NOTES:

1. **WARNING:** This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product’s name tag and national and local codes.

2. Up to 32 devices may be connected on the RS-485 buss, for up to a total combined distance of 4000 feet. For this configuration, 2 RS-485 busses are required.

3. Units must be daisy-chained; No Star Configurations.

Comm1; Remote CCU Protocol

Comm2; Therms Protocol: RS-485 Modbus ASCII

BTU to XFC SLAVES to XRC MASTER
NOTES:
1. WARNING: This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product’s name tag and national and local codes.

TO TERMINATE XRC BOARD: If the Master is the last unit, or is the only unit, jumper 1 to 2 to terminate.
or
Jumper 2 to 3 on J7 for first and intermediate units.

TO TERMINATE XRC BOARD: If the BTU Transmitter is the last device on the RS-485 Bus, or if it is the only device, jumper J6 Pin-1 to Pin-2.

If it is not the last device, jumper J6 Pin-2 to Pin-3 (Pin-1 is on the left, when viewing the I.S. Board).

2. Up to 32 devices may be connected on the RS-485 buss, for up to a total combined distance of 4000 feet.
For this configuration, 2 RS-485 busses are required.

3. Units must be daisy-chained; No Star Configurations.
NOTES:
1. WARNING: This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product's name tag and national and local codes.
2. Up to 32 devices may be connected on the RS-485 bus, for up to a total combined distance of 4000 feet.
   For this configuration, 2 RS-485 busses are required.
3. Units must be daisy-chained; No Star Configurations.

RS-485 Communications Module
Totalflow P/N 2015192
(Both modules are required
On the boards for this configuration)

TO TERMINATE XRC BOARD:
If the Master is the last unit, or is the only unit, jumper 1 to 2 terminate.
Jumper 2 to 3 on J10 for first and intermediate units.

TO TERMINATE FCU PORT, COMM2:
If the BTU Transmitter is the last device on the RS-422 Bus, or if it is the only device, jumper J7 Pin-1 to Pin-2.
J7

If it is not the last device, jumper J7 Pin-2 to Pin-3 (Pin-1 is on the left, when viewing the I.S. Board).
J7

1. [ircuit 2 Wire, jumper J8 Pin-1 to Pin-2. For RS-422 4-wire, jumper J8 Pin-2 to Pin-3.
J8

1. [ircuit 2 Wire, jumper J12 to 3 on J12 for first and intermediate units.
J12

If the first unit is the only unit, jumper 1 to 2 to terminate.

For RS-485 2-wire, jumper J8 Pin-1 to Pin-2. For RS-422 4-wire, jumper J8 Pin-2 to Pin-3.

ABB
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THERMS STATION WIRING LAYOUT
BTU TO XFC SLAVE TO XRC MASTER
2102927
AA
3 OF 7
NOTES:
1. WARNING: This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product’s name tag and national and local codes.

2. Up to 32 devices may be connected on the RS-485 buss, for up to a total combined distance of 4000 feet.
   For this configuration, 2 RS-485 busses are required.

3. Units must be daisy-chained; No Star Configurations.

4. The RS-232 connection to PLC has a suggested length of 25 feet or less.
1. **WARNING:** This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product’s name tag and national and local codes.

2. The RS-232 connection to PLC has a suggested length of 25 feet or less.
NOTES:
1. WARNING: This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product’s name tag and national and local codes.
2. Up to 32 devices may be connected on the RS-485 buss, for up to a total combined distance of 4000 feet.
   For this configuration, 2 RS-485 busses are required.
3. Units must be daisy-chained; No Star Configurations.
NOTES:
1. WARNING: This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product’s name tag and national and local codes.
2. Up to 32 devices may be connected on the RS-485 buss, for up to a total combined distance of 4000 feet. For this configuration, 2 RS-485 busses are required.
3. Units must be daisy-chained; No Star Configurations.

RS-485 Communications Module
Totalflow P/N 2015192
(Both modules are required On the boards for this configuration)

TO TERMINATE XRC BOARD:
If the Master is the last unit, or the only unit, jumper J1 to 2 to terminate. Jumper 2 to 3 on J10 for first and intermediate units.

TO TERMINATE FCU PORT, COMM2:
If the BTU Transmitter is the last device on the RS-422 Buss, or if it is the only device, jumper J7 Pin-1 to Pin-2. If it is not the last device, jumper J7 Pin-2 to Pin-3 (Pin-1 is on the left, when viewing the I.S. Board).

For RS-485 2-wire, jumper J8 Pin-1 to Pin-2. For RS-422 4-wire, jumper J8 Pin-2 to Pin-3

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BTU TO XFC SLAVE TO XRC MASTER
2102927
AA
OF 7