

Application Engineering

COPELAND

TECHNICAL INFORMATION

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COPELAND™ COMPRESSOR ELECTRONICS LIQUID INJECTION EXTENSION MODULE C – QUICK INSTALLATION GUIDE

1 Introduction

Copeland™ Stream with Copeland™ Compressor Electronics provides advanced motor protection, diagnostics, and liquid injection and head fan control as an option via the Liquid Injection extension module C.

Module C controls the operation of the liquid injection and/or the head fan depending on the discharge temperature.

2 Installation of Liquid Injection extension module C

The Liquid Injection extension module C can be ordered under reference N°3281560 and used on Stream compressors equipped with Copeland Compressor Electronics.

Module C is automatically detected when inserted.

Switch off/on Copeland Compressor Electronics before/after inserting the module into its dedicated slot.

Module C is to be inserted into the slot located in the middle of the module as shown in **Figure 2** below. The correct slot for the Liquid Injection extension module is marked with the letter **C**.



Figure 1:Liquid Injection extension module C

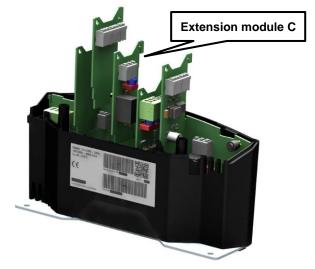


Figure 2: Copeland Compressor Electronic with modules

3 Discharge temperature sensor position

The discharge temperature sensor position has to be changed to the other hole of the cylinder head where it is already located.

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4 Connections

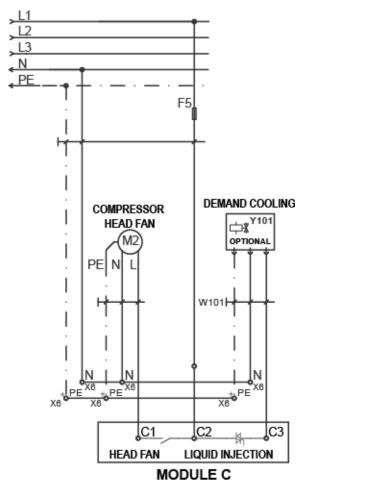


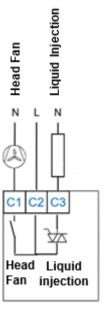
WARNING

Electrical connections must be made by qualified electrical personnel. All valid standards for connecting electrical and refrigeration equipment must be observed. Connected sensors and connection lines that extend from the terminal box have to feature at least a basic insulation.

Terminals are suitable for 0.75 mm² cables with 10 m maximum length.

- Terminal C1: ouput for head fan
 - o 70-W fan
 - 115 VAC or 230-240 VAC / 50-60 Hz
 - o Relay with potential free contact
- Terminal C2: phase
- Terminal C3: triac output for liquid injection valve
 - o 10-30 VA
 - o 115-240 VAC / 50-60 Hz





Module C

Figure 3: Wiring diagrams for liquid injection and/or head fan monitored via module C