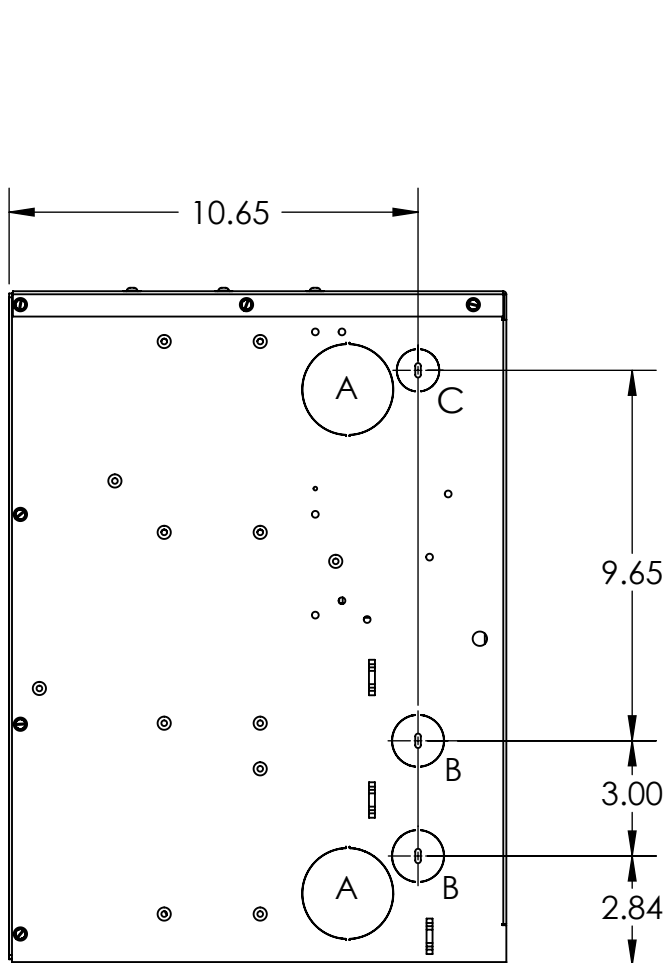
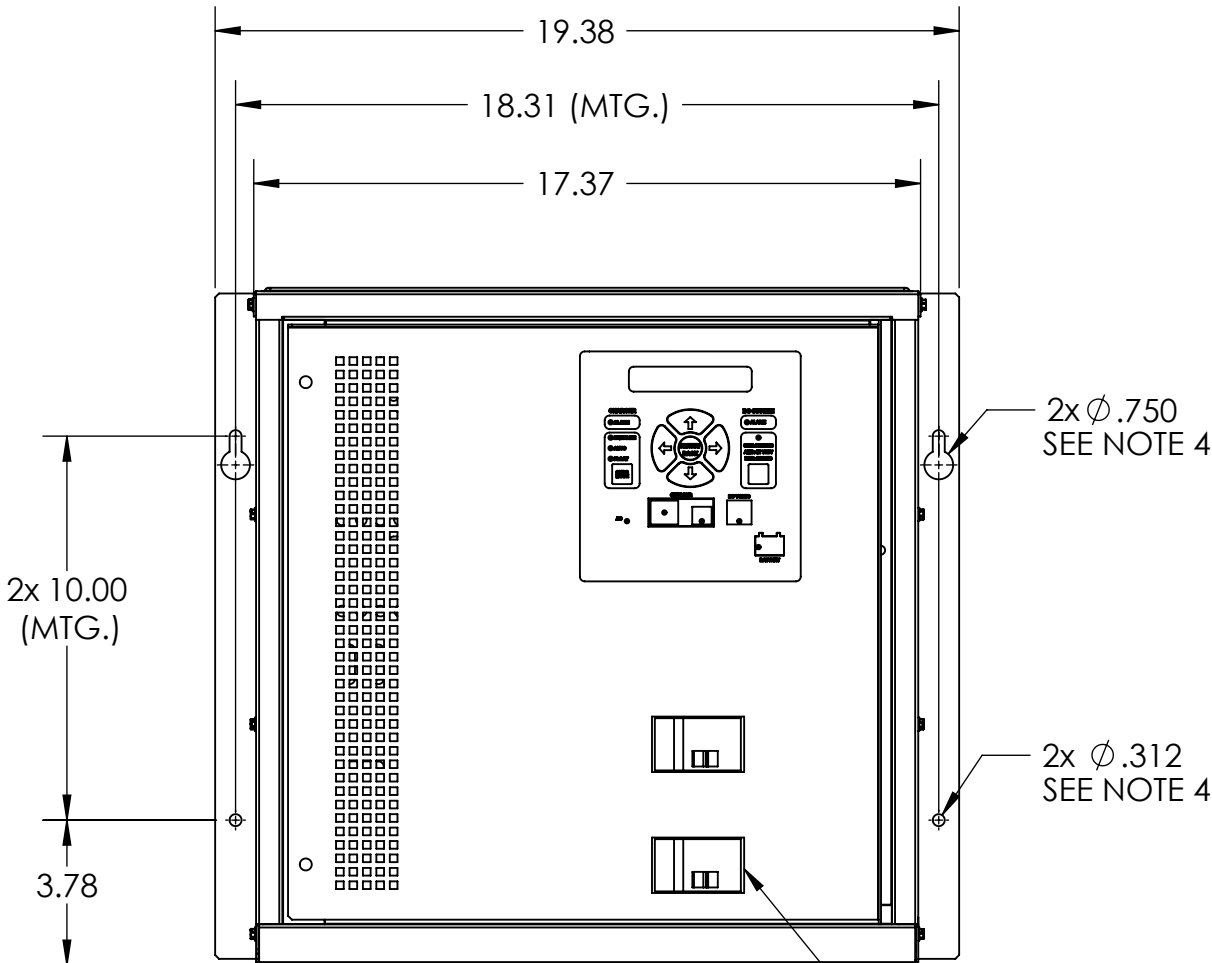


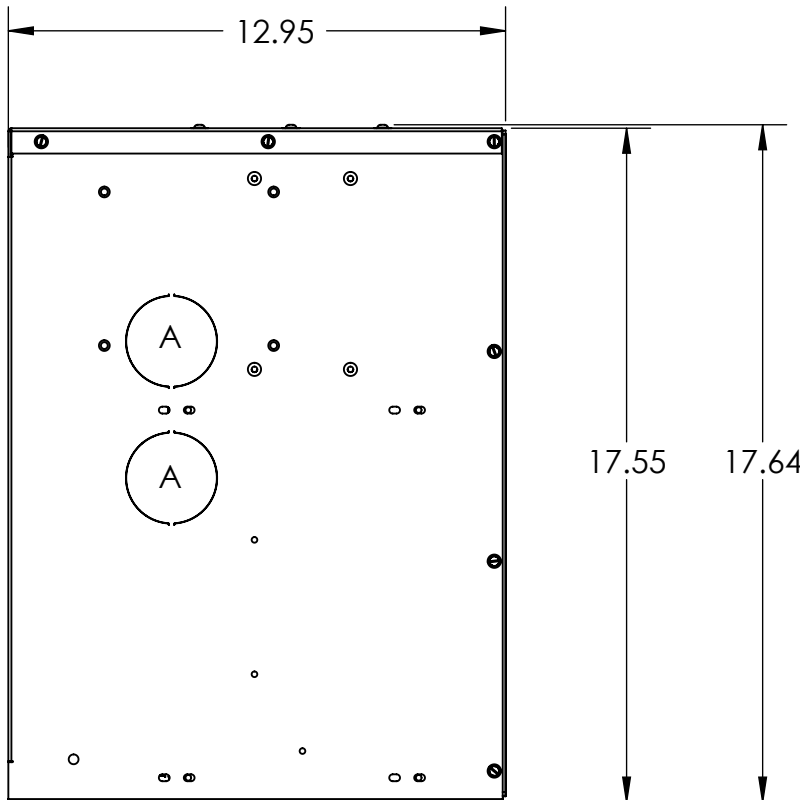
DCN		REV	REVISIONS		DATE	APPROVED
106422		A	DESCRIPTION		11/25/2013	JWF
106512		B	INITIAL RELEASE		10/6/2014	JWF
			UPDATE TABLE 3 SHEET 5			



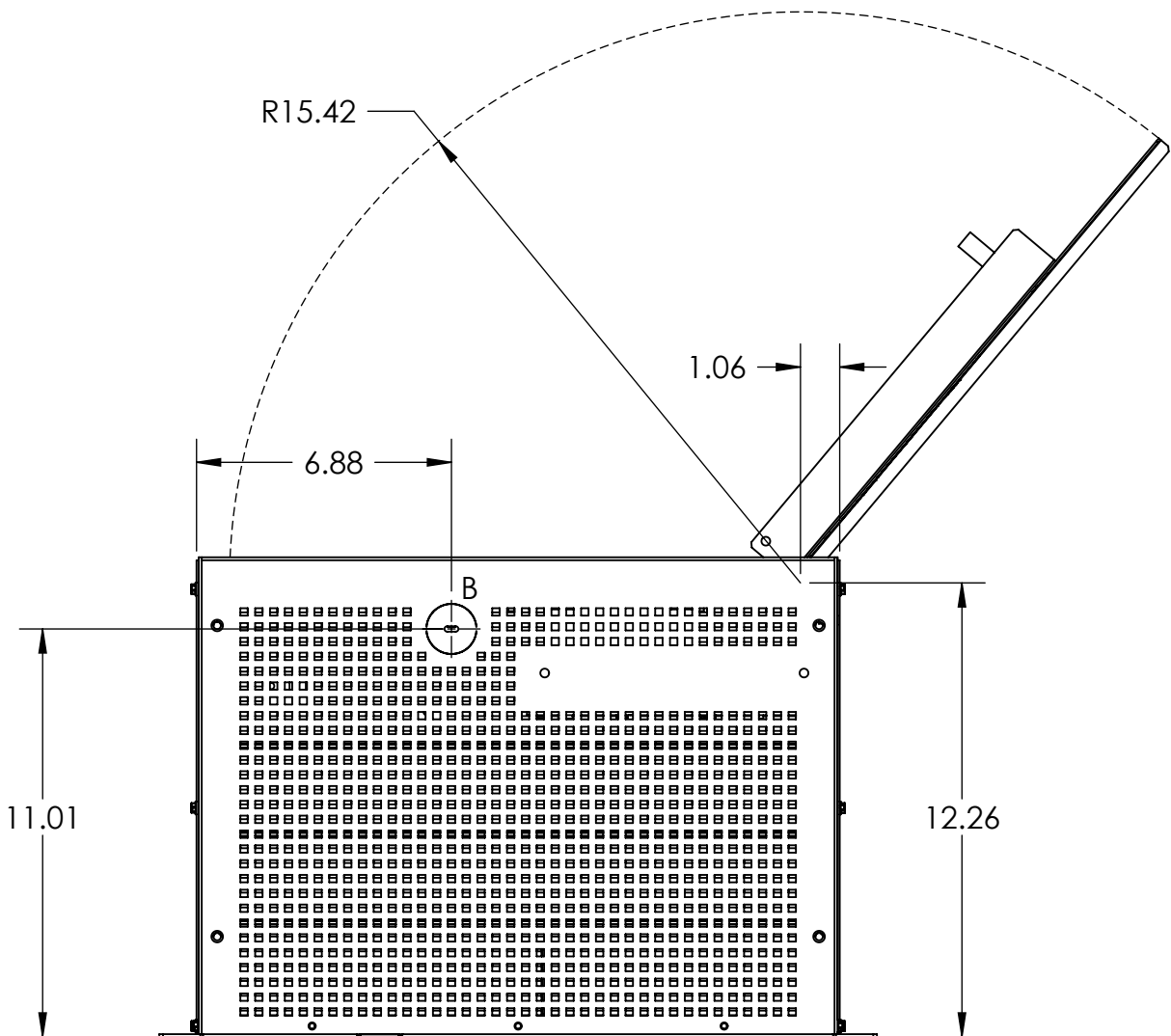
Left



Front



Right




Bottom



WALL MOUNT

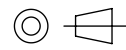
- Notes:
- DO NOT attempt to remove the large laser-cut knockouts labeled "A".
 - Use only the knockouts labeled "B" and "C". For holes marked "B", attach 1.0in electrical conduit. For holes marked "C", attach .75in electrical conduit.
 - Allow 6in of free air space minimumf top, 4in free air space bottom for for ventilation.
 - Keyhole slots and holes are provided for wall mounting with 1/4in diameter hardware.
 - Breaker size and ratings vary depending on charger model.



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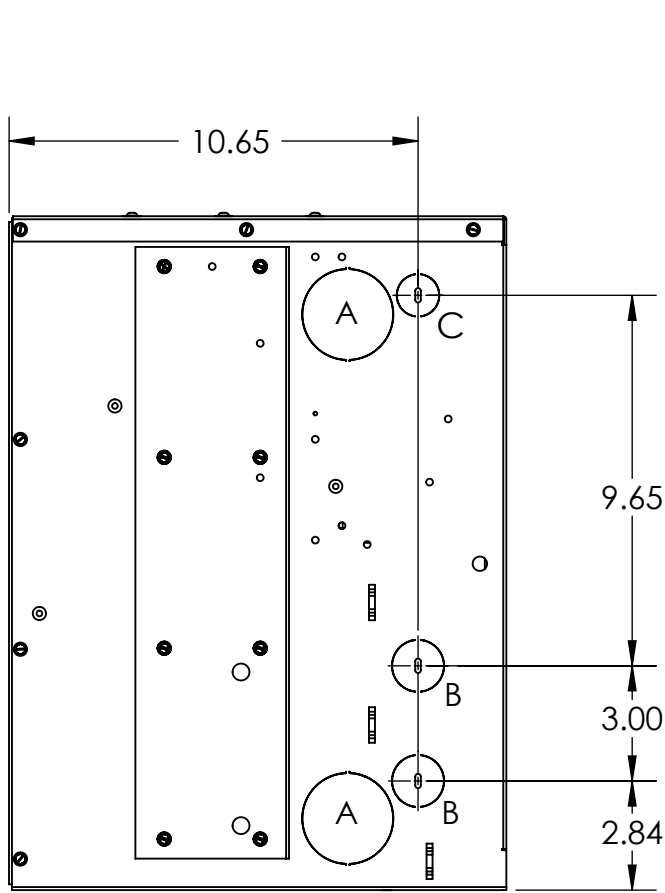
NAME	DATE
JWF	2/14/2014
CHECKED	THIRD ANGLE PROJECTION
	
DIMENSIONS & TOLERANCES PER ASME Y14.5 - 2009	

DESCRIPTION		
2DCAD,Q1,STANDARD		
SIZE	DOCUMENT NUMBER	REV
C	2DCAD-Q1-STD	B
		SHEET 1 OF 5

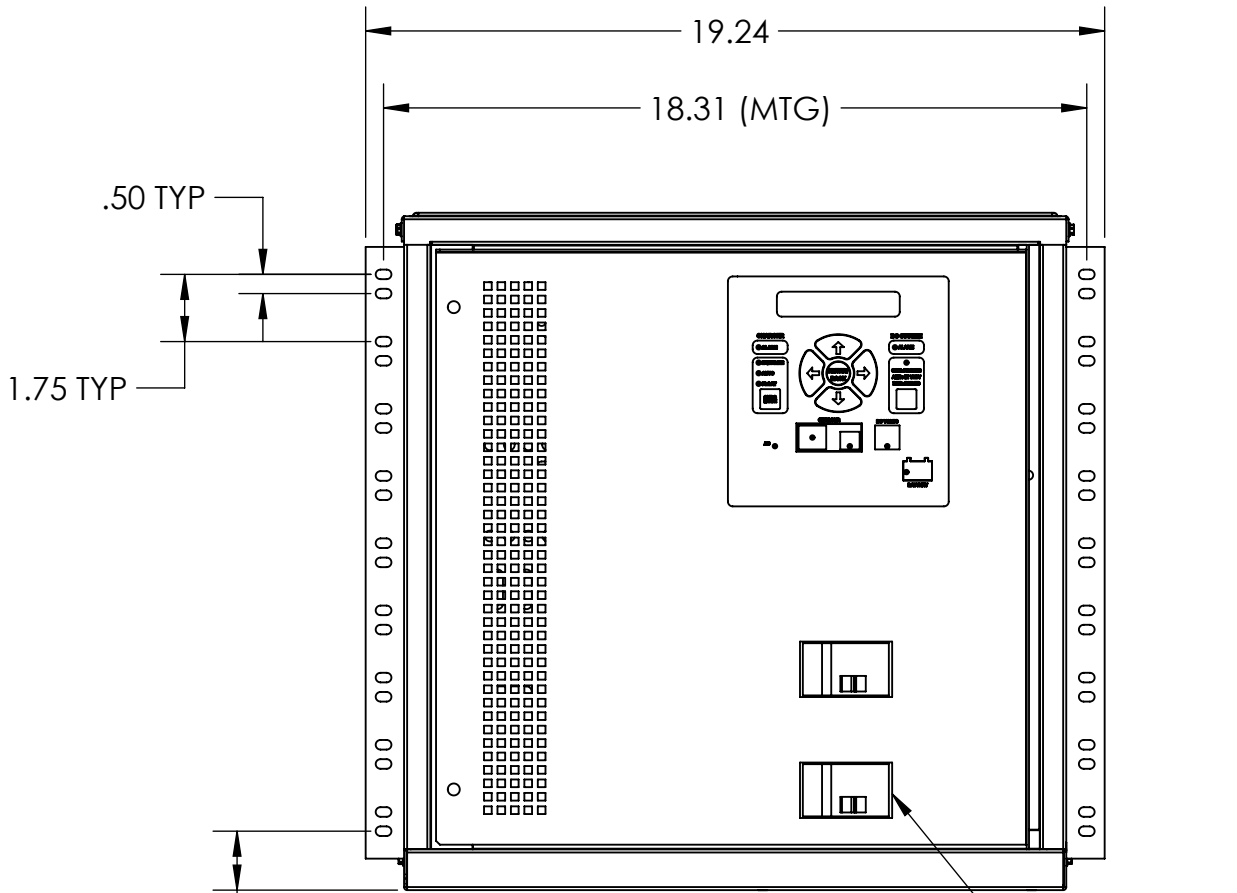
DCN		REV	REVISIONS		DATE	APPROVED
--		--	See sheet 1.		--	--

F
E
D
C
B
A

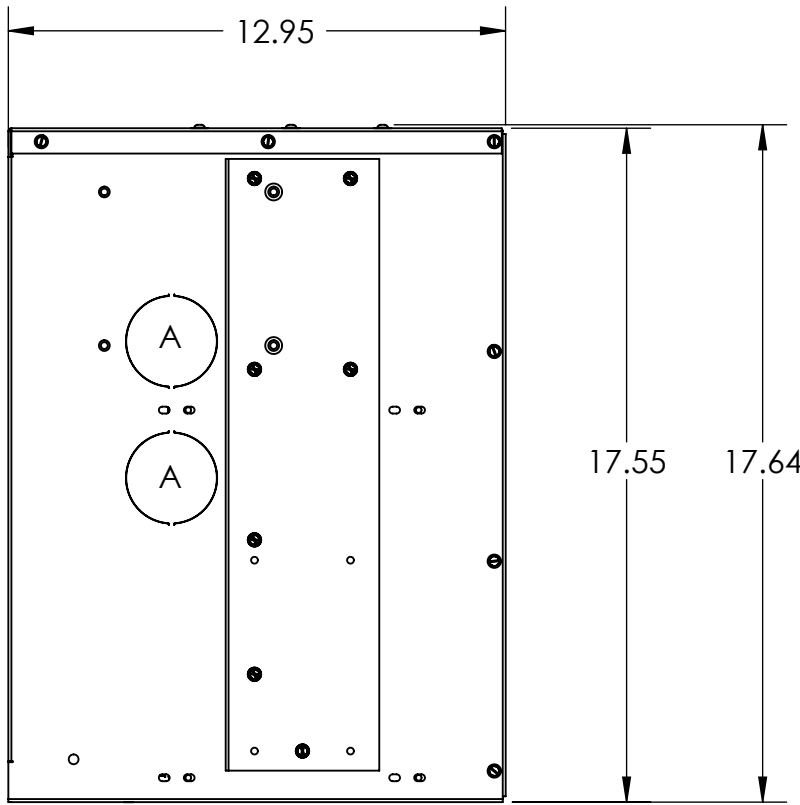
F
E
D
C
B
A



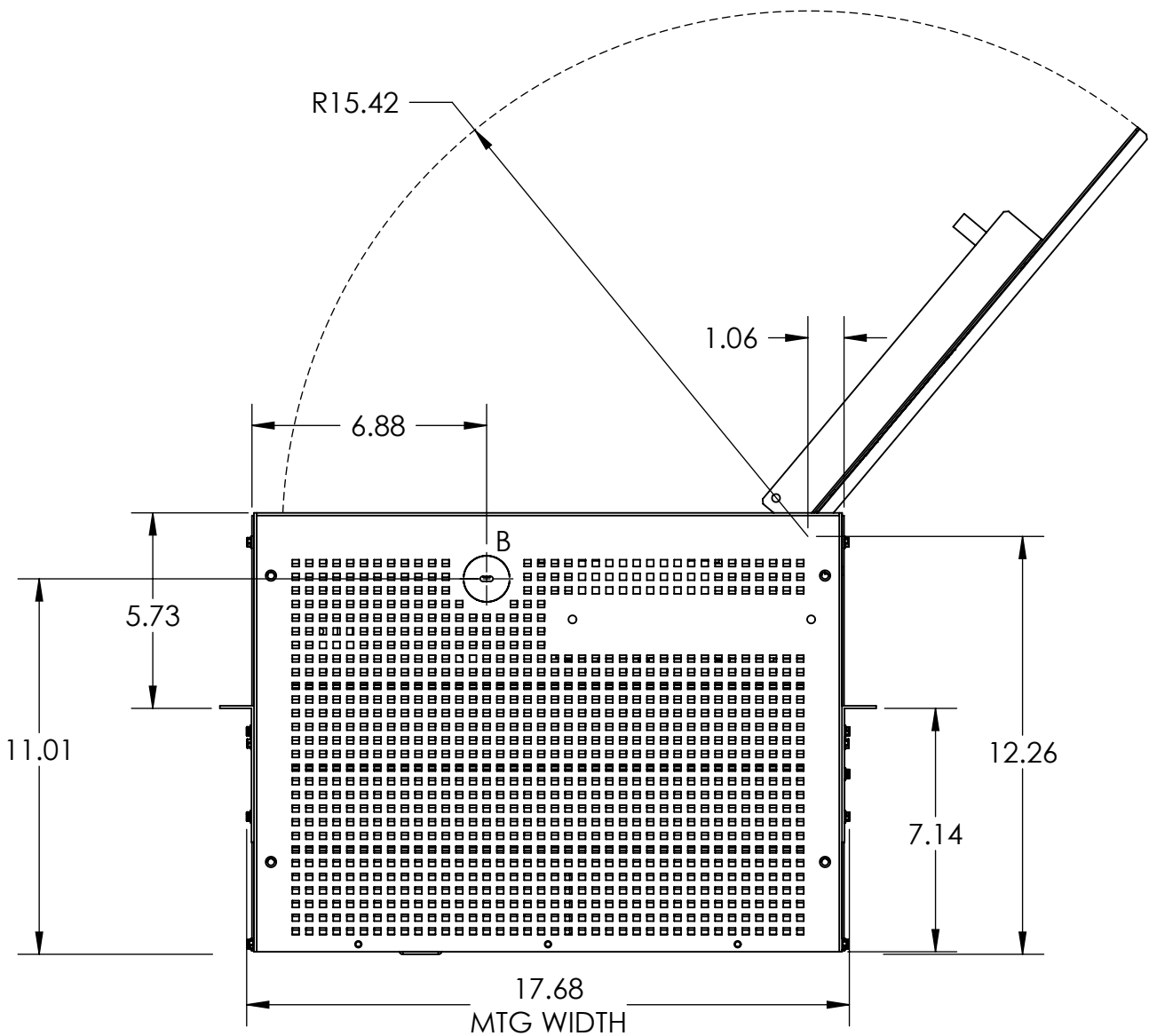
Left



Front



Right




Bottom



RACK MOUNT

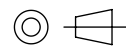
- Notes:
- DO NOT attempt to remove the large laser-cut knockouts labeled "A".
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 - Breaker size and ratings vary depending on charger model.



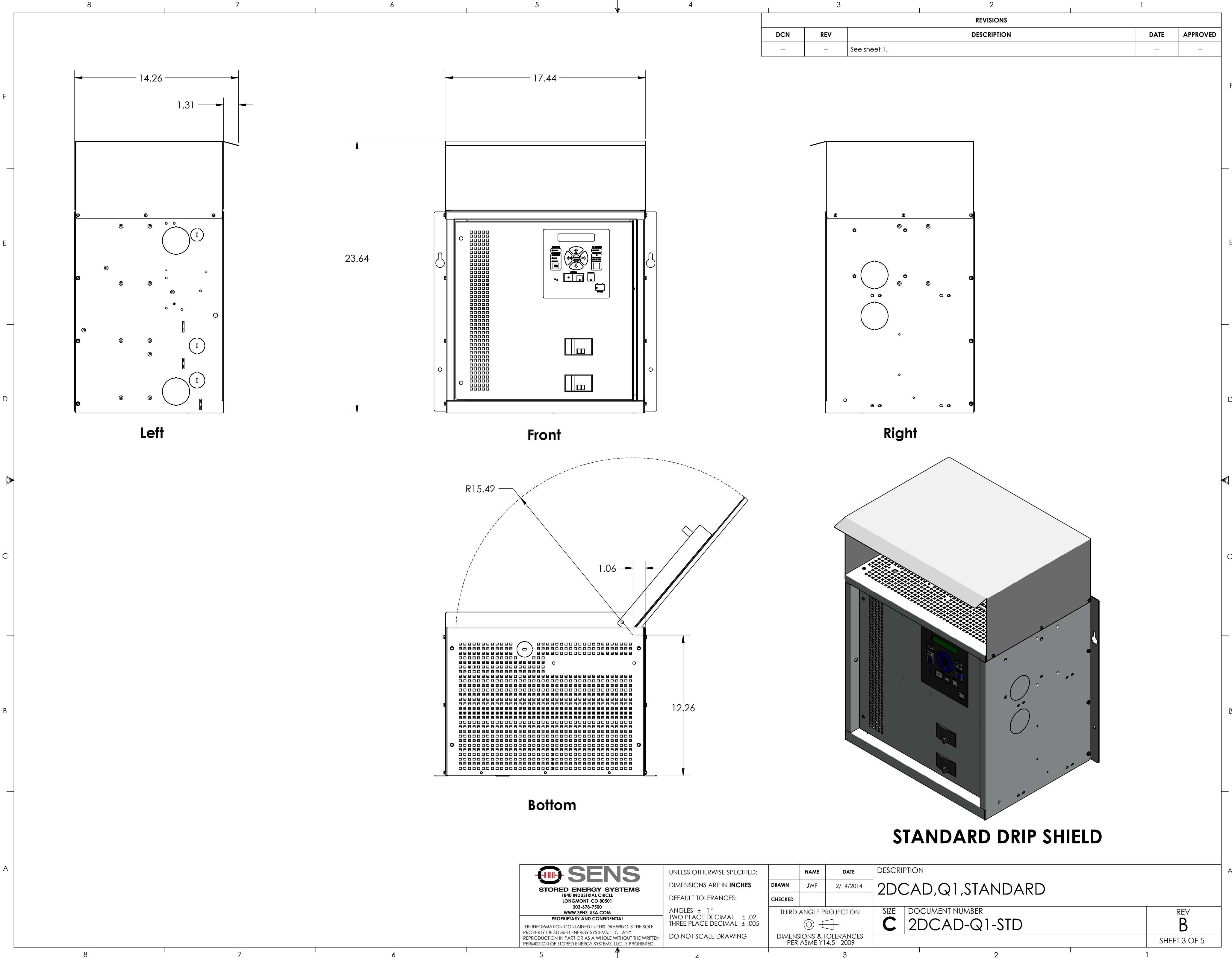
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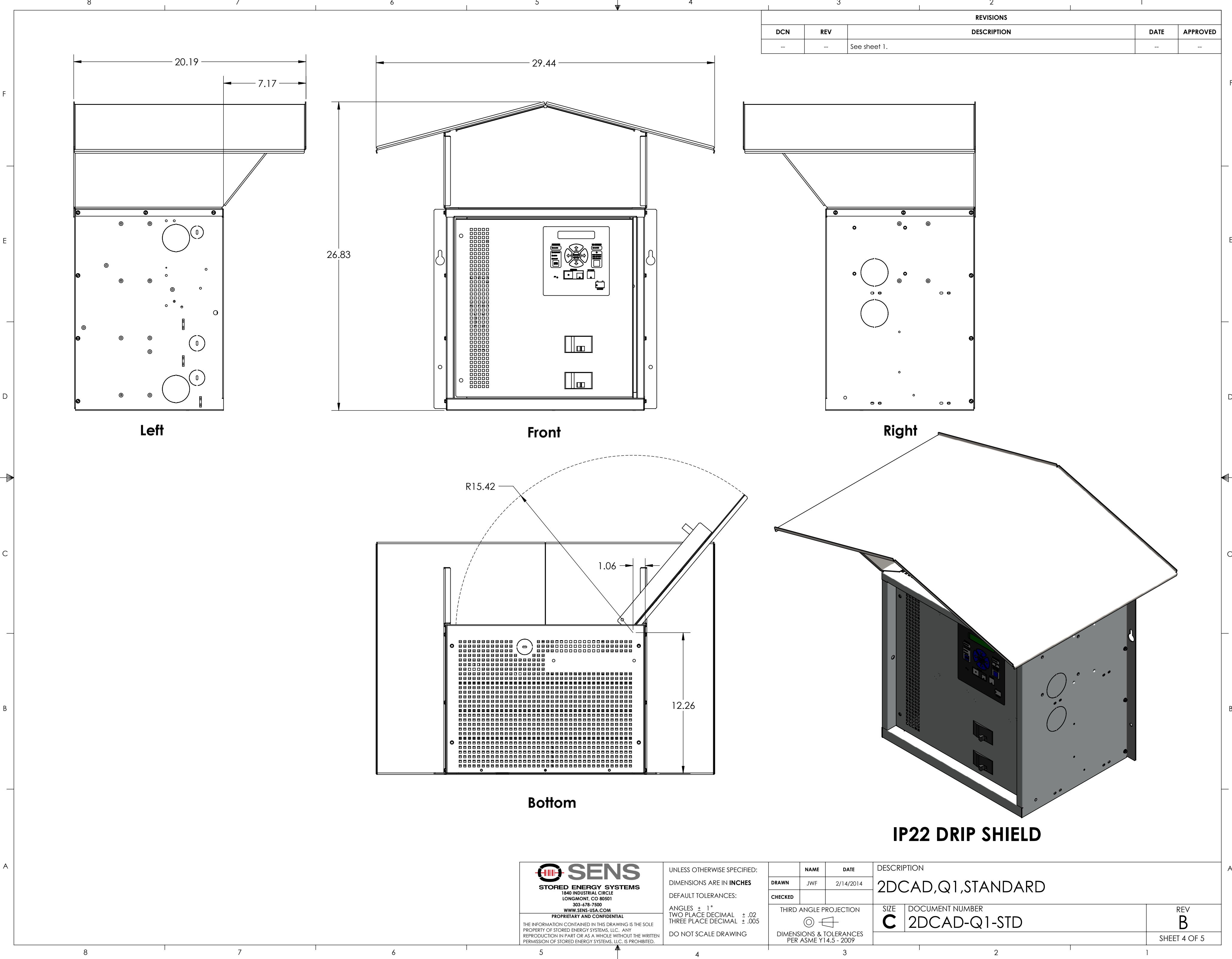
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NAME	DATE
JWF	2/14/2014
CHECKED	THIRD ANGLE PROJECTION
	
DIMENSIONS & TOLERANCES PER ASME Y14.5 - 2009	

DESCRIPTION		
2DCAD,Q1,STANDARD		
SIZE	DOCUMENT NUMBER	REV
C	2DCAD-Q1-STD	B
		SHEET 2 OF 5





REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
--	--	See sheet 1.	--	--


Left

Front

Right

Bottom

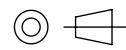
IP22 DRIP SHIELD



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	NAME	DATE
DRAWN	JWF	2/14/2014
CHECKED		
THIRD ANGLE PROJECTION		
		
DIMENSIONS & TOLERANCES PER ASME Y14.5 - 2009		

DESCRIPTION

2DCAD,Q1,STANDARD

SIZE	DOCUMENT NUMBER	REV
C	2DCAD-Q1-STD	B
		SHEET 4 OF 5

Figure 1. - AC Input Voltage Select Jumper Settings

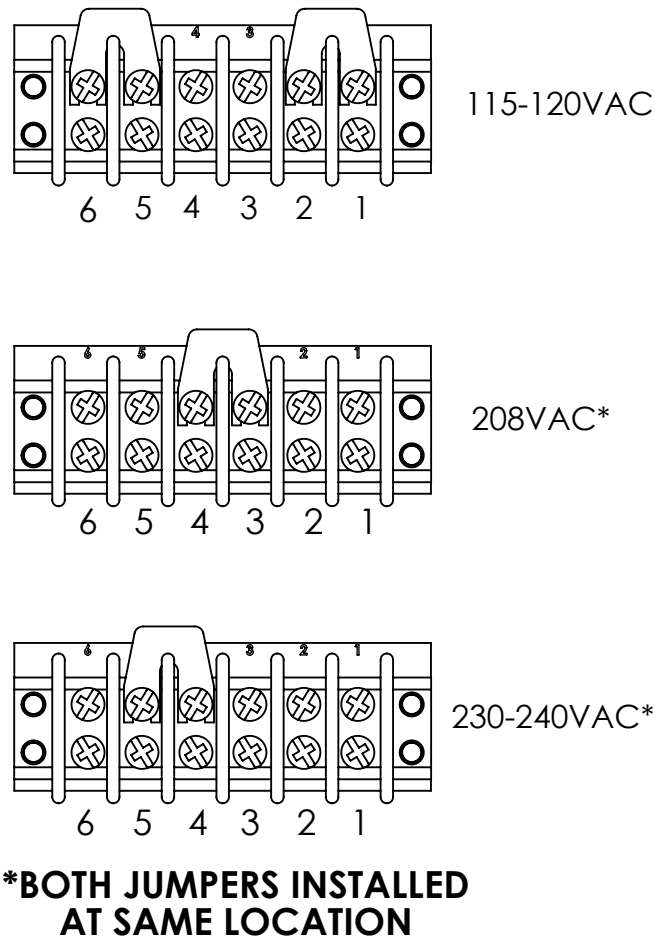
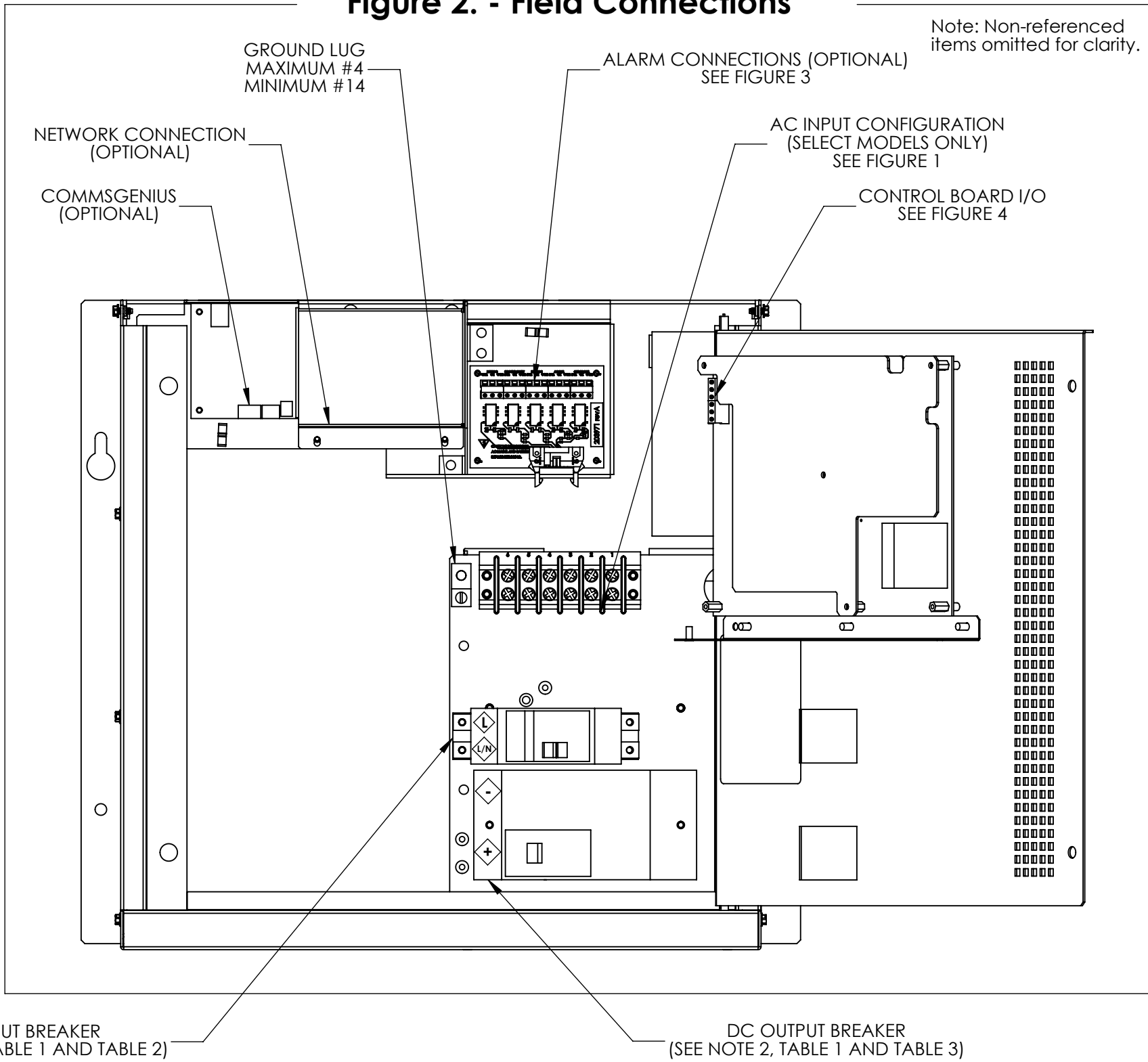


Figure 2. - Field Connections



AC INPUT BREAKER
(SEE NOTE 2, TABLE 1 AND TABLE 2)

DC OUTPUT BREAKER
(SEE NOTE 2, TABLE 1 AND TABLE 3)

Table 2. AC Input Wire Gauge Ratings

Rated Charger Input	Wire Gauge	
	Min	Max
≤ 240 VAC, ≤ 24A	# 14 Cu or Al	#2 Cu or Al
≤ 240 VAC, 60 Hz, > 24A	# 14 Cu or Al	#2 Cu or Al
≤ 240 VAC, 50/60 Hz, > 24A	# 14 Cu, #12 Al	# 1/0 Cu or Al
> 240 VAC (All)	# 14 Cu, #12 Al	#2 Cu, #4 Al

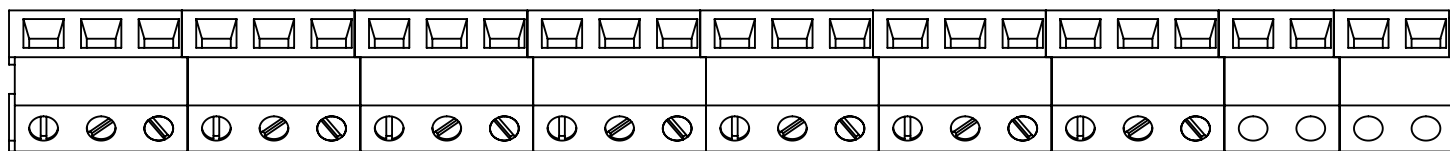
Table 3. DC Output Wire Gauge Ratings

Rated Charger Output		Wire Gauge	
Volts	Current	Min	Max
12V - 48V	≤ 50A	# 14 Cu or Al	# 2 Cu or Al
	≤ 16A	# 14 Cu, #12 Al	# 4 Cu or Al
120V & 240V	≥ 25A	# 14 Cu, #12 Al	# 1/0 Cu or Al

Figure 3. Optional Alarm Connections

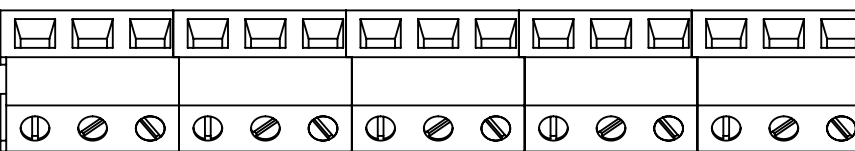
MAXIMUM WIRE - #14. SEE INSTALLATION AND OPERATION MANUAL FOR COMPLETE EXPLANATION OF ALARM FUNCTION AND CONNECTIONS.

END DISCHARGE LOW DC BATTERY CHECK GROUND FAULT HIGH DC AC FAIL CHARGER FAIL
FAIL OK COM FAIL OK COM FAIL OK COM FAIL OK COM FAIL OK COM FAIL OK COM FAIL OK COM NO CONNECTIONS



7 ALARM
OPTION

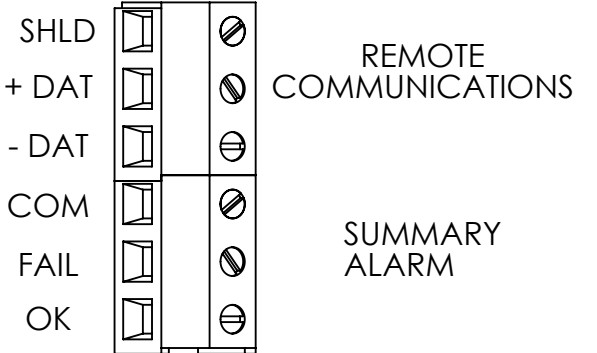
LOW DC GROUND FAULT HIGH DC AC FAIL CHARGER FAIL
FAIL OK COM FAIL OK COM FAIL OK COM FAIL OK COM FAIL OK COM



5 ALARM
OPTION

Figure 4. Control Board I/O

MAX WIRE SIZE #14



DCN		REV		DESCRIPTION		DATE		APPROVED	
-		-		SEE SHEET 1		-		-	

TABLE 1. AC INPUT CURRENT AND AC/DC CIRCUIT BREAKER CURRENT RATINGS

Charger Model	Rated AC Input Current			Charger Input Breaker Current Ratings				Output Breaker Current Ratings
	480V 60Hz (8)	120/208/240V 50/60Hz (P), 60Hz (T)	400V 50/60Hz (V)	480V 60Hz (8)	120/208/240V 50/60Hz (P)	120/208/240V 60Hz (T)	400V 50/60Hz (V)	
Q012-012	0.8	3.2/1.8/1.6	1	15	15	10	15	15
Q012-016	1	4.2/2.4/2.1	1.2	15	15	10	15	20
Q012-025	1.6	6.3/3.6/3.1	1.9	15	15	10	15	35
Q012-035	2.1	8.5/4.9/4.3	2.6	15	15	15	15	45
Q012-050	3.1	13/7.2/6.3	3.8	15	20	20	15	70
Q024-006	0.7	2.9/1.7/1.5	0.9	15	15	10	15	10
Q024-012	1.4	5.6/3.2/2.8	1.7	15	15	10	15	15
Q024-016	1.8	7.4/4.3/3.7	2.2	15	15	10	15	20
Q024-025	2.9	12/6.7/5.8	3.5	15	15	15	15	35
Q024-035	4	16/9.1/7.9	4.7	15	20	20	15	45
Q024-050	5.6	23/13/11	6.8	15	30	30	15	70
Q048-006	1.3	5.2/3.0/2.6	1.6	15	15	10	15	10
Q048-012	2.6	10/5.9/5.1	3.1	15	15	15	15	15
Q048-016	3.3	13/7.7/6.7	4	15	20	20	15	20
Q048-025	5.2	21/12/10	6.2	15	30	30	15	35
Q048-035	7.1	29/17/14	8.6	15	40	40	15	45
Q048-050	10	40/23/20	12	15	50	50	15	70
Q120-006	3.1	12/7.0/6.1	3.7	15	15	15	15	15
Q120-012	5.9	24/14/12	7	15	30	30	15	15
Q120-016	7.8	31/18/16	9.4	15	40	40	15	20
Q120-025	12	47/27/24	14	15	60	60	20	35
Q240-006	5.9	24/14/12	7	15	30	30	15	15
Q240-012	11	44/26/23	14	15	60	60	20	15

SIZE & STYLE OF AC AND DC BREAKERS MAY CHANGE DEPENDING ON CHARGER MODEL NUMBER.

Notes:

- Polarity of breaker connections is indicated by the text enclosed in a diamond. For AC connections, "L" denotes line and "L/N" denotes a line or neutral connection, depending on the particular AC line configuration used.
- Tables 2 and 3 specify only the physical capacity of the breaker terminals. In addition to physical limitations, conductors must be electrically adequate per all applicable electrical safety regulations.

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NAME	DATE
JWF	2/14/2014

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THIRD ANGLE PROJECTION

DIMENSIONS & TOLERANCES PER ASME Y14.5 - 2009

DESCRIPTION
2DCAD,Q1,STANDARD

SIZE
C

DOCUMENT NUMBER
2DCAD-Q1-STD

REV
B

SHEET 5 OF 5