

NOTES:

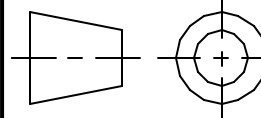
- 1 SWITCHED POWER OUT ON RADIO UCI ONLY
- 2 GRA WIRE NOT NECESSARY.
- 3 POWER FOR BARRIER MUST ORIGINATE FROM NON-HAZARDOUS AREA.
- 4 JUMPER ON LAST FCU ONLY. WHEN THESE RS485 I/O OPTION CARDS ARE USED THEN JUMPER IS PLACED BETWEEN J4-4 & J4-6 AND J4-7 & J4-8.
- 5 JUMPER NOT NEEDED ON RS485 MODEM INTERFACE.
- 6 SPECIAL CASE RETROFIT ONLY IF RS485 MODEM INTERFACE IS USED AS A RETROFIT FOR A RADIO UCI WHEN USED WITH A UPS212 MODEM IN CONTINUOUS POWER MODE. THEN TB3-6 AND TB4-9 MUST BE JUMPED TOGETHER.
- 7 D1 NOT NEEDED WHEN USING RS485 COMM MODULE 2015193-002. THESE DIODES MAY BE USED:
D30914 (1N914JANTX)
D34001 (1N4001)
D34004 (1N4004)
- 8 INSTRUCTIONS FOR USING THIS DOCUMENT:
SELECT APPROPRIATE DRAWING FROM "REFERENCE INDEX" PAGE 2. SELECT THE DIAGRAM WHICH MATCHES YOUR CONFIGURATION AND GO TO THE SPECIFIED SHEET NUMBER.
9. REMOVED
- 10 JUMPER ON LAST FCU ONLY. JUMPERS TO BE PLACED ON EXPIO CARD. JUMPERS (P6) PLACED ON PINS 1 & 2 OF J6.

NOTES: CONTINUED

- 11 J4 ONLY
- 12 12 VOLTS VBATT (WHT WIRE) USED TO POWER COMM DEVICE SHOULD ONLY BE ATTACHED TO A SINGLE FCU AND NEVER DAISY CHAINED.
- 13 ALL FCU'S USING EXPIO PCBA SHOULD NOT USE: BAUD RATE FASTER THAN 4800.
LISTEN TIME FASTER THAN 2 SECONDS
EXCEPT FOR EXPIO WITH DUAL UART'S.
- 14 FACTORY ALWAYS WIRES UCI2 (DIAL-UP MODEM) FOR CONTINUOUS POWER UNLESS CUSTOMER SPECIFIED SWITCHED POWER.
TO ENABLE FCU SCHEDULER, REMOVE JUMPER.
15. ALL UNUSED WIRES ARE TO BE BENT BACK AND TAPED SO SHORTING CANNOT OCCUR.
NOT PERMISSIBLE TO HAVE ANY UNUSED EXPOSED WIRES.

REVISIONS

REV	ACTION	DRAWN	CHECKED	APPROVED	DATE
AJ	D12434	KASTNER	KASTNER	HOLLAND	01/12/13
AK	D13093	KASTNER	KASTNER	HOLLAND	02/03/13
AI	D10903	KASTNER	KASTNER	HOLLAND	01/03/05

					ITEM NO.	PART NUMBER	DESCRIPTION	REF /ZONE DESIG MATERIAL	UNIT MEAS						
ASSEMBLY/QUANTITY															
PARTS LIST															
DO NOT SCALE DRAWING		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMAL ANGULAR .XX ± — ± — .XXX ± — BREAK ALL SHARP CORNERS AND EDGES DIMENSIONS APPLY BEFORE FINISH		PRODUCT LINE		LEVEL		<div>ABB</div> <div>TOTALFLOW Products</div>							
<div>THIRD ANGLE PROJECTION</div> 				TOTALFLOW®		3									
				DESIGN		DATE									
				G. HOLLAND		97/7									
				DRAWN		97/7/22									
				A. KASTNER											
				CHECKED		97/7/24				TITLE		WIRING INTERCONNECT 67XX FCU TO COMM INTERFACE WI			
				TIERNEY											
				APPROVED		97/7/25				SCALE				REV	
				G. HOLLAND						NONE				AK	
						SIZE		SHEET							
						DOC TYPE		2017399							
						DRAWING NO.		1 OF 13							



REFERENCE INDEX

RS485

RS232

67XX FCU
W/RS485 COMM
MODULE

SEE SH 3
COL A, B, C, D

UCI (RADIO/DESKTOP)

67XX FCU
W/RS485 COMM
MODULE

SEE SH 4
COL E, F, G, H

RS485 MODEM
INTERFACE

67XX FCU
W/RS485 COMM
MODULE

SEE SH 4
COL E, F, G, H

UCI (MODEM)
UCI2 (RADIO)

67XX FCU
W/RS485 COMM
MODULE

SEE SH 4
COL E, F, G, H

UCI2 (DIAL-UP MODEM)
RS485 (DIAL-UP MODEM)
DUAL PORT MODEM

67XX FCU
W/RS485 COMM
MODULE

SEE SH 5
COL J, K, L, M

RADIO MODEM
ASSY

67XX FCU
W/RS485 COMM
MODULE

SEE SH 6
COL N, P

RS485/RS232
CONVERTER

67XX FCU
W/RS485 COMM
MODULE

SEE SH 7
COLUMN R

DGH BOX

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 8
COL T, U, V, W

UCI (RADIO/DESKTOP)

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 9
COL Y, AA, AB, AC

RS485 MODEM
INTERFACE

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 9
COL Y, AA, AB, AC

UCI (MODEM)
UCI2 (RADIO)

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 9
COL Y, AA, AB, AC

UCI2 (DIAL-UP MODEM)
RS485 (DIAL-UP MODEM)
DUAL PORT MODEM

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 10
COL AD, AE, AF, AG

RADIO MODEM
ASSY

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 11
COL AH, AJ

RS485/RS232
CONVERTER

67XX FCU
W/RS485
I/O OPTION CARD

SEE SH 12
COLUMN AK

DGH BOX

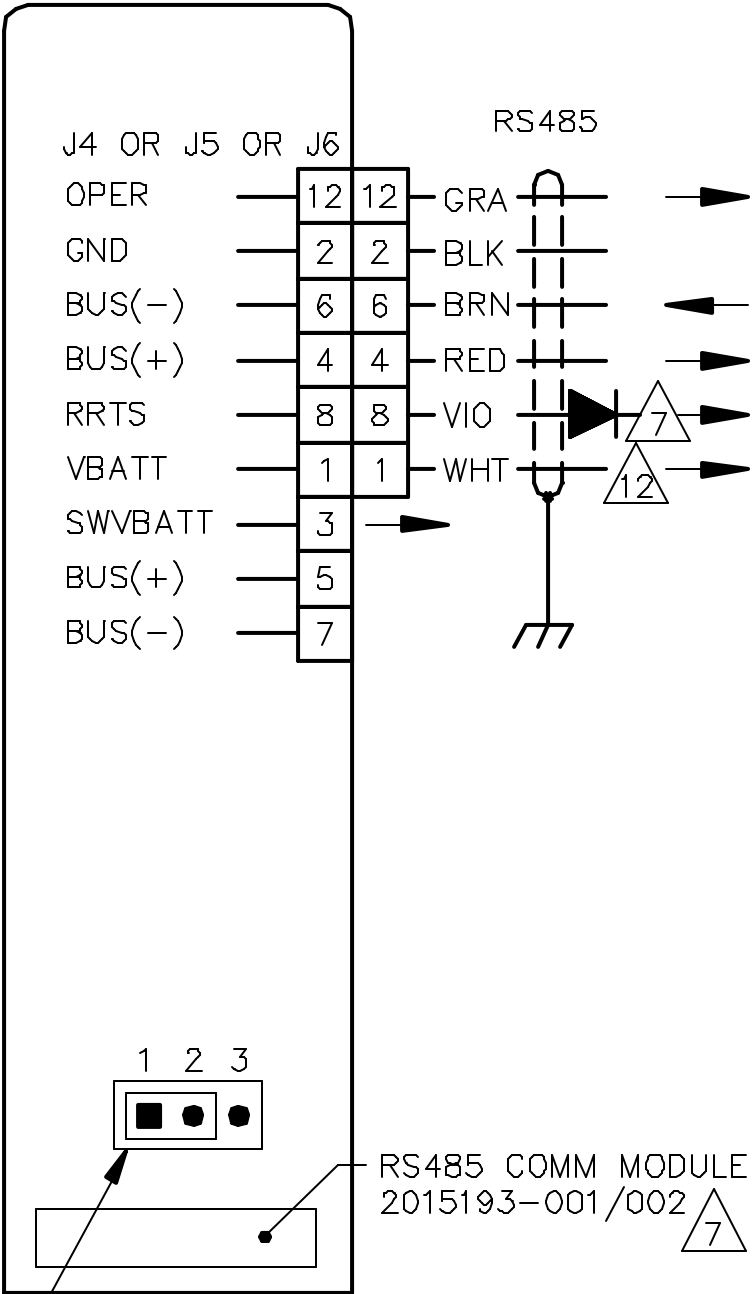
67XX FCU
W/RS232
I/O OPTION CARD
OR
RS232 COMM MODULE

SEE SH 13

UCI2
(DIAL-UP MODEM)

6713/6714 FCU

- ELEK BD (CB181)
2015382-XXX
W/RS485 COMM MODULE
2015193-001
2015193-002



JUMPER ON J18 OR J19 OR J20
TO BE PLACED ON PINS 1 & 2 OF
LAST FCU ON RS485 BUS ONLY.

POWER FROM FCU

A	B
SWITCHED POWER	CONTINUOUS POWER

- RADIO UCI ASSY
2012630-004/007
- DESKTOP UCI ASSY
2012630-005
- RS485 MODEM
2017266-003 PCBA
- DUAL PORT MODEM
2017266-004 PCBA

TB3-UCI P2-UCI2		
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
WHT	1	+12V SW
TB4-UCI P1-UCI2		

2

TB3-UCI P2-UCI2		
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
TB4-UCI P1-UCI2		
WHT	9	V-OUT

EXT POWER SUPPLY

C	D
SWITCHED POWER	CONTINUOUS POWER

- RADIO UCI ASSY
2012630-004/007

TB3-UCI P2-UCI2		
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
TB4-UCI P1-UCI2		
EXT POWER SUPPLY (+)	1	12 IN
EXT POWER SUPPLY (-)	2	GND
	9	V-OUT

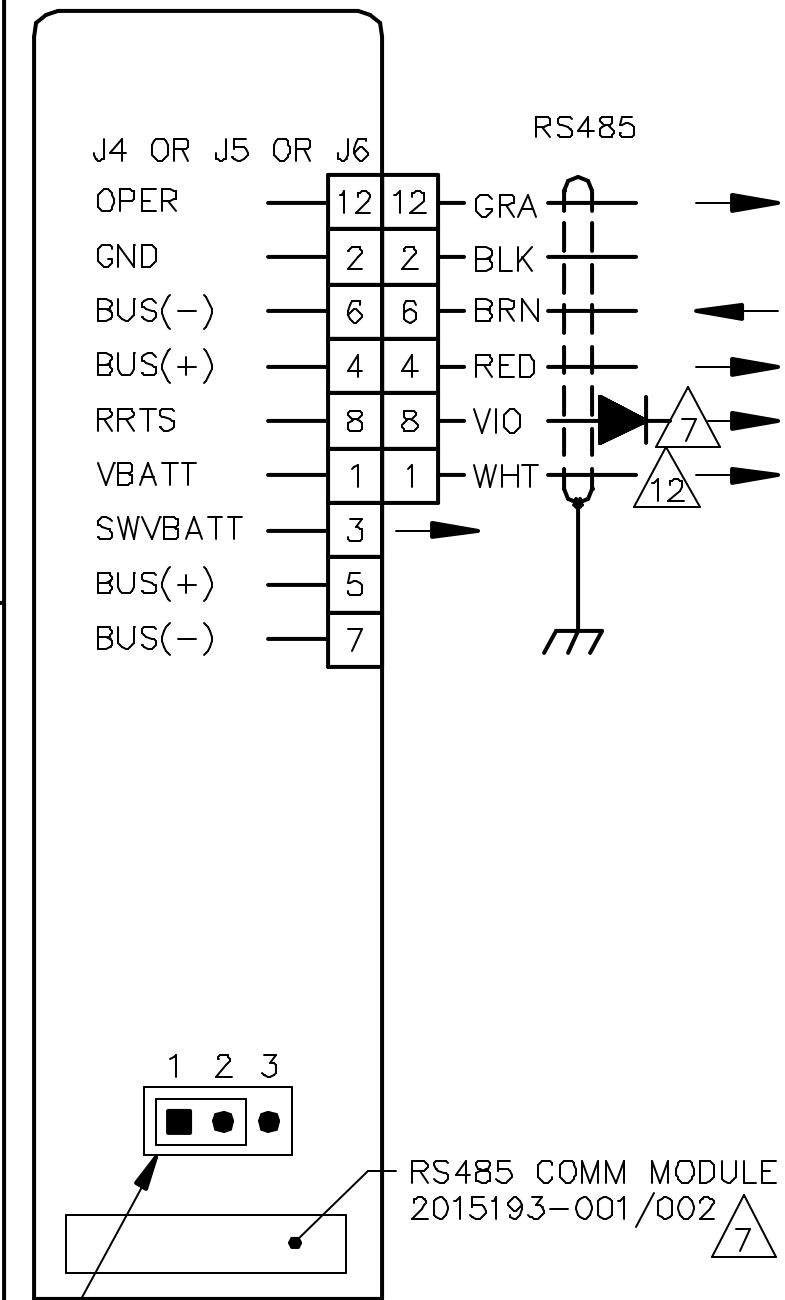
1

- RADIO UCI ASSY
2012630-004/007
- DESKTOP UCI ASSY
2012630-005
- UCI2 ASSY
2017266-001 PCBA

TB3-UCI P2-UCI2		
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
TB4-UCI P1-UCI2		
EXT POWER SUPPLY (+)	9	V-OUT
EXT POWER SUPPLY (-)	2	GND

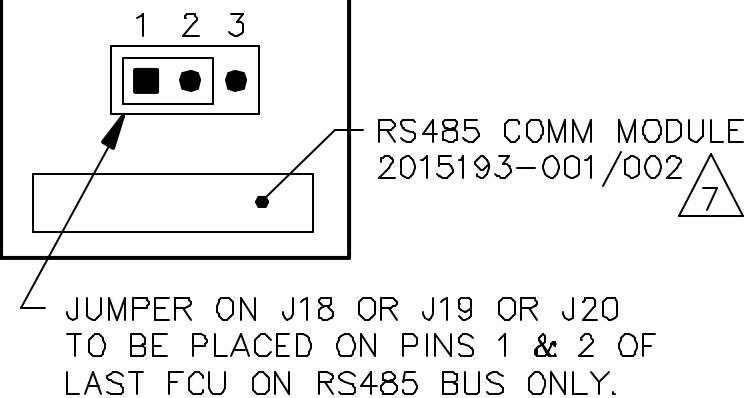
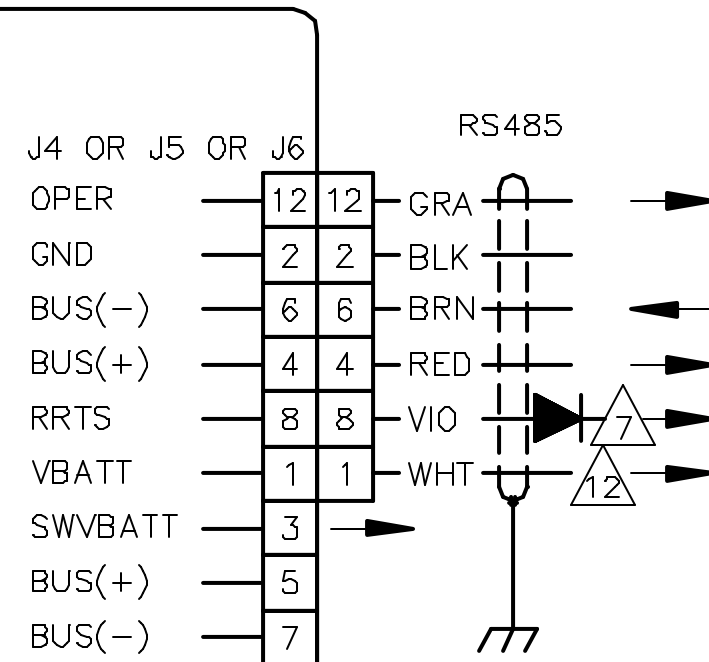
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- ELEK BD (CB181)
2015382-XXX
W/RS485 COMM MODULE
2015193-001
2015193-002



SCALE	SIZE	DOC TYPE	DRAWING NO.	REV	SHEET
NONE	B	WI	2017399	AK	4 OF


- ELEK BD (CB181)
2015382-XXX
W/RS485 COMM MODULE
2015193-001
2015193-002



- RADIO MODEM ASSY
- 2011613-001

	TB3	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
WHT	1	+12V SW

- RADIO MODEM ASSY
- 2011613-001



	TB3	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
	TB1	
WHT	7	V-OUT

Diagram illustrating the power distribution:

- L**: SWITCHED POWER
- M**: CONTINUOUS POWER

• RADIO MODEM ASSY
• 2011613-001

TB3	
6	OPER
2	GND
4	(-) BUS
3	(+) BUS
5	RTS
1	+12V SW

GRA
BLK
BRN
RED
VIO

EXT POWER SUPPLY (+)
EXT POWER SUPPLY (-)

• RADIO MODEM ASSY
• 2011613-001

TB3	
6	OPER
2	GND
4	(-) BUS
3	(+) BUS
5	RTS
1	+12V SW

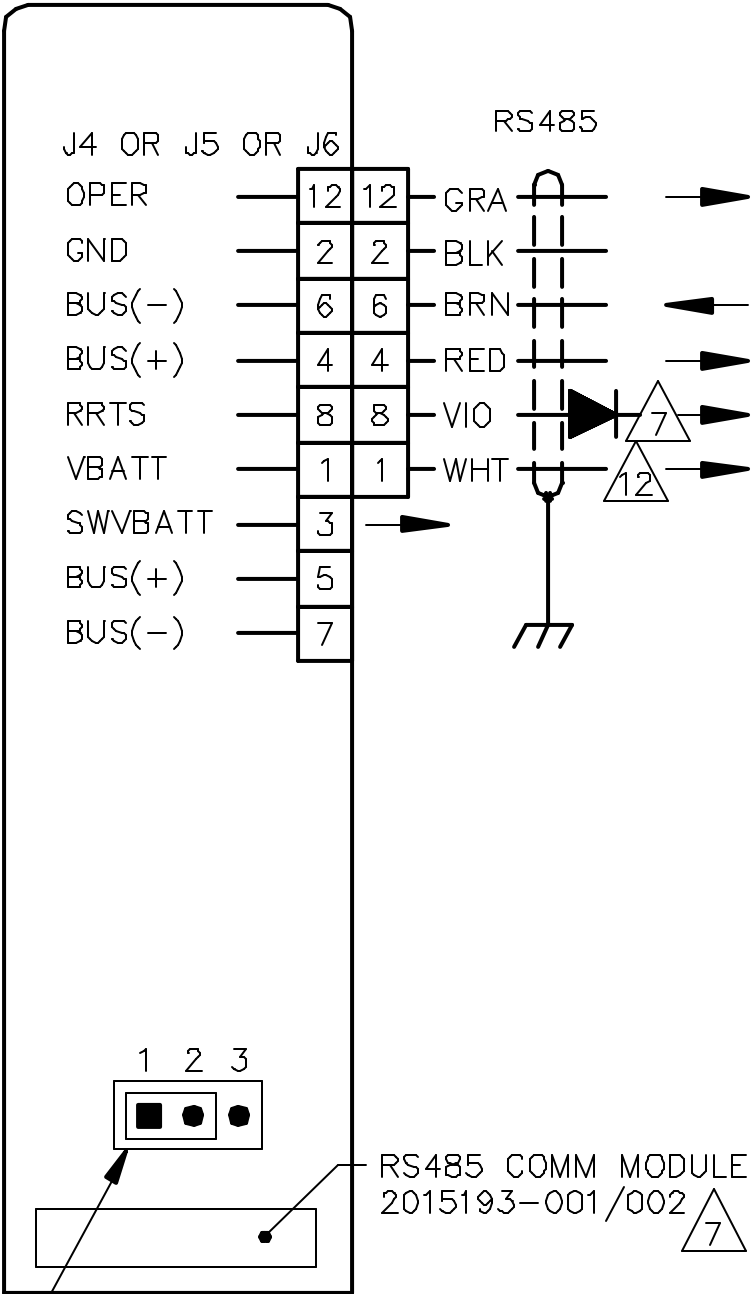
2 GRA
BLK
BRN
RED
VIO

TB1	
7	V-OUT
6	GND

EXT POWER SUPPLY (+)
EXT POWER SUPPLY (-)

6713/6714 FCU

- ELEK BD (CB181)
2015382-XXX
W/RS485 COMM MODULE
2015193-001
2015193-002



J4 OR J5 OR J6

OPER

GND

BUS(-)

BUS(+)

RRTS

VBATT

SWVBATT

BUS(+)

BUS(-)

RS485

12

2

6

4

8

1

3

5

7

12

2

6

4

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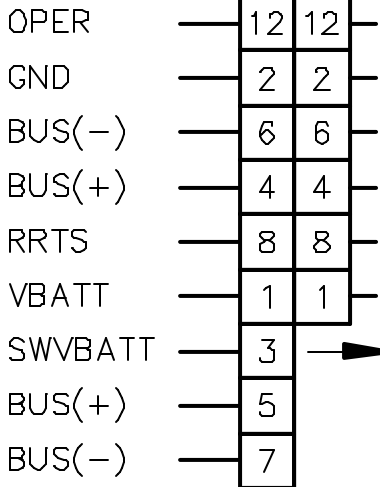
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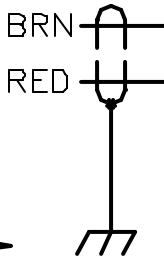
6713/6714 FCU

- ELEK BD (CB181)
2015382-XXX
W/RS485 COMM MODULE
2015193-001
2015193-002

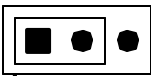
J4 OR J5 OR J6



RS485



1 2 3



RS485 COMM MODULE
2015193-001/002



JUMPER ON J18 OR J19 OR J20
TO BE PLACED ON PINS 1 & 2 OF
LAST FCU ON RS485 BUS ONLY.

POWER FROM FCU

EXT POWER SUPPLY

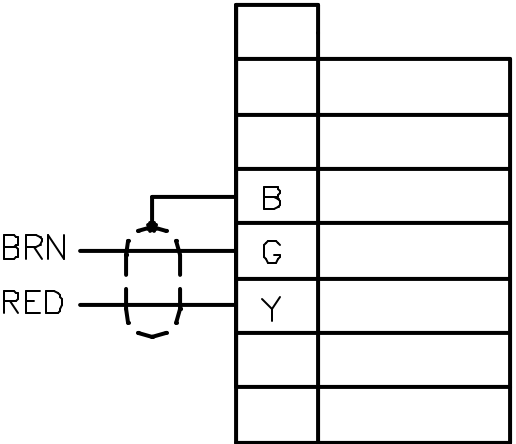
SWITCHED POWER

CONTINUOUS POWER

SWITCHED POWER

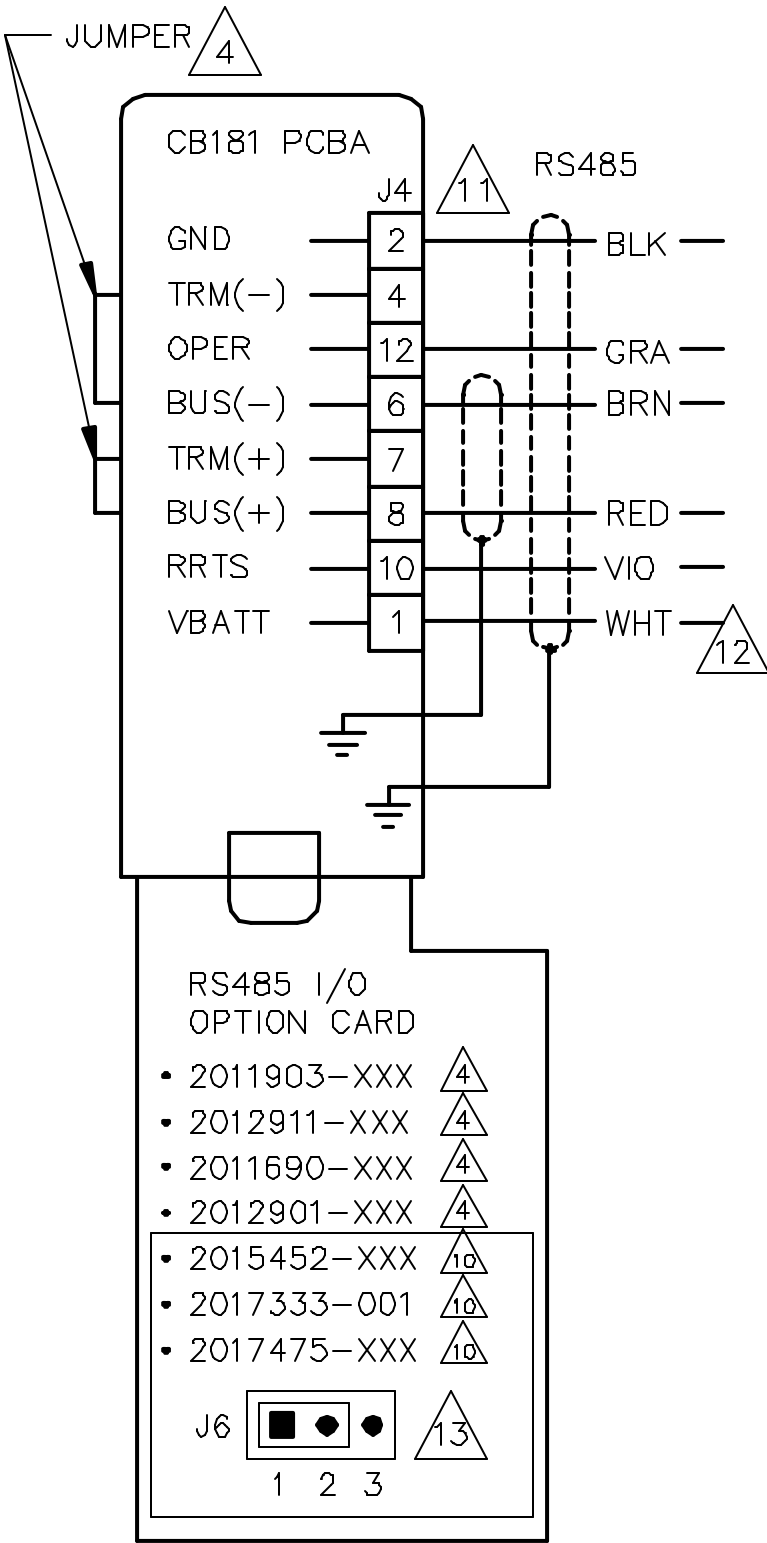
R
CONTINUOUS POWER

DGH BOX (DGH-A-1100)



6713/6714 FCU

ELEK BD (CB181)
2015382-XXX
W/RS485 I/O OPTION CARD



POWER FROM FCU

T
SWITCHED POWER

U
CONTINUOUS POWER

- RADIO UCI ASSY
2012630-004/007
- DESKTOP UCI ASSY
2012630-005

- RADIO UCI ASSY
2012630-004/007
- DESKTOP UCI ASSY
2012630-005

	TB3-UCI P2-UCI2	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
WHT	1	+12V SW
	TB4-UCI P1-UCI2	



	TB3-UCI P2-UCI2	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
	TB4-UCI P1-UCI2	
WHT	9	V-OUT

EXT POWER SUPPLY

V
SWITCHED POWER

W
CONTINUOUS POWER



- RADIO UCI ASSY
2012630-004/007
- DESKTOP UCI ASSY
2012630-005
- UCI2 ASSY
2017266-001 PCBA

- RADIO UCI ASSY
2012630-004/007
- DESKTOP UCI ASSY
2012630-005
- UCI2 ASSY
2017266-001 PCBA

	TB3-UCI P2-UCI2	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
	TB4-UCI P1-UCI2	
EXT POWER SUPPLY (+)	1	12 IN
(-)	2	GND
	9	V-OUT

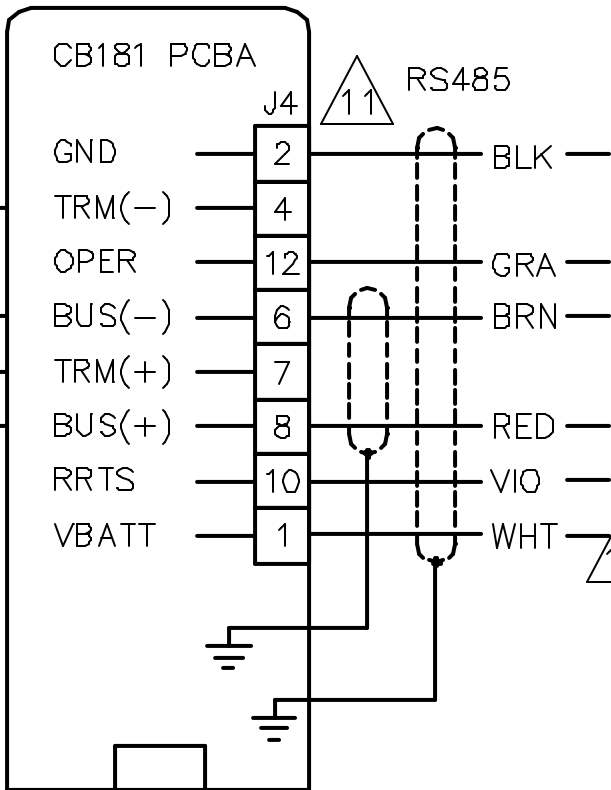


	TB3-UCI P2-UCI2	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
	TB4-UCI P1-UCI2	
EXT POWER SUPPLY (+)	9	V-OUT
(-)	2	GND

6713/6714 FCU

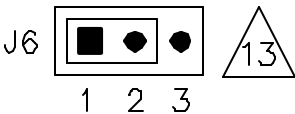
ELEK BD (CB181)
2015382-XXX
W/RS485 I/O OPTION CARD

JUMPER



RS485 I/O
OPTION CARD

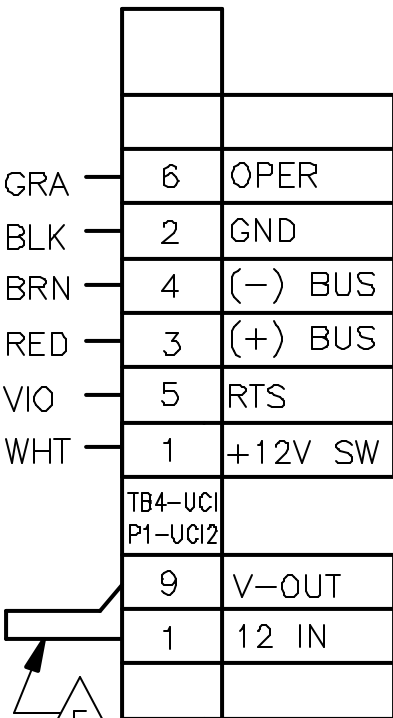
- 2011903-XXX
- 2012911-XXX
- 2011690-XXX
- 2012901-XXX
- 2015452-XXX
- 2017333-001
- 2017475-XXX



POWER FROM FCU

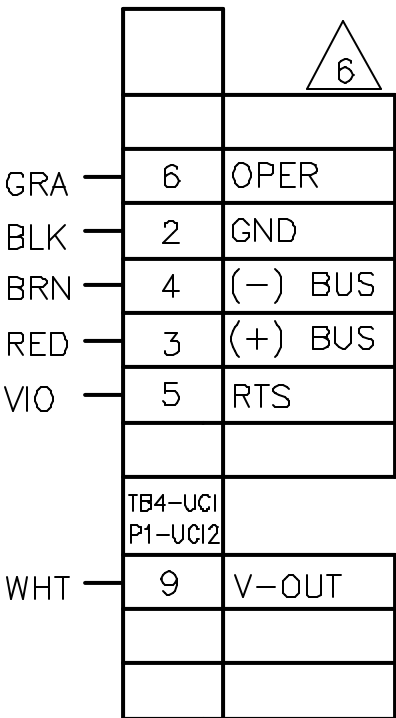
Y
SWITCHED POWER

- RS485 MODEM INTERFACE
2017273-001
- MODEM UCI ASSY
2012630-006/008
- UC12 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002
- UC12 ASSY
2017266-001 PCBA



AA
CONTINUOUS POWER

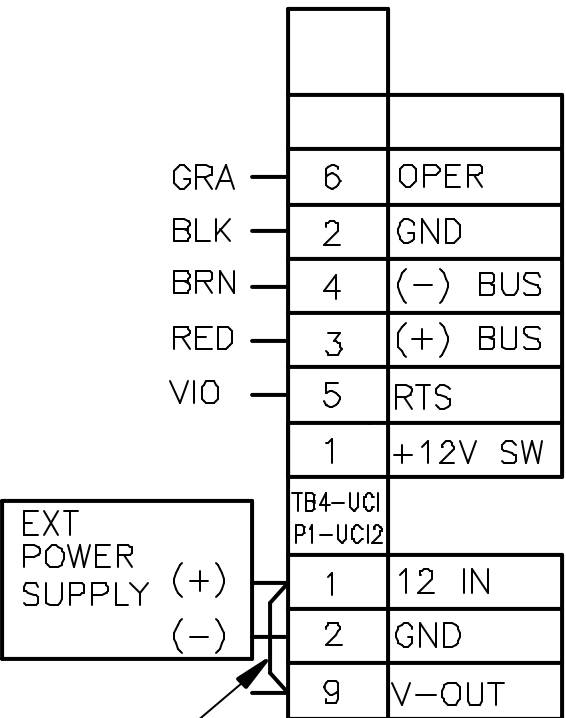
- RS485 MODEM INTERFACE
2017273-001
- MODEM UCI ASSY
2012630-006/008
- UC12 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002
- UC12 ASSY
2017266-001 PCBA



EXT POWER SUPPLY

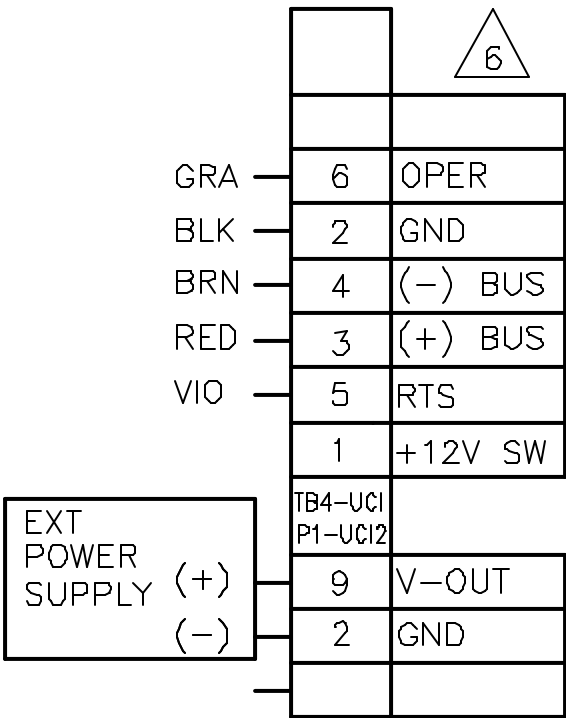
AB
SWITCHED POWER

- RS485 MODEM INTERFACE
2017273-001
- MODEM UCI ASSY
2012630-006/008
- UC12 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002



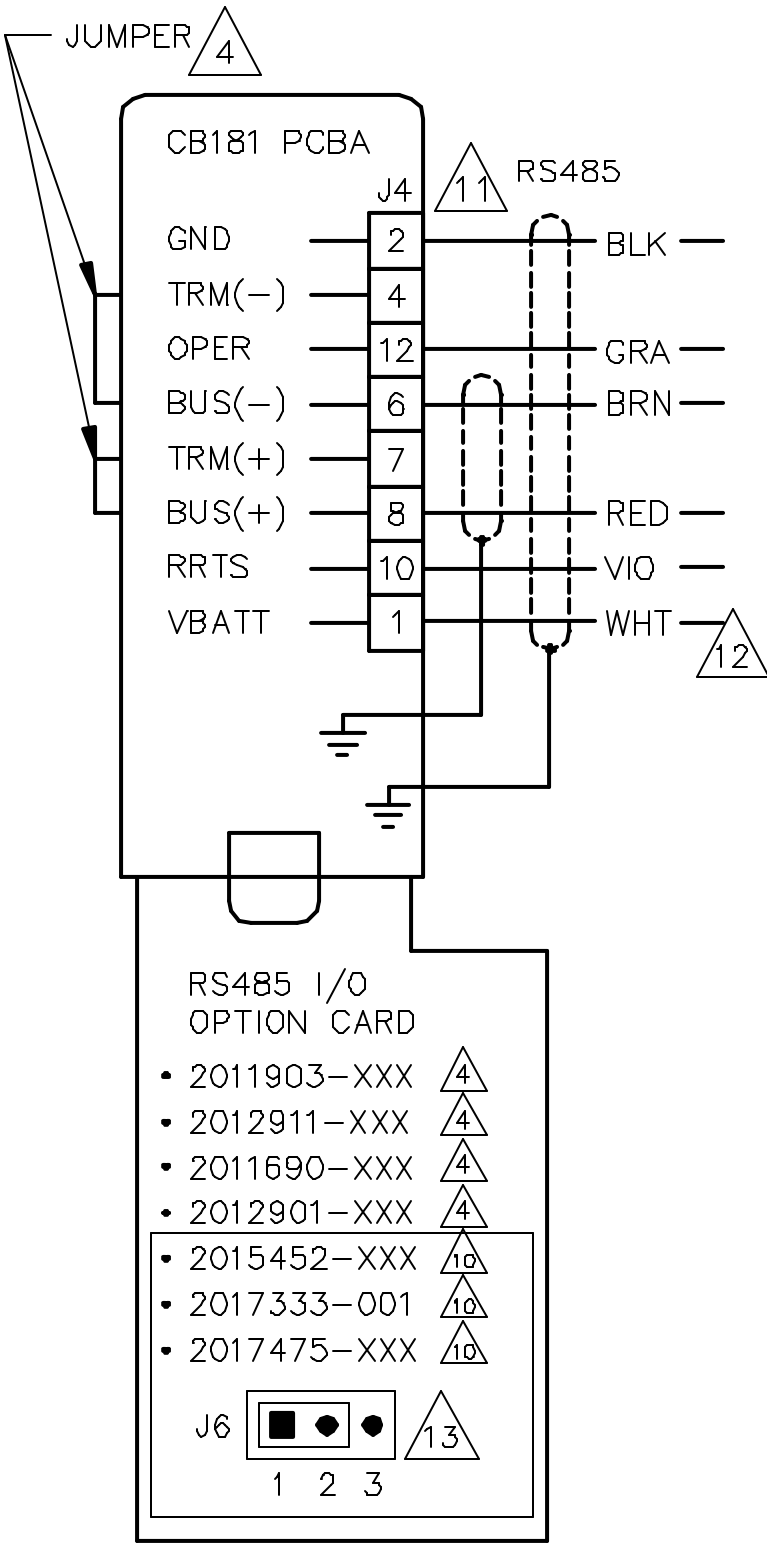
AC
CONTINUOUS POWER

- RS485 MODEM INTERFACE
2017273-001
- MODEM UCI ASSY
2012630-006/008
- UC12 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002



6713/6714 FCU

ELEK BD (CB181)
2015382-XXX
W/RS485 I/O OPTION CARD



POWER FROM FCU

AD AE
SWITCHED POWER CONTINUOUS POWER

• RADIO MODEM ASSY
2011610-001

	TB3	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
WHT	1	+12V SW

• RADIO MODEM ASSY
2011610-001

	TB3	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
WHT	1	+12V SW
	TB1	
WHT	7	V-OUT

EXT POWER SUPPLY

AF AG
SWITCHED POWER CONTINUOUS POWER

• RADIO MODEM ASSY
2011610-001

	TB3	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW

EXT POWER SUPPLY (+)
EXT POWER SUPPLY (-)

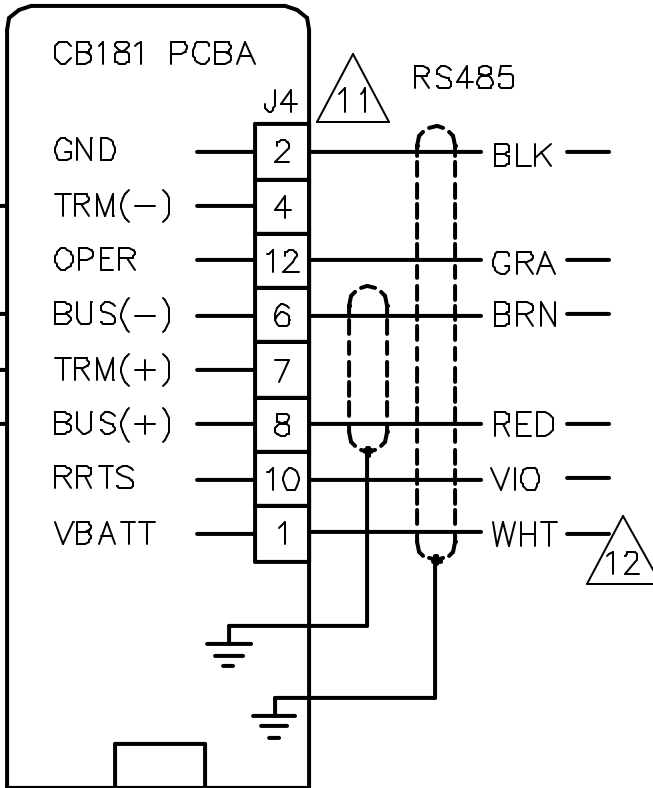
• RADIO MODEM ASSY
2011610-001

	TB3	
GRA	6	OPER
BLK	2	GND
BRN	4	(-) BUS
RED	3	(+) BUS
VIO	5	RTS
	1	+12V SW
	TB1	
EXT POWER SUPPLY (+)	7	V-OUT
EXT POWER SUPPLY (-)	6	GND








6713/6714 FCU

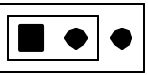

ELEK BD (CB181)
2015382-XXX
W/RS485 I/O OPTION CARD

JUMPER 



RS485 I/O
OPTION CARD

- 2011903-XXX 
- 2012911-XXX 
- 2011690-XXX 
- 2012901-XXX 
- 2015452-XXX 
- 2017333-001 
- 2017475-XXX 

J6  

1 2 3

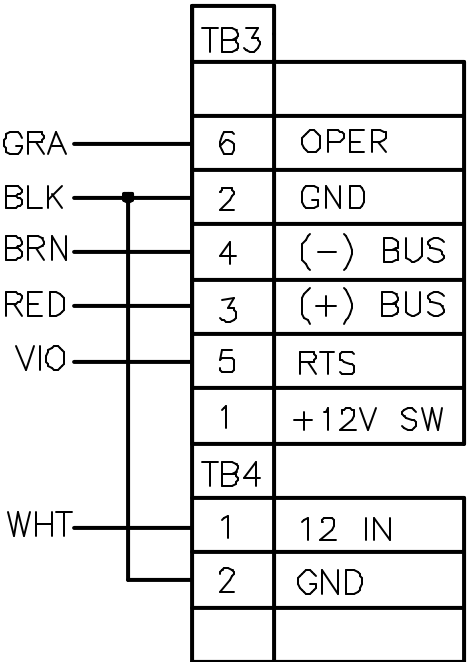
POWER FROM FCU

AH

SWITCHED POWER

CONTINUOUS POWER

RS485/RS232 CONVERTER
2011982-003/004



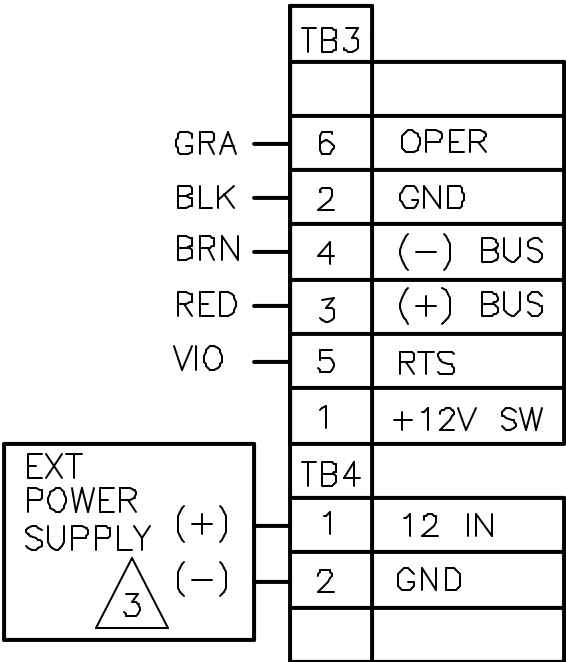
EXT POWER SUPPLY

AJ

SWITCHED POWER

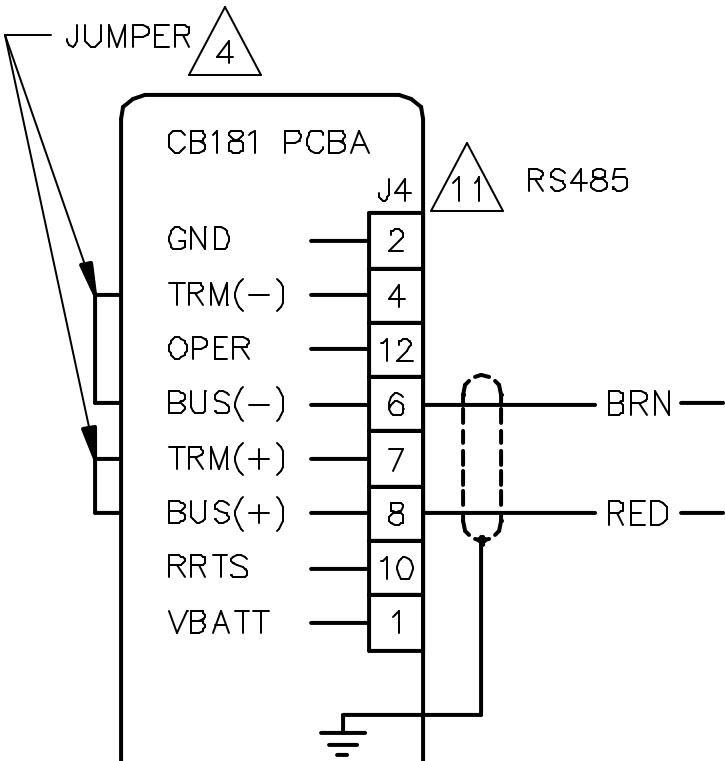
CONTINUOUS POWER

RS485/RS232 CONVERTER
2011982-003/004










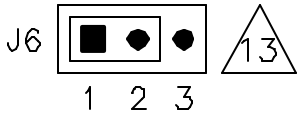
6713/6714 FCU

ELEK BD (CB181)
2015382-XXX
W/RS485 I/O OPTION CARD



RS485 I/O
OPTION CARD

- 2011903-XXX 
- 2012911-XXX 
- 2011690-XXX 
- 2012901-XXX 
- 2015452-XXX 
- 2017333-001 
- 2017475-XXX 



POWER FROM FCU

SWITCHED POWER

CONTINUOUS POWER

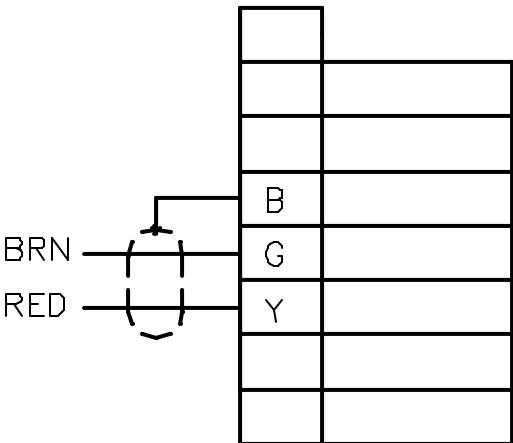
EXT POWER SUPPLY

AK

SWITCHED POWER

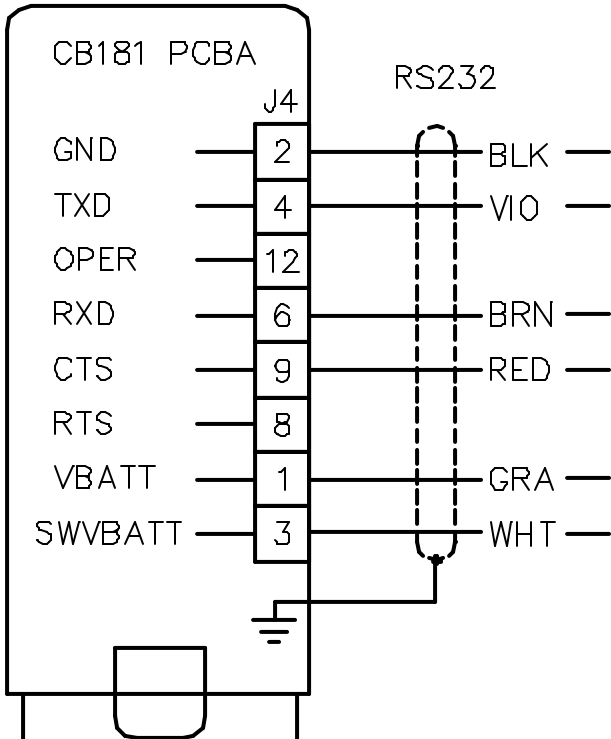
CONTINUOUS POWER

DGH BOX (DGH-A-1100)



6713/6714 FCU

ELEK BD (CB181)
2015382-XXX
W/RS232 I/O OPTION CARD



RS232 I/O
OPTION CARD

- COMM INTERFACE
2000003-001
SWITCH SET ON MODEM
- RS232 COMM INTERFACE
2012878-001
- COMM INTERFACE W/AO (RS232)
2012911-002
- VCI RS232
2010283-002
SWITCH SET ON 232
- EXPIO RS232
2011690-002
2011730-002
2012901-002
2015452-001
2017475-004,005,007,009

OR
RS232 COMM MODULE
2015192-001

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POWER FROM FCU

S	T
SWITCHED POWER	CONTINUOUS POWER

- UCI2 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002
- UCI2 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002

(SCHEDULER
SOFTWARE
REQUIRED)

	P1	
BRN	4	TXD
VIO	6	RXD
RED	7	KEY/CTS
BLK	8	GND
WHT	10	PWR I/O
	5	GND
	1	12 IN
	9	VOUT



	P1	
BRN	4	TXD
VIO	6	RXD
RED	7	KEY/CTS
BLK	8	GND
GRA	10	PWR I/O
	5	GND
	1	12 IN
	9	VOUT



EXT POWER SUPPLY

U	V
SWITCHED POWER	CONTINUOUS POWER

- UCI2 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002
- UCI2 (DIAL-UP MODEM)
2018323-001/002
2017379-001/002

(SCHEDULER
SOFTWARE
REQUIRED)

