Southwire Variable Frequency Drive (VFD) Shield Termination Kits

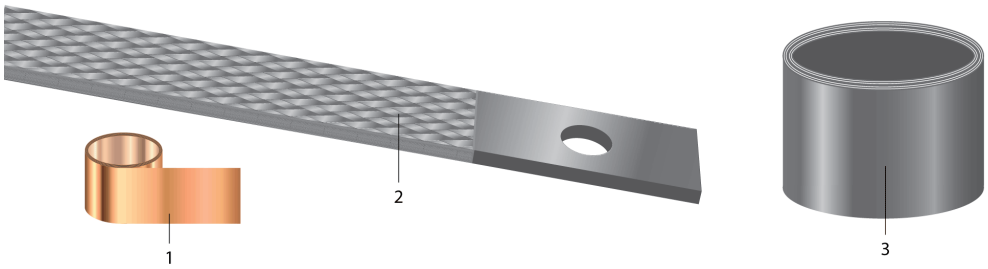

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Tape:** Conducting copper foil tape conforming to UL 510
2. **Braid:** Flexible tinned copper braid bonding strap with attached lug. Individual wires conform to ASTM B33
3. **Spring:** Constant force spring

APPLICATIONS AND FEATURES:

Southwire's Variable Frequency Drive (VFD) Shield Termination Kit provides the means to properly terminate a VFD cable's overall shield. The kit can be used on Southwire's copper tape shield VFD cables and copper braid/aluminum foil shield VFD cables. Drive manufacturers stress the importance of proper shield termination as it helps prevent premature motor failure due to bearing fluting as well as intermittent operational issues associated with communication and control equipment located in close proximity to uncontrolled common mode ground currents. The termination kit provides a low impedance path at high frequency for common mode current created by the drive to return to the inverter via the shield and minimizes potential problems.

Proper termination requires the cable to be terminated at both the drive end at the motor end of the cable. Southwire's Variable Frequency Drive Shield Termination Kits may be used on both copper tape shields and copper braid shields. They can be used when cable is installed in conduit and may also be used in conjunction with cable glands. Consult the kit's installation instructions for further details. Termination capable of operating continuously at temperature not in excess of 90°C.

Table 1 – Termination Kit Information

Stock Code	Fits Southwire VFD Cable Sizes		Cable Shield		Copper Braid	
	SPEC 45451	SPEC 45440, 45441, 45442	Min. Diameter	Max Diameter	Length	Equivalent Size
	AWG/kcmil	AWG/kcmil	inch	inch	inch	AWG
65099601◊	14, 12	16, 14	0.3	0.55	14	12
65099701◊	10, 8, 6	12, 10, 8, 6	0.5	0.79	14	12
65099801◊	4, 2, 1, 1/0, 2/0, 3/0	4, 2	0.8	1.50	16	6
65099901◊	4/0, 250, 350, 500		1.5	3.00	18	6