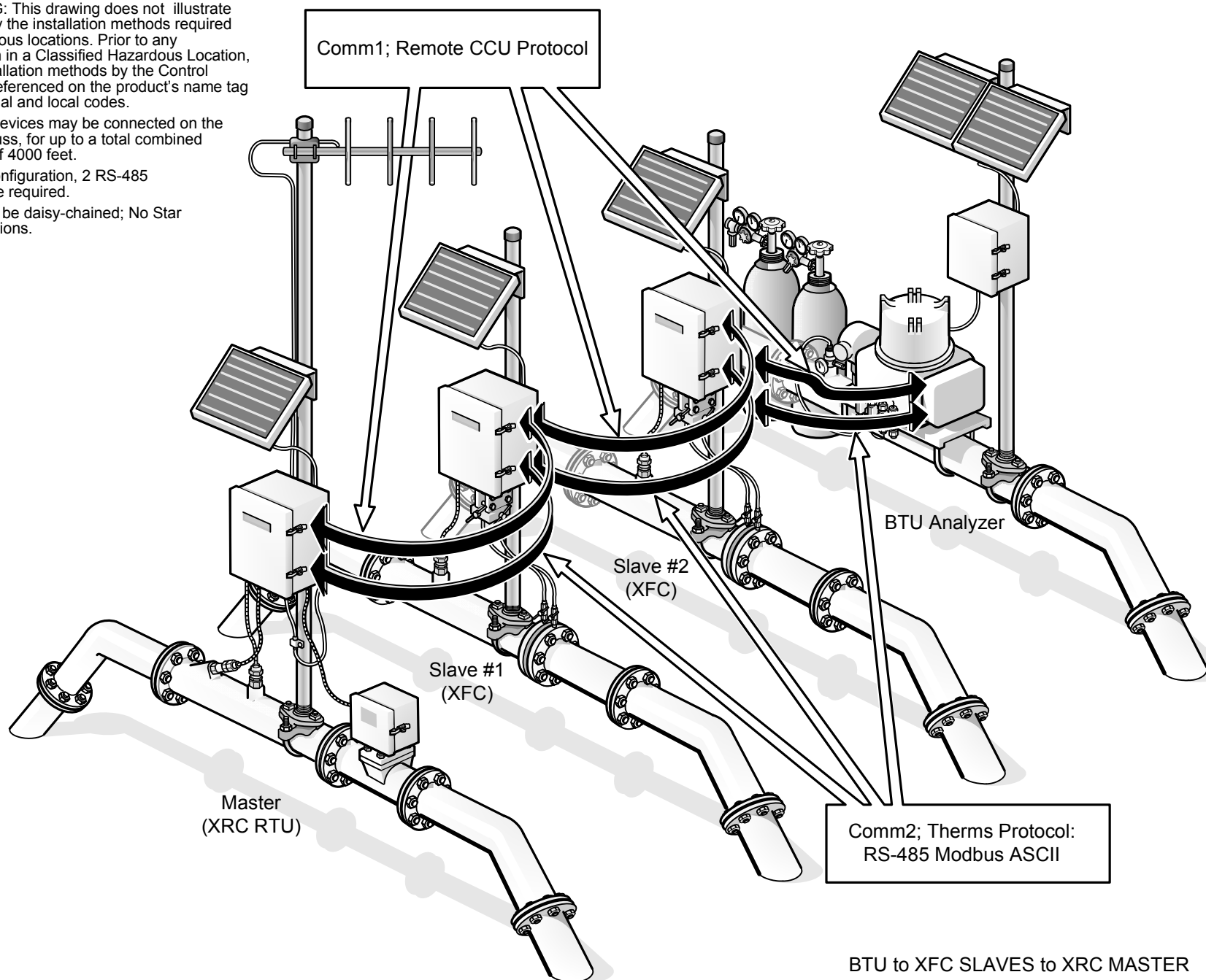


NOTES:

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.



ABB

TOTALFLOW
Products

ACTION
L19096

DOC TYPE
UD

TITLE
THERMS STATION WIRING LAYOUT
BTU TO XFC SLAVE TO XRC MASTER

DWG NO.
2102927

REV
AA

SHEET
1 OF 7

NOTES:

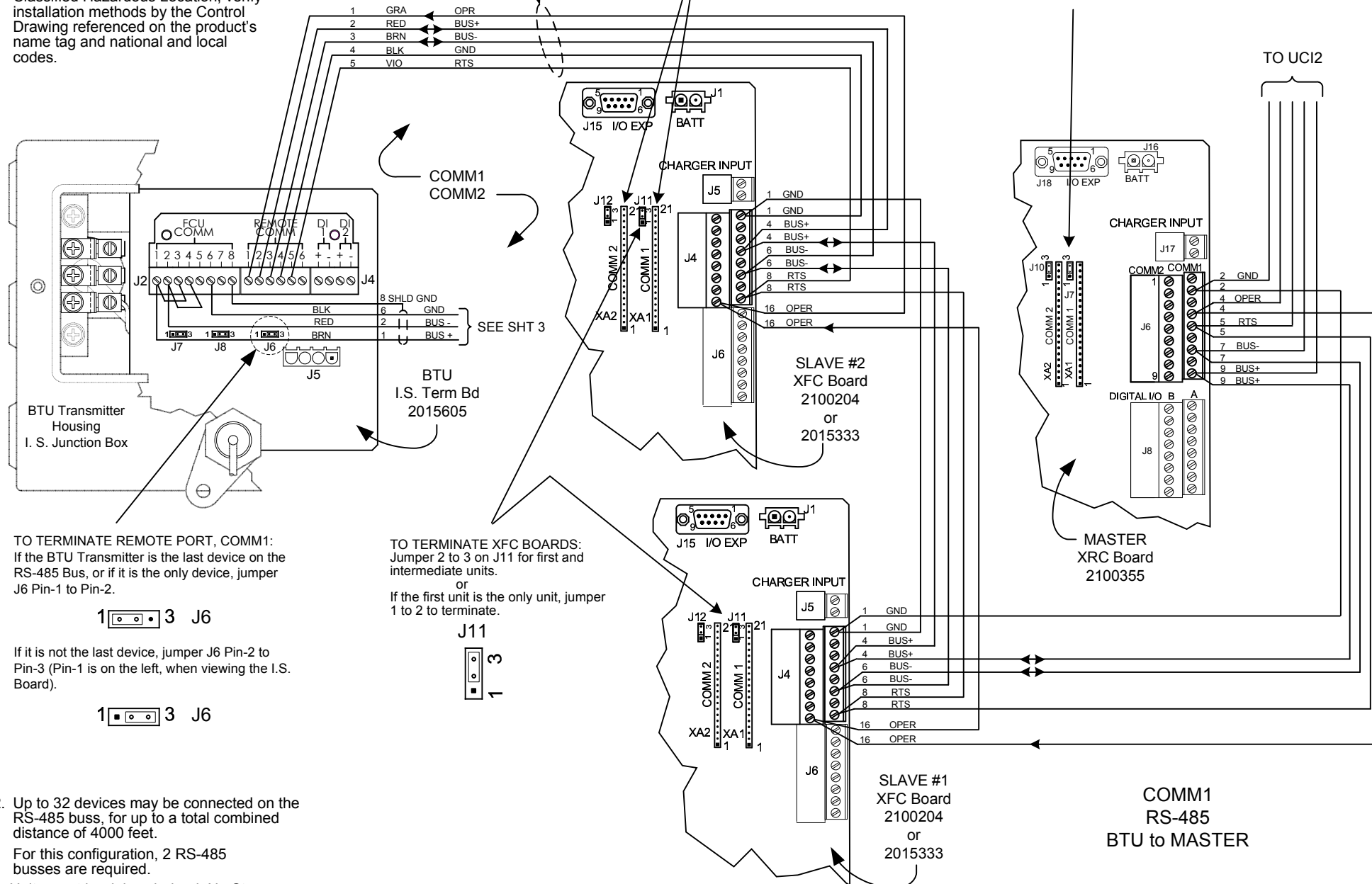
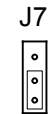
1. **WARNING:** This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product's name tag and national and local codes.

Totalflow RS-485 Cable
P/N 2011648-001

Or
Use 20 AWG shielded wire, 22
pF/ft, 14 OHMs/1000 ft

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 to terminate.
or
Jumper 2 to 3 on J7 for first and
intermediate units.



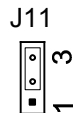
TO TERMINATE REMOTE PORT, COMM1:
If the BTU Transmitter is the last device on the
RS-485 Bus, or if it is the only device, jumper
J6 Pin-1 to Pin-2.



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).



TO TERMINATE XFC BOARDS:
Jumper 2 to 3 on J11 for first and
intermediate units.
or
If the first unit is the only unit, jumper
1 to 2 to terminate.



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.

REF: N/A

ABB TOTALFLOW Products	ACTION L19096	DOC TYPE UD	TITLE THERMS STATION WIRING LAYOUT BTU TO XFC SLAVE TO XRC MASTER	DWG NO. 2102927	REV AA	SHEET 2 OF 7
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NOTES:

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

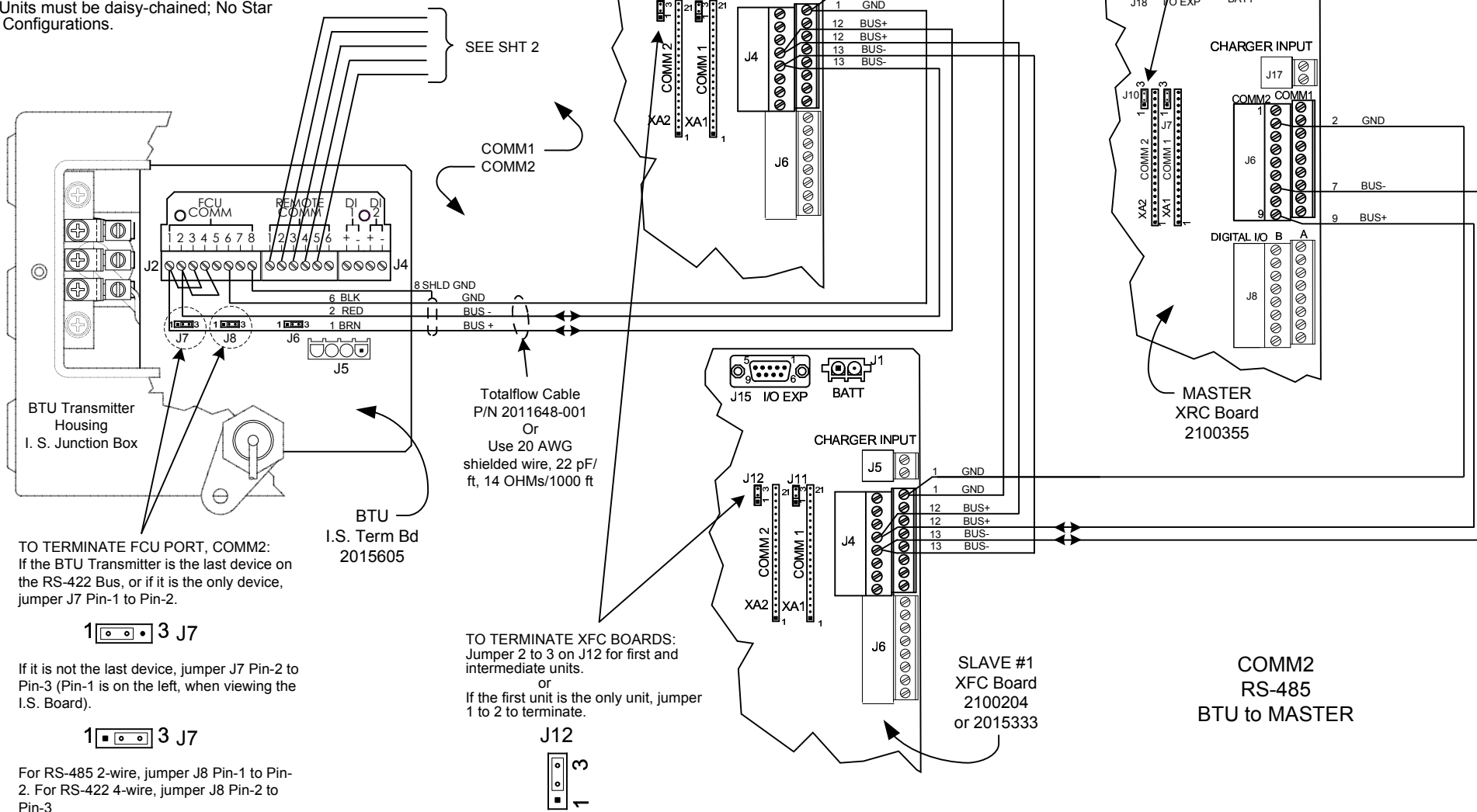
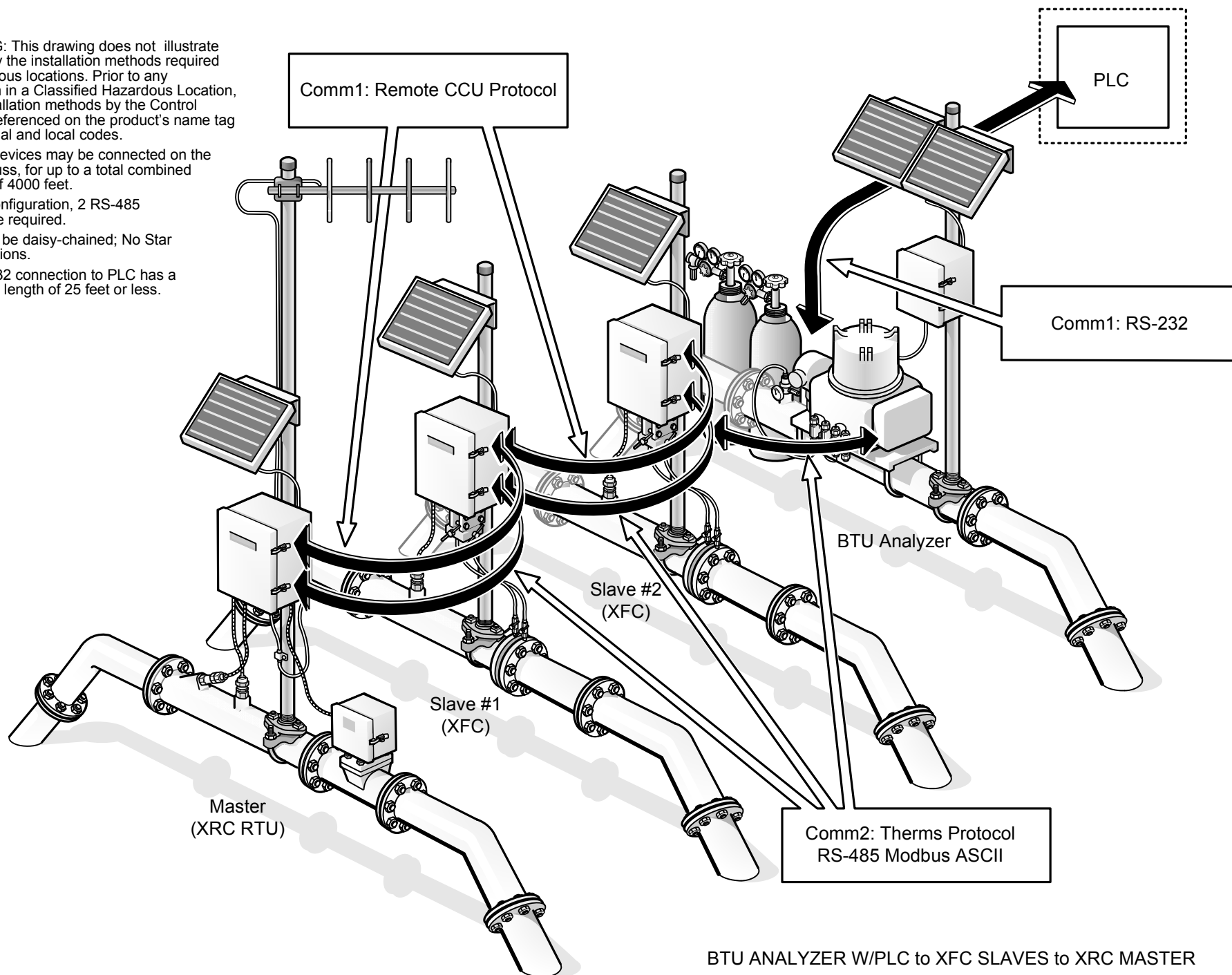


ABB TOTALFLOW Products	ACTION L19096	DOC TYPE UD	TITLE THERMS STATION WIRING LAYOUT BTU TO XFC SLAVE TO XRC MASTER	DWG NO. 2102927	REV AA	SHEET 3 OF 7
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REF: N/A

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.

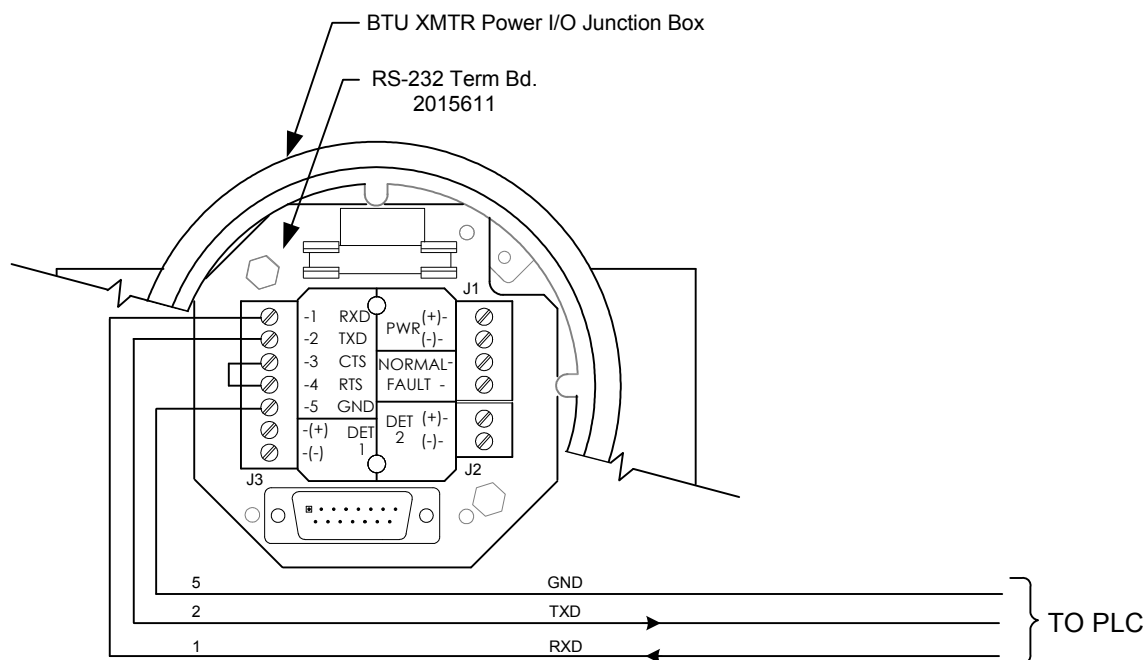


BTU ANALYZER W/PLC to XFC SLAVES to XRC MASTER

ABB	TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
		L19096	UD	THERMS STATION WIRING LAYOUT BTU TO XFC SLAVE TO XRC MASTER	2102927	AA	4 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. The RS-232 connection to PLC has a suggested length of 25 feet or less.



COMM1
RS-232 to PLC

REF: N/A

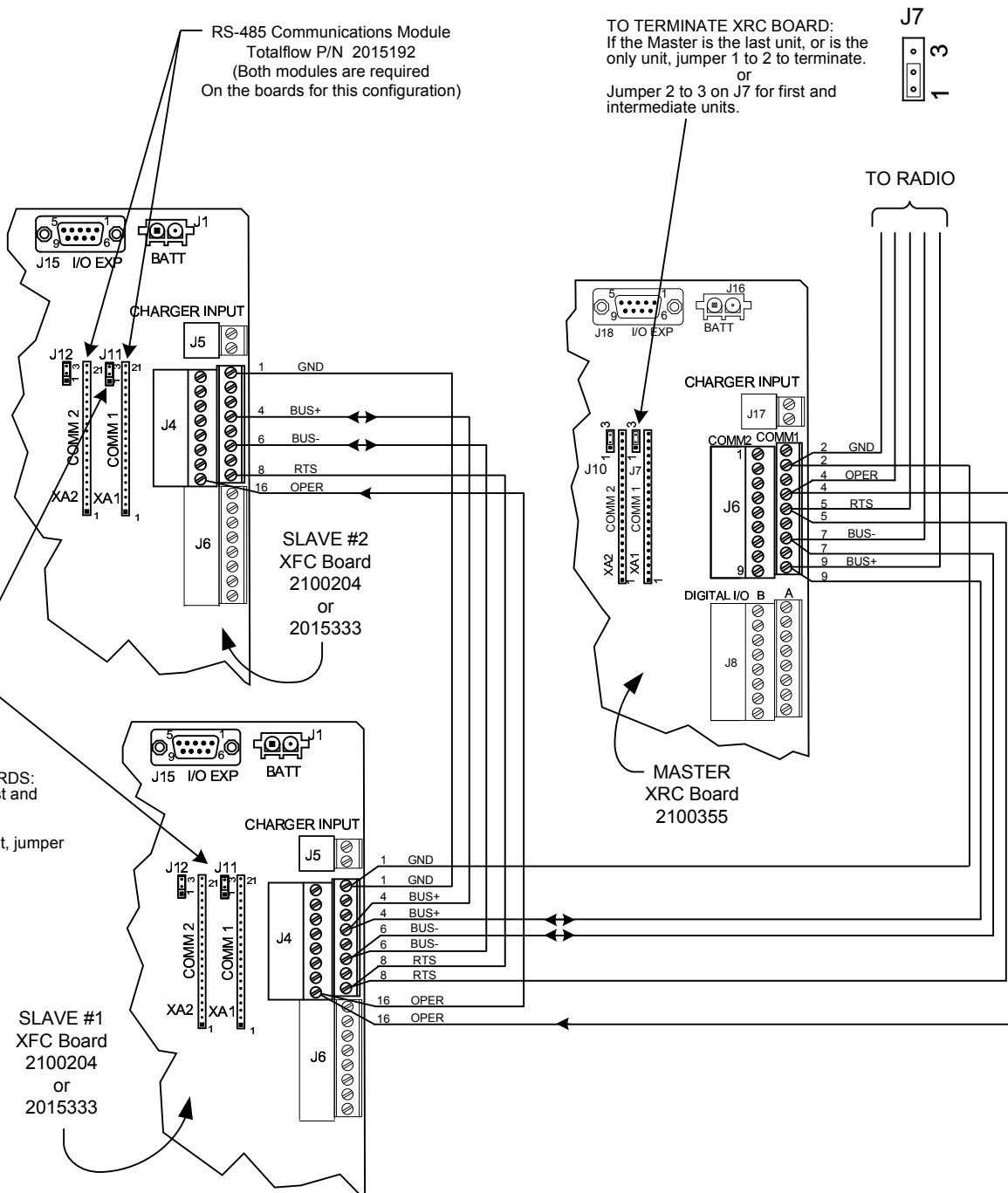
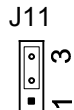
ABB	TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
		L19096	UD	THERMS STATION WIRING LAYOUT BTU TO XFC SLAVE TO XRC MASTER	2102927	AA	5 OF 7

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.

COMM1
RS-485
SLAVE#2 to MASTER

TO TERMINATE XFC BOARDS:
Jumper 2 to 3 on J11 for first and intermediate units.
or
If the first unit is the only unit, jumper 1 to 2 to terminate.



REF: N/A



TOTALFLOW
Products

ACTION
L19096

DOC TYPE
UD

TITLE
THERMS STATION WIRING LAYOUT
BTU TO XFC SLAVE TO XRC MASTER

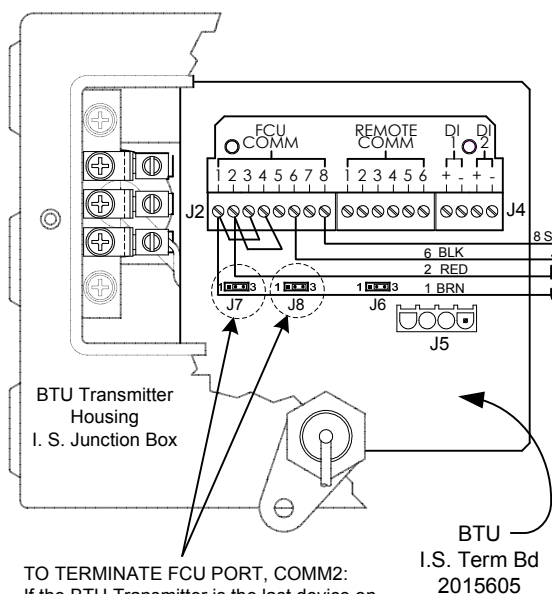
DWG NO.
2102927

REV
AA

SHEET
6 OF 7

NOTES:

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



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.

1 3 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).

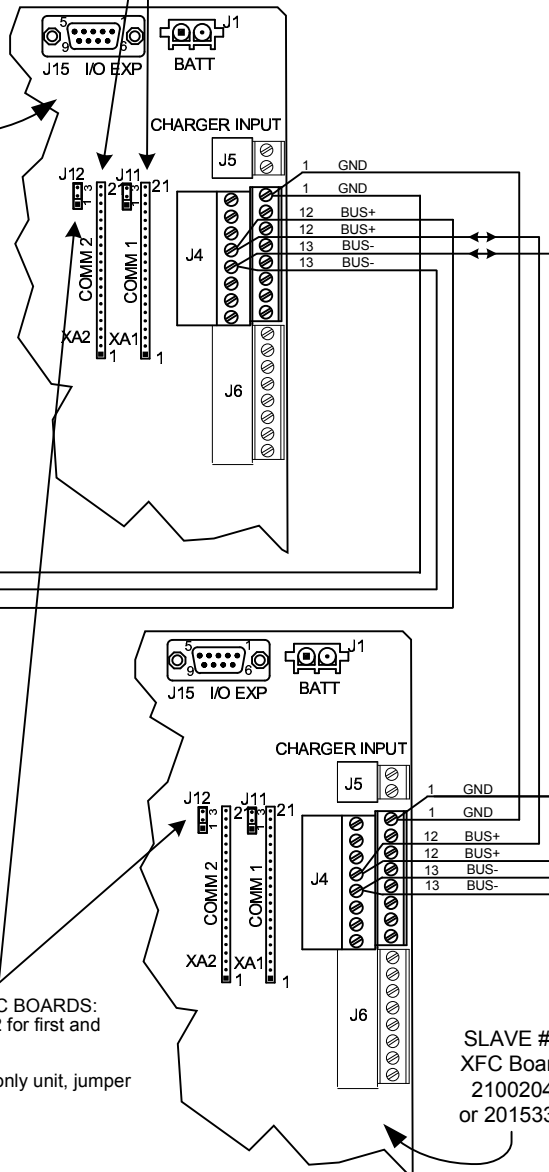
1 3 J7

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

1 3 J8

SLAVE #2
XFC Board
2100204
or
2015333

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

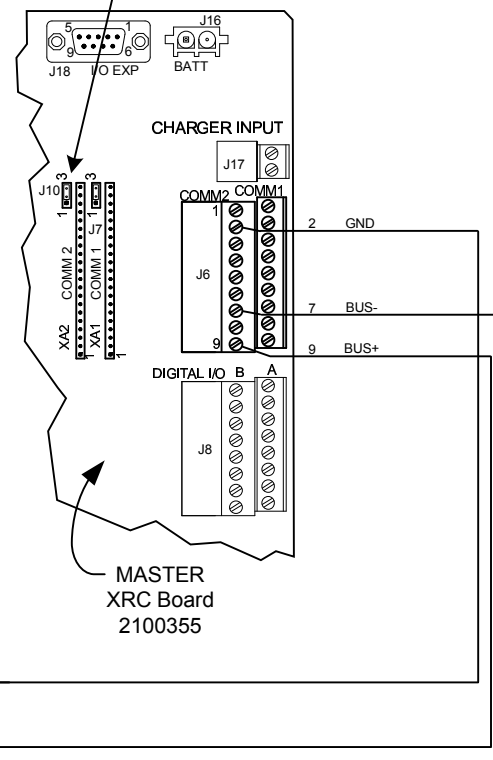


TO TERMINATE XFC BOARDS:
Jumper 2 to 3 on J12 for first and intermediate units.
or
If the first unit is the only unit, jumper 1 to 2 to terminate.

J12
1 3

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 J10 for first and intermediate units.

J10
1 3



COMM2
RS-485
BTU to MASTER

REF: N/A

ABB	TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
		L19096	UD	THERMS STATION WIRING LAYOUT BTU TO XFC SLAVE TO XRC MASTER	2102927	AA	7 OF 7