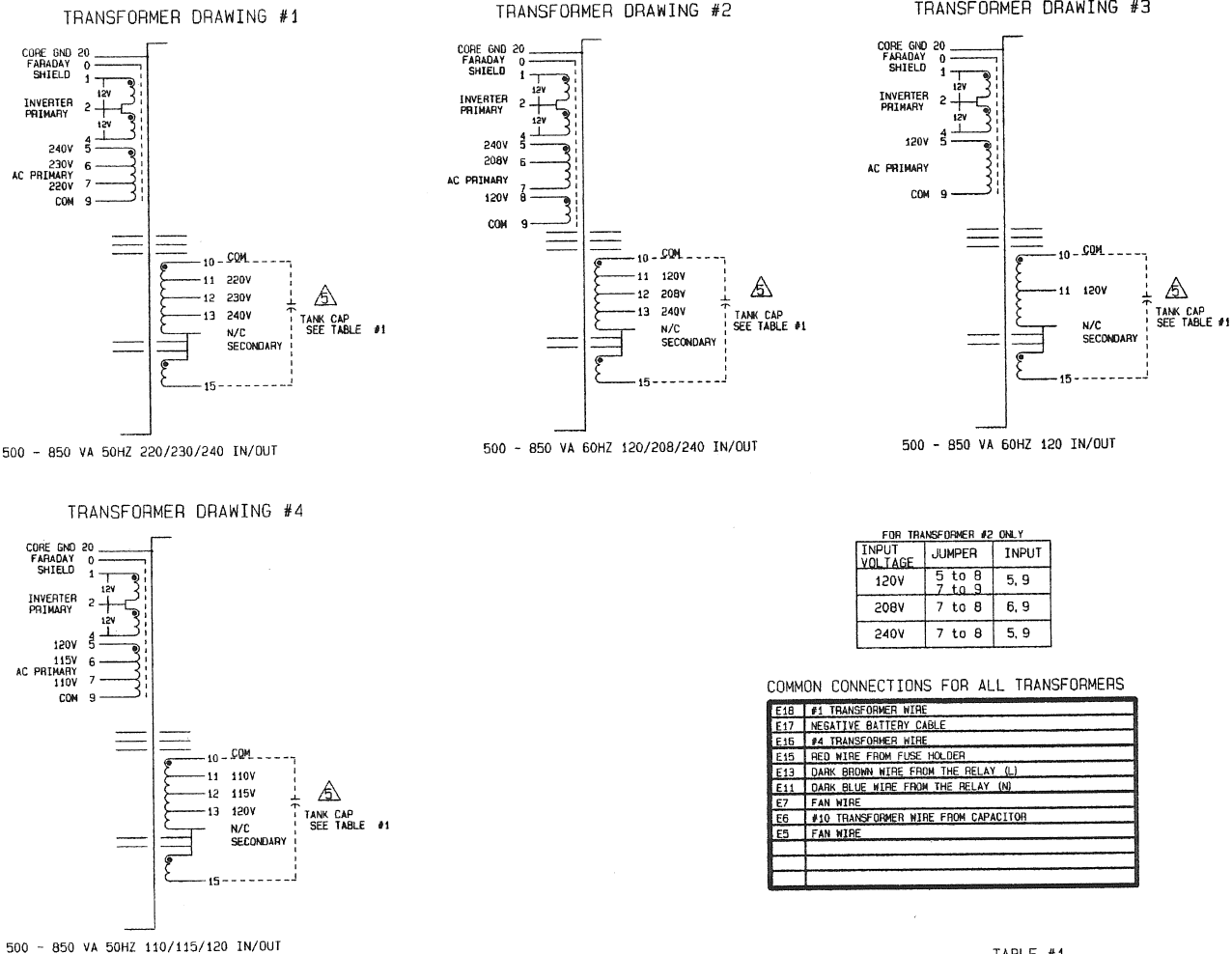


REVISIONS				
REV	CHANGE NO.	DESCRIPTION	DATE	BY
A	-----	RELEASED TO PRODUCTION.	10/31/94	TMW
B	ECN-4351	CHANGED PER ECN.	09/12/96	RS
C	ECN-4911	CHANGED PER ECN.	06-17-97	TMW

110/115/120/220/230/240V IN/OUT 50HZ TRANSFORMERS	208/240V IN 120/208/240V OUT 60HZ TRANSFORMER	120V IN/OUT ONLY 60HZ TRANSFORMERS
<p>110 OR 220 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #7 TRANSFORMER WIRE</p> <p>115 OR 230 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #6 TRANSFORMER WIRE</p> <p>120 OR 240 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #5 TRANSFORMER WIRE</p> <p>110 OR 220 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE SEE NOTE 8</p> <p>E8 GROUND WIRE</p> <p>E4 JUMPER WIRE TO E20</p> <p>E20 JUMPER WIRE TO E4</p> <p>E19 BROWN WIRE FROM RECEPTACLE</p> <p>E10 BLU (NEUTRAL) WIRE FROM RECEPTACLE</p> <p>115 OR 230 VOLT OUTPUT CONNECTIONS</p> <p>E9 #12 TRANSFORMER WIRE SEE NOTE 8</p> <p>E8 GROUND WIRE</p> <p>E4 JUMPER WIRE TO E20</p> <p>E20 JUMPER WIRE TO E4</p> <p>E19 BROWN WIRE FROM RECEPTACLE</p> <p>E10 BLU (NEUTRAL) WIRE FROM RECEPTACLE</p> <p>120 OR 240 VOLT OUTPUT CONNECTIONS</p> <p>E9 #13 TRANSFORMER WIRE SEE NOTE 8</p> <p>E8 GROUND WIRE</p> <p>E4 JUMPER WIRE TO E20</p> <p>E20 JUMPER WIRE TO E4</p> <p>E19 BROWN WIRE FROM RECEPTACLE</p> <p>E10 BLU (NEUTRAL) WIRE FROM RECEPTACLE</p>	<p>208 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #6 TRANSFORMER WIRE</p> <p>240 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #5 TRANSFORMER WIRE</p> <p>120 VOLT ONLY OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLACK WIRE FROM RECEPTACLE</p> <p>E20 NO CONNECTION</p> <p>E19 #13 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 WHITE WIRE FROM RECEPTACLE</p> <p>208 ONLY VOLT OUTPUT CONNECTIONS</p> <p>E9 #12 TRANSFORMER WIRE SEE NOTE 8</p> <p>E8 NO CONNECTION</p> <p>E4 JUMPER WIRE TO E20</p> <p>E20 JUMPER WIRE TO E4</p> <p>E19 BLACK WIRE FROM RECEPTACLE</p> <p>E10 GND WIRE AND #11 TRANSFORMER WIRE JUMPED TOGETHER</p> <p>E10 RED WIRE FROM RECEPTACLE</p> <p>240 ONLY VOLT OUTPUT CONNECTIONS</p> <p>E9 #13 TRANSFORMER WIRE SEE NOTE 8</p> <p>E8 NO CONNECTION</p> <p>E4 JUMPER WIRE TO E20</p> <p>E20 JUMPER WIRE TO E4</p> <p>E19 BLACK WIRE FROM RECEPTACLE</p> <p>E10 GND WIRE AND #11 TRANSFORMER WIRE JUMPED TOGETHER</p> <p>E10 RED WIRE FROM RECEPTACLE</p> <p>120/208 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLACK WIRE FROM RECEPTACLE "L1" OUT</p> <p>E20 RED WIRE FROM RECEPTACLE "L2" OUT</p> <p>E19 #12 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 WHITE WIRE FROM RECEPTACLE "N" OUT</p> <p>120/240 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLACK WIRE FROM RECEPTACLE "L1" OUT</p> <p>E20 RED WIRE FROM RECEPTACLE "L2" OUT</p> <p>E19 #13 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 WHITE WIRE FROM RECEPTACLE "N" OUT</p>	<p>120 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #5 TRANSFORMER WIRE</p> <p>120 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE SEE NOTE 8</p> <p>E8 GROUND WIRE</p> <p>E4 BLACK WIRE FROM RECEPTACLE</p> <p>E20 NO CONNECTION</p> <p>E19 NO CONNECTION</p> <p>E10 WHITE WIRE FROM RECEPTACLE</p> <p>120V IN 120/208/240V OUT 60HZ TRANSFORMER</p> <p>120 VOLT INPUT CONNECTIONS</p> <p>E12 #9 TRANSFORMER WIRE</p> <p>E14 #6 TRANSFORMER WIRE</p> <p>208 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLK WIRE FROM RECEPTACLE "L1" OUT</p> <p>E20 RED WIRE FROM RECEPTACLE "L2" OUT</p> <p>E19 #12 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 NO CONNECTION</p> <p>240 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLK WIRE FROM RECEPTACLE "L1" OUT</p> <p>E20 RED WIRE FROM RECEPTACLE "L2" OUT</p> <p>E19 #13 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 NO CONNECTION</p> <p>120/208 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLACK WIRE FROM RECEPTACLE "L1" OUT</p> <p>E20 RED WIRE FROM RECEPTACLE "L2" OUT</p> <p>E19 #12 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 WHITE WIRE FROM RECEPTACLE "N" OUT</p> <p>120/240 VOLT OUTPUT CONNECTIONS</p> <p>E9 #11 TRANSFORMER WIRE</p> <p>E8 GROUND WIRE</p> <p>E4 BLACK WIRE FROM RECEPTACLE "L1" OUT</p> <p>E20 RED WIRE FROM RECEPTACLE "L2" OUT</p> <p>E19 #13 TRANSFORMER WIRE SEE NOTE 8</p> <p>E10 WHITE WIRE FROM RECEPTACLE "N" OUT</p>



UNIT SIZE	220/230/240 50HZ	120/208/240 60HZ	120 60HZ	110/115/120 50HZ
500 VA	15 uF	12 uF	12 uF	15 uF
700 VA	20 uF	15 uF	15 uF	20 uF
850 VA	25 uF	20 uF	18 uF	25 uF

NOTES:

WIRE COLORS WILL VARY FOR INPUT AND OUTPUT WIRING. 60 HZ USES BLK AND RED FOR HOTS, WHT FOR NEUTRAL, AND GRN/YEL FOR GND. 50 HZ USES BRN FOR HOTS, BLU FOR NEUTRAL, AND GRN/YEL FOR GND.

BECAUSE OF THE NUMEROUS RECEPTICAL OUTPUT WIRING OPTIONS OF THIS UNIT THEY WILL NOT BE SHOWN ON THIS SYSTEM SCHEMATIC. SEE THE TECHNICAL REFERENCE MANUAL.

NUMBERS IN BOXES REPRESENT TRANSFORMER LEAD NUMBERS WHICH DO NOT CHANGE. SOME TRANSFORMERS DO NOT USE ALL LEADS.

ONLY ONE (1) OF THESE OPTIONS ARE USED.

IF A TANK CAPACITOR SHOULD NEED REPLACING OBSERVE THE CAPACITOR CASE TO SEE IF THERE IS A COLORED TOLERANCE DOT INDICATOR. REPLACE THE CAPACITOR WITH ONE OF THE SAME VALUE AND COLORED TOLERANCE DOT INDICATOR. IF TANK CAPACITORS ARE AVAILABLE BUT WITHOUT THE TOLERANCE DOT, MEASURE THE TANK CAPACITORS THAT ARE AVAILABLE AND INSTALL THE TANK CAPACITOR THAT BEST MATCHES THE ONE REMOVED. IF THE TANK CAPACITOR REMOVED HAS A RED DOT ADD 5% TO THE VALUE OF THE CAPACITOR AND THIS WILL BE THE NEW VALUE OF THE ONE THAT REPLACES IT. IF IT HAS A YELLOW DOT ADD 3%. A WHITE DOT SUBTRACT 3% AND IF IT HAS A BLACK DOT SUBTRACT 6%. THE MAIN GOAL TRYING TO BE ACHIEVED IS TO COME AS CLOSE TO THE REQUIRED CAPACITANCE FOR THE FERRO TRANSFORMER AS POSSIBLE.

THIS OPTION IS FOR EXTERNAL BATTERIES. THE INTERNAL BATTERIES MUST BE REMOVED TO MOUNT THIS OPTION IN THE BATTERY COMPARTMENT.

THESE CONNECTIONS ARE MADE EXTERNAL TO THE PC BOARD.

BLU/WHT WIRE FROM PFM BOARD IS ATTACHED HERE AND THE INDICATED TRANSFORMER WIRE IS CONNECTED TO THE MALE TAB OF THIS PFM WIRE.

ON 110/115/120V TRANSFORMER JUMPER FROM E4 TO E20 IS NOT USED AND THE BROWN (LINE) WIRE FROM RECEPTABLE IS PLACED ON E4.

HOW TO USE THE VOLTAGE CHARTS

- REFER TO THE COMMON CONNECTION TABLE. This table is a list of common connections that must be made for all transformers and all input and output voltages.
- SELECT THE CHART FOR THE APPROPRIATE TRANSFORMER. This chart will have a list of all the input and output tables for that transformer.
- FROM THAT CHART SELECT A TABLE FOR THE APPROPRIATE INPUT VOLTAGE. This table is a list of common connections used to determine the input voltage.
- SELECT A TABLE FOR THE APPROPRIATE OUTPUT CONFIGURATION. This table is a list of common connections used to determine the output voltage.

CAD SYSTEM: PCAD 8.5	DIMENSION TOLERANCE: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: INCHES : DEC. DIM. .XX - .1 AS DEC. DIM. .XXX - .1 .010 ANGLE : 2°	APPROVED: TIM WALSH 08/22/94	BEST POWER A UNIT OF GENERAL SIGNAL SYSTEM SCHEMATIC FE 500-850VA
DATABASE: /4754-C.PCB	PROPRIETARY	CHECKED BY: BB 11/03/94	
PROPRIETARY INFORMATION IN THIS DOCUMENT IS THE EXCLUSIVE PROPERTY OF BEST POWER. UNIT OF GENERAL SIGNAL AND MAY BE USED SOLELY FOR INSTALLATION OR SERVICE OF BEST POWER'S PRODUCTS. ANY OTHER USE EXPRESSLY PROHIBITED. THIS DOCUMENT MUST NOT BE REPRODUCED WITHOUT BEST POWER'S WRITTEN PERMISSION AND MUST BE RETURNED TO BEST POWER UPON DEMAND.		DESIGNED BY: NMH 11/03/94	SIZE: D Dwg No: 4754S01
		STANDARD ENGINEER: VT 11/03/94	
		MANUFACTURING ENG: SM 11/03/94	SHEET 1 OF 2
		QUALITY ASSURANCE: AM 11/03/94	
DO NOT SCALE DRAWING		P.C. PART NUMBER NON-STUFFED	SCALE: NONE

