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Introduction

Purpose

This document explains how to install and network AlphaEclipse 2600 sign modules.

NOTE: These instructions do *not* cover *cased* AlphaEclipse 2600 signs. For cased signs, see the **AlphaEclipse 2500/2600 Sign Installation Manual**.

Revision history

Revision	Date	Notes
9711-7102	August 14, 2003	Preliminary release.
9711-7102	August 27, 2003	First release.

Related documentation

Part #	Manual title	Description
9711-7001F	AlphaEclipse 2500/2600 Sign Installation Manual	Describes the electrical and mechanical installation of cased AlphaEclipse 2500 and 2600 signs.
9708-8081G	AlphaNET 3.0 User Manual	This document shows how to install and use AlphaNET version 3.0 software to create and send messages to signs. Numerous examples are provided.

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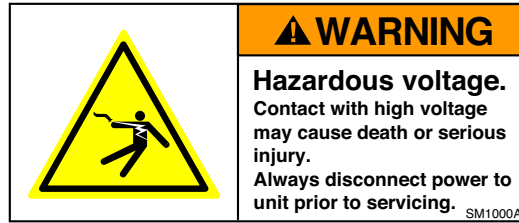
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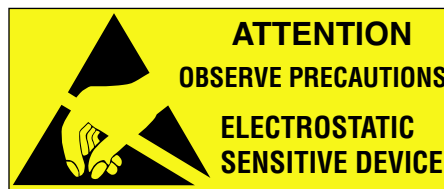
The distinctive trade dress of this product is a trademark claimed by Adaptive Micro Systems, Inc.
Due to continuing product innovation, specifications in this manual are subject to change without notice.

Safety

Warnings and cautions



Preventing electrostatic discharge damage

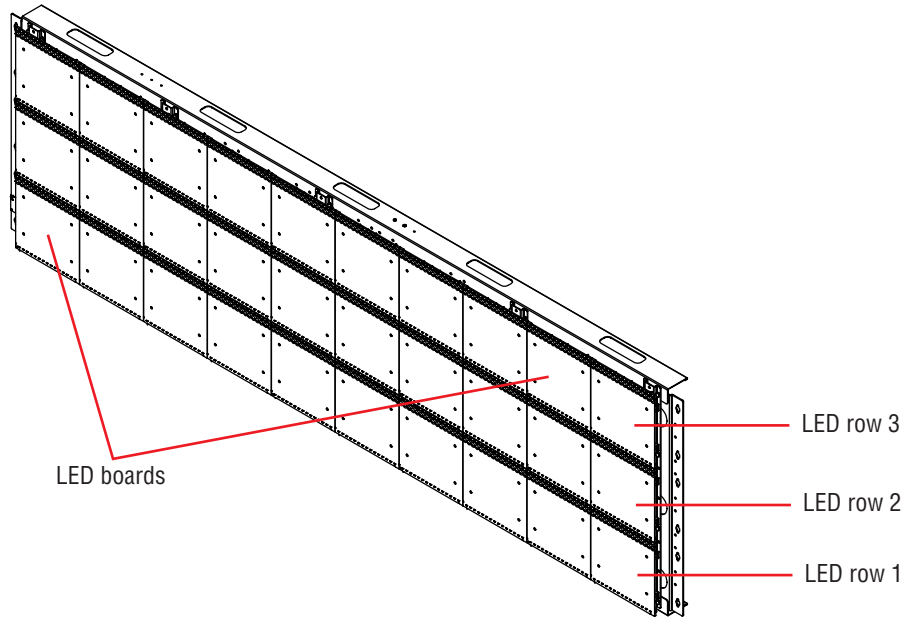


Alpha signs contain components that may be damaged by electrostatic discharge, or static electricity. To prevent this from happening, follow the guidelines in Adaptive TechMemo 00-0005, "Preventing Electrostatic Discharge (ESD) Damage," available on our Web site at <http://www.adaptivedisplays.com>.

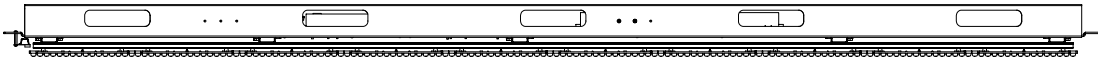
Equipment description

Top, front, and side views

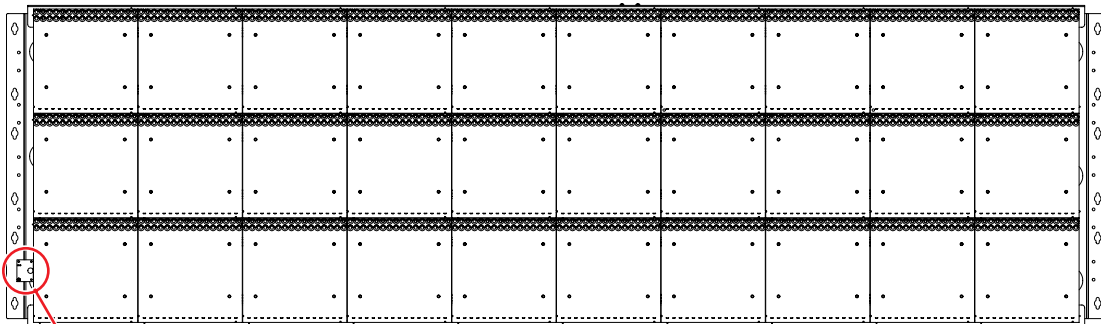
160 x 48 sign shown



Top view

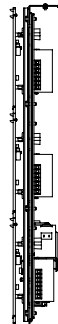


Front view



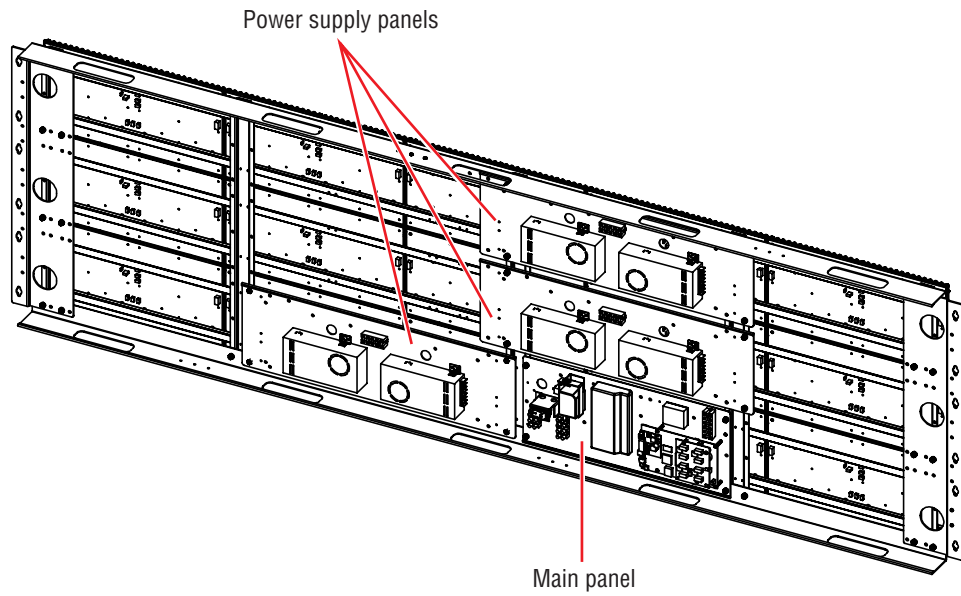
Photocell — used to dim the LED boards.

Side view

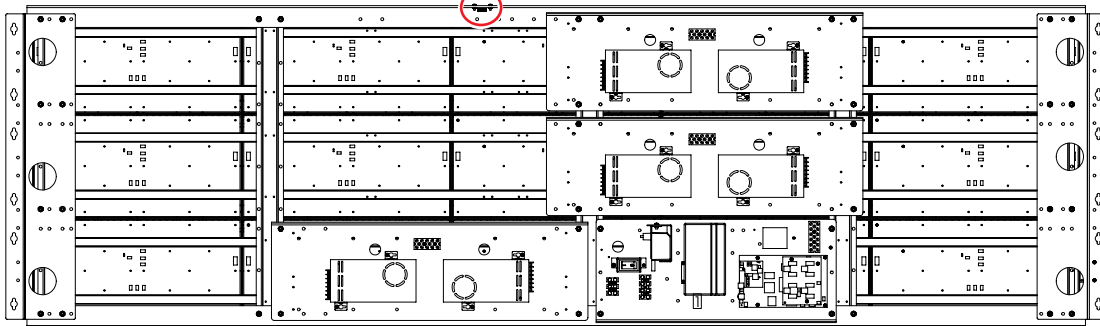


Back view

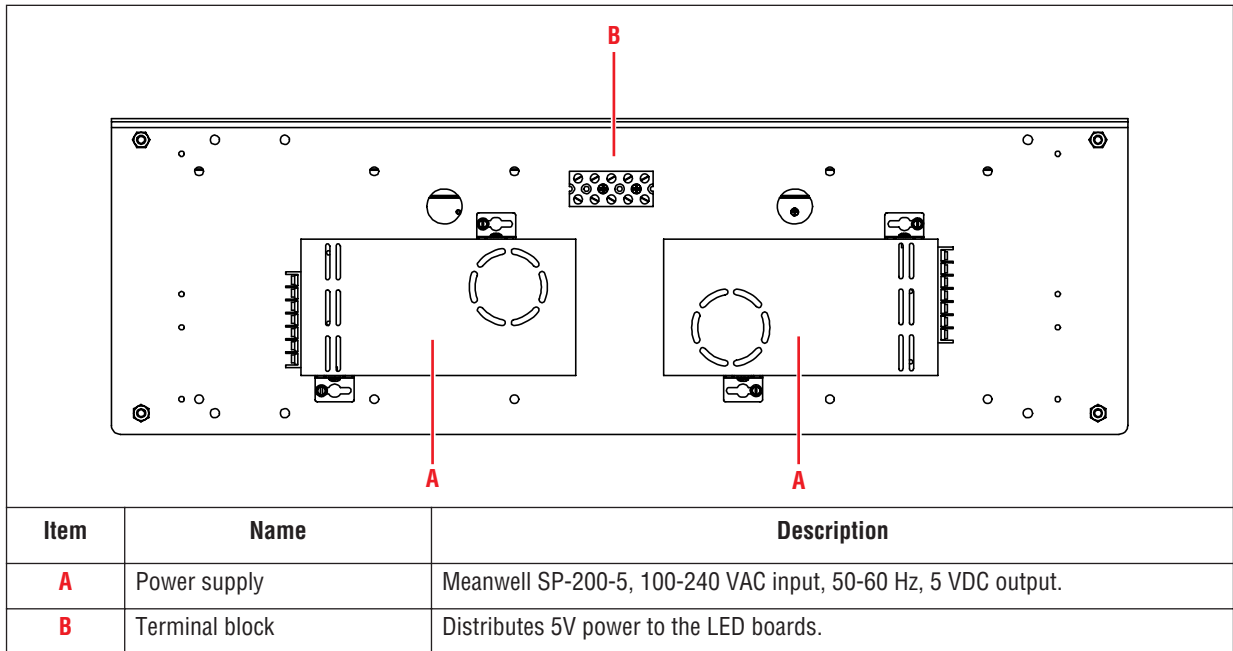
160 x 48 sign shown



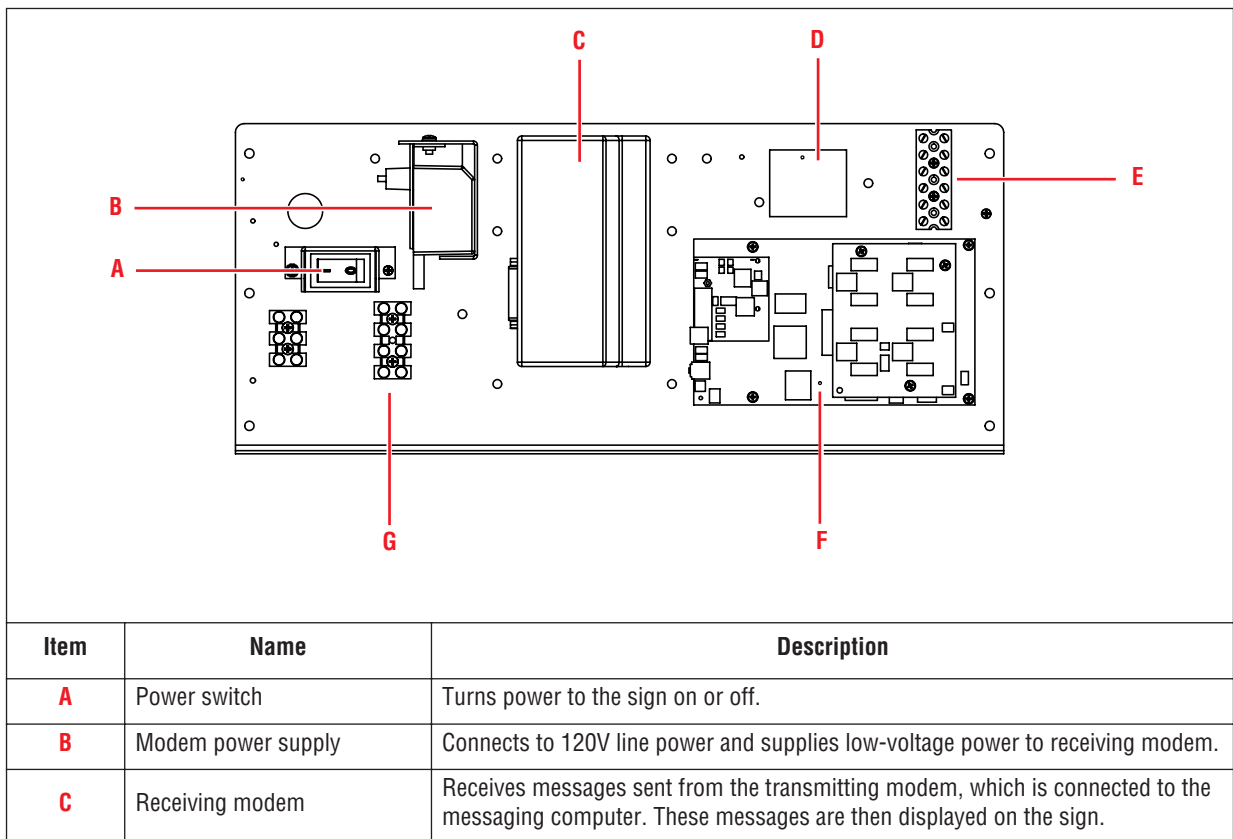
Shutdown thermostat — shuts down the sign when the temperature inside the unit exceeds 82°C (180°F).

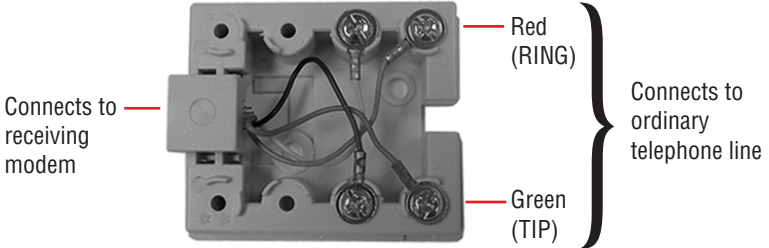




Power supply panel

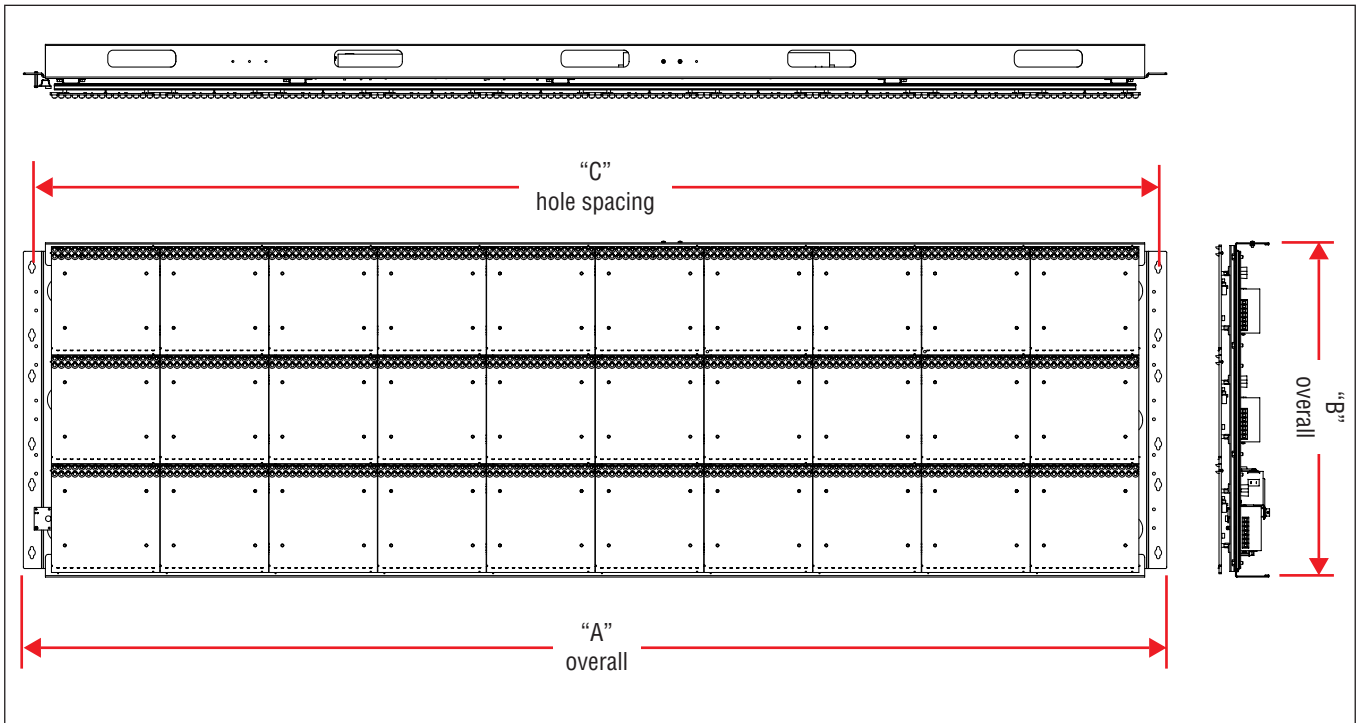


Main panel



<p>D</p>	<p>Telephone service hookup</p>	<p>Connects to the receiving modem and an ordinary telephone line.</p> 
<p>E</p>	<p>Serial I/O terminal block</p>	<p>Used to connect an RS232 or RS485 network to the sign:</p> 
<p>F</p>	<p>Controller board</p>	<p>Controls sign operation. (For more information, see the AlphaEclipse™ 2500/2600 Sign Installation Manual, pn 9711-7001F.)</p> 
<p>G</p>	<p>120V terminal block</p>	<p>Distributes 120V voltage to the power supplies.</p>

Technical specifications

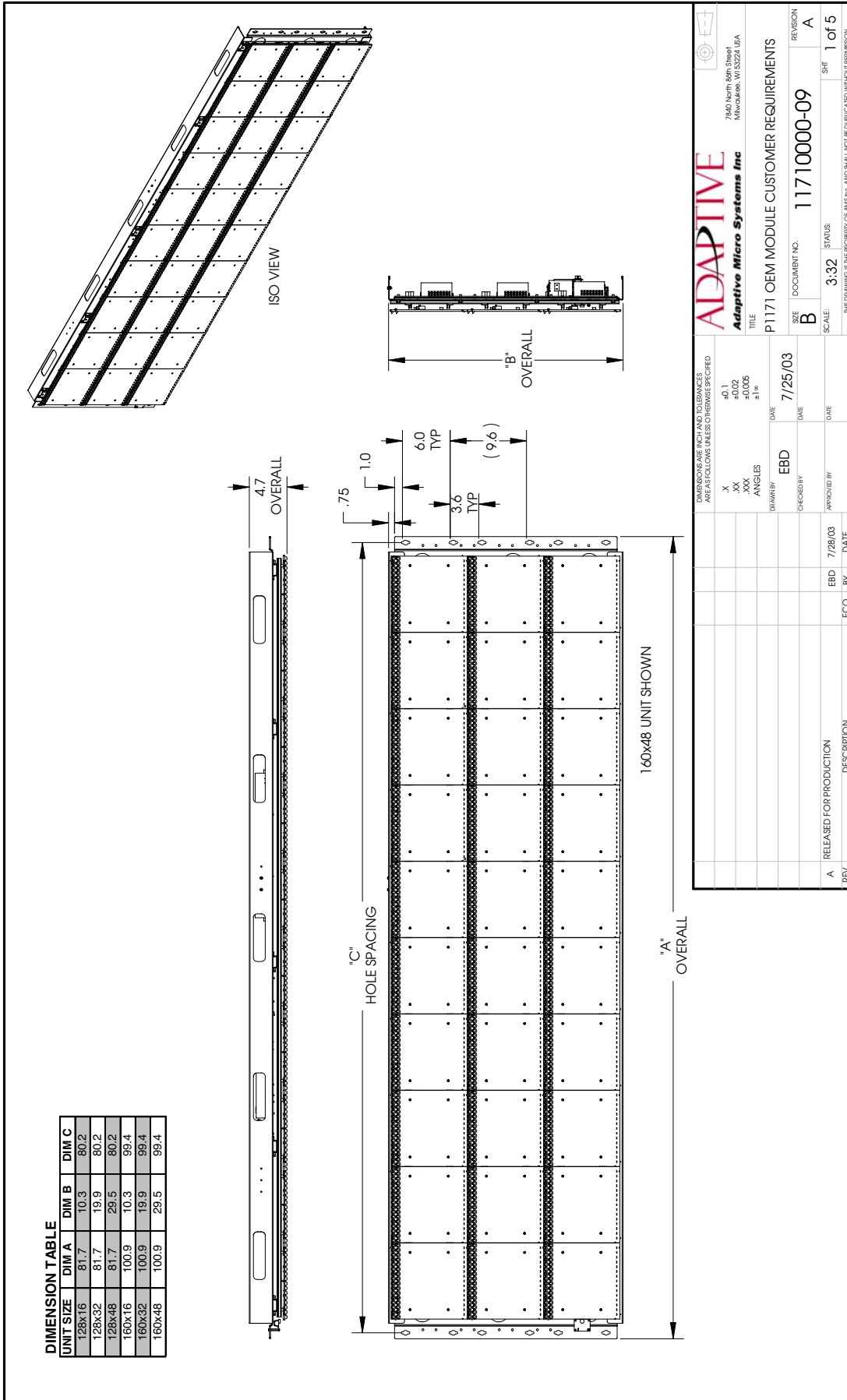


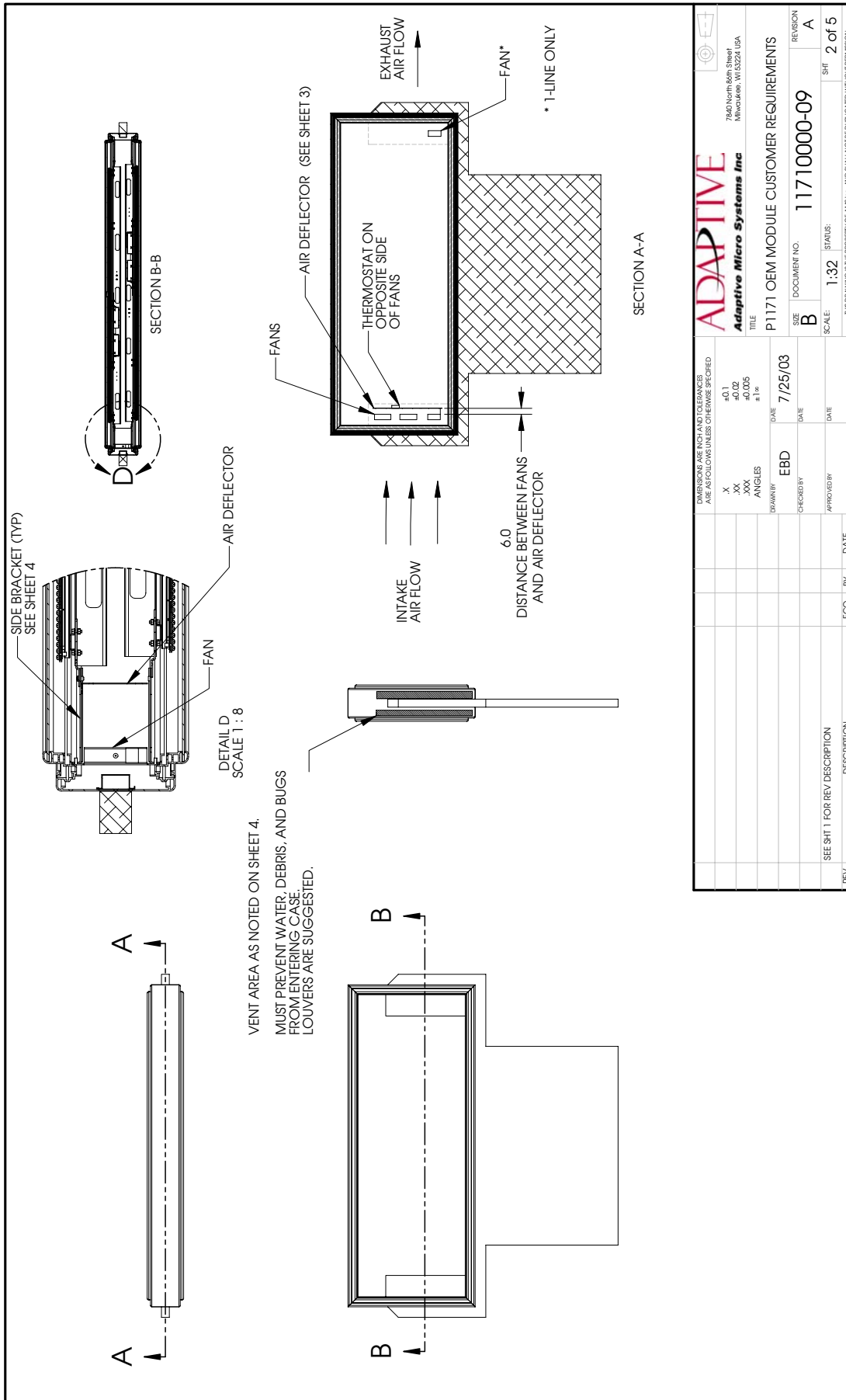
Sign size (columns x rows)	Dimensions (inches)			Weight (approx. in pounds)	Input current (amps @ 120V)	LED boards	Power supplies	Main panels	Power supply panels	Recommended number of cooling fans
	"A"	"B"	"C"							
128 x 16	81.7	10.3	80.2	85	2.16	4	2	1	1	2*
128 x 32	81.7	19.9	80.2	115	4.48	8	3	1	2	2
128 x 48	81.7	29.5	80.2	130	6.87	12	4	1	2	3
160 x 16	100.9	10.3	99.4	105	2.68	5	2	1	1	2*
160 x 32	100.9	19.9	99.4	135	5.51	10	4	1	2	2
160 x 48	100.9	29.5	99.4	150	8.42	15	5	1	3	3

* For 1-line units, mount a fan on one end of the module to push air in and mount the other fan on the opposite end of the module to pull air out.

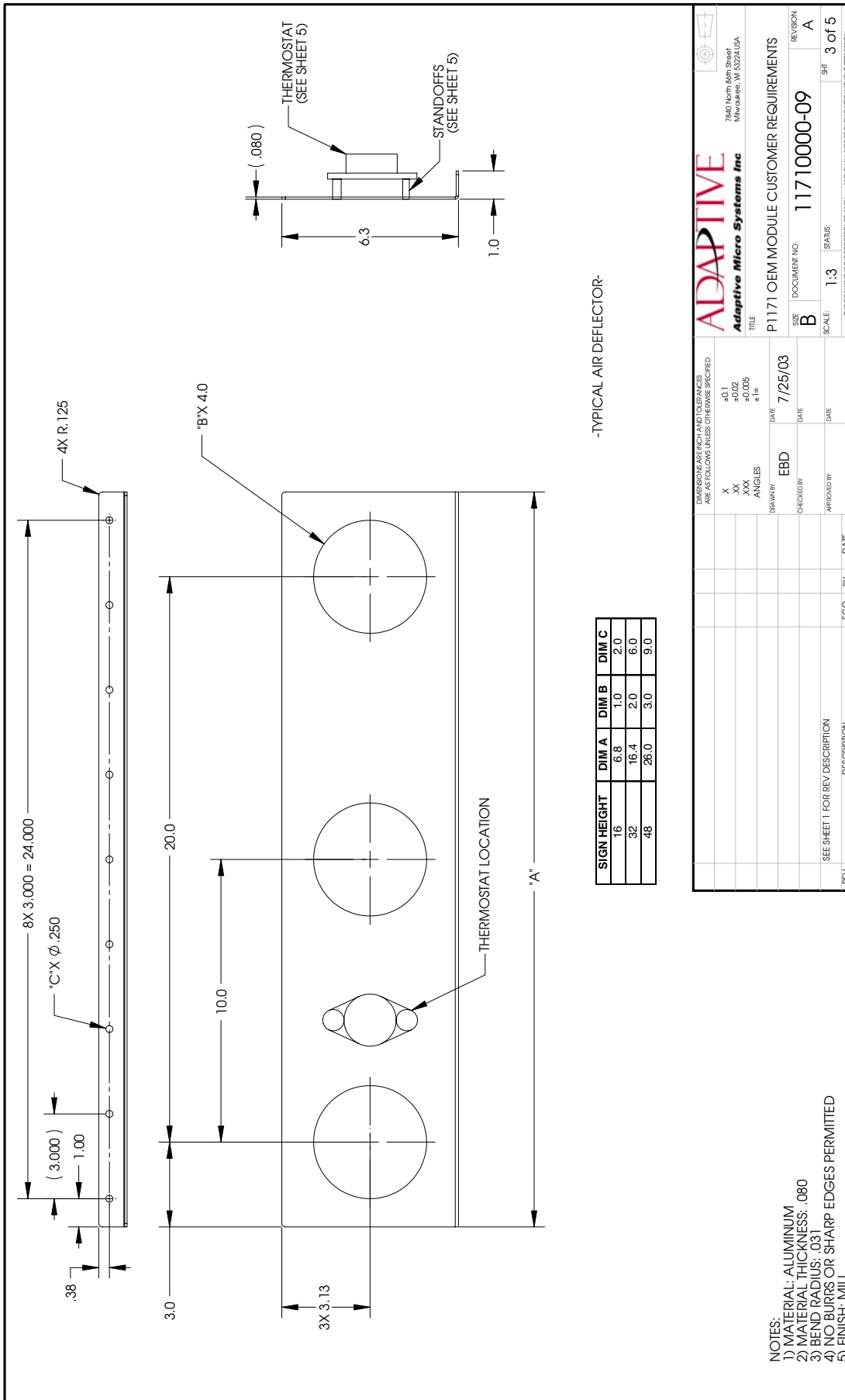
Customer requirements

- Install the recommended number of cooling fans (see "Technical specifications" on page 7).
NOTE: Fans should be wired to a separate circuit and *not* to the sign module.
- Install the sign module as specified in the following Adaptive drawings 11710000-09 (five sheets).





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<p>TITLE: P1171 OEM MODULE CUSTOMER REQUIREMENTS</p>	
<p>SIZE: B</p>	<p>DOCUMENT NO.: 11710000-09</p>
<p>REVISION: A</p>	<p>REVISION: A</p>
<p>SCALE: 1:32</p>	<p>STATUS: SHF 2 of 5</p>
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<p>XX ±0.02</p>	<p>CHECKED BY: EBD</p>
<p>.XXX ±0.005</p>	<p>DATE: _____</p>
<p>ANGLES ±1°</p>	<p>APPROVED BY: _____</p>
<p>DRAWN BY: _____</p>	<p>DATE: _____</p>
<p>ECO: _____</p>	<p>BY: _____</p>
<p>DATE: _____</p>	<p>DATE: _____</p>
<p>SEE SHIT 1 FOR REV DESCRIPTION</p>	<p>DESCRIPTION</p>
<p>REV: _____</p>	<p>DESCRIPTION</p>



-TYPICAL AIR DEFLECTOR-

SIGN HEIGHT	DIM A	DIM B	DIM C
16	6.8	1.0	2.0
32	16.4	2.0	6.0
48	26.0	3.0	9.0

- NOTES:
 1) MATERIAL: ALUMINUM
 2) MATERIAL THICKNESS: .080
 3) BEND RADIUS: .031
 4) NO BURRS OR SHARP EDGES PERMITTED
 5) FINISH: MILL

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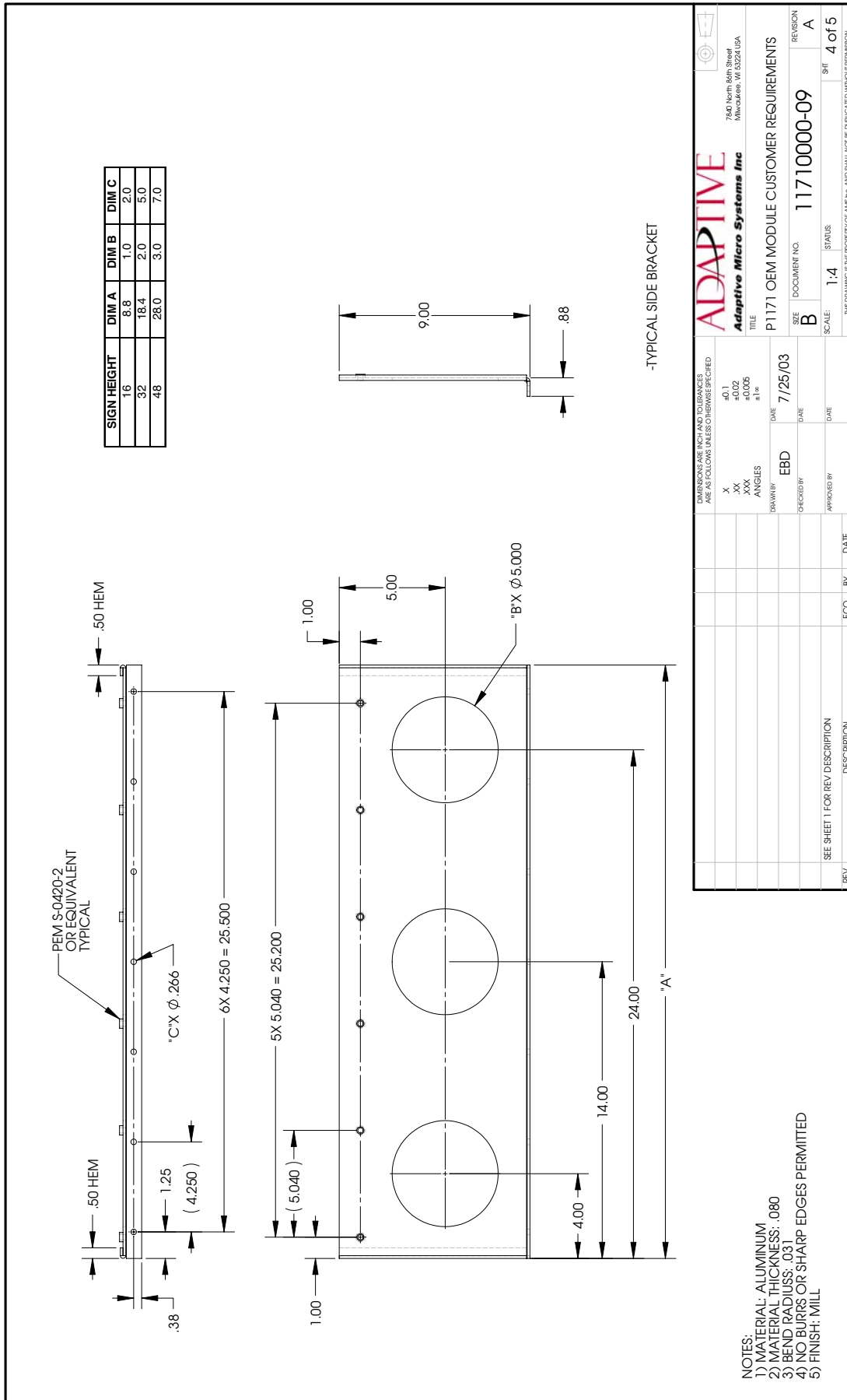
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 X ±0.1
 XX ±0.02
 XXX ±0.005
 ANGLES ±1°

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 CHECKED BY: DATE:
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REV.	DESCRIPTION	ECO	BY	DATE
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- NOTES:
- 1) MATERIAL: ALUMINUM
 - 2) MATERIAL THICKNESS: .080
 - 3) BEND RADIUS: .031
 - 4) NO BURRS OR SHARP EDGES PERMITTED
 - 5) FINISH: MILL

P1171 OEM MODULE FAN AND VENTING REQUIREMENTS

SIGN SIZE	No. OF FANS REQUIRED	TOTAL VENTING AREA REQUIRED (1/2 ON EACH CASE END)
128 X 16	2*	70 square inches
128 X 32	2	70 square inches
128 X 48	3	102 square inches
160 X 16	2*	70 square inches
160 X 32	2	70 square inches
160 X 48	3	102 square inches

*FOR 1-LINE UNITS: HAVE ONE FAN PUSH AIR IN, AND THE OTHER FAN PULL AIR OUT AT OPPOSITE ENDS OF CASE.

USE SINWAN FAN MODEL NUMBER S150AP-11-1B, OR AN EQUIVALENT FAN WITH THE SAME DERATING CURVE AS SHOWN BELOW.

Notes:

1. Thermostat recommendations
 - Selco P/N CA-85-QC
 - (Mount on 25 nylon stand-offs away from air flow)
2. Grounding requirements
 - Fans must be grounded to case
 - Case must be electrically grounded
3. Use trim piece to seal off LED module
 - Recommend using Trim-Lok
 - Trimseal P/N 3100B3X1/8C ALUM (See detail A)

AC S150-1 High Airflow---->

Static Pressure (inches)	50 Hz Airflow (cfm)	60 Hz Airflow (cfm)
0.0	250	250
0.2	180	200
0.4	120	140
0.6	80	100
0.8	50	60

DETAIL A

DIMENSIONS ARE INCH AND TOLERANCES ARE AS FOLLOWS UNLESS OTHERWISE SPECIFIED

X	+0.1
XX	+0.02
XXX	+0.005
ANGLES	±1°

DRAWN BY: EBD DATE: 7/25/03
 CHECKED BY: DATE: APPROVED BY: DATE: ECO: BY: DATE: DESCRIPTION: REV.:

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P1171 OEM MODULE CUSTOMER REQUIREMENTS

SIZE	DOCUMENT NO.	REVISION
B	11710000-09	A
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