

The logo for Flanders Innovation Division. It features a large, bold, black, sans-serif font where the letters 'F', 'L', 'A', 'N', 'D', 'E', 'R', 'S' are stacked vertically. Above this text is a large, solid black triangle pointing downwards. A thin white diagonal line runs from the top vertex of the triangle down to its base, intersecting the letter 'A'.

**FLANDERS ELECTRIC**  
Avenida Mauro Ribeiro  
**BRAZIL, ITABIRA-MG 190**

ITABIRA-MG – PF6752

SECTION	DESCRIPTION
00	STANDARDS AND PRACTICES
01	ARDVARC CONTROL SYSTEM INTERCONNECTION DIAGRAM
09	REMOTE I/O MODULES
12	OPERATOR CAB
15	OPERATOR CHAIR
18	DRILL MODE LIGHTS ENCLOSURES
21	KIRK KEY ENCLOSURE
24	COMMAND CENTER ALL STOP ENCLOSURE
35	ARDVARC CONTROL ENCLOSURE
40	HARNESS DETAILS
45	MOUNTING BRACKET DETAILS
46	DRILL CAMERAS

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
01	<b>DRAWING NUMBERS</b>																			
02	THE DRAWING NUMBER IS GENERATED FROM THE FLANDERS JOB NUMBER OR PRODUCT NUMBER, SECTION, SUB. SEC. LETTER & SHEET NUMBER AND IS USED AS THE FILENAME.																			
03	16015200B01																			
04	FLANDERS JOB NUMBER OR PRODUCT NUMBER	SHEET NUMBER: SEQUENTIAL 01 THRU 99 SUB. SEC. LETTER (EXCLUDES I & O) (REFER TO SHEET DESIGNATIONS CHART) SECTION: 00 THRU 99 (REFER TO SECTION DESIGNATIONS)																		
05	<b>SECTION DESIGNATIONS</b>									<b> SHEET DESIGNATIONS</b>										
06	SECTION	DESCRIPTION								SUB.SEC.	DESCRIPTION									
07	00	PROJECT / PRODUCT (RESERVED)								A	TITLE SHEET									
08	01	COMPONENT #1								B	GENERAL INFORMATION									
09	02	COMPONENT #2								C	SYSTEM DIAGRAM									
10										D	TAGS SCHEDULE									
11										E	ENCLOSURE LAYOUT									
12										F	SUBPANEL LAYOUT									
13										G	TERMINAL BLOCK LAYOUT/BOM									
14										H	POWER DISTRIBUTION WIRING DIAGRAM									
15										J	MOTOR CONTROL WIRING DIAGRAM									
16										K	DRIVE SYSTEM WIRING DIAGRAM									
17										L	CONTROL POWER WIRING DIAGRAM									
18										M	PLC I/O WIRING DIAGRAM									
19										N	GROUNDING/COMPONENT INTERCONNECTION									
20										P	PANEL INTERCONNECTION DIAGRAM									
21										R	CONDUIT AND CABLE SCHEDULE									
22										T	FABRICATION AND CONSTRUCTION DETAILS									
23										W	SOFTWARE DIAGRAMS									
24	<b>DEVICE DESIGNATIONS</b>																			
25	THE DEVICE DESIGNATION IS USED TO DESCRIBE THE COMPONENT SHOWN. DEVICE DESIGNATIONS CONSIST OF A SECTION #, SUB. SEC. LETTER, DEVICE TYPE AND A NUMERIC IDENTIFIER (SEQUENTIALLY ASSIGNED).																			
26	<p>SECTION NUMBER (2 DIGITS) (REFER TO SECTION DESIGNATORS CHART)</p> <p>SUB. SEC. LETTER (REFER TO SHEET DESIGNATORS CHART)</p> <p>DEVICE TYPE (REFER TO SHT. 00B03: LEGEND - DEVICE I.D.)</p> <p>SHEET NUMBER</p>																			
27	<p>DASHED BOX INDICATES SEPERATE LOCATION</p> <p>INDICATES FIELD WIRING</p> <p>03B01CB1</p> <p>03B0123B</p> <p>03B01K1</p> <p>(4) (7)</p> <p>[A0107D]</p> <p>[B0108J]</p> <p>[B0224F]</p>																			
28	<b>WIRE NUMBERS</b>																			
29	ALL WIRES SHALL BE IDENTIFIED BY A NUMBER. THE FOLLOWING DESCRIBES THE METHOD USED FOR LABELING WIRES.																			
30	<b>POWER &amp; CONTROL WIRES:</b> THESE WIRES SHOULD BE IDENTIFIED IN THE FOLLOWING MANNER																			
31	<p>SECTION NUMBER (2 DIGITS) (REFER TO SECTION DESIGNATORS CHART)</p> <p>SUB. SEC. LETTER (REFER TO SHEET DESIGNATORS CHART)</p> <p>SHEET NUMBER (2 DIGITS) (SHEET FROM WHICH WIRE ORIGINATES)</p> <p>ROW IDENTIFIER NUMBER (2 DIGITS) (FROM GRID SYSTEM ON DRAWING BORDER)</p> <p>COLUMN IDENTIFIER LETTER (FROM GRID SYSTEM ON DRAWING BORDER)</p> <p>03B0123B</p> <p>03B01K2</p> <p>(4)</p> <p>03B0109L</p> <p>(7)</p> <p>[A0109F]</p> <p>[B0209P]</p>																			
32	<b>WIRING NOTES</b>																			
33	(UNLESS OTHERWISE SPECIFIED)																			
34	<ol style="list-style-type: none"> <li>1. ALL AC CONTROL AND POWER WIRES SHOULD BE KEPT SEPARATED IN WIREWAYS FROM DC CONTROL AND PROCESS SIGNAL WIRES. IF AC AND DC WIRES MUST CROSS, THEY SHOULD DO SO AT 90° ANGLES.</li> <li>2. USE WIRE NUMBER TAGS ON ALL WIRES AS INDICATED ON SCHEMATICS.</li> <li>3. USE HEAT SHRINK AROUND SHIELDED CABLE TO COVER SHIELD AND SHIELD WIRE TO TERMINATION POINT WHERE POSSIBLE.</li> </ol>																			
35	<b>NAMEPLATE NOTES</b>																			
36	(UNLESS OTHERWISE SPECIFIED)																			
37	<ol style="list-style-type: none"> <li>1. NAMEPLATE TEXT HEIGHTS: ENCLOSURE DOORS - 0.5 INCHES DEVICE TAGS - 0.1710 INCHES</li> <li>2. ALL NAMEPLATES SHALL BE WHITE WITH BLACK LETTERS.</li> <li>3. SECURE ALL NAMEPLATES TO OUTSIDE OF ENCLOSURES WITH STAINLESS STEEL FASTENERS.</li> <li>4. SECURE ALL DEVICE I.D. TAGS TO BACKPANELS WITH SILICONE ADHESIVE.</li> </ol>																			
38	<b>GROUNDING PRACTICES</b>																			
39	(UNLESS OTHERWISE SPECIFIED)																			
40	<ol style="list-style-type: none"> <li>1. A GROUNDING LUG SHALL BE PROVIDED AT THE CONNECTION POINT FOR AC POWER INPUT.</li> <li>2. REMOVE SUB-PANEL PAINT AND APPLY CONDUCTIVE GREASE FOR ALL LUG CONNECTIONS.</li> <li>3. ALL ENCLOSURE DOORS, SIDE PANELS, FRAMES, SUB-PANELS, PANS, TOPS, FANS, BASES, ETC. SHALL BE BONDED WITH #12AWG COPPER WIRE WITH INSULATION COLORED GREEN WITH YELLOW STRIPE.</li> </ol>																			
41	<b>CROSS REFERENCES</b>																			
42	CROSS REFERENCES SHALL BE USED ON WIRING DIAGRAMS TO SHOW RELAY CONTACT LOCATIONS, WIRE CONTINUATIONS, AND MECHANICAL INTERLOCKS AS THEY APPEAR IN OTHER PORTIONS OF A DRAWING OR ON ANOTHER SHEET. THE CROSS REFERENCE SHOULD CONSIST OF THE FOLLOWING FORMAT:																			
43	EXAMPLE: #SSRRC = [B0117J]																			
44	WHERE: # = SUB. SEC. LETTER SS = SHEET NUMBER RR = ROW NUMBER C = COLUMN NUMBER																			
45	ONLY THE ROW AND COLUMN NUMBERS ARE REQUIRED IF THE ITEM REFERENCED IS ON THE SAME SHEET.																			
46	<b>RELAY CONTACTS AND COILS:</b>																			
47	WHEN A RELAY COIL IS PLACED IN A LADDER RUNG, LIST ALL CONTACTS USED ON THAT RELAY TO THE RIGHT SIDE OF THE VERTICAL RAIL. NORMALLY CLOSED CONTACTS SHALL BE SHOWN UNDERSCORED. WHEN RELAY CONTACTS ARE SHOWN, THE LOCATION OF THE ASSOCIATED COIL SHALL BE SHOWN BELOW THE CONTACT, IN BRACKETS.																			
48	<b>WIRE CONTINUATIONS:</b>																			
49	WHEN A WIRE IS CONTINUED ON ANOTHER PORTION OF A DRAWING OR ON ANOTHER SHEET A CONTINUATION LINE WITH A REFERENCE SHOWN IN BRACKETS.																			
50	<b>MECHANICAL INTERLOCKS:</b>																			
51	WHEN COMPONENTS ARE MECHANICALLY INTERLOCKED AND THESE PARTS ARE SHOWN ON DIFFERENT PORTIONS OF A DRAWING OR ON ANOTHER SHEET, THEY SHOULD BE CROSS REFERENCED IN BRACKETS, WITH A DASHED LINE EXTENDING ABOVE OR BELOW THE COMPONENT TO THE REFERENCE.																			
52	<b>FLANDERS</b> <small>www.flandersinc.com</small> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF FLANDERS ELECTRIC. NO DISCLOSURE OR USE OF IT SHALL BE MADE IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLANDERS ELECTRIC, UNLESS EXPRESSLY PROVIDED OTHERWISE BY CONTRACT.</p>																			
53	REV.	DESCRIPTION	DATE	BY	CHKD	REV.	A	AS BUILT	01/11/21	SVS	RE	ENGINEER:	J.GOODWIN	DRAWN BY:	S.SUNNY	DRAWING TITLE:	ITABIRA-MG - PF6752	LOC. CODE	DATE	CONT. ON
54												APPROVED BY:	J.GOODWIN	CHECKED BY:	R.ELLSON	ARDVARC CONTROL SYSTEM	213S16300B01.dwg	213S163	01/11/21	02
55												DESCRIPTION	DATE	BY	CHKD	SECTION	00	00	B	01



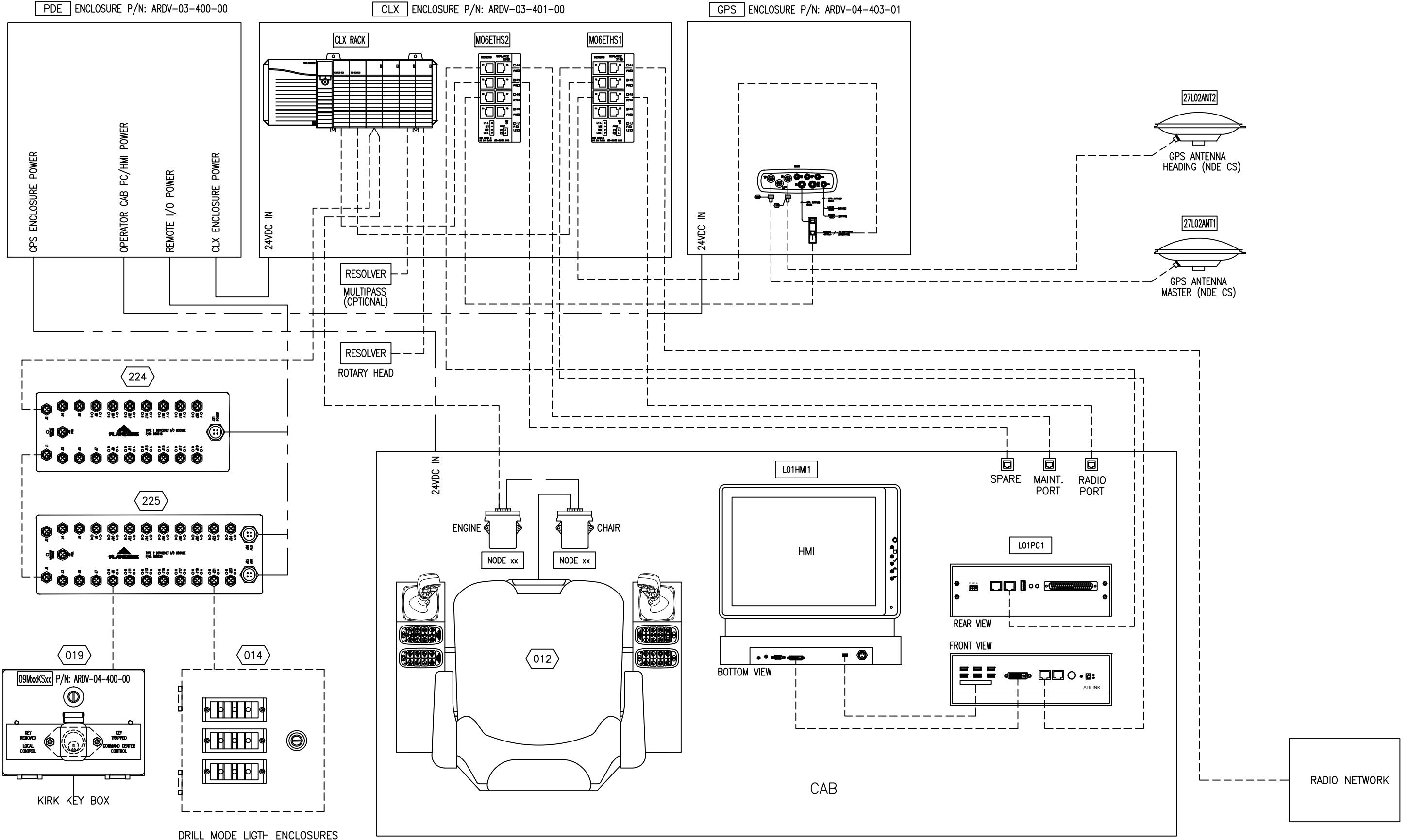
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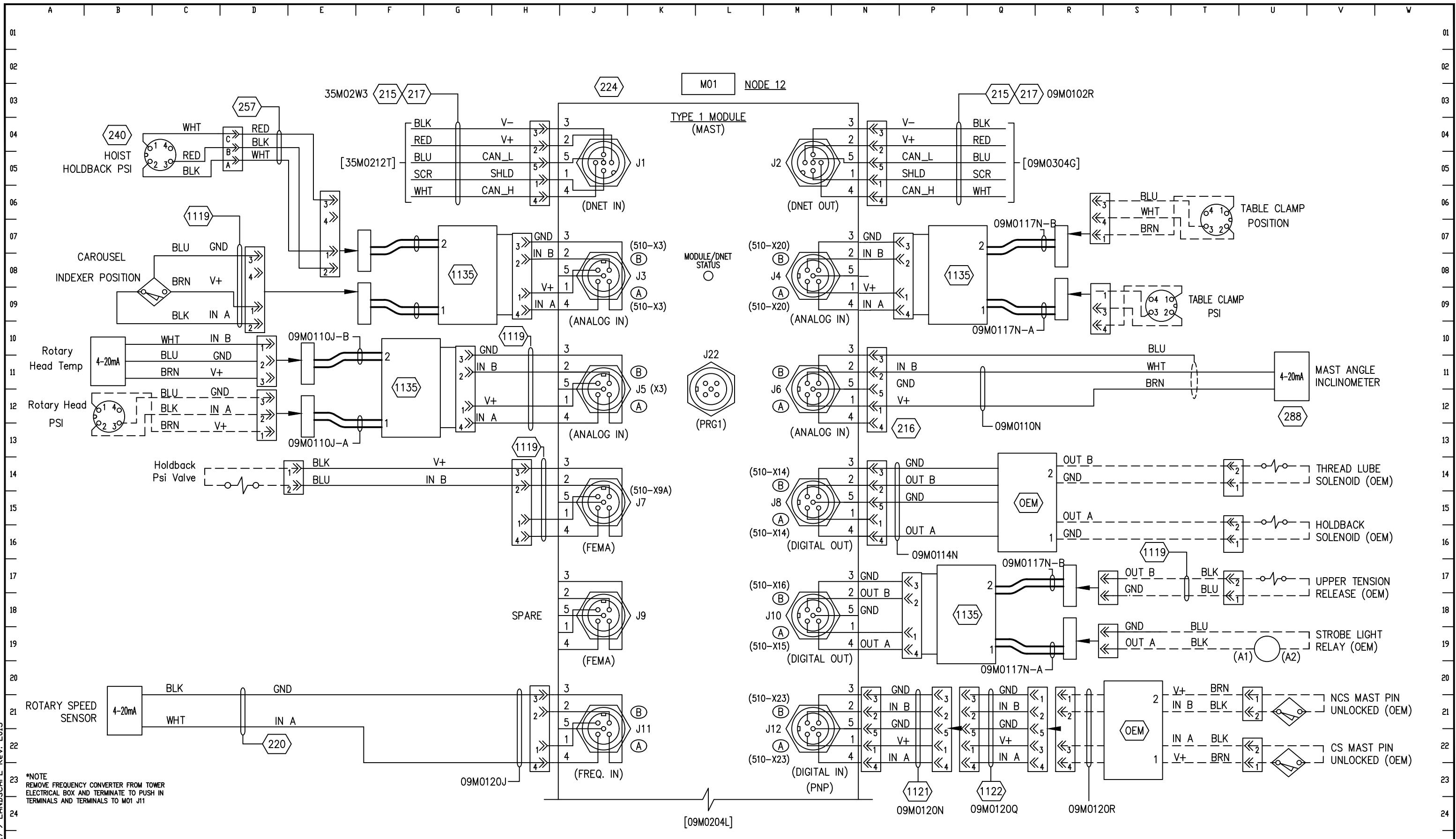
ENGINEER: J.GOODWIN DRAWN BY: S.SUNNY  
APPROVED BY: J.GOODWIN CHECKED BY: R.ELLSON  
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FILENAME: 213S16300B03.dwg

DRAWING TITLE: ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
STANDARDS & PRACTICES  
DEVICE ID LEGEND

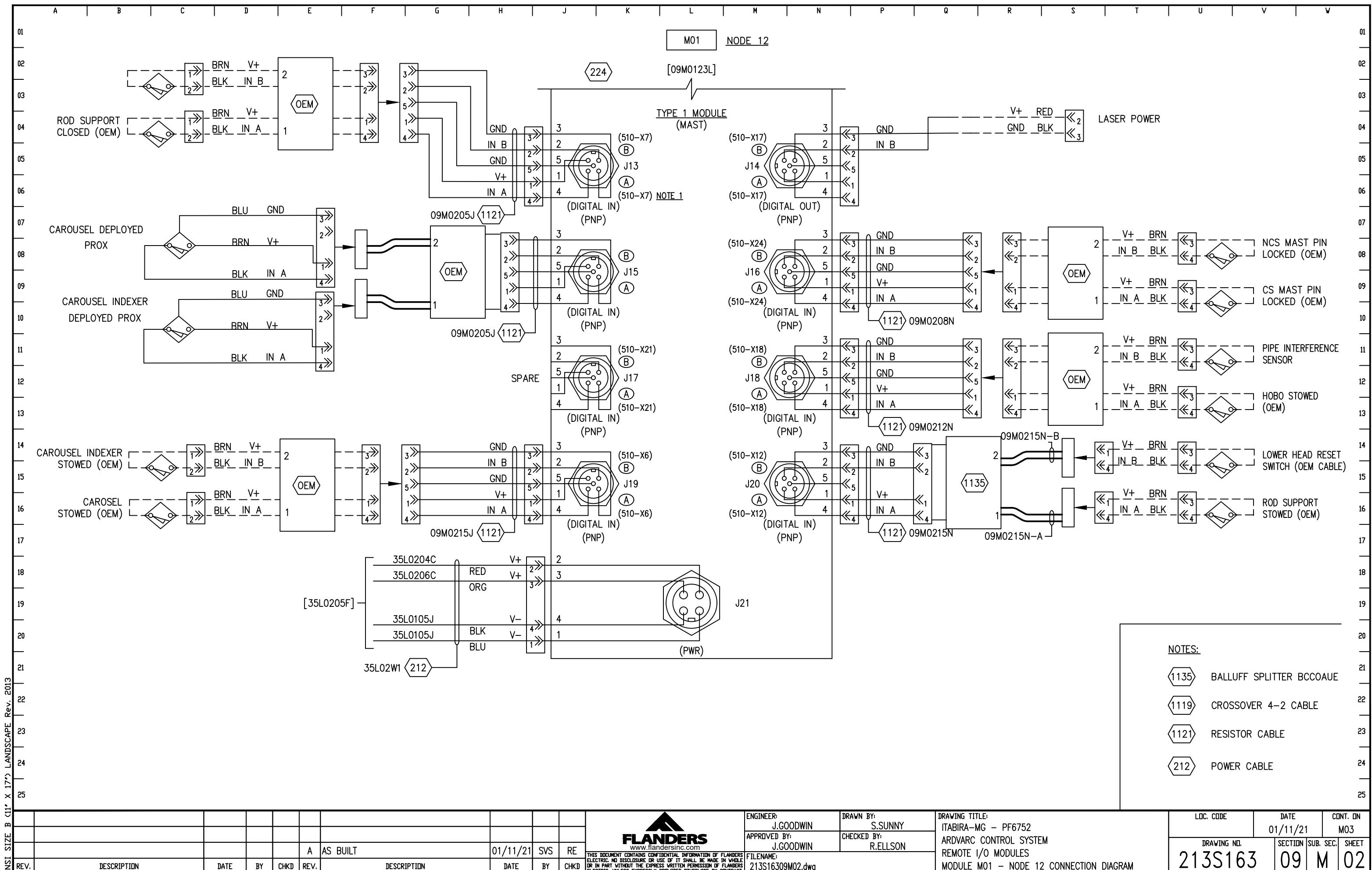
LOC. CODE	DATE	CONT. ON
213S163	01/11/21	FNL
DRAWING NO.	SECTION	SUB. SEC.
00	B	03

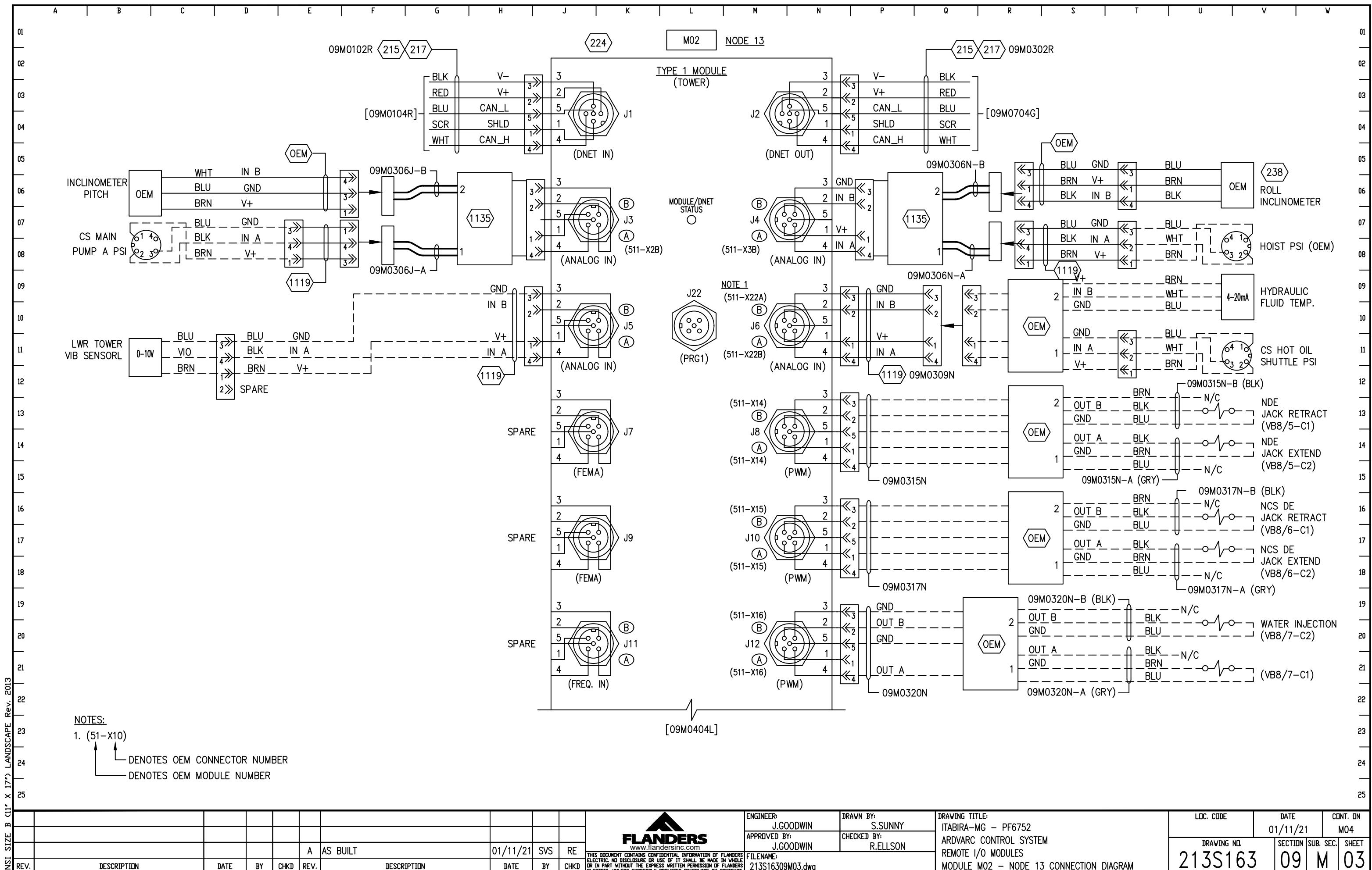


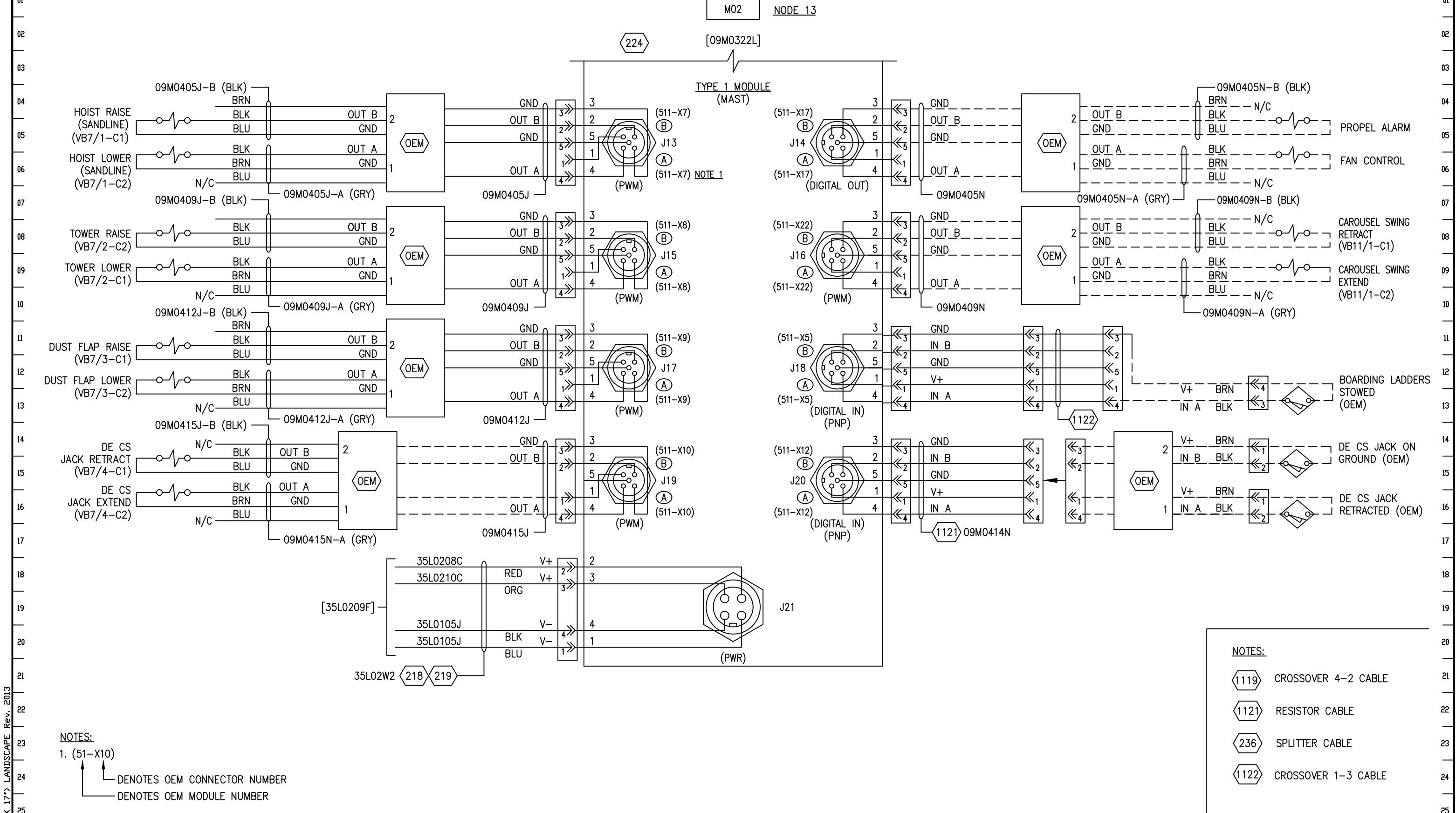


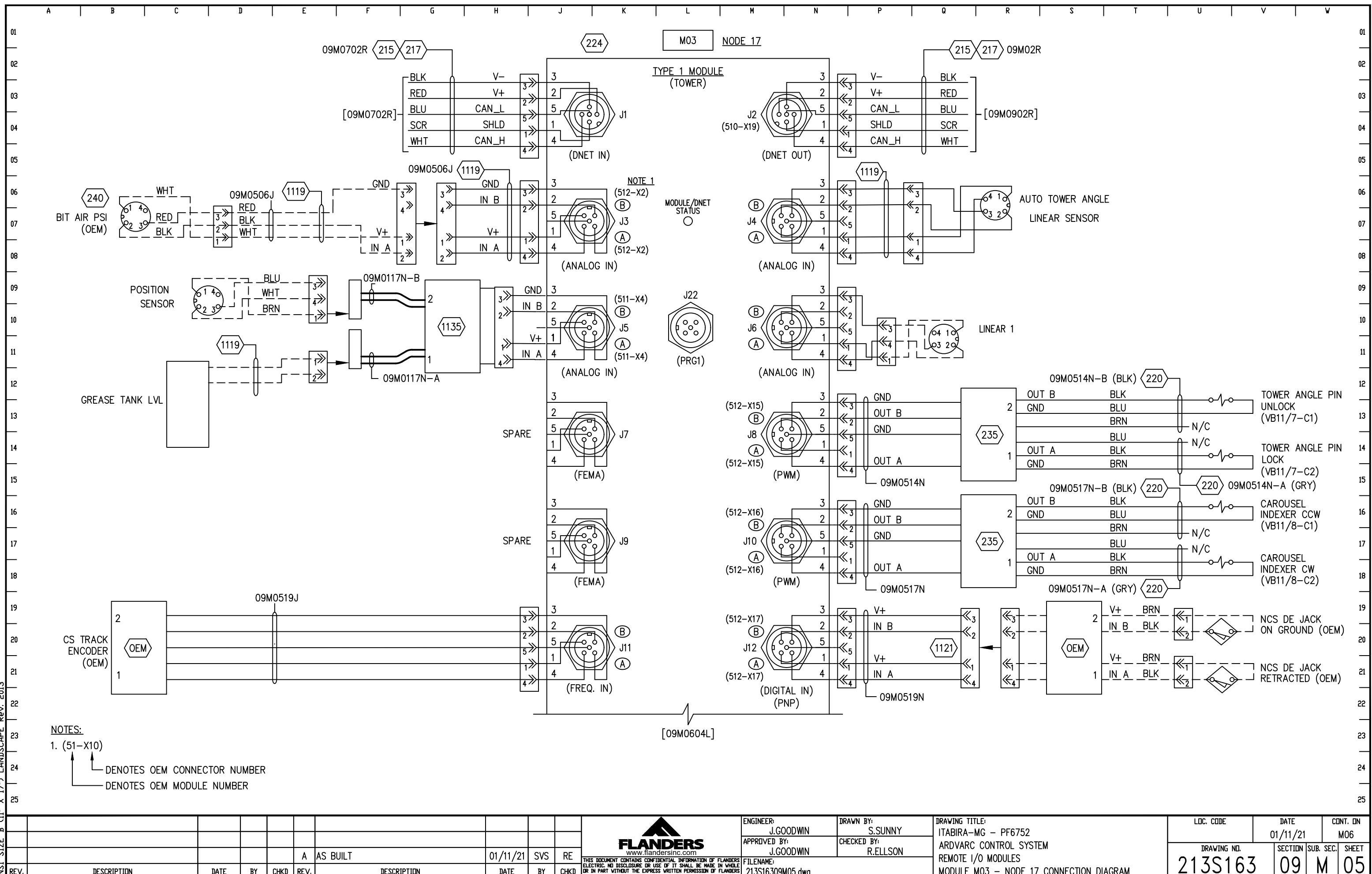


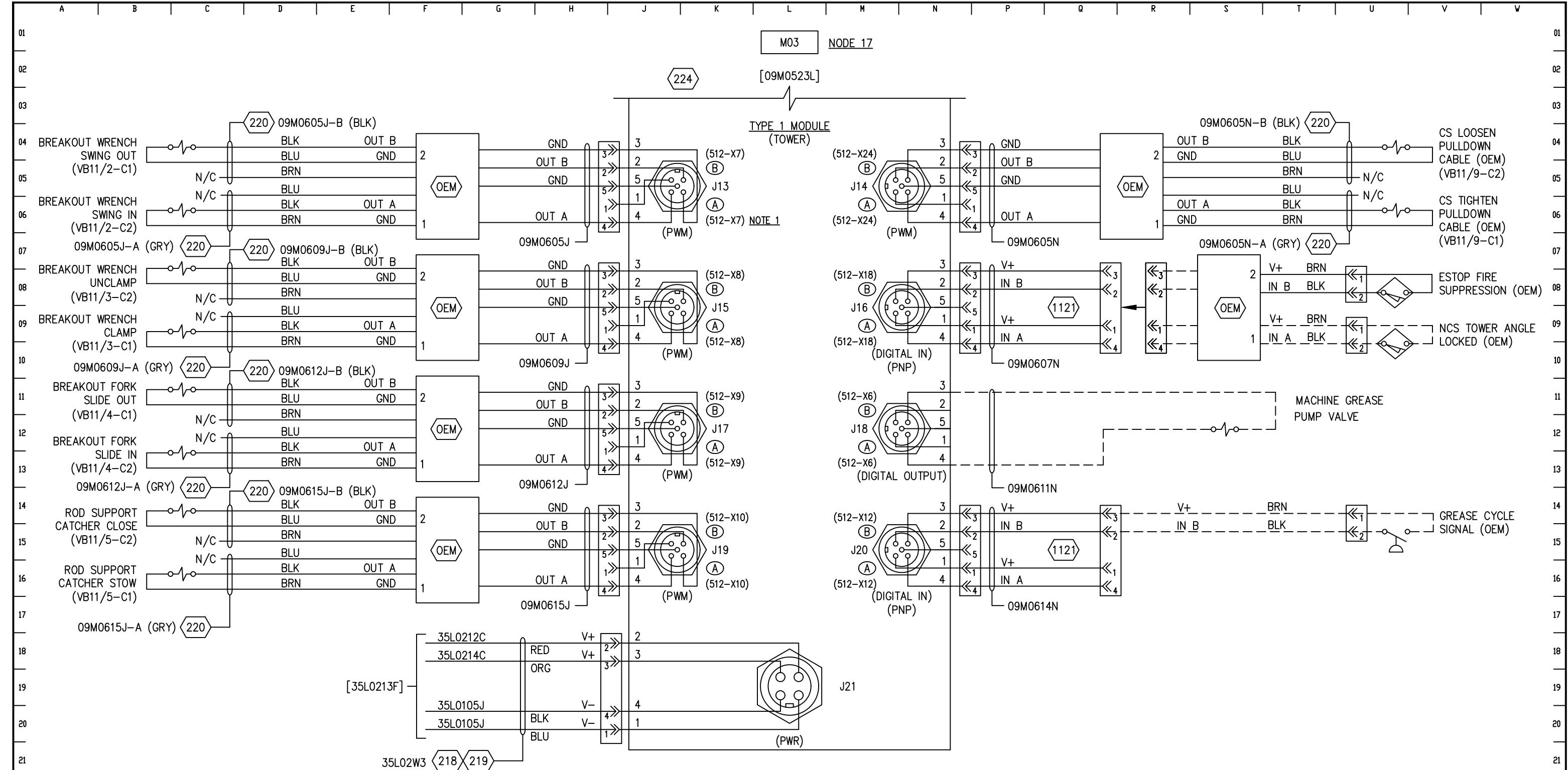
\*NOTE  
REMOVE FREQUENCY CONVERTER FROM TOWER  
ELECTRICAL BOX AND TERMINATE TO PUSH IN  
TERMINALS AND TERMINALS TO M01 J11









**NOTES:**

1. (51-X10)

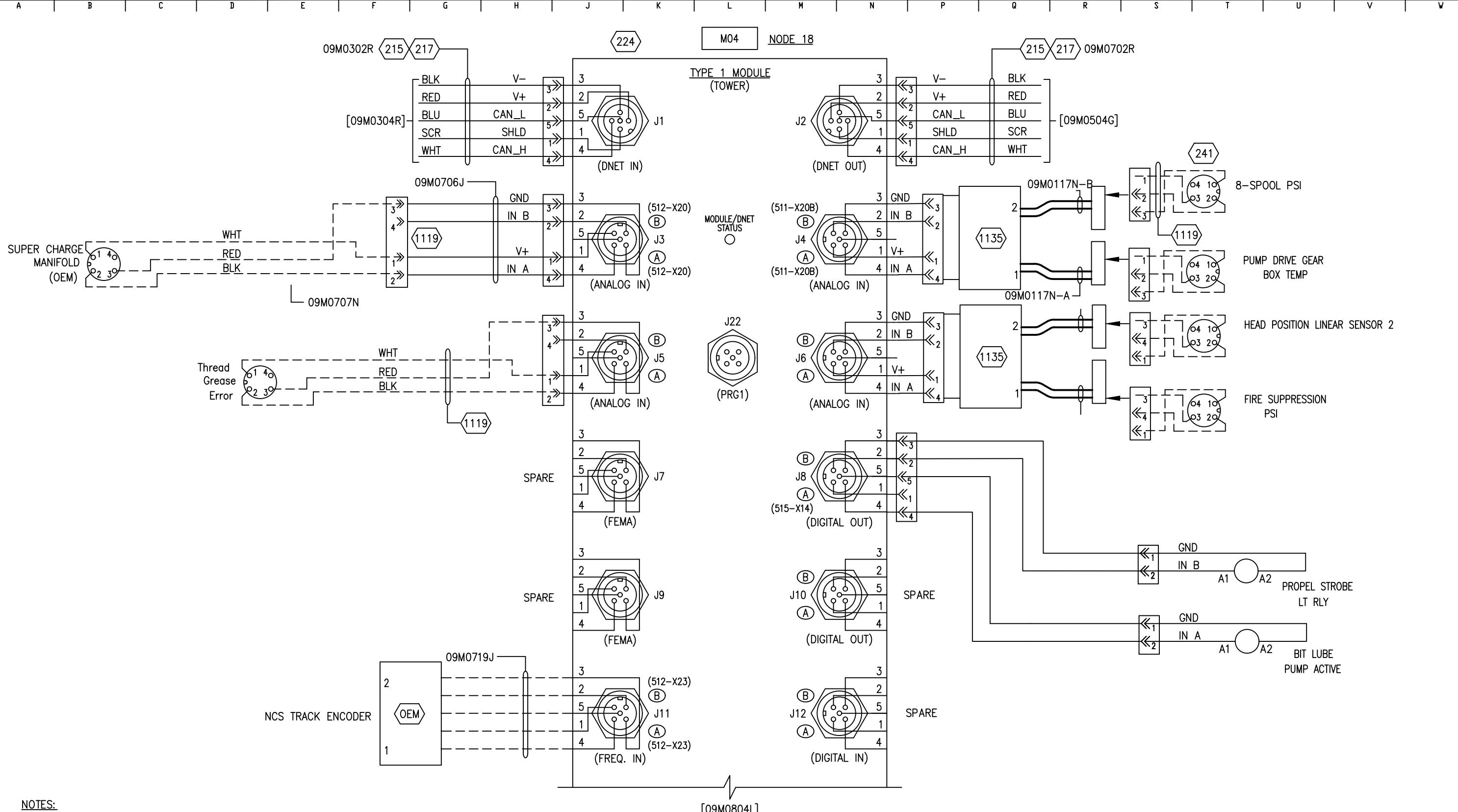
DENOTES OEM CONNECTOR NUMBER  
DENOTES OEM MODULE NUMBER



ENGINEER: J.GOODWIN  
APPROVED BY: J.GOODWIN  
DRAWN BY: S.SUNNY  
CHECKED BY: R.ELLSON

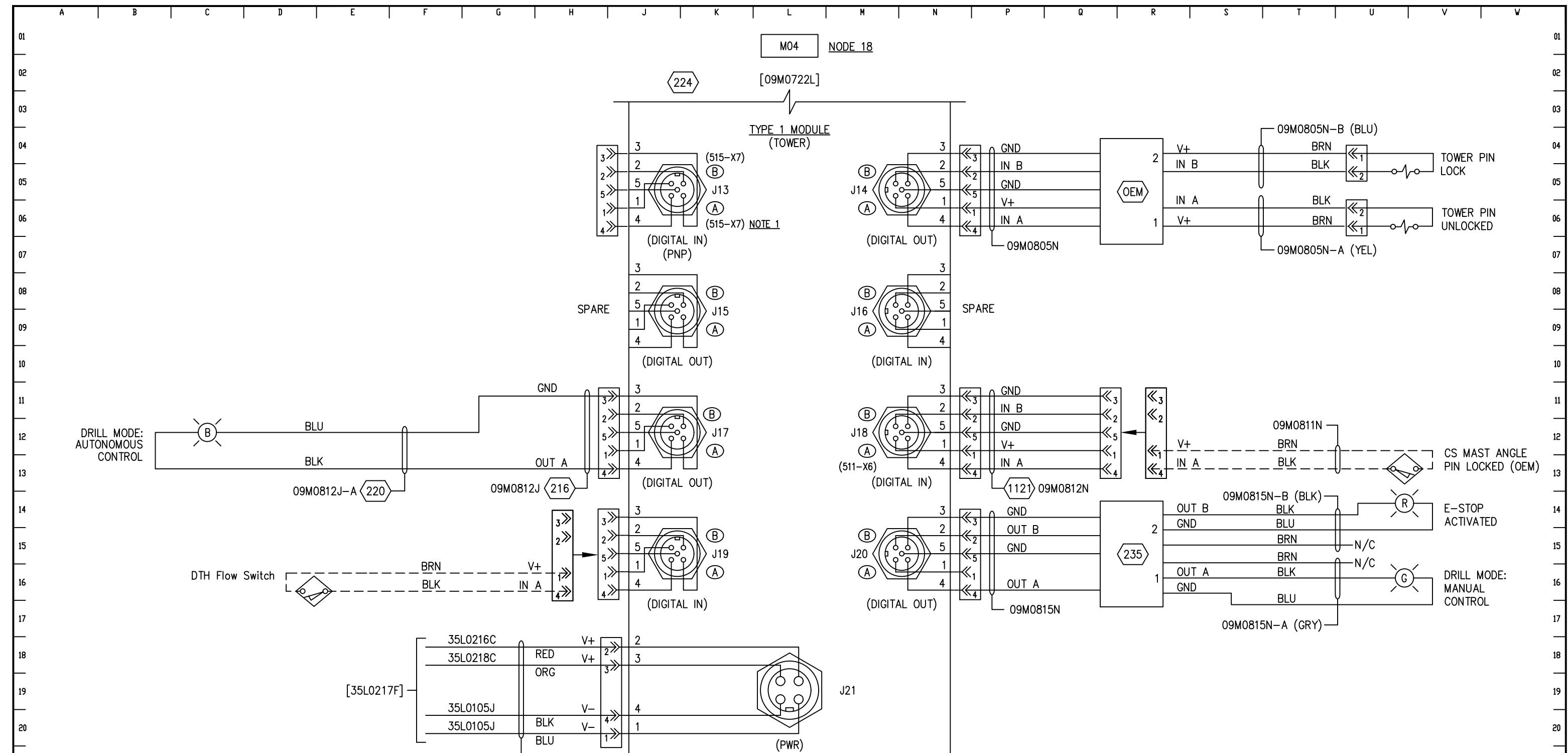
DRAWING TITLE: ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
REMOTE I/O MODULES  
MODULE M03 - NODE 17 CONNECTION DIAGRAM

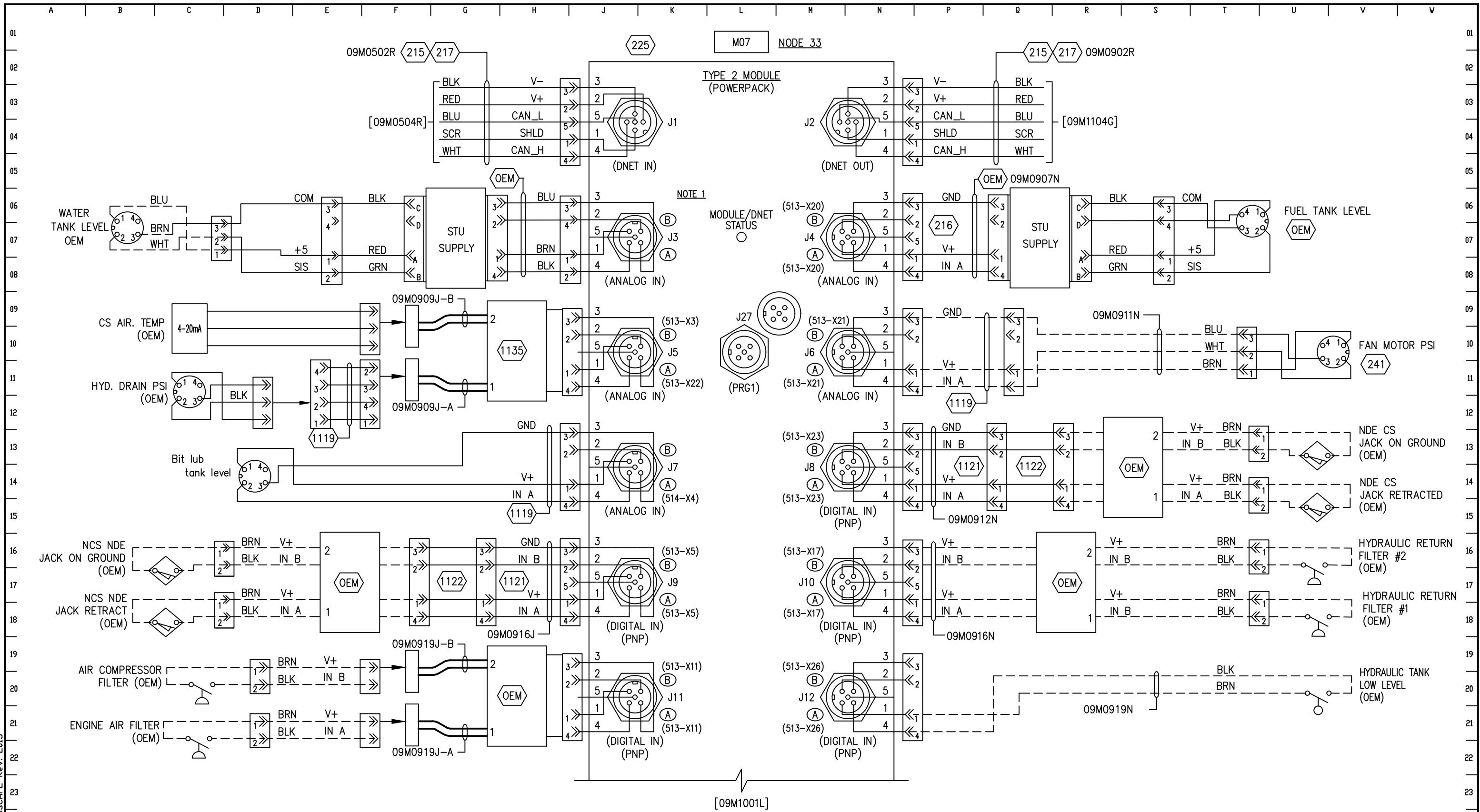
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	01/11/21	M07
DRAWING NO.	SECTION	SUB. SEC.
213S163	09	M
		SHEET
		06

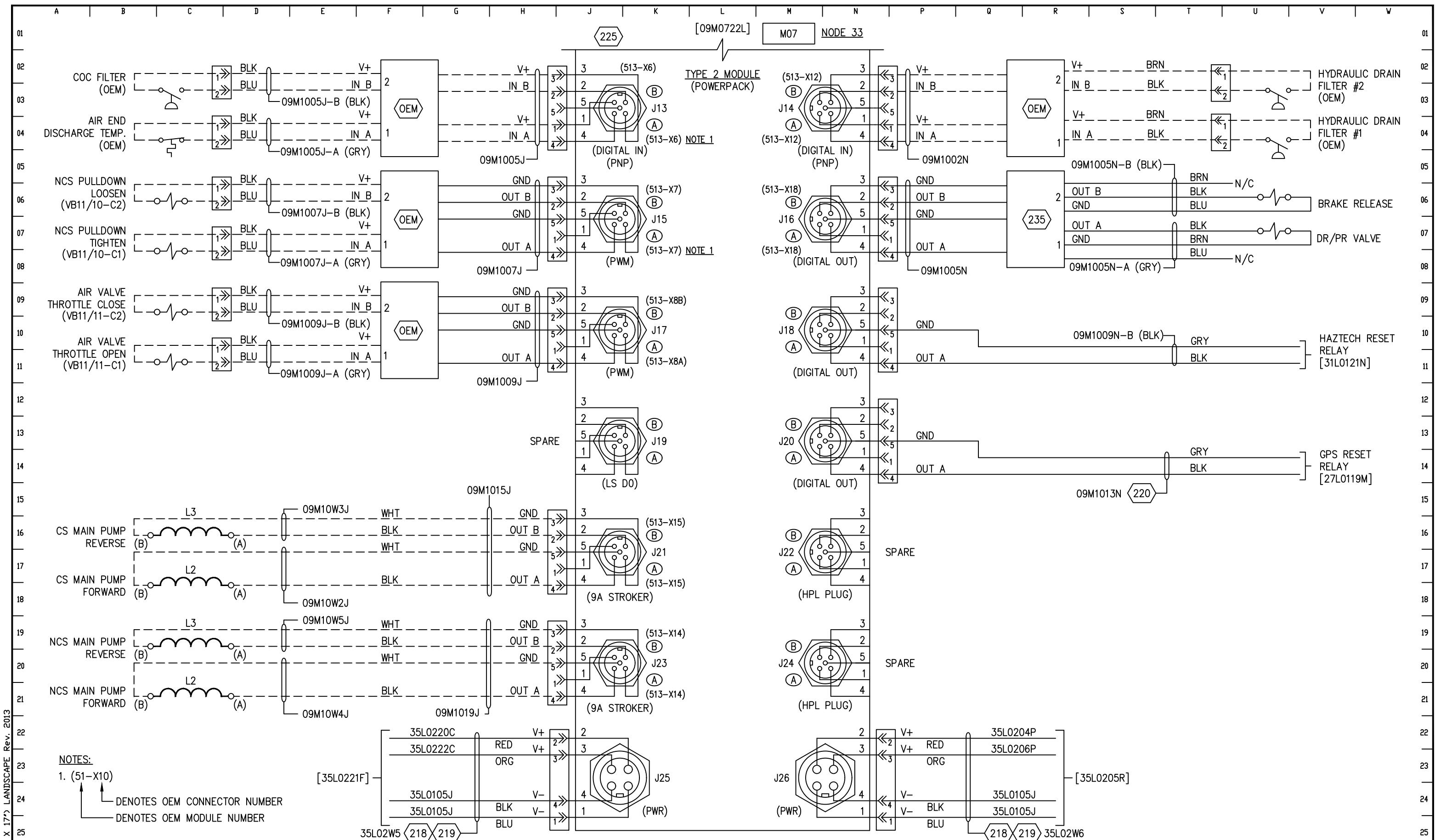


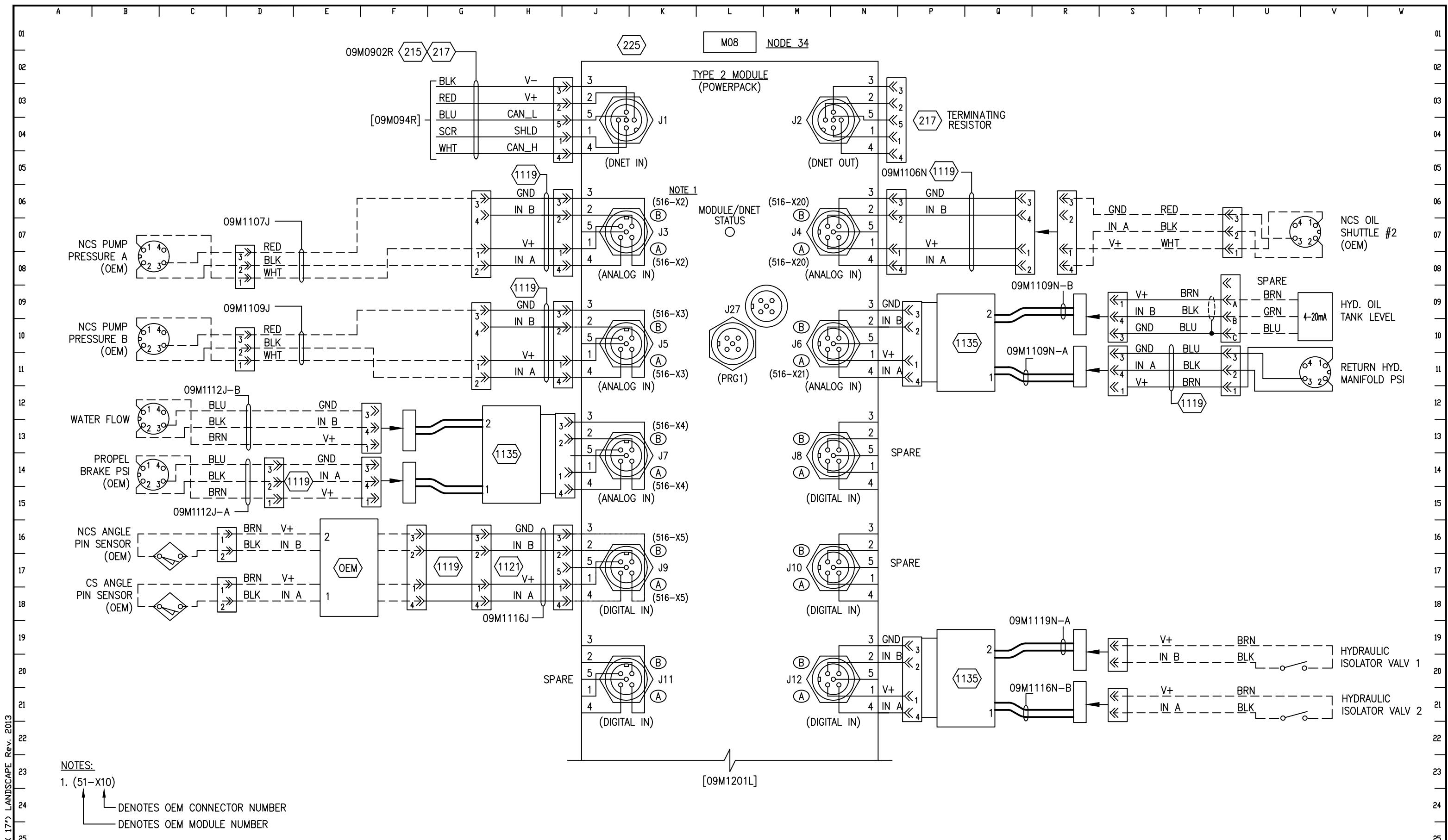
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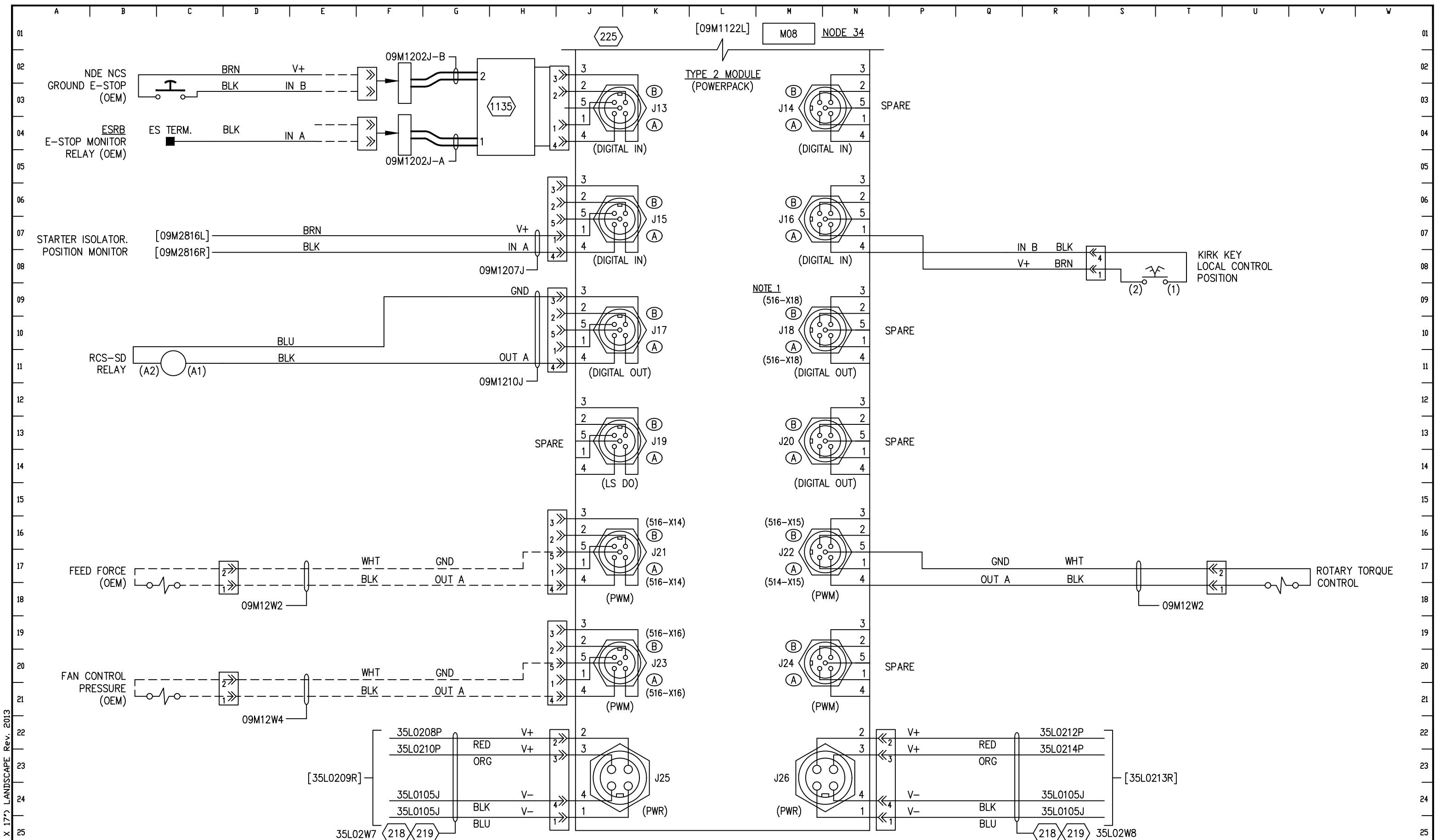
1. – RUN NEW CABLE FROM TRANSDUCER TO M04
  2. – INSTALL M12 BULKHEAD AT THE SWITCH. RUN CABLE TO BULKHEAD











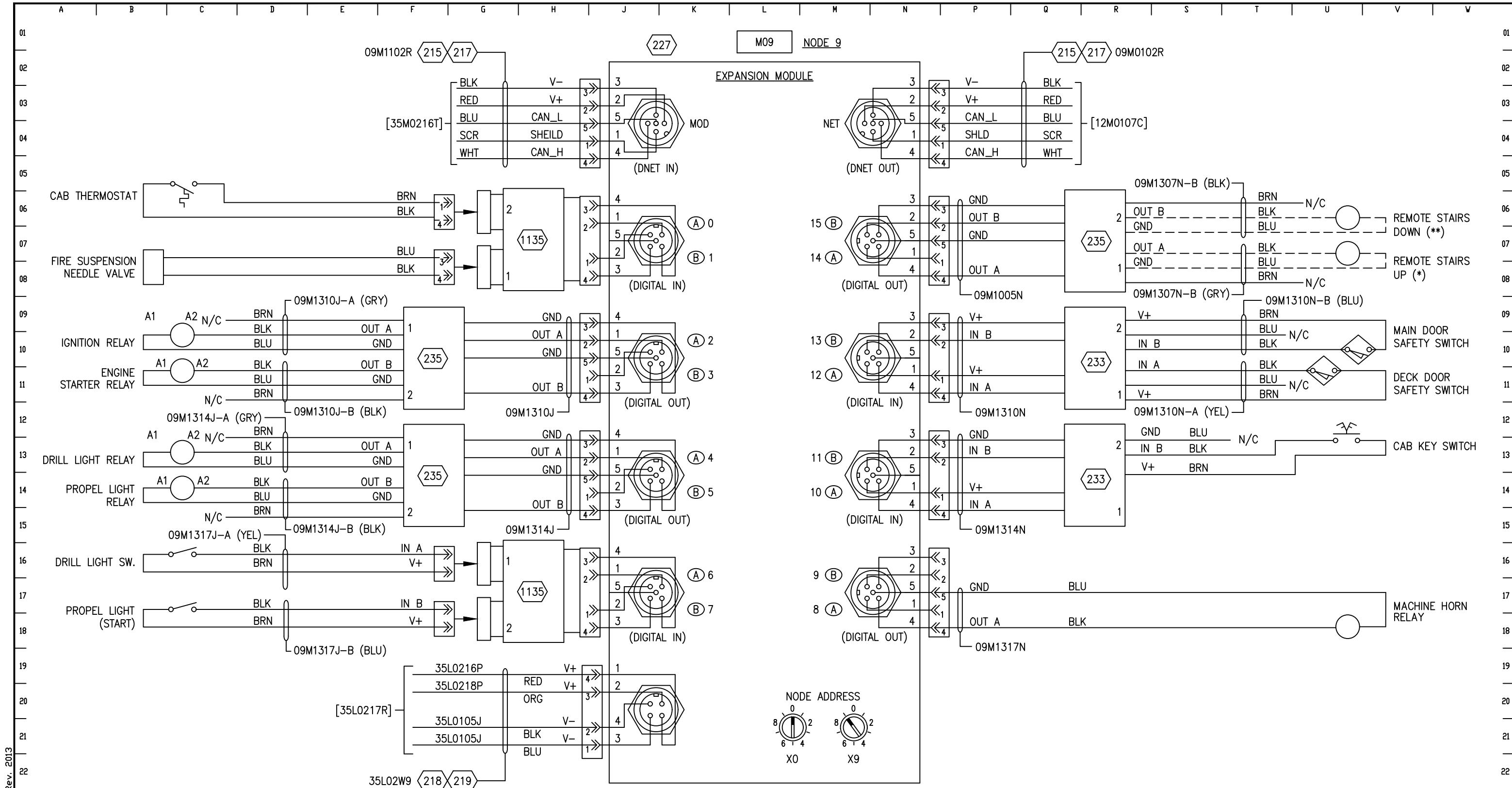
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	A AS BUILT	DATE	BY	CHKD
							01/11/21	SVS	RE



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ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM REMOTE I/O MODULES MODULE M08 - NODE 34 CONNECTION DIAGRAM
APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON	FILENAME: 213S16309M12.dwg

LOC. CODE	DATE		CONT. ON
01/11/21		M13	
DRAWING NO.	SECTION	SUB. SEC.	HEET
213S163	09	M	12



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ENGINEER:  
J.GOODWIN

DRAWN BY:  
S.SUNNY

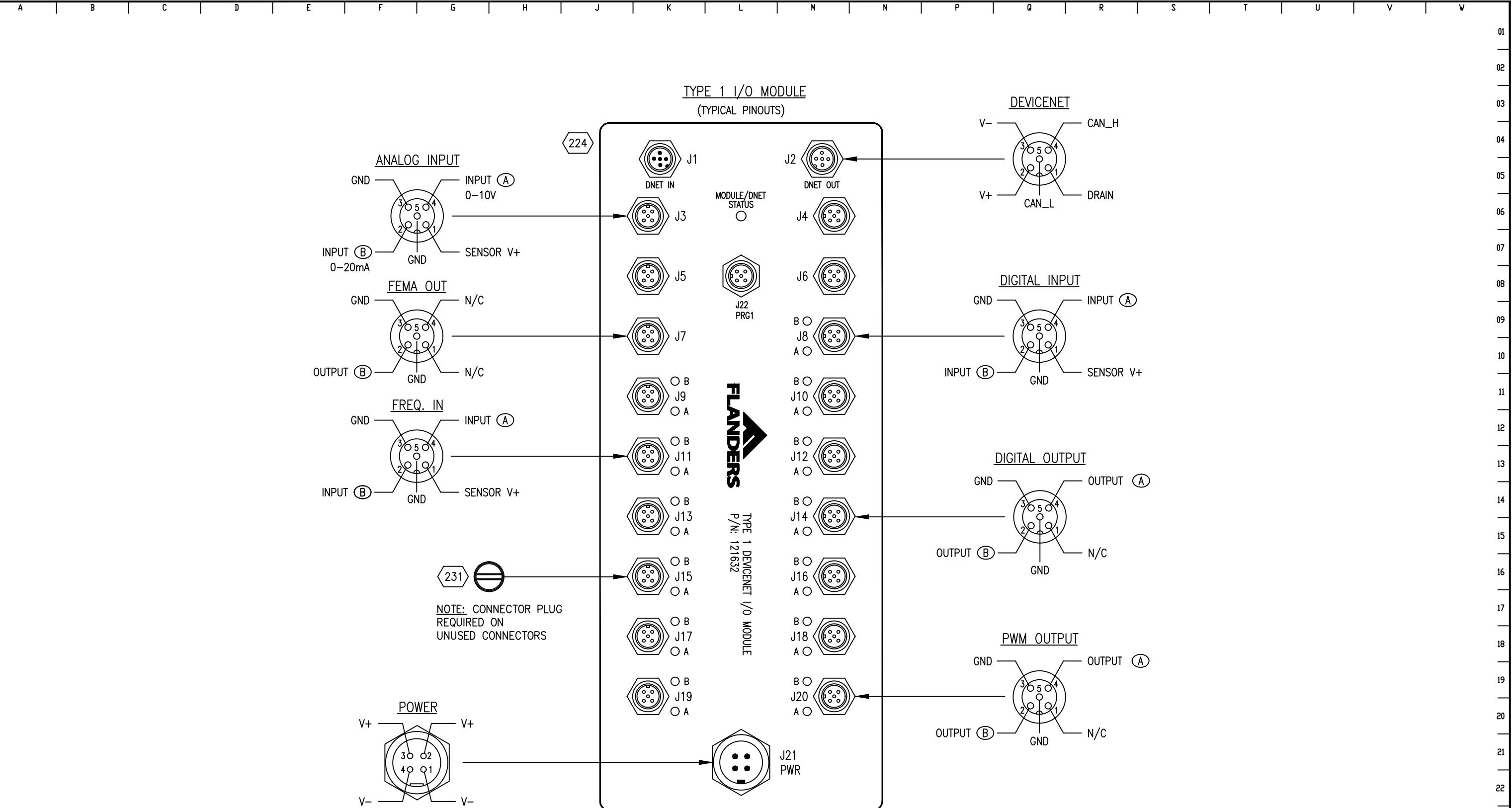
APPROVED BY:  
J.GOODWIN

CHECKED BY:  
R.ELLSON

FILENAME:  
213S16309M13.dwg

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
REMOTE I/O MODULES  
MODULE M09 - NODE 09 CONNECTION DIAGRAM

LOC. CODE	DATE	CONT. ON	
213S163	01/11/21	M20	
DRAWING NO.	SECTION	SUB. SEC.	HEET
213S163	09	M	13



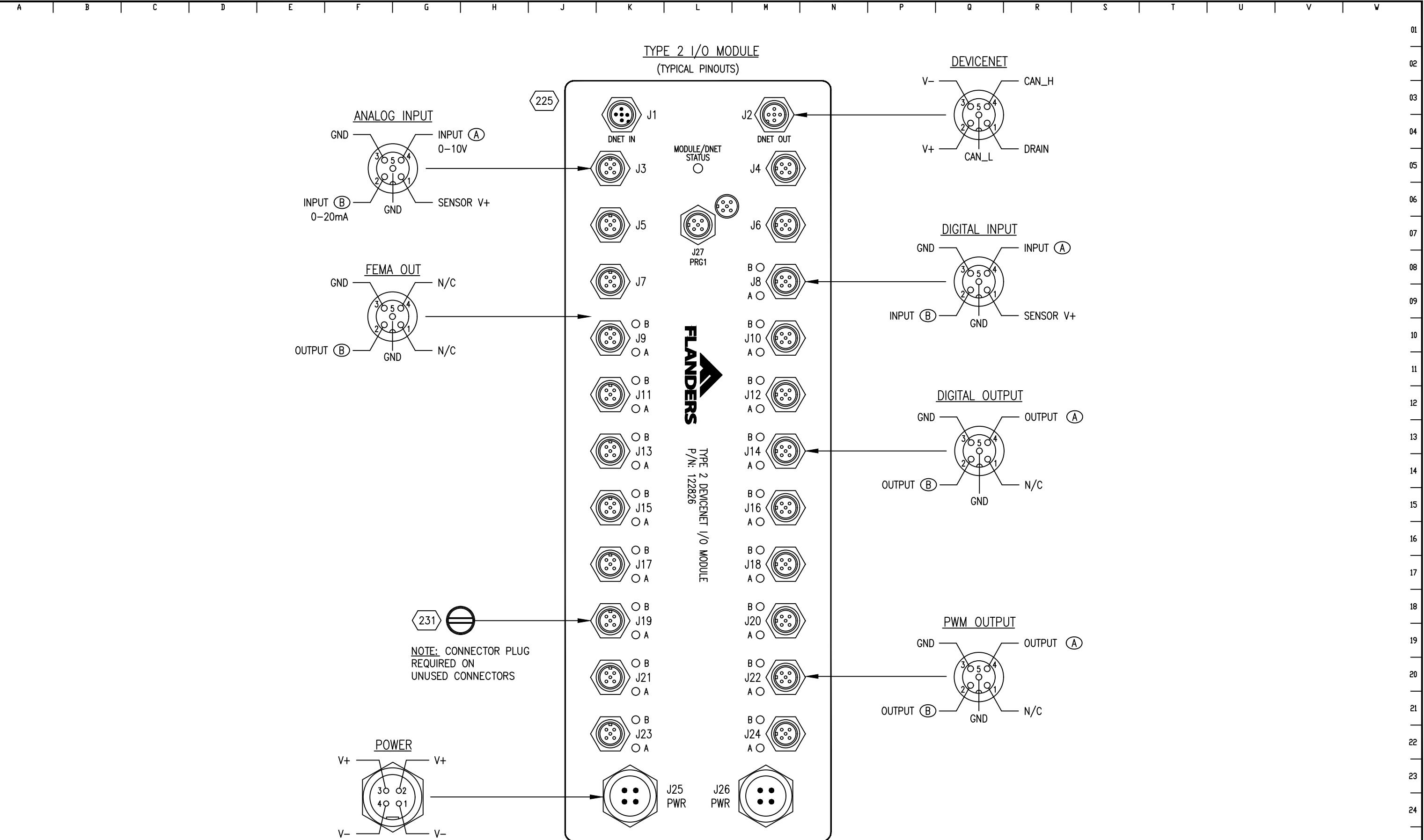
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ENGINEER:  
J.GOODWIN  
APPROVED BY:  
J.GOODWIN

DRAWN BY:  
S.SUNNY  
CHECKED BY:  
R.ELLSON

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
REMOTE I/O MODULES  
TYPE 1 I/O MODULE PINOUTS

LOC. CODE	DATE	CONT. ON
	01/11/21	M21
DRAWING NO.	SECTION	SUB. SEC.
213S163	09	M
		SHEET
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ENGINEER:  
J.GOODWIN  
APPROVED BY:  
J.GOODWIN

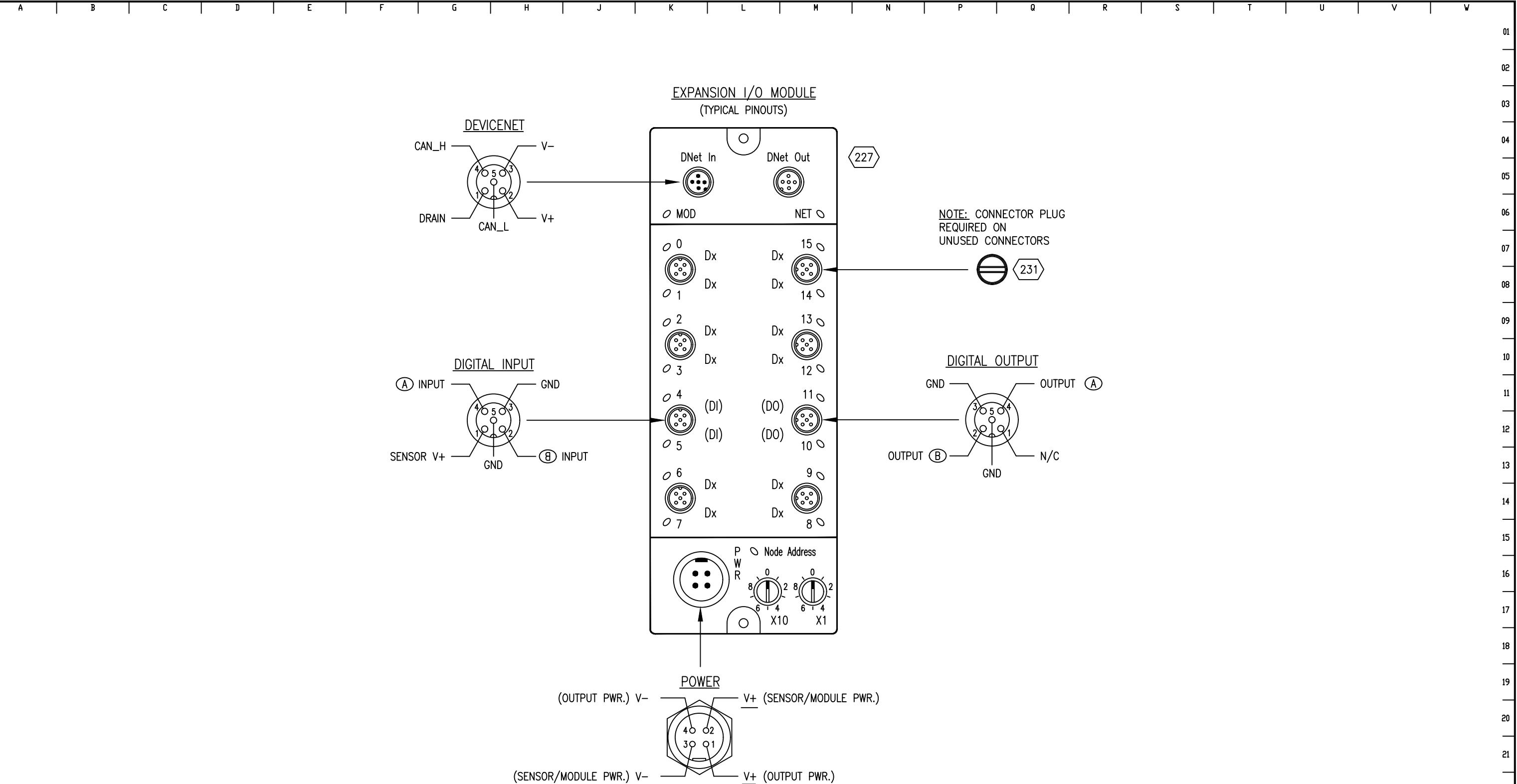
DRAWN BY:  
S.SUNNY  
CHECKED BY:  
R.ELLSON

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
REMOTE I/O MODULES  
TYPE 2 I/O MODULE PINOUTS

FILENAME:  
213S16309M21.dwg

LOC. CODE	DATE	CONT. ON			
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DRAWING NO.	SECTION	SUB. SEC.			
213S163	09	M			
REV.	DESCRIPTION	DATE	BY	CHKD	REV.

DRAWING NO.	SECTION	SUB. SEC.	HEET
213S163	09	M	21



ENGINEER: J.GOODWIN DRAWN BY: S.SUNNY  
APPROVED BY: J.GOODWIN CHECKED BY: R.ELLSON  
FILENAME: 213S16309M22.dwg

DRAWING TITLE: ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
REMOTE I/O MODULES  
EXPANSION I/O MODULE PINOUTS

LOC. CODE	DATE	CONT. ON
213S163	01/11/21	M23
DRAWING NO.	SECTION	SUB. SEC.
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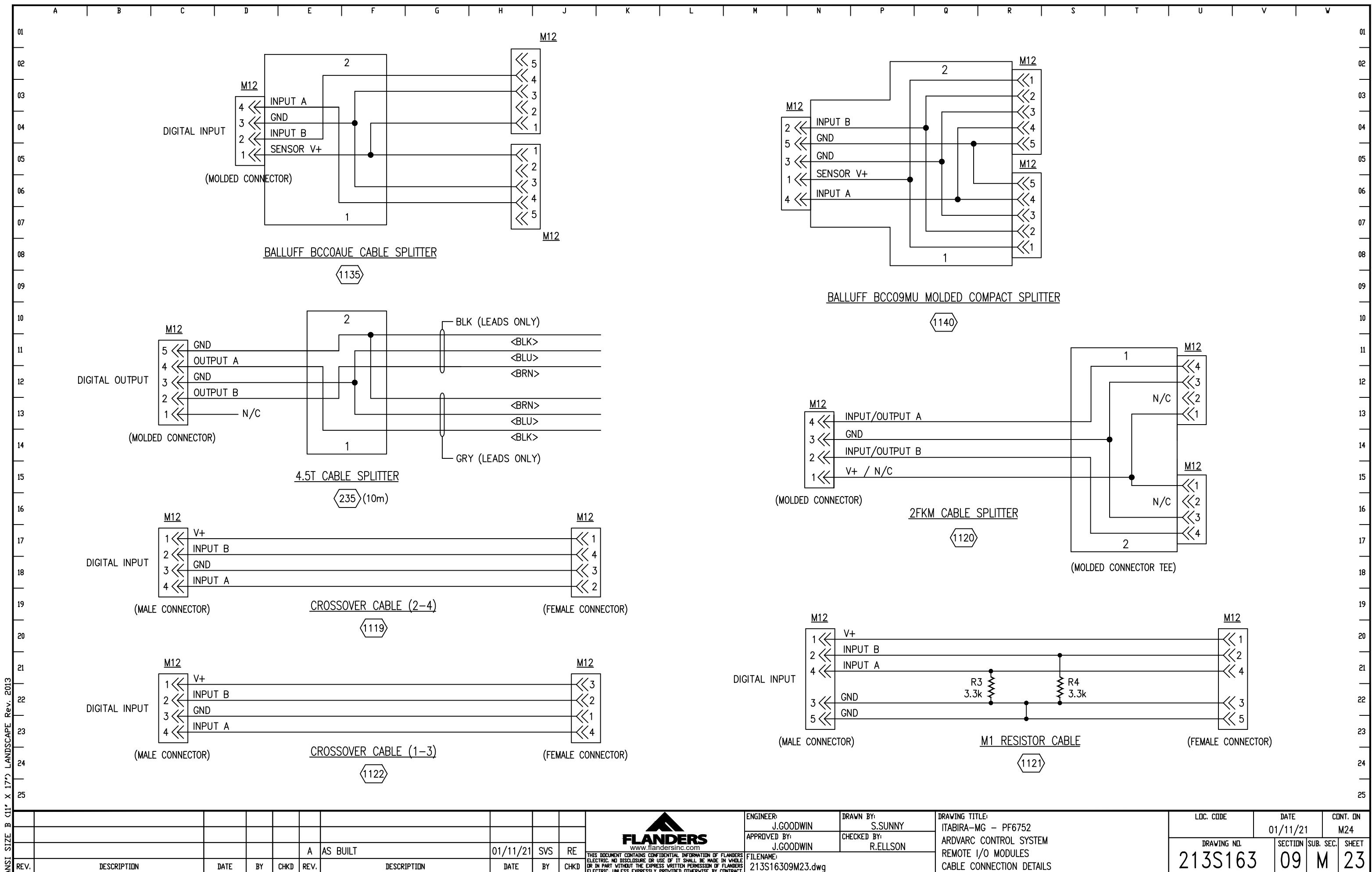
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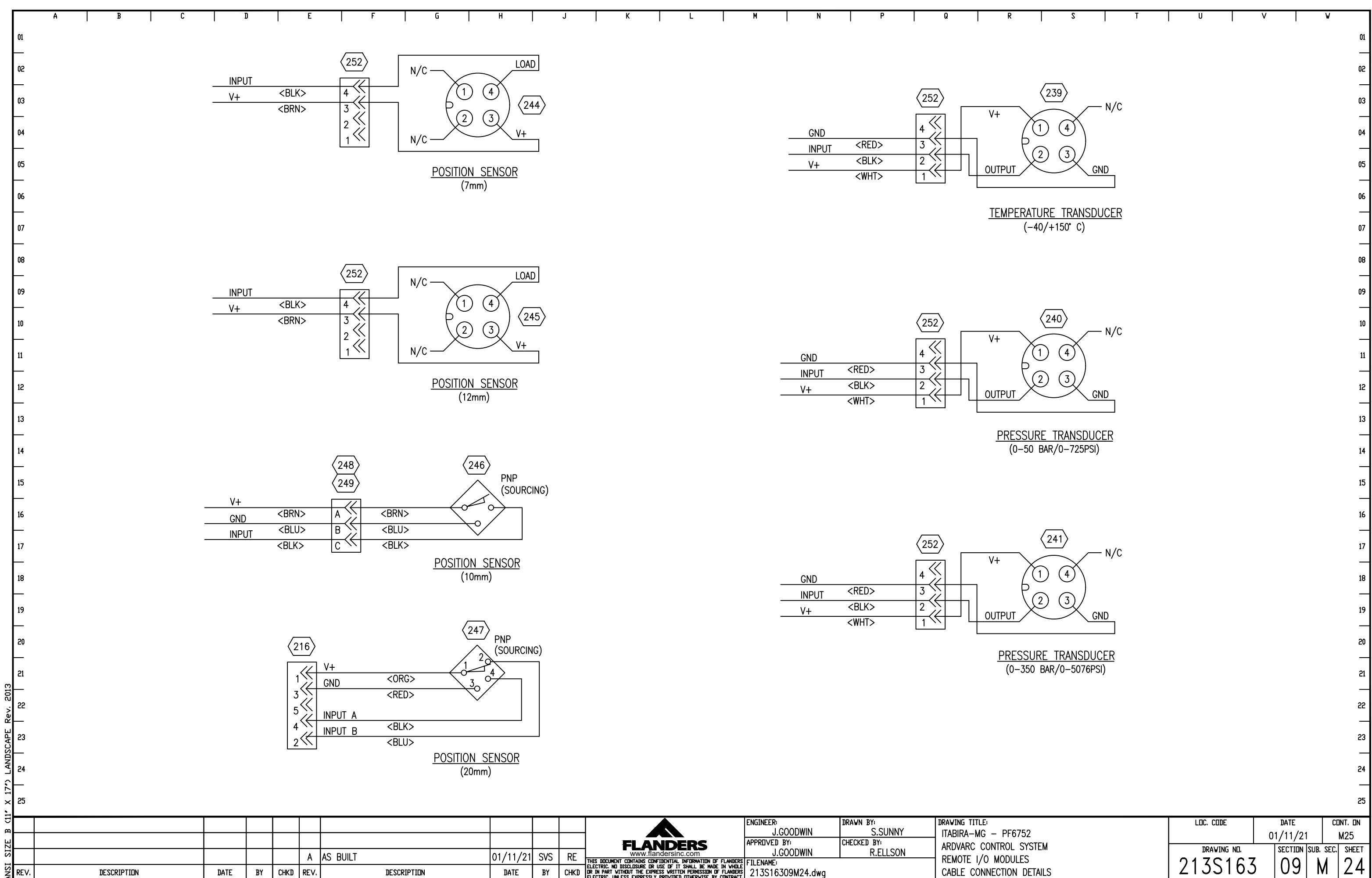
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DATE 01/11/21

DATE 01/11/21

CONT. ON M25

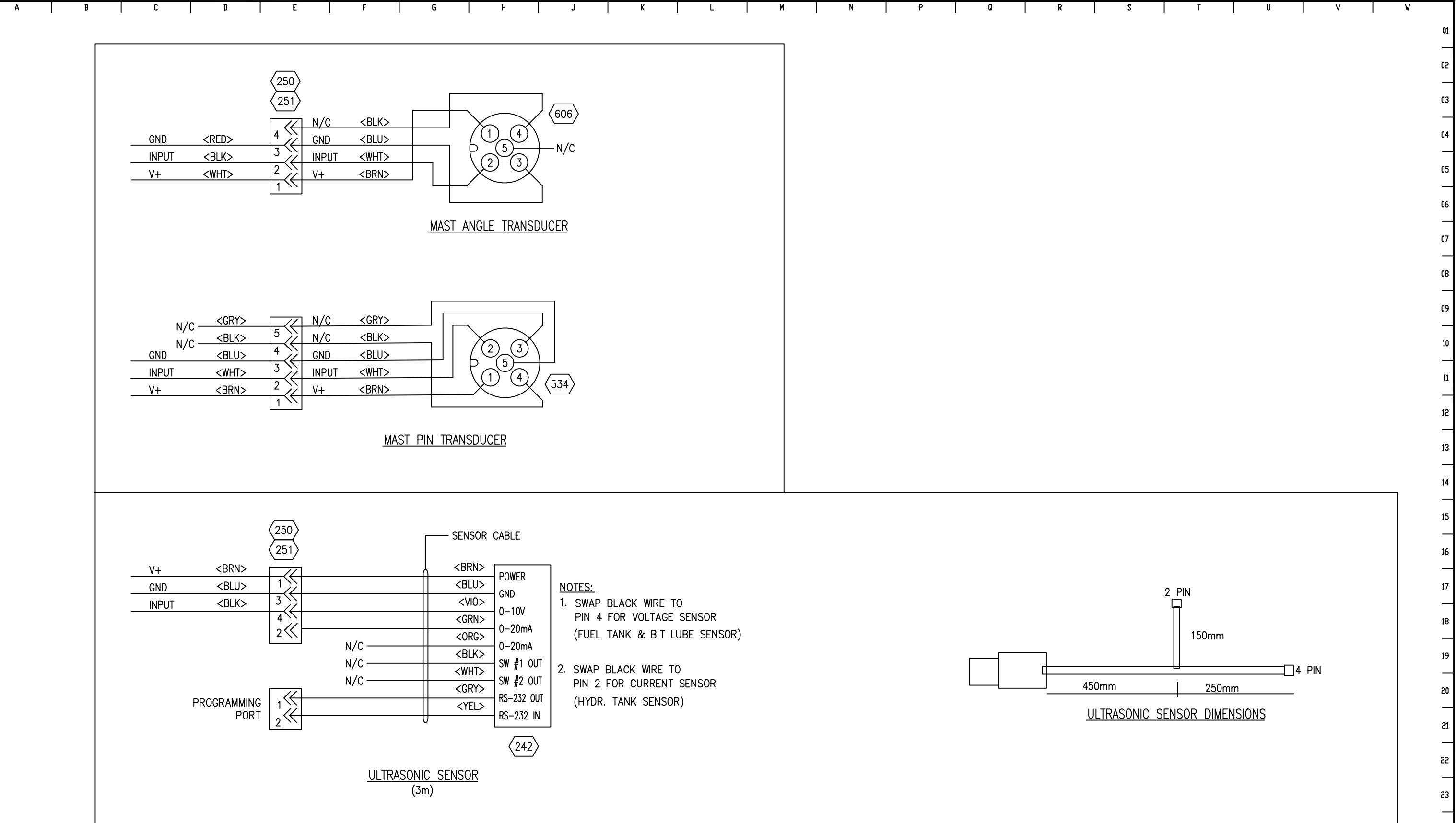
CONT. ON M25

DRAWING NO. 213S163

SECTION 09

SUB. SEC. M

SHEET 24



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APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON
FILENAME: 213S16309M25.dwg	

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
ULTRASONIC SENSORS / MAST PIN TRANS.  
CABLE CONNECTION DETAILS

LOC. CODE	DATE	CONT. ON
213S163	01/11/21	M26
DRAWING NO.	SECTION	SUB. SEC.
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01/11/21 SVS RE

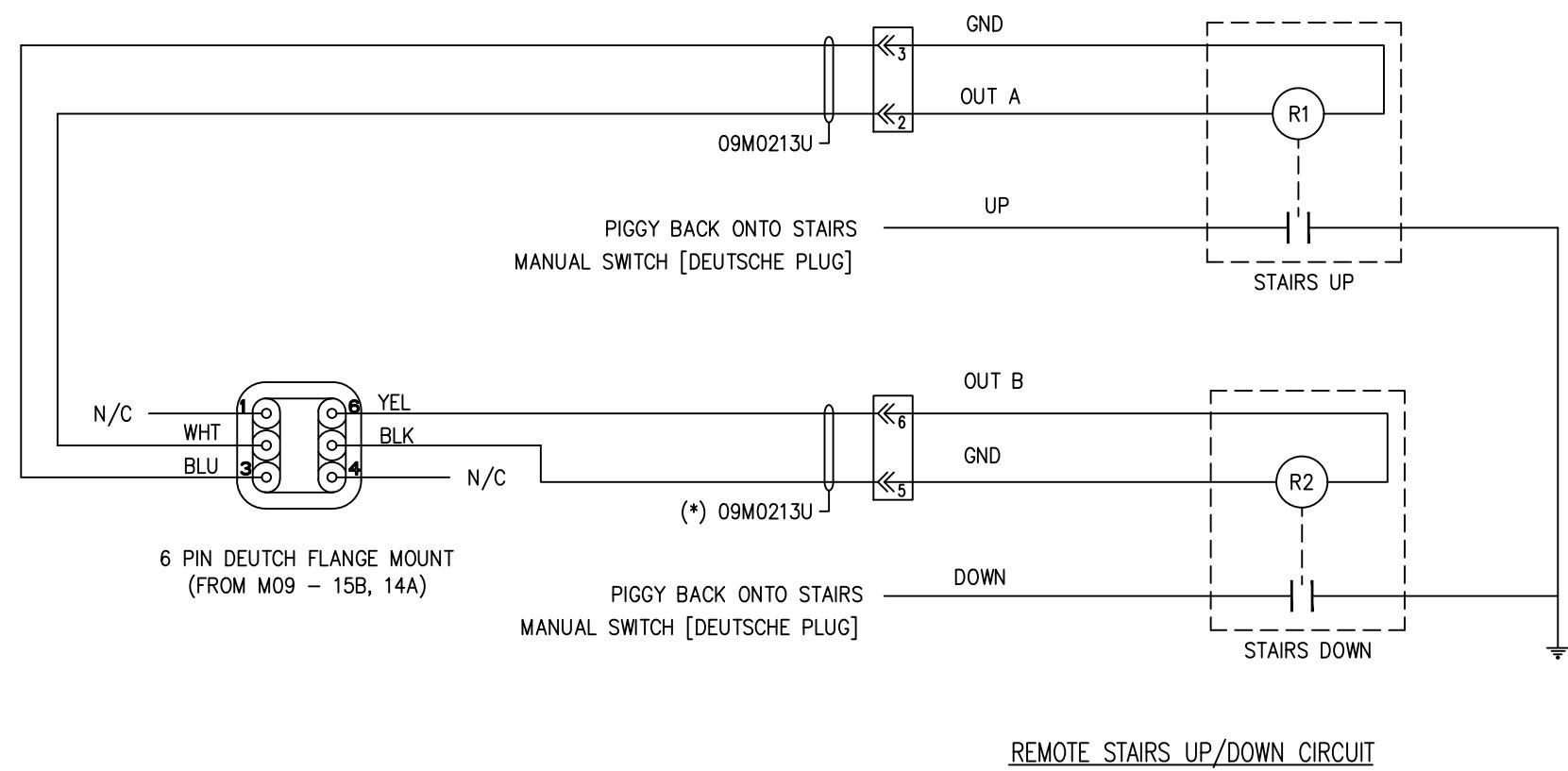
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DATE BY CHKD

RE

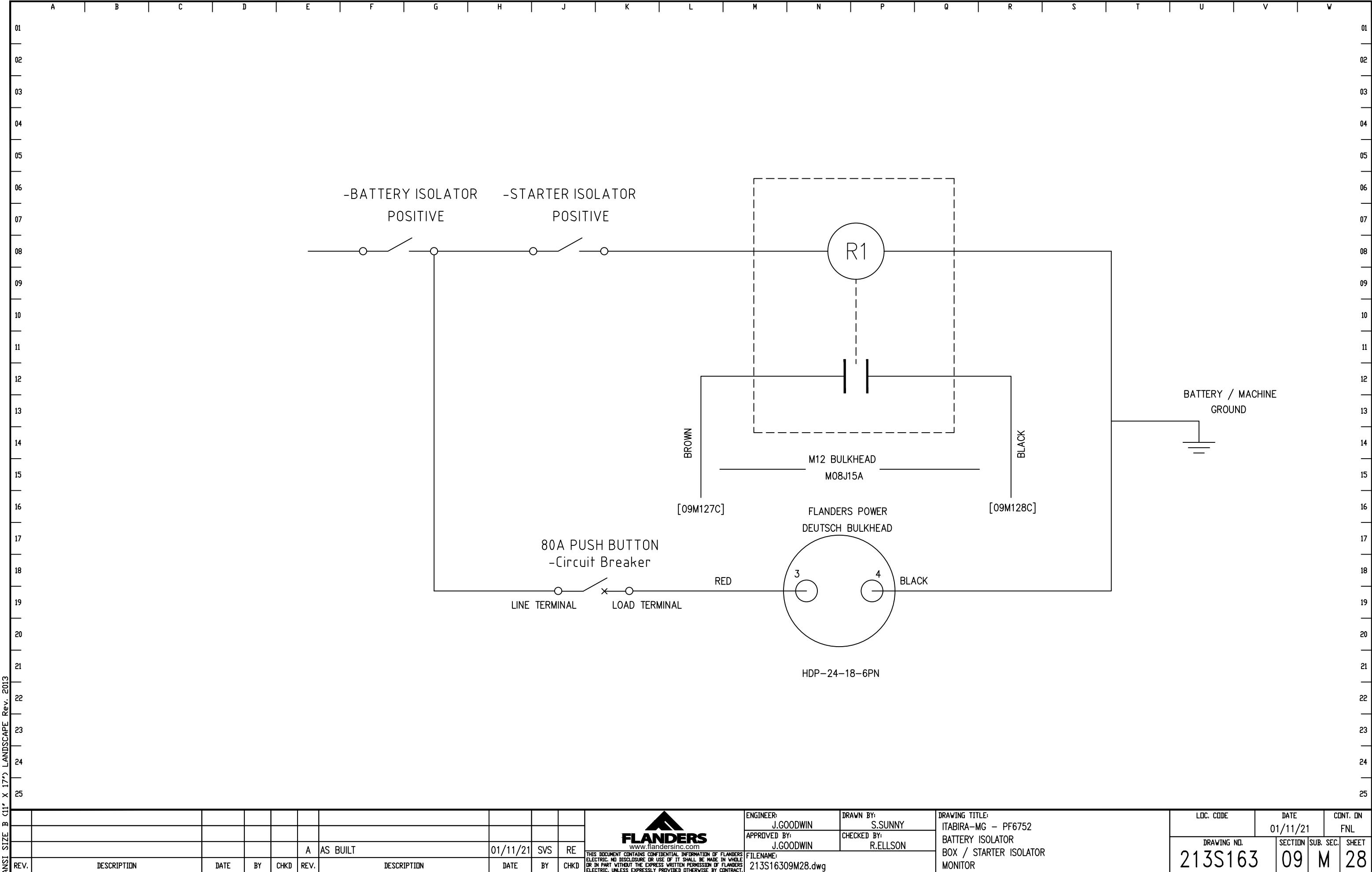
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ANSI SIZE B (11" x 17") LANDSCAPE Rev. 2013																				



(\*) - USE 7 CORE TRAILER CABLE

INSTRUMENT SIZE B 11							 <b>FLANDERS</b> www.flandersinc.com	ENGINEER:	J.GOODWIN	DRAWN BY:	S.SUNNY	DRAWING TITLE: ITABIRÁ-MG – PF6752 ARDVARC CONTROL SYSTEM STAIRS UP DOWN CIRCUITS OEM WIRING INTERFACE DETAILS	LOC. CODE	DATE		CONT. ON	
								APPROVED BY:	J.GOODWIN	CHECKED BY:	R.ELLSON			01/11/21	M27		
	A AS BUILT						01/11/21	SVS	RE	THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF FLANDERS ELECTRICAL DISCLOSURE OR USE MAY BE MADE IN WHOLE OR PART, WITH EXPRESSED WRITTEN CONSENT OF FLANDERS. ELECTRICAL UNLESS EXPRESSLY PROVIDED OTHERWISE, BY CONTRACT OR LAW.	FILENAME:	213S16309M27.dwg	DRAWING NO.	SECTION	SUB. SEC.	SHEET	
REV.	DESCRIPTION		DATE	BY	CHKD	REV.	DESCRIPTION		DATE	BY	CHKD	213S163	09	M	27		

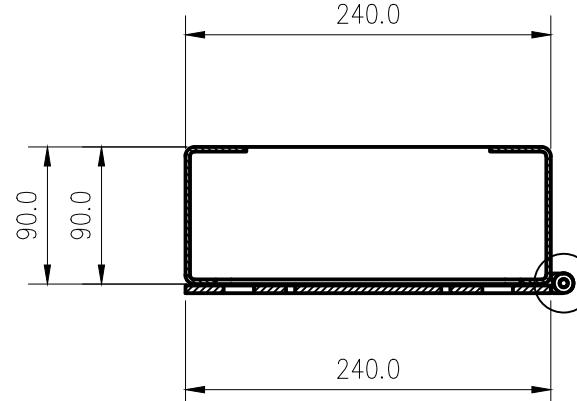


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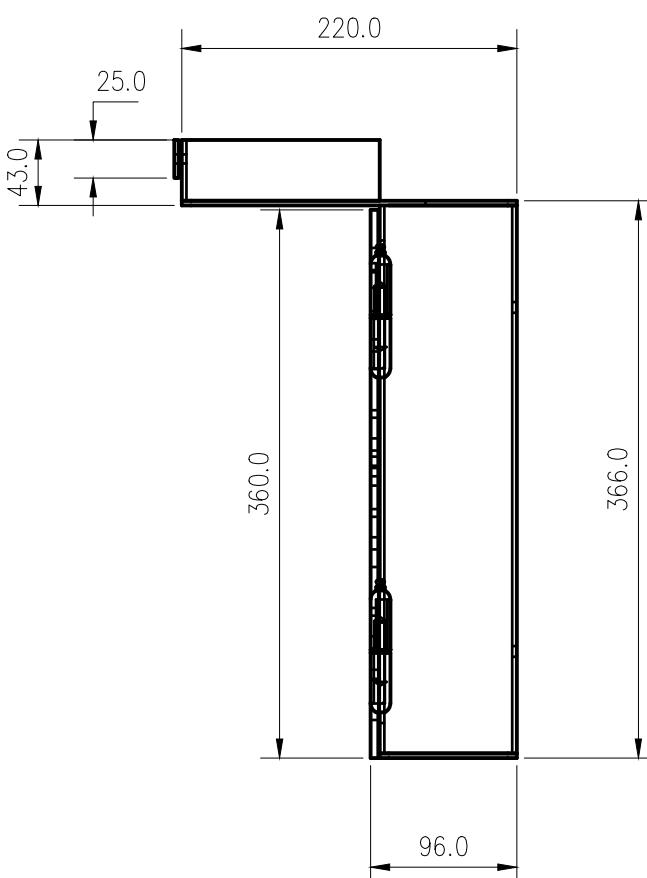
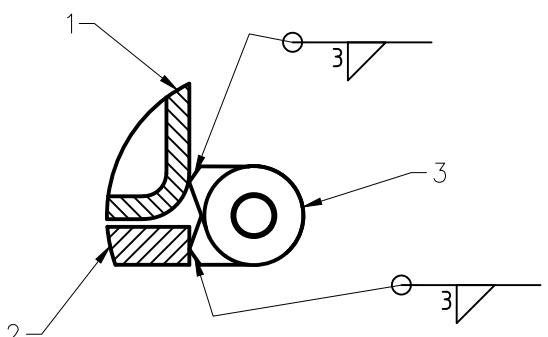
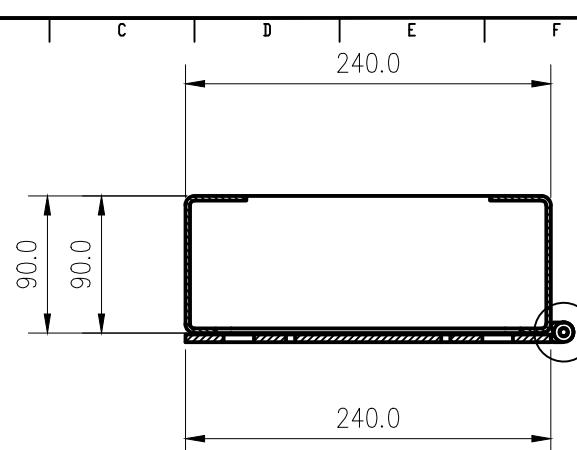
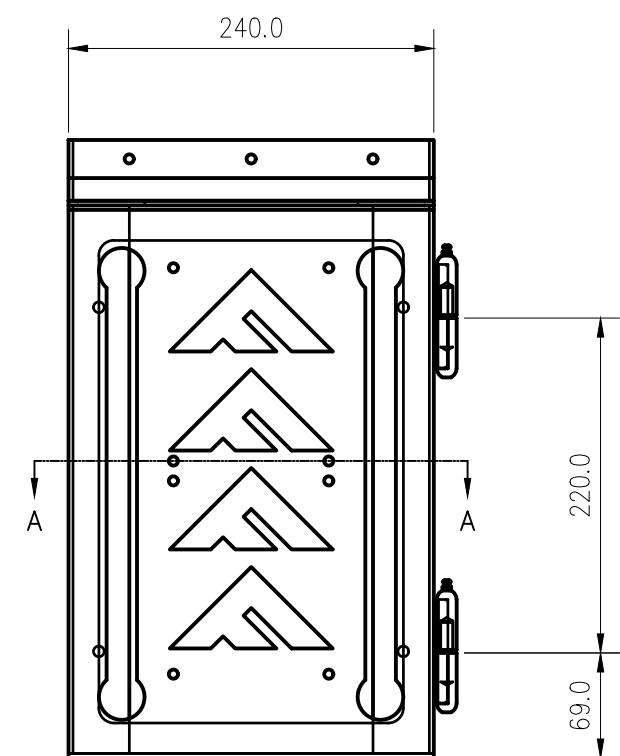
ENGINEER: J.GOODWIN DRAWN BY: S.SUNNY  
APPROVED BY: J.GOODWIN CHECKED BY: R.ELLSON  
FILENAME: 213S16309M28.dwg

DRAWING TITLE: ITABIRA-MG - PF6752  
BATTERY ISOLATOR  
BOX / STARTER ISOLATOR  
MONITOR

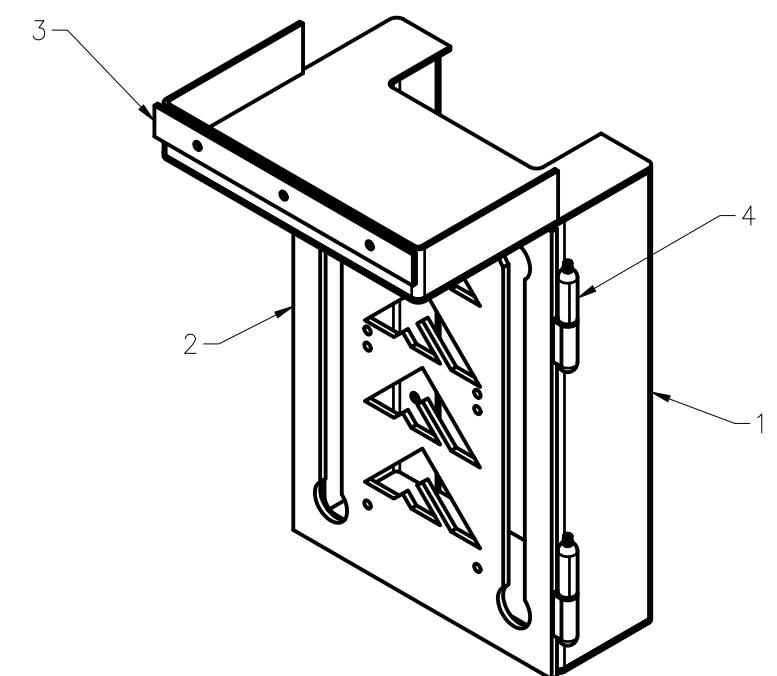
LOC. CODE	DATE	CONT. ON			
213S163	01/11/21	FNL			
DRAWING NO.	SECTION	SUB. SEC.			
213S163	09	M			
REV.	DESCRIPTION	DATE	BY	CHKD	REV.



SECTION  
SCALE 1:5



SIDE VIEW



ISOMETRIC VIEW

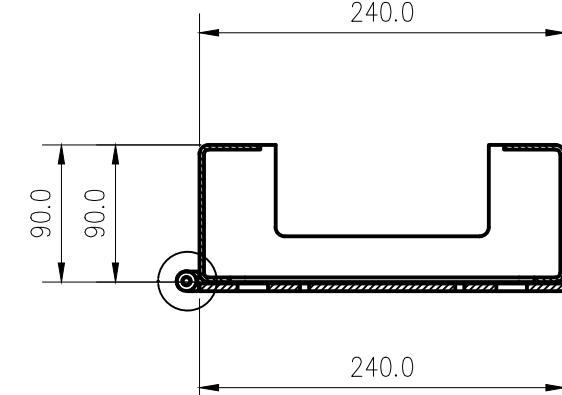
FABRICATION NOTES

1. EXPOSED SHARP EDGES AND CORNERS SHALL BE SANDED OR GROUND SMOOTH.
2. FINISH: POWDER COATED
3. COLOUR: ATLAS COPCO YELLOW

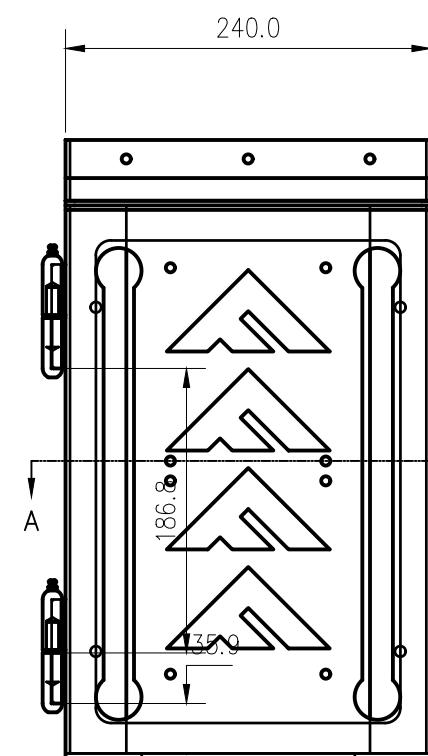
PART MATERIAL LIST																	
ITEM	DESCRIPTION	REFERENCE															
1	MODULE BRACKET 1 BASE	DWG 09T02, 09T03															
2	MODULE BRACKET 1 PLATE	DWG 09T04															
3	MODULE BRACKET 1 CLAMP	DWG 09T04															
4	WELD ON HINGE 80mm	UES Int. 7004.00.080															

REV.	DESCRIPTION	DATE	BY	CHKD	REV.	A	AS BUILT	DATE	BY	CHKD	RE	ENGINEER:	DRAWN BY:	DRAWING TITLE:	LOC. CODE	DATE	CONT. ON	
												J.GOODWIN	S.SUNNY	CLOUDBREAK - DR061	213S16309T01	01/11/21	T02	
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION			DATE	BY	CHKD	THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF FLANDERS ELECTRIC. NO DISCLOSURE OR USE OF IT SHALL BE MADE IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLANDERS ELECTRIC, UNLESS EXPRESSLY PROVIDED OTHERWISE BY CONTRACT.	APPROVED BY:	CHECKED BY:	ARDVARC CONTROL SYSTEM	DRAWING NO.	SECTION	CONT. ON
												J.GOODWIN	R.ELLSON	REMOTE I/O MODULE BRACKET 1	213S16309T01.dwg	09	T	01

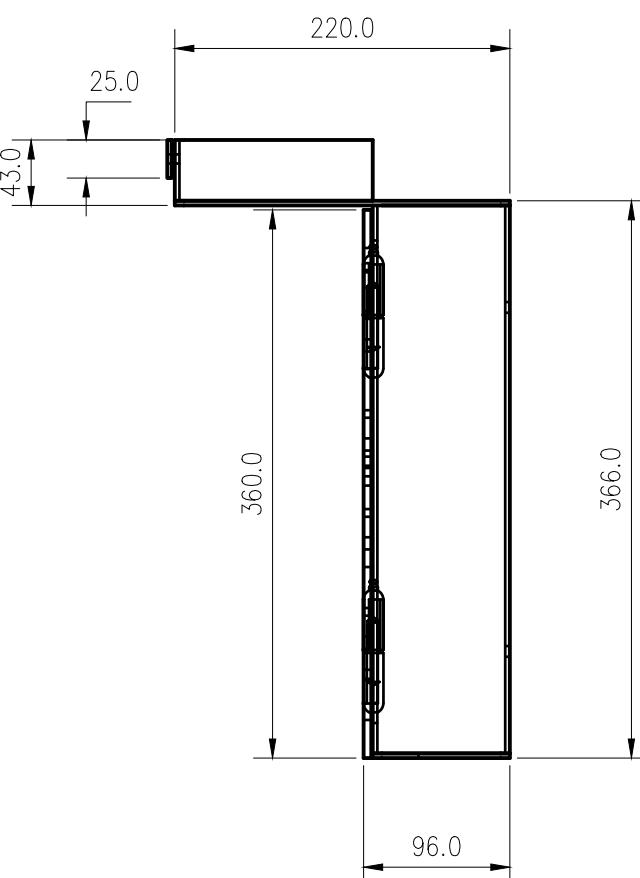
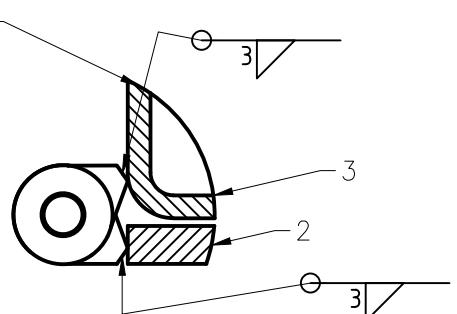
PART MATERIAL LIST		
ITEM	DESCRIPTION	REFERENCE
5	MODULE BRACKET 1 BASE	DWG 09T06, 09T07
6	MODULE BRACKET 1 PLATE	DWG 09T08
7	MODULE BRACKET 1 CLAMP	DWG 09T08
4	WELD ON HINGE 80mm	UES Int. 7004.00.080



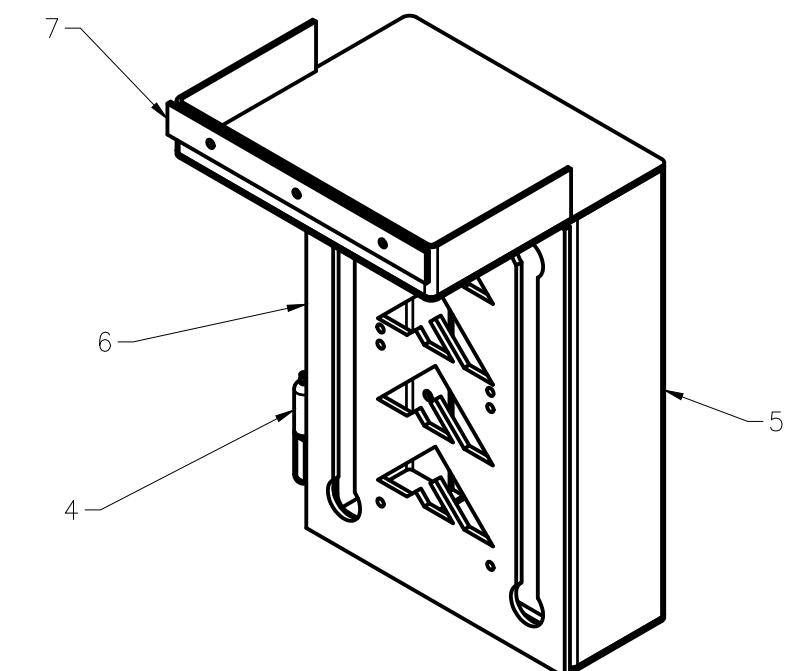
SECTION  
SCALE 1:5 A -



## FRONT VIEW



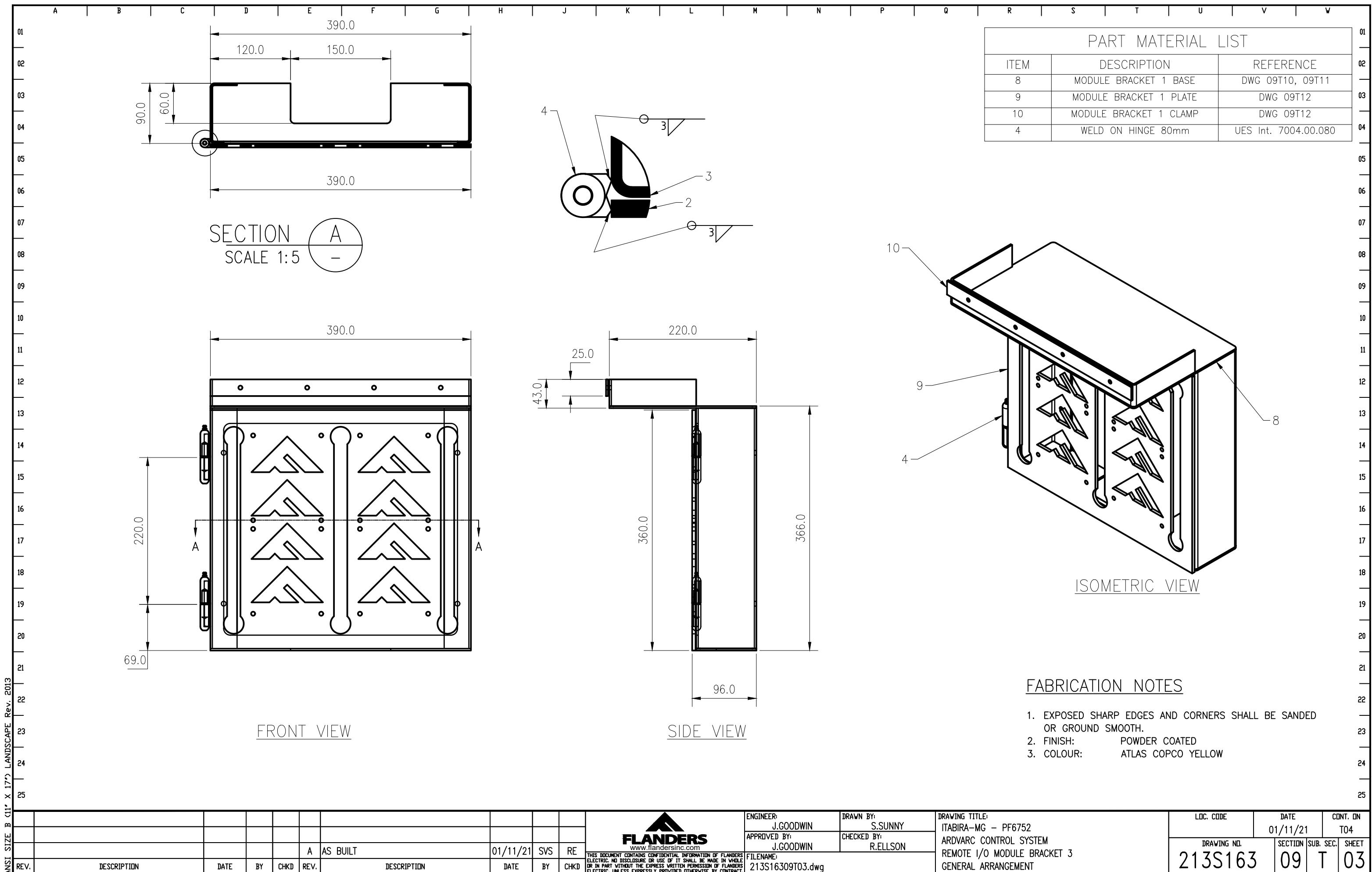
SIDE VIEW

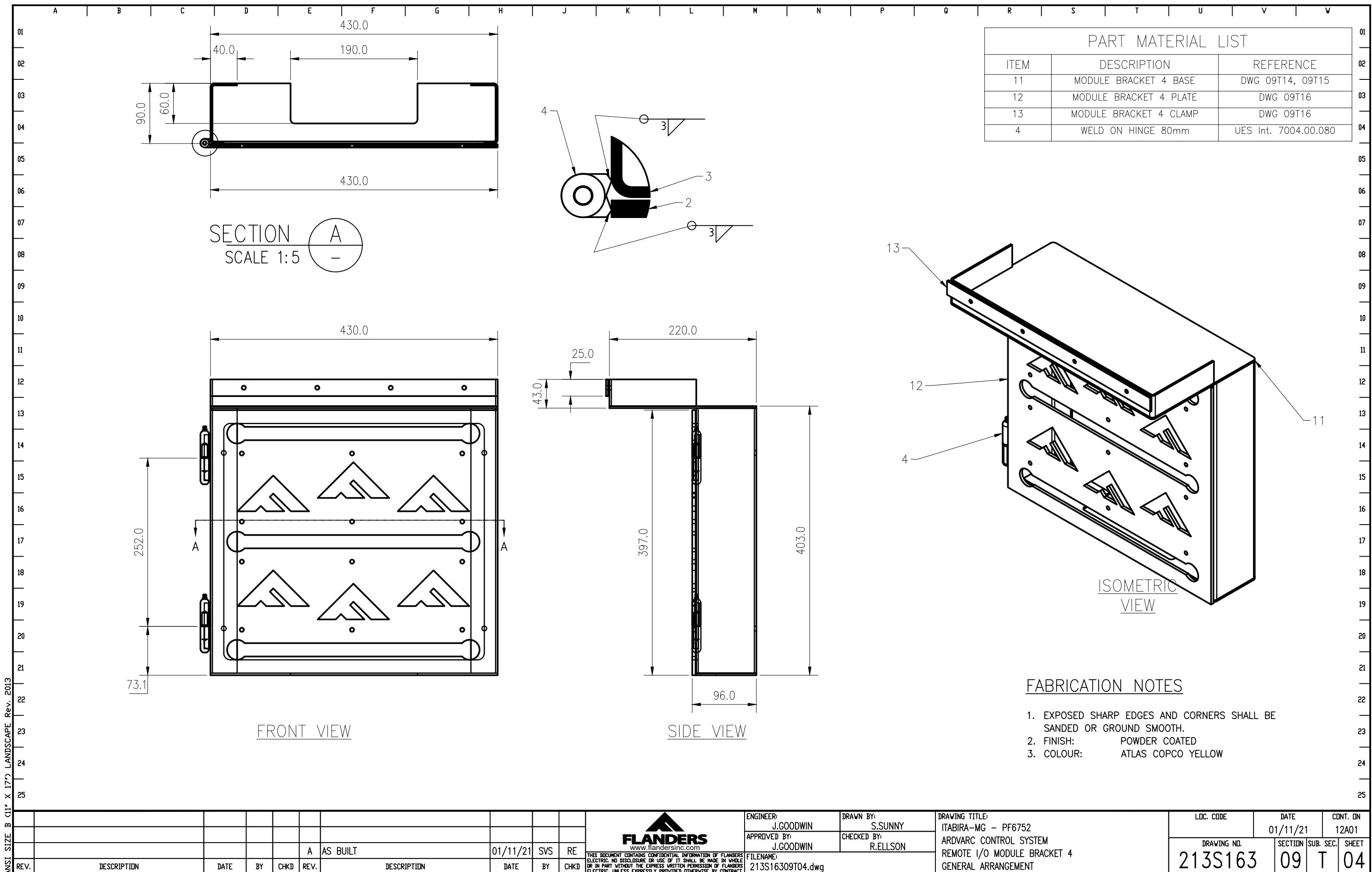


## ISOMETRIC VIEW

## FABRICATION NOTES

1. EXPOSED SHARP EDGES AND CORNERS SHALL BE SANDED OR GROUND SMOOTH.
  2. FINISH: POWDER COATED
  3. COLOUR: ATLAS COPCO YELLOW





ANSI SIZE B (11" X 17") LANDSCAPE Rev. 2013

## OPERATOR CAB PC/HMI

011

SHEET	DESCRIPTION
12A01	TITLE SHEET & INDEX
12D01	CAB PANEL LAYOUT
12G01	COMPONENT LAYOUT
12G02	BILL OF MATERIAL
12L01	24VDC POWER/INTERCONNECTION DIAGRAM
12M01	DEVICENET CONNECTION DIAGRAM
12M02	CAB CONNECTION DIAGRAMS



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ENGINE  
APPRO

R J.GOODWIN	DRAWN BY: S.SU
D BY: J.GOODWIN	CHECKED BY: R.FL

DRAWING TITLE:  
ITABIRÁ-MG - PF6752  
ARDVARC CONTROL SYSTEM  
OPERATOR CAB PC/HMI  
TITLE SHEET & INDEX

LOC. CODE	DATE	CONT. ON	
	01/11/21	D01	
DRAWING NO.	SECTION	SUB. SEC.	SHEET
213S163	12	A	01

TAG SCHEDULE				
TAG NO.	SIZE	TAG COLOR	TEXT COLOR	TAG TEXT
(1)	1/2" x 1-1/2"	WHITE	BLACK	12L01TB1
(2)	1/2" x 1-1/2"	WHITE	BLACK	12L01TB2
(3)	1/2" x 1-1/2"	WHITE	BLACK	12L01PWS1
(4)	1/2" x 1-1/2"	WHITE	BLACK	12L01PWS2
(5)	1/2" x 1-1/2"	WHITE	BLACK	12L01CB1
(6)	1/2" x 1-1/2"	WHITE	BLACK	12L01CB2
(7)	1/2" x 1-1/2"	WHITE	BLACK	12L01PC1
(8)	1/2" x 1-1/2"	WHITE	BLACK	12L01HMI1
(9)	1/2" x 1-1/2"	WHITE	BLACK	12M01TB1
(10)	1/2" x 1-1/2"	WHITE	BLACK	12L01CB1
(11)	1/2" x 1-1/2"	WHITE	BLACK	NODE 5
(12)	1/2" x 1-1/2"	WHITE	BLACK	NODE 6

SERIAL NUMBER:  
XXX-XXX

FLANDERS P/N: TAG-SST-200

NSI SIZE B (11" X 17") LANDSCAPE Rev. 2013



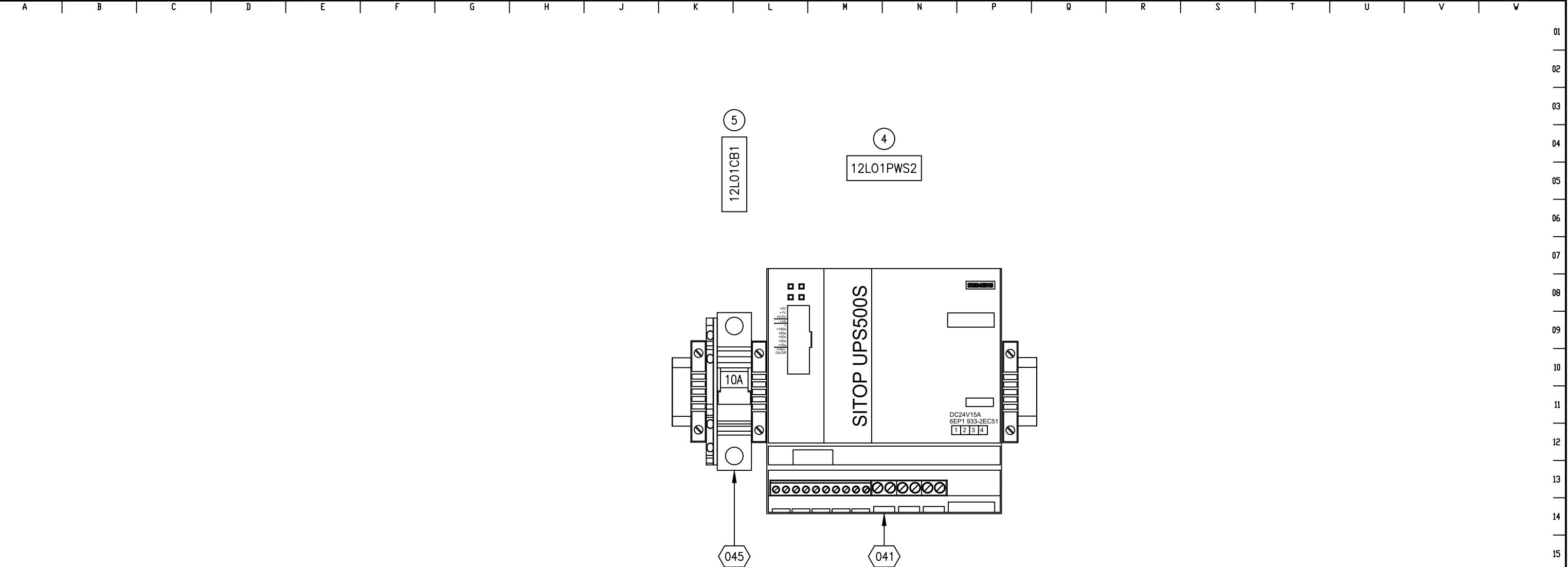
www.flandersinc.com

ENGINEER:	J.GOODWIN
APPROVED BY:	J.GOODWIN
LANDERS IN WHOLE LANDERS	FILENAME: 213S16312D01.dwg

	DRAWN BY: S.SUNNY
	CHECKED BY: R.ELLSON

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
OPERATOR CAB PC/HMI  
TAG SCHEDULE

LOC. CODE	DATE 01/11/21	CONT. ON G01	
DRAWING NO. <b>13S163</b>	SECTION <b>12</b>	SUB. SEC. <b>D</b>	SHEET <b>01</b>



LOCATED IN THE DASH



					A	AS BUILT			01/11/21	SVS	RE			
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD					

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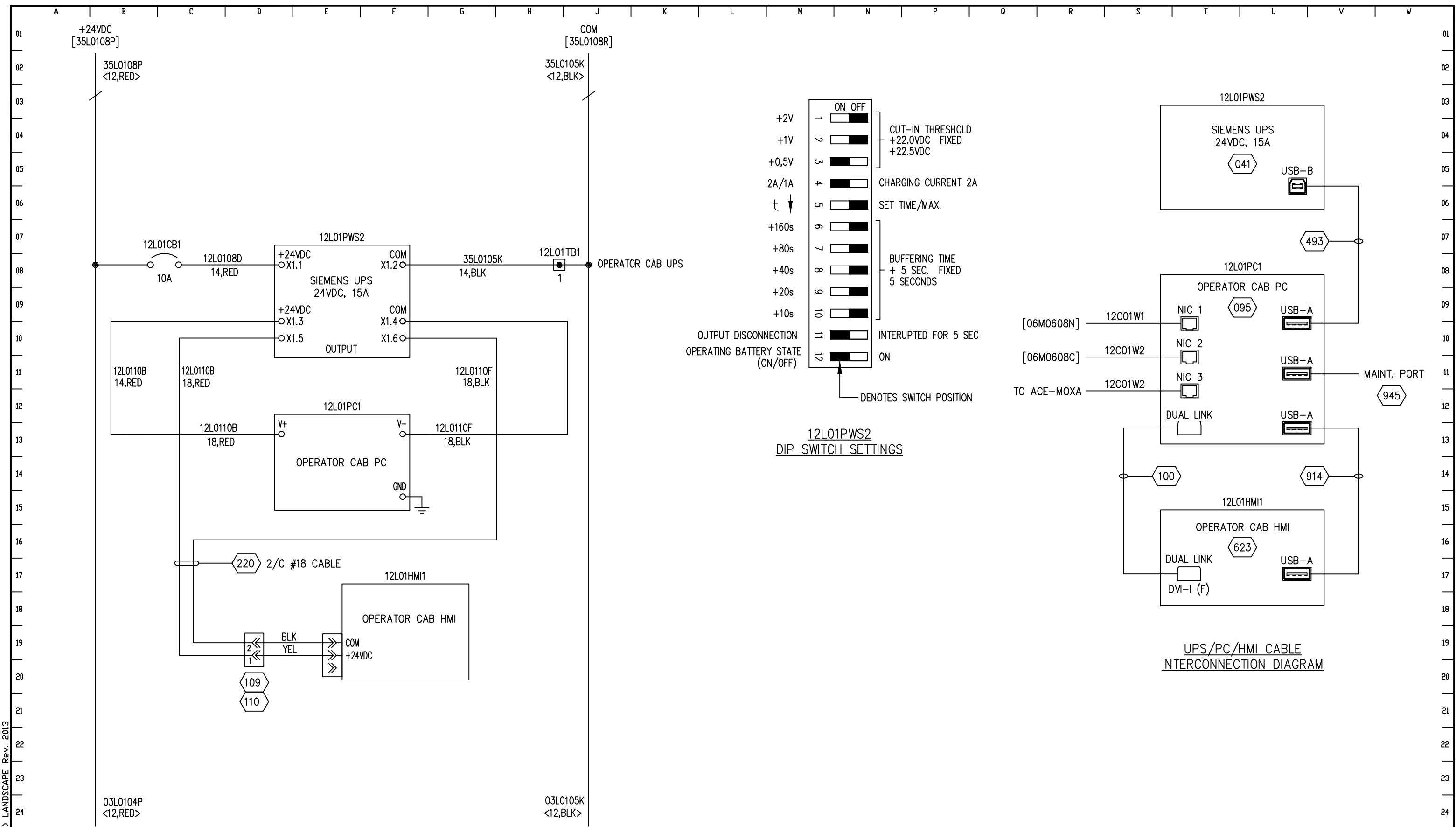
ENGINEER: J.GOODWIN DRAWN BY: S.SUNNY  
APPROVED BY: J.GOODWIN CHECKED BY: R.ELLSON  
FILENAME: 213S16312G01.dwg

DRAWING TITLE: ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
OPERATOR CAB PC/HMI  
COMPONENT LAYOUT

LOC. CODE	DATE	CONT. ON	
213S163	01/11/21	G02	
DRAWING NO.	SECTION	SUB. SEC.	HEET
12	G	01	

ANSI SIZE B (11" X 17") LANDSCAPE Rev. 2013

								 <b>FLANDERS</b> www.flandersinc.com	ENGINEER:	J.GOODWIN	DRAWN BY:	S.SUNNY	DRAWING TITLE:	ITABIRÁ-MG – PF6752			LOC. CODE	DATE 01/11/21		CONT. ON L01	
									APPROVED BY:	J.GOODWIN	CHECKED BY:	R.ELLISON	ARDVARC CONTROL SYSTEM								
									REVISION:		DESCRIPTION:		DATE:	BY:	CHKD:	FILENAME:		OPERATOR CAB PC/HMI			
REV.		DESCRIPTION		DATE	BY	CHKD	REV.	DESCRIPTION		DATE	BY	CHKD	213S16312G02.dwg	BILL OF MATERIAL			DRAWING NO.	SECTION	SUB. SEC.	SHEET	
							A	AS BUILT			01/11/21	SVS	RE				213S163	12	G	02	



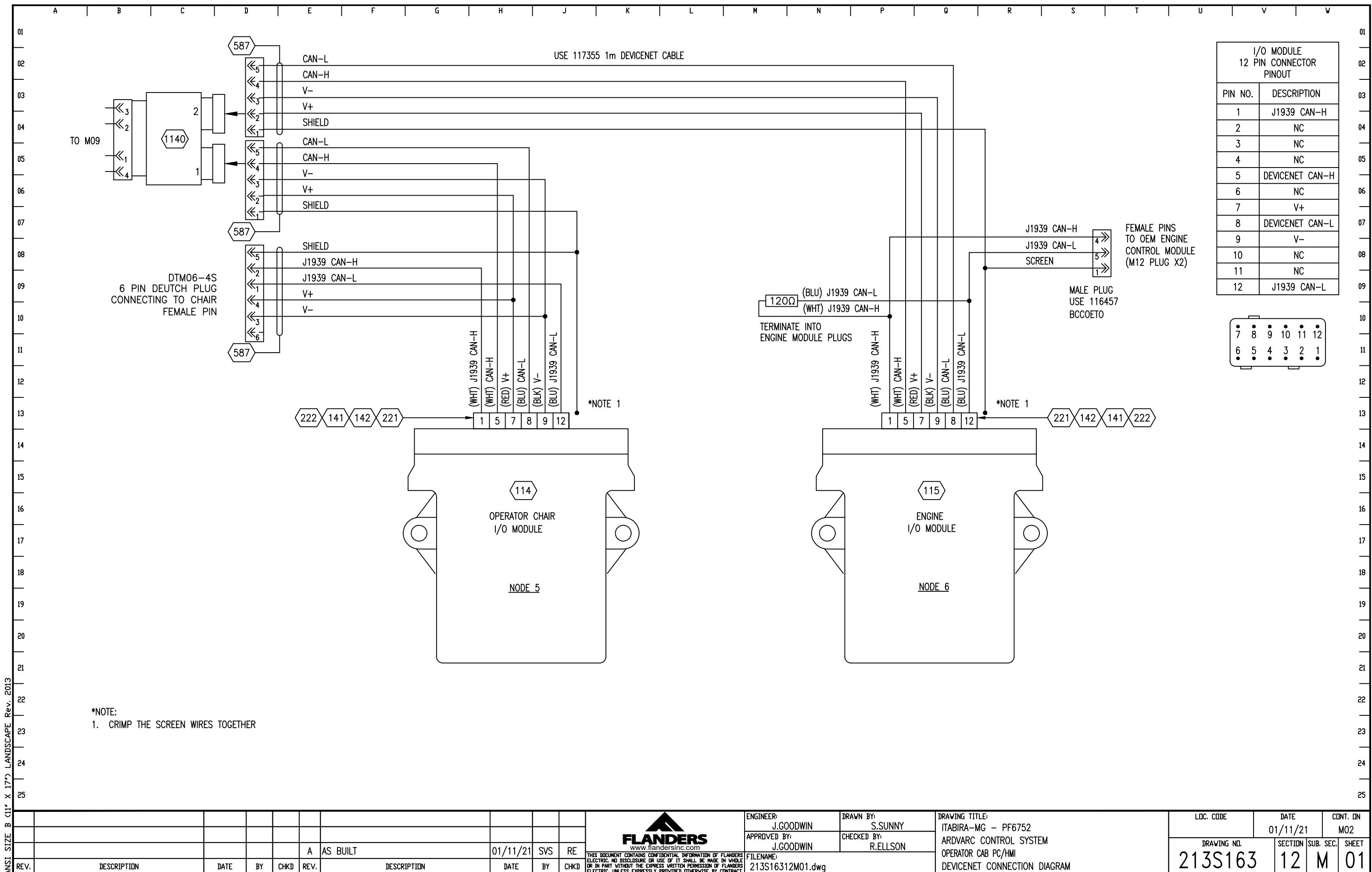
REV.	DESCRIPTION	DATE	BY	CHKD	RE	A AS BUILT			ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: CLOUDBREAK - DR061	LOC. CODE	DATE		CONT. ON		
							DATE	BY					01/11/21	M01	SECTION	SUB. SEC.	HEET
									J.GOODWIN	S.SUNNY	ARDVARC CONTROL SYSTEM			DRAWING NO.			
									J.GOODWIN	R.ELLSON	OPERATOR CAB PC/HMI			SECTION	SUB. SEC.	HEET	
											24VDC POWER/INTERCONNECTION DIAGRAM			213S163	12	L	01

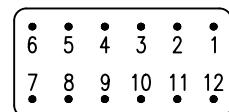


www.flandersinc.com

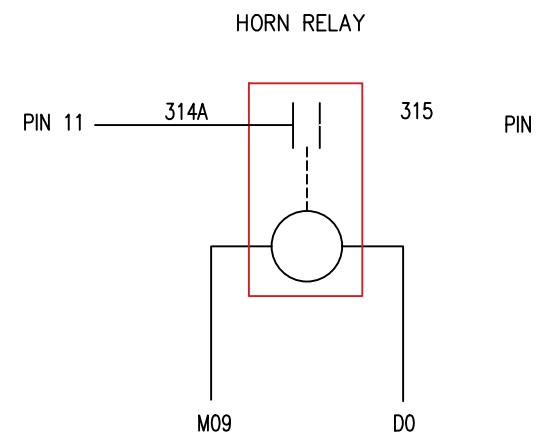
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FILENAME: ITABIRA-MG - PF6752





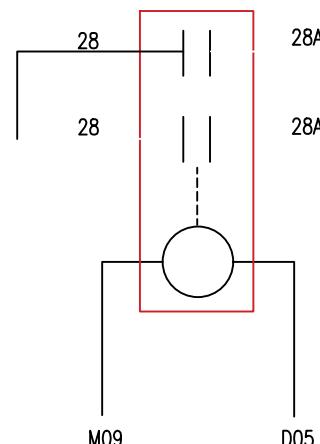
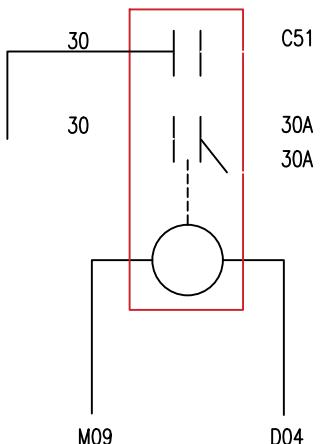
OEM CAB CHAIR PLUG



## LIGHT RELAYS

## DRILL LIGHT RELAY

## PROPEL LIGHT RELAY



OEM CAB 12 PIN CONNECTOR PINOUT	
PIN NO.	DESCRIPTION
1	005 (NOT USED)
2	006
3	200 (NOT USED)
4	36
5	A0
6	315
7	36A
8	007 (NOT USED)
9	008
10	C10e (NOT USED)
11	314A
12	120 (NOT USED)

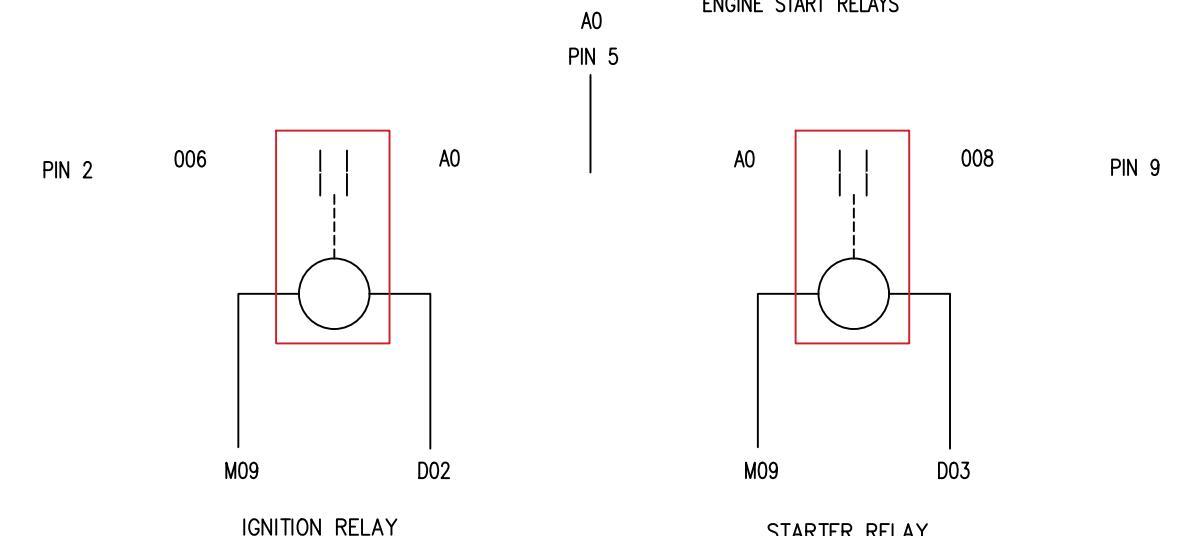
ENGINE STOP RELAY LOCATED IN THE ENGINE BOX

CHAIR E-STOOL

NORMALLY CLOSED HARDWIRED CIRCUIT

NOTE: Wire numbers for 36's may vary machines

\*NOTE: STANDARD ACROSS MOST PC271 HOWEVER CAN VARY  
DOUBLE CHECK PINOUTS



ANSI SIZE B (11" X 17") LANDSCAPE Rev. 2013

## OPERATOR CHAIR

012

SHEET	DESCRIPTION
15A01	TITLE SHEET & INDEX
15E01	CHAIR LAYOUT
15E02	LEFT CONSOLE COMPONENT LAYOUT
15E03	RIGHT CONSOLE COMPONENT LAYOUT
15G01	BILL OF MATERIAL
15N01	GROUNDING DIAGRAM
15P01	CONNECTION DIAGRAM
15P02	LEFT CONSOLE CABLE ASSEMBLY
15P03	RIGHT CONSOLE CABLE ASSEMBLY



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	ENGINEER: J.GOODWIN
	APPROVED BY: J.GOODWIN
LANDERS IN WHOLE LANDERS CONTRACT.	FILENAME: 213S16315A01.d

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
OPERATOR CHAIR  
TITLE SHEET & INDEX

LOC. CODE	DATE 01/11/21	CONT. ON E01	
DRAWING NO. <b>13S163</b>	SECTION <b>15</b>	SUB. SEC. <b>A</b>	SHEET <b>01</b>

This technical drawing illustrates the assembly of an operator chair. The central component is the **CHAIR BASE**, which supports the **HEADREST** (118). The base is flanked by two vertical panels: the **LEFT** panel (121) and the **RIGHT** panel (122). Each panel features a control unit with multiple buttons, labeled 125 and 126 on the left panel, and 127 and 128 on the right panel. The top of the chair includes a headrest (118), a central backrest (117), and two side armrests (123 and 124). A serial number indicator (1) points to the area above the headrest. Callout 012 identifies the entire assembly as an **OPERATOR CHAIR**.

**NSI SIZE B (11" x 17") LANDSCAPE Rev. 2013**

**1 SERIAL NUMBER:  
XXX-XXX**

**123**

**124**

**125**

**126**

**127**

**128**

**129**

**121 LEFT**

**122 RIGHT**

**117**

**118 HEADREST**

**119**

**120**

**012 OPERATOR CHAIR**

**013**

**014**

**015**

**016**

**017**

**018**

**019**

**020**

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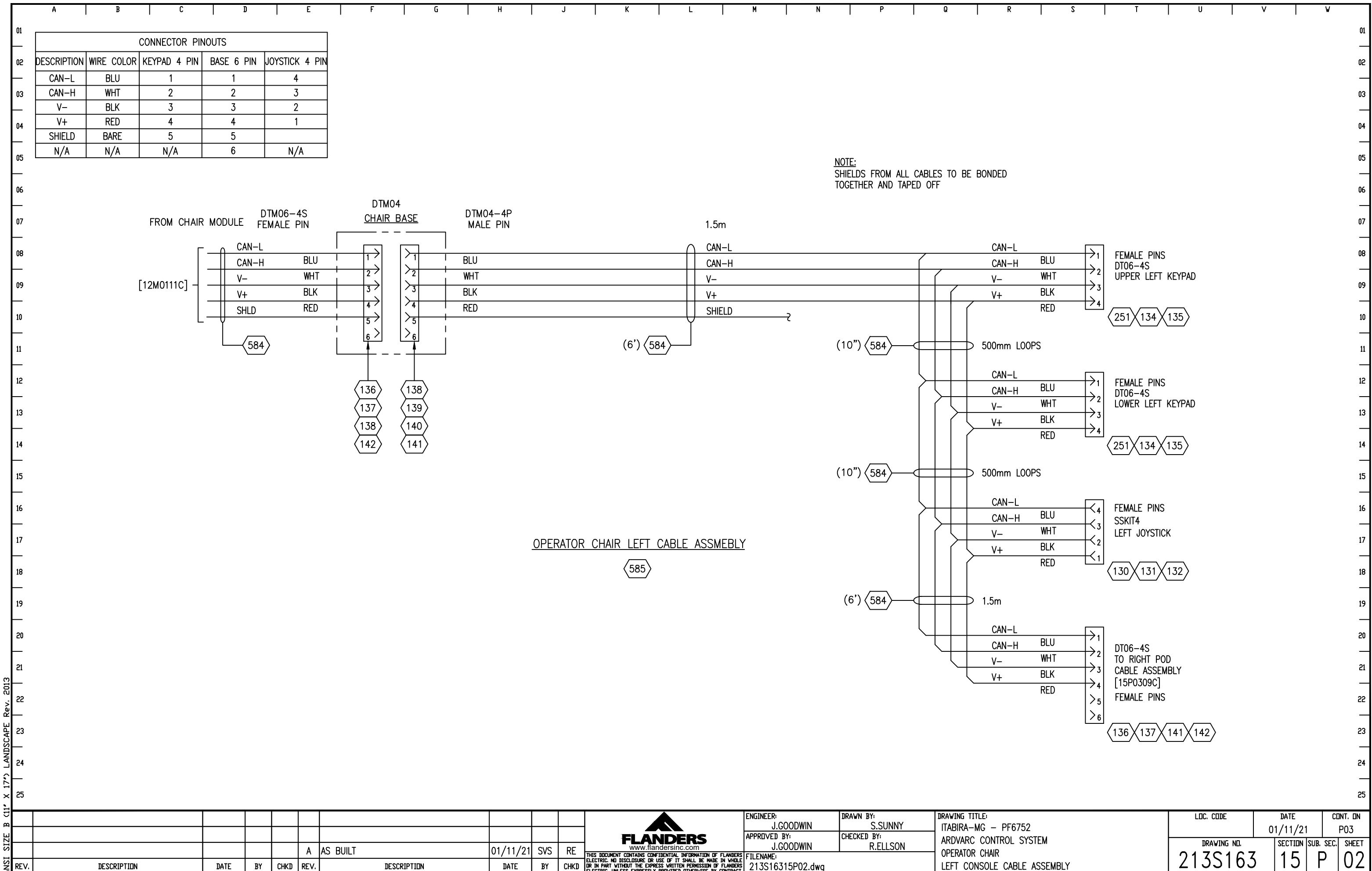
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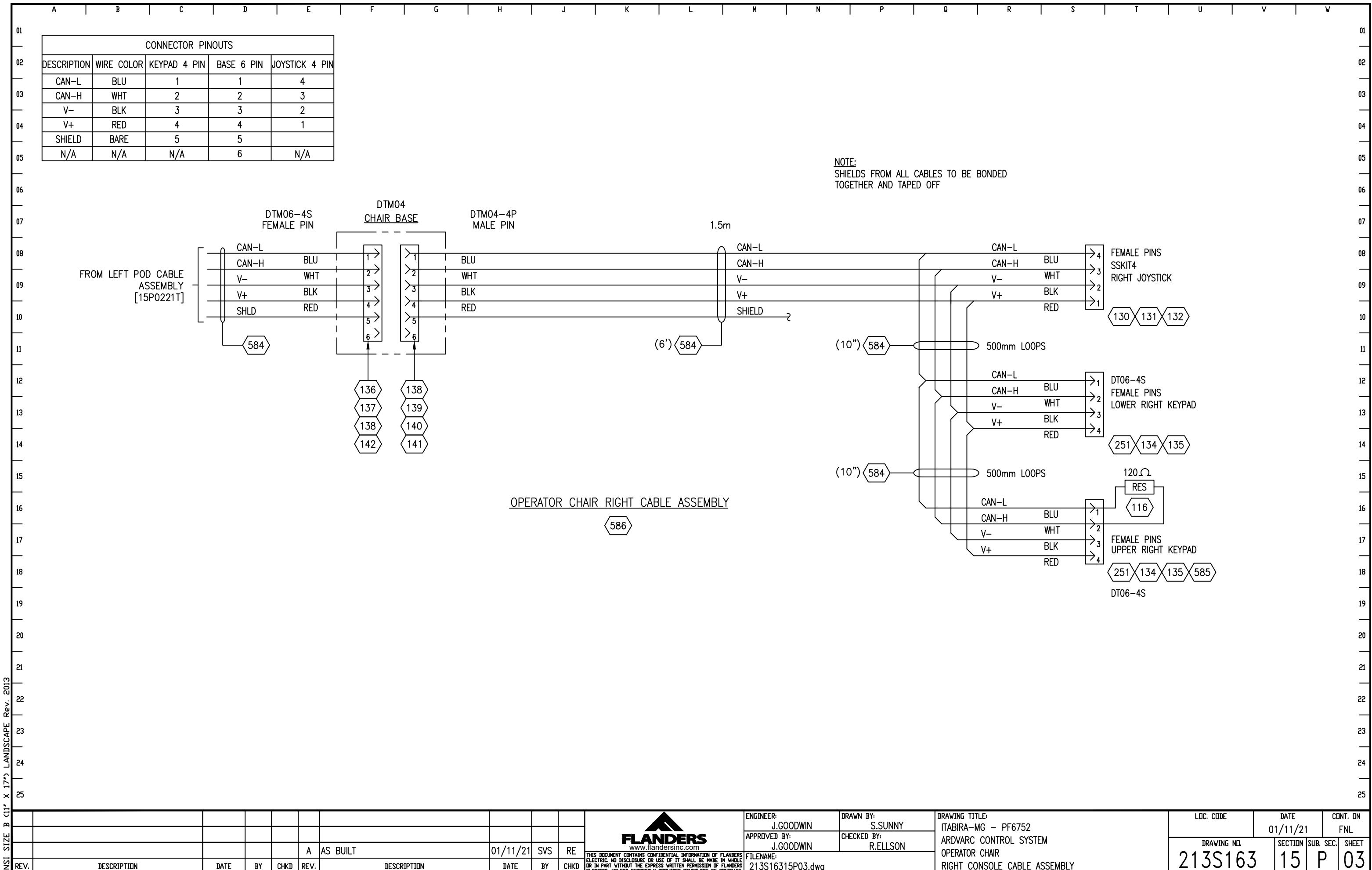
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01	BILL OF MATERIAL																			
02	ITEM	QTY.	DESCRIPTION																	PART NO.
03	116	2	RESISTOR, 120 OHM																	117381
04	117	1	OPERATOR CHAIR																	116402
05	118	1	HEADREST																	116836
06	119	1	LEFT ARMREST																	117357
07	120	1	RIGHT ARMREST																	117358
08	121	1	LEFT CONTROL CONSOLE																	117650
09	122	1	RIGHT CONTROL CONSOLE																	117651
10	123	1	LEFT JOYSTICK																	117657
11	124	1	RIGHT JOYSTICK																	117359
12	125	1	UPPER LEFT KEY PAD																	117260
13	126	1	LOWER LEFT KEYPAD																	117261
14	127	1	UPPER RIGHT KEYPAD																	117262
15	128	1	LOWER RIGHT KEYPAD																	117263
16	129	2	HOLE PLUG																	117903
17	130	2	CONNECTOR, 4-PIN																	116476
18	131	2	CONNECTOR RECEPTACLE																	116477
19	132	2	CONNECTOR PLUG SEAL																	116478
20	134	4	WEDGELOCK, 4-PIN																	116461
21	135	4	SOLID CONTACT SOCKET																	117236
22	136	2	PLUG, 6-PIN																	117361
23	137	2	PLUG WEDGELOCK, 6-PIN																	117231
24	138	2	RECEPTACLE, 6-PIN																	117230
25	139	2	RECEPTACLE WEDGELOCK, 6-PIN																	117232
26	140	1	SOLID CONTACT PIN																	117233
27	141	4	SEALING PLUG																	117235
28	142	3	SOLID CONTACT SOCKET																	117234
29	251	4	PLUG, 4-PIN																	116453
30	585	2	LEFT CONSOLE CABLE ASSEMBLY																	N/A
31	586	2	RIGHT CONSOLE CABLE ASSEMBLY																	N/A
32	994	1	GROUND BAR KIT																	119976
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DATE	BY	CHKD	REV.	DESCRIPTION		DATE	BY	CHKD	

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OR IN PART WITHOUT  
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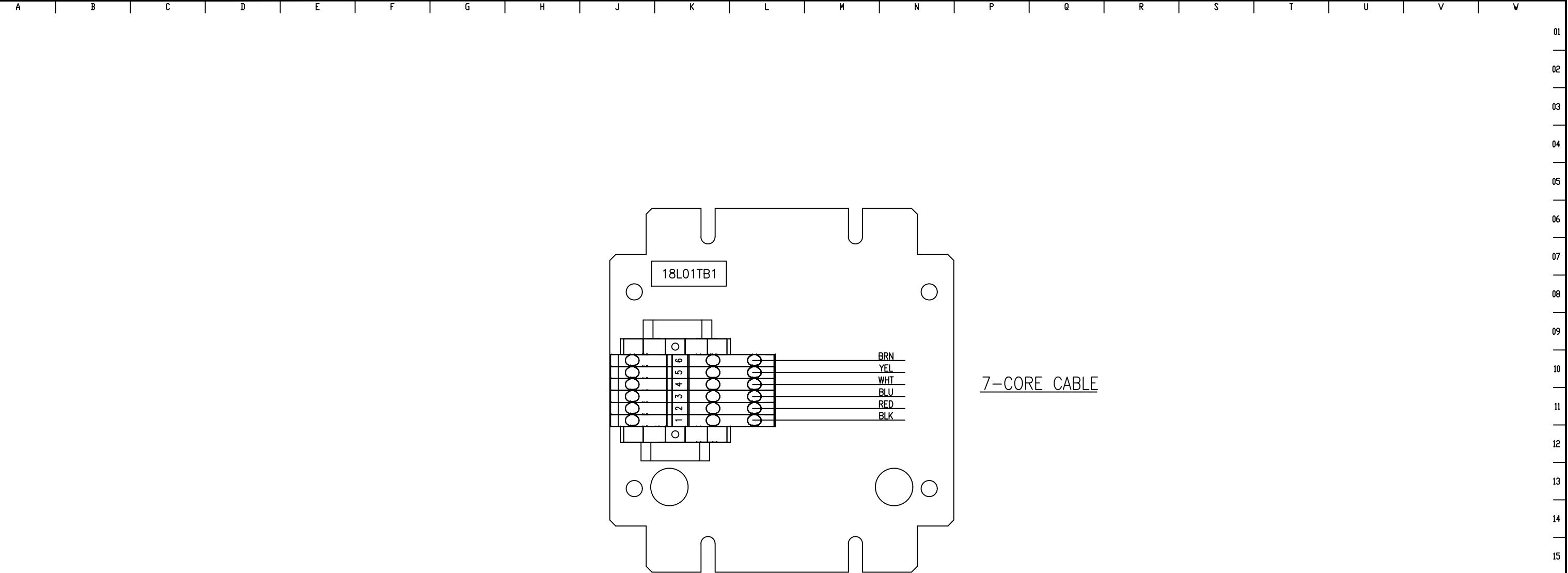
ANSI SIZE B (11" X 17") LANDSCAPE Rev. 2013

SECTION	DESCRIPTION
18A01	TITLE SHEET & INDEX
18D01	TAG SCHEDULE
18E01	ENCLOSURE ASSEMBLY
18E02	ENCLOSURE CUTOUT DETAIL
18E03	ENCLOSURE MOUNTING BRACKET
18E04	ENCLOSURE MOUNTING BRACKET
18F01	BACK PANEL LAYOUT
18G01	BILL OF MATERIAL
18P01	INTERCONNECTION DIAGRAM

# DRILL MODE LIGHTS ENCLOSURES

014

SECTION	DESCRIPTION
18A01	TITLE SHEET & INDEX
18D01	TAG SCHEDULE
18E01	ENCLOSURE ASSEMBLY
18E02	ENCLOSURE CUTOUT DETAIL
18E03	ENCLOSURE MOUNTING BRACKET
18E04	ENCLOSURE MOUNTING BRACKET
18F01	BACK PANEL LAYOUT
18G01	BILL OF MATERIAL
18P01	INTERCONNECTION DIAGRAM

BACK PANEL LAYOUT

ENGINEER:

J.GOODWIN

APPROVED BY:

J.GOODWIN

CHECKED BY:

R.ELLSON

DRAWN BY:

S.SUNNY

FILENAME:

213S16318F01.dwg

DRAFTING TITLE:

ITABIRA-MG - PF6752

ARDVARC CONTROL SYSTEM

DRILL MODE LIGHT ENCLOSURE

BACK PANEL LAYOUT

LOC. CODE	DATE	CONT. ON	
	01/11/21	P01	
DRAWING NO.	SECTION	SUB. SEC.	HEET
213S163	18	F	01

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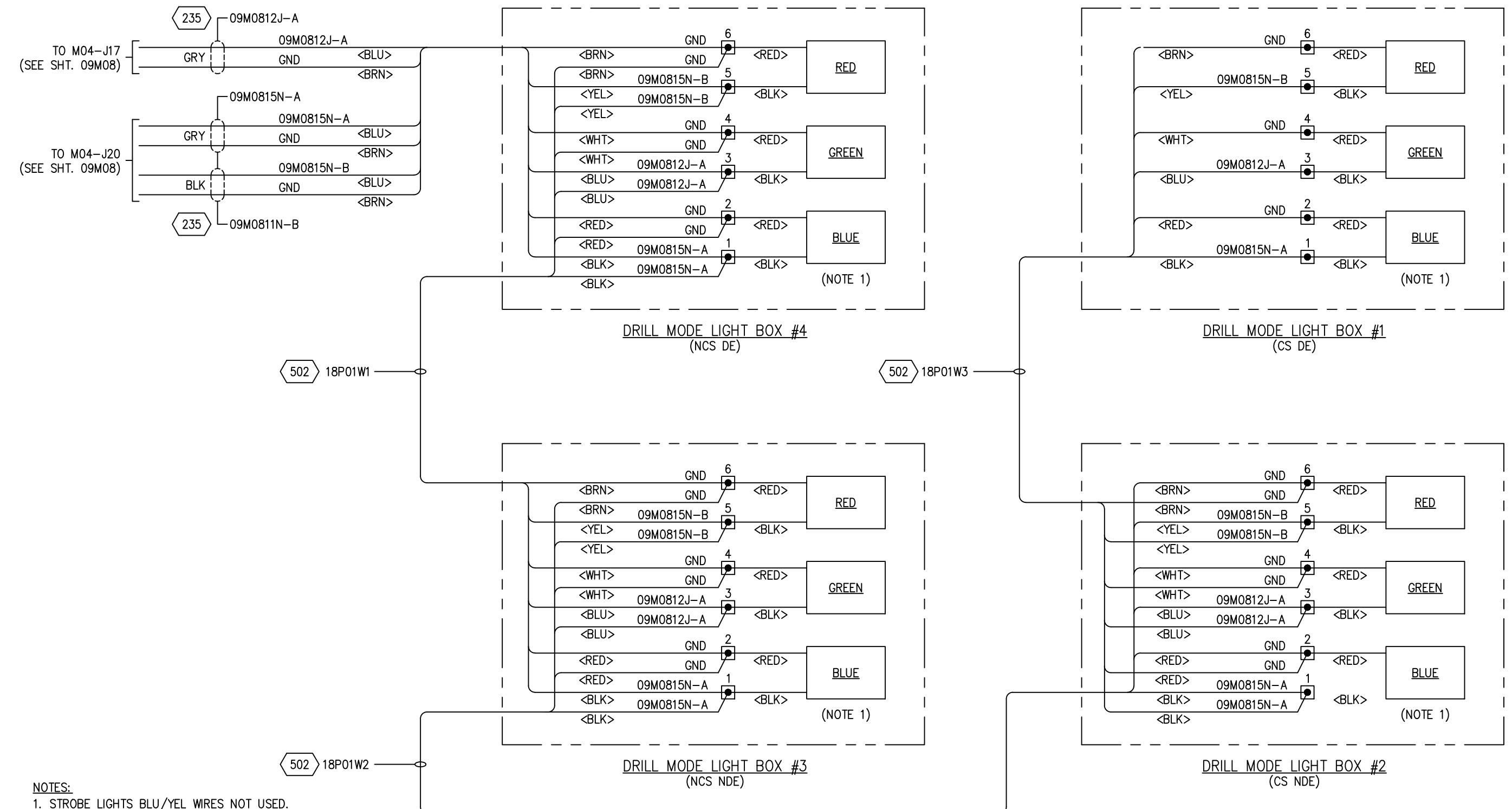
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A	AS BUILT	01/11/21	SVS	RE
REV.	DESCRIPTION	DATE	BY	CHKD

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FILENAME:

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ENGINEER:  
J.GOODWIN  
APPROVED BY:  
J.GOODWIN

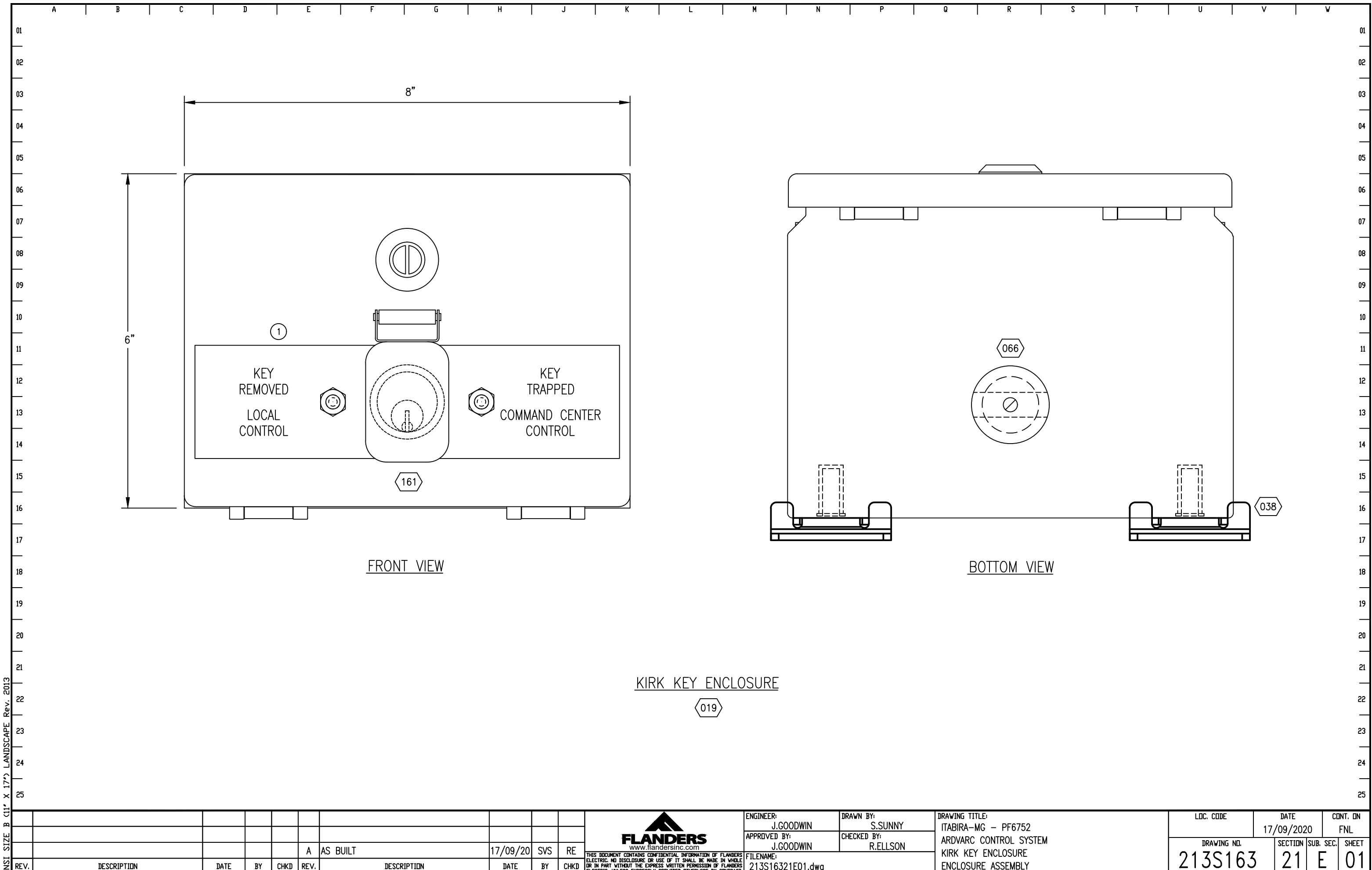
DRAWN BY:  
S.SUNNY  
CHECKED BY:  
R.ELLSON

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
DRILL MODE LIGHT BOXES  
INTERCONNECTION DIAGRAM

FILENAME:  
213S16318P01.dwg

LOC. CODE	DATE	CONT. ON	
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DRAWING NO.	SECTION	SUB. SEC.	HEET
213S163	18	P	01

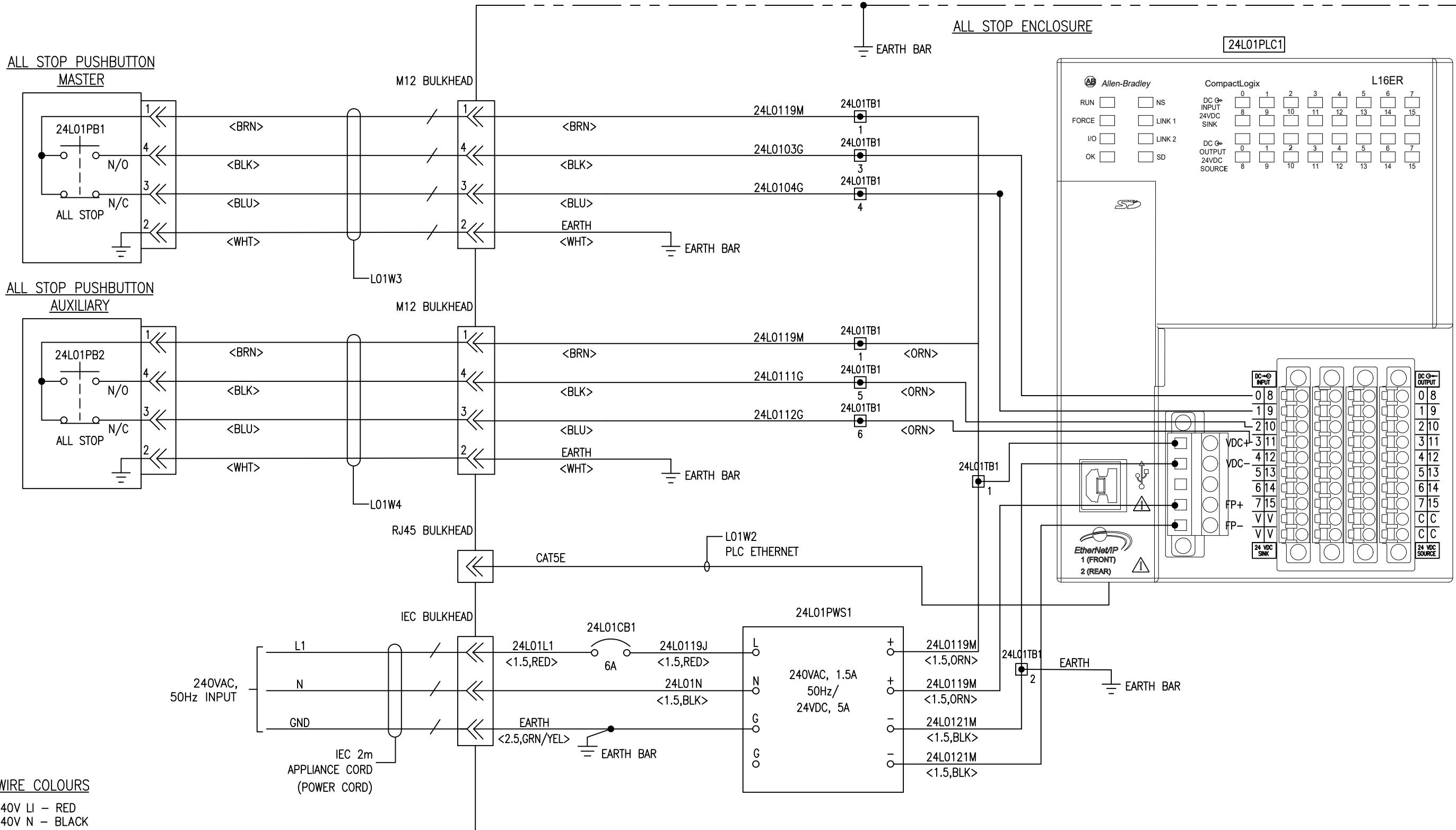




## ALL STOP ENCLOSURE

020 021

SHEET	DESCRIPTION
24A01	TITLE SHEET & INDEX
24D01	TAG SCHEDULE
24E01	ENCLOSURE ASSEMBLY
24E02	PUSHBUTTON STATION ASSEMBLY
24F01	BACK PANEL LAYOUT
24G01	BILL OF MATERIAL
24L01	INTERCONNECTION DIAGRAM



## WIRE COLOURS

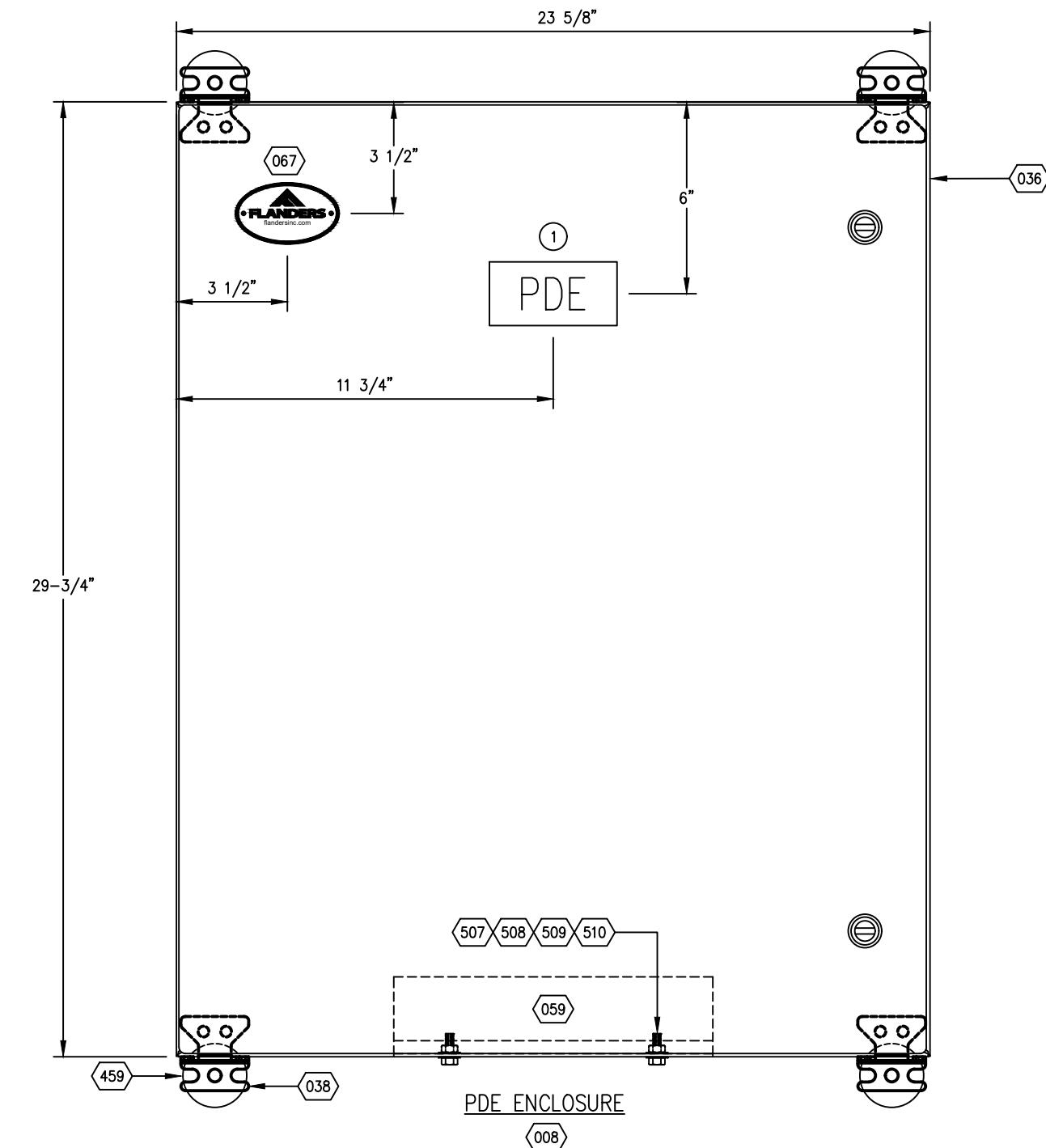
240V LI - RED  
240V N - BLACK  
EARTH - GREEN/YELLOW  
24VDC+ - ORANGE  
24VDC- - BLACK

**FLANDERS**  
[www.flandersinc.com](http://www.flandersinc.com)

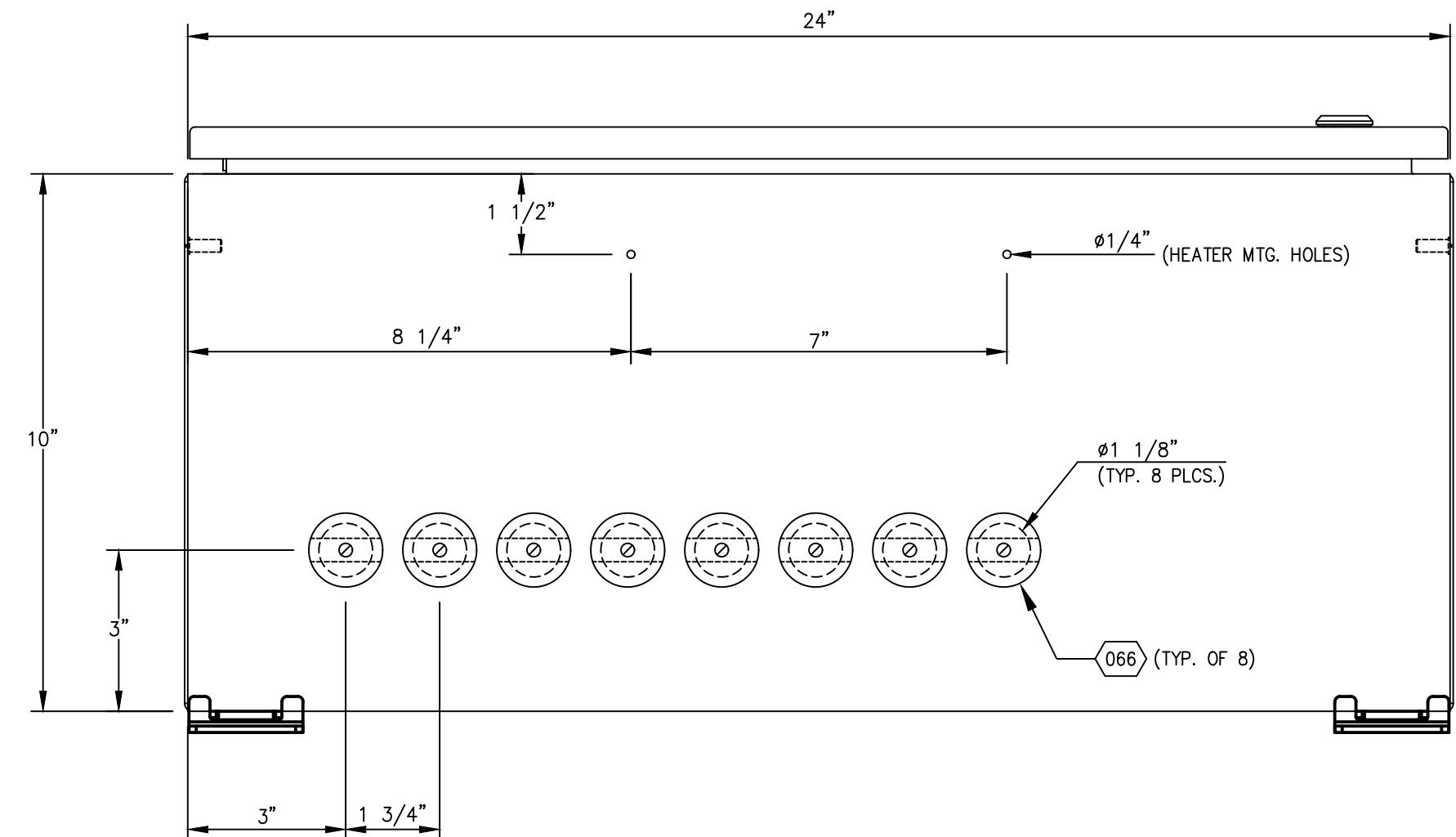
ENGINEER:	J.GOODWIN
APPROVED BY:	J.GOODWIN

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM  
ALL STOP ENCLOSURE  
INTERCONNECTION DIAGRAM

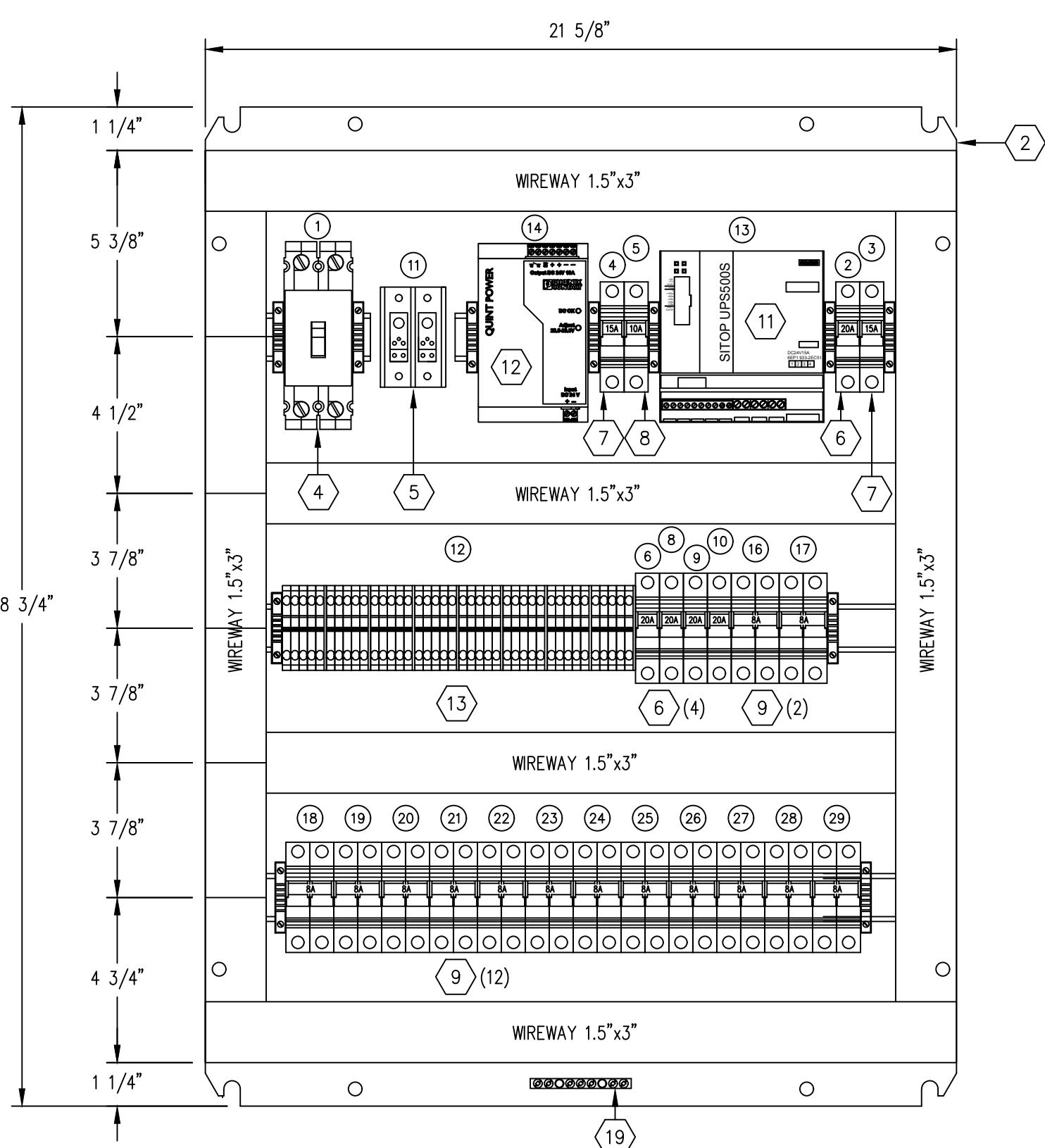
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	17/09/2020		FNL
DRAWING NO.	SECTION	SUB. SEC.	SHEET
13S163	24	L	01



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									SUNNY	APPROVED BY:	J.GOODWIN	CHECKED BY:					
								ARDVARC CONTROL SYSTEM									
								PDE ENCLOSURE									
								DOOR LAYOUT									
REV.	DESCRIPTION		DATE	BY	CHKD	REV.	DESCRIPTION		DATE	BY	CHKD	DRAWING NO.		SECTION	SUB. SEC.	SHEET	
												213S163		03	E	01	
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FILENAME: 20171103E01.dwg																	



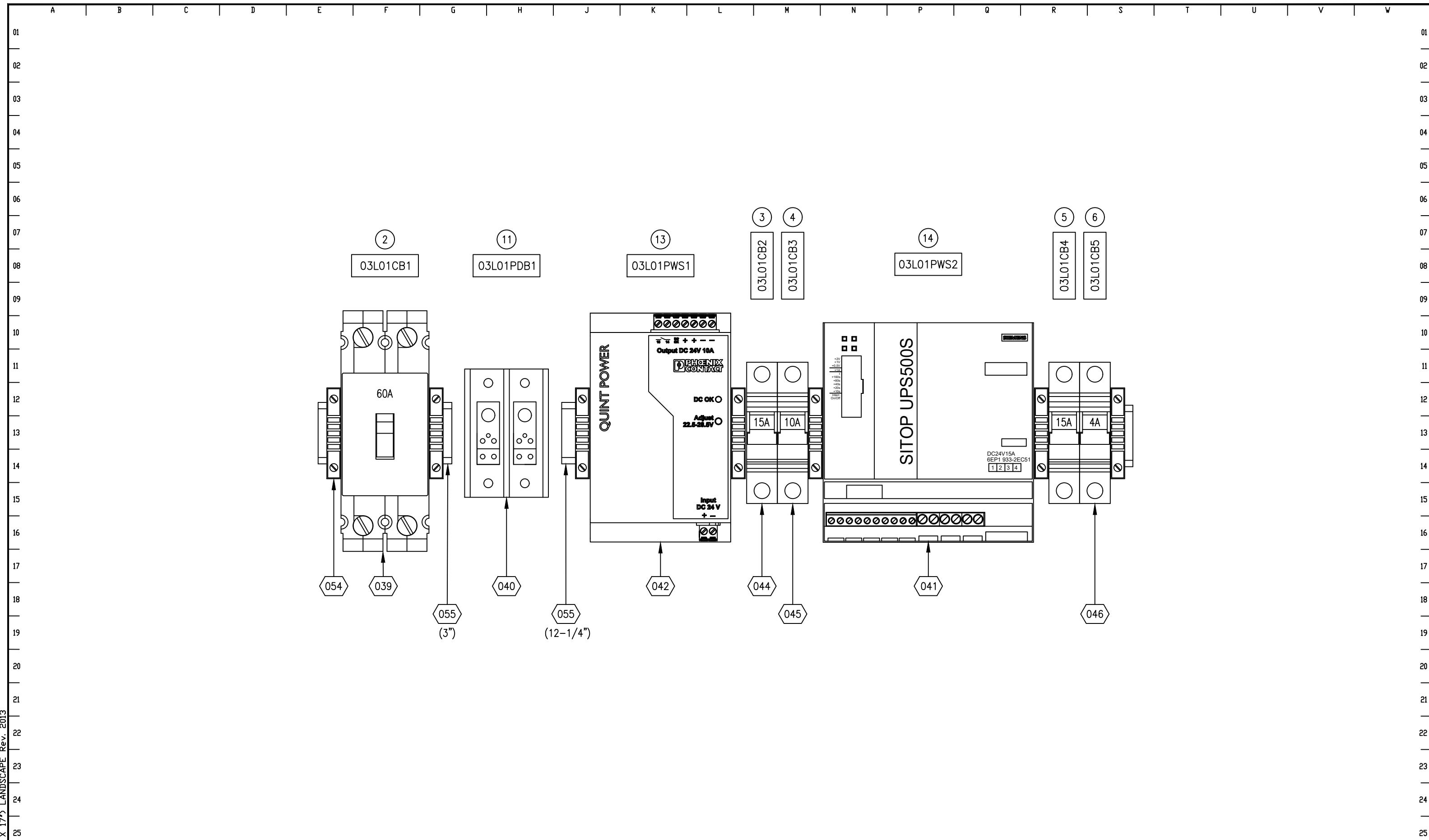
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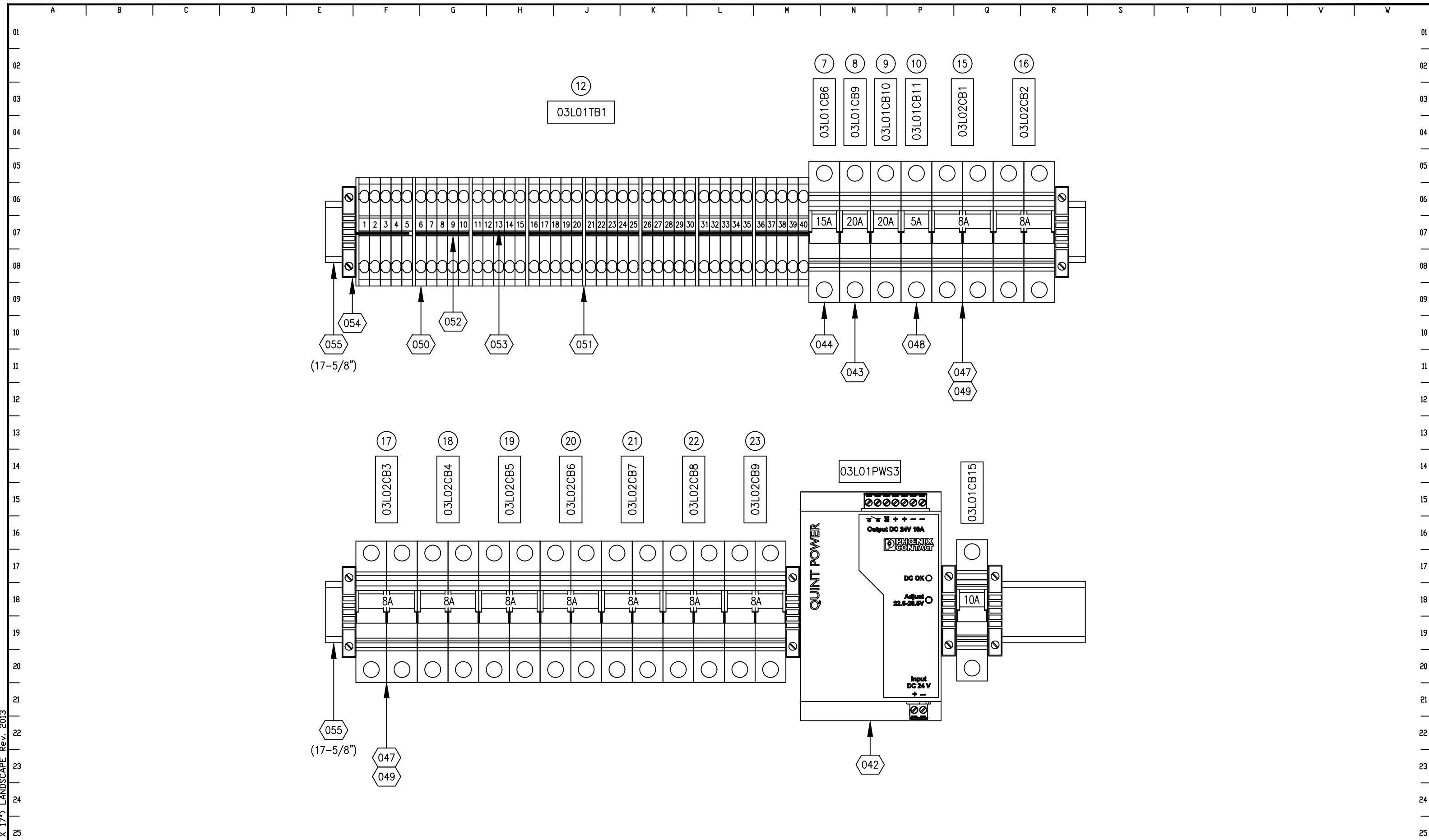
BILL OF MATERIAL			
ITEM	QTY.	DESCRIPTION	PART NO.
1	1	ENCLOSURE, 30"x24"x10", STAINLESS STEEL, NEMA 4X	853810
2	1	ENCLOSURE BACKPANEL, 29"x22" (INCLUDED w/ENCLOSURE)	N/A
3	1	WALL MOUNT BRACKET FOR ENCLOSURE	853820
4	1	MOLDED CASE CIRCUIT BREAKER, 2P, DIN MOUNT, 60A	851720
5	1	POWER DISTRIBUTION BLOCK, 175A	853825
6	5	CIRCUIT BREAKER, 1P, 20A	851810
7	2	CIRCUIT BREAKER, 1P, 15A	851740
8	1	CIRCUIT BREAKER, 1P, 10A	851735
9	14	CIRCUIT BREAKER, 2P, 8A	853830
10	14	2P CIRCUIT BREAKER LUG JUMPER	853835
11	1	SITOP CAPACITOR TYPE UPS, 24V, 15A	993279
12	1	DC-DC CONVERTER, 10A	850880
13	40	SPRING CLAMP TERMINAL BLOCK, 33A	852600
14	8	TERMINAL END BARRIER	852610
15	2	PLUG IN TERMINAL JUMPER, 20 POLE	993094
16	1	TERMINAL MARKERS, HORIZONTAL, 1-40	850540
17	11	END ANCHOR	852770
18	1	DIN RAIL	852630
19	1	GROUND BAR KIT	852540
20	1	STRIP HEATER, 2"x10", 24VDC, 100W	853540
21	2	WIREWAY, 1-1/2"X2", GRAY, 6' LENGTH	N/A
22	2	WIREWAY COVER, 1-1/2", GRAY, 6' LENGTH	N/A

LEGEND

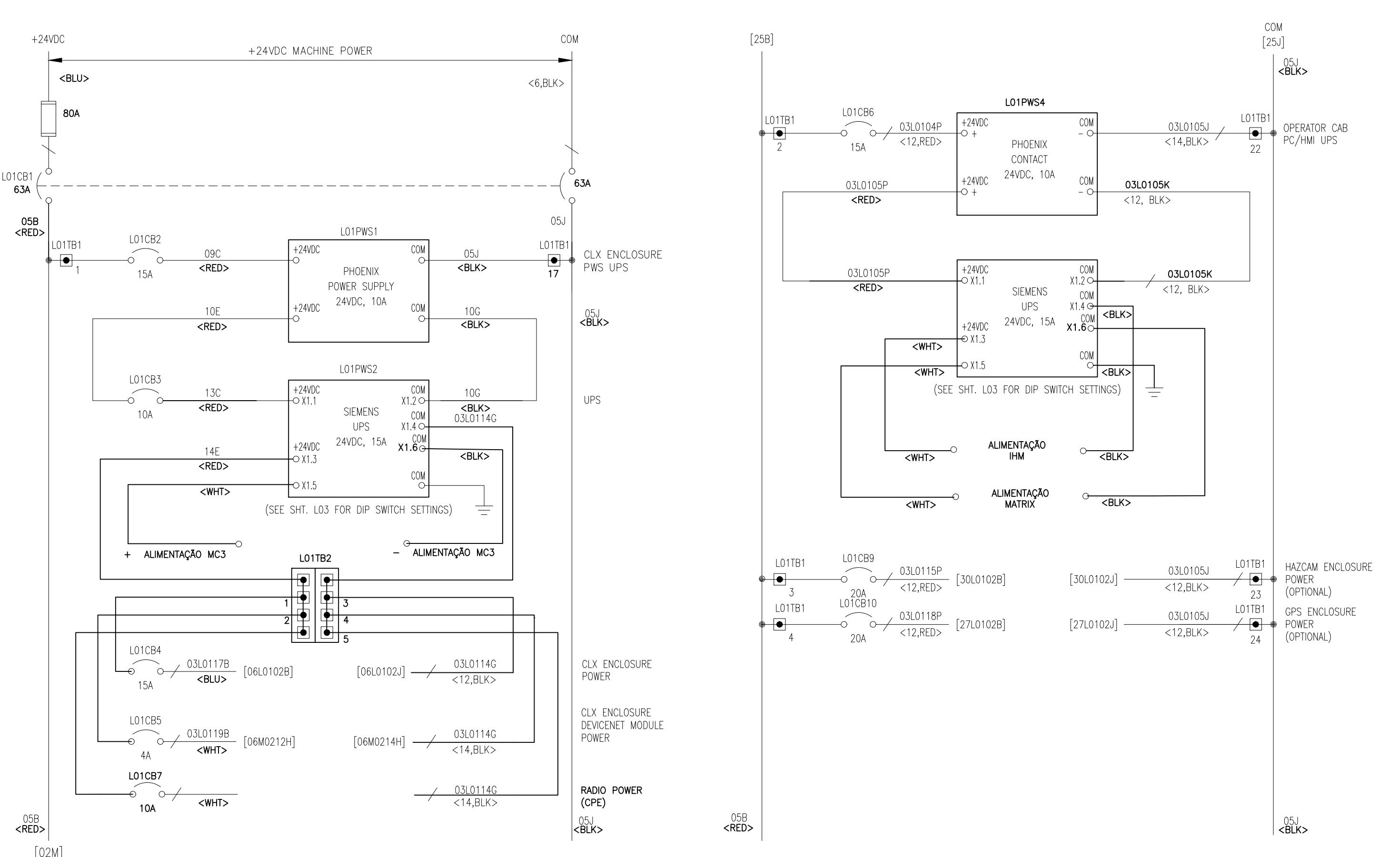
 INDICATES BILL OF MATERIAL NUMBER  
 INDICATES THAT A DRAWING IS INCLUDED

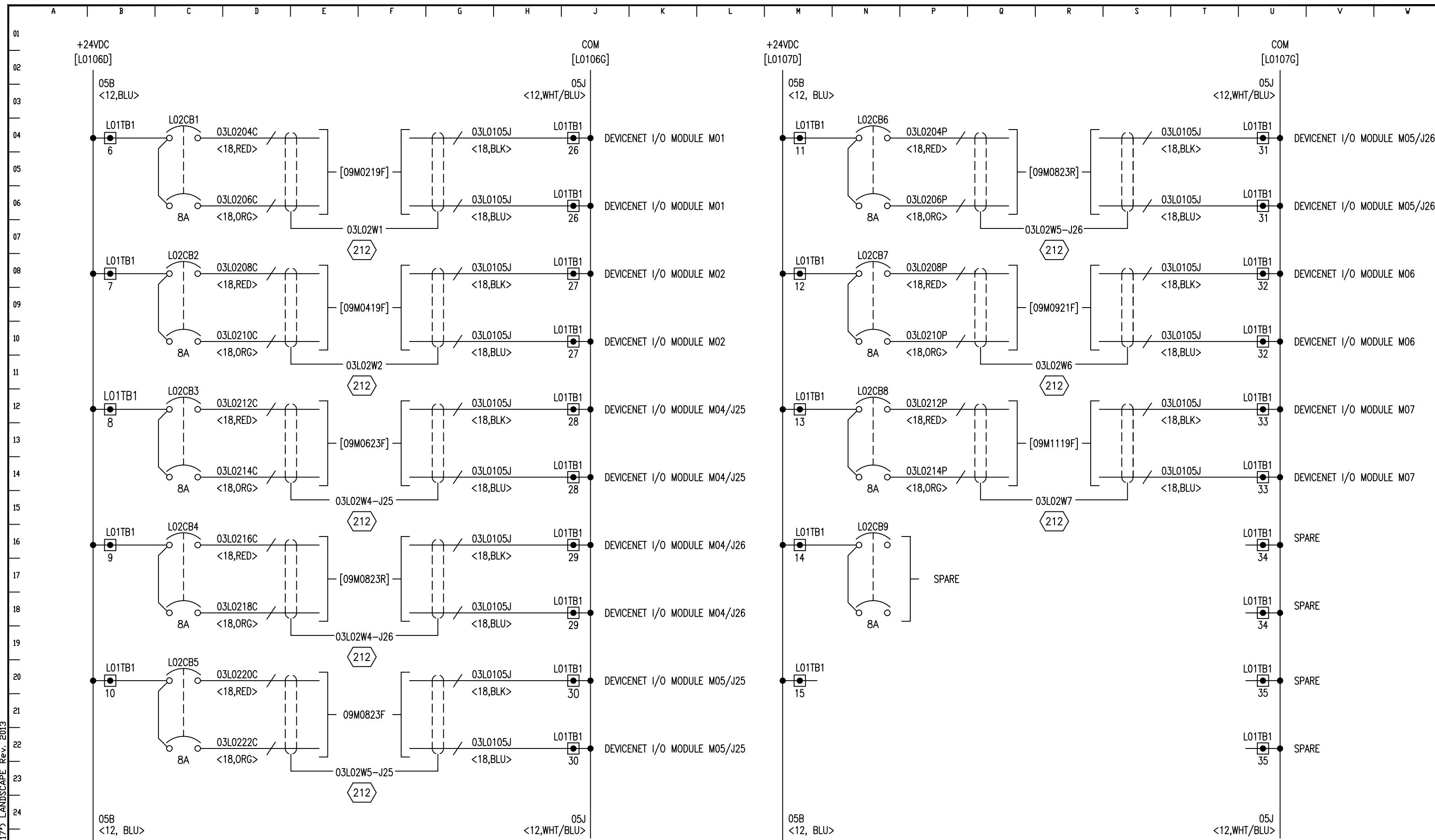


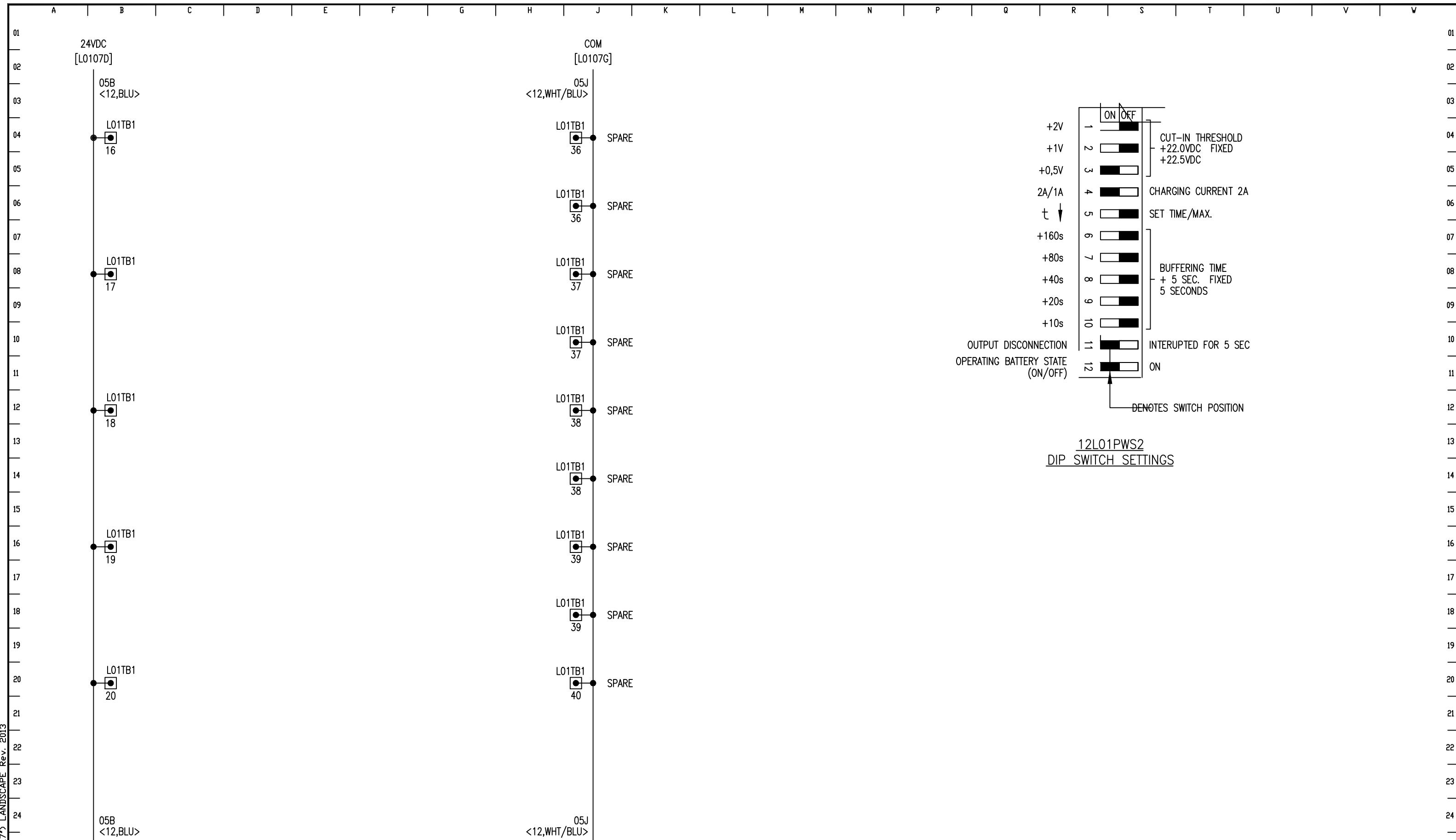
ANSI SIZE B (17" x 17") LANDSCAPE Rev. 2013										FLANDERS www.flandersinc.com	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLISON	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM PDE ENCLOSURE CB(S)/PWS/UPS LAYOUT	LOC. CODE	DATE		CONT. ON	
DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD	01/11/21							07				
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	AS-INSTALLED	01/11/21	JCS	LDM	<small>THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF FLANDERS ELECTRIC. NO DISCLOSURE OR USE OF IT SHALL BE MADE IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLANDERS ELECTRIC, UNLESS EXPRESSLY PROVIDED OTHERWISE BY CONTRACT.</small>						DRAWING NO.	SECTION	SUB. SEC.	HEET	
					0											213S163	03	G	01	



										FLANDERS www.flandersinc.com	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLISON	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM PDE ENCLOSURE L01TB1 TERMINAL BLOCK/CB(S) LAYOUT	LOC. CODE	DATE		CONT. ON				
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD								DRAWING NO.	SECTION	SUB. SEC.	HEET			
0	AS-INSTALLED	01/11/21	JCS	LDM						THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF FLANDERS ELECTRIC. NO DISCLOSURE OR USE OF IT SHALL BE MADE IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLANDERS ELECTRIC, UNLESS EXPRESSLY PROVIDED OTHERWISE BY CONTRACT.					FILENAME: 20171103G02.dwg					213S163	03	G	02







REV.	DESCRIPTION	DATE	BY	CHKD	REV.	AS-INSTALLED	DATE	BY	CHKD	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM PDE ENCLOSURE 24VDC POWER DISTRIBUTION	LOC. CODE	DATE 01/11/21	CONT. ON FNL	
ANSI SIZE B	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD	APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLISON	FILENAME: 20171103L03.dwg	DRAWING NO. 213S163	SECTION 03	SUB. SEC. L	HEET 03



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**VALE-ITABIRA-DRILL-1111**

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**ARDVARC CONTROL SYSTEM**

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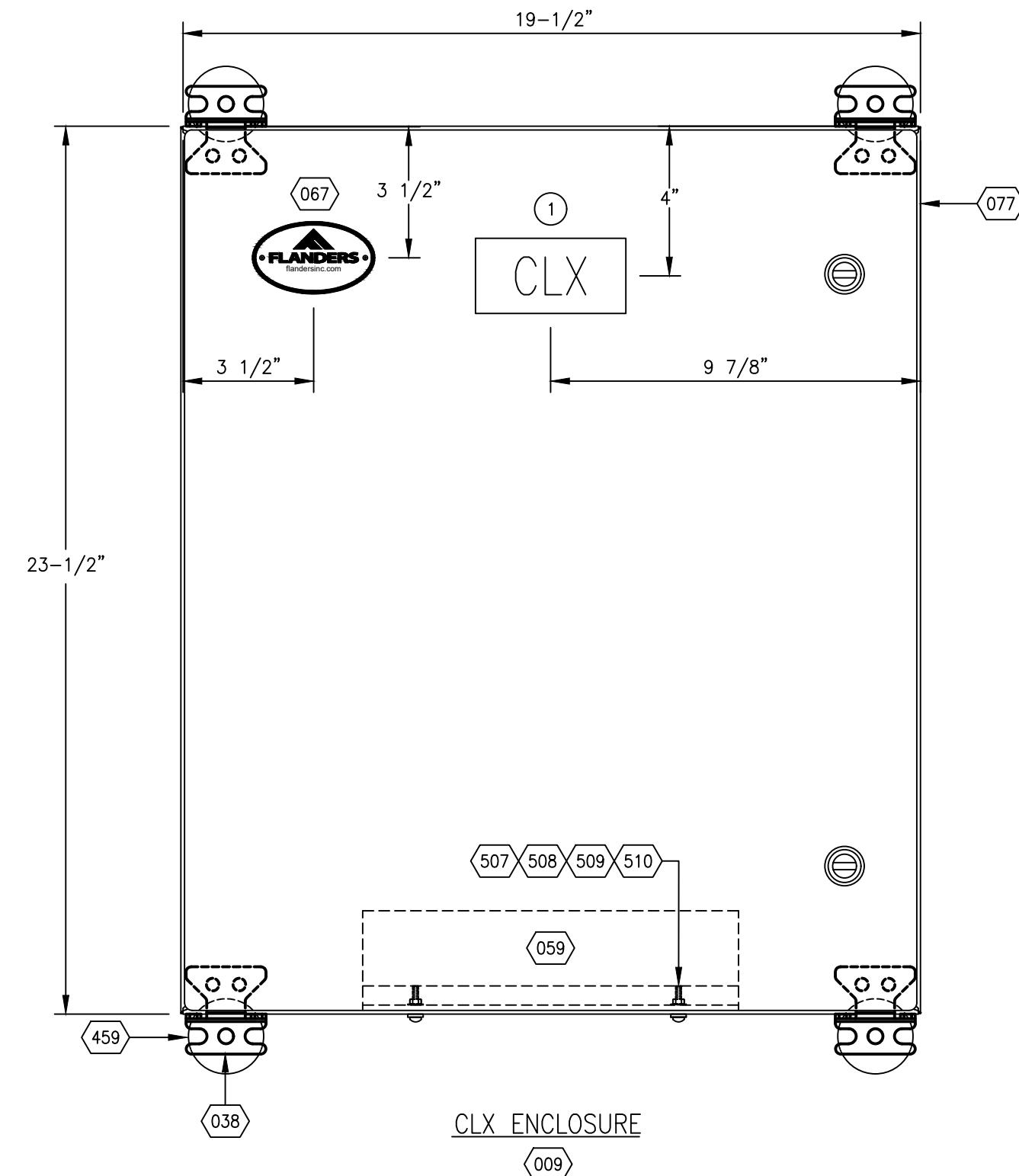
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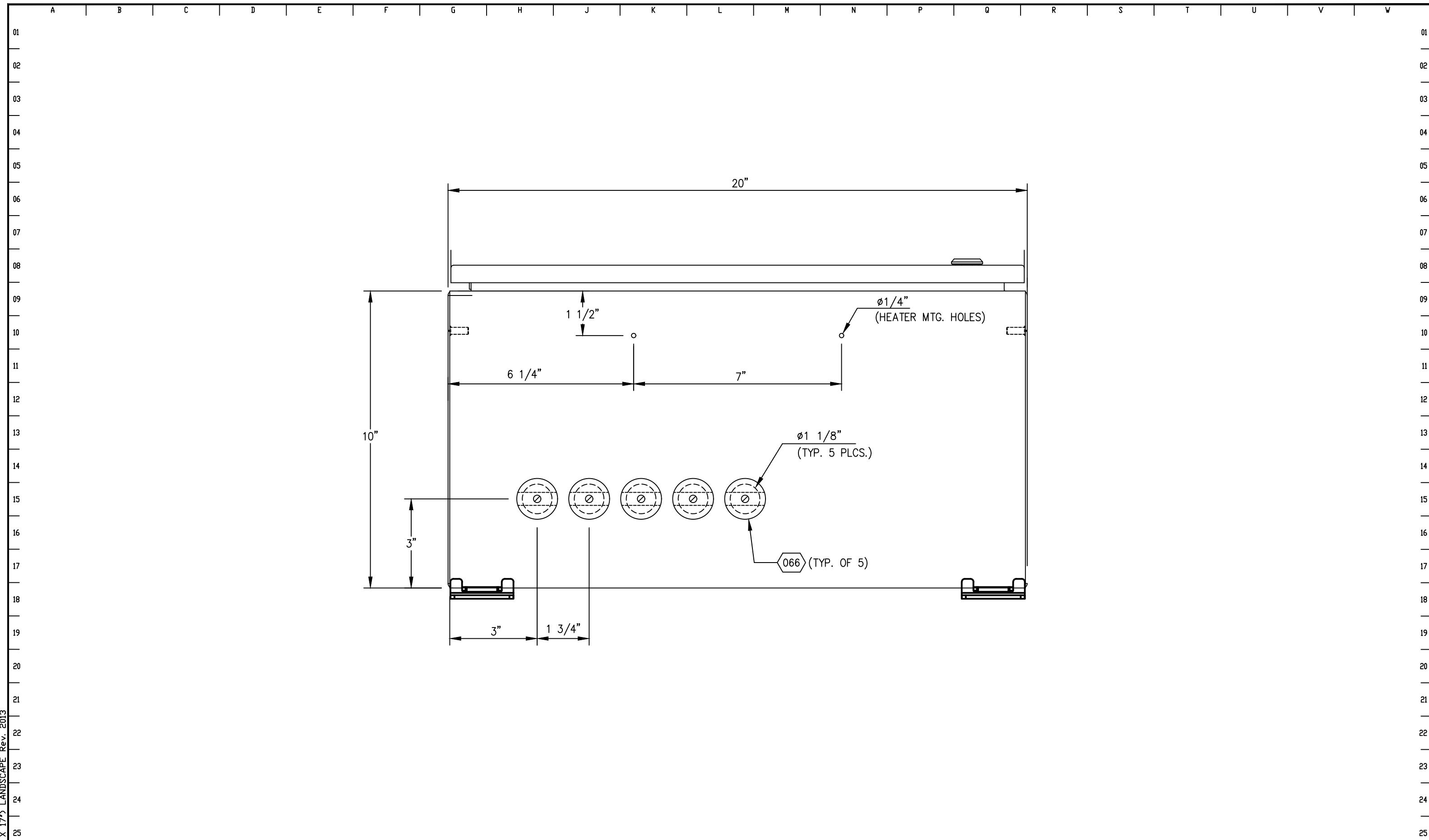
P/N: ARDV-03-401-00

SHEET	DESCRIPTION
06A01	TITLE SHEET & SHEET INDEX
06D01	TAGS SCHEDULE
06E01	DOOR LAYOUT
06E02	BOTTOM CUTOUT & ASSEMBLY
06F01	BACK PANEL LAYOUT
06G01	L01TB1/M02TB1 TERMINAL BLOCK M06ETHS1 LAYOUT
06L01	24VDC POWER DISTRIBUTION
06M01	CLX RACK LAYOUT
06M02	SLOT 3 DEVICENET BRIDGE
06M03	SLOT 4 ANALOG OUTPUT MODULE – (EARS) (OPTION)
06M04	SLOT 5 RESOLVER MODULE – (OPTIONAL) MULTIPASS
06M05	SLOT 6 RESOLVER MODULE – ROTARY HEAD
06M05	M06ETHS1 ETHERNET SWITCH CONNECTIONS

ANSI SIZE B (11" X 17") LANDSCAPE Rev. 2013

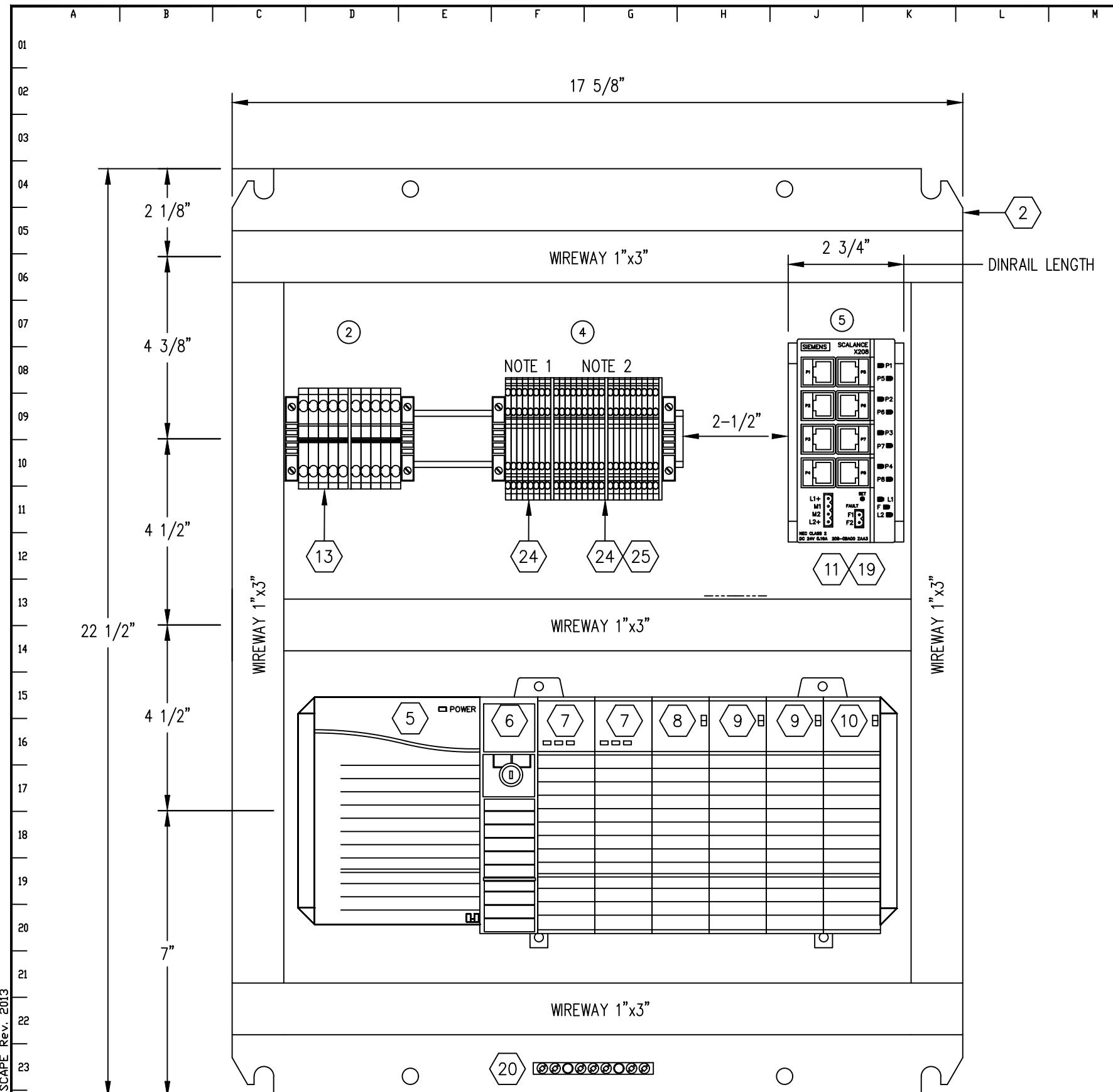






										FLANDERS www.flandersinc.com	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752	LOC. CODE	DATE		CONT. ON	
0 AS-INSTALLED					01/11/21		JCS	LDM	APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON	ARDVARC CONTROL SYSTEM	01/11/21		05	DRAWING NO.	SECTION	SUB. SEC.	HEET
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD	FILENAME: 20171106E02.dwg	CLX ENCLOSURE	BOTTOM CUTOUT & ASSEMBLY	213S163	06	E	02		

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BILL OF MATERIAL			
ITEM	QTY.	DESCRIPTION	PART NO.
1	1	ENCLOSURE, 24"x20"x10", STAINLESS STEEL, NEMA 4X	853815
2	1	ENCLOSURE BACKPANEL, 22"x18" (INCLUDED w/ENCLOSURE)	N/A
3	1	WALL MOUNT BRACKET FOR ENCLOSURE	853820
4	1	CONTROLLOGIX CHASSIS, 7 SLOT	851980
5	1	CONTROLLOGIX POWER SUPPLY, 24VDC/24VDC, 13A	851110
6	1	CONTROLLOGIX PROCESSOR, LOGIX5561 W/4MB MEMORY	852160
7	2	CONTROLLOGIX ENET/IP 10/100 BRIDGE MODULE	851130
8	1	CONTROLLOGIX DEVICENET BRIDGE	853630
9	2	SLOT FILLER	853850
10	1	RESOLVER MODULE	851600
11	1	SCALANCE X108 ETHERNET SWITCH	851530
12	2	CAT5E ETHERNET NETWORK CABLE, 3' LENGTH	853845
13	10	SPRING CLAMP TERMINAL BLOCK, 33A	852600
14	2	TERMINAL END BARRIER	852610
15	1	PLUG IN TERMINAL JUMPER, 20 POLE	993094
16	1	TERMINAL MARKERS, HORIZONTAL, 1-40	850540
17	4	END ANCHOR	852770
18	1	DIN RAIL	N/A
19	1	S7 DIN RAIL	853840
20	1	GROUND BAR KIT	852540
21	1	STRIP HEATER, 2"x10", 24VDC, 100W	853540
22	2	WIREWAY, 1"x2", GRAY, 6' LENGTH	N/A
23	2	WIREWAY COVER, 1", GRAY, 6' LENGTH	N/A
24	26	SPRING CLAMP TERMINAL BLOCK, 10A (VLINK SERIAL CONN. TERMS.)	991640
25			
26	3	TERMINAL END BARRIER	852270
27	1	TERMINAL MARKERS, HORIZONTAL, 1-40	850540
28			
29			
30			

#### LEGEND

(X) INDICATES BILL OF MATERIAL NUMBER

(O) INDICATES TAG SCHEDULE NUMBER

#### NOTES:

- TERM 1-8 ALLOCATED FOR DEVICE NET TERMINATIONS IF NEEDED.
- TERM 9-27 ALLOCATED FOR ONE TOUCH SYSTEMS VLINK SERIAL TERMINATIONS.




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ENGINEER:  
J.GOODWIN

APPROVED BY:  
J.GOODWIN

FILENAME:  
20171106F01.dwg

DRAWN BY:  
S.SUNNY

CHECKED BY:  
R.ELLISON

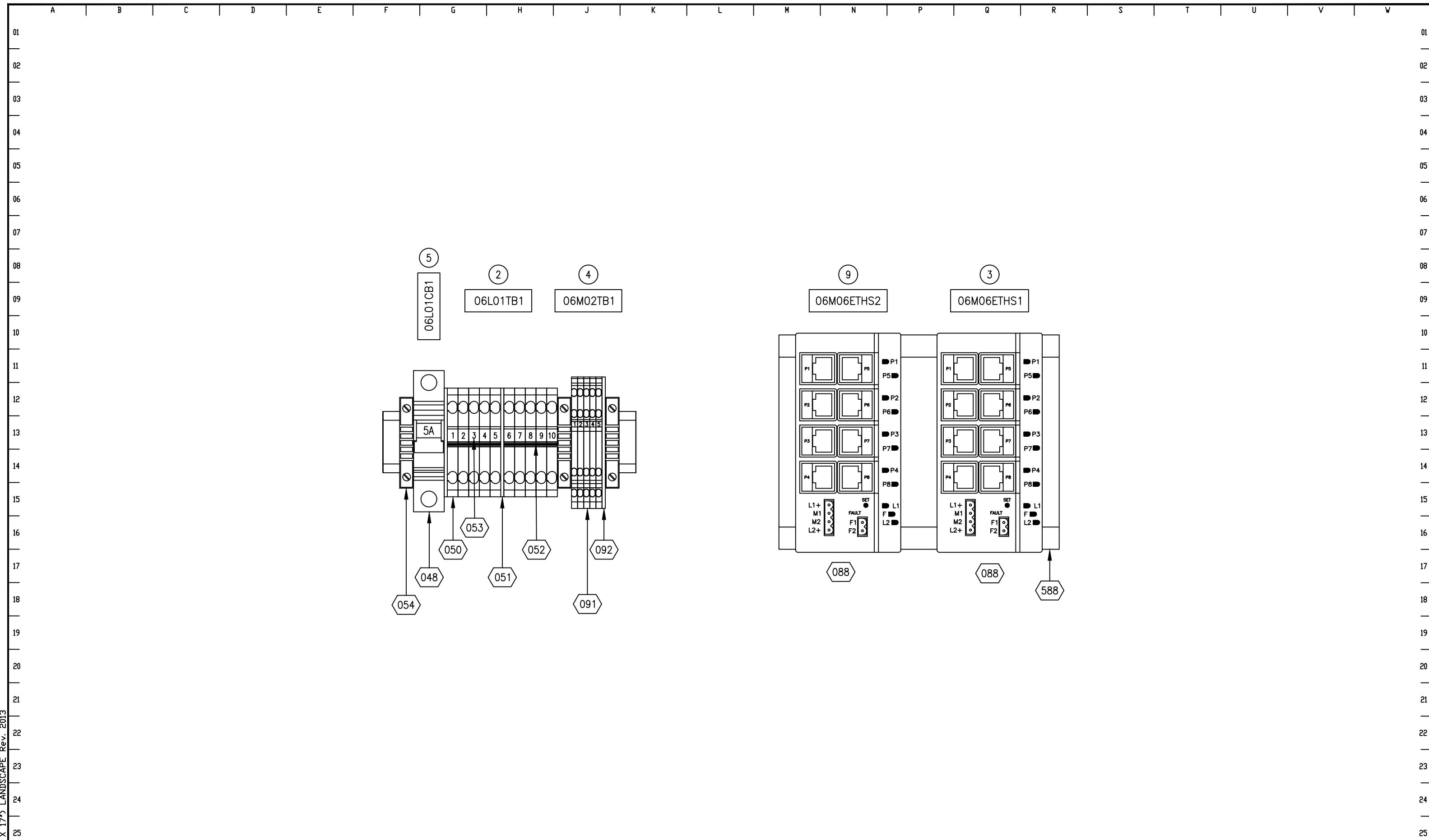
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ITABIRA-MG - PF6752

ARDVARC CONTROL SYSTEM

CLX ENCLOSURE

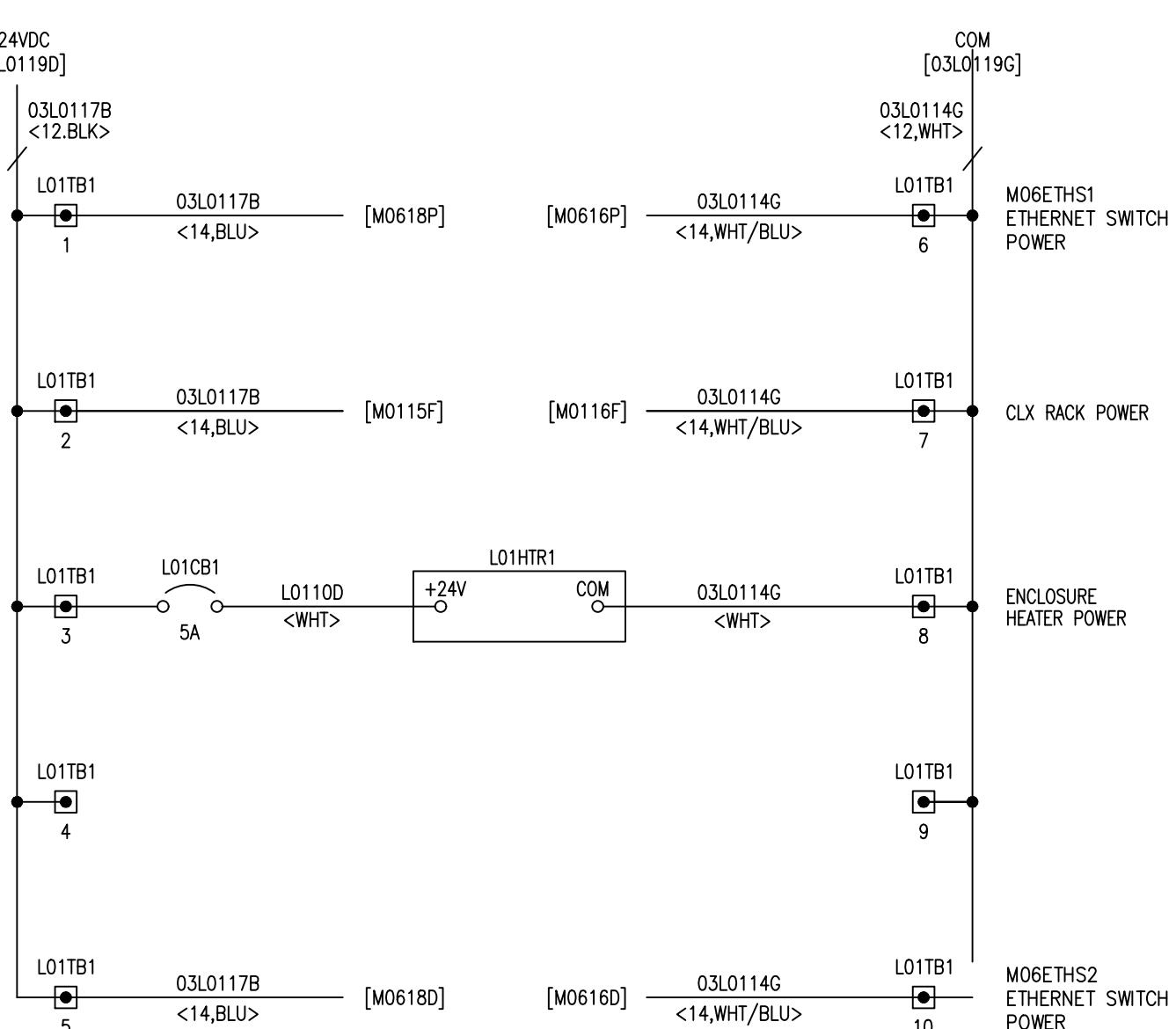
BACK PANEL LAYOUT

LOC. CODE	DATE	CONT. ON
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DRAWING NO.	SECTION	SUB. SEC.
213S163	06	F 01

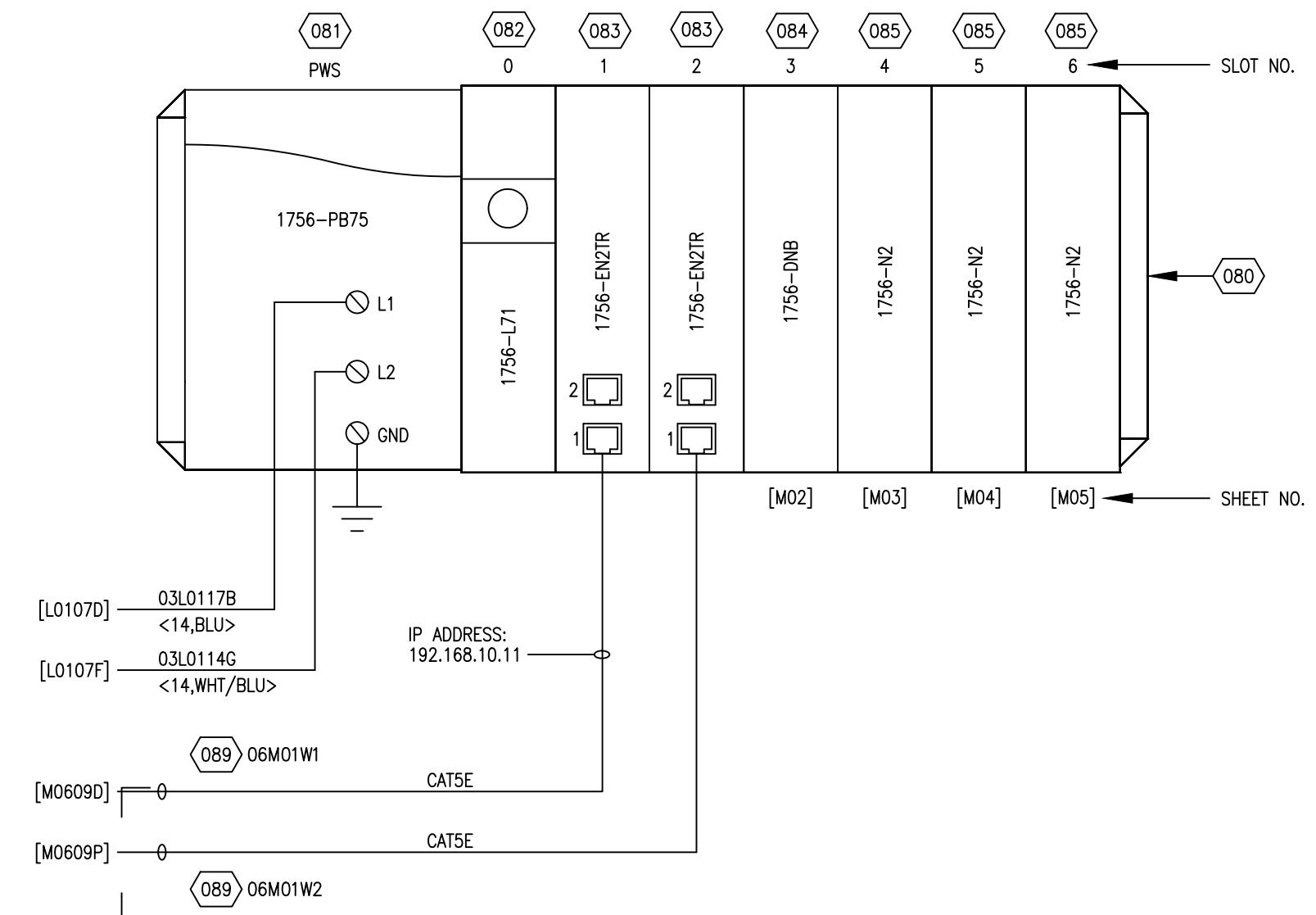


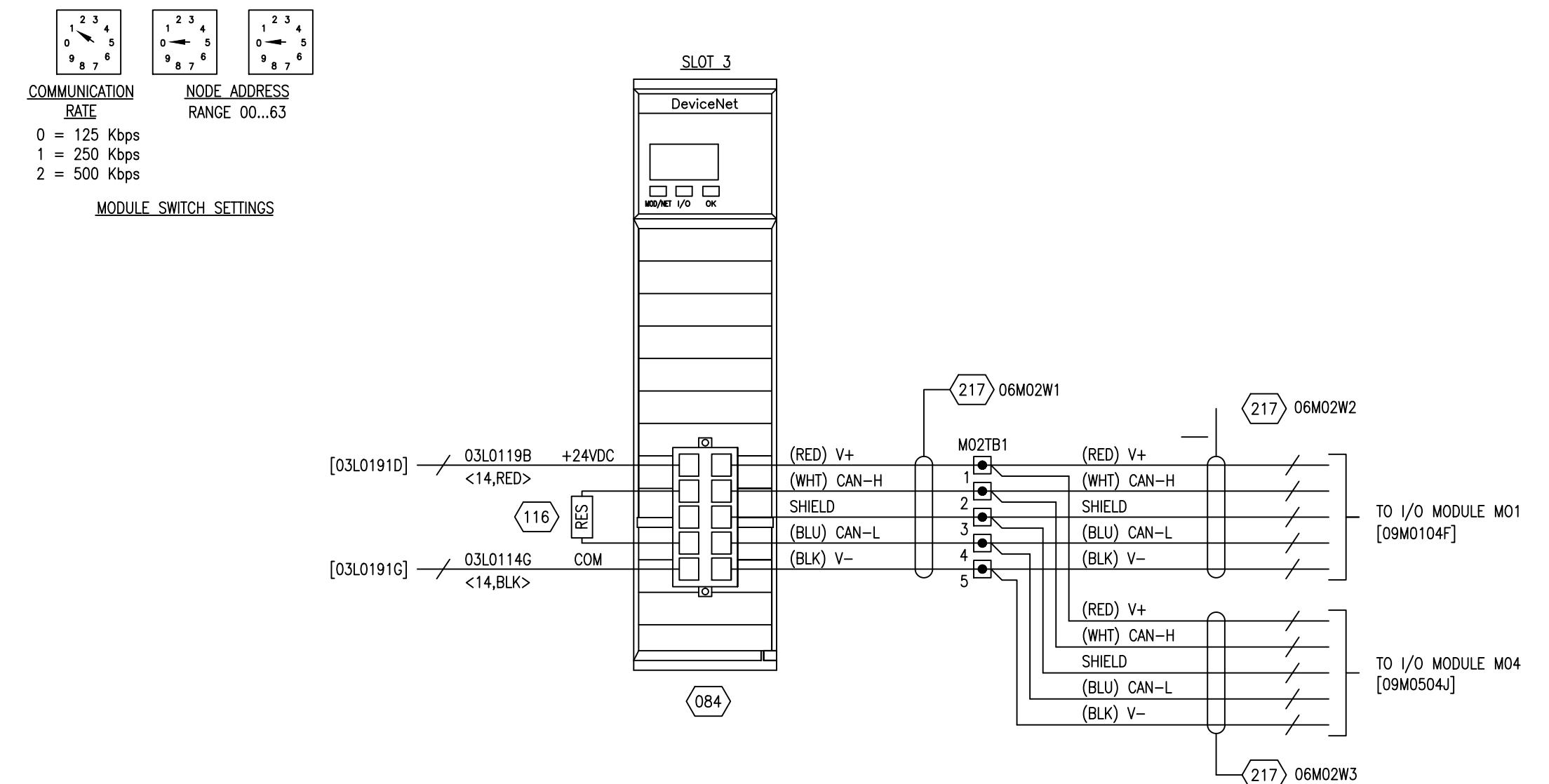
										FLANDERS www.flandersinc.com	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752	LOC. CODE	DATE		CONT. ON	
AS-INSTALLED					01/11/21		JCS	LDM	APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON	ARDVARC CONTROL SYSTEM	01/11/21		07				
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD	FILENAME: 20171106G01.dwg	CLX ENCLOSURE	DRAWING NO. 213S163	SECTION 06	SUB. SEC. G	SHEET 01			

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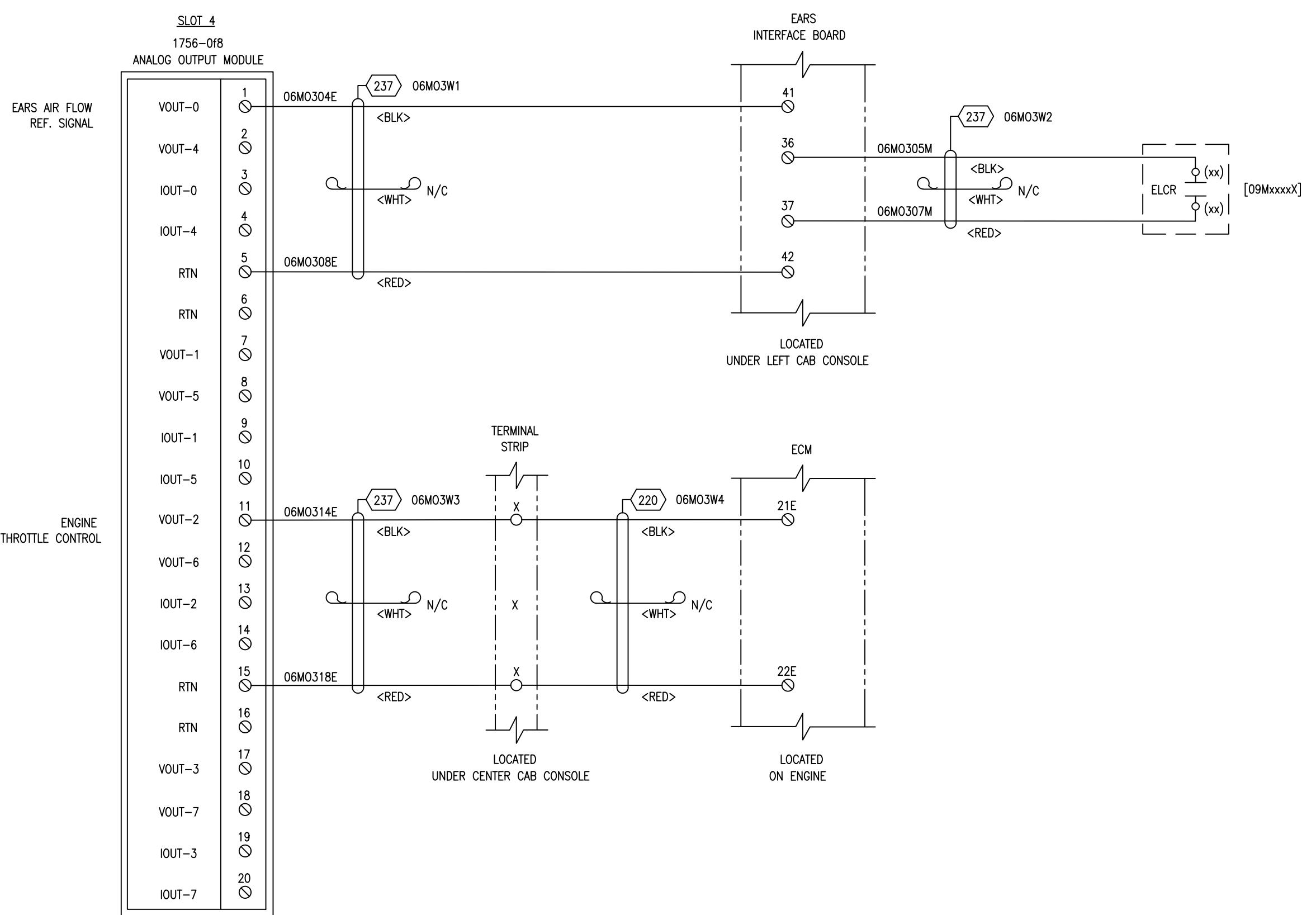


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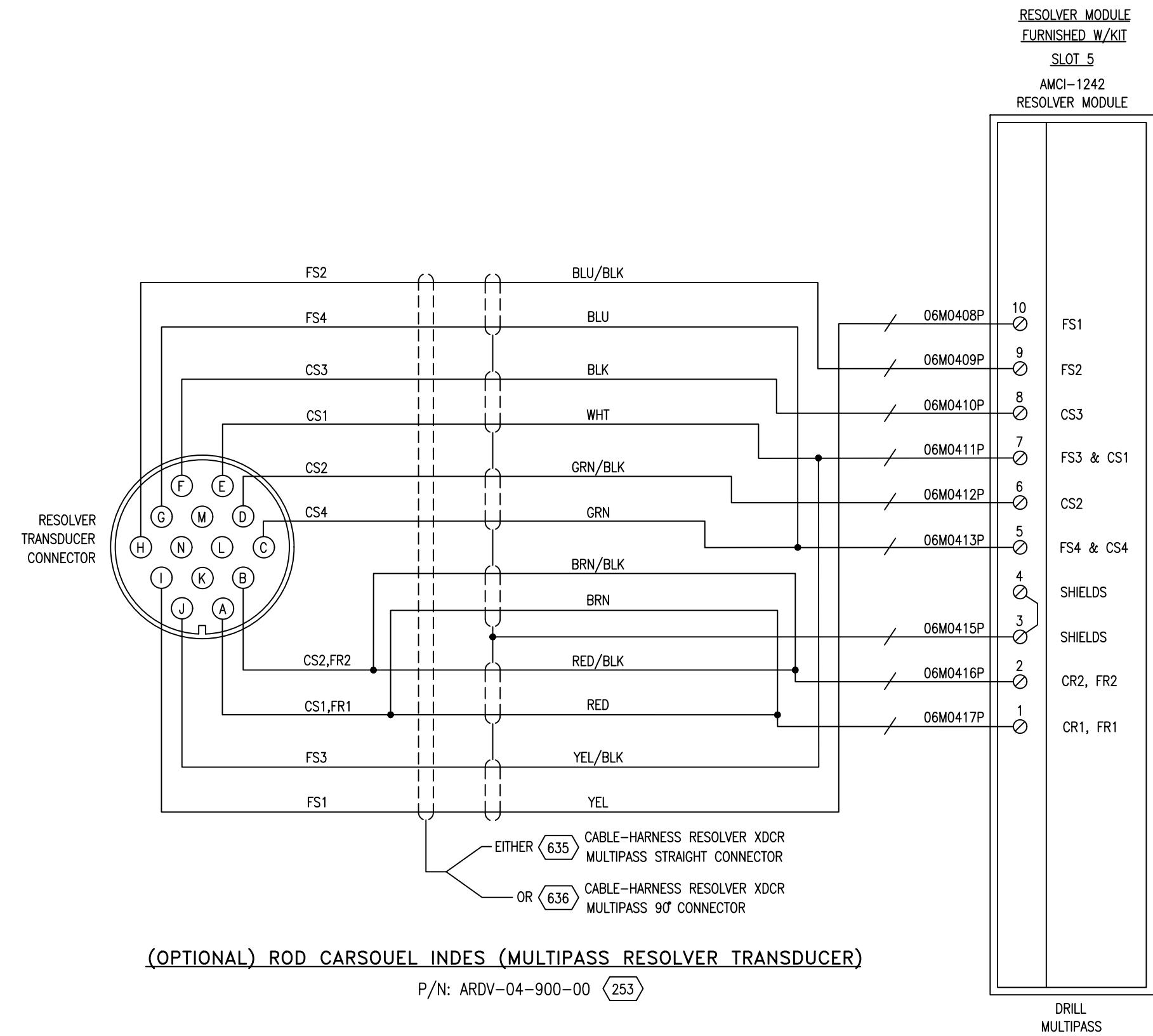




C B SIZE SHEET											 <b>FLANDERS</b> www.flandersinc.com	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM CLX ENCLOSURE SLOT 3 DEVICENET BRIDGE	LOC. CODE	DATE		CONT. ON						
																01/11/21		10						
																DRAWING NO.	SECTION	SUB. SEC.	SHEET					
REV.	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD	0	AS-INSTALLED	01/11/21	JCS	LDM	THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION OF FLANDERS ELECTRIC. NO DISCLOSURE OR USE OF IT SHALL BE MADE IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLANDERS ELECTRIC, UNLESS EXPRESSLY PROVIDED OTHERWISE BY CONTRACT.	APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON	FILENAME: 20171106M02.dwg	213S163	06	M	02		



SHEET NO. REV.							FLANDERS www.flandersinc.com	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM CLX ENCLOSURE SLOT 4 ANALOG OUTPUT MODULE - (EARS) (OPTION)	LOC. CODE DATE 01/11/21	CONT. ON 11		
								APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON					
	0 AS-INSTALLED							01/11/21	JCS	LDM	FILENAME: 20171106M03.dwg	DRAWING NO. 213S163	SECTION 06	SUB. SEC. M
	DESCRIPTION	DATE	BY	CHKD	REV.	DESCRIPTION	DATE	BY	CHKD					



ANSI SIZE B 17" x 17" LANDSCAPE Rev. 2013



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ENGINEER:  
J.GOODWIN

APPROVED BY:  
J.GOODWIN

FILENAME:  
20171106M04.dwg

DRAWN BY:  
S.SUNNY

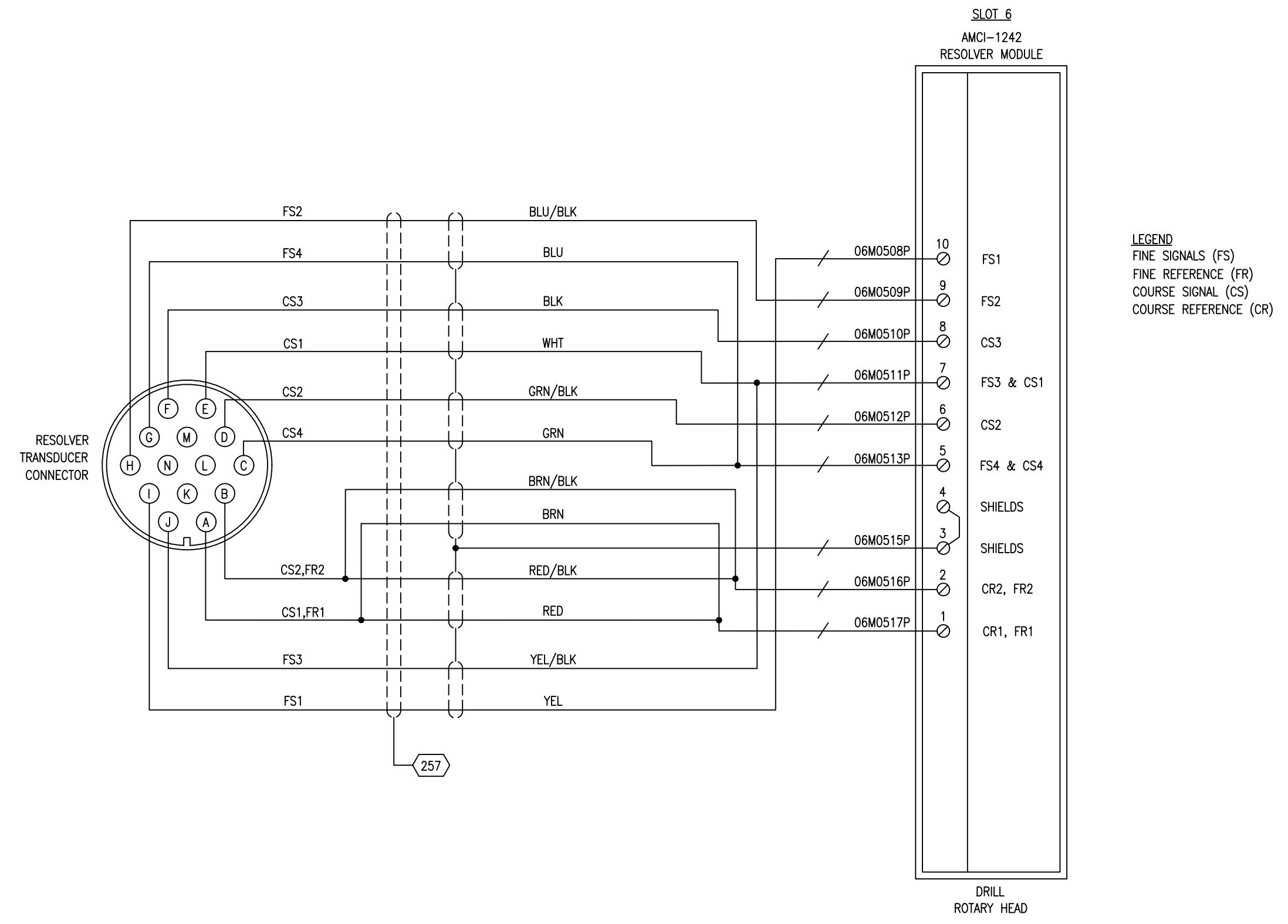
CHECKED BY:  
R.ELLISON

DRAWING TITLE:  
ITABIRA-MG - PF6752  
ARDVARC CONTROL SYSTEM

CLX ENCLOSURE

SLOT 5 RESOLVER MODULE - (OPTIONAL) MULTIPASS

LOC. CODE	DATE	CONT. ON
213S163	01/11/21	12
DRAWING NO.	SECTION	SUB. SEC.
213S163	06	M



ANSI SIZE B C									 <b>FLANDERS</b> <a href="http://www.flandersinc.com">www.flandersinc.com</a>	ENGINEER: J.GOODWIN	DRAWN BY: S.SUNNY	DRAWING TITLE: ITABIRA-MG - PF6752 ARDVARC CONTROL SYSTEM CLX ENCLOSURE SLOT 6 RESOLVER MODULE - ROTARY HEAD			LOC. CODE	DATE	CONT. ON	
										APPROVED BY: J.GOODWIN	CHECKED BY: R.ELLSON				01/11/21	13		
	0 AS-INSTALLED 01/11/21 JCS LDM																	
REV.	DESCRIPTION		DATE	BY	CHKD	REV.	DESCRIPTION		DATE	BY	CHKD	FILENAME: 20171106M05.dwg			DRAWING NO.	SECTION	SUB. SEC.	SHEET
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