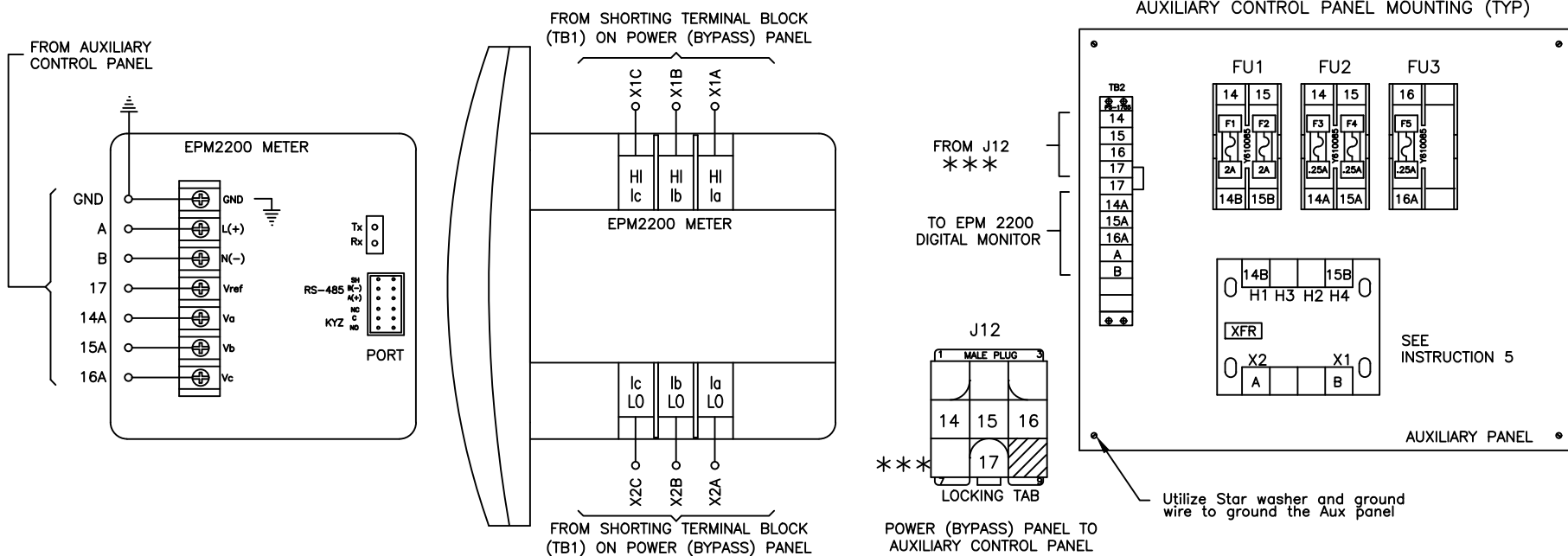


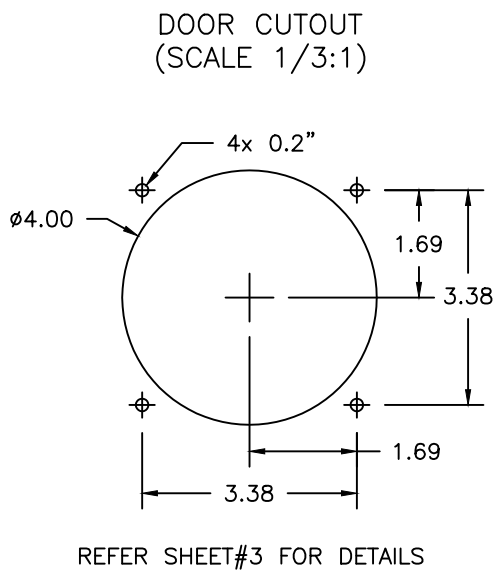
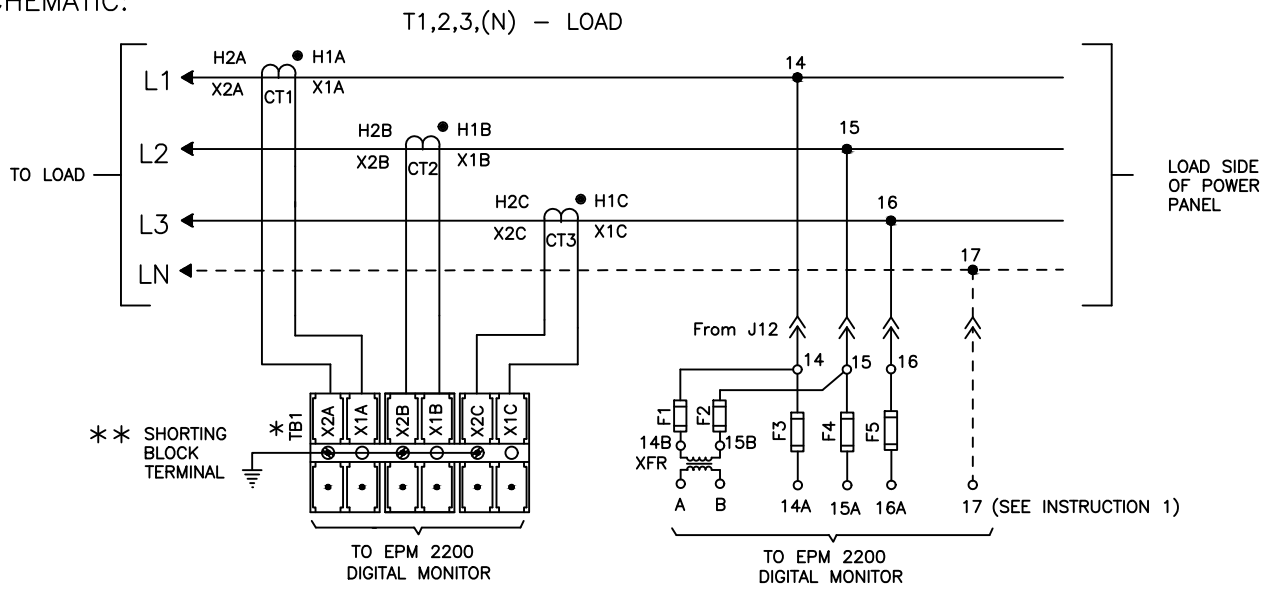


WIRING:

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
2	C075551	08/29/19	YP MAS



SCHEMATIC:



LEGEND:

- EPM 2200...Digital Power Monitor, GE Zenith P/N: PL2200C1S for 10-416 volts (L-N); 0-720 volts (L-L). For 3Ø-3 Wire and 3Ø-4 Wire 60 Hz. voltage systems.
 - F1,F2.....Fuses, 2A, SLO-BLO.....PS-8881
 - F3,F4,F5.....Fuses, 0.250A, SLO-BLO.....PS-8883
 - * CT1,2,3.....Current Transformers, 5 A secondary (See table)
 - ** TB1.....Shorting Terminal Block...Y610091
4" length of DIN rail: Y610001
 - TB2.....Terminal Block....PS-1755
 - CT bracket....T-2078 (FOR 30-400A ATS)
 - FU1,2,3.....Fuse Block...Y610085
 - XFR.....Transformer...50VA 480:120VAC...K-3071
NO XFR FOR 120-240V APPLICATION
 - Ring tongue....RA753 QTY(3)...FOR M12, 1/2" BOLT
 - Ring tongue....RA18-38 QTY(3)...FOR M8/M10, 5/16-3/8" BOLT
 - J12.....1-480706-0 Pin Housing 9 pt.
1-480707-0 Socket Receptical 9 pt.
350918-3 Pin Male (Qty = 4)
350919-3 Pin Female (Qty= 4)
 - Star Washer....1993100-0.250 (Qty = 1) For Grounding
 - AUX.....Auxiliary Panel....26P-1895
 - WIRE.....WMW-403 (BLACK -15FT OR As required),
.....WMW-412 (WHITE- As required)
 - CONNECTOR.....18RA-2577 QTY(6) Female disconnect (Meter connection)
- NOTE: FOR 30-200A ATS with Meter option, utilize larger enclosure (46"Hx24"Wx14.13"D)

ATS AMPERAGE	CT RATIO	CT PART#
		ATS (NON BYPASS)
30	50:5	PS-4118
80	100:5	PS-4119
100	100:5	PS-4119
150	150:5	PS-4120
225, 260	300:5	PS-4121
400	400:5	PS-4122
600	600:5	PS-4928
800	800:5	PS-4929
1000	1000:5	PS-4930
1200	1200:5	PS-4930

OPERATION: The EPM 2200 is a cost effective Digital Monitor, designed to replace analog meters with selector switches. It monitors and displays Voltage (Phase to Neutral and Phase to Phase), Current (Phase A, B and C), W, VAR, VA, Wh, Varh, VAh, Energy, PF, & Frequency.

INSTRUCTIONS:

1. On 4-wire WYE voltage systems, wire terminal -Vref to the Neutral bar (NB) or to the Load Neutral (LN) on transfer switch (Use white wire).
Select 3 EL. WYE in the meter programming setup.
On 3-wire GROUNDED WYE or DELTA voltage systems, wire terminal -Vref of EPM 2200 to Terminal -Vb
Omit CT2 Current transformer. Select 2 CT DELTA in the meter programming setup.
2. The EPM 2200 Power monitor must be properly configured according to the particular power system configuration. If the EPM 2200 default settings do not pertain to the connected power system, use the meter's front panel to perform Basic Setup to reconfigure the settings.
3. Refer to EPM 2200 Installation & Operation Manual for more details.
4. **⚠ DANGER: - HAZARDOUS CONDITIONS.** CT SECONDARY CIRCUITS ARE CAPABLE OF GENERATING LETHAL VOLTAGES AND CURRENTS WHEN OPEN CIRCUITED WITH THEIR PRIMARY CIRCUIT ENERGIZED. Standard safety precautions should be followed while performing any installation or service on the device (for example, shorting the CT secondaries, etc.).
5. When there is no XFR (for 120-240V application), connect 14B & 15B wire from fuse block to the Meter.

LEGEND	
	WIRE CONNECTION
	WIRE ON TERMINAL BLOCK
	WIRE IN INTERCONNECT PLUG
*	SEE INSTRUCTION 4
**	MOUNT ON OR ADJACENT TO ATS POWER PANEL
***	SEE INSTRUCTION 1

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THIRD ANGLE PROJECTION

FOR ADDITIONAL INFO REFER TO	SIGNATURES	DATE
APPLIED PRACTICES	MODEL YP	04/03/19
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DETAIL	
TOLERANCES ON:	CHECKED YP	04/03/19
2 PL. DECIMALS ± .020	ENGRG YP	04/03/19
3 PL. DECIMALS ± .005	MFG	
ANGLES ± 1°	QUALITY	
FRACTIONS ± 1/64	ISSUED	
FINISH	DRAWING FILE: 71r-2011.DWG	
	MODEL / ASSEMBLY FILE: ZTG(D)	
AutoCad Generated	# CTQs	CRITICAL TO QUALITY CHARACTERISTIC

ABB

TITLE
M90 EPM 2200 DIGITAL METER WITHOUT COMMUNICATION

FIRST MADE FOR: ZTG(D)

SIZE	CAGE CODE	DWG NO
B		70R-2011

SCALE: N/A

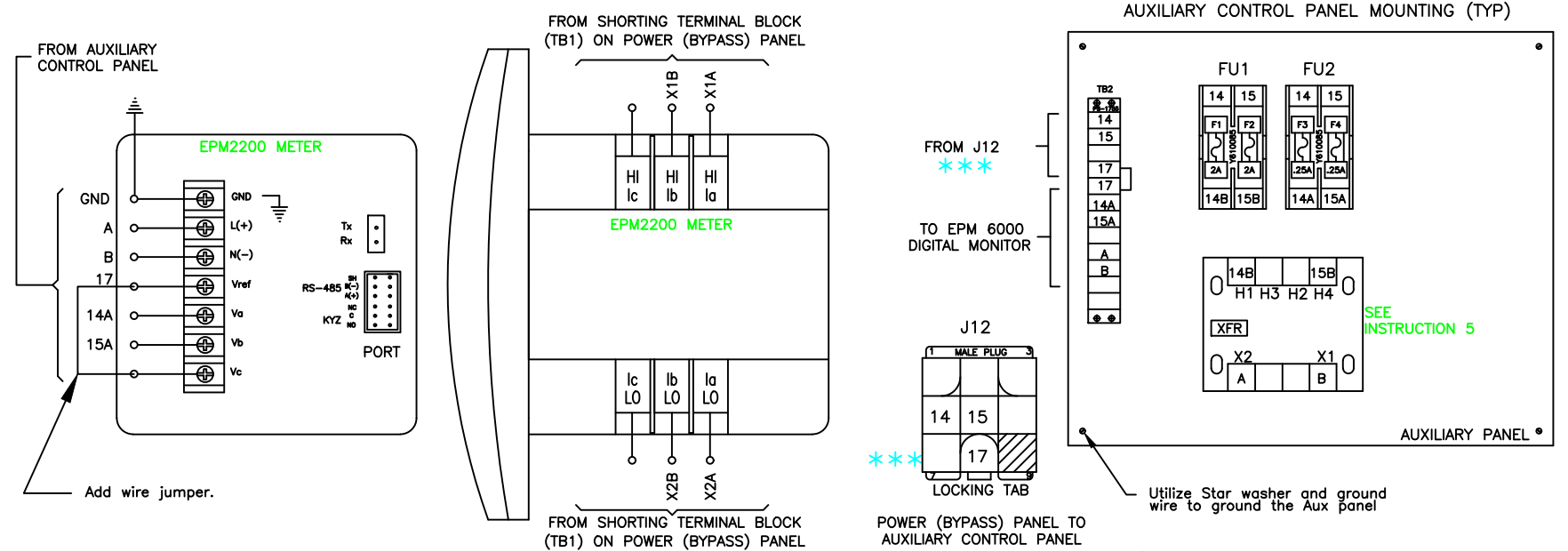
SHEET 1 OF 3



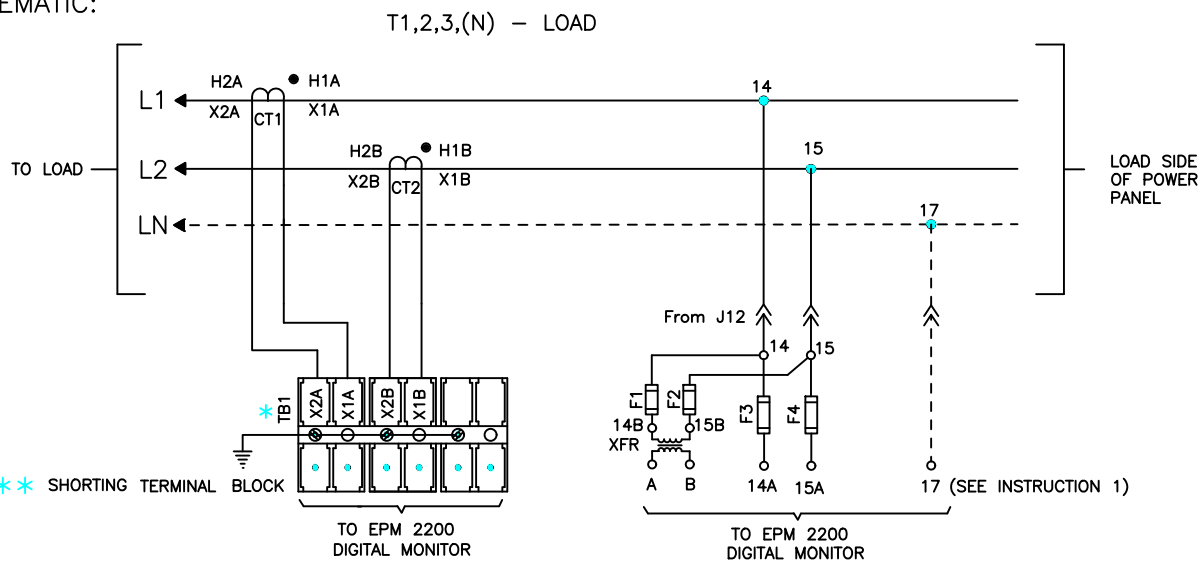


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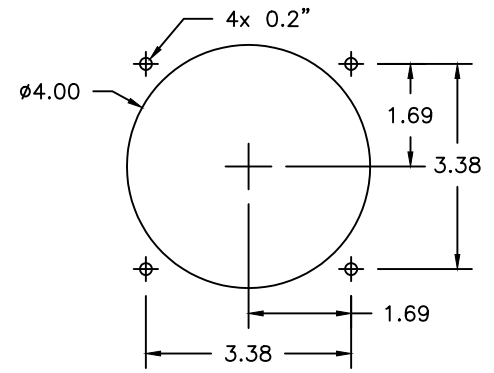
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
2	C075551	UPDATED DWG 08/29/19	YP MAS



SCHEMATIC:



DOOR CUTOUT (SCALE 1/3:1)



REFER SHEET#3 FOR DETAILS

LEGEND:

- EPM 2200...Digital Power Monitor, GE Zenith P/N: PL2200C1S for 10-416 volts (L-N); 0-720 volts (L-L). For 3ø-3 Wire and 3ø-4 Wire 60 Hz. voltage systems.
 - F1,F2.....Fuses, 2A, SLO-BLO.....PS-8881
 - F3,F4.....Fuses, 0.250A, SLO-BLO.....PS-8883
 - CT1,2,3.....Current Transformers, 5 A secondary (See table)
 - TB1.....Shorting Terminal Block...Y610091
4" length of DIN rail: Y610001
 - TB2.....Terminal Block....PS-1755
 - CT bracket....T-2078 (FOR 30-400A ATS)
 - FU1,2.....Fuse Block...Y610085
 - XFR.....Transformer...50VA 480:120VAC...K-3071
NO XFR FOR 120-240V APPLICATION
 - Ring tongue....RA753 QTY(3)...FOR M12, 1/2" BOLT
 - Ring tongue....RA18-38 QTY(3)...FOR M8/M10, 5/16-3/8" BOLT
 - J12.....1-480706-0 Pin Housing 9 pt
1-480707-0 Socket Receptical 9 pt.
350918-3 Pin Male (Qty = 4)
350919-3 Pin Female (Qty= 4)
 - Star Washer....1993100-0.250 (Qty = 1) For Grounding
 - AUX.....Auxiliary Panel....26P-1895
 - WIRE.....WMW-403 (BLACK -15FT OR As required),
.....WMW-412 (WHITE- As required)
 - CONNECTOR.....18RA-2577 QTY(4) Female disconnect
- NOTE: FOR 30-200A ATS with Meter option, utilize larger enclosure (46"Hx24"Wx14.13"D)

ATS AMPERAGE	CT RATIO	CT PART NUMBER
30	50:5	PS-4118
80	100:5	PS-4119
100	100:5	PS-4119
150	150:5	PS-4120
225, 260	300:5	PS-4121
400	400:5	PS-4122
600	600:5	PS-4928
800	800:5	PS-4929
1000	1000:5	PS-4930
1200	1200:5	PS-4930

OPERATION: The EPM 2200 is a cost effective Digital Monitor, designed to replace analog meters with selector switches. It monitors and displays Voltage (Phase to Neutral and Phase to Phase), Current (Phase A, B and C), W, VAR, VA, Wh, VARh, VAh, Energy, PF, & Frequency.

INSTRUCTIONS:

- On SINGLE PHASE voltage system wire terminals 1 and 4 to the Ground bar (stud) or the Neutral bar (NB) or to the Load Neutral (LN) on Transfer switch. Use CT1 and CT2 only. Fuse F5 and Fuse holder FU3 are not available. Select 3 EL WYE in the meter programming set-up.
- If the EPM 2200 default settings do not pertain to the connected power system, use the meter's front panel to perform Basic Setup to reconfigure the settings.
- Refer to EPM 2200 Installation & Operation Manual for more details.
- ⚠ DANGER: - HAZARDOUS CONDITIONS.** CT SECONDARY CIRCUITS ARE CAPABLE OF GENERATING LETHAL VOLTAGES AND CURRENTS WHEN OPEN CIRCUITED WITH THEIR PRIMARY CIRCUIT ENERGIZED. Standard safety precautions should be followed while performing any installation or service on the device (for example, shorting the CT secondaries, etc.).
- When there is no XFR (for 120-240V application), connect 14B & 15B wire from fuse block to the Meter.



METER DISPLAY:

A-B

A-N

B-N

LEGEND

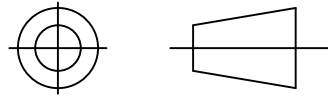
- WIRE CONNECTION
- WIRE ON TERMINAL BLOCK
- ➔ WIRE IN
- ➔ INTERCONNECT PLUG
- * SEE INSTRUCTION 4
- ** MOUNT ON OR ADJACENT TO ATS (BYPASS) POWER PANEL
- *** SEE INSTRUCTION 1

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THIRD ANGLE PROJECTION



FOR ADDITIONAL INFO REFER TO	SIGNATURES	DATE
APPLIED PRACTICES	MODEL YP	04/03/19
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DETAIL	
TOLERANCES ON:	CHECKED	
2 PL. DECIMALS ± .020	ENGRG YP	04/03/19
3 PL. DECIMALS ± .005	MFG	
ANGLES ± 1°	QUALITY	
FRACTIONS ± 1/64	ISSUED	
FINISH	DRAWING FILE: 70r-2011.DWG	FIRST MADE FOR: ZTG(D)
AutoCad Generated	MODEL / ASSEMBLY FILE: ZTG(D)	SIZE CAGE CODE
# CTQs	CRITICAL TO QUALITY CHARACTERISTIC	DWG NO



TITLE
M90 EPM 2200-SINGLE PHASE WITHOUT COMMUNICATION

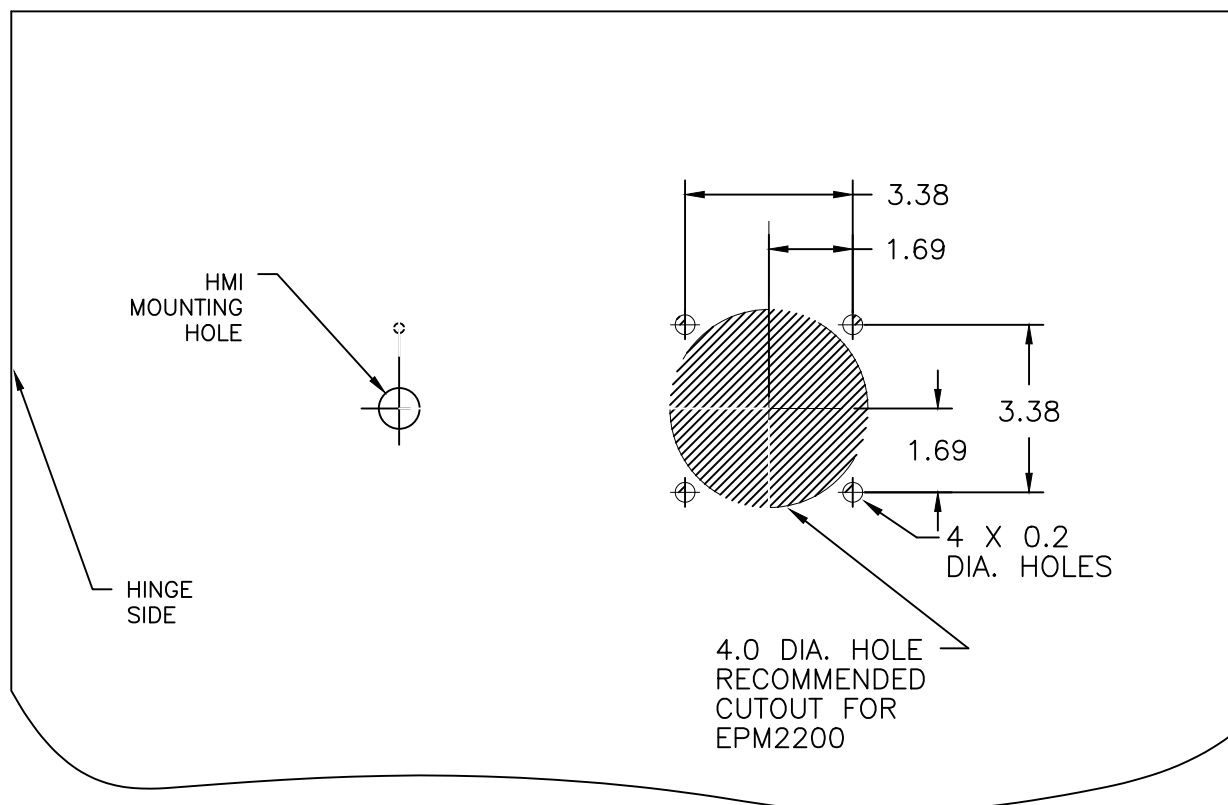
SCALE: N/A	SHEET 2 OF 3
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
2	C075551	REVISED DWG	08/29/19 YP MAS

MOUNTING HOLE LAYOUT (DOOR INSIDE VIEW)

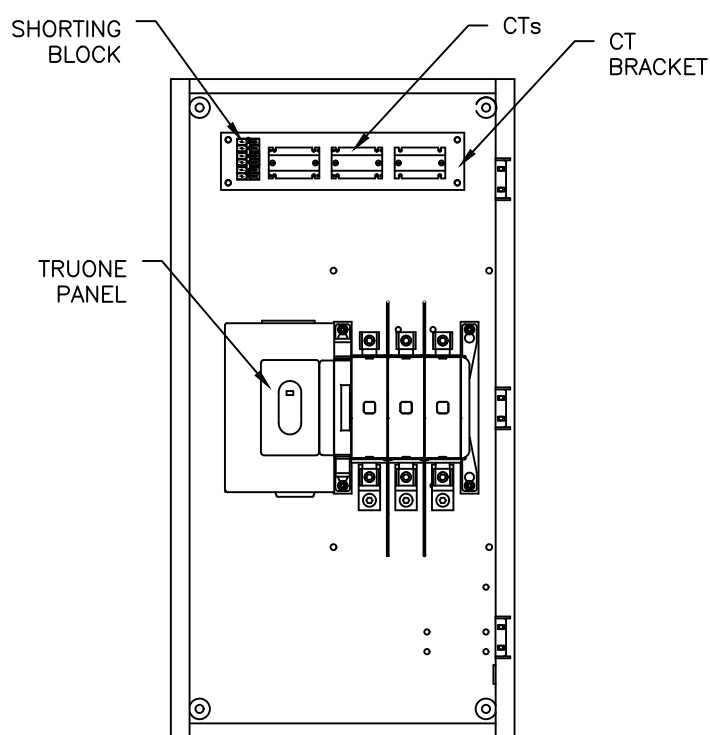


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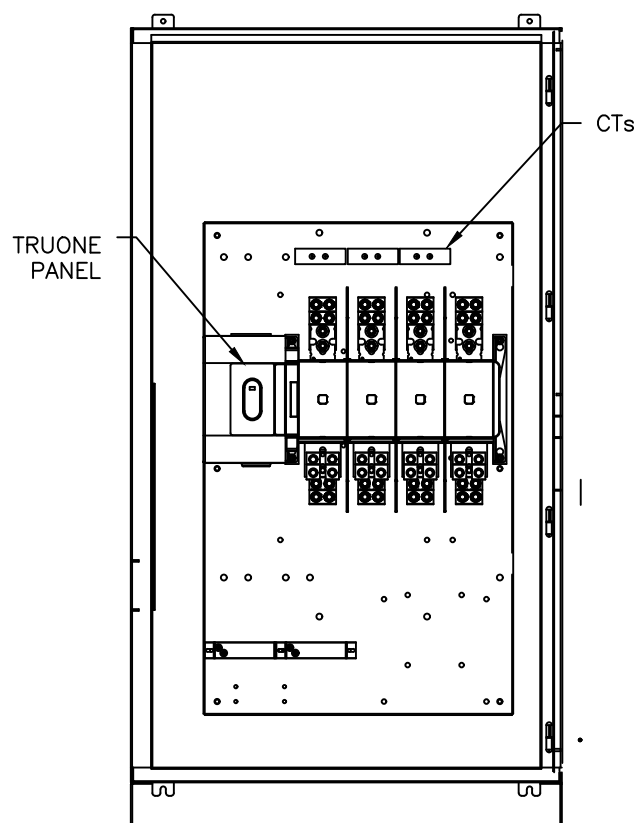
- METER HOLE LOCATION SHOWN FOR REFERENCE ONLY. USE MANUFACTURING FIXTURE TO LOCATE THE METER HOLE.

INSTALLATION INSTRUCTION:

- DRILL THE HOLE ON THE CABINET DOOR FOR METER.
- USE THE MOUNTING INSTRUCTION PROVIDED IN THE METER O&M.
- USE RING TERMINALS (RA753 OR RA18-38) ON LOAD LUG ON PHASE A, B & C OF POWER PANEL TO GET LINE VOLTAGE THROUGH J12 PLUG TO THE AUXILIARY PANEL.
- MOUNT SHORTING BLOCK ON CT BRACKET FOR 40-400A. AND MOUNT NEAR THE POWER PANEL FOR OTHER AMPERAGES.



FOR 40-400A UNIT
(WITHOUT DOOR)



FOR 800-1200A
UNIT
(WITHOUT DOOR)

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	<p>TOLERANCES ON:</p> <p>2 PL. DECIMALS ± .020</p> <p>3 PL. DECIMALS ± .005</p> <p>ANGLES ± 1°</p> <p>FRACTIONS ± 1/64</p> <p>FINISH ✓</p>	<p>CHECKED</p> <p>ENGRG YP</p> <p>MFG</p> <p>QUALITY</p> <p>ISSUED</p>	<p>04/03/19</p>	
<p>THIRD ANGLE PROJECTION</p>	<p>AutoCad Generated</p>	<p>DRAWING FILE: 70r-2011.dwg</p> <p>MODEL / ASSEMBLY FILE: ZTG(D)</p>	<p>CRITICAL TO QUALITY CHARACTERISTIC</p>	<p>SCALE: N/A</p> <p>SHEET 3 OF 3</p>

