Warnings and Cautions

Warning	Dangerous Voltage Warning: warns of situations in which a high voltage can cause injury and/or equipment damage. The text next to this symbol describes ways to avoid danger.
Warning	General Warning: warns of situations that can cause physical injury and/ or equipment damage by means other than electrical. The text next to this symbol describes ways to avoid the danger.

General Safety Instructions

Warning	Be sure to read, understand, and follow all safety instructions.
Warning	Only qualified electricians should carry out all electrical installation and maintenance work on capacitor bank.
Warning	All wiring must be in accordance with the National Electrical Code (NEC) and/or any other codes that apply to the installation site.
Warning	Disconnect all power before working on the equipment. Do not attempt any work on a powered capacitor bank.
Warning	The capacitor bank and other connected equipment must be properly grounded.
Warning	The terminals and connected cables are at a dangerously high voltage when power is applied.

Torques to be used when rating is not marked explicitly on connection block

240V

8kvar	awg 8 - 2/0, 35.5 lb in.
12kvar	awg 8 - 2/0, 35.5 lb in.
25 - 30kvar	awg 8 - 2/0, 35.5 lb in.
all other kvars	awg 1 - 4 (35 lb in.) 6 - 14 (30lb in.)

400V

1 to 90kvar	awg 1 - 4 (35lb in.) 6 - 14 (30lb in.)
above 30kvar	awg 8 - 2/0, 35.5lb in.

480V

45 to 90kvar	awg 8 - 2/0, 35.5lb in.			
105 to 150kvar	awg 3/0 - 350mcm, 230lb in.			
above 150kvar	awg 4 - 300 mcm, 275lb in.			

600V

60 to 105kvar	awg 8 - 2/0, 35.5lb in.
120 to 180kvar	awg 3/0 - 350mcm, 230lb in.
above 180kvar	awg 4 - 300mcm, 275lb in.

TCI, LLC W132 N10611 Grant Drive Germantown, WI 53022 Ph: 800-TCI-8282 www.transcoil.com



KPC Capacitor Bank Installation Guide

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Version 1.1 Part #27908

July 28, 2011

KPC Capacitor Bank Installation Instruction

INPUT

When installing the KPC capacitor bank on the INPUT side of the Variable Frequency Drive (VFD) or induction motor, please use the following guidelines when wiring the unit:

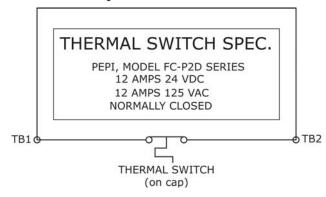
- The KPC capacitor bank is wired in parallel with the load.
- Refer to NEC wiring practices for appropriate wire sizes for your application.
- Power Wiring: Only use 75°C copper conductors unless the wire connector is marked for Al/Cu, then the use of aluminum wire is permitted.
- In standard 40°C ambient or less installations, a clearance of 3 inches on all sides of the capacitor bank and its enclosure is recommended for assisting in heat dissipation and ample wire bending space.
- These capacitors are designed to be panel mounted.

Product Specifications

- ➤ 3-phase and 1-phase, 600 Volt Class
- ➤ UL Listed; File E-116124
- ► kVar rated device
- ► Ambient Temperature: 40°C

Wiring: KPC has 3 power terminals, 1 for each phase of 3 phase circuit. Wire in any order.

Optional Thermal Switch



Required Minimum Dimensions if product is enclosed:

	Up to 40 Kvar	80 Kvar	180 Kvar	240 Kvar	300 Kvar
H (in.) for encl	17.4	28.0	52.0	70.0	72.0
W (in.) for encl	17.0	17.0	17.0	20.0	36.0
D (in.) for encl	12.3	12.3	16.3	20.0	24.0
Vent Area top (in ²)	24.0	55.0	76.0	57.5	75.0
Vent Area bottom (in ²)	21.0	10.0	28.5	50.0	112.5

Field Wiring Information

Below are typical wiring diagrams for the 3-phase KPC applied to the Variable Frequency Drive (VFD) or motor.

