

NOTES:

1. INSTALL IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
2. INPUT AND BYPASS MUST SHARE THE SAME SINGLE SOURCE.
3. A NEUTRAL IS REQUIRED FROM THE SYSTEM AC INPUT SOURCE. A FULL CAPACITY NEUTRAL CONDUCTOR IS RECOMMENDED. GROUNDING CONDUCTORS ARE RECOMMENDED.
4. BYPASS AND RECTIFIER INPUTS AND OUTPUT CABLES MUST BE RUN IN SEPARATE CONDUITS.
5. CONTROL WIRING MUST BE RUN IN SEPARATE CONDUITS.

- BIB - BYPASS ISOLATION BREAKER
MBB - MAINTENANCE BYPASS BREAKER
MIB - MAINTENANCE ISOLATION BREAKER
* EXTERNAL OVERCURRENT PROTECTION BY OTHERS

--- FIELD SUPPLIED WIRING

DRAWN BY	SHEET NO.
K. STACY	1 OF 1
CHK BY	ECN NO.
L. BRAZIS	
REF. DWG.	ORDER NO.

ONE-LINE DIAGRAM
SINGLE INPUT 10kVA - 200kVA
WITH 3 BREAKER MAINTENANCE BYPASS CABINET
LIEBERT eXM

DWG. NO.	DATE	REV. #
EXM11011	3/20/15	1

FILE NAME: I:\appl\Ohio Appl\AE Submittals - Standard\exM dwg\A) One-Line Diagram\EXM11011-01.dwg

Electrical Data - 10-100kVA eXM, 60Hz, 208VAC In, 208VAC Out, Single Input												
UPS Rating		Voltage			AC Input			Battery			AC Output	
					Current, A		Rec. OPD					
		kVA	kW	Input	Output	Nom.		Max		Nom. VDC	Max. Discharge, A	Nom.
10	10	208	208	30	34	45		288	47	28	40	
15	15	208	208	45	51	70		288	70	42	60	
20	20	208	208	59	68	90		288	93	56	70	
30	30	208	208	89	102	150		288	140	83	110	
40	40	208	208	119	136	175		288	187	111	150	
60	60	208	208	178	205	300		288	280	167	225	
80	80	208	208	237	273	350		288	373	222	300	
100	100	208	208	297	341	450		288	467	278	350	

NOTES:

- NOMINAL INPUT CURRENT (CONSIDERED CONTINUOUS) IS BASED ON FULL RATED OUTPUT LOAD MAXIMUM CURRENT INCLUDES NOMINAL INPUT CURRENT AND MAXIMUM BATTERY RECHARGE CURRENT (CONSIDERED NONCONTINUOUS). CONTINUOUS AND NONCONTINUOUS CURRENT ARE DEFINED IN NEC 100. RECOMMENDED OVERCURRENT PROTECTION IS BASED ON 80% RATED DEVICES. * THE RECOMMENDED OVERCURRENT PROTECTION REPRESENTS 125% OF NOMINAL FULL LOAD CURRENT (CONTINUOUS) PER NEC 215.
- MAXIMUM INPUT CURRENT IS CONTROLLED BY THE CURRENT LIMIT SETTING.
- RECOMMENDED AC INPUT EXTERNAL OVERCURRENT PROTECTION IS BASED ON 80% RATED DEVICES AND MAXIMUM INPUT CURRENT LIMIT SETTING.
- RECOMMENDED AC OUTPUT EXTERNAL OVERCURRENT PROTECTION IS BASED ON 80% RATED DEVICES AND FULL RATED OUTPUT CURRENT.
- NOMINAL BATTERY VOLTAGE IS SHOWN AT 2.0 VOLTS / CELL.
- INPUT POWER FACTOR OF 0.99 IS USED FOR THE CALCULATIONS.
- AC INPUT "MAX CURRENT" IS DEFINED AS 15% BATTERY RECHARGE CURRENT LIMIT WHICH IS THE FACTORY DEFAULT. RECHARGE CURRENT RANGE IS 1% - 25%.

HEAT / WEIGHT INFORMATION				
kVA RATING	UPS BTU/HR (*)	UPS WEIGHT		
		lbs	KG	
10	2,217	684	310	
15	3,245	684	310	
20	3,843	684	310	
30	6,189	758	344	
40	7,610	758	344	
60	11,278	844	383	
80	14,977	918	416	
100	18,645	992	450	
* HEAT DISSIPATION AT FULL LOAD				

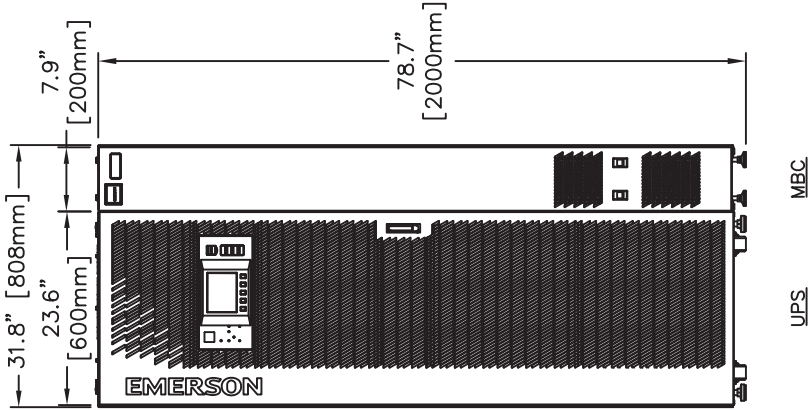
THIS CHART IS FOR UPS WEIGHTS ONLY, FOR MBC OR BDC WEIGHTS REFER TO SUBMITTAL EXM18014 OR EXM18015.

DRAWN BY K. STACY CHK BY L. BRAZIS REF. DWG.	SHEET NO. 1 OF 1	TECHNICAL INFORMATION 10kVA - 100kVA 60Hz, 208VAC IN, 208VAC OUT SINGLE INPUT LIEBERT eXM	DWG. NO. EXM18009	DATE 3/23/16	REV. # 4	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
	ECN NO.					
	ORDER NO.					

FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\EXM dwg\H) EDSpecs&CBSchedule\EXM18009-04.dwg

NOTES:

- 1. ALL DIMENSIONS ARE IN inches [mm].
- 2. 24" [610] MINIMUM CLEARANCE ABOVE UNIT FOR AIR EXHAUST.
- 3. 36" [914] FRONT ACCESS REQUIRED FOR SERVICE.
- 3. KEEP CABINET WITHIN 15 DEGREES OF VERTICAL.
- 4. TOP AND BOTTOM CABLE ENTRY AVAILABLE THROUGH REMOVABLE ACCESS PLATES. REMOVE, PUNCH TO SUIT CONDUIT SIZE AND REPLACE.
- 5. UNIT BOTTOM IS STRUCTURALLY ADEQUATE FOR FORKLIFT HANDLING.
- 6. CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS.
- 7. COPPER CABLES ONLY ARE RECOMMENDED.
- 8. ALL WIRING IS TO BE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- 9. ALL BATTERY CABINETS MUST BE POSITIONED ON THE LEFT SIDE OF UPS.



FRONT VIEW

DRAWN BY	SHEET NO.
K. STACY	1 OF 1
CHK BY	ECN NO.
M. ROCKWELL	
REF. DWG.	ORDER NO.

LINE-UP DETAIL
10kVA - 40kVA UPS
TO MAINTENANCE BYPASS CABINET (200mm)
LIEBERT eXM

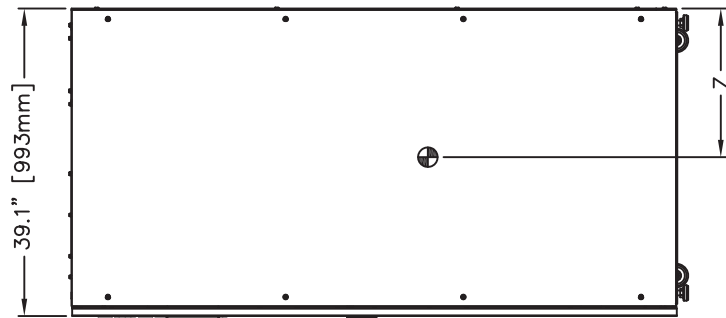
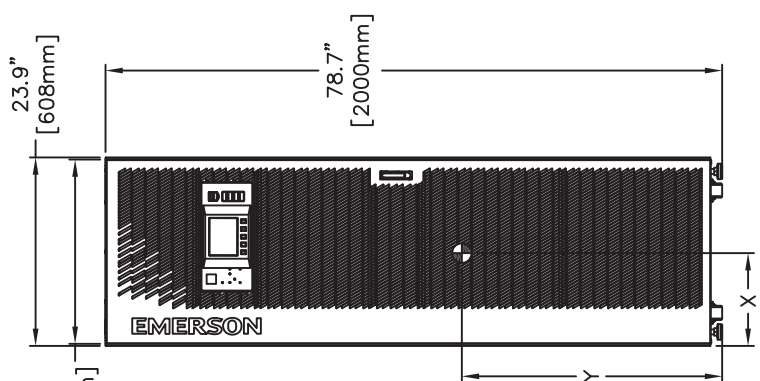
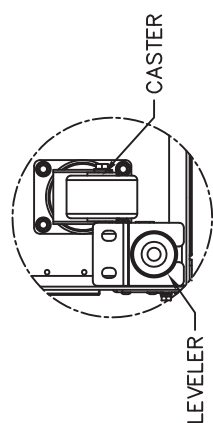
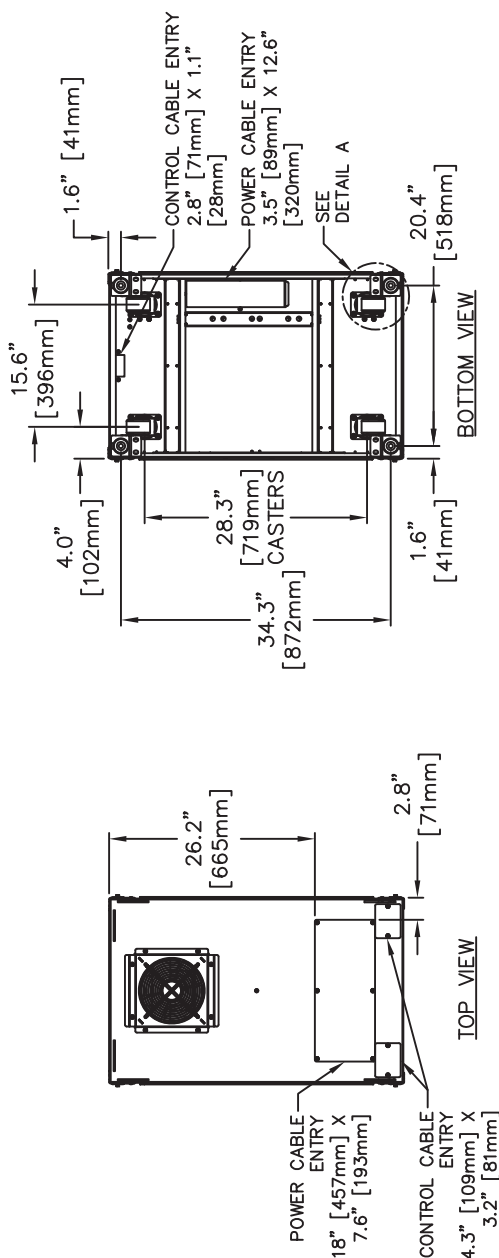
DWG. NO.	DATE	REV. #	1050 DEARBORN DRIVE
EXM13029	3/2/15	1	P.O. BOX 29186
			COLUMBUS, OHIO 43229

FILE NAME: I:\appl\Ohio Appl\AE Submittals - Standard\exM dwg\G Line-Up Detail\EXM13029-01.dwg



NOTES:

- 1. ALL DIMENSIONS ARE IN inches [mm].
- 2. 24" [610] MINIMUM CLEARANCE ABOVE UNIT FOR AIR EXHAUST.
- 3. 36" [914] FRONT ACCESS REQUIRED FOR SERVICE.
- 3. KEEP CABINET WITHIN 15 DEGREES OF VERTICAL.
- 4. TOP AND BOTTOM CABLE ENTRY AVAILABLE THROUGH REMOVABLE ACCESS PLATES; REMOVE, PUNCH TO SUIT CONDUIT SIZE AND REPLACE.
- 5. UNIT BOTTOM IS STRUCTURALLY ADEQUATE FOR FORKLIFT HANDLING.
- 6. CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS.
- 7. COPPER CABLES ONLY ARE RECOMMENDED.
- 8. ALL WIRING IS TO BE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.



UPS kVA RATING	CENTER OF GRAVITY in(mm)		
	X	Y	Z
40	11.8" (300mm)	33.1" (840mm)	18.9" (4800mm)

FRONT VIEW

RIGHT SIDE VIEW

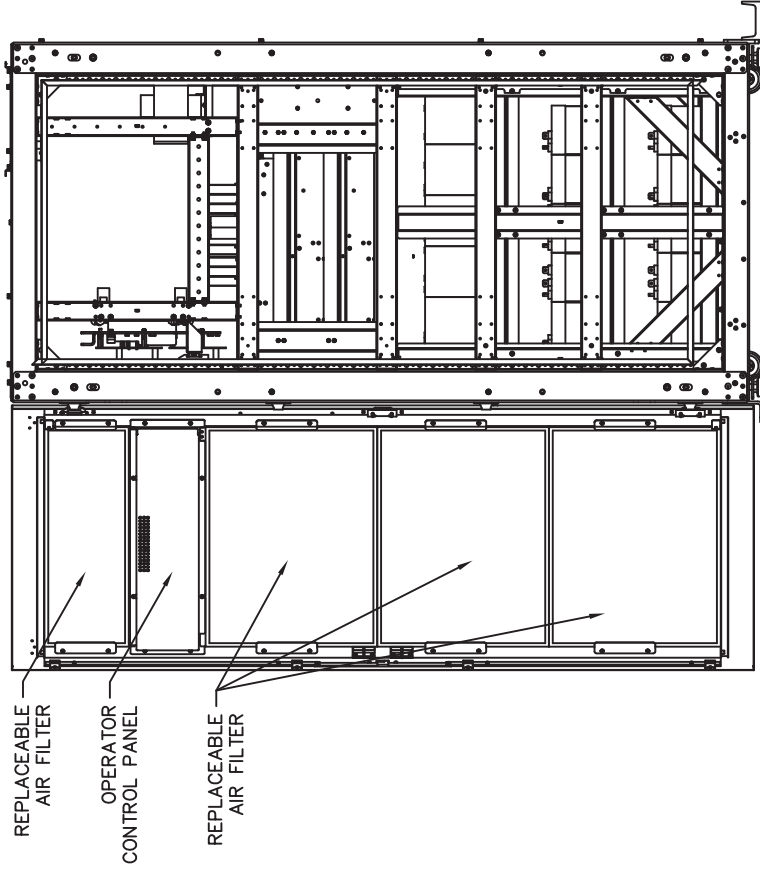
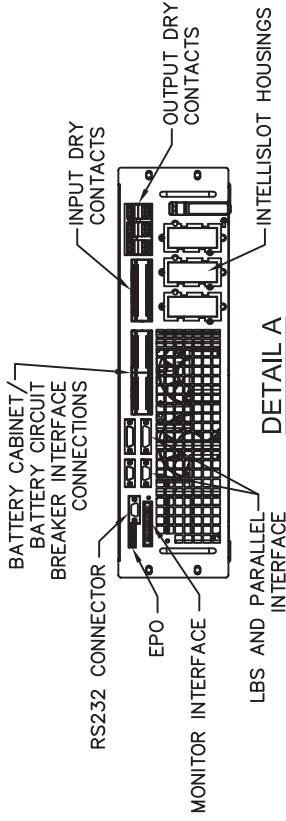
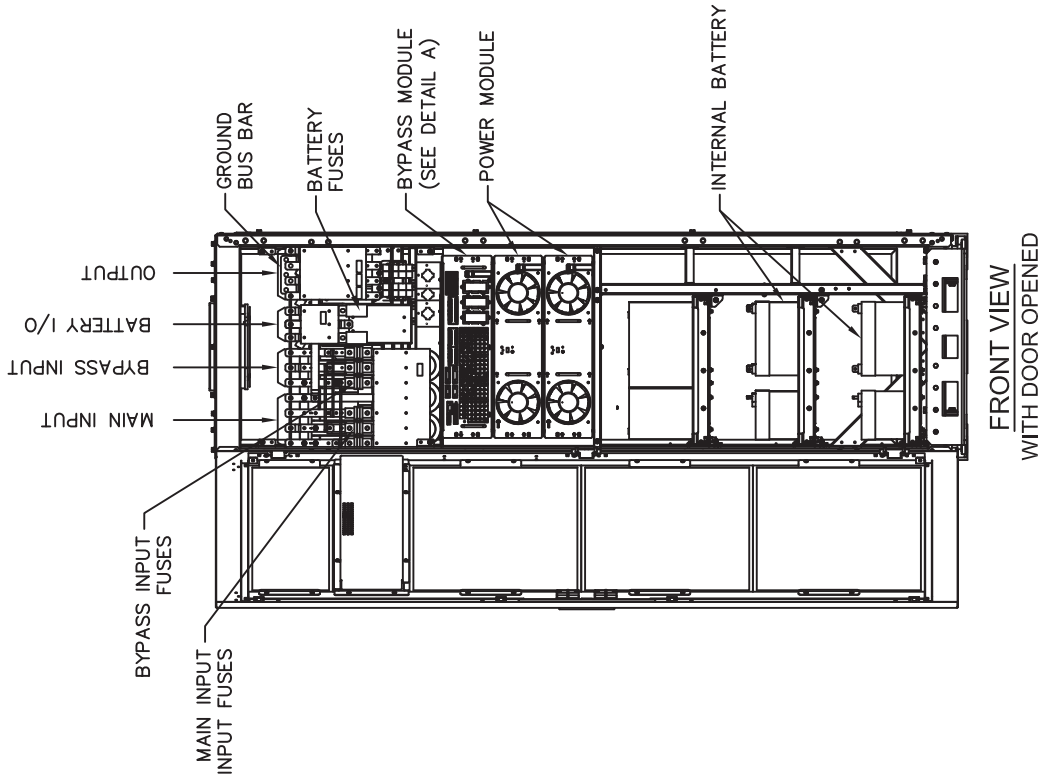
DRAWN BY	SHEET NO.
K. STACY	1 OF 2
CHK BY	ECN NO.
L. BRAZIS	
REF. DWG.	ORDER NO.

OUTLINE DRAWING
10kVA - 40kVA UPS
LIEBERT eXM

DWG. NO.	DATE	REV. #	1050 DEARBORN DRIVE
EXM12001A	5/19/15	2	P.O. BOX 29186
COLUMBUS, OHIO 43229			

FILE NAME: I:\appl\Ohio Appl\AE Submittals - Standard\exM dwg\B) Outline Dwg\EXM12001A-02.dwg





DRAWN BY	SHEET NO.
CHK BY	2 OF 2
L. BRAZIS	ECN NO.
REF. DWG.	ORDER NO.

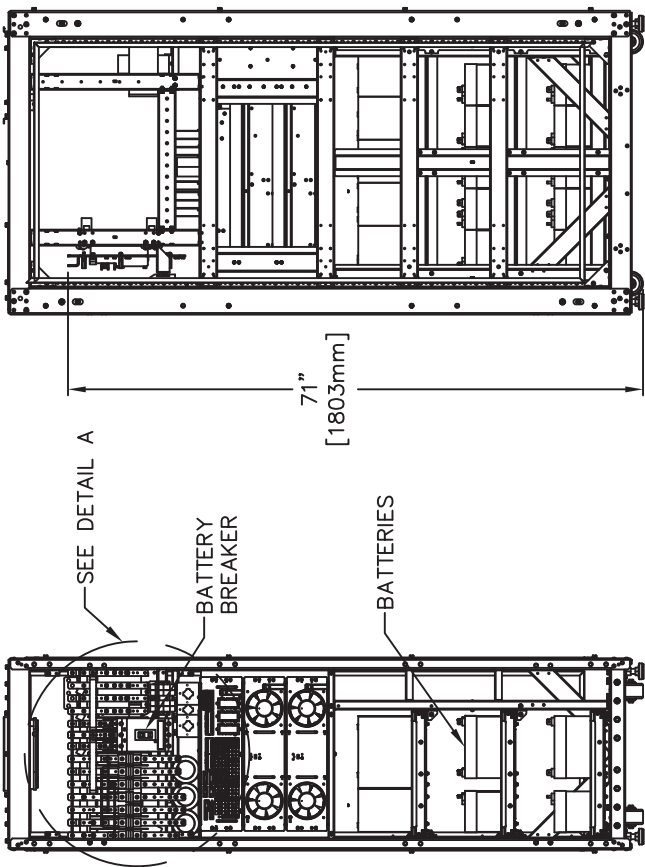
OUTLINES DRAWING
MAIN COMPONENTS LAYOUT
10kVA - 40kVA UPS
LIEBERT eXM

DWG. NO.	DATE	REV. #	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
EXM12001B	5/19/15	2	
FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\exM dwg\1E Main Components\EXM12001B-02.dwg			

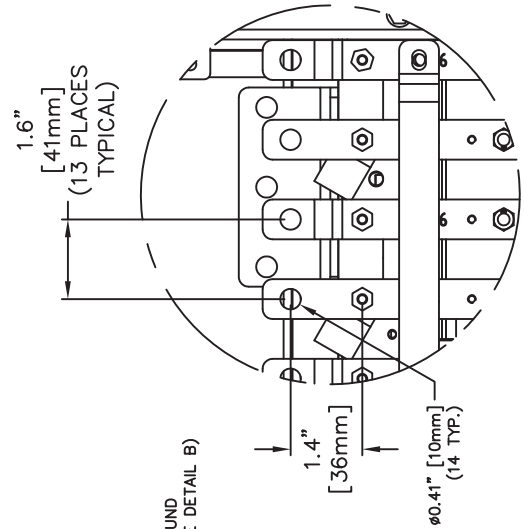
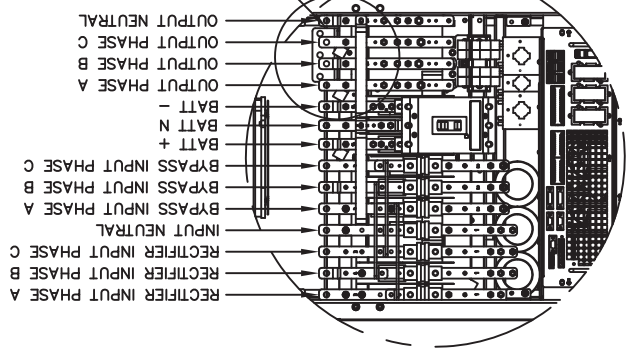


NOTES:

- 1. ALL DIMENSIONS ARE IN inches [mm].
- 2. CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS.
- 3. ALL WIRING IS TO BE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.



TERMINAL SPECIFICATIONS			
UNIT RATING	UTILITY CONFIGURATIONS		TORQUE
	BOLT SHAFT SIZE	LB-IN	
10-40	M10	240	N-M 27



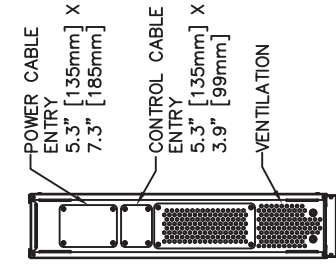
DETAIL A

DETAIL B
BUS BAR DIMENSIONS

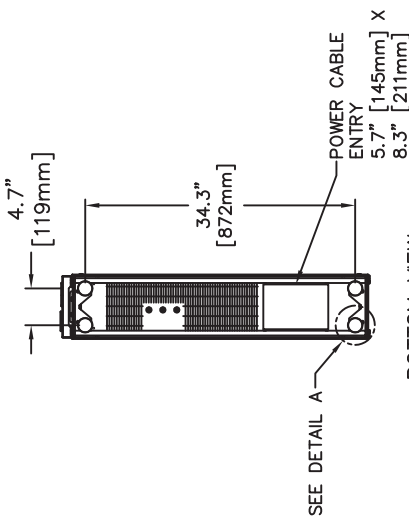
DRAWN BY K. STACY	SHEET NO. 1 OF 1
CHK BY L. BRAZIS	ECN NO.
REF. DWG.	ORDER NO.

TERMINAL DETAIL
10kVA - 40kVA UPS
WITH INTERNAL BATTERIES
LIEBERT eXM

DWG. NO. EXM16002	DATE 5/26/15	REV. # 2	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\exM dwg\F Terminal Details\EXM16002-02.dwg			

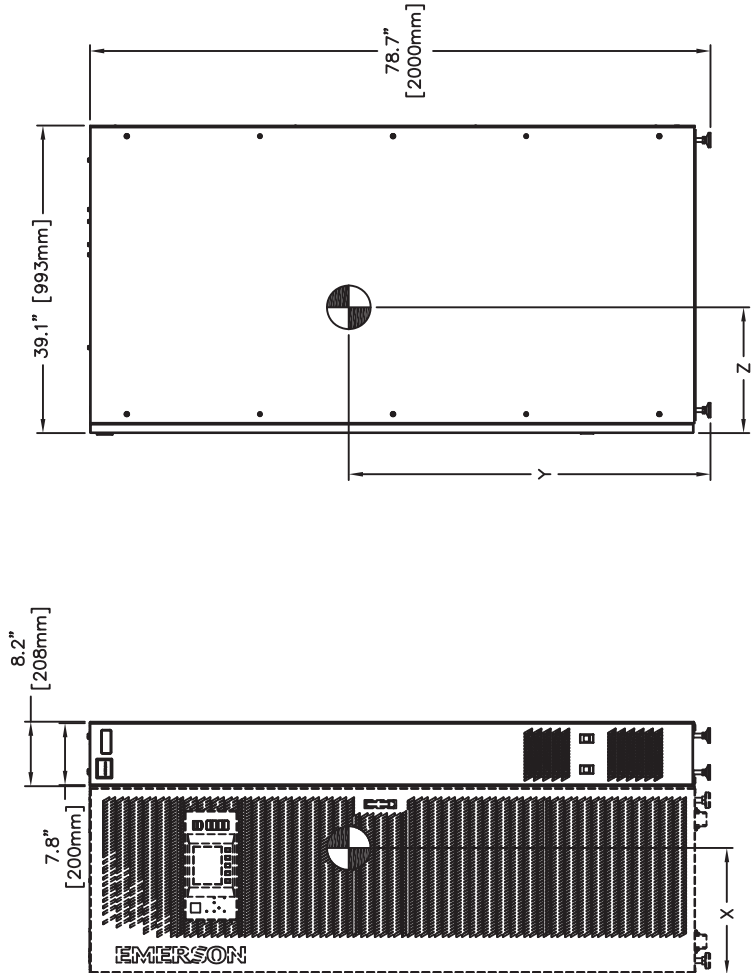


TOP VIEW



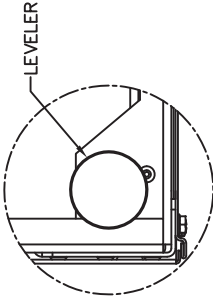
BOTTOM VIEW

- NOTES:
1. ALL DIMENSIONS ARE IN inches [mm].
 2. 24" [610] MINIMUM CLEARANCE ABOVE UNIT FOR AIR EXHAUST.
 3. 36" [914] FRONT ACCESS REQUIRED FOR SERVICE.
 4. TOP AND BOTTOM CABLE ENTRY AVAILABLE THROUGH REMOVABLE ACCESS PLATES. REMOVE, PUNCH TO SUIT CONDUIT SIZE AND REPLACE.
 5. UNIT BOTTOM IS STRUCTURALLY ADEQUATE FOR FORKLIFT HANDLING.
 6. CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS.
 7. ALL WIRING IS TO BE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
 8. MAINTENANCE BYPASS CABINET WILL ALWAYS BE ATTACHED TO UPS.
- UPS SHOWN FOR REFERENCE ONLY.



FRONT VIEW
(UPS SHOWN FOR
REFERENCE ONLY)

RIGHT SIDE VIEW



DETAIL A

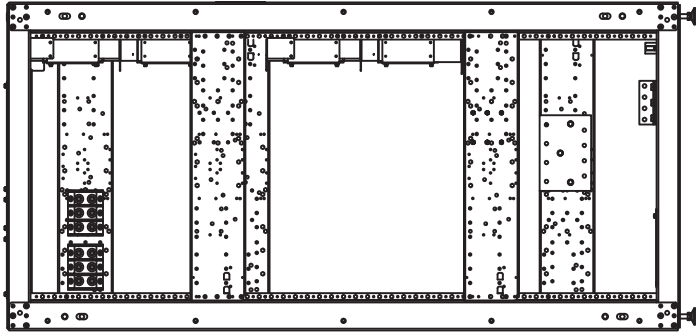
UPS kVA RATING	CENTER OF GRAVITY in(mm)			NOTE
	X	Y	Z	
10 – 40	16 (406)	46 (1168)	16.1 (408)	WITH MBC

DRAWN BY K. STACY	SHEET NO. 1 OF 2
CHK BY L. BRAZIS	ECN NO.
REF. DWG.	ORDER NO.

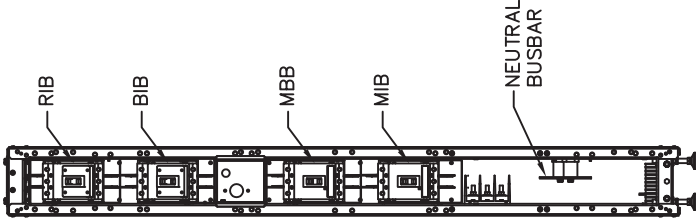
OUTLINE DRAWING
10kVA - 40kVA
MAINTENANCE BYPASS CABINET (200mm)
LIEBERT eXM

DWG. NO. EXM12006A	DATE 8/6/15	REV. # 3	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
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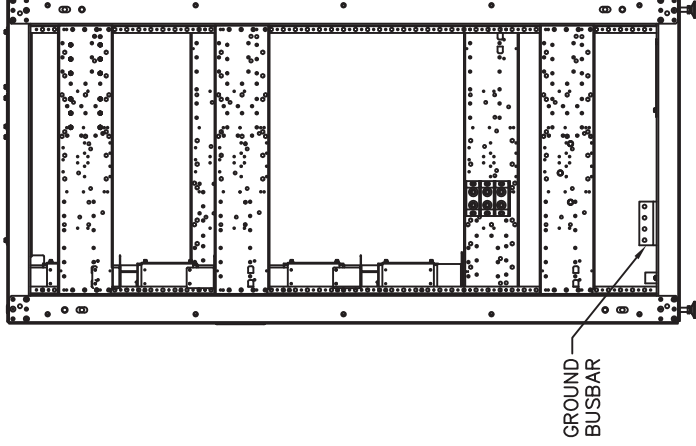
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LEFT SIDE VIEW
WITH PANEL REMOVED



FRONT VIEW
WITH DOOR REMOVED



RIGHT SIDE VIEW
WITH PANEL REMOVED

NOTES:

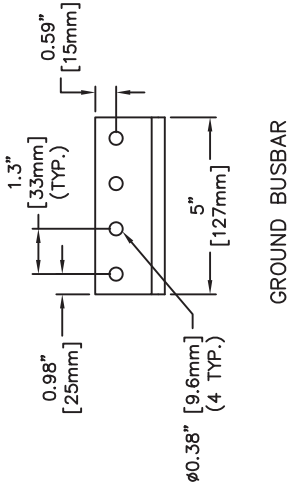
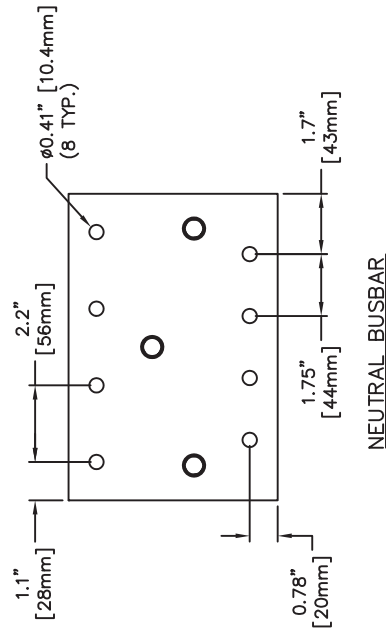
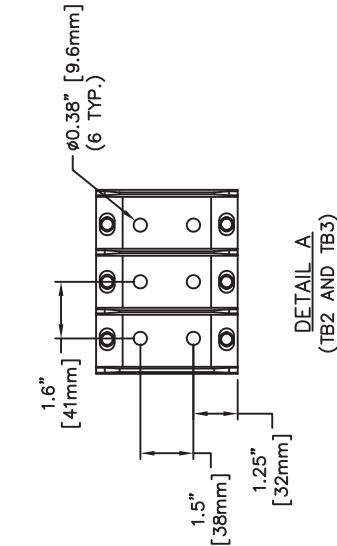
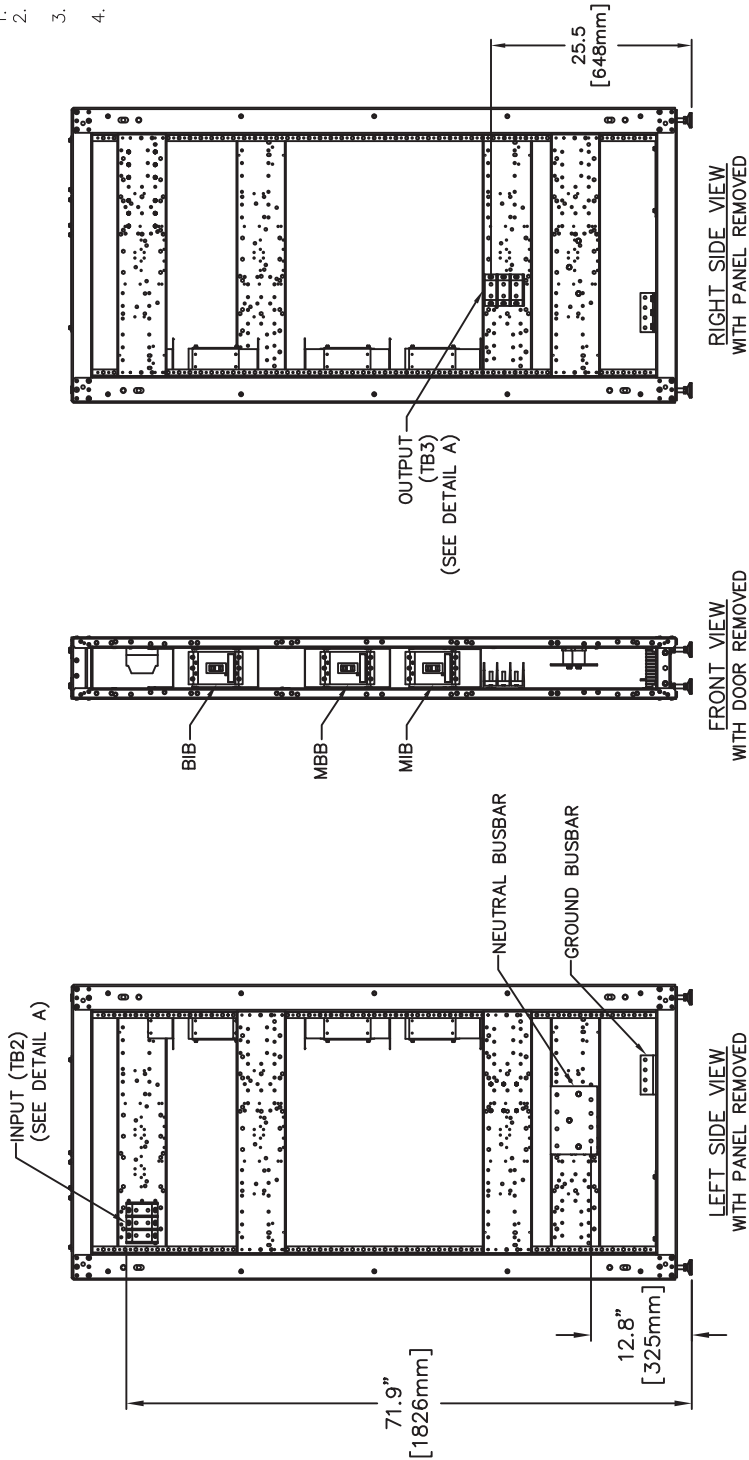
1. 3-BREAKER MBC CONSISTS OF MBB, MIB, AND BIB.
2. 4-BREAKER MBC CONSISTS OF MBB, MIB, BIB, AND RIB.

DRAWN BY K. STACY	SHEET NO. 2 OF 2
CHK BY L. BRAZIS	ECN NO.
REF. DWG.	ORDER NO.

OUTLINE DRAWING MAIN COMPONENTS LAYOUT 10kVA - 40kVA LIEBERT eXM
3-4 BREAKER MAINTENANCE BYPASS CABINET (200mm)

DWG. NO. EXM12006B	DATE 8/6/15	REV. # 3	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\exM dwg\B) Outline Dwg\EXM12006B-03.dwg			

- NOTES:
1. ALL DIMENSIONS ARE IN inches [mm].
 2. CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS.
 3. ALL WIRING IS TO BE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
 4. IF MAINTENANCE BYPASS CABINET IS ATTACHED TO UPS, LIEBERT WILL SUPPLY THE INTERCONNECTION CABLES.



DRAWN BY K. STACY	SHEET NO. 1 OF 1
CHK BY L. BRAZIS	ECN NO.
REF. DWG.	ORDER NO.

TERMINAL DETAIL
3 BREAKER MAINTENANCE BYPASS CABINET (200mm)
FOR USE WITH 10kVA - 40kVA UPS
LIEBERT eXM

DWG. NO. EXM16007	DATE 5/26/15	REV. # 2	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
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2-BREAKER MBC CIRCUIT BREAKER SCHEDULE				
KVA RATING	MIB/MBB			
	AF / AT	MFG.	MFG PN	KAIC
10kVA	100/40	ABB	T2S040TW	65
15kVA	225/60	ABB	T3S060TW	65
20kVA	225/70	ABB	T3S070TW	65
30kVA	225/110	ABB	T3S110TW	65
40kVA	225/150	ABB	T3S150TW	65
60kVA	400/225	ABB	T5N400TW	65
80kVA	400/300	ABB	T5N400TW	65
100kVA	400/350	ABB	T5N400TW	65
120kVA	600/450	ABB	T5N600BW	65
140kVA	600/500	ABB	T5N600BW	65
160kVA	600/600	ABB	T5N600BW	65
180kVA	800/700	ABB	T5N800BW	65
200kVA	800/700	ABB	T5N800BW	65

3-BREAKER MBC CIRCUIT BREAKER SCHEDULE								
kVA RATING	BIB (UIB)			MIB/MBB				
	AF / AT	MFG.	MFG PN	KAIC	AF / AT	MFG.	MFG PN	KAIC
10kVA	100/50	ABB	T2S050TW	65	100/40	ABB	T2S040TW	65
15kVA	225/70	ABB	T3S070TW	65	225/60	ABB	T3S060TW	65
20kVA	225/90	ABB	T3S090TW	65	225/70	ABB	T3S070TW	65
30kVA	225/150	ABB	T3S150TW	65	225/110	ABB	T3S110TW	65
40kVA	225/175	ABB	T3S175TW	65	225/150	ABB	T3S150TW	65
60kVA	400/300	ABB	T5N400TW	65	400/225	ABB	T5N400TW	65
80kVA	400/350	ABB	T5N400TW	65	400/300	ABB	T5N400TW	65
100kVA	600/450	ABB	T5N600BW	65	400/350	ABB	T5N400TW	65
120kVA	600/600	ABB	T5N600BW	65	600/450	ABB	T5N600BW	65
140kVA	600/600	ABB	T5N600BW	65	600/500	ABB	T5N600BW	65
160kVA	800/700	ABB	T5N800BW	65	600/600	ABB	T5N600BW	65
180kVA	800/800	ABB	T5N800BW	65	800/700	ABB	T5N800BW	65
200kVA	1000/1000	ABB	T7N1000BW	65	800/700	ABB	T5N800BW	65

4-BREAKER MBC CIRCUIT BREAKER SCHEDULE												
kVA RATING	BIB				RIB				MIB/MBB			
	AF / AT	MFG.	MFG PN	KAIC	AF / AT	MFG.	MFG PN	KAIC	AF / AT	MFG PN	KAIC	
10kVA	100/40	ABB	T2S040TW	65	100/50	ABB	T2S050TW	65	100/40	ABB	T2S040TW	65
15kVA	225/60	ABB	T3S060TW	65	225/70	ABB	T3S070TW	65	225/60	ABB	T3S060TW	65
20kVA	225/70	ABB	T3S070TW	65	225/90	ABB	T3S090TW	65	225/70	ABB	T3S070TW	65
30kVA	225/110	ABB	T3S110TW	65	225/150	ABB	T3S150TW	65	225/110	ABB	T3S110TW	65
40kVA	225/150	ABB	T3S150TW	65	225/175	ABB	T3S175TW	65	225/150	ABB	T3S150TW	65
60kVA	400/225	ABB	T5N400TW	65	400/300	ABB	T5N400TW	65	400/225	ABB	T5N400TW	65
80kVA	400/300	ABB	T5N400TW	65	400/350	ABB	T5N400TW	65	400/300	ABB	T5N400TW	65
100kVA	400/350	ABB	T5N400TW	65	600/450	ABB	T5N600TW	65	400/350	ABB	T5N400TW	65
120kVA	600/450	ABB	T5N600BW	65	600/600	ABB	T5N600BW	65	600/450	ABB	T5N600BW	65
140kVA	600/500	ABB	T5N600BW	65	600/600	ABB	T5N600BW	65	600/500	ABB	T5N600BW	65
160kVA	600/600	ABB	T5N600BW	65	800/700	ABB	T5N800BW	65	600/600	ABB	T5N600BW	65
180kVA	800/700	ABB	T5N800BW	65	800/800	ABB	T5N800BW	65	800/700	ABB	T5N800BW	65
200kVA	800/700	ABB	T5N800BW	65	1000/1000	ABB	T7N1000BW	65	800/700	ABB	T5N800BW	65

HEAT / WEIGHT INFORMATION			
MBC CABINET WIDTH	BTU/HR (")	KVA RATING	WEIGHT
200mm	3412	10-40	198 (89.9KG)
300mm	3412	60-100	288 (130.6KG)
600mm	3412	120-140	535 (242.7KG)
800mm	3412	160-200	700 (317.5KG)

* HEAT DISSIPATION AT FULL LOAD

DRAWN BY K. STACY	SHEET NO. 1 OF 1
CHK BY L. BRAZIS	ECN NO.
REF. DWG.	ORDER NO.

TECHNICAL INFORMATION
10kVA - 200kVA
MAINTENANCE BYPASS CABINET (MBC)
LIEBERT eXM

DWG. NO.
EXM18014

DATE
7/28/15

REV. #
1

1050 DEARBORN DRIVE
P.O. BOX 29186
COLUMBUS, OHIO 43229



EMERSON.
Network Power

FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\exM dwg\H) EDSpecs&CBSchedule\EXM18014-01.dwg

NOTES:

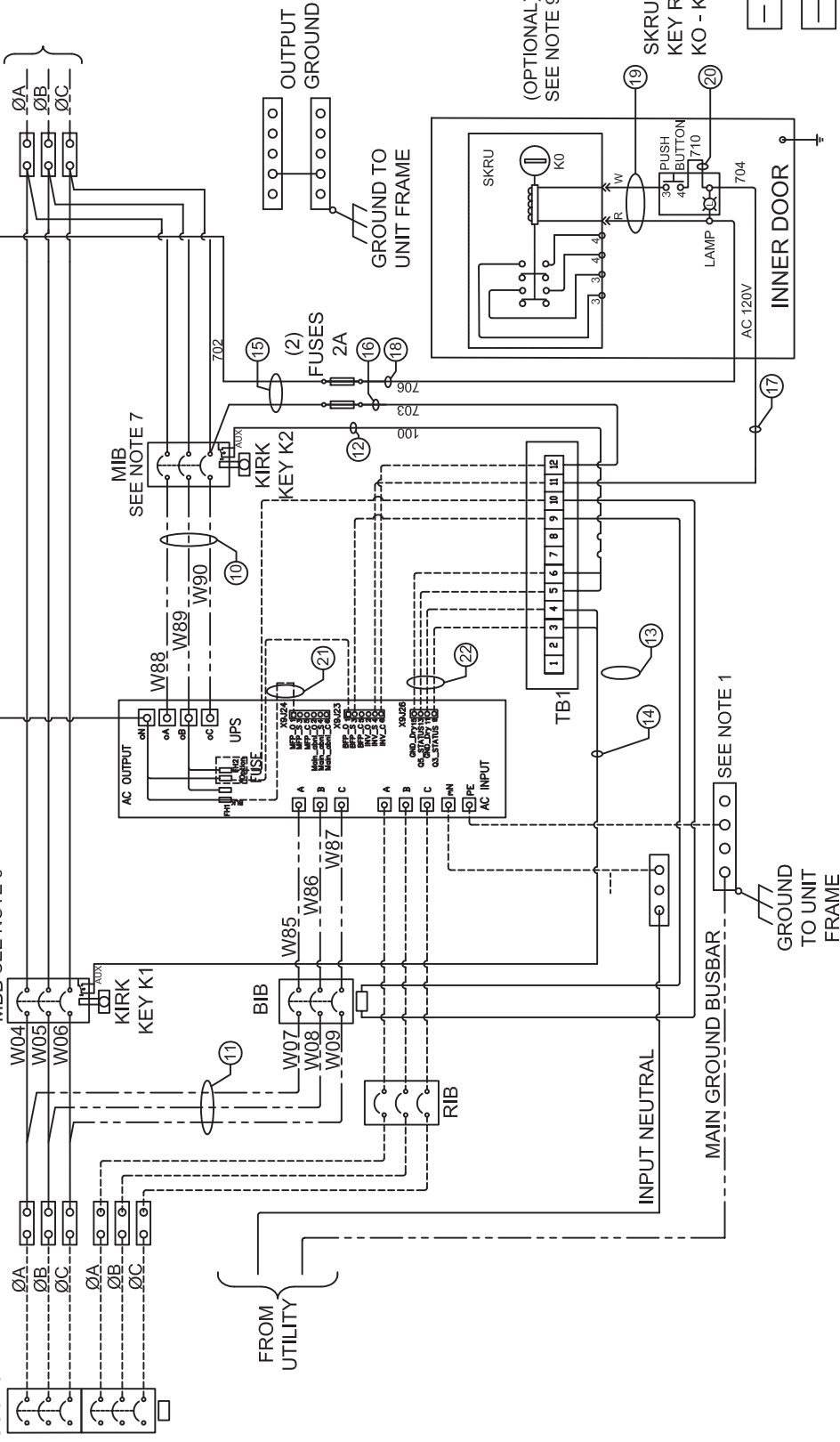
1. CUSTOMER FURNISHED ELECTRODE CONDUCTOR TO BE INSTALLED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
2. SEE INSTALLATION MANUAL FOR ADDITIONAL CONNECTION INFORMATION.
3. OVERCURRENT PROTECTION IS BASED ON 80% RATED DEVICES.
4. MBB AUX. SWITCH CONNECTIONS ARE ON THE NORMALLY CLOSED AND COMMON POSITIONS.
5. MIB AUX. SWITCH CONNECTIONS ARE ON THE NORMALLY OPENED AND COMMON POSITIONS.
6. MBC WHEN CONNECTED TO UPS MODULE, ALL CONTROL AND POWER WIRING IS SUPPLIED BY LIEBERT. IF THE MBC IS REMOTE FROM THE UPS MODULE, THE CABLES BETWEEN THE MBC AND UPS MODULE MUST BE SUPPLIED BY OTHERS.
7. OPTIONAL SKRU AND ASSOCIATED WIRING (703, 704, 706).
8. SHOWN IS TYPICAL FOR A 4-BREAKER CONFIGURATION. ALSO AVAILABLE: A 2-BREAKER CONFIGURATION (MIB, MBB) AND A 3-BREAKER CONFIGURATION (BIB, MIB, MBB).
9. IF CONFIGURATION IS A 2-BREAKER MBC, THE 120V SHUNT TRIP COIL MUST BE SUPPLIED BY THE CUSTOMER FOR THE BYPASS LINE ONLY.

CUSTOMER FEED

MBB SEE NOTE 6

AC OUTPUT

OUTPUT
NEUTRAL



----- FIELD SUPPLIED WIRING

----- FACTORY SUPPLIED WIRING

DRAWN BY
K. STACY

CHK BY
L. BRAZIS

REF. DWG.
ORDER NO.

SHEET NO.
1 OF 1

ECN NO.

CONTROL WIRING DIAGRAM
2-4 BREAKER MAINTENANCE BYPASS CABINET
10kVA - 200kVA
LIEBERT eXM

DWG. NO.
EXM14004

DATE
3/20/15

REV. #
1

1050 DEARBORN DRIVE
P.O. BOX 29186
COLUMBUS, OHIO 43229

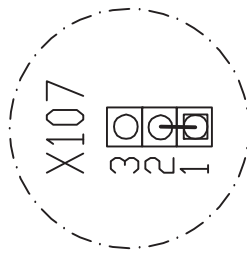
FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\exM dwg\B Control Wiring\EXM14004-01.dwg



EMERSON.
Network Power

1. ALL SERVICE AND INITIAL CONNECTIONS OF BATTERIES MUST BE PERFORMED BY QUALIFIED SERVICE PERSONNEL.

2. THE JUMPER X107 MUST SHORT CIRCUIT PIN 1 AND PIN 2.
3. THE CIRCUIT BREAKER AUX. BLUE WIRE #12 IS NOT USED.
4. SHUNT TRIP DRIVE IS 220VDC @ 2.4A.



DETAIL A
SEE NOTE 2

eXM BYPASS MODULE

UHRF3S67X2

INTERNAL BATTERY TEMPERATURE SENSOR

DRAWN BY K. STACY	SHEET NO. 1 OF 1
CHK BY K. HAUGHTON	ECN NO.
REF. DWG.	ORDER NO.

CONTROL WIRING DIAGRAM
INTERNAL BATTERY CONNECTIONS TO UPS
10kVA - 40kVA
LIEBERT eXM

DWG. NO.	EXM14001
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DATE	7/22/14
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REV	0
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#	1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229
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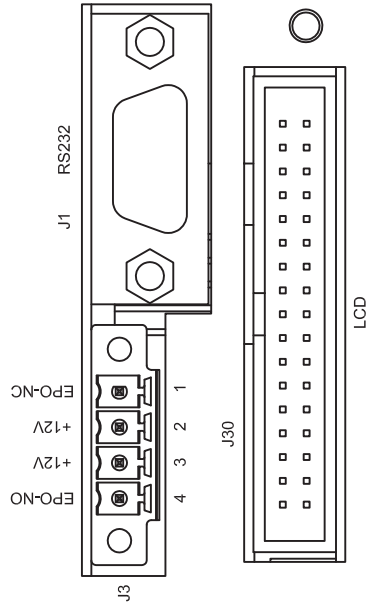
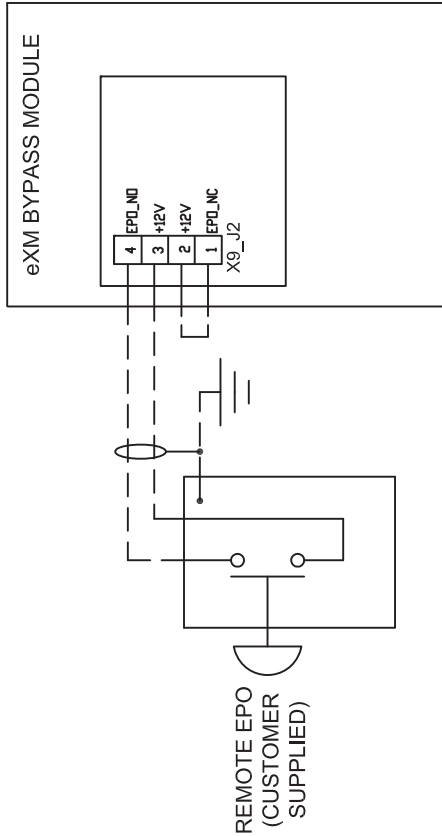


EMERSON.
Network Power

FILE NAME: I:\app\Ohio App\AE Submittals - Standard\EXM dwg\D) Control Wiring\EXM14001-00.dwg

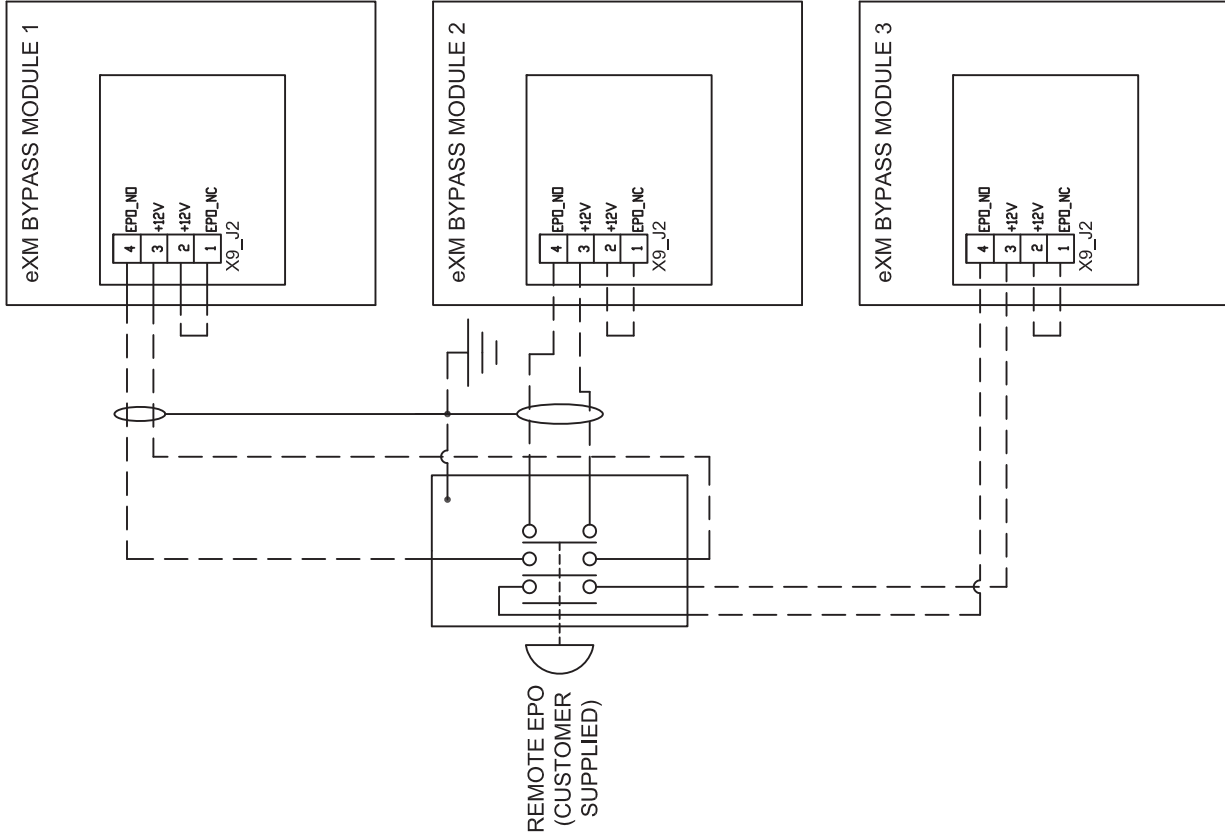
— — FIELD SUPPLIED WIRING

SINGLE eXM MODULE



eXM BYPASS MODULE

THREE MODULES IN PARALLEL



DRAWN BY	SHEET NO.
K. STACY	1 OF 1
CHK BY	ECN NO.
L. BRAZIS	
REF. DWG.	ORDER NO.

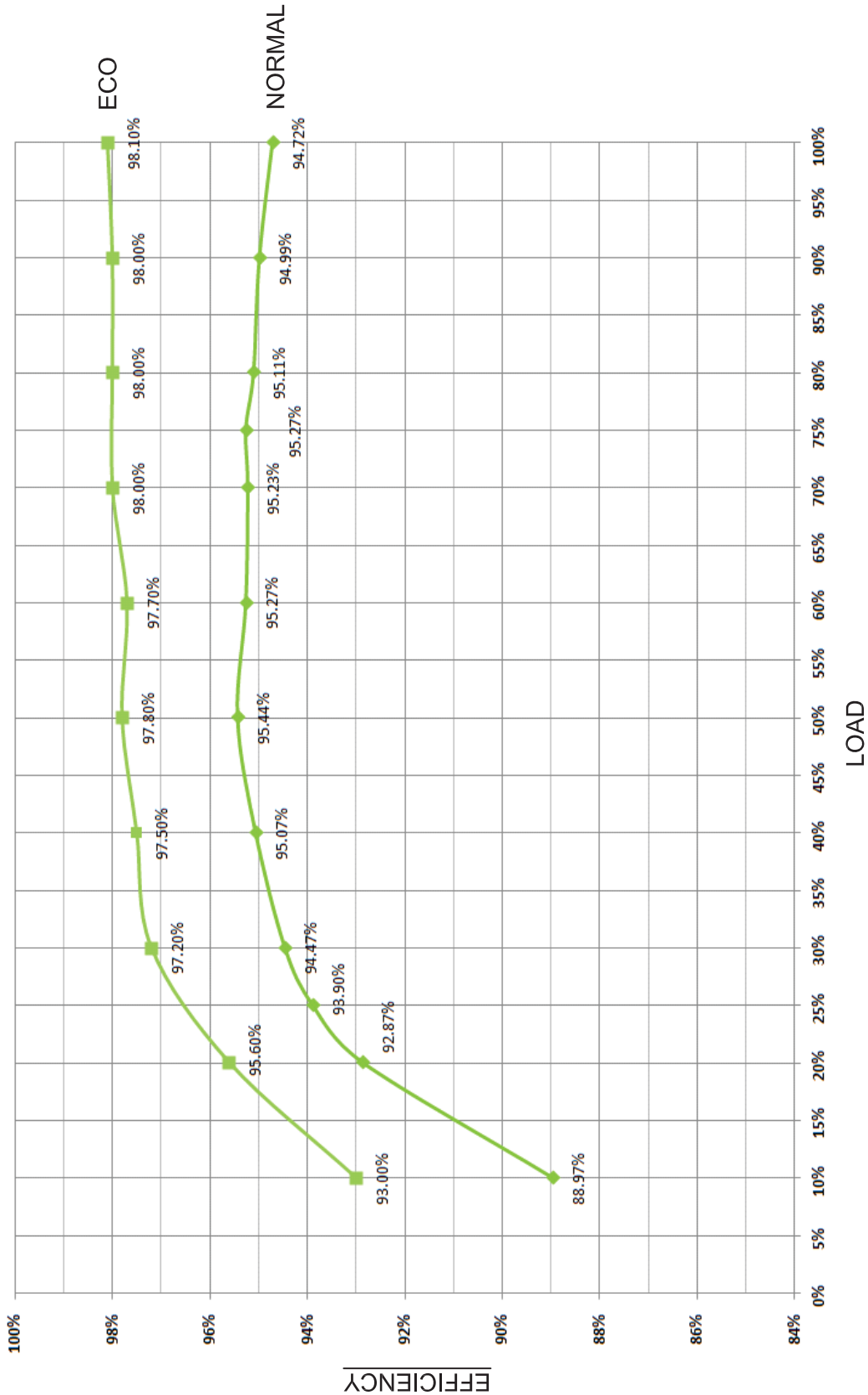
WIRING DIAGRAM
REMOTE EPO
10kVA - 200kVA
LIEBERT eXM

DWG. NO.	DATE	REV. #
EXM14008	3/20/15	1

FILE NAME: I:\appl\Ohio App\AE Submittals - Standard\EXM dwg\EXM14008-01.dwg

ECO MODE										
Load percentage	10	20	30	40	50	60	70	80	90	100
Efficiency AC-AC	93	95.6	97.2	97.5	97.8	97.7	98	98	98	98.1

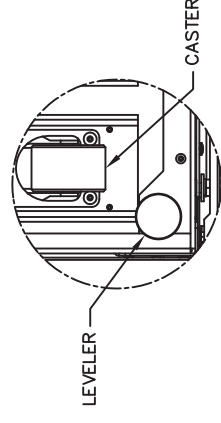
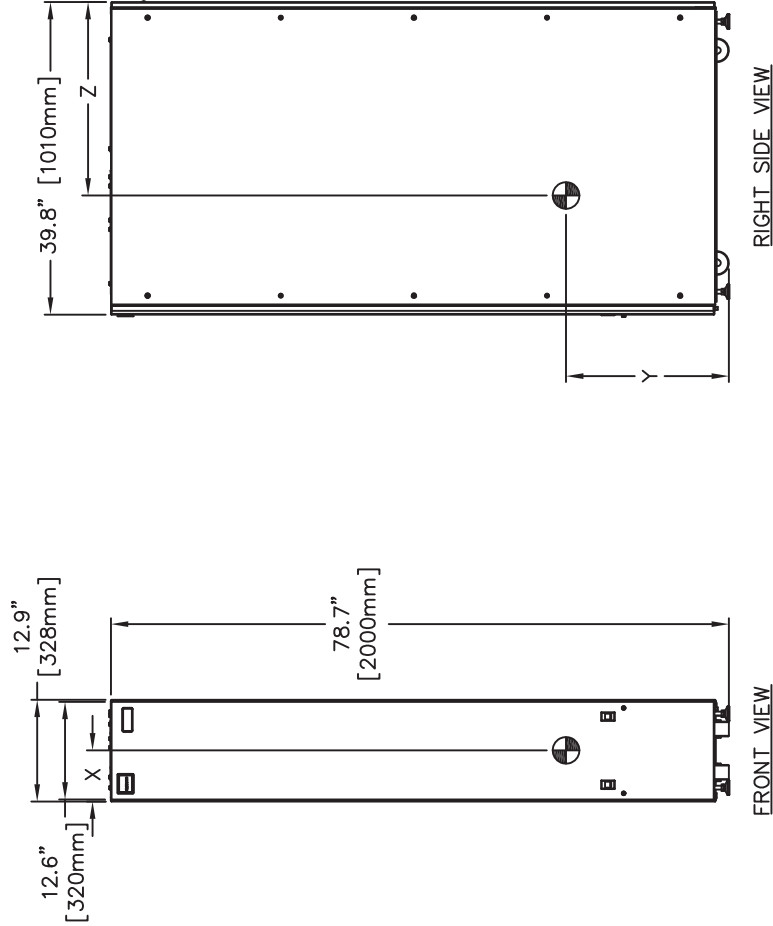
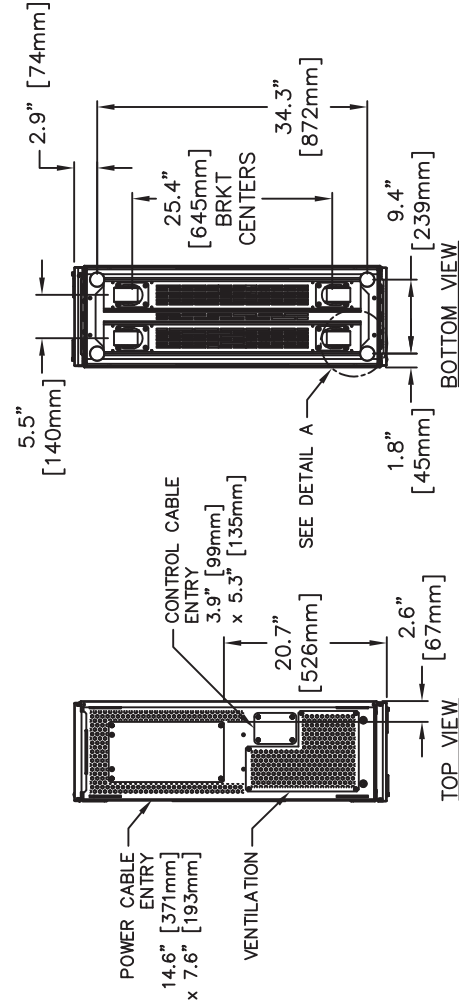
NORMAL MODE										
Load percentage	10	20	25	30	40	50	60	70	80	100
Efficiency AC-AC	88.97	92.87	93.9	94.47	95.07	95.44	95.27	95.23	95.11	94.99
										94.72



DRAWN BY	SHEET NO.
K. STACY	1 OF 1
CHK BY	ECN NO.
M. ROCKWELL	
REF. DWG.	ORDER NO.

UPS EFFICIENCY	
40kVA	
LIEBERT eXM	

DWG. NO.	DATE	REV. #
EXM17002	9/4/15	2
1050 DEARBORN DRIVE P.O. BOX 29186 COLUMBUS, OHIO 43229		



DETAIL A

BATTERY TYPE	CENTER OF GRAVITY in(mm)		
	X	Y	Z
ENERSYS 12HX150E			
ENERSYS 12HX205	6.5" (165mm)	20.7" (526mm)	24.6" (625mm)

NOTES:

- ALL DIMENSIONS ARE IN inches [mm].
- 24" [610] MINIMUM CLEARANCE ABOVE UNIT FOR AIR EXHAUST.
- 36" [914] FRONT ACCESS REQUIRED FOR SERVICE.
- KEEP CABINET WITHIN 15 DEGREES OF VERTICAL.
- TOP CABLE ENTRY AVAILABLE THROUGH REMOVABLE ACCESS PLATES. REMOVE, PUNCH TO SUIT CONDUIT SIZE AND REPLACE.
- UNIT BOTTOM IS STRUCTURALLY ADEQUATE FOR FORKLIFT HANDLING.
- CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS.
- COPPER CABLES ONLY ARE RECOMMENDED.
- ALL WIRING IS TO BE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- MAINTENANCE BYPASS CABINET WILL ALWAYS BE ATTACHED TO UPS.

DRAWN BY
K. STACY

CHK BY
L. BRAZIS

REF. DWG.

SHEET NO.
1 OF 2

ECN NO.

ORDER NO.

OUTLINE DRAWING
10kVA - 40kVA
BATTERY CABINET (320mm)
LIEBERT eXM

DWG. NO.
EXM12003A

DATE
1/20/16

REV. #
4

1050 DEARBORN DRIVE
P.O. BOX 29186
COLUMBUS, OHIO 43229

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