

# Inductor Extender

*P/N 335-3500*

It is highly recommended that the maximum distance of the stepper valve harness length between the valve and the XEV/XM controllers does not exceed 30 feet (10 meters).

If the stepper valve harness length must be extended beyond 30 feet (10 meters), Copeland provides an Inductor Extender (*P/N 335-3500*) for use with Sporlan Valves ONLY.

The Inductor Extender (*P/N 335-3500*) is ONLY for use with Sporlan Bipolar 4-wire stepper valves with 100 ohm or 75 ohm phase resistance.

When using the Inductor Extender, the XEV/XM controller "CPP" parameter setting MUST be less than 20; otherwise the Valve, Controller, and/or Inductor Extender will be damaged or have its life expectancy drastically shortened.

Refer to the XEV22D (*P/N 026-1206*) and XM678D (*P/N 026-1219*) manuals for a list of the controller supported Sporlan Stepper valves. The Inductor Extender can ONLY be used with Sporlan Bipolar Stepper valves that have a setting of 16 or 12 in the "CPP" column of the valve parameter table.

The recommended CPP parameter should NOT be increased to create AC voltage at the valve; if the valve harness length is over 30 feet, an Inductor Extender MUST be added into the 4-wire valve harness.

When using the Inductor Extender (*P/N 335-3500*), any stepper valve harness extensions MUST NOT exceed 170 feet total length.

Use 14 AWG wire for valve harness extensions in conduit. If the valve harness extension is not in conduit, use 16 AWG or 14 AWG shielded cable with the shield terminated to an earth grounded chassis. For valve harness extensions over 100 feet, 14 AWG shielded cable is recommended.

Refer to [Figure 1 - XEV22D Inductor Extender Installation](#) for installation of the Inductor Extender (*P/N 335-3500*) into the valve harness for the XEV22D controller. Refer to [Figure 2 - XM678D Inductor Extender Installation](#) for installation of the Inductor Extender (*P/N 335-3500*) into the valve harness for the XM678D controller.

The Inductor Extender must be installed no more than 9 feet (3 meters) from the XEV/XM controller.

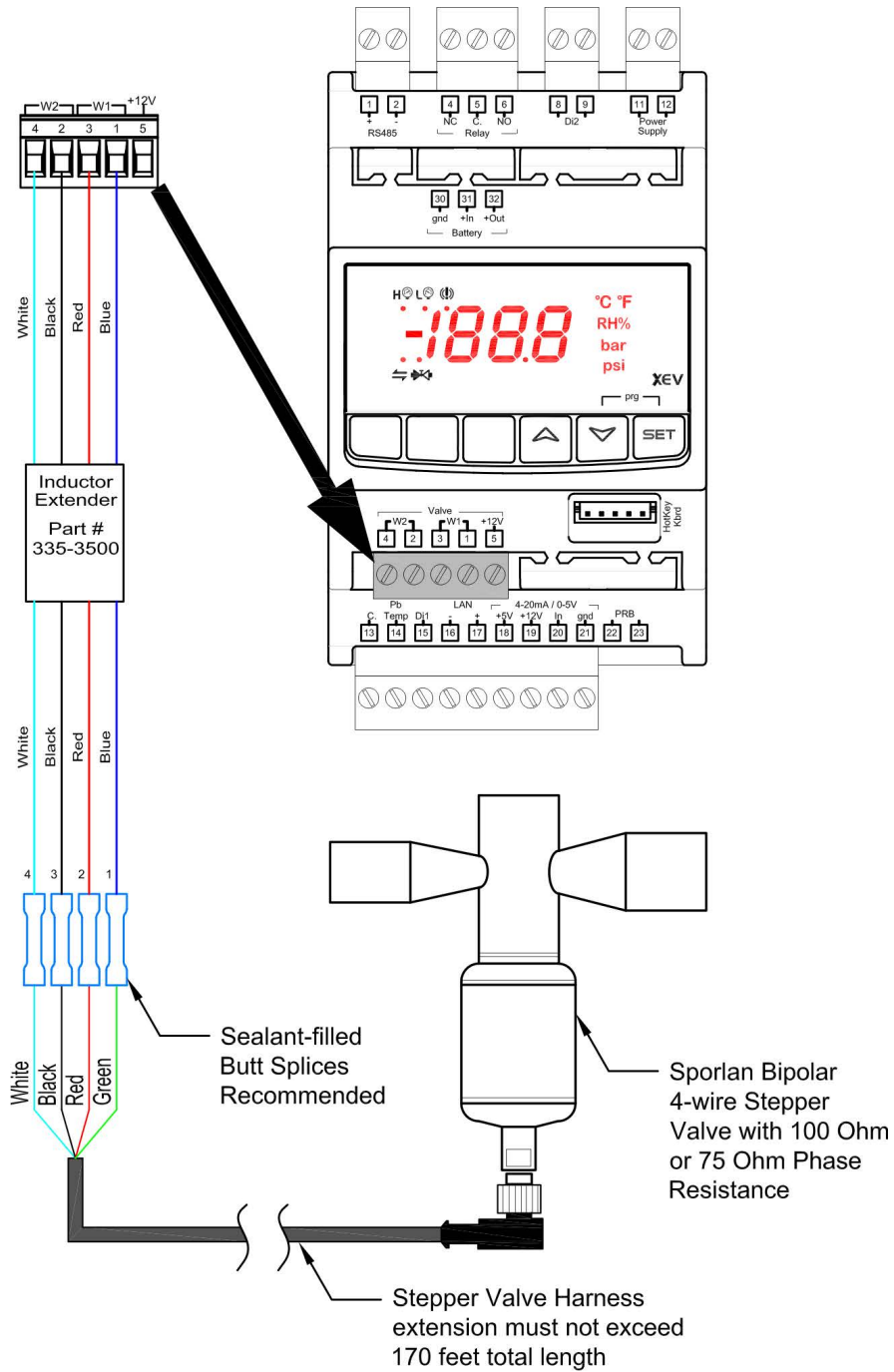


Figure 1 - XEV22D Inductor Extender Installation

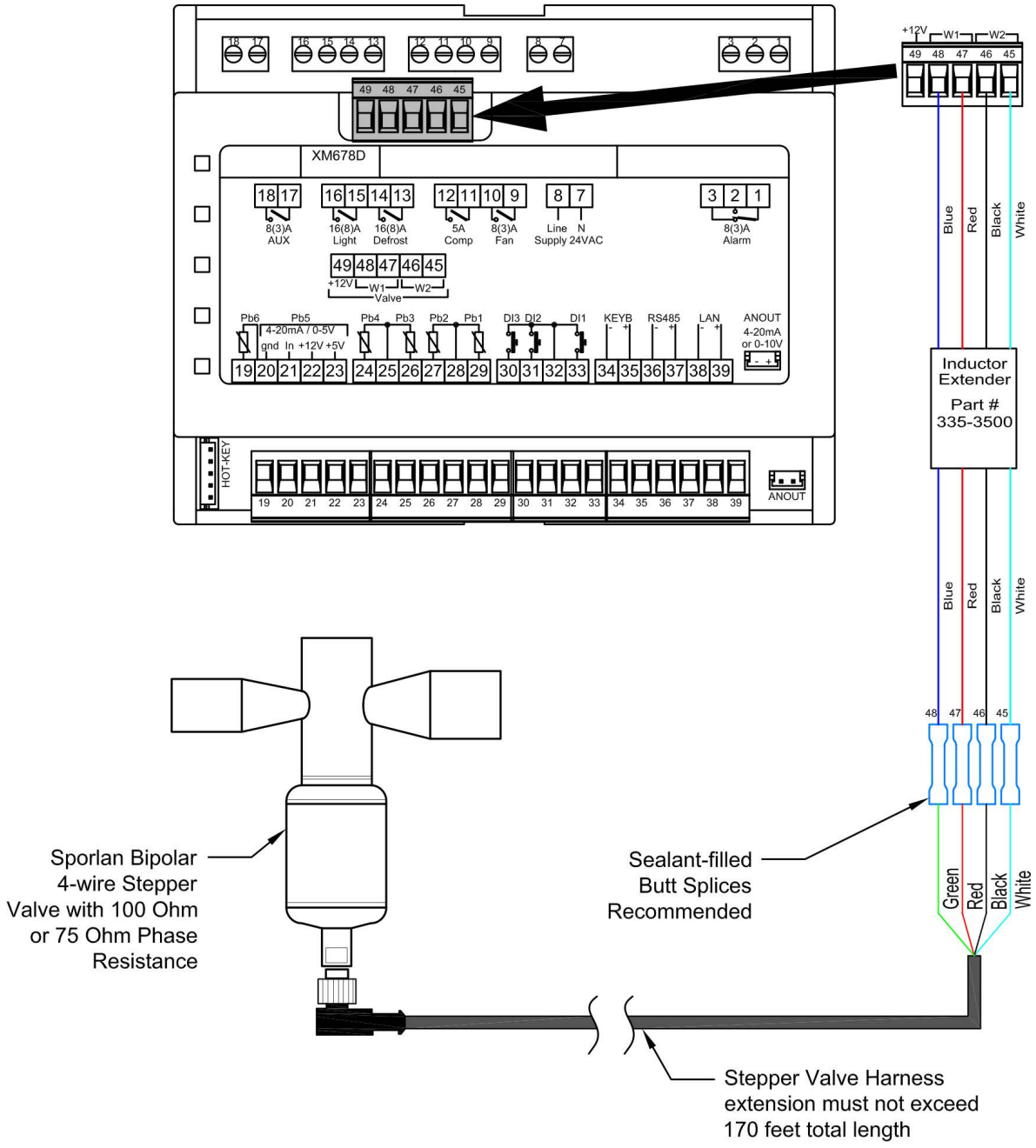


Figure 2 - XM678D Inductor Extender Installation

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