## CONNECTED



#### PROJECT FACT SHEET

# Westfield

Project:

Customer:

### Power Factor Correction (PFC) Installations

#### **Project Profile:**







Nilsen have completed several PFC Upgrade projects for Westfield. One such contract was awarded in November 2010 at the **Westfield Helensvale** centre. Works completed by Nilsen included replacement of six power factor correction units. Ranging from 200kVAR to 500kVAR, these units were engineered for future additions. Cabinets were also supplied with 5<sup>th</sup> Harmonic Reactors, effectively increasing equipment and capacitor life through limited temperature rise, mechanical strength and special surface protection.

In mid-2012 Nilsen removed old PFC trays across two main switchboards (20 units in total) and installed new PFC trays at **Westfield Garden City**. The team also retrofitted the existing ABB Capacitor bank within the PFC Unit with Frako LKT Cylindrical Capacitors. The Frako(Germany) capacitors provided increased reliability and safety, especially with the regards to its' Segmented Film Technology. The capacitors included a fuse-disconnect mechanical bellows which will provide a safe and visual indication of capacitor health moving forward.

In April 2012, a TEGG report completed by Nilsen at **Westfield Strathpine** identified that PFC units in two main switchboards were not operating to maximum effect. Nilsen arranged immediate replacement of the PFC unit components, ensuring optimum PFC of the switchboards.

In September 2012 Nilsen was engaged for the 'MSB2 and 5B PFC Replacements' project at **Westfield North Lakes**. This project consisted of replacement of two existing power factor correction units (300kVAR & 400kVAR respectively) within the centres' main switch room. The two PFC's were replaced with similar capacity units during a maximum power outage period of three hours (outside of operation hours).

For information on the significant way Power Factor Correction can affect your business please refer to the Nilsen Information Sheet on PFC.

ENGINEERING SERVICES