

Cooling System Failure Solved with Cost-Effective VFD

FATON

Challenge

A national delivery company in Ontario, Canada, faced a critical issue in one of their warehouses in Ontario, Canada where the cooling system had failed. The failure impacted the productivity of the warehouse sorting process, as the workers in the area were affected by the temperature change. The customer reached out to Wesco for a solution. After reviewing the situation, we discovered that the problem stemmed from a variable frequency drive (VFD) failure which required technical proficiency due to its complexity.

Solution

A VFD is an electronic device that controls the speed of an electric motor by regulating the frequency of the electrical power supplied to the motor. Failure of a VFD can have considerable consequences on a company's operations, especially when it is vital to the functioning of a particular system.

After reviewing the customer's requirements, our Wesco engineering team analyzed the current drive and determined the best VFD option to solve the issue. Wesco proposed Eaton's sensorless vector adjustable frequency microdrive that was compatible with the existing electrical and mechanical components of the system and provided similar functionality to the original VFD. This ensured the performance remained the same while reducing maintenance costs substantially.

We presented detailed electrical specifications and wiring diagrams for the customer's approval. The customer cross-checked our proposal against other sources and approved Wesco's solution.

Resolved VFD and cooling system failure in a warehouse of a national delivery company in Ontario, Canada.

- \$14,000/unit in cost savings
- Improved productivity
- · Minimized operational downtime



Eaton's latest microdrive solutions offer the same capability for common applications.

Results

Wesco developed a reliable and cost-effective solution that provided the customer with \$14,000 cost savings per unit. Our engineering team quickly completed the project with minimized operational downtime and helped the customer avoid the high costs of emergency repairs. Our team understood how to deliver a significant, positive impact on the customer's operations that could be applied to the 250 fans in this same facility, as well as to multiple facilities across Canada.

Learn how to optimize your business operations with our cost-effective VFD solutions at Wesco.com/automation-canada.

