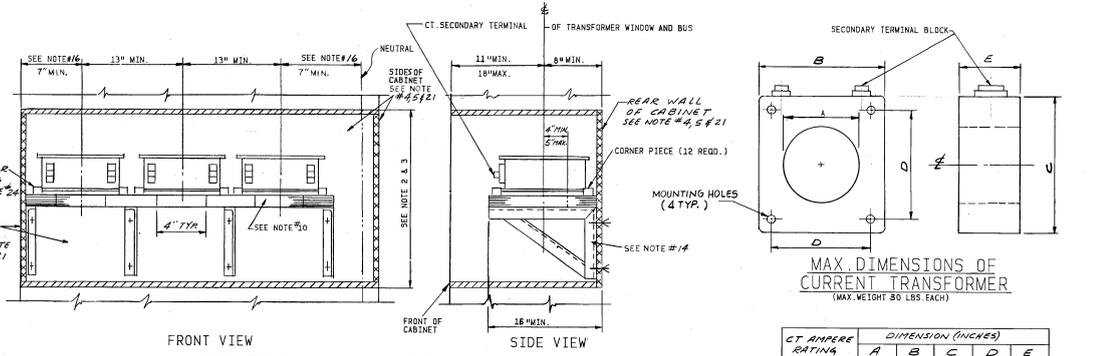


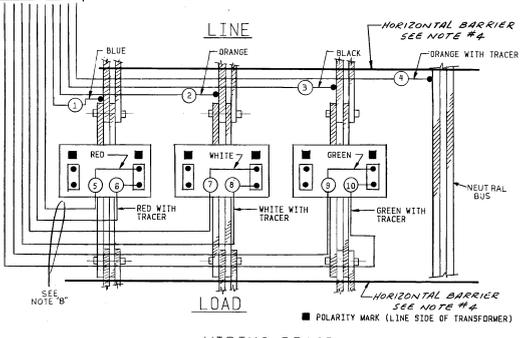
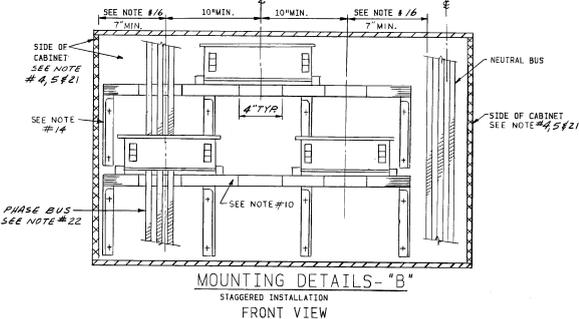
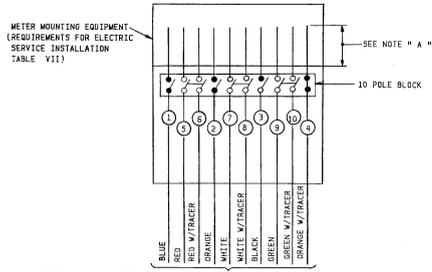
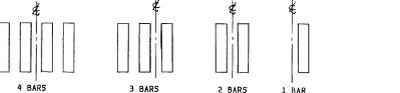
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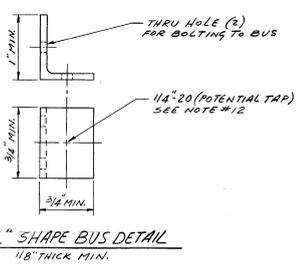


MAX. DIMENSIONS OF CURRENT TRANSFORMER
(MAX. WEIGHT 30 LBS. EACH)

CT AMPERE RATING	DIMENSION (INCHES)				
	A	B	C	D	E
1000/2000	5 3/4	8 1/2	8 11/16	6 3/4	4
2000/4000	8 1/8	11	11 3/16	8 1/2	4



- NOTES:** (FOR WIRING)
- A- NO. 10 AWG. SOLID COPPER WIRE HAVING MINIMUM LENGTHS OF 18 INCHES ARE TO BE LEFT ABOVE THE MOUNTING EQUIPMENT.
 - B- WIRES NOS. 5, 6, 7, 8, 9 & 10 ARE TO BE LEFT WITH SUFFICIENT SLACK TO REACH ANY SET OF SECONDARY TERMINALS, BUT ARE TO BE CONNECTED TO CT'S BY CON EDISON.
 - C- TRANSFORMERS ARE SHOWN FOR SERVICE FROM THE TOP. IF SERVICE IS FROM THE BOTTOM, THE TRANSFORMERS ARE TO BE SET WITH THE "LINE" MARKING OF TRANSFORMERS AT THE BOTTOM.
 - D- ALL METERING WIRES (CURRENT AND POTENTIAL) SHALL BE CONTINUOUS WITHOUT SPLICES FROM CURRENT TRANSFORMERS TO METERS. THE WIRES SHALL BE INSTALLED IN RIGID CONDUIT OR ELECTRICAL METALLIC TUBING, THROUGH OR THRU INSTALLATIONS ARE NOT ACCEPTABLE. THE CONDUIT MUST BE CONTINUOUS FROM THE CURRENT TRANSFORMER ENCLOSURE TO THE METER MOUNTING EQUIPMENT.
 - E- MULTIPLE CONDUCTOR CABLE IS TO BE #9 AWG. (19 / 22) STRANDED OR #10 AWG. SOLID COPPER WIRE WITH R-OR-T TYPE INSULATION. SINGLE CONDUCTORS ARE TO BE #10 AWG. SOLID COPPER WITH R-OR-T TYPE INSULATION. INSULATED RING TONGUE LINES ARE TO BE USED FOR CONNECTION OF STRANDED WIRES TO THE METER CONNECTION BLOCK AND TO LINE BUS, SPADE OR FORK TYPE LINES ARE NOT ACCEPTABLE.
 - F- DISTANCE BETWEEN CURRENT TRANSFORMERS AND METER MOUNTING EQUIPMENTS IS NOT TO EXCEED 25 FEET.
 - G- ALL WIRES ARE TO BE COLOR CODED AS SHOWN.



- NOTES:**
- 1- THE CUSTOMER OR CONSULTANT SHALL RECEIVE OFFICIAL CON EDISON APPROVAL OF THE MANUFACTURER'S EQUIP. DWG. PRIOR TO THE SWITCHGEAR ASSEMBLY OR INSTALLATION, NONCOMPLIANCE WITH COMPANY RULES AND SPECIFICATIONS MAY CAUSE DELAYS AND NON-APPROVAL.
 - 2- THE INSTALLATION AND SWITCHGEAR SHALL MEET THE NATIONAL AND N.Y.C. ELECTRICAL CODES.
 - 3- THE CURRENT TRANSFORMER ENCLOSURE OR COMPARTMENT SHALL BE SEPARATE, SEALABLE, PROPERLY BARRIERED AND ACCESSIBLE SUCH THAT THE CURRENT TRANSFORMERS CAN BE READILY INSTALLED OR CHANGED.
 - 4- CURRENT TRANSFORMERS ARE TO BE INSTALLED ON THE LINE SIDE OF A SERVICE DISCONNECT WHEN A SINGLE CUSTOMER IS TO BE SUPPLIED BY THE SERVICE WHEN PERMITTED BY REGULATORY AUTHORITIES HAVING JURISDICTION. EXCEPTION: 380V/480V VOLT SERVICE REQUIRES A DISCONNECT SWITCH BEFORE THE CT CABINET UNLESS OTHERWISE DIRECTED BY CON EDISON.
 - 5- IN MULTI-COMPARTMENT SWITCHGEAR, THE CURRENT TRANSFORMER COMPARTMENT SHALL BE SEPARATED FROM THE OTHER EQUIPMENT BY HORIZONTAL RESTRICTING BARRIERS TO PREVENT ANY SERVICE PARTS, TOOLS, ETC. FROM FALLING ONTO A LIVE PART OF EQUIPMENT LOCATED BELOW. THE BARRIERS SHALL BE SECURELY FASTENED IN PLACE, ANY OUTSIDE EDGE OF THE BARRIER NOT IN CONTACT WITH A COMPARTMENT WALL SHALL HAVE AN UPRIGHT FLANGE AT LEAST 3/4 INCH HIGH. THE BARRIER SHALL BE 1/8" THICK, NON-METALLIC (EX. GLASSIC MATTER OR EQUIVALENT) AND REINFORCED TO PROVIDE MECHANICAL STRENGTH.
 - 6- THE ENCLOSURE HOUSING THE CURRENT TRANSFORMERS (CT'S) SHALL BE CONSTRUCTED OF ALUMINUM INCLUDING THE REAR AND TWO SIDEWALLS WITH THE EXCEPTION OF THE STRUCTURAL FRAME AND HORIZONTAL RESTRICTING BARRIERS.
 - 7- THE SWITCHGEAR SECTION HOUSING THE TRANSFORMER SHALL BE DESTROYED WITH A SEPARATE SEALABLE HINGED DOUBLE DOOR AND THREE WAY CATCH. THE DOOR HANDLE IS TO HAVE FACILITIES TO ACCOMMODATE STANDARD SEALS AND PADLOCKS WITH 5/16 INCH HASP. THE DOORS ARE TO SPAN THE OVERALL WIDTH OF THE CURRENT TRANSFORMER COMPARTMENT. ADEQUATE SPACE SHALL BE PROVIDED ABOVE AND BELOW BUS JOINTS TO ALLOW DISCONNECTION OF THE BUS WITHOUT THE USE OF SPECIAL TOOLS.
 - 8- AN OPENING IN THE BARRIER OR A SIDEWALL OF THE SWITCHGEAR THROUGH WHICH A FACTORY INSTALLED WIRE, CABLE OR BUS PASSES, OR THROUGH WHICH A FIELD INSTALLED WIRE CAN PASS, SHALL BE PROVIDED WITH A BUSHING TO PREVENT ANY SHARP EDGES IN CONTACT WITH THE WIRE, CABLE OR BUS. A BUSHING OF RUBBER, NEOPRENE OR HOT MOLDED SHELLAC AND TAR COMPOSITION IS NOT ACCEPTABLE. AN ACCEPTABLE BUSHING MAY BE OF GLASS, PORCELAIN, HARD FIBER, PHENOLIC COMPOSITION, COLD MOLDED COMPOSITION OR THE OPENING SO FORMED THAT THERE WILL BE NO SHARP EDGES WITH WHICH INSULATED CONDUCTORS MAY COME IN CONTACT.
 - 9- HORIZONTAL BARRIERS SHALL NOT BE VENTILATED.
 - 10- THERE IS TO BE A CLEAR SPACE OF AT LEAST THREE (3) FEET IN FRONT OF THE CURRENT TRANSFORMER ENCLOSURE. IF THE CURRENT TRANSFORMER ENCLOSURE IS NOT LOCATED IN A SEPARATE ROOM BUT IS LOCATED IN AN OPEN FLOOR AREA, AN UNOBTURATED SPACE OF AT LEAST FIVE (5) FEET MUST BE MAINTAINED IN FRONT OF THE EQUIPMENT.
 - 11- THE SHELF SHALL BE DESIGNED TO HAVE 3/8" SHARP EDGES TO FACILITATE THE INSTALLATION AND REPLACEMENT OF CURRENT TRANSFORMERS. THE SHELF SHALL BE MADE OF NON-METALLIC MATERIAL (EX. GLASSIC MAT. OR EQUIVALENT).
 - 12- MOUNTING OF THE TRANSFORMER MAY BE STAGGERED VERTICALLY, IF CLOSER CENTERS ARE REQUIRED WITH A MINIMUM OF 10 INCHES BETWEEN BUS CENTERS. (SEE MOUNTING DETAIL - B).
 - 13- THE POTENTIAL WIRING ((1), (2), (3), (4)) IS TO BE CONNECTED TO THEIR RESPECTIVE BUS ON THE LINE SIDE AND ADJACENT TO THE CURRENT TRANSFORMERS. FOR COPPER BUS, THE CONNECTORS SHALL USE 1/4"-20 SCREWS AND LOCKWASHERS. FOR ALUMINUM BUS, ZINC COATED SCREWS AND LOCKWASHERS, AND TIN COATED WIRE TERMINALS SHALL BE USED. PREPARE BUS WITH PENETROX-A OR EQUIVALENT. THE SCREW HEAD SHALL FACE THE CABINET'S FRONT VIEW BY MEANS OF AN "L" SHAPED BUS OR EQUIVALENT.
 - 14- THE TRANSFORMERS ARE TO BE INSTALLED SO THAT THE POLARITY MARKING ON THE TRANSFORMERS ARE ON THE LINE SIDE AND THE SECONDARY CONNECTORS ARE READILY ACCESSIBLE.
 - 15- THE SHELF SUPPORTING BRACKETS SHALL BE OF NON-CONDUCTIVE MATERIAL TO SUPPORT THE SHELF AND CURRENT TRANSFORMERS.
 - 16- PHASE BUS BARS, INCLUDING NEUTRAL BUS BARS, SHALL BE ARRANGED FACE TO FACE, THE BUS BARS SMALLER DIMENSIONED EDGE SHALL FACE THE FRONT.
 - 17- A MINIMUM OF 7 INCHES OF SPACE SHALL BE PROVIDED FROM THE CENTER LINE OF THE CURRENT TRANSFORMER WINDOW AND ADJACENT EDGE OF THE NEUTRAL BUS OR ENCLOSURE SIDEWALL.
 - 18- THE NUMBER OF BUS BARS SHALL NOT EXCEED (4) FOUR FOR EACH PHASE.
 - 19- COPPER OR ALUMINUM BUS BARS SHALL BE NOMINALLY 1/4 INCH THICK AND NOT LESS THAN 4 INCHES NOR MORE THAN 6 INCHES WIDE. BUS BAR CONFIGURATIONS SHALL BE FLAT AND RECTANGULAR.
 - 20- BUS BAR CONNECTIONS AND JOINTS SHALL BE INTERLEAVED (NOT STACKED) AND HAVE SPACING BETWEEN BUS APPROXIMATELY THE THICKNESS OF ONE BUS BAR. SEE RISER BUS ARRANGEMENT DETAIL.
 - 21- BOLTED JOINTS SHALL BE PLATED WITH SILVER, TIN, NICKEL OR CHROMIUM.
 - 22- THE MINIMUM ELECTRICAL CLEARANCE FOR THE SEPARATION OF LIVE PARTS AND GROUND SHALL BE 0.5 INCHES FOR 250 VOLTS AND BELOW AND 1.0 INCHES FOR ABOVE 250 VOLTS.
 - 23- IN MULTI-COMPARTMENT SWITCHGEAR, SERVICE CABLE CONNECTIONS SHALL NOT BE MADE TO THE BUS WITHIN THE CURRENT TRANSFORMER COMPARTMENT.
 - 24- A BOLTED JOINT IN A BUS BAR SHALL BE ACCESSIBLE FOR TIGHTENING WITHOUT REMOVING INSULATING TAPE.
 - 25- THE TRANSFORMERS ARE TO BE POSITIONED ON THE SUPPORTING SHELF BY MEANS OF CORNER PIECES OR OTHER SUITABLE MEANS. IF FRONT AND REAR HOLD-DOWN STRAPS ARE USED ACROSS THE TOP OF THE CT'S, THE CT'S MOUNTING HOLES SHALL BE USED IN CONJUNCTION WITH HOLD-DOWN STRAPS.

MOUNTING DETAILS AND WIRING FOR 1000-4000 AMP. WINDOW TYPE CURRENT TRANSFORMERS

CONSOLIDATED EDISON COMPANY OF N.Y., INC.
 DISTRIBUTION ENGINEERING DEPARTMENT

DATE 5/2/51 SPEC. MES 377 REV. 22
 LAST REV. 1/8/01 NO.

FIELD MANUAL NO. 4 SECTION B & FIELD MANUAL NO. 18 SECTION 3

THIS DWG. SUPERSEDES DWG. U-8-26284

NO.	DATE	DESCRIPTION	BY	CHKD.
1	5/2/51	ISSUED		
2	1/8/01	REVISED		