PFJR TO PF2 REPLACEMENT: WIRING INSTALLATION GUIDE
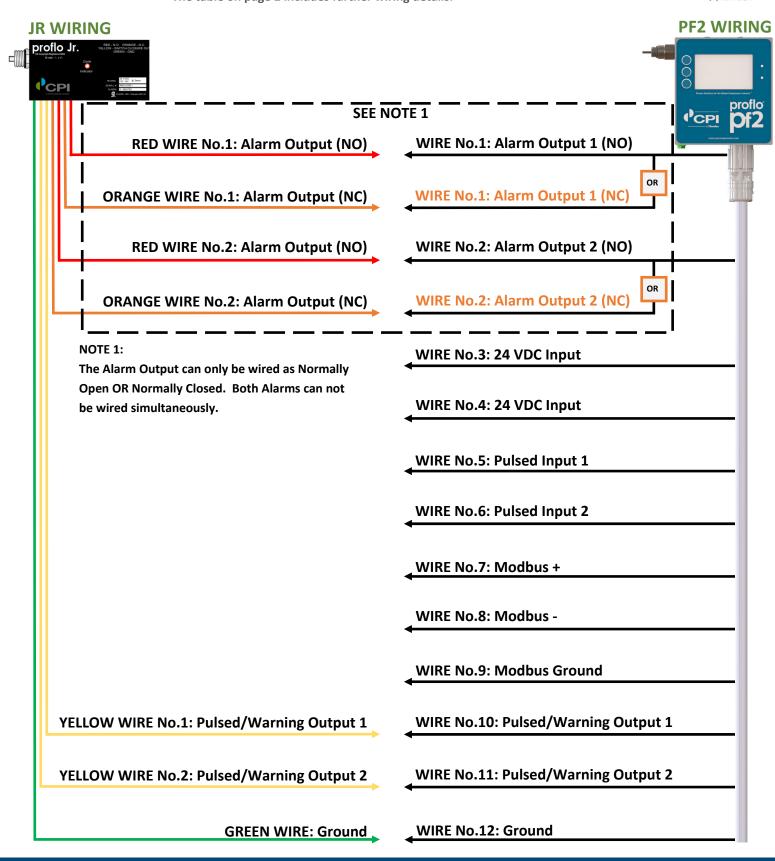
This document will cover the WIRING INSTRUCTIONS for replacing a PROFLO®JR with a PROFLO® PF2.
The images below show a comparison between the PFJR wiring and the equivalent wiring for a PF2.
The table on page 2 includes further wiring details.

JR WIRING

PF2 WIRING

SEE NOTE 1

RED WIRE No.1: Alarm Output (NO) → WIRE No.1: Alarm Output 1 (NO)

ORANGE WIRE No.1: Alarm Output (NC) → WIRE No.1: Alarm Output 1 (NC) [OR]

RED WIRE No.2: Alarm Output (NO) → WIRE No.2: Alarm Output 2 (NO)

ORANGE WIRE No.2: Alarm Output (NC) → WIRE No.2: Alarm Output 2 (NC) [OR]

NOTE 1:
The Alarm Output can only be wired as Normally
Open OR Normally Closed. Both Alarms can not
be wired simultaneously.

WIRE No.3: 24 VDC Input

WIRE No.4: 24 VDC Input

WIRE No.5: Pulsed Input 1

WIRE No.6: Pulsed Input 2

WIRE No.7: Modbus +

WIRE No.8: Modbus -

WIRE No.9: Modbus Ground

YELLOW WIRE No.1: Pulsed/Warning Output 1 → WIRE No.10: Pulsed/Warning Output 1

YELLOW WIRE No.2: Pulsed/Warning Output 2 → WIRE No.11: Pulsed/Warning Output 2

GREEN WIRE: Ground → WIRE No.12: Ground

JR WIRING	PF2 WIRING
RED WIRE 1: Normally Open, 300 VDC, 120VAC, 500mA MAX **RED WIRE 2: Normally Open, 300 VDC, 120VAC, 500mA MAX** • This Normally Open contact will close the internal circuit when the shutdown/alarm is activated. • Connect either RED wire to the control panel circuit and the other RED wire to ground. The ground wire may be directly installed to any metal surface that is tied to the common earth ground (i.e. junction box, condulete, compressor frame) or to a second wire connected directly to the control panel circuit. • The PFJR does not require applying any settings to activate the shutdown/alarm and will automatically go into Alarm after 2 min of inactivity (no divider block cycles). **OR** **ORANGE WIRE 1: Normally Closed ,300 VDC, 120VAC, 500mA MAX** **ORANGE WIRE 2: Normally Closed ,300 VDC, 120VAC, 500mA MAX** • This Normally Closed contact will open the internal circuit when the shutdown/alarm is activated. • Connect either ORANGE wire to the control panel circuit and the other ORANGE wire to ground. The ground wire may be directly installed to any metal surface that is tied to the common earth ground (i.e. junction box, condulete, compressor frame) or to a second wire connected directly to the control panel circuit. • The PFJR does not require applying any settings to activate the shutdown/alarm and will automatically go into Alarm after 2 min of inactivity (no divider block cycles).	**WIRE No.1: Alarm Output 1, 100 VDC, 125 VAC, 100mA MAX** **WIRE: No.2: Alarm Output 2, 100 VDC, 125 VAC, 100mA MAX** • This Normally Open contact will close the internal circuit when the shutdown/alarm is activated. • Connect either BLACK wire to the control panel circuit and the other BLACK wire to ground. Grounding should **NOT** be directly installed to any metal surface that is tied to the common earth ground (i.e. junction box, condulete, compressor frame). Instead a second wire connected directly to the control panel circuit should be used. • The PF2 is a programmable device and requires changing the PF2 settings to Normally Open to activate the shutdown/alarm and adjusting the shutdown time interval between 5s - 300s. Reference the Instruction Manual for further operating instructions. **OR** **WIRE No.1**: Alarm Output 1, 100 VDC, 125 VAC, 100mA MAX **WIRE: No.2: Alarm Output 2, 100 VDC, 125 VAC, 100mA MAX** • This Normally Closed contact will open the internal circuit when the shutdown/alarm is activated. • Connect either BLACK wire to the control panel circuit and the other BLACK wire to ground. Grounding should **NOT** be directly installed to any metal surface that is tied to the common earth ground (i.e. junction box, condulete, compressor frame). Instead a second wire connected directly to the control panel circuit should be used. • The PF2 is a programmable device and requires changing the PF2 settings to Normally Closed to activate the shutdown/alarm and adjusting the shutdown time interval between 5s - 300s. Reference the Instruction Manual for further operating instructions.
• **No wired 24VDC option available** • Battery powered	**WIRE No.3: 24 VDC Input, +9 VDC - 28 VDC** **WIRE No.4: 24 VDC Input, -9 VDC - 28 VDC** • Battery powered
• **No Pulsed Input option available**	**WIRE No.5: Pulsed Input 1, Any Dry Contact Closure** **WIRE No.6: Pulsed Input 2, Any Dry Contact Closure** • This dry contact circuit allows an input to be read from an external proximity switch device like a PROFLO® Cycle Switch. • Reference the Instruction Manual for further operating instructions.
• **No serial data output via option available (Modbus)**	**WIRE No.7: Modbus +, 5 V, 3.3 V Compatible** **WIRE No.8: Modbus -, 5 V, 3.3 V Compatible** **WIRE No.9: Modbus Ground** • The PF2 allows the transmission of serial data collected by the device to be transmitted over a serial connection (MODBUS). See the PF2 Instruction Manual for further instructions.
YELLOW WIRES 1: Switch closure output **YELLOW WIRES 2: Switch closure output** • The two (2) yellow wires are used to send a switch closure output with each divider block cycle to a PLC, Scada System, Digital Counter or Digital Control Panel.	**WIRE No.10: Pulsed/Warning Output 1, 100 VDC, 125 VAC, 100mA MAX** **WIRE No.11: Pulsed/Warning Output 2, 100 VDC, 125 VAC, 100mA MAX** • This pair of wires can be configured to transmit a second alarm (Warning) OR a Pulsed output. If the yellow wires of the PFJR were in use then the Pulsed Output setting must be activated in the PF2. • Reference the Instruction Manual for further operating instructions.
1 GREEN WIRE: Ground	**WIRE No.12: Ground**

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