Why Belden Doesn't Sell Termination Kits

Some VFD cable manufacturers actively promote products that generate issues and work against the purpose of a VFD cable. VFD cables are designed to harness and contain potentially harmful noise currents, yet incorrect termination can release all the noise current that a properly-designed VFD cable worked to contain. Worse still, it is released at exactly the place where it can do the most harm and create the biggest issues.

Save Money with the Right Product

When developing VFD cable, Belden and the development partner set specific parameters for performance and goals to mitigate the issues associated with variable frequency drives.

Belden Recommendations:

- Choose products that effectively seal and isolate the cable grounds through the cable jacket and carry ratings based on industry standards.
- Commercially-available cable glands with UL-certifications and listings for the environments specified. Accurate gland selection depends on the environment and hazards present. The correct cable glands are a fraction of the cost of “termination kits” being marketed.
- Use isolating (pass through) glands to prevent the release of harmful noise currents from the shields and grounds.
  - Crouse Hinds CGB, or ADE Series, and CMP TC or A2 Series are just a few of the many good options that have been used effectively with Belden VFD cables.

Fundamental Rules for Effective VFD Cable Termination:

1. Avoid intermediate ground terminations.
2. Only terminate the grounds at the drive and motor if safely possible.
3. Do not terminate shields or grounds at enclosure ingress.

Each intermediate termination creates a common mode noise current loop. At enclosure ingress, that noise current will be released next to the most sensitive equipment in the system. This can cause issues with process reliability and safety that are easily avoidable by terminating the ground system directly on the drive.

For more details on avoiding costly termination errors, download the Belden termination guide, developed with 25 years of experience in providing effective VFD cable solutions.