

## Air Conditioning, Refrigeration & Appliance Transformers

The transformers in this section are autotransformers designed to change a wide range of voltages to the standard motor voltages for domestic appliances, air conditioners, and related equipment.

Correcting high or low supply voltage conditions to match the voltage requirements of appliances and equipment aids in safe, efficient operation.

These Acme autotransformers change or correct off-standard voltage that may be the result of:

1. Line supply voltage not matching the appliance motor nameplate voltage, (e.g., supply voltage is 380Y/220V, three phase, four wire. Appliance motor operates on 110 V, single phase. See schematic).
2. Low voltage due to inadequate wiring capacity in the electrical distribution system.
3. Low voltage caused by distribution of power over a long distance.
4. High or low voltages supplied by the utility company.

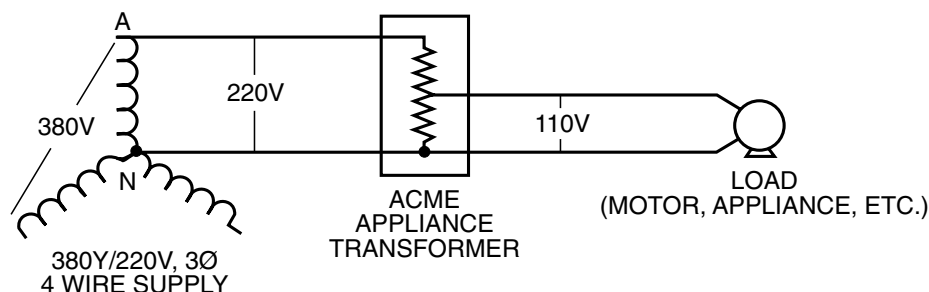
Standard voltages and frequencies (Hz) vary throughout many countries of the world. Since these autotransformers

are suitable for 50/60 Hz (cycle) service, they are applicable in export trade where it is necessary to change to a standard voltage for appliance operation.

These transformers are capable of adjusting voltage only; they can't change the frequency of a supply circuit. However, in most instances, 60 Hz (cycle) equipment can be operated from a 50 Hz supply if the voltage is reduced approximately 8-10%. For example, 115 V, 60 Hz equipment can usually be operated on 50 Hz at 105 V.

Some common uses for Acme Air Conditioning, Refrigeration and Appliance transformers include adjustment of off-standard voltage to the nominal voltages required to operate:

- a) Air conditioners, television receivers, all home appliances.
- b) Hermetically sealed refrigeration motors.
- c) Individual machine lighting, tool post grinders, fans, convenience outlets for portable lights, power tools.
- d) Magnetic contactors, relays, AC motors and similar devices requiring large starting (inrush) currents.



## Construction Features

Acme appliance transformers are autotransformers. The input (primary) winding is in electrical series connection with the output (secondary) winding; the input and output are not electrically isolated.

The autotransformer principle is the most economical for appliance applications, since only the difference between input voltage and output voltage is transformed. This results in smaller size, reduced weight and lower cost.

All units are constructed of core lamination processed from annealed electrical grade silicon steel. This improves transformer efficiency by keeping heat losses at a minimum.

Coils are precision machine wound and hand finished. The core and coil combination is impregnated with electrical grade varnish, then heat cured. This provides cool operation and protects the transformer from moisture and contamination. The result is long transformer life.



## GROUP C

PRIMARY VOLTS — 200/220/240      SECONDARY VOLTS — 115, 50/60 Hz



RECEPTACLE

CATALOG NO.	VA RATING	OUTPUT AMPS	APPROX. DIMENSIONS INCHES (CM.)			APPROX. SHIP WEIGHT LBS. (KG.)	CONNECTIONS FEET (METERS)
			HEIGHT	WIDTH	DEPTH		
T160830 ①	200	1.74	9.16 (23.3)	3.89 (9.9)	3.67 (9.3)	6 (2.7)	6 (1.8) primary cord and secondary receptacle
T160831 ①	300	2.61	9.16 (23.3)	3.89 (9.9)	3.67 (9.3)	6 (2.7)	6 (1.8) primary cord and secondary receptacle
T160832 ①	400	3.48	9.16 (23.3)	3.89 (9.9)	3.67 (9.3)	8 (3.6)	6 (1.8) primary cord and secondary receptacle
T160833 ①	500	4.35	9.68 (24.6)	4.75 (12.1)	4.51 (11.5)	10 (4.5)	6 (1.8) primary cord and secondary receptacle
T160834 ①	1000	8.70	9.68 (24.6)	4.75 (12.1)	4.51 (11.5)	14 (6.4)	6 (1.8) primary cord and secondary receptacle
T160835 ①	2000	17.40	11.50 (29.2)	7.81 (19.8)	7.13 (18.1)	27 (12.2)	6 (1.8) primary cord and secondary receptacle

① All models can be reverse connected with input voltage applied to secondary terminals and output voltage available at primary terminals. Do not exceed rating voltages. Transformer VA capacity will remain the same.