

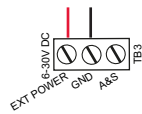
Wiring exchange from MC-III to E110/E112

In this technical note we will show you how to wire the E110/E112 explosion proof Flow logger / Totalizer when switching from an MC-III EXP Flow Analyzer. Take careful notice of all safety and precautionary measures indicated in the manual and follow the local Lockout Tagout procedures before exchanging any field or power supply wiring.

Disconnect from MC-III Connect to E110/E112

External power supply

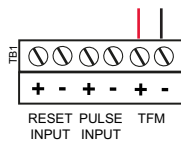
Positive DC wire.
Negative DC or ground wire.



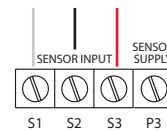
The power supply will be connected to the E110/E112 as final step of the replacement.

Turbine flowmeter (TFM) coil input*

Positive flowmeter wire.
Negative flowmeter wire.

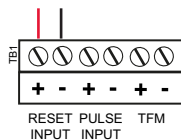


Negative flowmeter wire to terminal S2.
Positive flowmeter wire to terminal S3.
Cable-shield to terminal S1.



Remote (isolated) reset total input

Positive reset pulse input wire.
Negative reset pulse input wire.

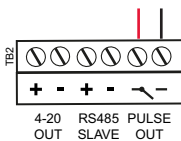


Negative reset pulse input wire to terminal E1.
Positive reset pulse input wire to terminal E2.
(This is a passive, not isolated signal)

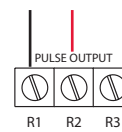


Scaled (isolated) pulse output **

Positive pulse output wire.
Negative pulse output wire.

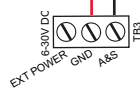


Negative pulse output wire to terminal R1.
Positive pulse output wire to terminal R2.
Pulse output frequency: max. 500Hz.
(This is a passive, not isolated signal)

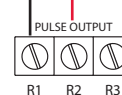


Flowmeter frequency output (Amp & Square)** (Pulse input retransmission)

"A&S" frequency output wire.
Ground wire.



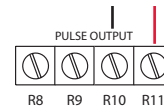
Ground wire to terminal R1.
"A&S" frequency output wire to terminal R2.
Min. pulse duration: 50µs, square wave.



Relay output

No relay output

Negative pulse output wire to terminal R10.
Positive pulse output wire to terminal R11.
Pulse output frequency: max. 0.5Hz.



* Set the sensor input signal to "COIL LO" for a 90mVpp and "COIL HI" for a 20mVpp sensitivity.

** The scaled pulse output and the pulse input retransmission of the E110/E112 cannot be used simultaneously. Set the digital output function in the configuration menu to SCALED or RETRANS.

E 110/112 Flow logger

Your success counts

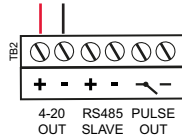


Disconnect from MC-III

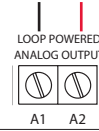
Connect to E110/E112

Isolated analog output

Positive analog output wire.
Negative analog output wire.

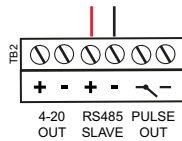


Negative analog output wire to terminal A1.
Positive analog output wire to terminal A2.
(If this output is required as non-isolated, connect A1 to common ground i.e. R3.)

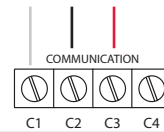


Modbus RS485 Communication

Positive or "B" wire.
Negative or "A" wire.



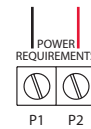
Negative or "A" wire to terminal C3.
Positive or "B" wire to terminal C4.
If required, ground or shield to C1.



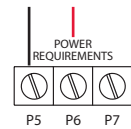
External power supply

Disconnect the power supply before exchanging any other wiring.

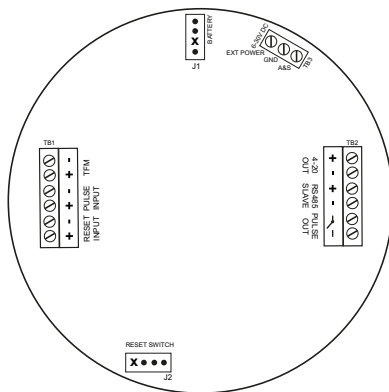
Negative DC or ground wire to terminal P1.
Positive DC wire to terminal P2 (9 - 27V DC).
(If the relay output is used, then connect to P5 and P6, 24 - 27V DC.)



OR



MC-III EXP



E110 / E112

