52 (105.5)	32.90 (83.6)	29.87 (75.9)	525 (238.0)	F	NA	WS-A-4	15-E

* CE Marked

① Maximum exciting current 5% at 50 Hz.

② Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).



GROUP X

EXPORT MODEL

190/208/220/240 x 380/416/440/480 PRIMARY VOLTS

120/240 SECONDARY VOLTS — 1Ø, 50/60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
*1.0	TF-2-79260-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	64-B
*2.0	TF-2-79261-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	64-B
*3.0	TF-2-79262-S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	64-C
*5.0	TF-2-79263-S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	64-C
*7.5	TF-2-79264-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	64-D
*10.0	TF-2-79265-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	125 (56.7)	W	0.75-1.25 (1.9-3.2)	NA	64-D
*15.0	TF-2-79266-S	16.94 (43.0)	14.12 (35.9)	11.59 (29.4)	170 (77.1)	W	1.00-1.50 (2.5-3.8)	NA	64-D
*25.0	TF-2-79267-S	18.44 (46.8)	16.13 (41.0)	13.34 (33.9)	300 (136.1)	W	1.00-1.50 (2.5-3.8)	NA	64-D

GROUP XI

EXPORT MODEL

190/200/208/220 x 380/400/416/440 PRIMARY VOLTS

110/220 SECONDARY VOLTS — 1Ø, 50/60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
*1.0	TF-2-79300-S	10.50 (26.7)	5.50 (14.0)	5.13 (13.0)	24 (10.9)	W	0.50-0.75 (1.3-1.9)	NA	65-B
*2.0	TF-2-79301-S	13.00 (33.0)	5.50 (14.0)	5.13 (13.0)	38 (17.2)	W	0.50-0.75 (1.3-1.9)	NA	65-B
*3.0	TF-2-79302-S	11.50 (29.2)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	W	0.75-1.25 (1.9-3.2)	NA	65-C
*5.0	TF-2-79303-S	14.38 (36.5)	10.31 (26.2)	7.13 (18.1)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	65-C
*7.5	TF-2-79304-S	15.19 (38.6)	13.50 (34.3)	10.84 (27.5)	115 (52.2)	W	0.75-1.25 (1.9-3.2)	NA	65-D

* CE Marked

SELECTION CHARTS

Three Phase

GROUP A



208 DELTA PRIMARY VOLTS — 480Y/277 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
15.0	T-3-79367-1S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	245 (111.0)	F ①	NA	NA	48-I
30.0	T-2-79368-4S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	330 (150.0)	F ①	NA	WS-A-1	46-E
45.0	T-2-79369-4S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	400 (181.0)	F ①	NA	WS-A-1	46-E
75.0	T-2-79370-4S	29.90 (76.0)	28.20 (71.6)	22.40 (56.9)	530 (240.0)	F ①	NA	WS-A-2	46-E
112.5	T-2-79371-4S	35.90 (91.2)	31.90 (81.0)	26.90 (68.3)	750 (340.0)	F	NA	WS-A-3	46-E
150.0	T-2-79372-4S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	950 (430.9)	F	NA	WS-A-4	46-E
225.0	T-2-79373-4S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	1200 (544.0)	F	NA	WS-A-4	46-E
300.0	T-3-79374-4S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	46-E
500.0	T-2-79376-2S	57.80 (146.8)	45.00 (114.3)	41.50 (105.4)	3500 (1588.0)	F	NA	WS-A-6	② G

GROUP B

240 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
9.0	T-2A-53360-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	18-F
15.0	T-3-53361-1S	18.86 (48.0)	20.30 (51.6)	9.03 (23.0)	250 (113.0)	F ①	NA	NA	18-I
30.0	T-3-53362-4S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	325 (147.0)	F ①	NA	WS-A-1	19-E
45.0	T-3-53363-4S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	350 (158.8)	F ①	NA	WS-A-1	19-E
75.0	T-3-53364-4S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	450 (204.1)	F ①	NA	WS-A-2	19-E
112.5	T-2A-53365-4S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	696 (294.8)	F	NA	WS-A-3	19-E
150.0	T-2-53366-4S	41.52 (105.5)	32.90 (84.0)	29.88 (75.9)	978 (412.8)	F	NA	WS-A-4	19-E
225.0	T-2-53367-4S	41.52 (105.5)	32.90 (84.0)	29.88 (75.9)	1200 (544.0)	F	NA	WS-A-4	19-E

GROUP C

416 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79340-2S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	66-F
6.0	T-2A-79341-2S	11.38 (28.9)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	66-F
9.0	T-2A-79342-2S	14.03 (35.6)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	66-F
15.0	T-3-79343-4S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	250 (113.0)	F ①	NA	NA	47-I
30.0	T-2A-79344-4S	25.48 (64.8)	24.39 (62.0)	19.37 (49.3)	325 (147.0)	F ①	NA	WS-A-1	47-E
45.0	T-2A-79345-4S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	400 (181.0)	F ①	NA	WS-A-1	47-E
75.0	T-3-79346-4S	29.90 (76.0)	28.15 (71.5)	22.40 (56.9)	600 (272.0)	F ①	NA	WS-A-2	47-E
112.5	T-2A-79347-4S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	750 (340.0)	F	NA	WS-A-3	47-E
150.0	T-2-79348-4S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1125 (510.0)	F	NA	WS-A-4	47-E
225.0	T-2-79349-4S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1500 (544.0)	F	NA	WS-A-5	47-E
300.0	T-3-79350-4S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	47-E
500.0	T-1-79351-4S	62.00 (157.5)	54.00 (137.2)	42.00 (106.7)	2675 (1213.0)	F	NA	WS-B-3	② G

① Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

② Consult factory for wiring diagram.

GROUP D



480 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-53308-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	21-F
6.0	T-2A-53309-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	21-F
9.0	T-2A-53310-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	21-F
15.0	T-3-53311-1S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	250 (113.0)	F ⊕	NA	NA	21-I
25.0	T-3-53393-3S	25.48 (64.7)	24.39 (61.9)	19.37 (49.2)	290 (132.0)	F ⊕	NA	WS-A-1	22-E
30.0	T-3-53312-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	290 (132.0)	F ⊕	NA	WS-A-1	22-E
37.5	T-3-53394-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	400 (181.0)	F ⊕	NA	WS-A-1	22-E
45.0	T-3-53313-3S	25.48 (64.7)	24.39 (61.9)	19.37 (49.2)	400 (181.0)	F ⊕	NA	WS-A-1	22-E
50.0	T-3-53403-3S	29.40 (74.7)	28.15 (71.5)	22.37 (56.8)	475 (216.0)	F ⊕	NA	WS-A-2	22-E
75.0	T-3-53314-3S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	500 (226.8)	F ⊕	NA	WS-A-2	22-E
112.5	T-2A-53315-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	750 (340.0)	F	NA	WS-A-3	22-E
150.0	T-3-53316-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	970 (440.0)	F	NA	WS-A-4	22-E
225.0	T-3-53317-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1200 (544.0)	F	NA	WS-A-4	22-E
300.0	T-3-53318-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	22-E
500.0	T-2-53319-3S	57.80 (146.8)	45.60 (115.8)	41.50 (105.4)	2480 (1125.0)	F	NA	WS-A-7	22-G
750.0	T-2-53321-3S	62.80 (159.5)	54.00 (137.2)	41.50 (105.4)	3600 (1633.0)	F	NA	WS-A-6	22-G
1000.0	T-1-53322-2S	62.80 (159.5)	54.00 (137.2)	41.50 (105.4)	4300 (1950.0)	F	NA	WS-A-6	48-G

GROUP DI

480 DELTA PRIMARY VOLTS — NON-SHIELDED UNITS — 208Y/120 SECONDARY VOLTS MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	T-79804-3	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	293 (133.0)	F	NA	WS-A-1	67-E
45.0	T-79805-3	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	341 (154.7)	F	NA	WS-A-1	67-E
75.0	T-79806-3	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	460 (208.7)	F	NA	WS-A-2	67-E
112.5	T-79807-3	35.90 (91.2)	31.90 (81.0)	26.90 (68.3)	630 (285.8)	F	NA	WS-A-3	67-E

GROUP D2

480 DELTA PRIMARY VOLTS — COPPER WINDINGS 208Y/120 SECONDARY VOLTS, 150° C RISE — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
15.0	TC-53311-1S*	18.90 (48.0)	20.30 (51.6)	9.00 (22.9)	245 (111.1)	F	NA	NA	21-I
30.0	TC-53312-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	346 (156.9)	F	NA	WS-A-1	22-E
45.0	TC-53313-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	397 (180.1)	F	NA	WS-A-1	22-E
75.0	TC-53314-3S	29.9 (75.9)	28.20 (71.6)	22.40 (56.9)	521 (236.3)	F	NA	WS-A-2	22-E
112.5	TC-53315-3S	35.90 (91.2)	31.90 (81.0)	26.90 (65.8)	766 (347.5)	F	NA	WS-A-3	22-E
150.0	TC-53316-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	1026 (465.4)	F	NA	WS-A-4	22-E
225.0	TC-53317-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	1300 (589.7)	F	NA	WS-A-4	22-E
300.0	TC-1-53318-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1551 (703.5)	F	NA	WS-A-5	22-E
500.0	TC-53319-3S	57.80 (146.8)	45.00 (114.3)	41.50 (105.4)	2819 (1278.7)	F	NA	WS-A-7	22-E

* NOTE: TC-53311-1S—Encapsulated, 115° C Rise, 180°C Insulation

⊕ Wall mounting brackets are available for these sizes, refer to Document 8005 11.

GROUP E



NON-VENTILATED TRANSFORMERS

480 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS

MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	TE-2-53312-3S	29.40 (74.7)	28.20 (71.6)	22.40 (56.9)	425 (193.0)	F ①	NA	NA	22-H
45.0	TE-2-53313-3S	35.40 (89.9)	31.90 (81.0)	26.90 (68.3)	575 (261.0)	F	NA	NA	22-H
75.0	TE-2-53314-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	965 (438.0)	F	NA	NA	22-H
112.5	TE-3-53315-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1450 (658.0)	F	NA	NA	22-H
150.0	TE-3-53316-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	NA	22-H

GROUP F

ENCAPSULATED TRANSFORMERS, 115° C RISE

480 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	T-3-79312-3S	24.81 (63.0)	27.13 (68.9)	11.14 (28.3)	613 (278.0)	F	NA	NA	22-I
45.0	T-3-79313-3S	25.31 (64.3)	30.18 (76.7)	12.76 (32.4)	780 (354.0)	F	NA	NA	22-I
75.0	T-3-79314-3S	26.82 (68.1)	34.68 (88.1)	15.25 (38.7)	1126 (511.0)	F	NA	NA	22-I

GROUP G

480 DELTA PRIMARY VOLTS — 240 DELTA / 120 TAP SECONDARY VOLTS

MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA ②	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-53328-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	25-F
6.0	T-2A-53329-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	25-F
9.0	T-2A-53340-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	25-F
15.0	T-3-53341-1S	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	250 (113.0)	F ①	NA	NA	25-I
30.0	T-3-53342-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	325 (147.0)	F ①	NA	WS-A-1	26-E
45.0	T-3-53343-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	400 (181.0)	F ①	NA	WS-A-1	26-E
75.0	T-3-53344-3S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	500 (226.8)	F ①	NA	WS-A-2	26-E
112.5	T-2A-53345-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	750 (340.0)	F	NA	WS-A-3	26-E
150.0	T-3-53346-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1125 (510.0)	F	NA	WS-A-4	26-E
225.0	T-3-53347-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1200 (544.0)	F	NA	WS-A-4	26-E
300.0	T-3-53348-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	26-G
500.0	T-1-53349-3S	62.00 (157.5)	54.00 (137.2)	42.00 (106.7)	2675 (1213.0)	F	NA	WS-B-3	27-G
750.0	T-2-53350-3S	62.80 (159.5)	54.00 (137.2)	41.50 (105.4)	3408 (1545.8)	F	NA	WS-A-6	26-G

GROUP G1

480 DELTA PRIMARY VOLTS — NON SHIELDED UNITS — 240 DELTA / 120 TAP SECONDARY VOLTS

MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA ②	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	T-79844-3	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	293 (133.0)	F	NA	WS-A-1	68-E
45.0	T-79845-3	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	341 (154.7)	F	NA	WS-A-1	68-E
75.0	T-79846-3	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	460 (208.7)	F	NA	WS-A-2	68-E
112.5	T-79847-3	35.90 (91.2)	31.90 (81.0)	26.90 (68.3)	630 (285.8)	F	NA	WS-A-3	68-E

① Wall mounting brackets are available for these sizes, refer to Document 8005 11.

② 3 KVA through 500 KVA provided with 120V lighting tap limited to 5% of nameplate rating.

GROUP H



NON-VENTILATED TRANSFORMERS

480 DELTA PRIMARY VOLTS — 240 DELTA/ 120 TAP SECONDARY VOLTS

MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA ^②	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	TE-3-53342-3S	29.40 (74.7)	28.15 (71.5)	22.37 (56.8)	600 (272.0)	F ^①	NA	NA	26-H
45.0	TE-2-53343-3S	35.40 (89.9)	31.90 (81.0)	26.90 (68.3)	750 (340.0)	F	NA	NA	26-H
75.0	TE-2-53344-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	1125 (510.0)	F	NA	NA	26-H
112.5	TE-3-53345-3S	45.59 (115.8)	39.50 (100.3)	35.50 (90.2)	1150 (522.0)	F	NA	NA	26-H
150.0	TE-2-53346-3S	54.00 (137.2)	45.00 (114.3)	30.00 (76.2)	1500 (680.0)	F	NA	NA	27-H

GROUP I

480 DELTA PRIMARY VOLTS — 480Y/277 SECONDARY VOLTS

MAY BE USED ON A 4 WIRE 480Y/277 VOLT SUPPLY — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
15.0	T-3-3500015-3S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	250 (113.0)	F ^①	NA	NA	31-I
30.0	T-2A-3500030-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	325 (147.0)	F ^①	NA	WS-A-1	31-E
45.0	T-2A-3500045-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	400 (181.0)	F ^①	NA	WS-A-1	31-E
75.0	T-3-3500075-3S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	600 (272.0)	F ^①	NA	WS-A-2	31-E
112.5	T-2A-3500112-3S	35.40 (90.0)	31.90 (81.0)	26.87 (68.2)	710 (322.0)	F	NA	WS-A-3	31-E
150.0	T-2A-3500150-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1155 (524.0)	F	NA	WS-A-4	31-E
225.0	T-2A-3500225-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1210 (548.8)	F	NA	WS-A-4	31-E
300.0	T-3-3500300-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1600 (726.0)	F	NA	WS-A-5	31-E
500.0	TTBD-3500500-3S	62.00 (157.5)	54.00 (137.2)	42.00 (106.7)	2620 (1188.0)	F	NA	WS-B-3	32-G

GROUP J

600 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS Inches (Cm.)	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79330-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	28-F
6.0	T-2A-79331-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	28-F
9.0	T-2A-79332-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	28-F
15.0	T-3-79333-1S	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	250 (113.0)	F ^①	NA	NA	28-I
30.0	T-13102-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	325 (147.0)	F ^①	NA	WS-A-1	29-E
45.0	T-13103-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	400 (181.0)	F ^①	NA	WS-A-1	29-E
75.0	T-13104-3S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	600 (272.0)	F ^①	NA	WS-A-2	29-E
112.5	T-13105-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	790 (358.0)	F	NA	WS-A-3	29-E
150.0	T-2-13106-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1000 (454.0)	F	NA	WS-A-4	29-E
225.0	T-2-13107-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1250 (567.0)	F	NA	WS-A-4	29-E
300.0	T-3-13099-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	29-E
450.0	T-1-13111-3S	62.00 (157.5)	54.00 (137.2)	49.50 (125.7)	2650 (1202.0)	F	NA	WS-B-3	30-G
500.0	T-1-13112-3S	62.00 (157.5)	54.00 (137.2)	42.00 (106.7)	2675 (1213.0)	F	NA	WS-B-3	30-G
750.0	T-2-13113-4S	62.80 (159.5)	54.00 (137.2)	41.50 (105.4)	4000 (1814.0)	F	NA	WS-A-6	49-E

① Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

② 3 KVA through 500 KVA provided with 120V lighting tap limited to 5% of nameplate rating.

GROUP K



ENCAPSULATED TRANSFORMERS, 115° C RISE

600 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	T-3-79334-3S	24.81 (63.0)	27.13 (68.9)	11.14 (28.3)	613 (278.1)	F	NA	NA	29-I
45.0	T-3-79335-3S	25.31 (64.3)	30.18 (76.7)	12.76 (32.4)	780 (354.0)	F	NA	NA	29-I
75.0	T-3-79336-3S	26.82 (68.1)	34.68 (88.1)	15.25 (38.7)	1126 (511.0)	F	NA	NA	29-I

GROUP L

600 DELTA PRIMARY VOLTS — 380Y/220 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79432-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	53-F
6.0	T-2A-79433-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	53-F
9.0	T-2A-79434-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	53-F
15.0	T-3-79435-1S	18.86 (47.9)	20.80 (52.8)	9.03 (22.9)	250 (113.0)	F ①	NA	NA	53-I
30.0	T-3-79436-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	325 (147.0)	F ①	NA	WS-A-1	50-E
45.0	T-2A-79437-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	400 (181.0)	F ①	NA	WS-A-1	50-E
75.0	T-3-79438-3S	29.90 (75.9)	28.15 (71.5)	22.40 (56.9)	600 (272.0)	F ①	NA	WS-A-2	50-E
112.5	T-2-79439-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	750 (340.0)	F	NA	WS-A-3	50-E
150.0	T-2-79440-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1125 (510.0)	F	NA	WS-A-4	50-E
225.0	T-2-79441-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1200 (544.0)	F	NA	WS-A-4	50-E
300.0	T-3-79442-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	② G
450.0	T-1-79443-3S	Consult Factory For Availability							
500.0	T-1-79444-3S								

GROUP M

600 DELTA PRIMARY VOLTS — 480Y/277 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79516-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	55-F
6.0	T-2A-79517-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	55-F
9.0	T-2A-79518-1S	14.03 (38.8)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	55-F
15.0	T-3-79519-1S	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	250 (113.0)	F ①	NA	NA	55-I
30.0	T-2A-79520-3S	29.90 (91.2)	28.15 (71.5)	22.40 (56.9)	400 (181.0)	F ①	NA	WS-A-2	51-E
45.0	T-2A-79521-3S	29.90 (91.2)	28.15 (71.5)	22.40 (56.9)	425 (193.0)	F ①	NA	WS-A-2	51-E
75.0	T-3-79522-3S	29.90 (75.9)	28.15 (71.5)	22.40 (56.9)	700 (318.0)	F ①	NA	WS-A-2	51-E
112.5	T-2A-79523-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	750 (340.0)	F	NA	WS-A-3	51-E
150.0	T-2-79524-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1125 (510.0)	F	NA	WS-A-4	51-E
225.0	T-2-79525-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1175 (533.0)	F	NA	WS-A-4	51-E
300.0	T-3-79526-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.0)	F	NA	WS-A-5	51-E
450.0	T-2-79527-3S	57.80 (146.8)	45.00 (114.3)	41.50 (105.4)	2500 (1134.0)	F	NA	WS-A-7	② G
500.0	T-2-79528-3S	57.80 (146.8)	45.00 (114.3)	41.50 (105.4)	2500 (1134.0)	F	NA	WS-A-7	② G

① Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

② Consult factory for wiring diagram.

GROUP N



600 DELTA PRIMARY VOLTS — 600Y/347 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79416-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	54-F
6.0	T-2A-79417-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	54-F
9.0	T-2A-79418-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	54-F
15.0	T-3-79419-1S	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	300 (136.0)	F ①	NA	NA	54-I
30.0	T-2A-79420-3S	29.90 (75.9)	28.15 (71.5)	22.40 (56.9)	400 (181.0)	F ⑤	NA	WS-A-2	52-E
45.0	T-2A-79421-3S	29.90 (75.9)	28.15 (71.5)	22.40 (56.9)	600 (272.0)	F ⑤	NA	WS-A-2	52-E
75.0	T-2A-79422-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	700 (318.0)	F	NA	WS-A-3	52-E
112.5	T-2A-79423-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	750 (340.0)	F	NA	WS-A-3	52-E
150.0	T-2A-79424-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1125 (510.0)	F	NA	WS-A-4	52-E
225.0	T-2-79425-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1200 (544.0)	F	NA	WS-A-4	52-E
300.0	T-1-79426-3S	Consult Factory For Availability							
450.0	T-1-79427-3S	Consult Factory For Availability							
500.0	T-2-79428-3S	57.80 (146.8)	45.00 (114.3)	41.50 (105.4)	2530 (1147.6)	F	NA	WS-A-7	52-G

GROUP O

208 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79268-1S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	60-F
6.0	T-2A-79269-1S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	140 (63.5)	W	0.75-1.25 (1.9-3.2)	NA	60-F
9.0	T-2A-79270-1S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	180 (81.6)	W	0.75-1.25 (1.9-3.2)	NA	60-F
15.0	T-3-79271-1S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	245 (111.0)	F ①	NA	NA	60-I
30.0	T-2-79272-4S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	300 (136.0)	F ①	NA	WS-A-1	61-E
45.0	T-2-79273-4S	25.48 (64.7)	24.39 (61.9)	19.37 (49.2)	365 (166.0)	F ①	NA	WS-A-1	61-E
75.0	T-2-79274-4S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	500 (227.0)	F ①	NA	WS-A-2	61-E
112.5	T-2-79275-4S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	700 (318.0)	F	NA	WS-A-3	61-E
150.0	T-2-79276-4S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	970 (440.0)	F	NA	WS-A-4	61-E
225.0	T-2-79277-4S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1200 (544.0)	F	NA	WS-A-4	61-E

GROUP P

600 DELTA PRIMARY VOLTS — 240 DELTA/120 TAP SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
30.0	T-13142-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	299 (135.6)	F ①	NA	WS-A-1	69-E
45.0	T-13143-3S	25.48 (64.7)	24.39 (61.9)	19.37 (49.2)	353 (160.1)	F ①	NA	WS-A-1	69-E
75.0	T-13144-3S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	463 (210.0)	F ①	NA	WS-A-2	69-E

GROUP Q

240 DELTA PRIMARY VOLTS — 480Y/277 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
15.0	T-3-79693-1S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	245 (111.1)	F ①	NA	NA	70-I
30.0	T-2-79694-4S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	330 (149.7)	F ①	NA	WS-A-1	71-E
45.0	T-2-79695-4S	25.48 (64.7)	24.39 (61.9)	19.37 (49.2)	380 (172.4)	F ①	NA	WS-A-1	71-E
75.0	T-2-79696-4S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	455 (206.4)	F ①	NA	WS-A-2	71-E
112.5	T-2-79697-4S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	687 (311.6)	F	NA	WS-A-3	71-E
150.0	T-2-79698-4S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	973 (441.3)	F	NA	WS-A-4	71-E

① Wall mounting brackets are available for these sizes, refer to [Document 8005 11](#).

⑤ For proper overcurrent protection, refer to Article 450-4 of N.E.C.



GROUP R

380 DELTA PRIMARY VOLTS — 208Y/120 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
3.0	T-2A-79708-4S	10.38 (26.4)	12.37 (31.4)	7.47 (19.0)	75 (34.0)	W	0.75-1.25 (1.9-3.2)	NA	33-F
6.0	T-2A-79709-4S	11.83 (30.0)	14.17 (36.0)	8.82 (22.4)	120 (54.4)	W	0.75-1.25 (1.9-3.2)	NA	33-F
9.0	T-2A-79710-4S	14.03 (36.0)	17.77 (45.1)	11.52 (29.3)	175 (79.4)	W	0.75-1.25 (1.9-3.2)	NA	33-F
15.0	T-3-79711-4S	18.86 (48.0)	20.30 (51.6)	9.03 (22.9)	245 (111.1)	F ①	NA	NA	33-I
30.0	T-3-79712-3S	25.50 (64.8)	24.39 (61.9)	19.37 (49.2)	295 (133.8)	F ①	NA	WS-A-1	72-E
45.0	T-3-79713-3S	25.48 (64.7)	24.39 (61.9)	19.37 (49.2)	353 (160.1)	F ①	NA	WS-A-1	72-E
75.0	T-3-79714-3S	29.90 (75.9)	28.15 (71.5)	22.37 (56.8)	457 (207.3)	F ①	NA	WS-A-2	72-E
112.5	T-2A-79715-3S	35.90 (91.2)	31.90 (81.0)	26.88 (68.3)	679 (308.0)	F	NA	WS-A-3	72-E
150.0	T-2-79716-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	939 (425.9)	F	NA	WS-A-4	72-E
225.0	T-2-79717-3S	41.52 (105.5)	32.90 (83.6)	29.88 (75.9)	1175 (533.0)	F	NA	WS-A-4	72-E

GROUP S

380 DELTA PRIMARY VOLTS — 220Y/127 SECONDARY VOLTS — 3Ø, 60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
15.0	T-3-79501-1S	18.9 (48.0)	20.30 (51.6)	9.0 (22.9)	245 (111.1)	F ①	NA	NA	24-I
30.0	T-2A-79502-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	313 (142.0)	F ①	NA	WS-A-1	20-E
45.0	T-2A-79503-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	328 (148.8)	F ①	NA	WS-A-1	20-E
75.0	T-2A-79504-3S	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	490 (222.3)	F ①	NA	WS-A-2	20-E
112.5	T-2A-79505-3S	35.90 (91.2)	31.90 (80.0)	26.90 (68.3)	680 (308.4)	F	NA	WS-A-3	20-E
150.0	T-2-79506-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	950 (430.9)	F	NA	WS-A-4	20-E
225.0	T-2-79507-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	1200 (544.3)	F	NA	WS-A-4	20-E
300.0	T-1-79508-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1550 (703.1)	F	NA	WS-A-5	20-E
500.0	T-1-79509-3S	Consult Factory For Availability							

GROUP T

380 DELTA PRIMARY VOLTS — 220Y/127 SECONDARY VOLTS — 3Ø, 50/60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
15.0	T-3-79551-1S	20.80 (52.8)	20.90 (53.1)	10.20 (25.9)	435 (197.3)	F	NA	NA	24-I
30.0	T-2A-79552-3S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	365 (165.6)	F	NA	WS-A-1	20-E
45.0	T-2A-79553-3S	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	468 (212.3)	F	NA	WS-A-2	20-E
75.0	T-2A-79554-3S	35.90 (91.2)	31.90 (80.0)	26.90 (68.3)	693 (314.3)	F	NA	WS-A-3	20-E
112.5	T-2A-79555-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	970 (440.0)	F	NA	WS-A-4	20-E
150.0	T-2-79556-3S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	1100 (499.0)	F	NA	WS-A-4	20-E
225.0	T-3-79557-3S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1600 (725.7)	F	NA	WS-A-5	20-E
300.0	T-1-79558-3S	Consult Factory For Availability							
500.0	T-1-79559-3S								

① KVA capacity of three phase autotransformer bank, using two single phase, 60 Hz transformers connected open delta.

② For proper overcurrent protection, refer to Article 450-4 of N.E.C.

GROUP U



440 DELTA PRIMARY VOLTS — 220Y/127 SECONDARY VOLTS — 3Ø, 50/60 Hz

KVA	CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
		HEIGHT	WIDTH	DEPTH					
10.0	TF-22010-5S	18.90 (48.0)	20.30 (51.6)	9.00 (22.9)	245 (111.1)	F	NA	NA	73-I
15.0	TF-22015-5S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	291 (130.0)	F	NA	WS-A-1	73-E
25.0	TF-22025-5S	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	375 (170.1)	F	NA	WS-A-1	73-E
50.0	TF-22050-5S	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	437 (198.2)	F	NA	WS-A-2	73-E
100.0	TF-220100-5S	41.50 (105.4)	32.90 (83.6)	29.90 (75.9)	725 (328.9)	F	NA	WS-A-4	73-E
200.0	TF-220200-5S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1025 (464.9)	F	NA	WS-A-5	73-E
250.0	TF-220250-5S	45.60 (115.8)	39.50 (100.3)	35.50 (90.2)	1600 (725.8)	F	NA	WS-A-5	73-E
300.0	TF-220300-5S	57.84 (146.9)	45.50 (115.6)	41.50 (105.4)	1700 (771.12)	F	NA	WS-A-7	73-G
500.0	TF-220500-5S	62.80 (159.5)	54.00 (137.2)	41.50 (105.4)	2418 (1096.8)	F	NA	WS-A-6	73-G

AUTO-TRANSFORMERS ^②

600 PRIMARY VOLTS — 480 SECONDARY VOLTS — 3Ø, 60 Hz

480 PRIMARY VOLTS — 380 SECONDARY VOLTS — 3Ø, 50/60 Hz ALTERNATE RATING

KVA		CATALOG NO.	APPROX. DIMENSIONS Inches (Cm.)			APPROX. SHIP WEIGHT Lbs. (Kg.)	TYPE MTG. W – Wall F – Floor	KNOCKOUTS	WEATHER SHIELD P/N	Electrical Connections and Design Figures Document 8005
600V Pri. 480V Sec.	480 Pri. 380 Sec.		HEIGHT	WIDTH	DEPTH					
15.0	12.0	T-2-52703-1 ^③	15.21 (38.6)	19.25 (48.9)	7.37 (18.7)	104 (47.2)	W	NA	NA	56-F
30.0	24.0	T-2-52705-1 ^③	15.21 (38.6)	19.25 (48.9)	7.37 (18.7)	152 (68.9)	W	NA	NA	56-F
45.0	36.0	T-2-52707-1 ^③	15.21 (38.6)	19.25 (48.9)	7.37 (18.7)	156 (70.8)	W	NA	NA	56-F
75.0	60.0	T-3-52710-1 ^③	18.86 (47.9)	20.30 (51.6)	9.03 (22.9)	300 (136.1)	F ^①	NA	NA	56-I
112.5	90.0	T-2A-52712-1 ^④	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	325 (147.0)	F ^⑤	NA	WS-A-1	57-E
150.0	120.0	T-2A-52713-1 ^④	25.50 (64.8)	24.40 (62.0)	19.40 (49.3)	350 (158.8)	F ^⑤	NA	WS-A-1	57-E
225.0	180.0	T-2A-52715-1 ^④	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	600 (272.0)	F ^⑤	NA	WS-A-2	57-E
300.0	240.0	T-2A-52717-1 ^④	29.90 (75.9)	28.20 (71.6)	22.40 (56.9)	650 (294.8)	F ^⑤	NA	WS-A-2	57-E
450.0	360.0	T-2A-52718-1 ^④	35.90 (91.2)	31.90 (81.0)	26.90 (68.3)	750 (340.0)	F	NA	WS-A-3	57-E
500.0	400.0	T-2A-52719-1 ^④	35.90 (91.2)	31.90 (81.0)	26.90 (68.3)	790 (358.3)	F	NA	WS-A-3	57-E

^① Wall mounting brackets use PL-79911.

^② If used on unbalanced loads, these units should only be used on a 4 wire system with the supply neutral connected to the transformer. If used on balanced loads, such as motor loads, then they may be used on a 3 wire system without a neutral or 4th wire.

^③ These units are encapsulated with a 115° C temperature rise.

^④ These units are ventilated with 150° C temperature rise.

^⑤ Wall mounting brackets use PL-79912.

Economical Auto Arrangements

Using two single phase transformers

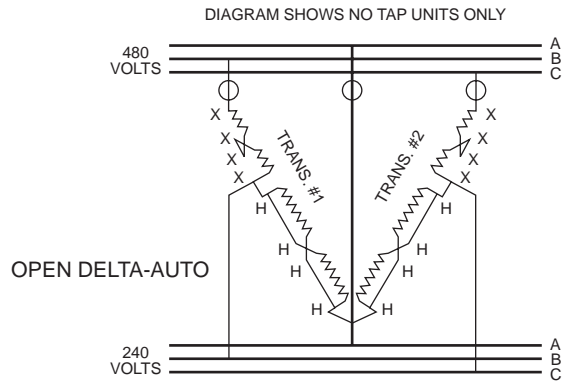


THREE PHASE

480 PRIMARY (open delta) VOLTS —

240 SECONDARY (open delta) VOLTS — 3Ø, 60 Hz

KVA ①	Qty. ②	Catalog No. ③	Primary Full Load Amps	Secondary Full Load Amps	Max. Size Fuse or Breaker
3.0	2	T-2-53010-S	3.60	7.20	10
5.0	2	T-2-53011-S	6.00	12.00	10
6.0	2	T-2-53012-S	7.20	14.40	15
10.0	2	T-2-53013-4S	12.00	24.00	15
17.0	2	T-2-53014-4S	20.50	40.80	30
26.0	2	T-2-53515-3S	31.50	63.00	40
34.0	2	T-2-53516-3S	41.00	81.60	60
52.0	2	T-2-53517-3S	63.00	125.00	80
86.0	2	T-2-53518-3S	104.00	206.30	150
130.5	2	T-2-53019-3S	157.00	314.00	200
173.0	2	T-2-53020-3S	209.00	418.00	300
259.0	2	T-2-53021-3S	312.00	623.00	400
346.0	2	T-2A-53022-3S	417.00	834.00	600
578.0	2	T-1-53023-3S	696.00	1392.00	1000
865.0	2	T-1-53024-3S	1041.00	2082.00	1600

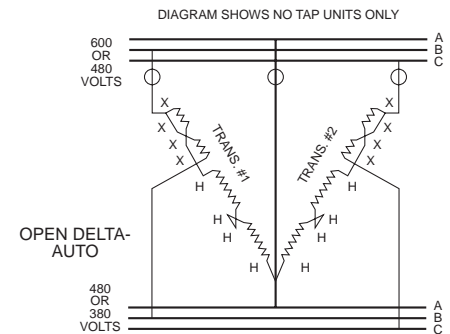


⑤ ○ = Fuse Location NEC 450-4, 1990.

600 PRIMARY VOLTS — 480 SECONDARY (open delta) VOLTS — 3Ø, 60 Hz

480 PRIMARY VOLTS — 380 SECONDARY (open delta) VOLTS — 3Ø, 50/60 Hz

Pri. 600V Sec. 480V KVA ①	Pri. Amps	Sec. Amps	Pri. 480V Sec. 380V KVA ①	Pri. Amps	Sec. Amps	Qty ②	Catalog No. ③	Max. Size Fuse or Breaker
8.0	7.70	9.60	6.5	7.80	9.60	2	T-2-53010-S	15
12.0	11.55	14.40	9.5	11.55	14.40	2	T-2-53011-S	15
17.0	16.33	20.41	13.5	16.33	20.41	2	T-2-53012-S	25
25.0	24.06	30.01	20.0	24.06	30.01	2	T-2-53013-4S	30
43.0	41.38	51.70	34.0	41.38	51.70	2	T-2-53014-4S	60
64.0	61.59	77.00	51.0	61.59	77.00	2	T-2-53515-3S	80
86.0	82.76	103.44	68.0	82.76	103.44	2	T-2-53516-3S	110
129.0	124.13	155.20	103.0	124.13	155.20	2	T-2-53517-3S	175
216.0	207.85	259.80	172.0	207.85	259.80	2	T-2-53518-3S	300
324.0	311.78	389.70	259.0	311.78	389.70	2	T-2-53019-3S	400
433.0	416.67	520.83	346.0	416.67	520.83	2	T-2-53020-3S	600
650.0	625.00	781.00	519.0	625.00	781.00	2	T-2-53021-3S	800
865.0	833.00	1040.00	692.0	833.00	1051.00	2	T-2A-53022-3S	1200
1445.0	1391.00	1738.00	1156.0	1391.00	1756.00	2	T-1-53023-3S	2000
2164.0	2083.00	2602.00	1731.0	2083.00	2629.00	2	T-1-53024-3S	3000



⑤ ○ = Fuse Location NEC 450-4, 1990.

① KVA capacity of three phase autotransformer bank, using two single phase, 60 Hz transformers connected open delta.

② Catalog No. is for 1 transformer, 2 units are required.

③ Can be reverse connected with no change in KVA.

④ For transformer dimensions, refer to appropriate table in [Document 8001 06](#).

⑤ For proper overcurrent protection, refer to Article 450-4 of N.E.C.

The diagrams above are for illustration purposes only. Please contact the factory for construction details.

Each transformer is shipped with detailed wiring diagrams. Refer to nameplate located inside the front cover for specific voltage tap combinations.

Auto Zig-Zag Grounding Transformers

For developing a neutral from a three phase, 3-wire supply



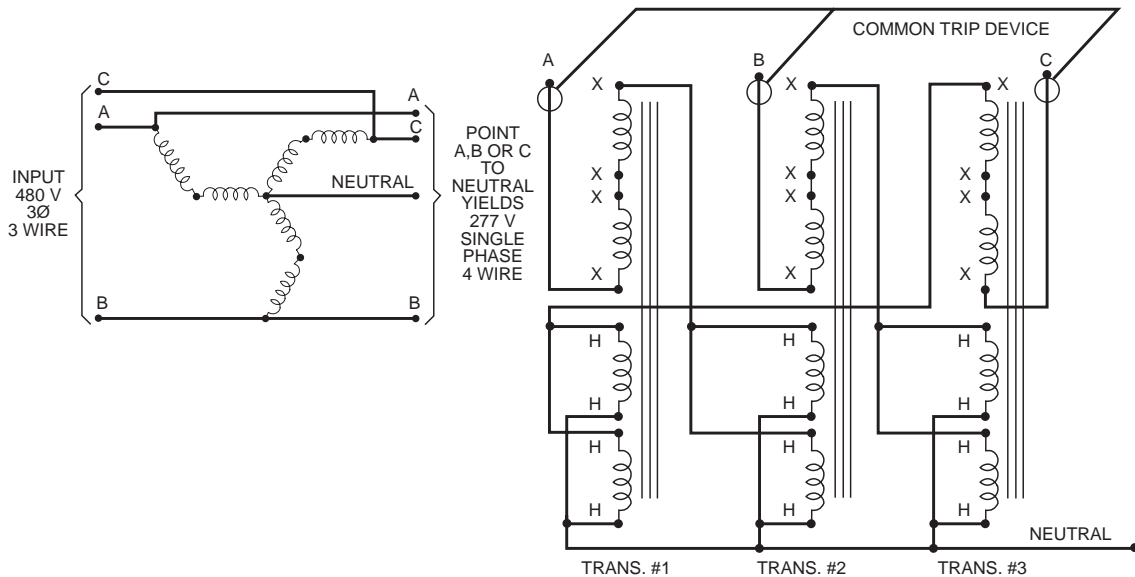
PRIMARY (INPUT): 480 VOLTS
3Ø, 3 WIRE

① 50/60 Hz

SECONDARY (OUTPUT): 480Y/277 VOLTS
3Ø, 4 WIRE

Use 3 Pieces of Type No. ④	Available In	Nameplate KVA For Each Tfmr.	No. of Tfmr. Required	Three Phase KVA	Max. Continuous Amp. Load Per Phase (277 Volts)
T-2-53010-S	No Taps Only	1.0	3	10.80	12.50
T-2-53011-S	No Taps Only	1.5	3	15.60	18.75
T-2-53012-S	No Taps Only	2.0	3	20.70	25.00
T-2-53013-4S	Taps & No Taps	3.0	3	31.20	37.50
T-2-53014-4S	Taps & No Taps	5.0	3	51.90	62.50
T-2-53515-3S	With Taps Only	7.5	3	78.00	93.50
T-2-53516-3S	With Taps Only	10.0	3	103.80	125.00
T-2-53517-3S	With Taps Only	15.0	3	156.00	187.50
T-2-53518-3S	With Taps Only	25.0	3	259.50	312.00
T-2-53019-3S	With Taps Only	37.5	3	390.00	468.00
T-2-53020-3S	With Taps Only	50.0	3	519.00	625.00
T-2-53021-3S	With Taps Only	75.0	3	780.00	935.00
T-2A-53022-3S	With Taps Only	100.0	3	1038.00	1250.00
T-1-53023-3S	With Taps Only	167.0	3	1734.00	2085.00

See Footnote ②



○ = Fuse Location NEC 450-4, 1990. ③

- ① Applicable for the above connection only.
- ② Connection diagram (using 3 pieces of 1 phase, 60 hertz transformers connected zig-zag auto) for developing a neutral (4th wire) from a 3 phase, 3 wire supply.
- ③ For proper over-current protection, refer to the N.E.C. Article 450-5.
- ④ For transformer dimensions, refer to appropriate table in [Document 8001 06](#).

Each transformer is shipped with detailed wiring diagrams.
Refer to nameplate located inside the front cover for specific voltage tap combinations.

Do You Have a Non-Standard Three Phase Voltage Application?

Many non-standard voltage correction problems can be solved by using standard off-the-shelf single phase transformers. The following is a list of such voltage combinations that can be supplied by

the Power Distribution Products Division. If you don't find the particular combination you are looking for, contact our technical services for further assistance



THREE PHASE

Voltages		Available KVA Range	Type of Circuit	Drawing No.
Input	Output			
208 Delta	208Y/120	3-75	Isolation	A-125879
208 Delta	208Y/120	3-86	Auto Zig-Zag ①	A-125895
208 Delta	240 Delta/120	1.68-25.2	O.D. ISO	A-700314
208 Delta	240 Delta	3-75	Isolation	A-125880
208 Delta	416Y/240	3-75	Isolation	A-700598
208 Delta	416Y/240	112.5-300	Isolation	A-700591
208Y/120	208Y/120	3-75	Isolation	A-125857
208Y/120	374Y/216	22.5-75	Isolation	A-125883
208Y/120	374Y/216	112.5-750	Isolation	A-102730
208Y/120	480Y/277	3-75	Isolation	B-39881 (pg 2)
240 Delta	208Y/120	3-15	Isolation	A-125855
240 Delta	208Y/120	9-15	Isolation	A-102723
240 Delta	208Y/120	22.5-75	Isolation	A-102722-B
240 Delta	208Y/120	112.5-750	Isolation	A-125856
240 Delta	208Y/120	3-75	Isolation	A-125858
240 Delta	240 Delta	3-75	Isolation	A-125859
240 Delta	240Y/138	10.3-258.75	Auto Zig-Zag ①	A-125896
240 Delta	374Y/216	22.5-75	Isolation	A-125881
240 Delta	374Y/216	112.5-750	Isolation	A-125882
240 Delta	480Y/277	3-75	Isolation	B-39881 (pg 1)
380 Delta	240 Delta	3-75	Isolation	A-700592
380 Delta	240 Delta	112.5-300	Isolation	A-700593
380 Delta	228 Delta	1.4-7.0	O.D. Auto	A-35633
380 Delta	228 Delta	4.2-7.0	O.D. Auto	A-125892
380 Delta	228 Delta	10.4-34.5	O.D. Auto	A-125893
380 Delta	228 Delta	51-227	O.D. Auto	A-125894
380 Delta	416Y/240	3-75	Isolation	A-700599
380 Delta	416Y/240	112.5-300	Isolation	A-700594
380Y/220	240 Delta	3-75	Isolation	A-700600
380Y/220	240 Delta	112.5-300	Isolation	A-700595
416Y/240	440 Delta	3-75	Isolation	A-700602
416Y/240	440 Delta	112.5-300	Isolation	A-700597
416 Delta	240 Delta	3-75	Isolation	A-700601
416 Delta	240 Delta	112.5-300	Isolation	A-700596

Voltages		Available KVA Range	Type of Circuit	Drawing No.
Input	Output			
416Y/240	208Y/120	3-15	Isolation	A-700319
416Y/240	208Y/120	22.5-75	Isolation	A-700322
480 Delta	240 Delta/120	1.68-5.04	O.D. ISO Hi-Leg ①	A-125849
480 Delta	240 Delta/120	3.36	O.D. ISO Hi-Leg ①	A-125850
480 Delta	240 Delta/120	5.04	O.D. ISO Hi-Leg ①	A-125851
480 Delta	240 Delta/120	8.4	O.D. ISO Hi-Leg ①	A-125852
480 Delta	240 Delta/120	12.6-25.2	O.D. ISO Hi-Leg ①	A-125853
480 Delta	240 Delta/120	42	O.D. ISO Hi-Leg ①	A-125854
480 Delta	240 Delta/120	63-266	O.D. ISO Hi-Leg ①	A-111702
480 Delta	240 Delta	1.68-8.4	O.D. ISO	A-32817-B
480 Delta	240 Delta	5.04-8.4	O.D. ISO	A-125872
480 Delta	240 Delta	12.6-42	O.D. ISO	A-125873
480 Delta	240 Delta	63-420	O.D. ISO	A-125874
480 Delta	416Y/240	3-15	Isolation	A-125875
480 Delta	416Y/240	9-15	Isolation	A-125876
480 Delta	416Y/240	22.5-75	Isolation	A-125877
480 Delta	416Y/240	112.5-750	Isolation	A-125878
480 Delta	394Y/228	9-15	Isolation	A-125884
480 Delta	394Y/228	22.5-75	Isolation	A-125885
480 Delta	394Y/228	112.5-750	Isolation	A-125886
600 Delta	208Y/120	3-6	Isolation	A-102758
600 Delta	208Y/120	9-75	Isolation	A-125863
600 Delta	208Y/120	112.5-500	Isolation	A-125864
600 Delta	240 Delta	3-6	Isolation	A-125860
600 Delta	240 Delta	9-75	Isolation	A-125861
600 Delta	240 Delta	112.5-500	Isolation	A-125862
600 Delta	240 Delta/120	1.68-2.52	O.D. ISO Hi-Leg ①	A-125865
600 Delta	240 Delta/120	3.36	O.D. ISO Hi-Leg ①	A-125866
600 Delta	240 Delta/120	5.04-25.2	O.D. ISO Hi-Leg ①	A-125867
600 Delta	240 Delta/120	42	O.D. ISO Hi-Leg ①	A-125868
600 Delta	240 Delta/120	63-168	O.D. ISO Hi-Leg ①	A-125869
600 Delta	240 Delta	1.68-3.36	O.D. ISO	A-33227-A
600 Delta	240 Delta	5.04-42	O.D. ISO	A-125870
600 Delta	240 Delta	63-280	O.D. ISO	A-125871

KEY:
O.D. — Open Delta
ISO — Isolation
AUTO — Autotransformer

① Cannot Be Reverse Connected.