Lafayette College | Electrical and Computer Engineering

COOLING SYSTEM

ENCLOURE INTERCONNECTIVITY DOCUMENT

ECE 492 2017

# Overview

Below is the ICD for the COOLING CONTROLLER enclosure. It includes each type of connector and specifies what travels along each pin. All of the connectors on the COOLING CONTROLLER enclosure are panel mount DT-04.

# COOLING CONTROLLER Enclosure

## PANNEL 1:

## SAFETY LOOP Panel (Left Side) – J1

**Connector Type:** DT04-4P Panel Mount

**Pin 1**: Safety loop input wire 1

**Pin 2**: Safety loop input wire 2

**Pin 3**: Safety loop input wire 3

**Pin 4**: Safety loop input wire 4

## SAFETY LOOP Panel (Middle) – J3

**Connector Type:** DT04-4P Panel Mount

**Pin 1**: Safety loop output wire 1

**Pin 2**: Safety loop output wire 2

**Pin 3**: Safety loop output wire 3

**Pin 4**: Safety loop output wire 4

## CAN and POWER Panel (Right Side) – J4

**Connector Type:** DT04-6P Panel Mount

**Pin 1**: CAN H

**Pin 2:** CAN L

**Pin 3**: SHIELD

**Pin 4:** CHGND

**Pin 5**: 24VDC

**Pin 6:** 24V RTN

## PANNEL 2:

## Pump and Sensors (left side) – J6

**Connector Type:** DT04-8P Panel Mount

**Pin 1**: Pump POWER

**Pin 2:** Pump GND

**Pin 3**: Sensors 5V

**Pin 4:** TEMP SENSOR 1 INPUT

**Pin 5**: TEMP SENSOR 2 INPUT

**Pin 6:** TEMP SENSOR 3 INPUT

**Pin 7**: FLOW METER INPUT

**Pin 8:** N/A

## Pump and Sensors (Middle) – J5

**Connector Type:** DT04-8P Panel Mount

**Pin 1**: FANs POWER

**Pin 2:** FANs GND

**Pin 3**: FAN1 PWM

**Pin 4:** FAN2 PWM

**Pin 5**: FAN3 tachometer

**Pin 6:** FAN4 tachometer

**Pin 7**: N/A

**Pin 8:** N/A

## CAN and POWER Panel (Right Side) – J2

**Connector Type:** DT04-6P Panel Mount

**Pin 1**: CAN H

**Pin 2:** CAN L

**Pin 3**: SHIELD

**Pin 4:** CHGND

**Pin 5**: 24VDC

**Pin 6:** 24V RTN