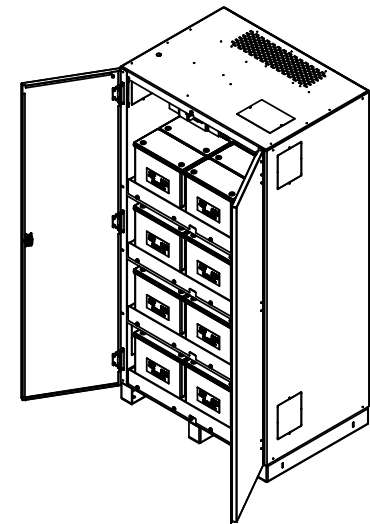
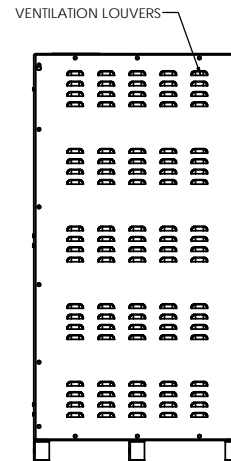
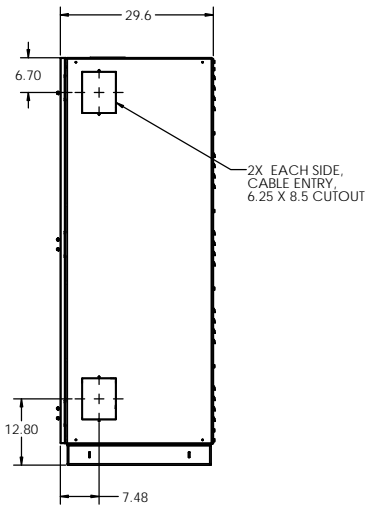
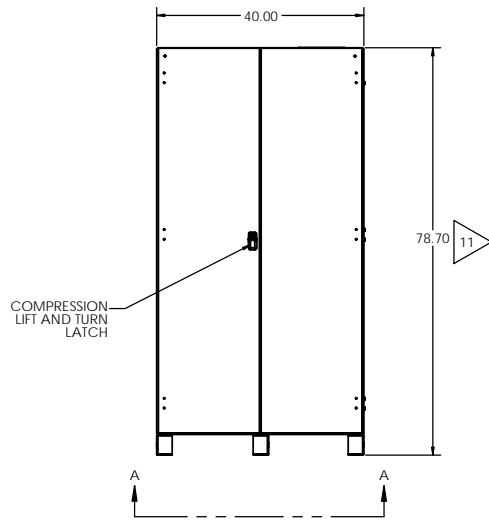


SECTION A-A
BOTTOM VIEW

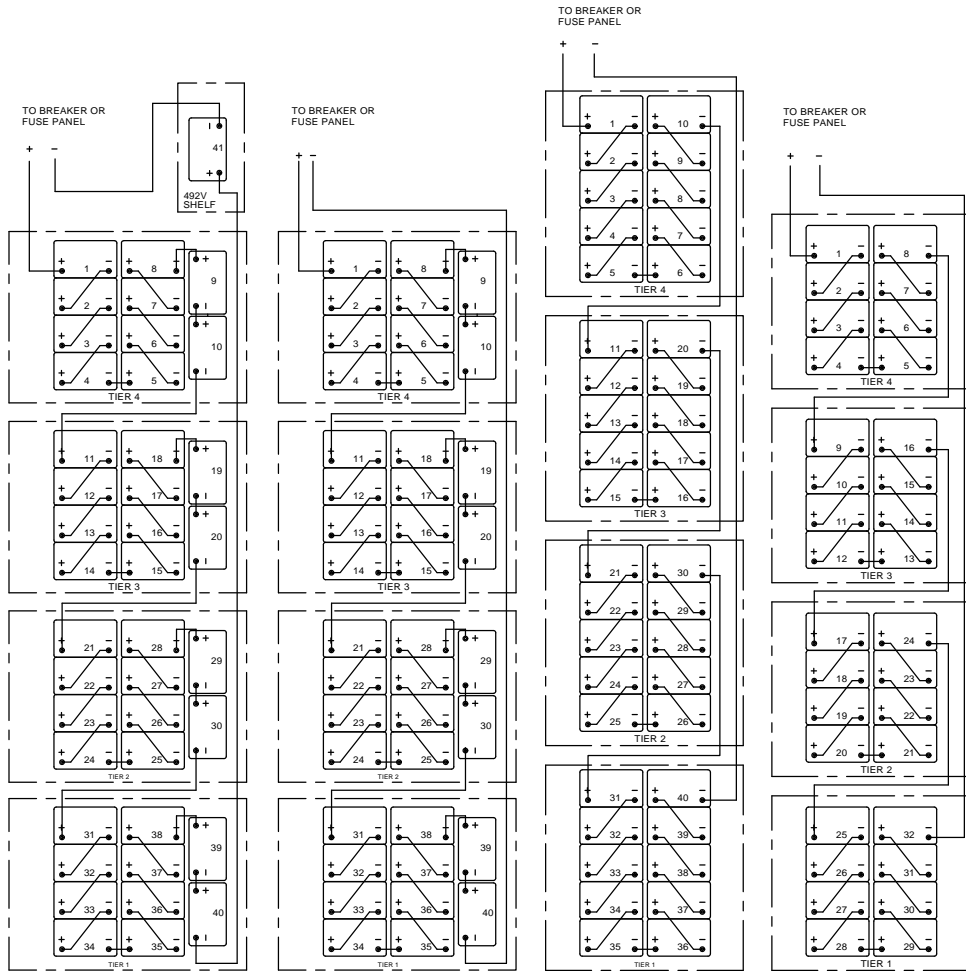


CABINET NOTES:

1. NEMA 1 DESIGN.
2. EMPTY CABINET WEIGHT 665 LBS (256 KG)
3. UL 1778 LISTED AND FULLY TESTED AT THE FACTORY PRIOR TO SHIPPING.
4. FULLY WELDED FRAME. MANUFACTURED FROM HEAVY GAUGE STEEL.
5. POWDER COATED WITH A CORROSION RESISTANT, EPOXY HYBRID POWDER USING A SIX STAGE EMERSON PRETREATMENT PROCESS.
6. BATTERIES CAN BE ACCESSED FROM FRONT, REAR, AND BOTH SIDES.
7. CUSTOM DESIGNED PALLETS FOR SHIPPING ANYWHERE LOCALLY AND GLOBALLY (UPON REQUEST).
8. BATTERY CABINET CAN BE MOVED WITH A NORMAL PALLET JACK FROM FRONT AND REAR.
9. BATTERIES ARE SECURED WITH NON-CONDUCTIVE STRAPPING FOR FOR SAFE TRANSIT.
10. STANDARD AND CUSTOM SPILL CONTAINMENT OPTIONS ARE AVAILABLE.
11. SEE HEIGHT LEGEND TABLE FOR ADDITIONAL HEIGHTS AVAILABLE, PAGE 3.
12. SEISMIC OPTIONS AVAILABLE.
13. OPTIONAL PULL OUT BATTERY SHELVES AVAILABLE.

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TITLE: BATTERY CABINET, 12V, TOP TERMINAL					
PROJECTION:	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN BY	RNA	10-17-14	C	ETC41-SPEC	A
SCALE: 1:12				SHEET 1 OF 3	



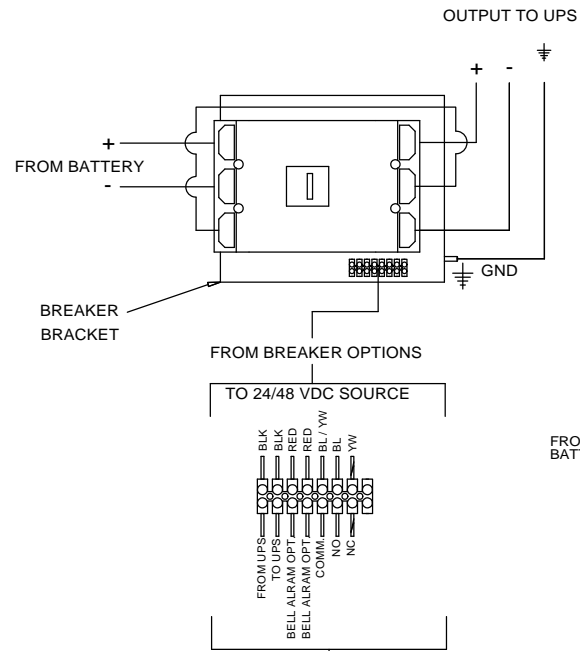
TYP 492V WIRING
(300-540WPC)

TYP 480V WIRING
(300-540WPC)

TYP 480V WIRING
(200 WPC)

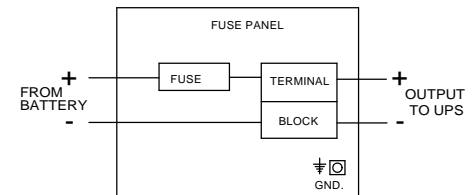
TYP 384V WIRING
(300-540WPC)

BREAKER DETAIL



TO UPS
AUXILIARY CONTACTS LISTED APPLICABLE WHEN
BREAKER IS IN THE CLOSED (ON) POSITION

FUSE OPTION



BATTERY MODEL NUMBER	BATTERY CONFIGURATION TABLE						MAXIMUM NUMBER OF BATTERIES PER CABINET
	BATTERY MANUFACTURER						
	ENERSYS	C & D	EAST PENN	GNB	NORTHSTAR	CSB	
12HX205	UPS12-210MR	45HR2000	S12V120F S12V170F			HRL12200W	60
12HX300	UPS12-300MR	HR3000	S12V285F S12V300F	NSB12-310		HRL12280W	
12HX330	UPS12-350MR	HR3500	S12V370NGF	NSB12-425		HRL12330W	40
12HX400	UPS12-400MR	HR4000				HRL12390W	
12HX505	UPS12-490MR	31HR5000	S12V500F	NSB12-540		HRL12500W	
	UPS12-540MR					HRL12500W	
12HX540	UPS12-600MR	HR5500	S12V550NGF			HRL12540W	
6HX800	UPS6-620MR		S6V740NGF				

ELECTRICAL NOTES:

1. ALL CABLES USED ARE UL LISTED.
2. ALL BREAKERS ARE UL RECOGNIZED.
3. ALL FUSES ARE UL RECOGNIZED, TYPE A50P, A70P OR EQUIVALENT (FUSED CABINETS ARE NOT LISTED IN UL FILE). ALWAYS REPLACE WITH SAME TYPE OR ITS EQUIVALENT.
4. TERMINAL BLOCKS ARE UL RECOGNIZED, 600V RATED.
5. CABINETS ARE SHIPPED WITH THE BREAKER IN THE TRIPPED POSITION.
6. CABINET GROUND CONNECTION IS A 5/16-18 THREADED STUD.
7. CABLES BETWEEN BATTERY CABINET TO UNINTERRUPTIBLE POWER SUPPLY ARE OPTIONAL.

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PROJECTION:

DRAWN BY	NAME	DATE
	RNA	10-17-14

TITLE:

BATTERY CABINET,
12V, TOP TERMINAL

SIZE	DWG. NO.	REV
C	ETC41-SPEC	A



SCALE: 1:12 SHEET 2 OF 3

ESS ETC41 TOP TERMINAL CABINET SYSTEM MATRIX											
ESS CABINET WITH BREAKER SYSTEM PART NUMBERS											
E T C 41 A E 40 HX540 B 04 A											
DIGIT 1	DIGIT 2	DIGIT 3	DIGIT 4-5	DIGIT 6	DIGIT 7	DIGIT 8-9	DIGIT 10-14		DIGIT 15	DIGIT 16-17	DIGIT 18
	TYPE OF BATTERY	TYPE OF CABINET OR RACK	CABINET MODEL	COLOR	HEIGHT (INCHES)	BATTERY QUANTITY	BATTERY MODEL PER MANUFACTURER		BREAKER	AMPS	BREAKER OPTION
E = ESS STANDARD	T = TOP TERMINAL	C = CABINET	41	**A = BLACK	C = 80.0	41	ENERSYS	CSB	B = BREAKER	04 = 600 AMPS	A = 24 VDC SHUNT TRIP / SINGLE AUX
C = CENTER TAP CABLING OPTION				B = BEIGE	D = 79.0	40	HX205 = 12HX205	HL200 = HRL12200W		05 = 500 AMPS	B = 48 VDC SHUNT TRIP / SINGLE AUX
S = SPLIT BUS CABLING OPTION				C = LIEBERT GRAY	**E = 78.7	32	HX300 = 12HX300	HL280 = HRL12280W	H = BREAKER W/HANDLE OPTION	06 = 450 AMPS	C = 24 UVR / SINGLE AUX
				D = MITSUBISHI BEIGE	F = 78.4	30	HX330 = 12HX330	HL330 = HRL12330W		07 = 400 AMPS	D = 48 UVR/SINGLE AUX
				E = MGE WHITE	G = 78.00	29	HX400 = 12HX400	HL390 = HRL12390W		08 = 350 AMPS	E = 120 VDC SHUNT TRIP/SINGLE AUX
				F = TOSHIBA BLACK	H = 77.3	27	HX505 = 12HX505	HL500 = HRL12500W		09 = 300 AMPS	F = 240 VDC SHUNT TRIP / SINGLE AUX
				G = GE WHITE	J = 76.8	24	HX540 = 12HX540	HL540 = HRL12540W		10 = 250 AMPS	G = 120 VDC UVR / SINGLE AUX
				H = LIEBERT BLACK			6HX80 = 6HX680	XL360 = XHRL12360W		11 = 225 AMPS	H = 240 VDC UVR / SINGLE AUX
				I = EATON BLACK			C & D	XL410 = XHRL12410W		12 = 200 AMPS	J = 24 VDC UVR WITH BELL ALARM / SINGLE AUX
				J = LIGHT GRAY			210MR = UPS12-210MR	XL475 = XHRL12475W		13 = 175 AMPS	
							300MR = UPS12-300MR	XL620 = XHRL12620W		14 = 150 AMPS	
							350MR = UPS12-350MR	GNB		15 = 125 AMPS	K = BELL ALARM/SINGLE AUX
							400MR = UPS12-400MR	SV120 = S12V120F		16 = 100 AMPS	
							490MR = UPS12-490MR	SV170 = S12V170F		17 = 75 AMPS	
							540MR = UPS12-540MR	SV285 = S12V285F		18 = 50 AMPS	
							600MR = UPS12600MR	SV300 = S12V300F		19 = 40 AMPS	
							620MR = UPS6-620MR	SV370 = S12V370NGF		20 = 30 AMPS	
							EAST PENN	SV500 = S12V500F			
							HR200 = 45HR2000	SV550 = S12V550NGF			
							HR300 = HR3000	SV740 = S6V740NGF			
							HR350 = HR3500	NORTHSTAR			
							HR400 = HR4000	NS310 = NSB12-310			
							HR500 = 31HR5000	NS425 = NSB12-425			
							HR550 = HR5500	NS450 = NSB12-540			
**REPRESENTS STANDARD COLOR FOR ALL ESS CABINETS (DIGIT 6)											
**REPRESENTS ESS STANDARD HEIGHT OF TOP TERMINAL BATTERY CABINETS (DIGIT 7)											

PART NUMBER GUIDE:

1. REFERENCE THE BATTERY PART NUMBER GUIDE TABLE WHEN ORDERING A CABINET.
 2. WHEN PLACING ORDER, INDICATE THE QTY OF CABINETS. NO DASHES ARE TO BE INCLUDED IN PART NUMBER. OVERALL PART NUMBER OF SYTEM IS ALWAYS 18 DIGITS LONG.
 3. THE BASE NUMBER (DIGITS 1-5) WILL ALWAYS BE THE SAME.
 4. DIGITS 6-7 WILL FOLLOW THE BASE NUMBER INDICATING THE COLOR AND HEIGHT OF THE CABINET.
 5. DIGITS 8-18 MAKE UP THE REST OF THE SYSTEM PART NUMBER WHICH INCLUDE OPTIONS FOR BATTERY QUANTITIES, BATTERY MODEL AND BREAKER OPTIONS.
 6. EXAMPLE: ETC41AE - THIS REPRESENTS A STANDARD ETC41 CABINET, WITH A POWDER COAT FINISH OF STANDARD BLACK AND 78.7" HEIGHT.
- PLEASE NOTE, ONLY STANDARD CABINETS (COLOR AND HEIGHT) ARE IN STOCK. MINIMUM ORDERS OF 20 OR MORE CANBINETS ARE REQUIRED FOR NON STANDARD CABINETS UNLESS IT IS THROUGH OEM CONTRACTS.

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TITLE: BATTERY CABINET, 12V, TOP TERMINAL					
PROJECTION: 	NAME: RNA	DATE: 10-17-16	SIZE: C	DWG. NO.: ETC41-SPEC	REV: A
SCALE: 1:12				SHEET 3 OF 3	