

## COPELAND™ COMPRESSOR ELECTRONICS

### DIGITAL MODULATION EXTENSION MODULE D – QUICK INSTALLATION GUIDE

#### 1 Introduction

Copeland™ Stream with Copeland™ Compressor Electronics provides advanced motor protection, diagnostics and digital control and unloaded start as an option via the Digital Modulation extension module D.

Module D controls the operation of:

- the digital modulation over a voltage input (D5/D6) or Modbus;
- the unloaded start by compressor start signal (terminals 17/18) or Modbus.

#### 2 Installation of Digital Modulation & Unloaded Start extension module D

The Digital Modulation & Unloaded Start extension module D can be ordered under reference N°3281571 and used on Stream compressors equipped with Copeland Compressor Electronics.

Module D is automatically detected when inserted.

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

Module D is to be inserted into the slot located in the middle right of the module as shown in **Figure 2** below. The correct slot for the Digital Modulation & Unloaded Start extension module is marked with the letter **D**.



Figure 1: Digital Modulation extension module D

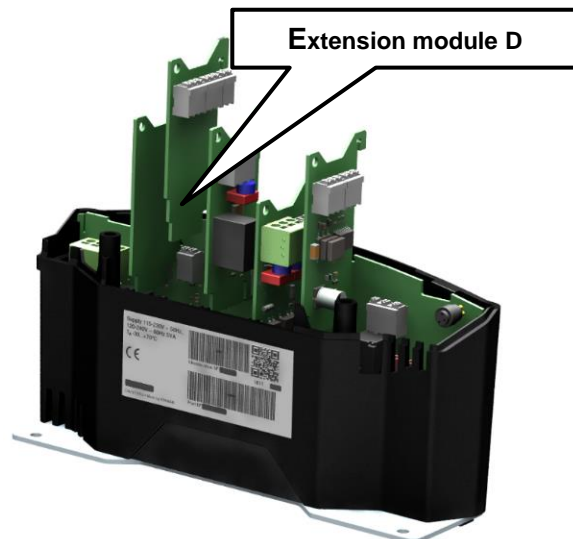


Figure 2: Copeland Compressor Electronics with modules

### 3 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.

- Triac outputs: terminals D2, D3, D4
  - D2: output for digital modulation
  - D3: phase
  - D4: output for unloaded start
  - Suitable for 1.5 mm<sup>2</sup> cables with max 10 m length
  - 10-30 VA
  - 115-240 VAC / 50-60 Hz
- Demand input: terminals D5, D6
  - Suitable for 0.75 mm<sup>2</sup> cables with max 10 m length
  - DC 0-10 V

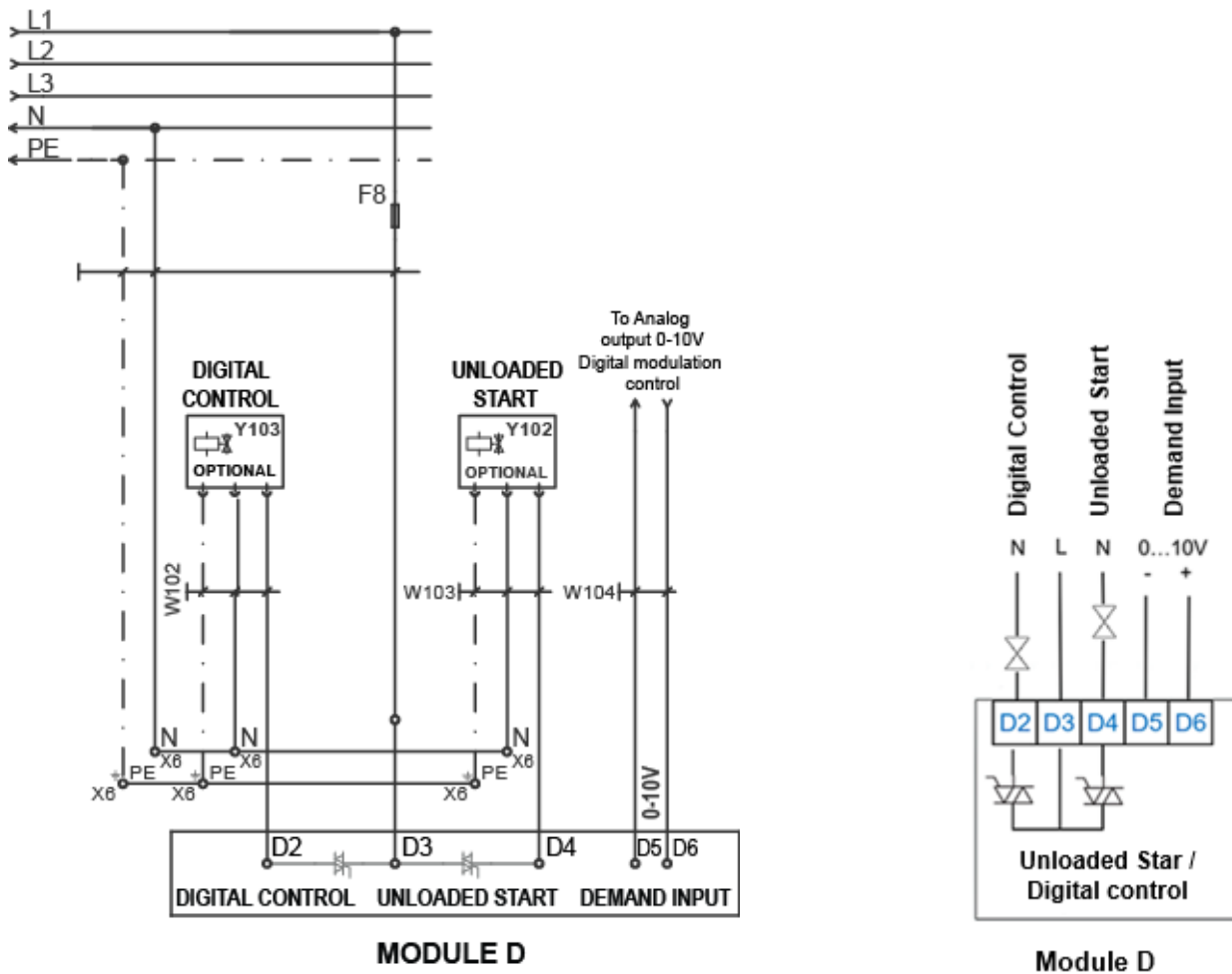


Figure 3: Wiring diagrams for digital control and/or unloaded start via module D