

## ENSURE LONG-TERM DRIVE/MOTOR SYSTEM PERFORMANCE

## WITH NFPA/2018 79 COMPLIANT VFD CABLES

As one of North America's largest wire and cable manufacturers, we focus on service, product, and research advancement. Southwire offers multiple options for VFD cables that are NFPA/2018 79 Compliant:

**INDUSTRIAL GRADE:** Our VFD cable has a copper conductor, thermoset insulation, and a metallic shield with a robust industrial grade jacket to effectively perform in harsh operating conditions.

**FLEX STRAND INDUSTRIAL GRADE:** Made for improved flexibility with a higher strand count, this VFD cable is a perfect solution for routing and connecting to drives where space is limited.

**MACHINE FLEXIBLE:** A reliable VFD cable rated for 1000V operating levels that includes a dual rating of 600V for tray and 1000V for flexible motor supply cable.

We understand cable issues that may damage your equipment and could cause delays in production. THHN cables have PVC insulation and do not meet the NFPA/2018 79 requirements. THHN cables have two major disadvantages when used in drive application, such as:

**THERMOPLASTIC INSULATION:** High voltage spikes associated with VFD outputs can cause corona discharge in THHN cables which degrades the insulation.

**HIGH DIELECTRIC CONSTANT:** PVC has a high dielectric constant that causes THHN cables to have a high capacitance which can lead to drive trips.

 $^{\star}\text{Neither}$  of these points are issues for THHN when used in non-VFD traditional 60Hz power applications.

Paragraph 4.4.2.8 of NFPA/2018 Edition States:

"Electrical conductors and equipment supplied by power conversion equipment as part of adjustable speed drive systems and servo drive systems shall be listed flexible motor supply cable marked RHH RHW, RHW-2, XHH, XHHW, or XHHW-2."

Southwire believes recommendations and requirements made by the National Fire Protection Agency (NFPA) are good for business and safety.



MAKE THE RIGHT CHOICE SOUTHWIRE VFD CABLES NFPA/2018 79 COMPLIANT

