# Dry-Type General-Purpose Transformers

Types QB, QMS, QMS 3, and QL 600 Volts and Below

#### Sound Levels

All general-purpose transformers are as quiet, or quieter than the 1986 ANSI and NEMA Standards for sound levels. Average sound levels are warranted not to exceed the values listed for each load rating shown in the adjacent table. Sound characteristics vary between transformers of identical voltage and kVA rating. The range of variation may be 4 to 8 decibels.

These values apply only to specified test conditions because the characteristic of the installation can cause them to be higher under operating conditions. Where acoustical noise is deemed to be of unusual concern, proper steps should be taken during installation to minimize audible noise transmission.

# Wall Mounting Brackets (For 150°C Rise Models)

Separate, optional wall-mounting brackets are available as accessories on transformers through 75 kVA. Each kit consists of two brackets.



kVA	Bracket Catalog Number (Includes 2 Per Set)	List Price, GO-66C
Single-Phase	2	
.050-25 25 37.5-50	Standard on all QB and QMS units 9T18Y5042 \$14 9T18Y5043 19	
Three-Phase		
3-15 15-50 75	15-50 9T18Y5042	

#### Transformer Installation Lug Kits

- Complete hardware requirement package
- Mechanical set screw construction (no special tools required)
- Connectors UL listed for copper or aluminum.

kVA	Catalog Number	List Price GO-66C
ngle-Phase		
25, 37.5 50 75 100 167	9T18Y7240G02 9T18Y7241G03 9T18Y7240G03 9T18Y7242G07 9T18Y7242G05	\$ 130.00 170.00 250.00 250.00 600.00
ee-Phase		
15 30, 45 75 112.5 150 225 300 400, 500 750	9718Y7327 9718Y7240 9718Y7241 9718Y7241 9718Y7242G03 9718Y7242G02 9718Y7242G04 9718Y7242G06 9718Y7242G10	70.00 150.00 225.00 225.00 350.00 445.00 700.00 1050.00

# Sound Levels in Decibels (For 150°C Rise Models)

	Sound Levels in Decibels ①
kVA	ANSI-C89 Average
0-9	40
10-50	45
51-150	50 55 60
151-300	55
301-500	60

① Measured per ANSI C89.2-1986.

# Weathershield Kits (For 150°C Rise Models) UL Approved for Customer Installation Kits Supplied with Tamper-Resistant Hardware



kVA	Kit Catalog Number	List Price GO-66C
Single-Phase		
25 37.5,50 75 100 167	9718Y4317G05 9718Y4317G06 9718Y4317G06 9718Y4317G08 9718Y4317G08	\$256.00 256.00 256.00 359.00 359.00
hree-Phase		
15 30, 45, 50 75, 112.5 150 225 300 400, 500 750, 1000	9T18Y4317G11 9T18Y4317G05 9T18Y4317G06 9T18Y4317G07 9T18Y4317G08 9T18Y4317G09 9T18Y4317G10	256.00 256.00 256.00 359.00 359.00 359.00 359.00 459.00

#### Copper K-Factor Transformers

Width	Weathershield Kit Catalog Number	List Price, GO-66C
17.13	9T18Y4319G02	\$256.00
22.38	9T18Y4319G04	256.00
32.25	9T18Y4319G06	256.00
34.75	9T18Y4319G08	256.00
39.00	9T18Y4319G10	359.00
42.13	9T18Y4319G12	359.00
46.50	9T18Y4319G14	359.00
53.38 and	9T18Y4319G16	359.00

Depth	Bracket Catalog Number	List Price, GO-66C
19.88	9T18Y4320G03	\$141.00
20.00 23.50	9T18Y4320G04	196.00



# Dry-Type General-Purpose Transformers

Types QB, QMS, QMS 3, and QL 600 Volts and Below



Type QB, .050 kVA-3 kVA, Single-Phase



Type QMS, 5 kVA-25 kVA, Single-Phase



Type QMS 3 3 kVA-15 kVA Three-Phase



Type QL, 25 kVA-167 kVA, Single-Phase 15 kVA-1500 kVA, Three-Phase

# General Information

The complete family of transformers from GE provide quiet, reliable transformer operation.

All of the dry-type transformers through 1,000 kVA are UL listed under the requirements of Standard 506 and 1561. In addition, each transformer meets the requirements of NEMA ST-20, 1992. Type QB, QMS, and QMS 3 models are C-UL listed.

General-purpose transformers are rated 600 Volts and below for supplying appliance, lighting, and power loads from electrical distribution systems. Standard distribution voltages are 600, 480, and 240 Volts; standard load voltages are 480, 240, 208, and 120 Volts. The transformer is used to obtain the load voltage from the distribution voltage. Since no vaults are required for installation, these transformers can be located right at the load to provide the correct voltage for the application. This eliminates the need for long, costly, low-voltage feeders.

#### Construction

#### Types QB, QMS, and QMS 3

Core and coils are contained within a NEMA 3R nonventilated weatherproof enclosure. Type QB, QMS, and QMS 3 units feature encapsulated core and coils.

## Type QL

Units are enclosed in a NEMA 2 drip-proof metal enclosure with natural-draft ventilation. Core-and-coil assembly is mounted on rubber isolation pads to reduce noise. Weathershield kits are available for conversion to a NEMA 3R enclosure suitable for outdoor service.

### **How to Select**

- Establish phase and frequency
- · Determine the primary voltage—the voltage presently available
- Determine the secondary voltage—the voltage needed at the load
- · Determine the kVA load, allowing room for expansion
- Using the facts determined in the four steps, locate the transformer model in the listings on the following pages.

# Voltage Tap Arrangement

Transformer taps compensate for high or low line voltages. Standard NEMA, ANSI three-phase taps are two 5 percent taps below normal on transformers smaller than 30 kVA. This arrangement provides a 10 percent range of tap voltage adjustment.

Most standard QL units rated 15 through 500 kVA have available six universal voltage taps—four 2½ percent below normal, and two 2½ percent above normal. This arrangement provides a 15 percent range of tap voltage adjustment.

# **Temperature Class**

Industry standards classify insulation systems in accordance with the rating system shown below.

Insulation System Classification			
Ambient	+ Winding Rise	+ Hot Spot	= Temp. Class
40°C 40°C 40°C 40°C	55°C 80°C 115°C 150°C	10°C 30°C 25°C 30°C	105°C 150°C 180°C 220°C

All standard, general-purpose, GE transformers meet all applicable NEMA, ANSI, UL, and IEEE standards.

The design life of transformers having different insulation systems is the same, since the allowable temperature rise of an insulation material system is predicated on a specified life for all insulation. The lower temperature systems are designed for the same life as higher temperature systems.

## **Termination**

Improved termination spacing and wiring compartment room gives greater flexibility in selecting various UL listed connectors for either copper or aluminum cable. A listing of suitable connectors is packaged with each GE transformer.