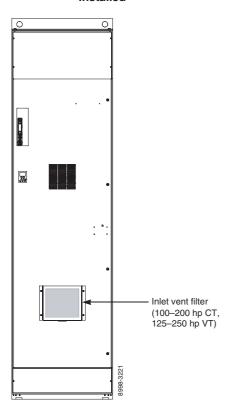
APPENDIX B—FIELD INSTALLATION OF INLET VENT FILTER ASSEMBLY

OVERVIEW

Figure 9: M-Flex™ Drive Controller with Inlet Vent Filter Assembly

Installed



This appendix contains installation instructions for a foam filter assembly. The assembly is installed onto the enclosure door over the bottom inlet ventilation louvers of the M-Flex[™] adjustable speed drive controller unit. The assembly is available only for 100–450 hp CT and 125–500 hp VT M-Flex[™] drives.

When installed correctly, the filter will capture some contaminants in a foam filter media rated at 30 pores per inch. The factory installs the foam filter assembly as standard for 1G gasketed enclosures. The foam filter assembly is available only as a field installed option on Type 1 enclosures.

This filter reduces the amount of contaminants pulled through the cooling vents of the drive controller unit. Filters are not required to maintain the UL Listing of the unit for Type 1 integrity.

The assembly contains the parts listed in Table 40.

Table 40: Inlet Vent Filter Assembly Parts

| Controller Rating (hp) | | Description | Part Number | Quantity |
|------------------------|------------|----------------------|--------------|----------|
| 100-200 CT | 125–250 VT | Outer filter bracket | 80444-132-02 | 1 |
| | | Inner filter bracket | 80444-133-02 | 1 |
| | | Foam filter element | 80444-134-01 | 1 |
| 250-450 CT | 300-500 VT | Filter | 80444-205-01 | 1 |

Each filter media is pre-cut to fit the inlet vent of a particular drive horsepower size.

INSTALLATION

To install the inlet vent filter assembly:

- With the door closed, install the filter brackets (outer and inner) over the louvers as shown in Figure 10 using the hardware provided in the predrilled holes around the louvers.
- 2. Insert the foam filter element into the opening at the top of the filter bracket. The element should be completely inside the filter brackets.

Inner filter bracket

Foam filter element
Outer filter bracket

10-32 screws (pre-installed)

10-32 screws (pre-installed)

Figure 10: Inlet Vent Filter Assembly Hardware Locations

MAINTENANCE

Enclosure sizes H–J drive controllers in 1G (gasketed) enclosures include a filter over the lower door vents. The maintenance procedures for the drive controller require that the filter element be inspected and cleaned every six months, or more frequently if indicated by service conditions and your established maintenance schedule.

To clean the filter element:

- Remove the filter element from the front door bracket by pushing the filter element up from the bottom of the filter bracket, using the access slots in the bottom of the bracket. Once the filter element is partially above the bracket, remove it by pulling it out of the top of the bracket.
- 2. Vacuum and wash the filter thoroughly.
- 3. Dry the filter completely and re-install it.

NOTE: Replace the filter element if it becomes damaged or deteriorates. See Table 40 on page 103 for a list of filter part numbers.

HIGHER HORSEPOWER CONTROLLERS (250–450 hp CT, 300–500 hp VT)

To prevent overheating and to allow proper air flow, maintain the clearances shown in Figures 5 to 8 on pages 35 to 38. Every six months, inspect and clean the filters if needed. Vacuum and wash the filters thoroughly, then dry and reinstall them.

NOTE: Replace the filter element if it becomes damaged or deteriorates. See Table 40 on page 103 for the filter part number.