

PowerFlex 525 Drive Family



SERVICE

PowerFlex 40 VFD Upgrade to a PowerFlex 525

AFFECTED UNITS This procedure applies to the BCR CleanB®, Neutralizer® and the Bio-Scru®.

The PowerFlex 40 series is superseded by the PowerFlex 525 series, these drives are considered a V/Hz drive with a mode called "sensorless vector." Basically, sensorless vector control (SVC) has an auto boosting algorithm to dynamically push more amps to the motor. When the drive load slows down, the motor will maintain a commanded speed.

When migrating from a PowerFlex 40 to a PowerFlex 525, must consider the hardware and control differences between these drives including:

- **Circuit Protection** – Protective device (fuses and circuit breakers) sizing may be different between equivalent PowerFlex 40 or 40P drives and PowerFlex 525 drives. Verify the correct size has been chosen when selecting and installing a PowerFlex 525 drive.
- **Motor Control** – The default motor control mode for the PowerFlex 40 and 40P drives is sensorless Vector. They can also be programmed for Bolts per Hertz operation. The default setting for PowerFlex 525 is also sensorless Vector with optional control mode for Volts per Hertz.
- **Control Wiring** – For control of the discrete inputs, the PowerFlex 40 and 40P drives can use the internal or external 24V supply. The PowerFlex 525 drive digital I/O can use an internal or external +24V DC supply. To replicate the wiring of the PowerFlex 40 or 40P drive, the wiring diagrams will show the respective drives internally sourced (referenced to common) and externally sourced (+24V DC user supply), as examples.

FOLLOW UP SERVICE Please contact your BCR Representative to discuss your upgraded needs.

This service bulletin serves as general information and your specific application may vary.



QUESTIONS

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