

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.



KPC Capacitor Bank Installation Guide

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

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

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:

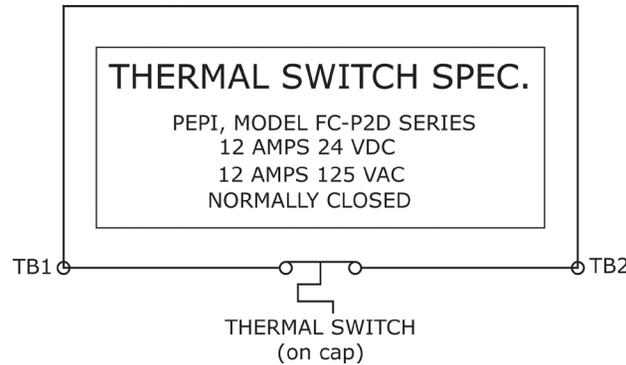
- The KPC capacitor bank is wired in parallel with the load.
- Refer to NEC wiring practices for appropriate wire sizes for your application.
- Power Wiring: Only use 75°C copper conductors unless the wire connector is marked for Al/Cu, then the use of aluminum wire is permitted.
- In standard 40°C ambient 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.

