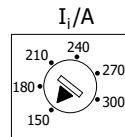


POWER DISTRIBUTION PANEL 5KVA 120V CONTROL POWER / 24V PLC POWER

ECS-5138-<sup>XFMR
TYPE</sup>TT

PROCESSOR POWER CIRCUIT BREAKER SETTINGS E404DISC

TM320 LI
3VA5195-6EC31-0AA0
 $I_r = 15A$



SET: $I_i/A = 150 A$

APPLICATION NOTES:

1. TT IS THE TRANSFORMER TYPE
(TT = 00 NO TRANSFORMER)
(TT = 02 FOR NORTH AMERICA 480V)
(TT = 03 FOR NON-NA REGIONS 380/400/416/440V)
(TT = 04 FOR NON-NA REGIONS 380/416/440/480V)
2. EXAMPLE PART NUMBER: ECS-5138-02 (THIS ECS WOULD HAVE THE NA 480 V TRANSFORMER OPTION)

LAST PART SELECTED WITH: GM_ePartsDB_202106

DRAWING PACKAGE REVISION LEVEL: REL

REFERENCE USED:		ENGINEERING MANAGER:	
SYSTEM/TOOL NO:	RELEASE DATE: 2021-10-14	REVISION LETTER:	SECTION LETTER:
DRAWING NUMBER: ECS-5138-TT	DATE:	A	1 OF 3



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: TITLE AND REFERENCE SHEET

SYSTEM/TOOL NO:

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

A 1 OF 3

THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-09-09

EPLAN VERSION: 2.7.3

SECTION	REV	SHEET	DESCRIPTION
A	REFERENCE	1	TITLE AND REFERENCE SHEET
		2	TABLE OF CONTENTS
		3	REVISION SUMMARY SHEET
C	INTERCONNECT	1	INTERCONNECT
E	MAGNETICS	1	380 - 500 VAC POWER DISTRIBUTION
		2	380 - 500 VAC POWER DISTRIBUTION
		3	380 - 500 VAC POWER DISTRIBUTION
		4	24 VDC POWER ABOVE DISCONNECT
		5	120 VAC POWER BELOW DISCONNECT
X	ENCLOSURE	1	ENCLOSURE LAYOUT - FRONT AND SIDE
		2	ENCLOSURE LAYOUT - TOP
		3	DOOR TAG DETAILS
		4	SUBPLATE DETAIL
		5	SUBPLATE LAYOUT
		6	RECEPTACLE PIN CHART
		7	ENCLOSURE FOOTPRINT
YA	BILL OF MATERIAL	1	BOM CHANGE SHEET: ECS-5138-TT-BOM (BASE)
		2	ECS-5138-TT-BOM (BASE)
		3	ECS-5138-TT-BOM (BASE)
YB	VARIABLE BOM	1	BOM CHANGE SHEET: ECS-5138-TT-BOM (TT OPTION)
		2	ECS-5138-TT-BOM (TT OPTION)
YZ	DEVICE LIST	1	DEVICE LIST
		2	DEVICE LIST

SECTION	REV	SHEET	DESCRIPTION
---------	-----	-------	-------------

REV	SHEET AFFECTED	CHANGE DESCRIPTION	DATE	CHANGE CODE	CHANGED BY

REV	SHEET AFFECTED	CHANGE DESCRIPTION	DATE	CHANGE CODE	CHANGED BY

CHANGE CODE	
PR	PRODUCT CHANGE
R	PLANT REQUEST
MP	MECHANICAL PROCESS CHANGE
CP	CONTROL PROCESS CHANGE
M	MECHANICAL DESIGN CHANGE
C	CONTROL DESIGN CHANGE
F	FLOOR AND BUILD CHANGE



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: REVISION SUMMARY SHEET

SYSTEM/TOOL NO:

DRAWING NUMBER:
ECS-5138-TT

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

SHEET
NUMBER:

A 3 OF 3

THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

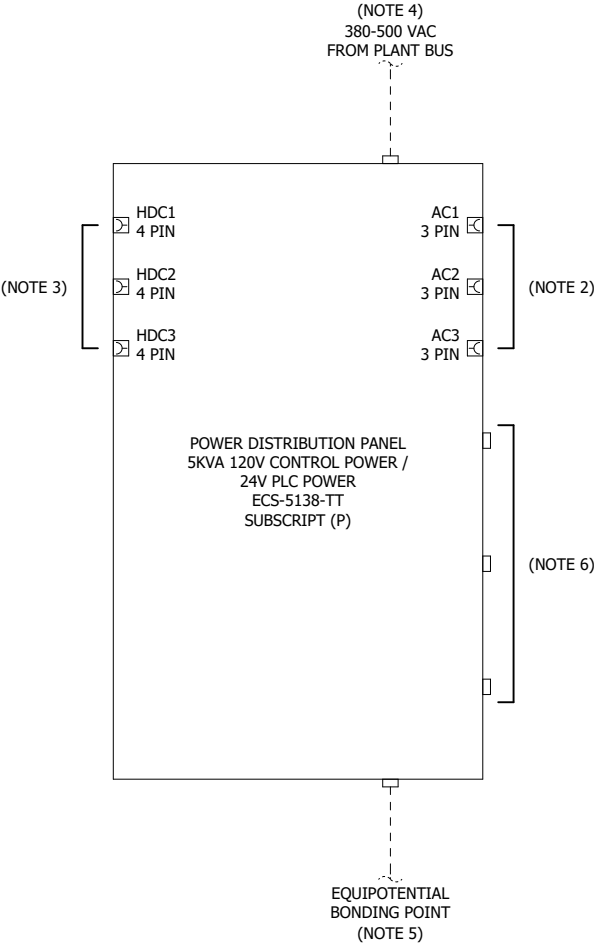
STATUS: RELEASED


PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-09-09

EPLAN VERSION: 2.7.3

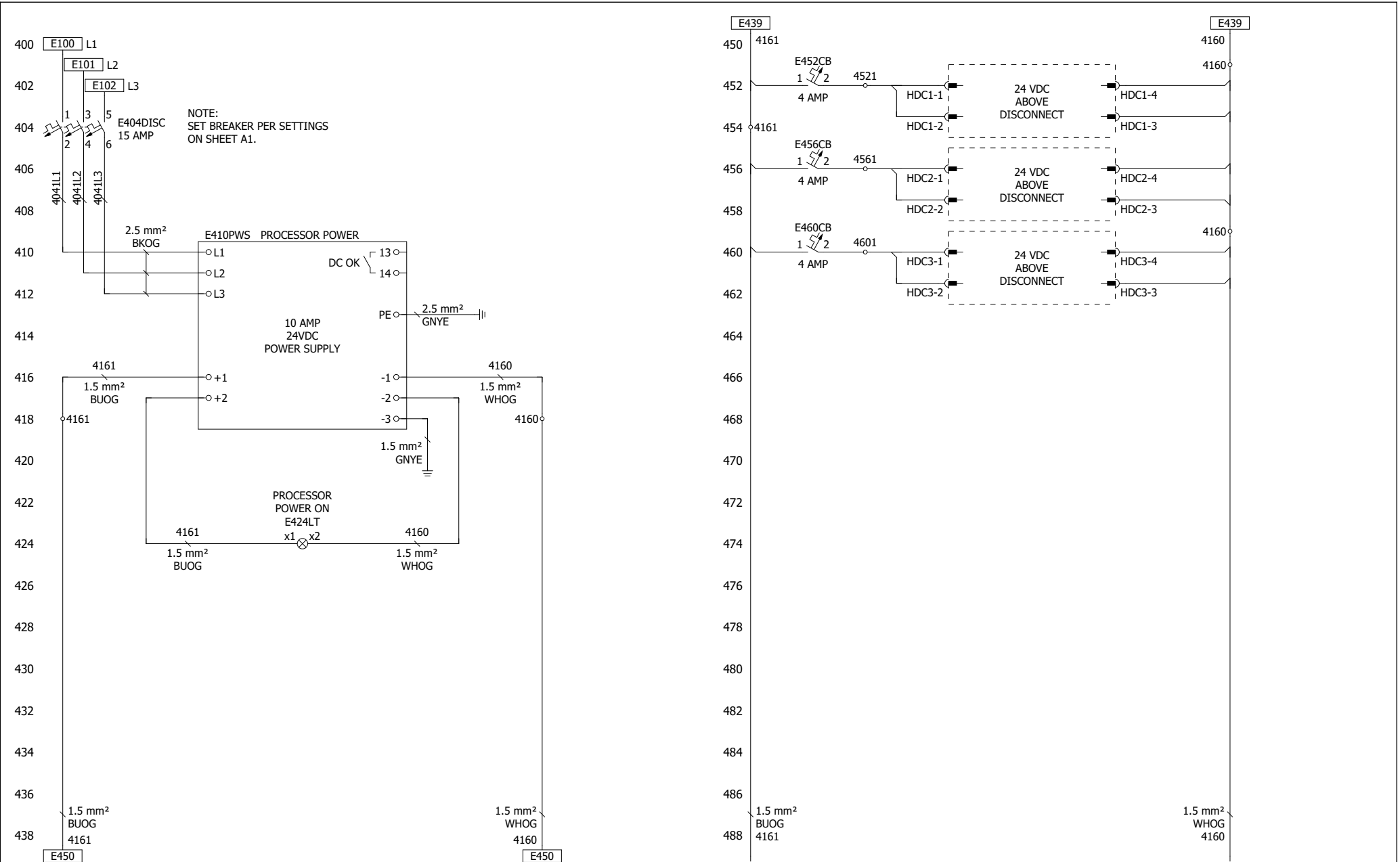
- NOTES:
- 1. THIS ENCLOSURE DOES NOT CONTAIN BRANCH CIRCUITS.
 - 2. USE ACx RECEPTACLES TO FEED 120 VAC TO PANELS AND DEVICES REQUIRING AC POWER.
 - 3. USE HDCx RECEPTACLES TO FEED 24 VDC TO PANELS AND DEVICES REQUIRING "HOT" DC POWER.
 - 4. USE ONLY WIRE SIZE AND STRAND CLASS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REMOVE INSULATION FROM WIRE AND TORQUE TERMINALS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - 5. EQUIPOTENTIAL BONDING CONNECTION REQUIRED. REFERENCE APPLICATION WD.
 - 6. THERE ARE THREE CIRCUITS (E564CB - E572CB) AVAILABLE FOR HARDWIRED 120 VAC LOADS.
 - 7. COVERS ARE REQUIRED FOR UNUSED RECEPTACLES. THESE COVERS ARE NOT INCLUDED WITH THIS ENCLOSURE.



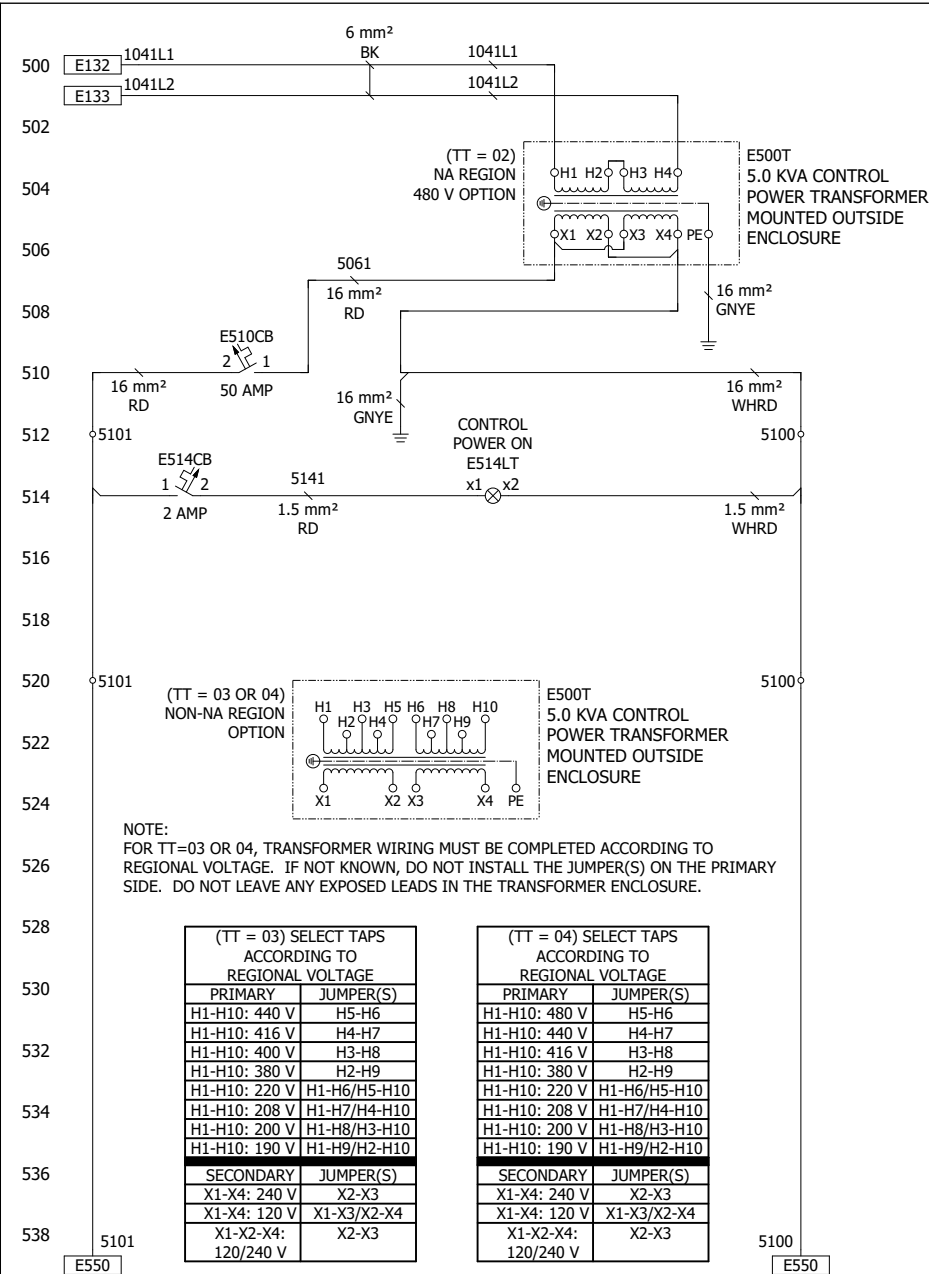
	GM - STANDARD	GM ENGINEER:	DESIGN SOURCE:	DESIGN LEADER:	PROGRAMS:	PACKAGE	POWER DISTRIBUTION PANEL	SYSTEM/TOOL NO:	RELEASE DATE:	REVISION	SECTION	SHEET	
		HARDWARE TEAM		GREG DOPPKE		DESCRIPTION:	5KVA 120V CONTROL POWER / 24V PLC POWER						LETTER:
THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.						SHEET	INTERCONNECT	DRAWING NUMBER:	DATE:	C	1	OF 1	
						DESCRIPTION:	ECS-5138-TT						
STATUS: RELEASED						PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)				SAVE DATE: 2021-10-14		EPLAN VERSION: 2.7.3	

200	250
202	252
204	254
206	256
208	258
210	260
212	262
214	264
216	266
218	268
220	270
222	272
224	274
226	276
228	278
230	280
232	282
234	284
236	286
238	288

300	350
302	352
304	354
306	356
308	358
310	360
312	362
314	364
316	366
318	368
320	370
322	372
324	374
326	376
328	378
330	380
332	382
334	384
336	386
338	388



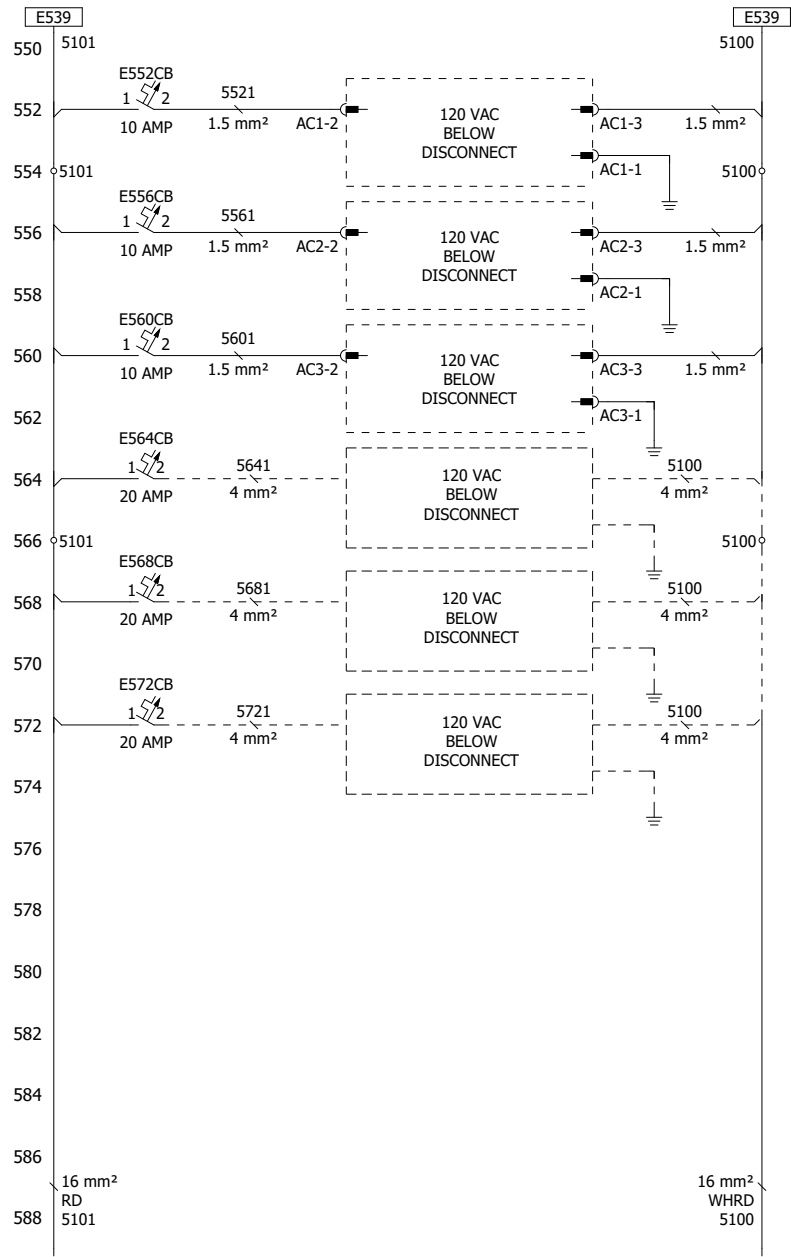
	GM - STANDARD	GM ENGINEER: HARDWARE TEAM	DESIGN SOURCE:	DESIGN LEADER: GREG DOPPKE	PROGRAMS:	PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL 5KVA 120V CONTROL POWER / 24V PLC POWER	SYSTEM/TOOL NO:	RELEASE DATE: 2021-10-14	REVISION LETTER: DATE:	SECTION LETTER: E	SHEET NUMBER: 4 OF 5
						SHEET DESCRIPTION: 24 VDC POWER ABOVE DISCONNECT	DRAWING NUMBER: ECS-5138-TT				

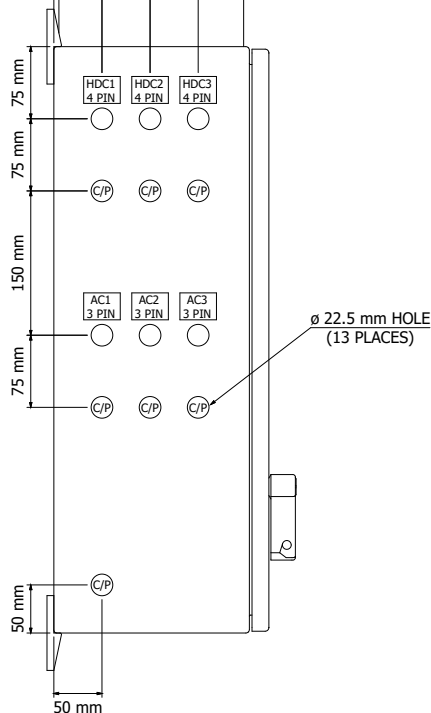
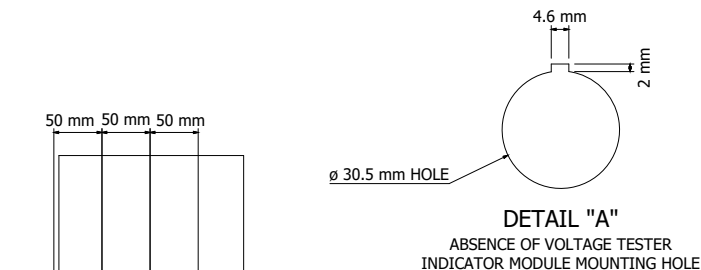


NOTE:
FOR TT=03 OR 04, TRANSFORMER WIRING MUST BE COMPLETED ACCORDING TO REGIONAL VOLTAGE. IF NOT KNOWN, DO NOT INSTALL THE JUMPER(S) ON THE PRIMARY SIDE. DO NOT LEAVE ANY EXPOSED LEADS IN THE TRANSFORMER ENCLOSURE.

(TT = 03) SELECT TAPS ACCORDING TO REGIONAL VOLTAGE	
PRIMARY	JUMPER(S)
H1-H10: 440 V	H5-H6
H1-H10: 416 V	H4-H7
H1-H10: 400 V	H3-H8
H1-H10: 380 V	H2-H9
H1-H10: 220 V	H1-H6/H5-H10
H1-H10: 208 V	H1-H7/H4-H10
H1-H10: 200 V	H1-H8/H3-H10
H1-H10: 190 V	H1-H9/H2-H10
SECONDARY	JUMPER(S)
X1-X4: 240 V	X2-X3
X1-X4: 120 V	X1-X3/X2-X4
X1-X2-X4: 120/240 V	X2-X3

(TT = 04) SELECT TAPS ACCORDING TO REGIONAL VOLTAGE	
PRIMARY	JUMPER(S)
H1-H10: 480 V	H5-H6
H1-H10: 440 V	H4-H7
H1-H10: 416 V	H3-H8
H1-H10: 380 V	H2-H9
H1-H10: 220 V	H1-H6/H5-H10
H1-H10: 208 V	H1-H7/H4-H10
H1-H10: 200 V	H1-H8/H3-H10
H1-H10: 190 V	H1-H9/H2-H10
SECONDARY	JUMPER(S)
X1-X4: 240 V	X2-X3
X1-X4: 120 V	X1-X3/X2-X4
X1-X2-X4: 120/240 V	X2-X3





DOOR BONDING INSTRUCTIONS
SUPPLY GROUNDING STUD ON
INTERIOR OF DOOR AND INSIDE
ENCLOSURE.

PROVIDE 10 mm² BONDING
CONDUCTOR BETWEEN THE DOOR
AND ENCLOSURE GROUNDING
STUDS. USE NON-INSULATED CRIMP
RING LUG ON EACH BRAID END.

PROVIDE 10 mm² BONDING
CONDUCTOR BETWEEN THE
ENCLOSURE STUD AND THE
SUBPLATE.

ITEMS PROVIDED BY
APPLICATION SUPPLIER
TAG SIZE:
76 mm W x 76 mm H

PURCHASED ITEM
REFERENCE BOM
TAG SIZE:
50 mm W x 50 mm H

INSTALL LOCKOUT PLACARD HOLDER USING M5
SCREW. PROVIDE WASHERS AND LOCKNUT TO
ALLOW SECURE BUT REMOVABLE ATTACHMENT OF
THE PLACARD HOLDER.

ITEM PROVIDED BY
PANEL MANUFACTURER
TAG SIZE:
76 mm W x 51 mm H

PANEL SHOP TO INSTALL THE FOLLOWING:
(NOT SUPPLIED WITH ENCLOSURE)

- 1 X M5 HEX NUT
- 3 X M5 FLAT WASHER
- 1 X M5 LOCK WASHER
- 1 X M5 x 22 mm SOCKET CAP BOLT

RIGHT SIDE VIEW SAFETY LOCK MOUNTING DETAIL

ACTUATOR REQUIREMENTS

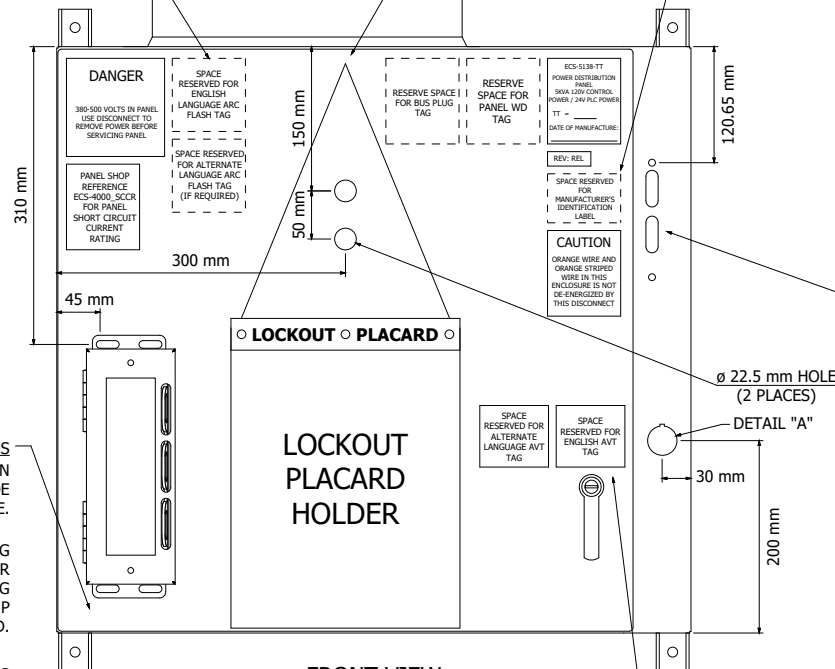
MUST BE READILY ACCESSIBLE WITH
DOORS IN THE OPEN OR CLOSED POSITION

MUST BE LOCKABLE IN THE OFF POSITION
ONLY

MUST BE IN CONTROL OF THE DISCONNECT AT
ALL TIMES, INDEPENDENT OF THE POSITION OF
THE ASSOCIATED DOOR.

MUST BE INTERLOCKED WITH THE DOOR SO
THAT THE DOOR CAN ONLY BE OPEN WHEN THE
MAIN BREAKER IS OFF AND SO THE MAIN
BREAKER CAN ONLY BE SWITCHED ON WHEN
THE DOOR IS CLOSED.

MUST BE ABLE TO OVERRIDE DOOR
INTERLOCKING WITH A SCREWDRIVER.




ENCLOSURE - 610 mm H X 660 mm W X 203 mm D

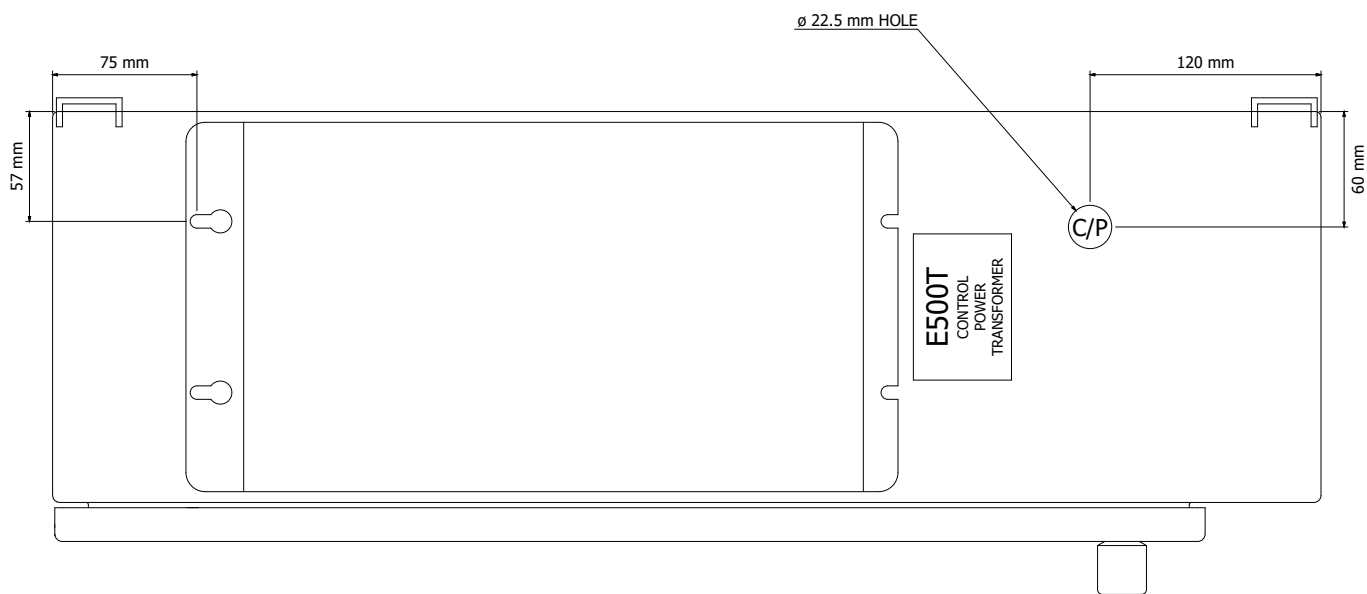
INSTALL ENGLISH LANGUAGE ABSENCE OF VOLTAGE TESTER LABEL AS SHOWN.
STORE THE OTHER LANGUAGE LABELS IN THE INTERIOR PRINT POCKET.
MARK "LOAD" FOR TESTER LOCATION ON ALL LABELS USING A PERMANENT INK
MARKER.

- NOTES:
- ENCLOSURE TO BE CONSTRUCTED TO CURRENT GCCB-1 AND GCCH-1 STANDARDS.
 - INCLUDE A COPY OF THIS DRAWING PACKAGE INSIDE THE ENCLOSURE.
 - PROVIDE A TAG WITH RECEPTACLE NAME ON THE INSIDE AND OUTSIDE OF THE ENCLOSURE FOR EACH RECEPTACLE.
 - ALL TAGS TO BE WHITE WITH BLACK LETTERING UNLESS NOTED OTHERWISE.

TOP OF ENCLOSURE (SIDE MOUNTED)
OR
FRONT OF ENCLOSURE (TOP/BOTTOM MOUNTED)

KEY POSITION OF
RECEPTACLE TYPICAL
FOR ALL

	GM - STANDARD	GM ENGINEER: HARDWARE TEAM	DESIGN SOURCE:	DESIGN LEADER: GREG DOPPKE	PROGRAMS:	PACKAGE DESCRIPTION:	POWER DISTRIBUTION PANEL 5KVA 120V CONTROL POWER / 24V PLC POWER	SYSTEM/TOOL NO:	RELEASE DATE: 2021-10-14	REVISION LETTER:	SECTION LETTER:	SHEET NUMBER:
						SHEET DESCRIPTION:	ENCLOSURE LAYOUT - FRONT AND SIDE					
THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.												
STATUS: RELEASED					PROJECT NAME: ECS-5138-TT Rel(2021-10-14)				SAVE DATE: 2021-10-14		EPLAN VERSION: 2.7.3	



TOP VIEW

TOP OF ENCLOSURE (SIDE MOUNTED)
OR
FRONT OF ENCLOSURE (TOP/BOTTOM MOUNTED)



KEY POSITION OF
RECEPTACLE TYPICAL
FOR ALL

- NOTES:**
1. ENCLOSURE TO BE CONSTRUCTED TO CURRENT GCCB-1 AND GCCH-1 STANDARDS.
 2. INCLUDE A COPY OF THIS DRAWING PACKAGE INSIDE THE ENCLOSURE.
 3. PROVIDE A TAG WITH RECEPTACLE NAME ON THE INSIDE AND OUTSIDE OF THE ENCLOSURE FOR EACH RECEPTACLE.
 4. ALL TAGS TO BE WHITE WITH BLACK LETTERING UNLESS NOTED OTHERWISE.



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: ENCLOSURE LAYOUT - TOP

SYSTEM/TOOL NO:

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

X

SHEET
NUMBER:

2 OF 7

THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-09-09

EPLAN VERSION: 2.7.3

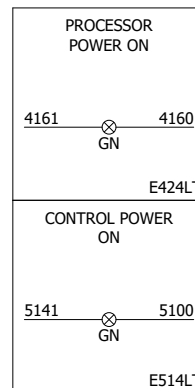
DANGER

380-500 VOLTS IN PANEL
USE DISCONNECT TO
REMOVE POWER BEFORE
SERVICING PANEL

TAG SIZE:
102 mm W x 102 mm H
WHITE TEXT ON
RED BACKGROUND

PANEL SHOP
REFERENCE
ECS-4000_SCCR
FOR PANEL
SHORT CIRCUIT
CURRENT
RATING

TAG SIZE:
76 mm W x 89 mm H



TAG SIZE:
76 mm W x 89 mm H

PANEL SHOP TO PROVIDE
INFORMATION FOR ALL BLANK
FIELDS BASED ON ACTUAL
PANEL CONSTRUCTION.

ECS-5138-TT
POWER DISTRIBUTION
PANEL
5KVA 120V CONTROL
POWER / 24V PLC POWER

TT = _____
DATE OF MANUFACTURE:

TAG SIZE:
45 mm W x 15 mm H

REV: REL


TAG SIZE:
76 mm W x 89 mm H
BLACK TEXT ON
YELLOW BACKGROUND

CAUTION
ORANGE WIRE AND
ORANGE STRIPED
WIRE IN THIS
ENCLOSURE IS NOT
DE-ENERGIZED BY
THIS DISCONNECT

TAG SIZE:
76 mm W x 38 mm H
(NOTE 3)

INPUT: 380-500 3Ø(50/60Hz)	13.1A
-	-
-	-
OUTPUT: 120 VAC (ACx)	41A
24 VDC (HDCx)	4A
-	-

- NOTES:
1. ALL TAGS TO BE WHITE WITH BLACK LETTERING UNLESS NOTED OTHERWISE.
 2. WIRE NUMBERS AND PUSHBUTTON COLOR SHOWN ON TAGS FOR WIRING PURPOSES ONLY. DO NOT MARK WIRE NUMBERS OR PB COLOR ON TAGS.
 3. PROVIDE POWER TAG ON THE FRONT OF ENCLOSURE OR ON THE INSIDE OF THE DOOR. MANUFACTURER SPECIFIC TAGGING WITH EQUIVALENT INFORMATION IS ALLOWED.

	GM - STANDARD	GM ENGINEER: HARDWARE TEAM	DESIGN SOURCE:	DESIGN LEADER: GREG DOPPKE	PROGRAMS:	PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL 5KVA 120V CONTROL POWER / 24V PLC POWER	SYSTEM/TOOL NO:	RELEASE DATE: 2021-10-14	REVISION LETTER:	SECTION LETTER:	SHEET NUMBER:
						SHEET DESCRIPTION: DOOR TAG DETAILS	DRAWING NUMBER: ECS-5138-TT		DATE:	X	3 OF 7

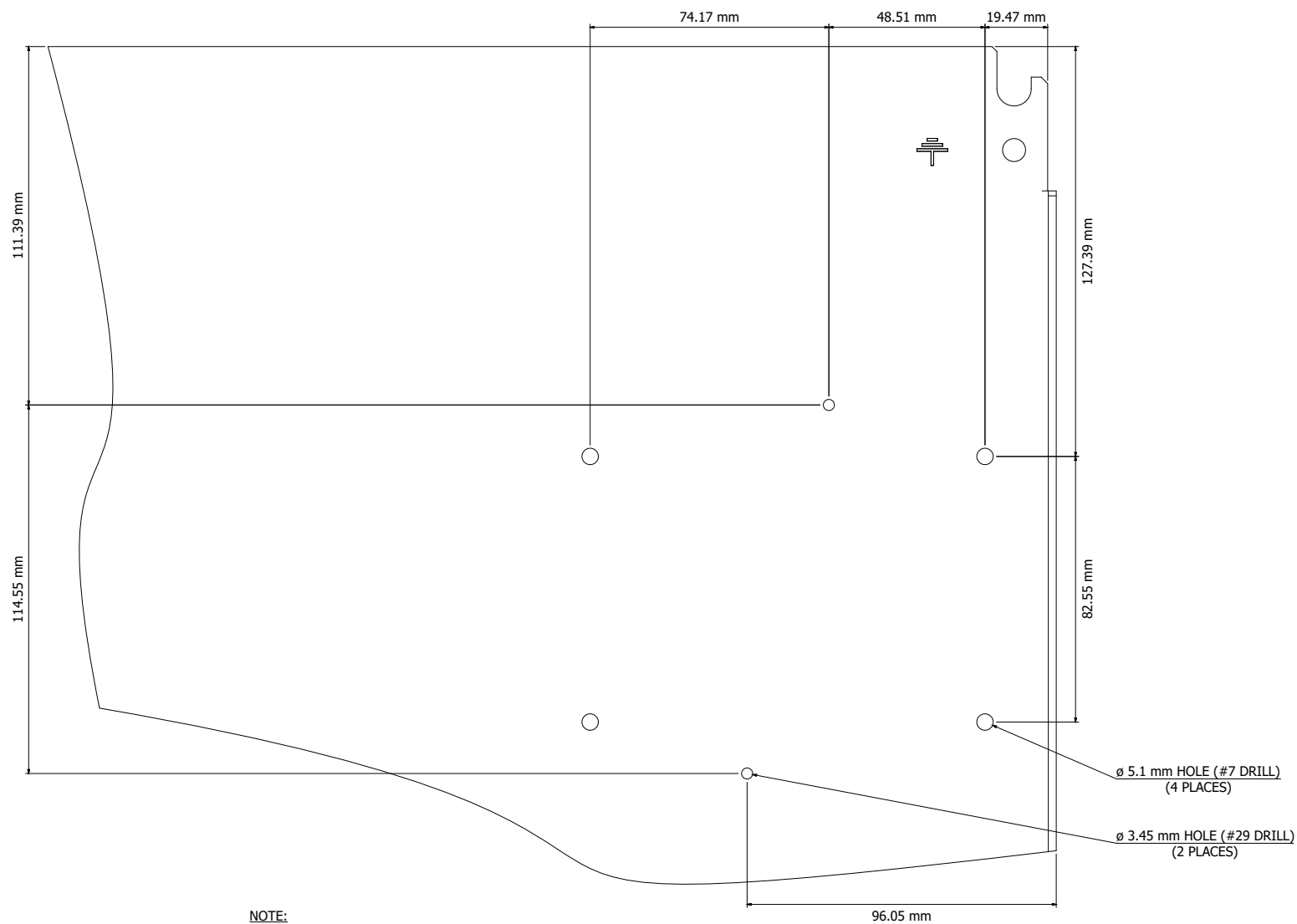
THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-10-13

EPLAN VERSION: 2.7.3




NOTE:

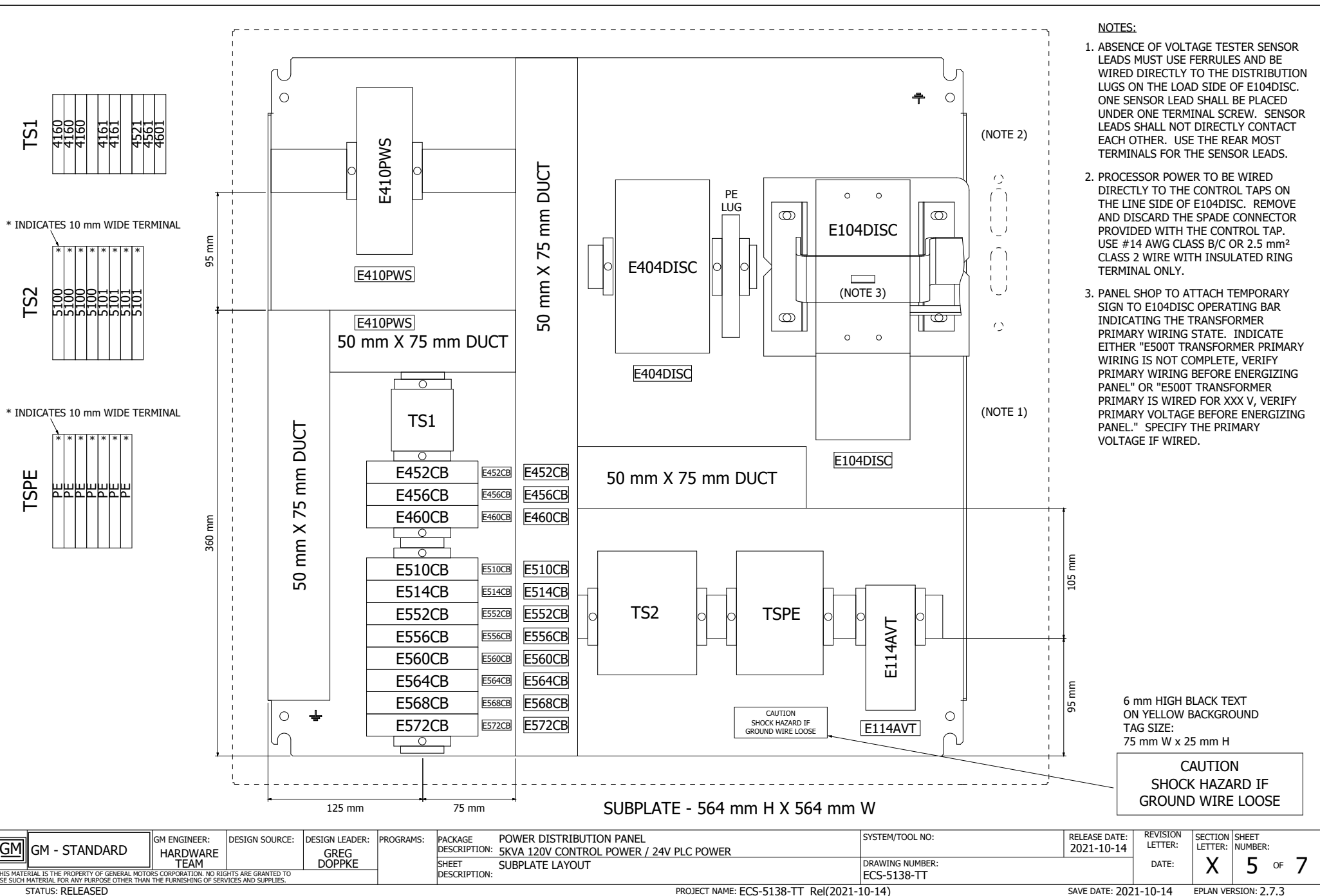
DIMENSIONS SHOWN ARE VALID FOR ENCLOSURE SPECIFIED ON BOM. IF AN ALTERNATIVE ENCLOSURE IS USED, THEN THE DIMENSIONS MAY VARY. THE BREAKER AND OPERATING MECHANISM MUST BE LOCATED PER THE MANUFACTURER'S REQUIREMENTS.

NOTE:

PANEL SHOP TO TAP HOLES IN SUBPLATE - DO NOT FASTEN COMPONENTS WITH NUTS BEHIND THE SUBPLATE.

CIRCUIT BREAKER AND DISCONNECT MECHANISM MOUNTING DETAIL

	GM - STANDARD	GM ENGINEER:	DESIGN SOURCE:	DESIGN LEADER:	PROGRAMS:	PACKAGE DESCRIPTION:	POWER DISTRIBUTION PANEL 5KVA 120V CONTROL POWER / 24V PLC POWER	SYSTEM/TOOL NO:	RELEASE DATE:	REVISION LETTER:	SECTION LETTER:	SHEET NUMBER:	
		HARDWARE TEAM		GREG DOPPKE					2021-10-14				
		THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.				SHEET DESCRIPTION:	SUBPLATE DETAIL		DRAWING NUMBER:				ECS-5138-TT
STATUS: RELEASED						PROJECT NAME: ECS-5138-TT Rel(2021-10-14)				SAVE DATE: 2021-09-09		EPLAN VERSION: 2.7.3	



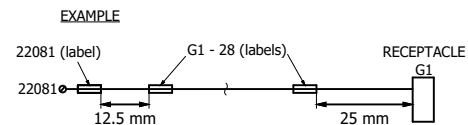
MINI CONNECTOR
FEMALE - FACEVIEW

PIN	FUNCTION	COLOR
1	GROUND	GNYE
2	POWER	BK
3	NEUTRAL	WH

MINI CONNECTOR
FEMALE - FACEVIEW

PIN	FUNCTION
1	+24V SWITCHED - BN
2	+24V UNSWITCHED - WH
3	0V UNSWITCHED - BU
4	0V SWITCHED - BK

THE RECEPTACLE WIRES SHALL HAVE
THE RECEPTACLE NUMBER AND PIN
NUMBER LABELED ON BOTH ENDS.



NOTE:
ALL UNUSED RECEPTACLE
WIRES SHOULD HAVE ENDS
PROTECTED WITH TAPE TO
PREVENT UNINTENTIONAL
SHORTING.
ALL WIRES ARE TO BE
BLUE (BU) UNLESS
OTHERWISE SPECIFIED
(MINI AND MICRO RECEPTACLE
WIRE COLORS TO BE IN
COMPLIANCE WITH THE
ASSOCIATED IEC OR ANSI
STANDARD).

WIRE COLOR	ABBREV
BLACK	BK
BROWN	BN
RED	RD
ORANGE	OG
YELLOW	YE
GREEN	GN
BLUE	BU
VIOLET	VT
GRAY	GY
WHITE	WH
PINK	PK
GOLD	GD
TURQUOISE	TQ
SILVER	SR
GREEN WITH YELLOW TRACER	GNYE
BLACK WITH ORANGE TRACER	BKOG
BLUE WITH ORANGE TRACER	BUOG
WHITE WITH RED TRACER	WHRD
WHITE WITH ORANGE TRACER	WHOG
WHITE WITH BLUE TRACER	WHBU



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: RECEPTACLE PIN CHART

SYSTEM/TOOL NO:

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

X

SHEET
NUMBER:

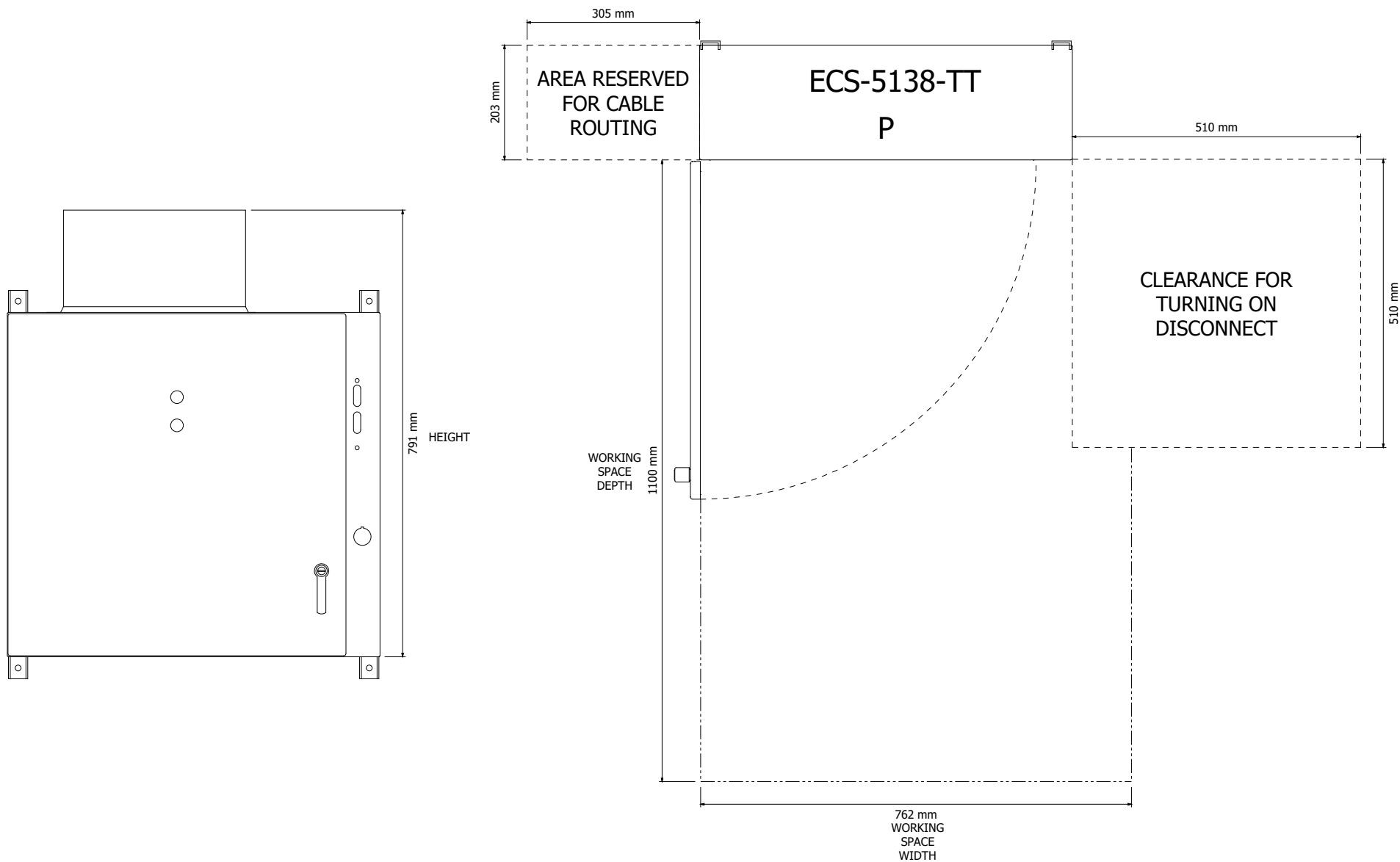
6 OF 7


STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-09-09

EPLAN VERSION: 2.7.3



	GM - STANDARD	GM ENGINEER: HARDWARE TEAM	DESIGN SOURCE:	DESIGN LEADER: GREG DOPPKE	PROGRAMS:	PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL 5KVA 120V CONTROL POWER / 24V PLC POWER	SYSTEM/TOOL NO:	RELEASE DATE: 2021-10-14	REVISION LETTER: DATE:	SECTION LETTER: X	SHEET NUMBER: 7 OF 7	
						SHEET DESCRIPTION: ENCLOSURE FOOTPRINT	DRAWING NUMBER: ECS-5138-TT					
THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.												
STATUS: RELEASED						PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)			SAVE DATE: 2021-09-09		EPLAN VERSION: 2.7.3	

REV	ITEM NUMBER	CHANGE DESCRIPTION	DATE	CHANGE CODE	CHANGED BY

REV	ITEM NUMBER	CHANGE DESCRIPTION	DATE	CHANGE CODE	CHANGED BY

CHANGE CODE	
PR	PRODUCT CHANGE
R	PLANT REQUEST
MP	MECHANICAL PROCESS CHANGE
CP	CONTROL PROCESS CHANGE
M	MECHANICAL DESIGN CHANGE
C	CONTROL DESIGN CHANGE
F	FLOOR AND BUILD CHANGE



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: BOM CHANGE SHEET: ECS-5138-TT-BOM (BASE)

SYSTEM/TOOL NO:

DRAWING NUMBER:
ECS-5138-TT

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

YA

SHEET
NUMBER:

1 OF 3

THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-10-14

EPLAN VERSION: 2.7.3

BOM NAME:
ECS-5138-TT-BOM (BASE)

SOURCE
LEGEND

F - FURNISHED BY GM
M - CONSTRUCTION SOURCE MAKE ITEM
REF - PURCHASED BY OTHERS (NO SUBSTITUTION)

B1 - PURCHASE ITEM OR EQUIVALENT ITEM (GM APPROVAL NOT REQUIRED)
B2 - PURCHASE ITEM (SUBSTITUTION REQUIRES GM APPROVAL) -INTERCHANGEABLE COMPONENT
B3 - PURCHASE ITEM (SUBSTITUTION REQUIRES GM APPROVAL) -NOT AN INTERCHANGEABLE COMPONENT
B4 - PURCHASE ITEM (NO SUBSTITUTION)

NOTE: 'N' SUFFIX ON SOURCE CODE DENOTES AN ITEM THAT IS NOT REQUIRED TO BE STOCKED AS SPARE BY THE PLANT.

BOM REV	ITEM NUMBER	QUANTITY	PART DESCRIPTION	MANUFACTURER	PART NUMBER	SOURCE	GCCL REFERENCE	COMMENTS
	11102	1	OPERATING UNIT WITH ROD VARIABLE DEPTH FLANGE MOUNTED OPERATOR KIT, 3 POLE: CONSISTING OF: HANDLE STEEL CHROME PLATED NEMA 4/4X BLACK=OFF, BLACK=ON SWITCHING MECHANISM MOUNTING DEPTH 8" TO 16" ACCESSORY FOR: 3VA5 125, W/ ADAPTER PLATE	SIEMENS	3VA9138-ODK84	B3		
	11106	1	BREAKER 3VA FRONT MOUNTED ROTARY OPERATOR FMRO FOR 3VA51 GRAY STANDARD WITHOUT ILLUMINATION KIT WITHOUT DOOR INTERLOCK WITHOUT DOOR OPENING FUNCTION WITH HANDLE NEMA 1	SIEMENS	3VA9137-0EK11	B3		
	11110	2	SIEMENS LOW VOLTAGE 3VA CIRCUIT BREAKER ACCESSORY. 3-PIECE STEEL BODY 1-CONDUCTOR BOX TERMINAL - WIRE SIZE: 14 - 3/0 AWG. FOR (125A 3VA5) FRAME UL CIRCUIT BREAKERS.	SIEMENS	3VA9133-0JA11	B3		
	11120	3	TERMINAL COVER 3 POLE; 1 PC. WITH PROBE HOLES FOR VOLTAGE TESTING ACCESSORY FOR: 3VA4/5 125 -	SIEMENS	3VA9131-0WD31	B3		
	11140	1	WIRE CONNECTOR FOR 6 CABLES; 3 PCS.; INCL. TERMINAL COVER EXTENDED WITH PROBE HOLES FOR VOLTAGE TEST; ACCESSORY FOR: 3VA4/5 125	SIEMENS	3VA9133-0JF68	B3		
	11218	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 2 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS	5SJ4102-7HG40	B2		
	11220	3	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 4 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS	5SJ4104-7HG40	B2		
	11225	3	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 10 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS	5SJ4110-7HG40	B2		
	11227	3	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 20 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS	5SJ4120-7HG40	B2		
	11232	1	MINIATURE CIRCUIT BREAKER 240 V 10KA, 1-POLE, C, 50 A, D=70 mm ACCORDING TO UL 489, EQUAL POLARITY	SIEMENS	5SJ4150-7HG40	B2		
	11350	1	CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS H 65KA @ 480V 3-POLE, LINE PROTECTION TM210, FTFM, IN=20A OVERLOAD PROTECTION IR=20A FIXED SHORT-CIRCUIT PROTECTION II=15 X IN WITHOUT CONNECTION	SIEMENS	3VA5120-6ED31-0AA0	B3		
	12504	2	INDICATOR LIGHT, 22 mm, ROUND, METAL, SHINY, GREEN, SMOOTH LENS	SIEMENS	3SU1051-6AA40-0AA0	B3		
	12630	2	HOLDER FOR 3 MODULES, METAL	SIEMENS	3SU1550-0AA10-0AA0	B3		
	12644	1	LED MODULE WITH INTEGRATED LED, 24V AC/DC, GREEN, SPRING-TYPE TERMINAL, FOR FRONT PLATE MOUNTING	SIEMENS	3SU1401-1BB40-3AA0	B3		
	12654	1	LED MODULE WITH INTEGRATED LED, 24-240V AC/DC, GREEN, SPRING-TYPE TERMINAL, FOR FRONT PLATE MOUNTING	SIEMENS	3SU1401-1BH40-3AA0	B3		
	12700	10	BLOCK, TERMINAL, SPRING CLAMP, 600 V, ZDU 2.5-2/3AN, 20 A UL, 26 - 12 AWG, 0.5 - 2.5 mm², FINGER SAFE, 3 POLE SINGLE CIRCUIT, 5 mm, BEIGE	WEIDMULLER	1706010000	B2-N		
	12701	1	BLOCK, TERMINAL, END BARRIER FOR ZDU 2.5-2/3AN 1706010000, BEIGE	WEIDMULLER	1706110000	B2-N		
	12702	0 A/R	BLOCK, TERMINAL, JUMPERS, 2 POLE, ZQV 2.5/2, TOP MOUNT, 5 mm, FOR ZDU 2.5-2/3AN 1706010000	WEIDMULLER	1608860000	B2-N		
	12703	0 A/R	BLOCK, TERMINAL, MARKING TAG, WS 12/5, 12 X 5 mm, FOR ZDU 2.5-2/3AN 1706010000	WEIDMULLER	1609860000	B2-N		
	12712	16	BLOCK, TERMINAL, END ANCHORS - DIN RAIL, EW 35, BEIGE	WEIDMULLER	0383560000	B2-N		
	12730	8	BLOCK, TERMINAL, SPRING CLAMP, 600 V, ZDU 10/3AN, 60 A UL, 16 - 6 AWG, 1.5 - 16 mm², FINGER SAFE, 3 POLE SINGLE CIRCUIT, 10 mm, BEIGE	WEIDMULLER	1767690000	B2-N		
	12731	3	BLOCK, TERMINAL, END BARRIER, FOR ZDU 10/3AN 1767690000 AND ZDU 16/3AN 1768320000, BEIGE	WEIDMULLER	1749580000	B2-N		
	12732	0 A/R	BLOCK, TERMINAL, JUMPERS, 2 POLE, ZQV 10/2, TOP MOUNT, FOR ZDU 10/3AN 1767690000	WEIDMULLER	1739680000	B2-N		
	12733	0 A/R	BLOCK, TERMINAL, MARKING TAG, WS 10/8, 10 X 8 mm, FOR ZDU 10/3AN 1767690000	WEIDMULLER	1906030000	B2-N		
	12734	8	BLOCK, TERMINAL, SPRING CLAMP, GROUND, 600 V, ZPE 10/3AN, 16- 6 AWG, 1.5 - 16 mm², FINGER SAFE, 3 POLE SINGLE CIRCUIT, 10 mm, GREEN-YELLOW	WEIDMULLER	1767670000	B2-N		



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: ECS-5138-TT-BOM (BASE)

SYSTEM/TOOL NO:

DRAWING NUMBER:
ECS-5138-TT

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

YA

SHEET
NUMBER:

2 OF 3

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-10-14

EPLAN VERSION: 2.7.3

BOM NAME:
ECS-5138-TT-BOM (BASE)

SOURCE
LEGEND

F - FURNISHED BY GM
M - CONSTRUCTION SOURCE MAKE ITEM
REF - PURCHASED BY OTHERS (NO SUBSTITUTION)

B1 - PURCHASE ITEM OR EQUIVALENT ITEM (GM APPROVAL NOT REQUIRED)
B2 - PURCHASE ITEM (SUBSTITUTION REQUIRES GM APPROVAL) -INTERCHANGEABLE COMPONENT
B3 - PURCHASE ITEM (SUBSTITUTION REQUIRES GM APPROVAL) -NOT AN INTERCHANGEABLE COMPONENT
B4 - PURCHASE ITEM (NO SUBSTITUTION)

NOTE: '-N' SUFFIX ON SOURCE CODE DENOTES AN ITEM THAT IS NOT REQUIRED TO BE STOCKED AS SPARE BY THE PLANT.

BOM REV	ITEM NUMBER	QUANTITY	PART DESCRIPTION	MANUFACTURER	PART NUMBER	SOURCE	GCCL REFERENCE	COMMENTS
	15742	3	CORD, RECEPTACLE, MINI 3 PIN, FEMALE-INTERNAL THREADS, 2 METER (6.56 FT) PIGTAIL - 1/2 INCH NPT, AC C.C., 16 AWG, 600V, 13A	WOODHEAD - MOLEX	1R3000A20M020	B2		
	15762	3	CORD, RECEPTACLE, MINI 4 PIN DC, FEMALE, INTERNAL THREAD, 2 METER (6.56 FT) PIGTAIL, 1/2 INCH -14 NPT, 16 AWG, 10A, 600V	WOODHEAD - MOLEX	1R4000A39M020	B2		
	15875	0 A/R	3/8 INCH - NPT GASKET SEAL FOR MINI RECEPTACLE	WOODHEAD - MOLEX	00-5090	B1-N		
	15876	0 A/R	LOCKING NUT FOR MINI RECEPTACLE	WOODHEAD - MOLEX	30-1100	B1-N		
	75106	0 A/R	DUCT,50 mm W X 75 mm H, WITH COVER	TEHALIT	DNG75050	B1-N		
	75120	0 A/R	STANDARD MOUNTING RAIL 35X27X15,1.5mm THICK, 2 METERS LONG	PHOENIX	0806602	B1-N		
	75150	2	GROUNDING STRAP, COPPER BRAID 10 mm² X 200 mm LONG WITH 6 mm HOLES, FOR BONDING OF ENCLOSURES	RITTAL OR EQUIVALENT	2412210	B1-N		
	75600	8	HOLE PLUG, 22.5mm DIAMETER	SIEMENS	3SU1900-0FA11-0AA0	B1-N		
	75709	1	KEYLOCK BOX, 9.5" X 3" X1.5"	SAGINAW BAS	SCE-KLB 018115	B2-N		
	75804	0 A/R	TAGS, FOR PUSHBUTTONS & LIGHTS, 48mm X 48MM, WITH 4mm (0.15 INCH) (16PT) FONT, BLACK TEXT ON WHITE BACKGROUND	CUSTOM	GENERIC TAG - PBPL	M-N		
	75805	0 A/R	TAGS, PANEL, STICK ON OR LAMICOID, MINIMUM FONT SIZE - 5mm (20PT)	CUSTOM	GENERIC TAG - PANEL	M-N		
	75813	1	LABEL, WARNING, PICTOGRAM FOR HOT SURFACE, 50 mm H X 50 mm W	BRADY	Y5062718	B1-N		
	75814	1	SAFETY, HOLDER, PLACARD, FOR 11" X 8.5" GRAPHIC AND 11" X 8.5" LOCKOUT LIST SHEETS, GMT RED, SCREEN PRINT "LOCKOUT PLACARD", (3) 8.5" X 11" PRINT POCKET SAVERS, HARDWARE INCLUDED (PORTRAIT)	WECO OR EQUIVALENT	GMT-LOLP	B1-N		
	80010	1	ENCLOSURE BUILT TO LATEST GCCB-1 AND GCCH-1 SPECIFICATIONS, RAL7035 GRAY, 610 mm H X 660 mm W X 203 mm D	HOFFMAN OR EQUIVALENT	CDSC24268LG	B1-N		
	80011	1	SUBPLATE, GALVANIZED, 564 mm H X 564 mm W	HOFFMAN OR EQUIVALENT	CP2424G	B1-N		
	80012	1	WALL MOUNTING BRACKET WITH MOUNTING HARDWARE, PACKAGE CONTAINS (4) BRACKETS	HOFFMAN OR EQUIVALENT	CMFK	B1-N		
	80013	1	DATA POCKET, 152mm H X 152mm W, MOUNTING HARDWARE INCLUDED.	HOFFMAN OR EQUIVALENT	ADP1	B1-N		
	80030	0 A/R	RING TERMINALS, BLUE VINYL-INSULATED, 14 - 16 AWG (1.5 - 2.5 mm²), #4 (M2.5) STUD	PANDUIT	PV14-4R-C	B2		
	80040	1	VERISAFE ABSENCE OF VOLTAGE TESTER, 8' (2.4 m) SYSTEM CABLE, 10' (3.1 m) SENSOR LEADS	PANDUIT	VS-AVT-C08-L10	B3		
	80041	0 A/R	FERRULE, NON-INSULATED, #14 AWG, 12 mm LENGTH, FOR AVT SENSOR LEAD	PANDUIT	F80-12-M	B2		
	80042	1	LITHIUM BATTERY, 3.6 V, SIZE AA	TADIRAN XENO ENERGY SAFT	TL-5903 XLP-060F LS14500	REF		
	80050	1	WIRE CONNECTOR WITH CONTROL WIRE VOLTAGE TAP-OFF 3 UNITS ACCESSORY FOR: 3VA4/5 125	SIEMENS	3VA9133-0JG11	B3		
	80060	1	POWER SUPPLY, SITOP, PSU6200, INPUT: 400-500 VAC, OUTPUT: 24 VDC / 10 A	SIEMENS	6EP3434-7SB00-3AX0	B3		
	80070	1	CIRCUIT BREAKER 3VAs UL FRAME 125 BREAKING CAPACITY CLASS H 65KA @ 480V 3-POLE, LINE PROTECTION TM230, FTAM, IN=15A OVERLOAD PROTECTION IR=15A FIXED SHORT-CIRCUIT PROTECTION II=5...10 X IN WITHOUT CONNECTION	SIEMENS	3VA5195-6EC31-0AA0	B3		



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: ECS-5138-TT-BOM (BASE)

SYSTEM/TOOL NO:

DRAWING NUMBER:
ECS-5138-TT

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

YA

SHEET
NUMBER:

3 OF 3

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-10-14

EPLAN VERSION: 2.7.3

REV	ITEM NUMBER	CHANGE DESCRIPTION	DATE	CHANGE CODE	CHANGED BY

REV	ITEM NUMBER	CHANGE DESCRIPTION	DATE	CHANGE CODE	CHANGED BY

CHANGE CODE	
PR	PRODUCT CHANGE
R	PLANT REQUEST
MP	MECHANICAL PROCESS CHANGE
CP	CONTROL PROCESS CHANGE
M	MECHANICAL DESIGN CHANGE
C	CONTROL DESIGN CHANGE
F	FLOOR AND BUILD CHANGE



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: BOM CHANGE SHEET: ECS-5138-TT-BOM (TT OPTION)

SYSTEM/TOOL NO:

DRAWING NUMBER:
ECS-5138-TT

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

YB

SHEET
NUMBER:

1 OF 2

THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-10-14

EPLAN VERSION: 2.7.3

BOM NAME:
ECS-5138-TT-BOM (TT OPTION)

SOURCE
LEGEND

F - FURNISHED BY GM
M - CONSTRUCTION SOURCE MAKE ITEM
REF - PURCHASED BY OTHERS (NO SUBSTITUTION)

B1 - PURCHASE ITEM OR EQUIVALENT ITEM (GM APPROVAL NOT REQUIRED)
B2 - PURCHASE ITEM (SUBSTITUTION REQUIRES GM APPROVAL) -INTERCHANGEABLE COMPONENT
B3 - PURCHASE ITEM (SUBSTITUTION REQUIRES GM APPROVAL) -NOT AN INTERCHANGEABLE COMPONENT
B4 - PURCHASE ITEM (NO SUBSTITUTION)

NOTE: '-N' SUFFIX ON SOURCE CODE DENOTES AN ITEM THAT IS NOT REQUIRED TO BE STOCKED AS SPARE BY THE PLANT.

BOM REV	ITEM NUMBER	QUANTITY	PART DESCRIPTION	MANUFACTURER	PART NUMBER	SOURCE	GCCL REFERENCE	COMMENTS
	16543	1	TRANSFORMER, CONTROL, 5 KVA, PRIMARY 480-240 V, SECONDARY 240-120 V, 1 PHASE, 50/60 HZ, IP54, 115 °C RISE, 40 °C AMBIENT	SIEMENS	1D1N005	B2		TT=02. THIS IS THE NORTH AMERICA OPTION (480 VAC)
	16553	1	TRANSFORMER, CONTROL, 5 KVA, PRIMARY 440-416-400-380-220-208-200-190 V, SECONDARY 240-120 V, 1 PHASE, 50/60 HZ, IP54, 115 °C RISE, 40 °C AMBIENT	SIEMENS	1H1N005CE	B2		TT=03. THIS IS THE NON-NORTH AMERICA OPTION (440/416/400/380 VAC)
	16563	1	TRANSFORMER, CONTROL, 5 KVA, PRIMARY 480-440-416-380-240-220-208-190 V, SECONDARY 240-120 V, 1 PHASE, 50/60 HZ, IP54, 115 °C RISE, 40 °C AMBIENT	SIEMENS	1X1N005CE	B2		TT=04. THIS IS THE NON-NORTH AMERICA OPTION (480/440/416/380 VAC)



GM - STANDARD

GM ENGINEER:
HARDWARE
TEAM

DESIGN SOURCE:

DESIGN LEADER:
GREG
DOPPKE

PROGRAMS:

PACKAGE DESCRIPTION: POWER DISTRIBUTION PANEL
5KVA 120V CONTROL POWER / 24V PLC POWER
SHEET DESCRIPTION: ECS-5138-TT-BOM (TT OPTION)

SYSTEM/TOOL NO:

RELEASE DATE:
2021-10-14

REVISION
LETTER:

DATE:

SECTION
LETTER:

YB

SHEET
NUMBER:

2 OF 2

THIS MATERIAL IS THE PROPERTY OF GENERAL MOTORS CORPORATION. NO RIGHTS ARE GRANTED TO
USE SUCH MATERIAL FOR ANY PURPOSE OTHER THAN THE FURNISHING OF SERVICES AND SUPPLIES.

STATUS: RELEASED

PROJECT NAME: ECS-5138-TT_Rel(2021-10-14)

SAVE DATE: 2021-10-14

EPLAN VERSION: 2.7,3

DEVICE LIST

DEVICE TAG	ITEM NUMBER	QTY	DESCRIPTION	MANUFACTURER PART NUMBER
E104DISC	11102	1	OPERATING UNIT WITH ROD VARIABLE DEPTH FLANGE MOUNTED OPERATOR KIT, 3 POLE: CONSISTING OF: HANDLE STEEL CHROME PLATED NEMA 4/4X BLACK=OFF, BLACK=ON SWITCHING MECHANISM MOUNTING DEPTH 8" TO 16" ACCESSORY FOR: 3VA5 125, W/ ADAPTER PLATE	SIEMENS 3VA9138-0DK84
	11120	1	TERMINAL COVER 3 POLE; 1 PC. WITH PROBE HOLES FOR VOLTAGE TESTING ACCESSORY FOR: 3VA4/5 125 - -	SIEMENS 3VA9131-0WD31
	11140	1	WIRE CONNECTOR FOR 6 CABLES; 3 PCS.; INCL. TERMINAL COVER EXTENDED WITH PROBE HOLES FOR VOLTAGE TEST; ACCESSORY FOR: 3VA4/5 125	SIEMENS 3VA9133-0JF68
	11350	1	CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS H 65KA @ 480V 3-POLE, LINE PROTECTION TM210, FTFM, IN=20A OVERLOAD PROTECTION IR=20A FIXED SHORT-CIRCUIT PROTECTION II=15 X IN WITHOUT CONNECTION	SIEMENS 3VA5120-6ED31-0AA0
	80030	0 A/R	RING TERMINALS, BLUE VINYL-INSULATED, 14 - 16 AWG (1.5 - 2.5 mm²), #4 (M2.5) STUD	PANDUIT PV14-4R-C
	80050	1	WIRE CONNECTOR WITH CONTROL WIRE VOLTAGE TAP-OFF 3 UNITS ACCESSORY FOR: 3VA4/5 125	SIEMENS 3VA9133-0JG11
E114AVT ABSENCE OF VOLTAGE TESTER	80040	1	VERISAFE ABSENCE OF VOLTAGE TESTER, 8' (2.4 m) SYSTEM CABLE, 10' (3.1 m) SENSOR LEADS	PANDUIT VS-AVT-C08-L10
	80041	0 A/R	FERRULE, NON-INSULATED, #14 AWG, 12 mm LENGTH, FOR AVT SENSOR LEAD	PANDUIT F80-12-M
	80042	1	LITHIUM BATTERY, 3.6 V, SIZE AA	TADIRAN TL-5903 XENO ENERGY XLP-060F
E404DISC	11106	1	BREAKER 3VA FRONT MOUNTED ROTARY OPERATOR FMRO FOR 3VA51 GRAY STANDARD WITHOUT ILLUMINATION KIT WITHOUT DOOR INTERLOCK WITHOUT DOOR OPENING FUNCTION WITH HANDLE NEMA 1	SIEMENS 3VA9137-0EK11
	11110	2	SIEMENS LOW VOLTAGE 3VA CIRCUIT BREAKER ACCESSORY. 3-PIECE STEEL BODY 1-CONDUCTOR BOX TERMINAL - WIRE SIZE: 14 - 3/0 AWG. FOR (125A 3VA5) FRAME UL CIRCUIT BREAKERS.	SIEMENS 3VA9133-0JA11
	11120	2	TERMINAL COVER 3 POLE; 1 PC. WITH PROBE HOLES FOR VOLTAGE TESTING ACCESSORY FOR: 3VA4/5 125 - -	SIEMENS 3VA9131-0WD31
	80070	1	CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS H 65KA @ 480V 3-POLE, LINE PROTECTION TM230, FTAM, IN=15A OVERLOAD PROTECTION IR=15A FIXED SHORT-CIRCUIT PROTECTION II=5...10 X IN WITHOUT CONNECTION	SIEMENS 3VA5195-6EC31-0AA0
E410PWS POWER SUPPLY	80060	1	POWER SUPPLY, SITOP, PSU6200, INPUT: 400-500 VAC, OUTPUT: 24 VDC / 10 A	SIEMENS 6EP3434-7SB00-3AX0
E424LT PROCESSOR POWER ON	12504	1	INDICATOR LIGHT, 22 mm, ROUND, METAL, SHINY, GREEN, SMOOTH LENS	SIEMENS 3SU1051-6AA40-0AA0
	12630	1	HOLDER FOR 3 MODULES, METAL	SIEMENS 3SU1550-0AA10-0AA0
	12644	1	LED MODULE WITH INTEGRATED LED, 24V AC/DC, GREEN, SPRING-TYPE TERMINAL, FOR FRONT PLATE MOUNTING	SIEMENS 3SU1401-1BB40-3AA0
E452CB	11220	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 4 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4104-7HG40
E456CB	11220	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 4 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4104-7HG40
E460CB	11220	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 4 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4104-7HG40

DEVICE TAG	ITEM NUMBER	QTY	DESCRIPTION	MANUFACTURER PART NUMBER
E500VA CONTROL POWER TRANSFORMER MOUNTED OUTSIDE ENCLOSURE	16543	1	TRANSFORMER, CONTROL, 5 KVA, PRIMARY 480-240 V, SECONDARY 240-120 V, 1 PHASE, 50/60 HZ, IP54, 115 °C RISE, 40 °C AMBIENT	SIEMENS 1D1N005
	16553	1	TRANSFORMER, CONTROL, 5 KVA, PRIMARY 440-416-400-380-220-208-200-190 V, SECONDARY 240-120 V, 1 PHASE, 50/60 HZ, IP54, 115 °C RISE, 40 °C AMBIENT	SIEMENS 1H1N005CE
	16563	1	TRANSFORMER, CONTROL, 5 KVA, PRIMARY 480-416-400-380-220-208-190 V, SECONDARY 240-120 V, 1 PHASE, 50/60 HZ, IP54, 115 °C RISE, 40 °C AMBIENT	SIEMENS 1X1N005CE
E510CB	11232	1	MINIATURE CIRCUIT BREAKER 240 V 10KA, 1-POLE, C, 50 A, D=70 mm ACCORDING TO UL 489, EQUAL POLARITY	SIEMENS 5SJ4150-7HG40
E514CB	11218	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 2 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4102-7HG40
E514LT CONTROL POWER ON	12504	1	INDICATOR LIGHT, 22 mm, ROUND, METAL, SHINY, GREEN, SMOOTH LENS	SIEMENS 3SU1051-6AA40-0AA0
	12630	1	HOLDER FOR 3 MODULES, METAL	SIEMENS 3SU1550-0AA10-0AA0
	12654	1	LED MODULE WITH INTEGRATED LED, 24-240V AC/DC, GREEN, SPRING-TYPE TERMINAL, FOR FRONT PLATE MOUNTING	SIEMENS 3SU1401-1BH40-3AA0
E552CB	11225	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 10 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4110-7HG40
E556CB	11225	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 10 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4110-7HG40
E560CB	11225	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 10 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4110-7HG40
E564CB	11227	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 20 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4120-7HG40
E568CB	11227	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 20 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4120-7HG40
E572CB	11227	1	CIRCUIT BREAKER, MINIATURE, 240 V, 14 KA, 1-POLE, C, 20 A, D=70 mm TO UL 489, SAME POLARITY	SIEMENS 5SJ4120-7HG40
MP MOUNTING PANEL	12712	16	BLOCK, TERMINAL, END ANCHORS - DIN RAIL, EW 35, BEIGE	WEIDMULLER 0383560000
	15875	0 A/R	3/8 INCH - NPT GASKET SEAL FOR MINI RECEPTACLE	WOODHEAD - MOLEX 00-5090
	15876	0 A/R	LOCKING NUT FOR MINI RECEPTACLE	WOODHEAD - MOLEX 30-1100
	75106	0 A/R	DUCT,50 mm W X 75 mm H, WITH COVER	TEHALIT DNG75050
	75120	0 A/R	STANDARD MOUNTING RAIL 35X27X15.1.5mm THICK, 2 METERS LONG	PHOENIX 0806602
	75150	2	GROUNDING STRAP, COPPER BRAID 10 mm² X 200 mm LONG WITH 6 mm HOLES, FOR BONDING OF ENCLOSURES	RITTAL OR EQUIVALENT 2412210
	75600	8	HOLE PLUG, 22.5mm DIAMETER	SIEMENS 3SU1900-0FA11-0AA0
	75709	1	KEYLOCK BOX, 9.5" X 3" X1.5"	SAGINAW SCE-KLB BAS 018115
	75804	0 A/R	TAGS, FOR PUSHBUTTONS & LIGHTS, 48mm X 48MM, WITH 4mm (0.15 INCH) (16PT) FONT, BLACK TEXT ON WHITE BACKGROUND	CUSTOM GENERIC TAG - PBPL

DEVICE LIST

DEVICE TAG	ITEM NUMBER	QTY	DESCRIPTION	MANUFACTURER PART NUMBER	DEVICE TAG	ITEM NUMBER	QTY	DESCRIPTION	MANUFACTURER PART NUMBER
MP MOUNTING PANEL	75805	0 A/R	TAGS, PANEL, STICK ON OR LAMICOID, MINIMUM FONT SIZE - 5mm (20PT)	CUSTOM GENERIC TAG - PANEL					
	75814	1	SAFETY, HOLDER, PLACARD, FOR 11" X 8.5" GRAPHIC AND 11" X 8.5" LOCKOUT LIST SHEETS, GMT RED, SCREEN PRINT "LOCKOUT PLACARD", (3) 8.5" X 11" PRINT POCKET SAVERS, HARDWARE INCLUDED (PORTRAIT)	WECO OR EQUIVALENT GMT-LOLP					
	80010	1	ENCLOSURE BUILT TO LATEST GCCB-1 AND GCCH-1 SPECIFICATIONS, RAL7035 GRAY, 610 mm H X 660 mm W X 203 mm D	HOFFMAN OR EQUIVALENT CDSC24268LG					
	80011	1	SUBPLATE, GALVANIZED, 564 mm H X 564 mm W	HOFFMAN OR EQUIVALENT CP2424G					
	80012	1	WALL MOUNTING BRACKET WITH MOUNTING HARDWARE, PACKAGE CONTAINS (4) BRACKETS	HOFFMAN OR EQUIVALENT CMFK					
	80013	1	DATA POCKET, 152mm H X 152mm W, MOUNTING HARDWARE INCLUDED.	HOFFMAN OR EQUIVALENT ADP1					
	75813	1	LABEL, WARNING, PICTOGRAM FOR HOT SURFACE, 50 mm H X 50 mm W	BRADY Y5062718					
LUG PE LUG	12734	1	BLOCK, TERMINAL, SPRING CLAMP, GROUND, 600 V, ZPE 10/3AN, 16- 6 AWG, 1.5 - 16 mm², FINGER SAFE, 3 POLE SINGLE CIRCUIT, 10 mm, GREEN-YELLOW	WEIDMULLER 1767670000					
	12731	1	BLOCK, TERMINAL, END BARRIER, FOR ZDU 10/3AN 1767690000 AND ZDU 16/3AN 1768320000, BEIGE	WEIDMULLER 1749580000					
AC1	15742	1	CORD, RECEPTACLE, MINI 3 PIN, FEMALE-INTERNAL THREADS, 2 METER (6.56 FT) PIGTAIL - 1/2 INCH NPT, AC C.C., 16 AWG, 600V, 13A	WOODHEAD - MOLEX 1R3000A20M020					
AC2	15742	1	CORD, RECEPTACLE, MINI 3 PIN, FEMALE-INTERNAL THREADS, 2 METER (6.56 FT) PIGTAIL - 1/2 INCH NPT, AC C.C., 16 AWG, 600V, 13A	WOODHEAD - MOLEX 1R3000A20M020					
AC3	15742	1	CORD, RECEPTACLE, MINI 3 PIN, FEMALE-INTERNAL THREADS, 2 METER (6.56 FT) PIGTAIL - 1/2 INCH NPT, AC C.C., 16 AWG, 600V, 13A	WOODHEAD - MOLEX 1R3000A20M020					
HDC1	15762	1	CORD, RECEPTACLE, MINI 4 PIN DC, FEMALE, INTERNAL THREAD, 2 METER (6.56 FT) PIGTAIL, 1/2 INCH -14 NPT, 16 AWG, 10A, 600V	WOODHEAD - MOLEX 1R4000A39M020					
HDC2	15762	1	CORD, RECEPTACLE, MINI 4 PIN DC, FEMALE, INTERNAL THREAD, 2 METER (6.56 FT) PIGTAIL, 1/2 INCH -14 NPT, 16 AWG, 10A, 600V	WOODHEAD - MOLEX 1R4000A39M020					
HDC3	15762	1	CORD, RECEPTACLE, MINI 4 PIN DC, FEMALE, INTERNAL THREAD, 2 METER (6.56 FT) PIGTAIL, 1/2 INCH -14 NPT, 16 AWG, 10A, 600V	WOODHEAD - MOLEX 1R4000A39M020					