

MULTI-TAP 3PH AC INPUT VOLTAGE ADJUSTMENT**BACKGROUND**

Some ATEvo three-phase models feature power isolation transformers (T1) with dual-input voltage designs. In these units, the transformer "taps" (T1-H#) can be reconnected in the field to change the input supply voltage accepted by the ATEvo. Depending on the transformer design, taps can be adjusted to choose, 208/240, 220/240, 380/416, or 550/600 Vac supplies.

To identify the ATEvo factory-set 3PH ac input voltage, refer to the **CAUTION** tag (p/n **JC0011-01**) affixed to the ac input circuit breaker (CB1). Once changed, the ac input listings (Vac & Aac) on the silver data nameplate decal need to be altered or replaced.


SAFETY**WARNING**

Before starting work, disconnect and lock out all external ac and dc power sources to the ATEvo.

**NOTICE**

Turning off (open) the front panel ac input (CB1) and dc output (CB2) circuit breakers does not isolate live voltages inside the ATEvo enclosure.

**PROCEDURE**

1. Verify that all power sources to the ATEvo are de-energized and  locked out.
2. Open the ATEvo ac input (CB1) and dc output (CB2) circuit breakers, accessible from the front door panel windows.
3. Allow dc filter capacitors (C1x/C2x) to fully *discharge* before proceeding.
4. See Section 2.2 of the *Operating and Service Instructions* for necessary steps to follow when accessing internal components within the ATEvo.
5. Open the front panel door of the ATEvo and remove the acrylic safety shield.
6. Verify that no voltages are present inside the ATEvo, using a voltmeter at the ac input terminals (L1, L2 & L3), the dc output terminals (POS[+] & NEG[-]), the dc remote sense terminals (+/-), and any external wiring to alarm contacts.
7. Identify the power isolation transformer (T1) mounted to the bottom of the enclosure.
8. Refer to the three (3) diagrams on *Sheet 2 of 2* of this instruction.
9. Identify the primary "taps" (T1-H#) located at the front of the transformer.
10. Change the jumpers on each transformer as shown for the newly required setting.
11. Always use all three (3) jumpers on the transformer.
12. Make sure all connections are tight, and check your work before re-energizing ATEvo.
13. Reconnect the battery, dc loads, and ac power supply.
14. Re-energize the ATEvo by closing the ac input circuit breaker (CB2) *first*, followed by the dc output circuit breaker (CB2) *second*.
15. Modify or replace the silver data nameplate decal for new ac input settings (Vac & Aac).
16. The 3PH ATEvo ac input voltage adjustment service procedure is now *complete!*

NOTES:

- 1) CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS.
- 2) JUMPABLE TAPS T1-H1, T1-H2, T1-H3, T1-1 ("A" VOLTAGE) & T1-2 ("B" VOLTAGE) ARE NORMALLY ORIENTED LEFT-TO-RIGHT AS SHOWN.
- 3) MAIN POWER WIRES (# 04, 05 & 06) CONNECT POWER ISOLATION TRANSFORMER (T1-H1/H2/H3) TO AC INPUT CIRCUIT BREAKER (CB1),
- 4) TRANSFORMER (T1) MUST BE TAPPED FOR EITHER "A" OR "B" VOLTAGE.

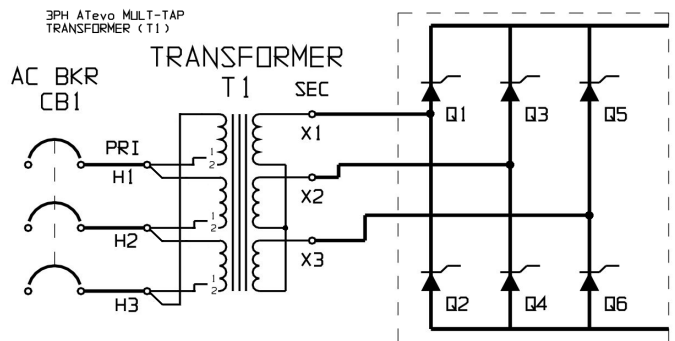
For "A" Voltages:

H1	CoilA-1 to CoilB-0
H2	CoilB-1 to CoilC-0
H3	CoilC-1 to CoilA-0

For "B" Voltages:

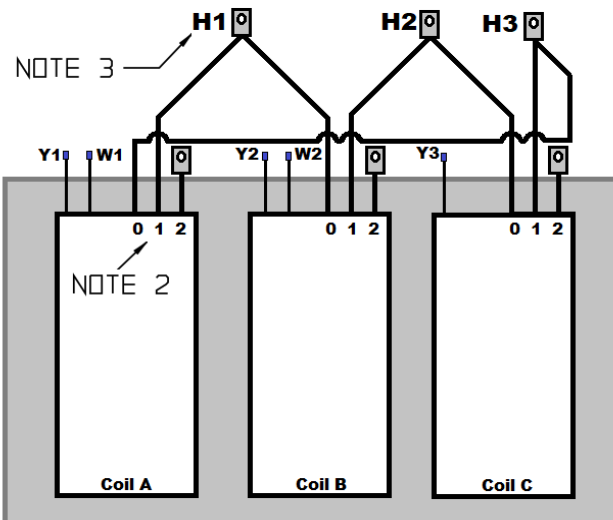
H1	CoilA-2 to CoilB-0
H2	CoilB-2 to CoilC-0
H3	CoilC-2 to CoilA-0

SCHEMATIC :



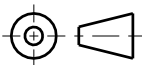
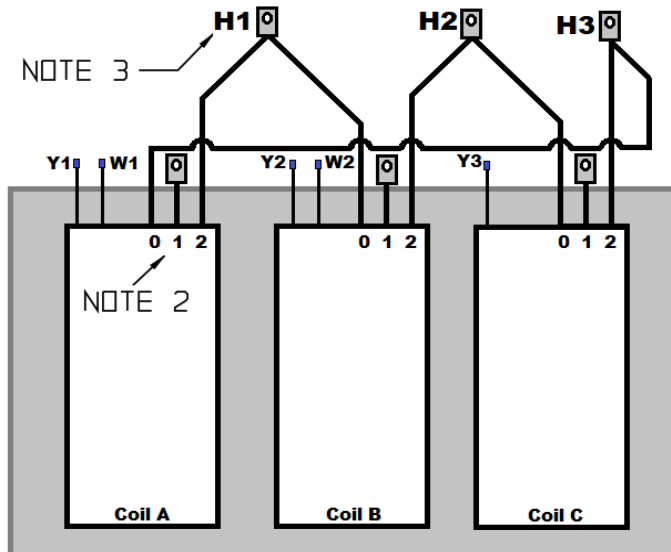
TAPPED FOR :
"A" VOLTAGE
208, 220, 380
or 550Vac

T1 CONNECTION TABLE	
INPUT	XFMR JUMPERS
H1	CoilA-1 to CoilB-0
H2	CoilB-1 to CoilC-0
H3	CoilC-1 to CoilA-0



TAPPED FOR :
"B" VOLTAGE
240, 416,
or 600Vac

T1 CONNECTION TABLE	
INPUT	XFMR JUMPERS
H1	CoilA-2 to CoilB-0
H2	CoilB-2 to CoilC-0
H3	CoilC-2 to CoilA-0



THIRD
ANGLE
PROJECTION

DRAWN BY MCR 050421

ELECTRONIC APPROVAL SIGNATURES
MAINTAINED BY MFG ECN LOG

UNLESS OTHERWISE NOTED DIMENSIONS
ARE IN INCHES. TOLERANCES ARE:

TITLE ATevo SERIES BATT CHGR SERVICE INSTRUCTION:
MULT-TAP 3PH AC INPUT SUPPLY VOLTAGE CHANGE

DRAWING No JD5026-53

REV 1 **A**

SCALE NTS PART No JD5026-53

SHEET 2 OF 2

1	-N/A-	09/11/21	TH
0	-N/A-	050421	TH
REV	ECN No	DATE	APP