

# Encline Artificial Lift Technologies: Phase Transition Control PLC: 8/2019

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## Digital Inputs

1. On-Off Switch – mounted locally on PLC Enclosure
2. Reset Button – mounted locally on PLC Enclosure, close when depressed (NO)
3. Close Bypass Momentary Switch – remote mounted (NO)
4. Compressor Oil Pressure Switch – remote mounted, closes on loss of oil pressure (NC)
5. Blowcase Level Switch – remote mounted, closes on high level, open on low level (NC)
6. Air Compressor Running Relay – remote mounted, closes when compressor operating (NO)
7. Confirmation of VFD running if so equipped – remote mounted, closes when running (NO)
8. VFD Fault Switch if so equipped – remote mounted, closed when VFD faulted (NO)
9. Supply Air Pressure Switch – remote mounted, closes on loss of air pressure (NC)
10. Inlet Separator Dump Pressure Switch – remote mounted, closes on dump(NO)
11. First Interstage Scrubber Dump Pressure Switch – remote mounted, closes on dump (NO)
12. Second Interstage Scrubber Dump Pressure Switch – remote mounted, closes on dump (NO)
13. Spare
14. Jumper for RS485 to RS232 adaptor on Comm port 2
15. Jumper for JW E200 with Centurion C5 Controller

## Digital Outputs

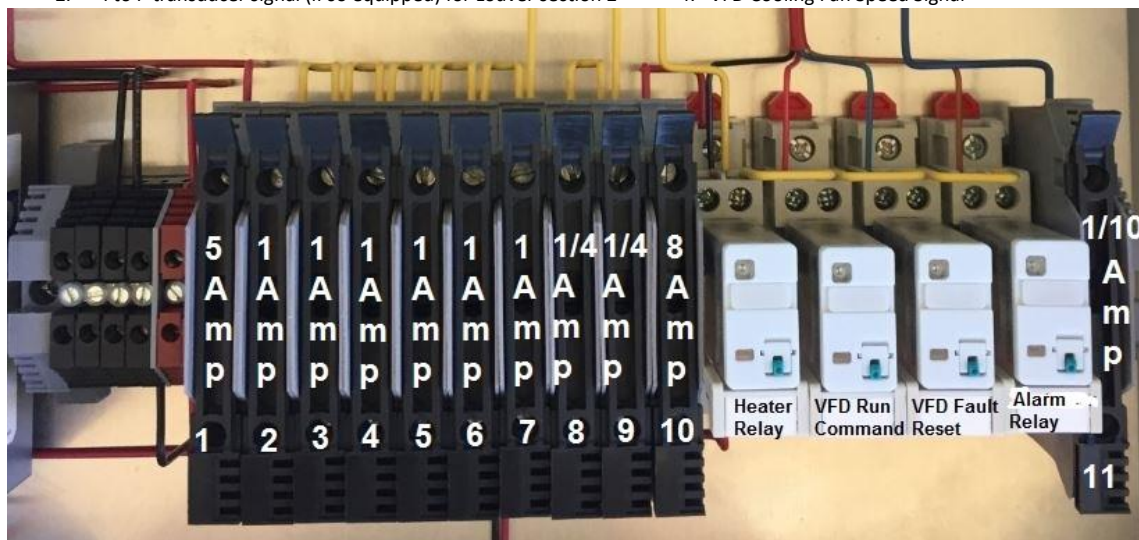
- |   |   |
|---|---|
| 1. Louver 1 Open Solenoid (share 1 amp fuse with below) | 9. VFD Run Command Relay (VFD RUN)      |
| 2. Louver 1 Close Solenoid                              | 10. VFD Fault Reset Relay (VFD RESET)   |
| 3. Louver 2 Open Solenoid (share 1 amp fuse with below) | 11. Green Light in On-Off Switch        |
| 4. Louver 2 Close Solenoid                              | 12. Red Light in Reset Switch           |
| 5. Cooler VFD Heater (20F – 40F)                        | 13. PLC Cabinet Heater Relay (HEATER)   |
| 6. Main VFD Cabinet Heater (20F – 40F)                  | 14. Air compressor drain Solenoid       |
| 7. Compressor Bypass Valve Solenoid                     | 15. Warning Buzzer                      |
| 8. Compressor Blowcase Valve Solenoid                   | 16. VFD Temp Out of Range Alarm (ALARM) |

## Analog Inputs

- |  |   |
|--|---|
| 1. Air pressure transducer on Louver section 1 w/255 ohm   | 5. 10K Type 3 Thermistor for cooler VFD cabinet             |
| 2. Air pressure transducer on Louver section 2 w/ 255 ohm  | 6. 10K Type 3 Thermistor for radiator water return/main VFD |
| 3. 10K Type 3 Long Thermistor w/5500 ohm opt Cooler 1 temp | 7. 10K Type 3 Thermistor (temp of PLC cabinet)              |
| 4. 10K Type 3 Long Thermistor w/5500 ohm opt Cooler 2 temp | 8. 10K Precon Type 3 Thermistor (Ambient temp – in conduit) |

## Analog Outputs (0-20 mA)

- |   |                                       |
|---|---------------------------------------|
| 1. I to P transducer signal (if so equipped) for Louver section 1 | 3. Future Compressor VFD Speed Signal |
| 2. I to P transducer signal (if so equipped) for Louver section 2 | 4. VFD Cooling Fan Speed Signal       |



## Fuse Guide

- |                                |  |   |
|--------------------------------|--|---|
| 1. PLC Main Power Fuse: 5 amps | 5. Compressor Bypass Solenoid          | 9. Murphy Transducer 2                        |
| 2. Solenoid Cluster 1          | 6. Scrubber Drain / Blowcase Solenoid  | 10. Heater Fuse: 8 Amps                       |
| 3. Solenoid Cluster 2          | 7. Air Compressor Water drain solenoid | 11. 5 Volt fuse for all thermistors: 1/10 Amp |
| 4. Modem Power                 | 8. Murphy Transducer 1                 | 120/240 into NDR 240-24 10 Amp Supply         |

For help, please visit website or call Bill Elmer at 903-530-6032