Manchester United recently completed a project to extend the capacity of its stadium at Old Trafford, UK. The Quadrant buildings have added around 7,600 seats to the stadium by increasing capacity in the second tier in the north-west and north-east quadrants of the ground.

The development brings the total seating capacity of Old Trafford to 76,500. The spaces underneath the new seating house five large kitchens and 10 restaurants, allowing the stadium to offer a wide range of corporate hospitality.

**Native BACnet as standard - reduced cabling and installation costs**

The air conditioning system serving the Quadrant buildings uses 33 ABB standard drives for HVAC to ensure the comfort of diners. The drives range in capacity from 3 to 7.5 kW.

One of the main benefits of choosing the ABB standard drives for HVAC was their native, or inbuilt, BACnet communications capability. This enabled contractors Laing O’Rourke to reduce the amount of cabling around the buildings, making installation easier and reducing costs.

The drives can accommodate components such as control switches, meaning the contractors did not need as many separate cables running back to the building management system. This enabled savings on the hardware and wiring costs. Another major reason for choosing ABB drives was their high reliability.
Challenge
■ Provide control of HVAC system for 10 restaurants in new stadium development

Solution
■ 33 ABB standard drives for HVAC ranging from 3 to 7.5 kW

Benefits
■ Locally controlled field devices reduce the cabling from the BMS to these devices, making installation easier and lowering costs
■ BACnet reduces wiring to drive, saving on hardware and wiring costs
■ BACnet allows access to control the drive and to monitor data from the drive

ABB standard drives for HVAC control the fans for the air conditioning system serving the two buildings that comprise the stadium’s Quadrant expansion project.