Accessory 44 Strip Heater for ASCO® Automatic Transfer Switches

Accessory 44 Strip Heater is designed to keep humidity and/or temperature within the ATS enclosure at acceptable levels. This accessory consists of a mounting bracket with strip heater, thermostat, and terminal block. A transformer with fuses is included when the power for the assembly is derived from the ATS. The 120 V ac customer powered assembly does not include a transformer. This accessory is available factory installed or in kit form. If already installed, turn the thermostat's dial to required setting.

⚠ DANGER

De–energize all power to the Transfer Switch before opening the enclosure. Hazardous voltage capable of causing shock, burns, or death is used in this switch.

Mounting

1. After de–energizing both Normal and Emergency power sources and the Load, open the enclosure door. Carefully use a voltmeter to verify that all power is de–energized at the Transfer Switch power terminals
2. ***Hole Drilling Data Sheets*** are shown in this publication. They are not drilling templates. They specify locations and sizes of the strip heater assembly mounting holes for each ampere rating size ATS (not for J–design). Drill two holes into the enclosure as indicated.

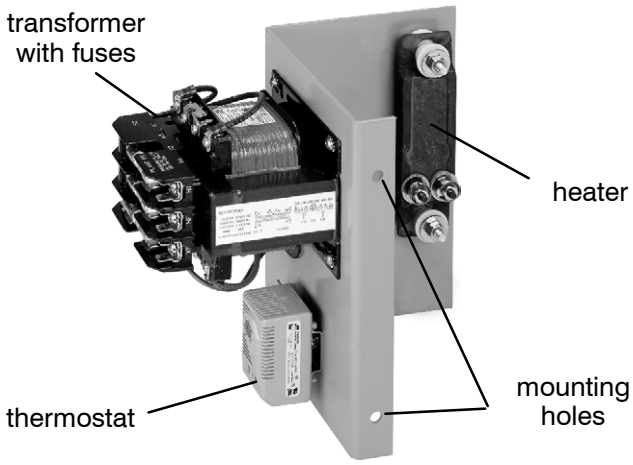
⚠ CAUTION

Protect the transfer switch from metal chips when drilling the holes. Clean up all debris inside the enclosure after drilling.

3. Use the kit hardware supplied to mount the bracket to the inside of the enclosure. The thermostat should face the front of the enclosure after mounting the assembly. For J–design ATSs refer to the installation drawing.

⚠ DANGER

De–energize the conductors before making any connections. Open the Normal and Emergency source circuit breakers and be sure that the load is also de–energized.



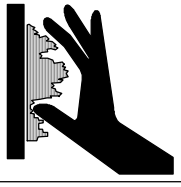
Wiring

1. A ***Mounting Data*** drawing is included on the back page. Select the appropriate wiring diagram and illustration according to Transfer Switch ampere rating size. If 120 V ac customer–furnished power will be used, go to step 2. If power will be from the Transfer Switch go to step 3.
2. **120 V ac customer–furnished power**. Run the 120 V ac line into the enclosure and connect the wires to TB terminals TB–1 and TB–2 on the strip heater assembly.
3. **Transfer Switch derived power**. Use #14 stranded wire to make a two–wire harness (not provided). Select the appropriate illustration on the ***Mounting Data*** diagram (back page) according to Transfer Switch ampere rating size. Follow it to connect the Transfer Switch to the strip heater assembly. Connect one wire from transfer switch Load terminal LA to the strip heater assembly's fuse block terminal HI; connect the other wire from Load terminal LC to terminal HF on the fuse block. Double check all wiring before continuing.

⚠ CAUTION

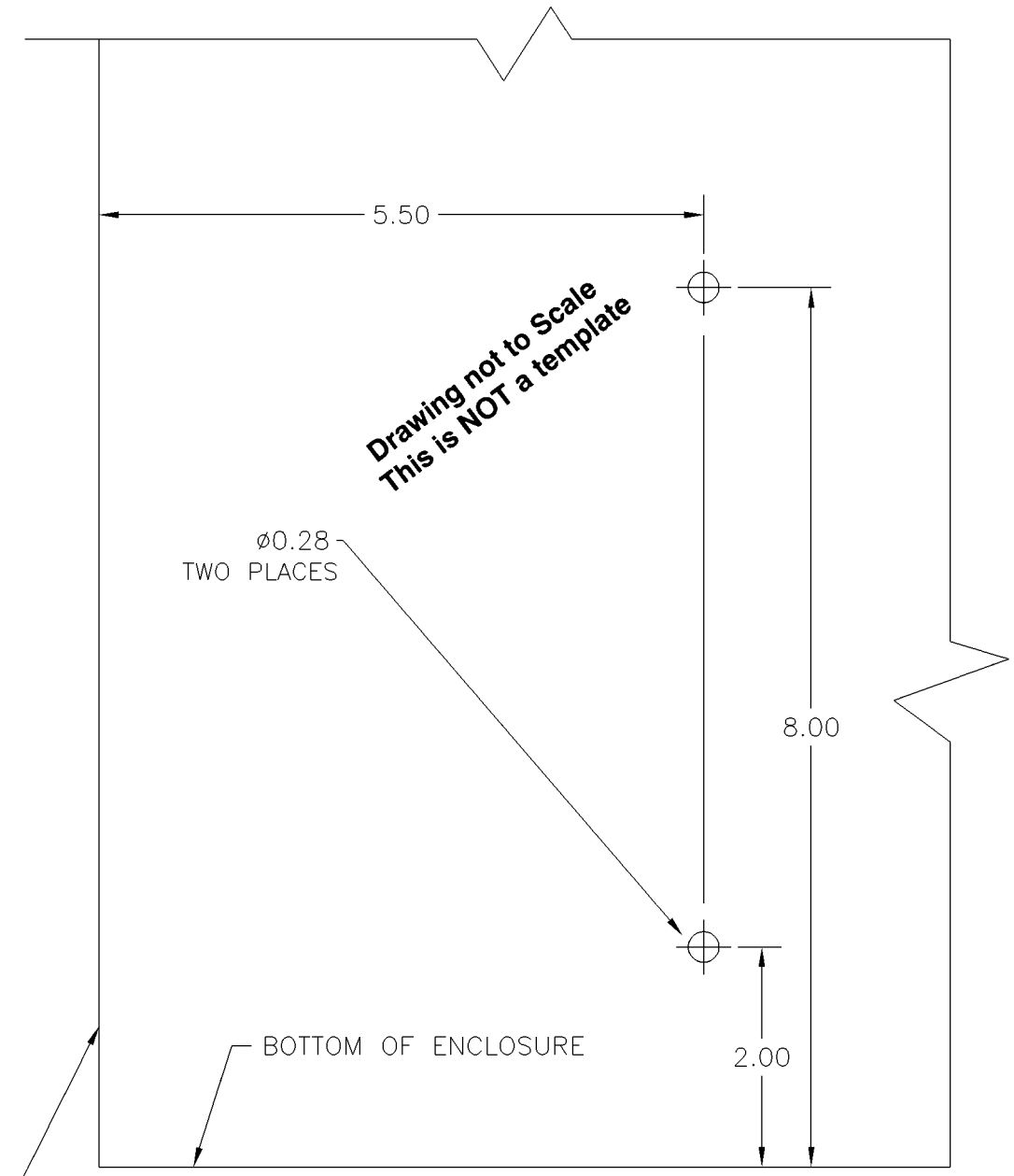
Keep all wiring away from the heater surface.

4. Turn the thermostat's dial to desired setting. Then close the enclosure door.
5. After the door is closed, reenergize the ATS (close Normal and Emergency source circuit breakers and reenergize the load). If a separate 120 V ac line was used for the accessory, energize that line.



⚠ WARNING

To avoid burns, do not touch the heater surface which becomes hot during operation.



PART OF LEFT SIDE VIEW
30–230 AMP TS ENCLOSURE

CHANGE LETTER	ECN NO.	BY	APP.	DATE
D	165121	BWM	WK	10/15/03
	SEE ECN			
C	153671	BWM	WK	1/13/00
	SEE ECN			
B	144996	YZ	YZ	6/97
	SEE ECN			
A	143531	YZ	YZ	2/10/97
	SEE ECN			
—	142945	YZ	SDH	12/18/96
	ISSUED			

PROJECT NAME:

DRILLING | DATA SHEET

HOLE DRILLING
DATA SHEET (30–230 AMP TS)

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	YZ	12/96
CHECKED		
DRAFTING APPROVAL		
FINAL APPROVAL	SDH	12/96

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055

ASSEM. REF. NO.

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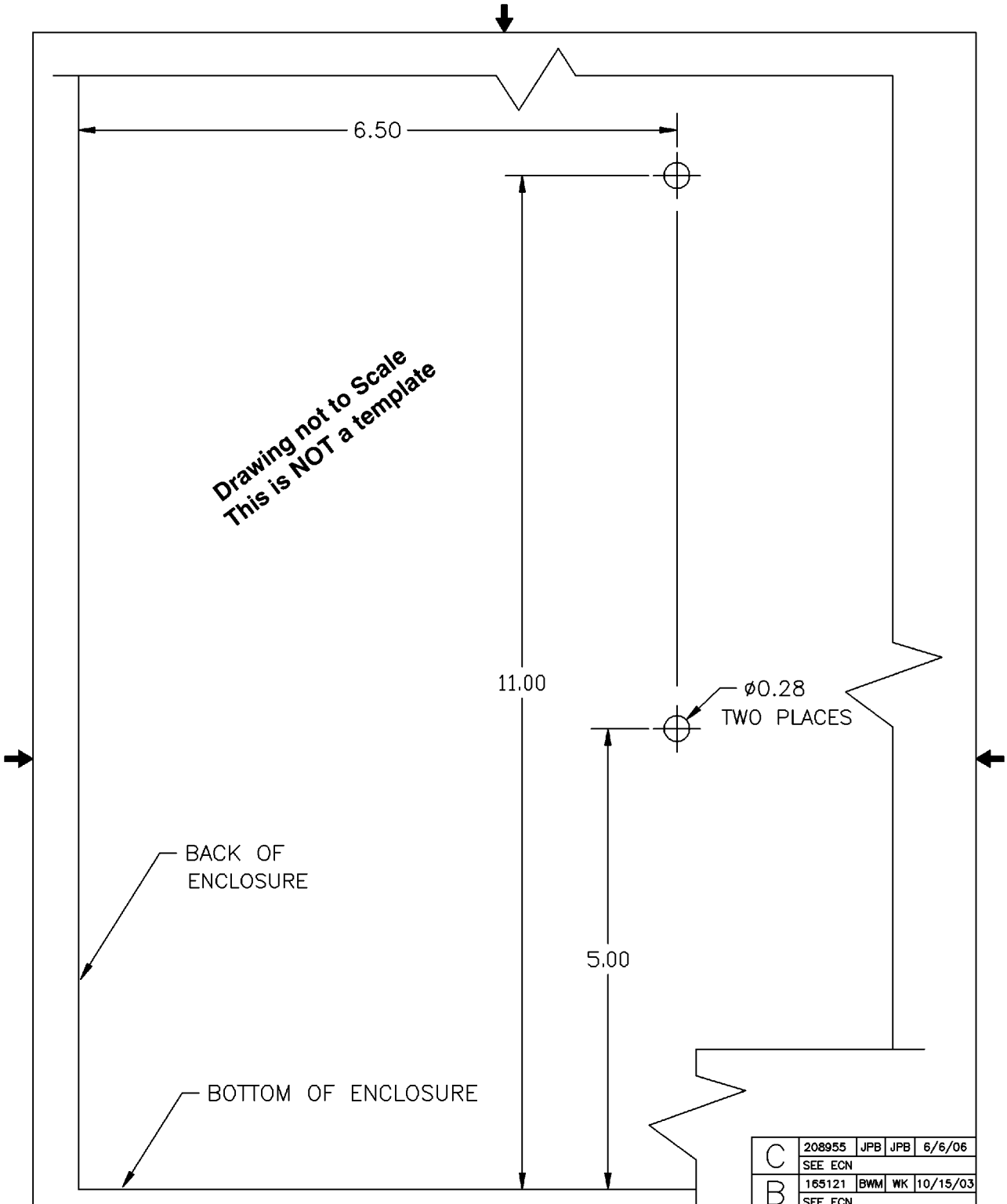
AE ☐	AN ☐	AM ☐	AJ ☐	AL ☐			☐
CH ☐	AV ☐	AA ☐	PS ☐	AR ☐			☐
AG ☐	AP ☐	AC ☐	AS ☐				☐

COMPUTER GENERATED DRAWING

SCALE 1:1 | ACAD | FILE AO

SIZE BS | DWG. NO. 611302

CHANGE LETTER D | ECN NO. 165121 | SHEET 1 OF 1



PART OF LEFT SIDE VIEW
"E" 260-400AMP TS ENCLOSURE

CHANGE LETTER	ECN NO.	BY	APP.	DATE
C	208955	JPB	JPB	6/6/06
	SEE ECN			
B	165121	BWM	WK	10/15/03
	SEE ECN			
A	143531	YZ	YZ	2/10/97
	SEE ECN			
—	142945	YZ	SDH	12/18/96
	ISSUED			

PROJECT NAME:

DRILLING | DATA SHEET

HOLE DRILLING
DATA SHEET (260-400A)

THIRD ANGLE PROJECTION

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CH	☐	AV	☐	AA	☐	PS	☐	AR	☐		☐
AG	☐	AP	☐	AC	☐	AS	☐		☐		☐

	BY	DATE
DRAWN BY	YZ	12/96
CHECKED		
DRAFTING APPROVAL		
FINAL APPROVAL	SDH	12/96

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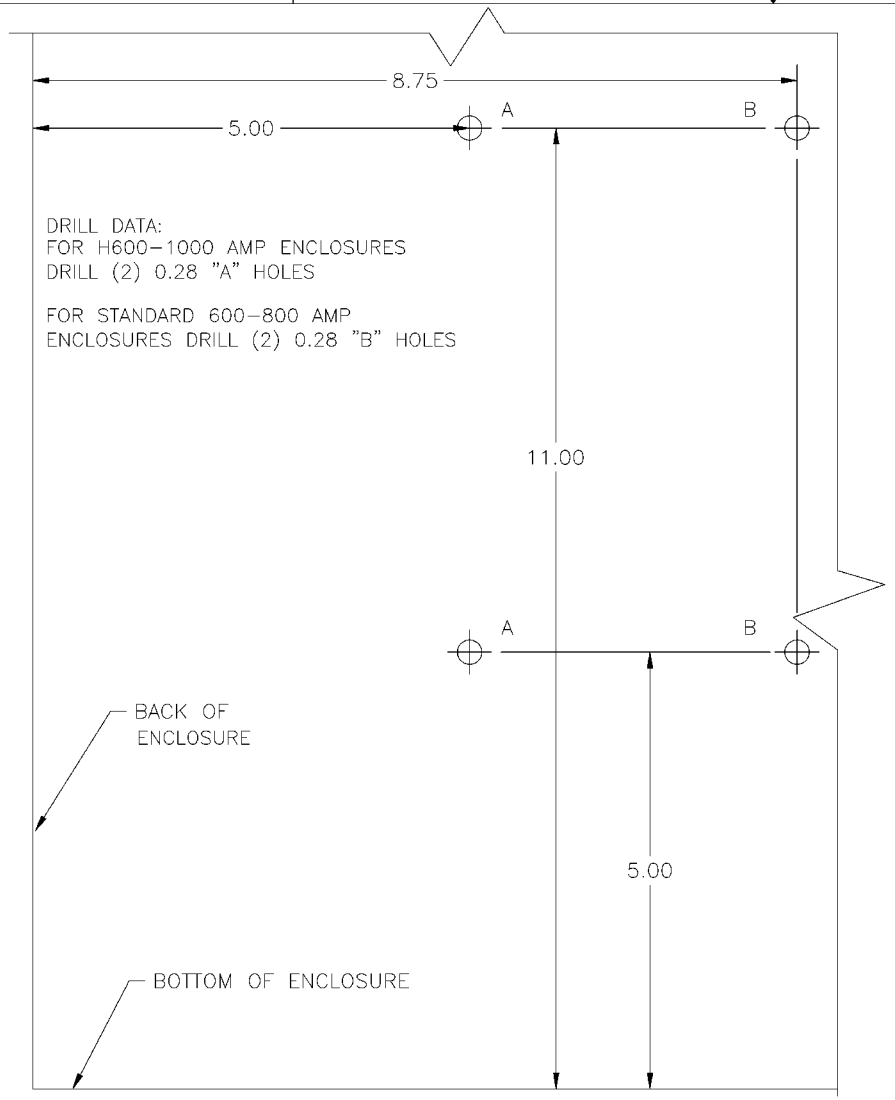
COMPUTER GENERATED DRAWING

SCALE 1:1 | ACAD | FILE A0

SIZE BS | DWG. NO. 611303

CHANGE LETTER C | ECN NO. 208955 | SHEET 1 OF 1



DRILL DATA:
FOR H600–1000 AMP ENCLOSURES
DRILL (2) 0.28 "A" HOLES

FOR STANDARD 600–800 AMP
ENCLOSURES DRILL (2) 0.28 "B" HOLES

PART OF LEFT SIDE VIEW
STANDARD 600–800AMP TS ENCLOSURE
H DESIGN 600–1000AMP TS ENCLOSURE

Drawing not to Scale
This is NOT a template

CHANGE LETTER	ECN NO.	BY	APP.	DATE
B	157543	BWM	WK	5/2/01
	ADDED H DESIGN			
A	143531	YZ	YZ	2/10/97
	SEE ECN			
—	142945	YZ	SDH	12/18/96
	ISSUED			

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AG ☐	AP ☐	AC ☐	AS ☐	☐	☐	☐	☐	☐

PROJECT NAME:

DRILLING DATA SHEET
HOLE DRILLING
DATA SHEET

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	YZ	12/95
CHECKED		
DRAFTING APPROVAL		
FINAL APPROVAL	SDH	12/95

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-I-003. FOR PLASTIC PARTS SEE MP-I-055

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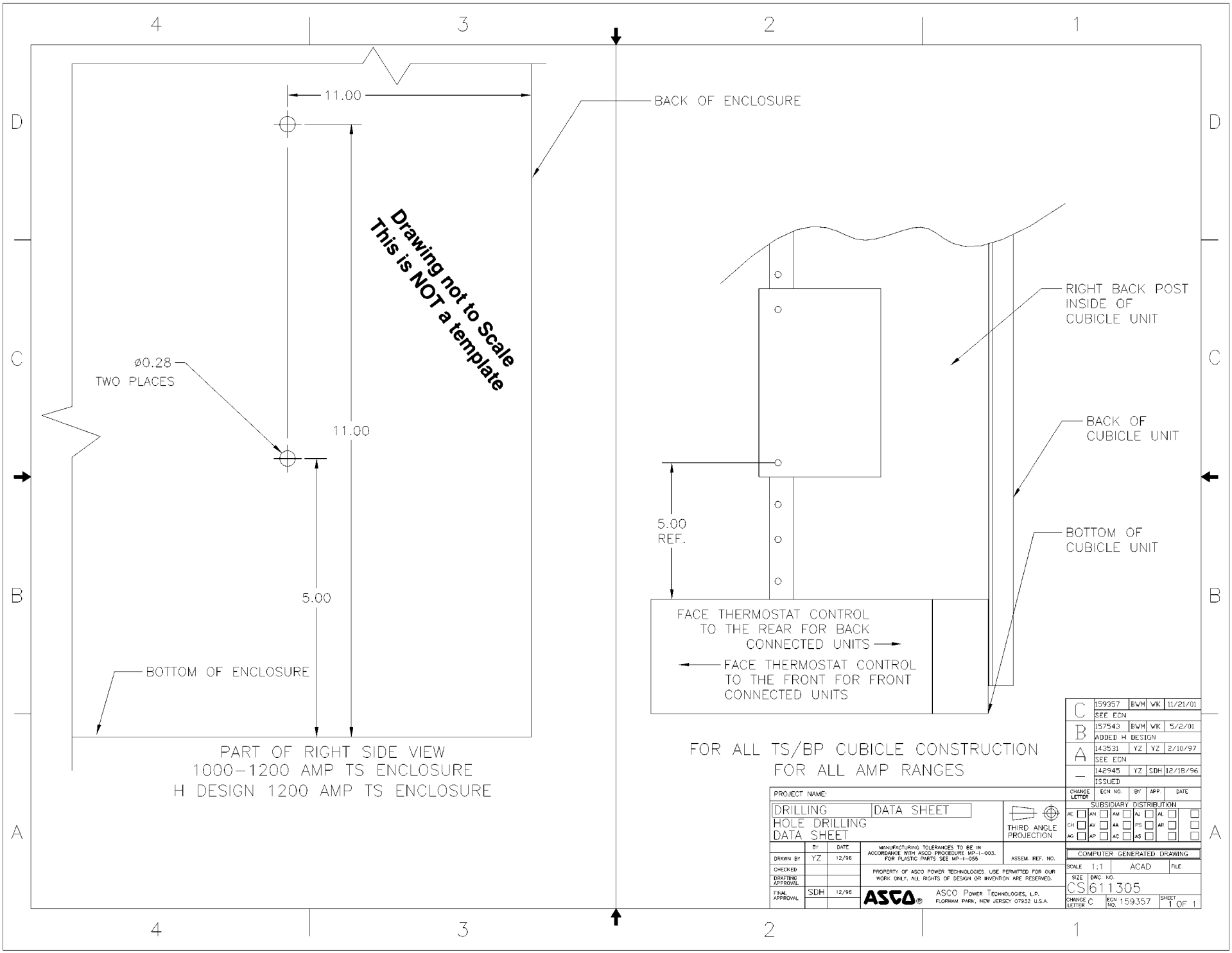
COMPUTER GENERATED DRAWING

SCALE NONE | ACAD | FILE A0

SIZE CS | DWG. NO. 611304

CHANGE LETTER B | ECN NO. 157543 | SHEET 1 OF 1



PART OF RIGHT SIDE VIEW
1000–1200 AMP TS ENCLOSURE
H DESIGN 1200 AMP TS ENCLOSURE

FOR ALL TS/BP CUBICLE CONSTRUCTION
FOR ALL AMP RANGES

CHANGE LETTER	ECN NO.	BY	APP	DATE
C	159357	BWM	WK	11/21/01
	SEE ECN			
B	157543	BWM	WK	5/2/01
	ADDED H DESIGN			
A	143531	YZ	YZ	2/10/97
	SEE ECN			
–	142945	YZ	SDH	12/18/96
	ISSUED			

PROJECT NAME:

DRILLING DATA SHEET

HOLE DRILLING
DATA SHEET

THIRD ANGLE PROJECTION

SUBSIDIARY DISTRIBUTION

	BY	DATE
DRAWN BY	YZ	12/96
CHECKED		
DRAFTING APPROVAL		
FINAL APPROVAL	SDH	12/96

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-I-003. FOR PLASTIC PARTS SEE MP-I-055

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COMPUTER GENERATED DRAWING

SCALE 1:1 | ACAD | FILE

SIZE C | DWG. NO. CS611305

CHANGE LETTER C | ECN NO. 159357 | SHEET 1 OF 1

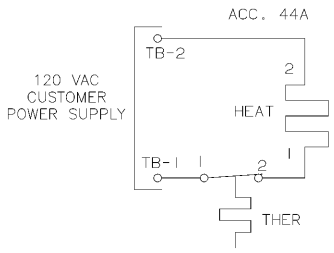


DIAGRAM (CUSTOMER SUPPLY 120V)

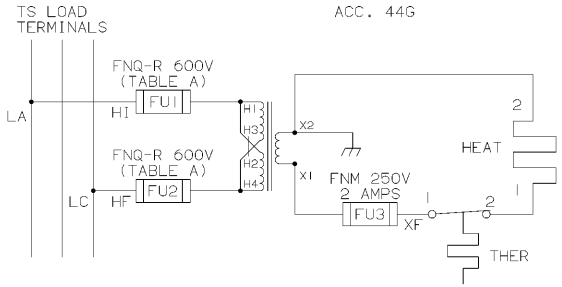


DIAGRAM (208-240V & 440-480V)

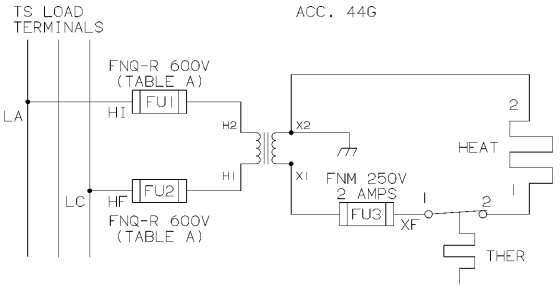
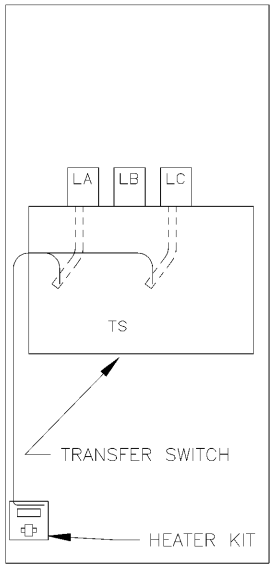
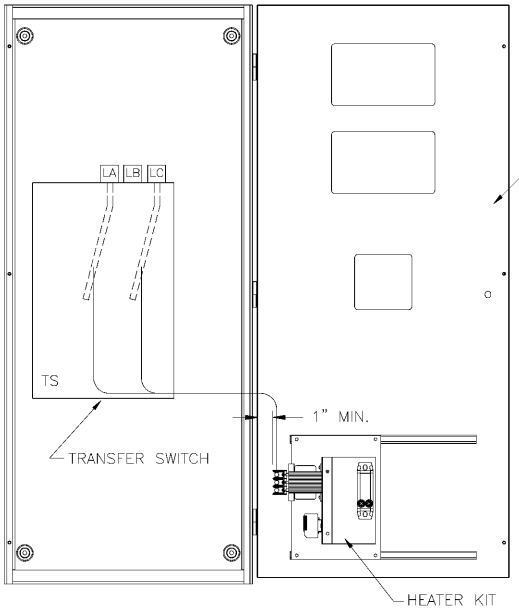


DIAGRAM (380V & 550-600V)

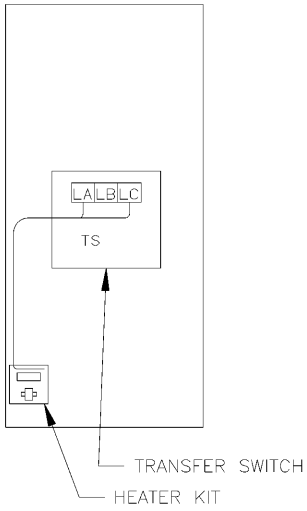
VOLTS	FUSE (PRIMARY)
208-240V	1 1/2 AMP
380V	8/10 AMP
460-480V	6/10 AMP
550-600V	6/10 AMP



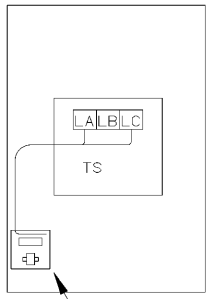
FRONT VIEW
WITHOUT DOOR
600-800 AMPS TS
"H" DESIGN 600-1000 AMPS TS



FRONT VIEW
WITH DOOR
"J" DESIGN 150-600 AMPS TS
(ALSO E7ATB, 150-400 AMPS, MOUNTING LOCATION ON DOOR AS APPLICABLE)



FRONT VIEW
WITHOUT DOOR
"E" 260-400 AMPS TS (ATS)



FRONT VIEW
WITHOUT DOOR
30-230 AMPS TS

NOTE:
1. DRAWINGS ARE NOT TO SCALE
2. USE EXISTING HOLES ON ENCLOSURE TO MOUNT HEATER KIT FOR 1600-3000 AMPS TS ENCLOSURE.

REV.	ECN NO.	BY	APP.	DATE
F	213092	BWM	BK	4/25/07
	REMOVE HARNESS NUMBERS			
E	211548	MJB	BK	01/09/07
	SEE ECN			
D	208955	JPB	JPB	6/6/06
	SEE ECN			
C	165121	BWM	WK	10/15/03
	SEE ECN			
B	159357	BWM	WK	11/20/01
	SEE ECN			
A	157543	BWM	WK	6/12/01
	SEE ECN			
—	143531	YZ	YZ	2/10/97
	ISSUED			

PROJECT NAME:

INSTRUCTION | OUTLINE

MOUNTING DATA FOR
HEATER KITS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	YZ	2/10/97
CHECKED		
PROJECT APPROVAL		
FINAL APPROVAL	YZ	2/10/97

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055

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COMPUTER GENERATED DRAWING

SCALE 1:1 | SIZE DS

DWG. NO. 611911

DRAWING F REV. | ECN NO. 213092 | SHEET 1 OF 2

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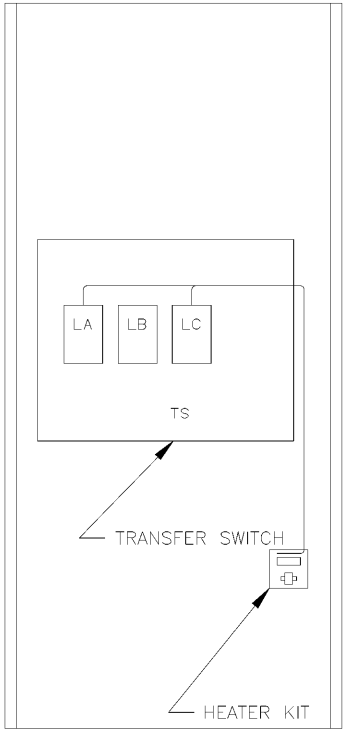
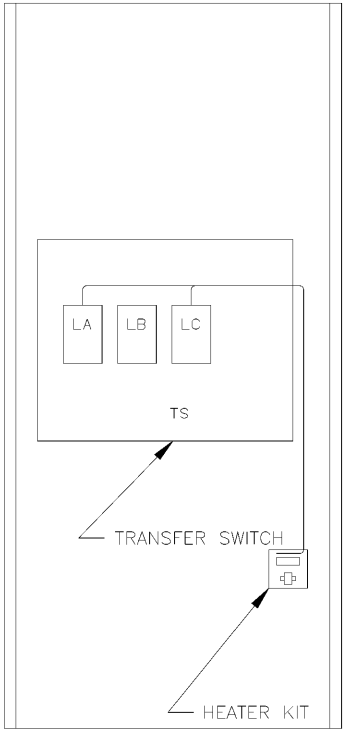
NOTE:
1. DRAWINGS ARE NOT TO SCALE
2. USE EXISTING HOLES ON ENCLOSURE TO MOUNT HEATER KIT FOR 1600–3000 AMPS TS ENCLOSURE.



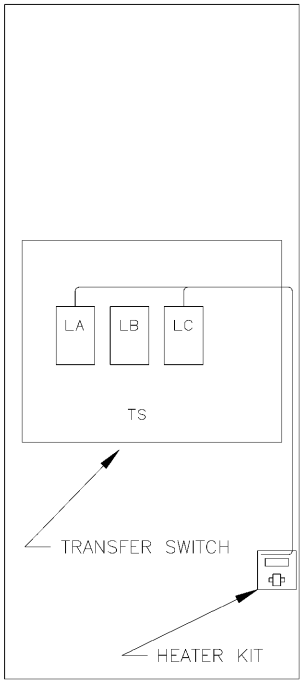
FRONT VIEW
WITHOUT DOOR

1000–2000 AMPS TS (REAR CONNECTED)
2600–3000 AMPS TS



FRONT VIEW
WITHOUT DOOR

H–DESIGN REAR CONNECTED BYPASS SWITHCES
600–1200 AMP TS (REAR CONNECTED)



FRONT VIEW
WITHOUT DOOR

1000–2000 AMPS TS (FRONT CONNECTED)
"H" DESIGN 1200 AMPS TS

REV. TO SHEET	ECN NO.	BY	APP.	DATE
F	213092	BWM	BK	4/25/07
	REMOVE HARNESS NUMBERS			
E	211548	MJB	BK	01/09/07
	SEE ECN			
D	208955	JPB	JPB	6/6/06
	SEE ECN			
C	165121	BWM	WK	10/15/03
	SEE ECN			
B	159357	BWM	WK	11/20/01
	SEE ECN			
A	157543	BWM	WK	6/12/01
	SEE ECN			
–	143531	YZ	YZ	2/10/97
	ISSUED			

PROJECT NAME:

INSTRUCTION | OUTLINE

MOUNTING DATA FOR
HEATER KITS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	YZ	2/10/97
CHECKED		
PROJECT APPROVAL		
FINAL APPROVAL	YZ	2/10/97

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SCALE 1:1 SIZE DS

DWG. NO. 611911

DRAWING REV. F ECN NO. 213092 SHEET 2OF2

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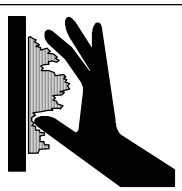
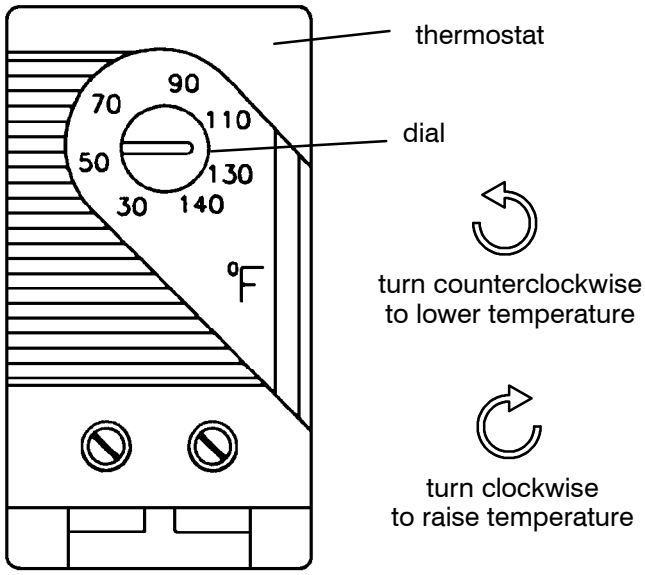
⚠ DANGER

De–energize all power to the Transfer Switch before opening the enclosure. Hazardous voltage capable of causing shock, burns, or death is used in this switch.

Operation

1. After de–energizing both Normal and Emergency power sources and the Load, open the enclosure door. Carefully use a voltmeter to verify that all power is de–energized at the Transfer Switch power terminals
2. Turn the thermostat's dial to desired setting. Then close the enclosure door.
3. After the door is closed, reenergize the ATS (close Normal and Emergency source circuit breakers and reenergize the load). If a separate 120 V ac line was used for the accessory, energize that line.



⚠ WARNING

To avoid burns, do not touch the heater surface which becomes hot during operation.