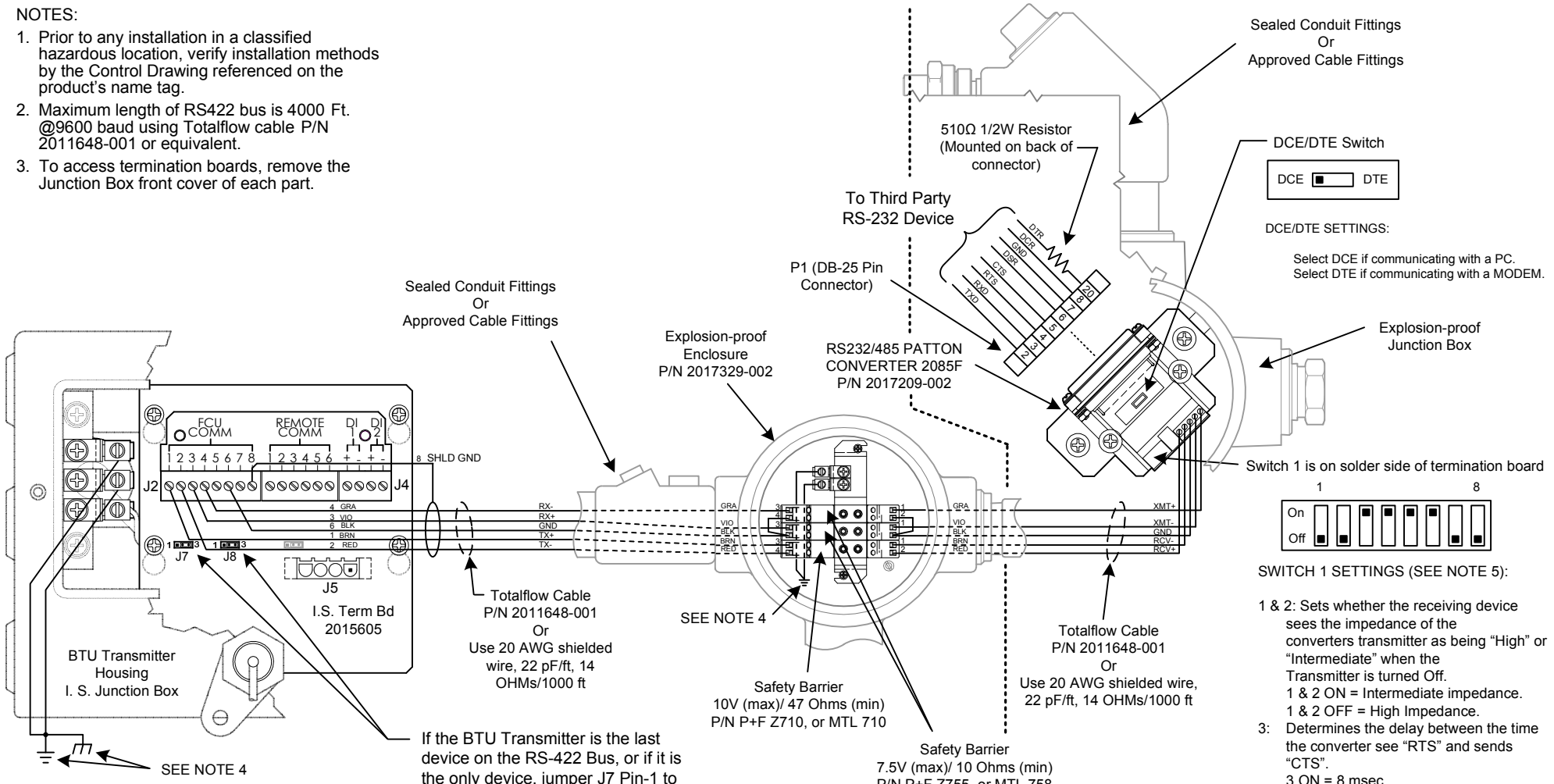
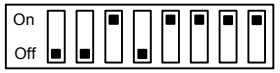
NOTES:

1. Prior to any installation in a classified hazardous location, verify installation methods by the Control Drawing referenced on the product's name tag.
2. Maximum length of RS422 bus is 4000 Ft. @9600 baud using Totalflow cable P/N 2011648-001 or equivalent.
3. To access termination boards, remove the Junction Box front cover of each part.

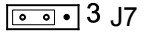


4. Redundant Ground Wires per ISA RP 12.6
   Wires Must be GRN 12 AWG.
   Ground Electrode per CEC C22.1 10-700
   or NEC 250-81
5. Unless it is configured for this application already, Switch 1 may have default settings:



To access Patton Converter Switch settings, remove enclosure front cover and unscrew the converter to turn it over.

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.



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

SWITCH 1 SETTINGS (SEE NOTE 5):

1 & 2: Sets whether the receiving device sees the impedance of the converters transmitter as being "High" or "Intermediate" when the Transmitter is turned Off.
1 & 2 ON = Intermediate impedance.
1 & 2 OFF = High Impedance.

3: Determines the delay between the time the converter see "RTS" and sends "CTS".
3 ON = 8 msec.
3 OFF = No delay

4: Determines whether the converter echoes data back to the transmitting device.
4 ON = Echo ON (Half-duplex only)
4 OFF = Echo OFF

5: Determines whether the Carrier is always ON, or controlled by "RTS".
5 ON = Controlled by "RTS"
5 OFF = Constantly ON

6: Selects the impedance of the Input Receiver.
6 ON = Low (120 Ohm)
6 OFF = High (16 kOhm)

7 & 8: Determines whether the converter is 2-wire (2-wire is half-duplex) or 4-wire.
7 & 8 ON = 2-wire mode.
7 & 8 OFF = 4-wire mode.

REF: N/A

ABB TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
	L17628	UD	BTU 8000/8100 FCU COMM RS-422 4-WIRE W/GND W/ABB BARRIER TO PATTON CONV RS-232	2102324	AA	1 OF 1