

OPERATIONS MANUAL

Motherboards/Cardcages

WinSystems reserves the right to make changes in the circuitry
and specifications at any time without notice.

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Motherboards

Drawings

Warranty and Repair Information

MOTHERBOARDS

1. Power And Signal Connections For All WinSystems Motherboards:

Pin 1 = +5 VDC
Pin 2 = Ground
Pin 3 = VBAT
Pin 4 = -12 VDC
Pin 5 = Ground
Pin 6 = -5 VDC or /PROTECT
Pin 7 = +12 VDC
Pin 8 = Auxiliary Ground
Pin 9 = /PBRESET (Manual or Push Button Reset)

2. Motherboard And Cable Pin Out:

30	20	10
60	50	40
90	80	70

3. Plug And Receptacle Molex Part Numbers:

Molex Plug Part Number 03-09-2092

Molex Receptacle Part Number 03-09-1094

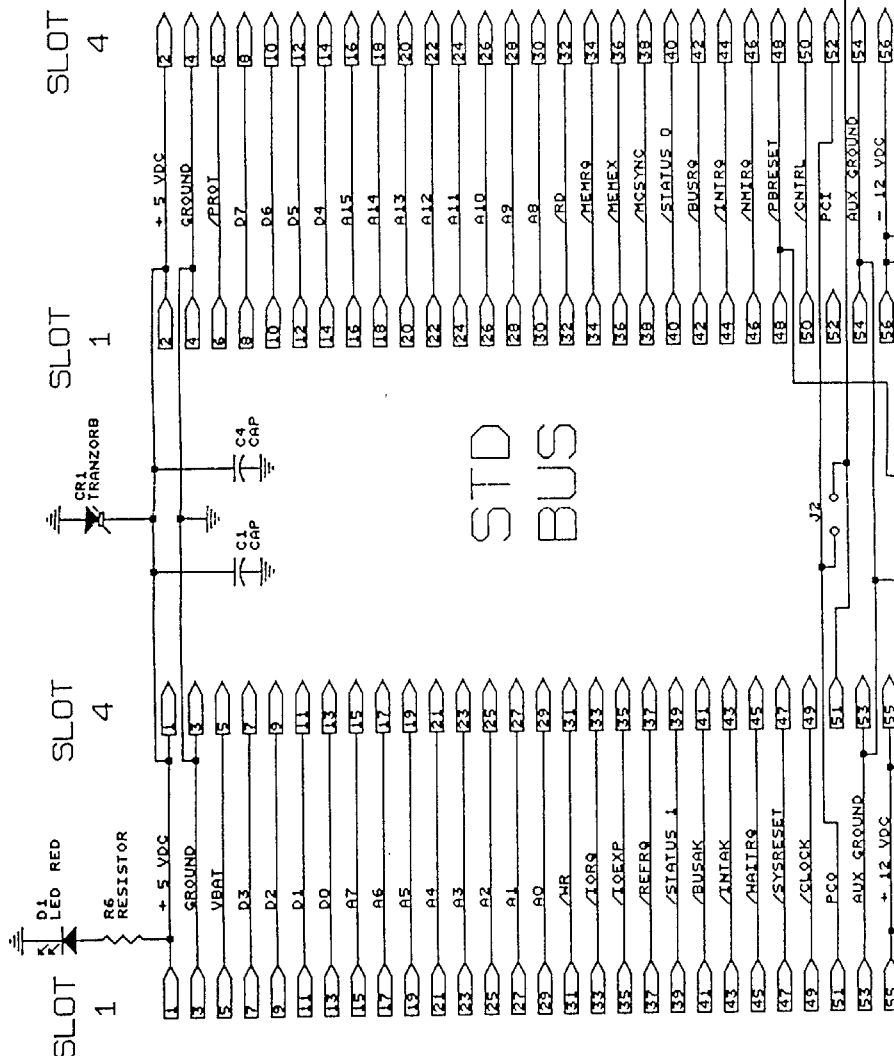
4. Interrupt Priority For Use With Cards That Utilize The Z80 Mode 2 Interrupt Structure:

Highest Priority = Slot 1

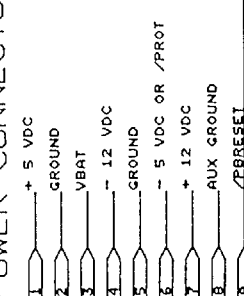
Lowest Priority = Slot n (Highest Number)

5. Jumpers J2 - Jn Are Used For Shorting PCI to PCO For An Unused Card Slot When Z80 Mode 2 Interrupts Are Used.

6. If The Optional Power Fail Circuit Is Installed, J1 Enables, Disables This Option. When Enabled, The Power Fail Reset Will Pull The /PBRESET Line On The STD BUS Low When +5 VDC Fails.



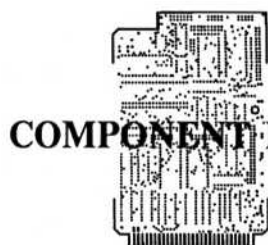
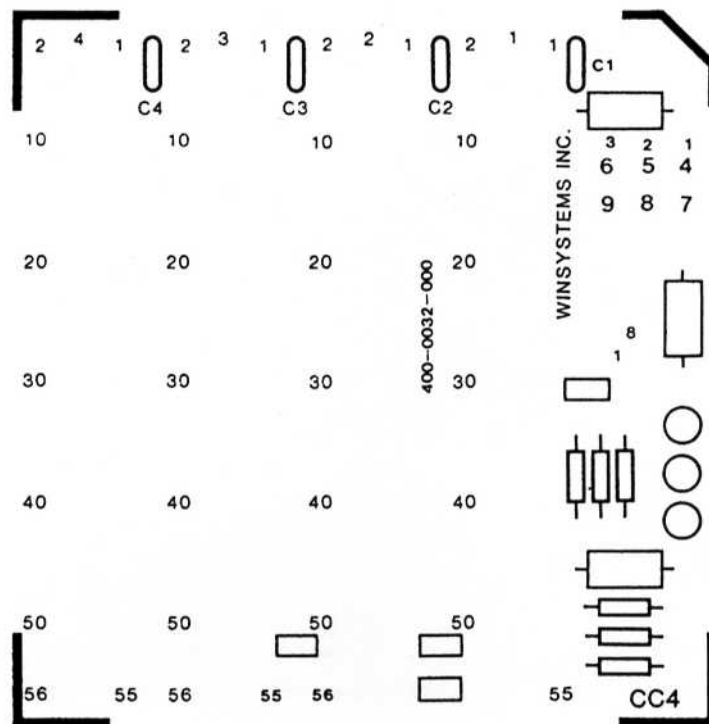
POWER CONNECTOR



NOTE: JUMPERS J2-J4 ARE FOR USE WITH THE Z80 PRIORITY INTERRUPT CHAIN ONLY. INSTALL THE JUMPER WHEN THERE IS AN EMPTY SLOT BETWEEN CARDS.

HIN SYSTEMS
715 STADIUM DRIVE EAST #112
ARLINGTON, TX
76011
817/274-7553 (FAX) 817/548-1358

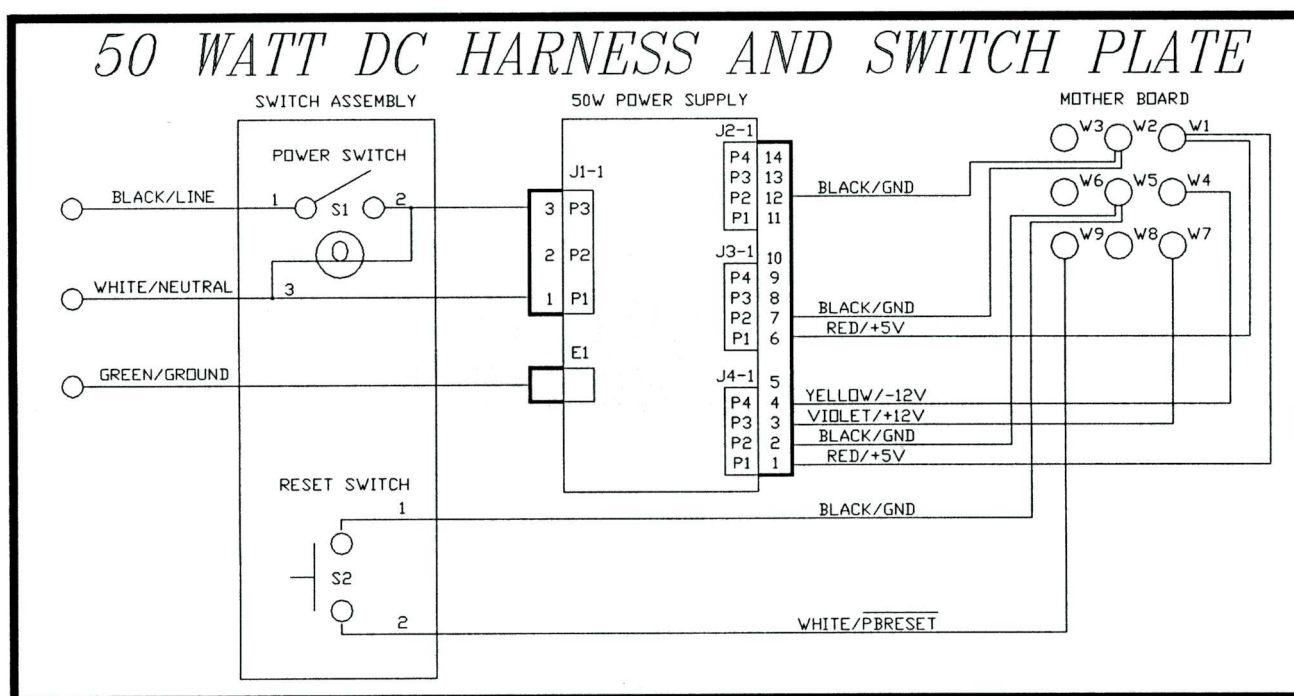
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Size	Document Number	401-0032-000
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Date	January 9, 1991	Sheet 1 of 1



COMPONENT LAYOUT

MOTHERBOARD

REV.	DESCRIPTION	DATE:	ALT. BY	APPROVED
A	CONVERTED TO CAD.	5-10-90	K. THOMAS	



WinSystems, Inc.

"THE STD BUS AUTHORITY"

TITLE:

50W DC HARNESS & SWITCH PLATE

DRW. BY:

K. THOMAS

DATE:

05-10-90

APP. BY:

DATE:

ACAD ID:

50WDIAG.DWG

SCALE:

NOTED

TOL:

FSCM. NO:

DRW. NO:

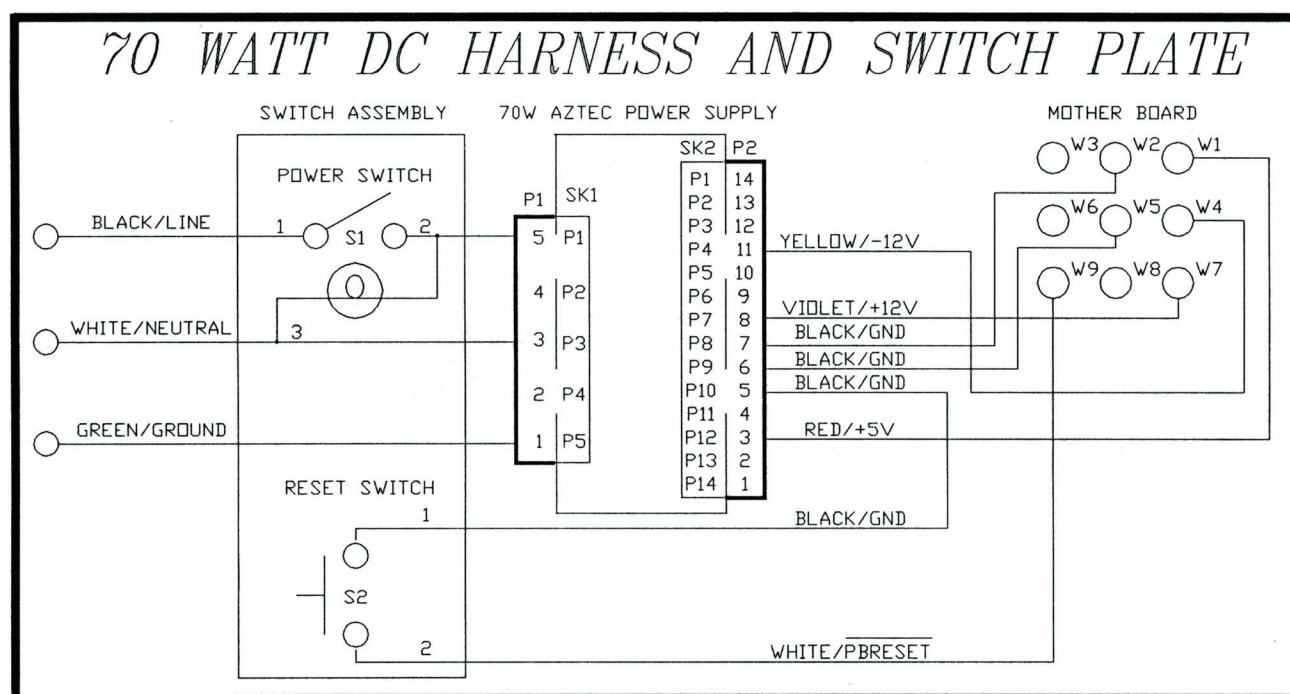
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SHT. OF

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REV.	DESCRIPTION	DATE:	ALT. BY	APROVED
A	CONVERTED TO CAD.	4-11-90	K. THOMAS	



WARNING

MINIMUM LOAD REQUIRED

SPECIFICATIONS: SA70A-3400
 OUTPUT CURRENT (AMPS)

+5VDC	-5VDC	+12VDC	-12VDC
MIN. MAX.	MIN. MAX.	MIN. MAX.	MIN. MAX.
1 8	0 0.7	0.5 3.5	0 1.0

WinSystems, Inc.

"THE STD BUS AUTHORITY"

TITLE:

70W DC HARNESS & SWITCH PLATE

DRW. BY:

DATE:

APP. BY:

DATE:

K. THOMAS

04-11-90

ACAD ID:

SCALE:

TOL:

70WDIAG.DWG

NOTED

FSCM. NO:

DRW. NO:

REV:

SHT.

OF

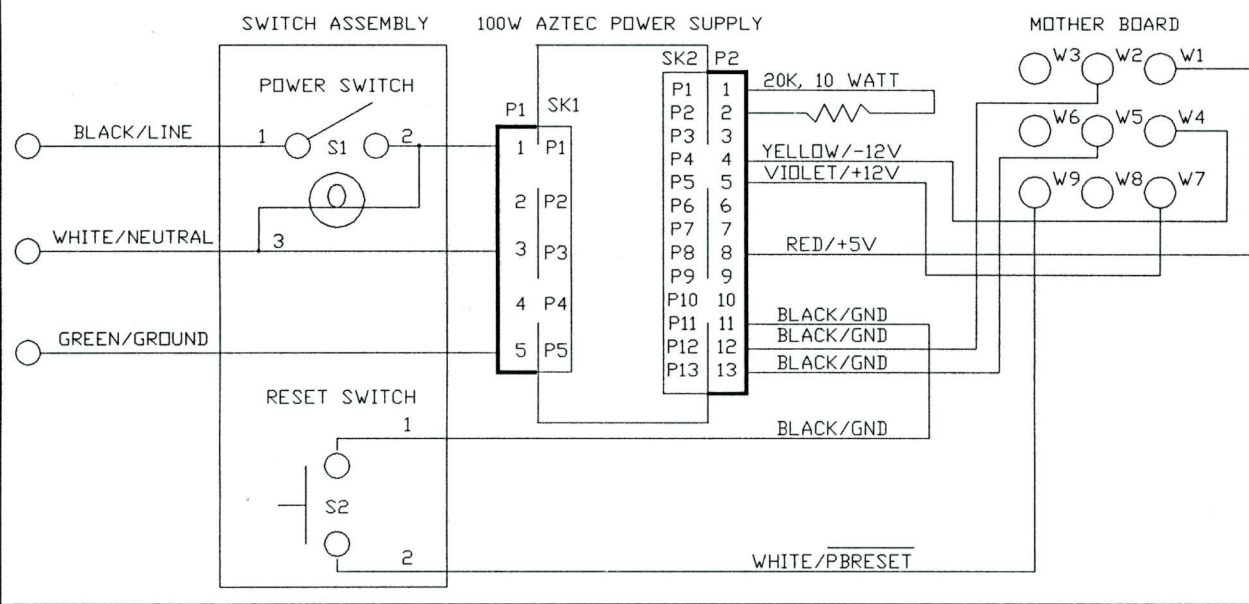
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REV.	DESCRIPTION	DATE:	ALT. BY	APROVED
A	CONVERTED TO CAD.	5-10-90	K. THOMAS	

100 WATT DC HARNESS AND SWITCH PLATE



WARNING

MINIMUM LOAD REQUIRED

SPECIFICATIONS: SA100-3401
OUTPUT CURRENT (AMPS)

+5VDC	+12VDC	+12VDC	-12VDC
MIN. MAX.	MIN. MAX.	MIN. MAX.	MIN. MAX.
2 10	0.8 3.5	0.6 1.5	0 0.7

WinSystems, Inc.

"THE STD BUS AUTHORITY"

TITLE:

100W DC HARNESS & SWITCH PLATE

DRW. BY:

K. THOMAS

DATE:

05-10-90

APP. BY:

DATE:

ACAD ID:

100WDIAG.DWG

SCALE:

NOTED

TOL:

FSCM. NO:

DRW. NO:

REV:

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SHT.

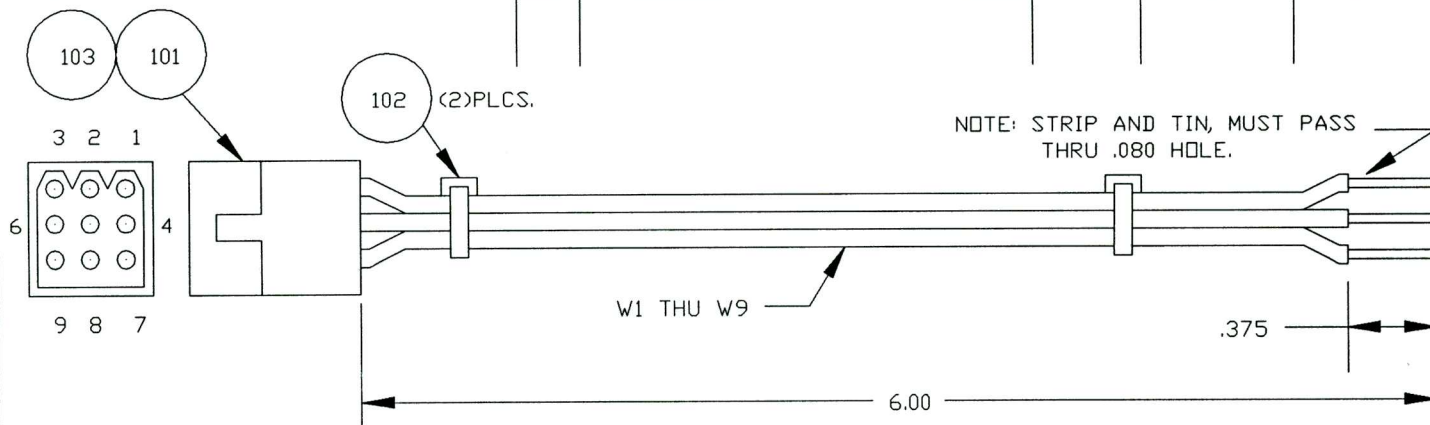
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REV.	DESCRIPTION	DATE:	ALT. BY	APPROVED
A	CONVERTED TO CAD.	2-15-90	K. THOMAS	

DET.-103 (9)PLCS



WIRE LIST		DET.	REF.	DESCRIPTION	MANUFACTURER	MPART NO.	WIN. NO.	-1	100		
REF.	PIN	100	EI	MOTHERBOARD PIG TAIL			CBL-116-1	1			
W1	1										
W2	2	101		HOUSING, PLUG	MOLEX	03-09-2092	201-0009-235	1			
W3	3	102		CABLE TIE, NYLON 6"	MOUSER	48NT150	500-0026-000	2			
W4	4	103	*	CRIMP PIN, MALE	MOLEX	02-09-2103	201-1000-002	9			
W5	5	*		ALT. CRIMP PIN MAY BE USED. MOLEX 02-09-2101							
W6	6	W1	**	WIRE, 16 AWG. BROWN	ALPHA	7058/19-7	109-0001-161	6"			
W7	7	W2	**	WIRE, 16 AWG. RED	ALPHA	7058/19-3	109-0002-161	6"			
W8	8	W3	**	WIRE, 16 AWG. ORANGE	ALPHA	7058/19-8	109-0003-161	6"			
W9	9	W4	**	WIRE, 16 AWG. YELLOW	ALPHA	7058/19-5	109-0004-161	6"			
		W5	**	WIRE, 16 AWG. GREEN	ALPHA	7058/19-4	109-0005-161	6"			
		W6	**	WIRE, 16 AWG. BLUE	ALPHA	7058/19-6	109-0006-161	6"			
		W7	**	WIRE, 16 AWG. VIOLET	ALPHA	7058/19-10	109-0007-161	6"			
		W8	**	WIRE, 16 AWG. GRAY	ALPHA	7058/19-9	109-0008-161	6"			
		W9	**	WIRE, 16 AWG. WHITE	ALPHA	7058/19-1	109-0009-161	6"			
		**		ALT. WIRE MAY BE USED. STYLE UL1429 / MIL-W-16878D TYPE B							

WinSystems, Inc.

"THE STD BUS AUTHORITY"

TITLE:

CBL-116-1 (MOTHERBOARD PIG TAIL)

DRW. BY:

K. THOMAS

DATE:

2-15-90

APP. BY:

DATE:

ACAD ID:

CBL1161.DWG

SCALE:

NOTED

TOL:

FSCM. NO:

DRW. NO:

REV:

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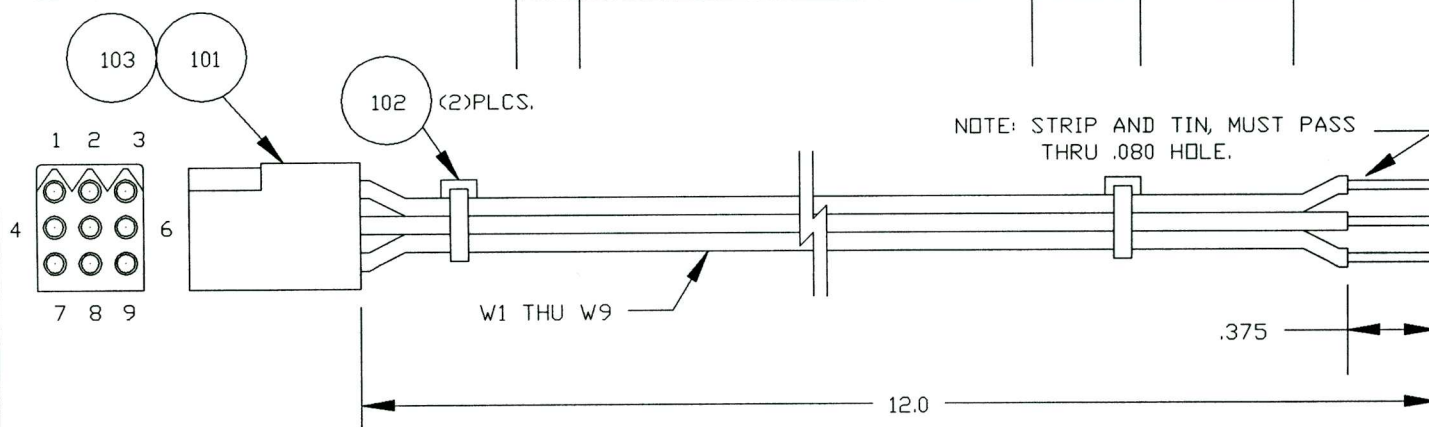
FULL SCALE

PART NO.	CBL-116-1
TOLERANCE	(0.0) (0.00) (0.000) ANG.
UNLESS NOTED	+ - + - + -

100

REV.	DESCRIPTION	DATE:	ALT. BY	APROVED
A	CONVERTED TO CAD.	5-14-90	K. THOMAS	

DET.-103 (9)PLCS



WIRE LIST		DET.	REF.	DESCRIPTION	MANUFACTURER	MPART NO.	WIN. NO.	-1	100		
REF.	PIN	100	EI	MB. PIG TAIL MATE			CBL-117-1	1			
W1	1										
W2	2	101		HOUSING, RECEPTACLE	MOLEX, 1292	03-09-1094	201-0009-234	1			
W3	3	102		CABLE TIE, NYLON 6"	MOUSER	48NT150	500-0026-000	2			
W4	4	103	*	CRIMP PIN, FEMALE	MOLEX, 1189	02-09-1103	201-1000-001	9			
W5	5	*		ALT. CRIMP PIN MAY BE USED. MOLEX 02-09-1101							
W6	6	W1	**	WIRE, 16 AWG. BROWN	ALPHA	7058/19-7	109-0001-161	12"			
W7	7	W2	**	WIRE, 16 AWG. RED	ALPHA	7058/19-3	109-0002-161	12"			
W8	8	W3	**	WIRE, 16 AWG. ORANGE	ALPHA	7058/19-8	109-0003-161	12"			
W9	9	W4	**	WIRE, 16 AWG. YELLOW	ALPHA	7058/19-5	109-0004-161	12"			
		W5	**	WIRE, 16 AWG. GREEN	ALPHA	7058/19-4	109-0005-161	12"			
		W6	**	WIRE, 16 AWG. BLUE	ALPHA	7058/19-6	109-0006-161	12"			
		W7	**	WIRE, 16 AWG. VIOLET	ALPHA	7058/19-10	109-0007-161	12"			
		W8	**	WIRE, 16 AWG. GRAY	ALPHA	7058/19-9	109-0008-161	12"			
		W9	**	WIRE, 16 AWG. WHITE	ALPHA	7058/19-1	109-0009-161	12"			
		**		ALT. WIRE MAY BE USED. STYLE UL1429 / MIL-W-16878D TYPE B							

WinSystems, Inc.

"THE STD BUS AUTHORITY"

TITLE:

CBL-117-1 (MB. PIG TAIL MATE)

DRW. BY:

K. THOMAS

DATE:

5-14-90

APP. BY:

DATE:

FULL SCALE

PART NO.	CBL-117-1			
TOLERANCE	(0.0)	(0.00)	(0.000)	ANG.
UNLESS NOTED	±	±	±	±

ACAD ID:

CBL1171.DWG

SCALE:

NOTED

TOL:

FSCM. NO:

DRW. NO:

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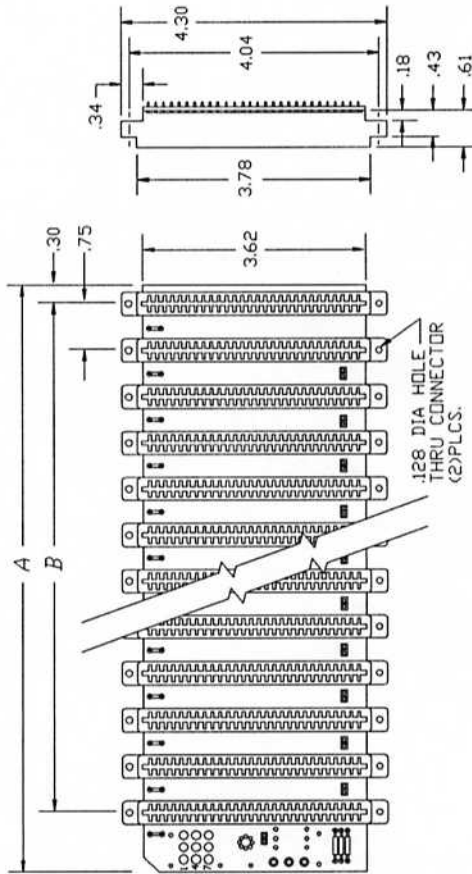
OF

1



PIN NO.	DESCRIPTION
1	+5 VOLTS DC
2	LOGIC GROUND
3	VBAT/VBB#1
4	-12 VOLTS DC
5	LOGIC GROUND
6	DCPD*/VBB#2
7	+12 VOLTS DC
8	AUX GROUND
9	PRESET*

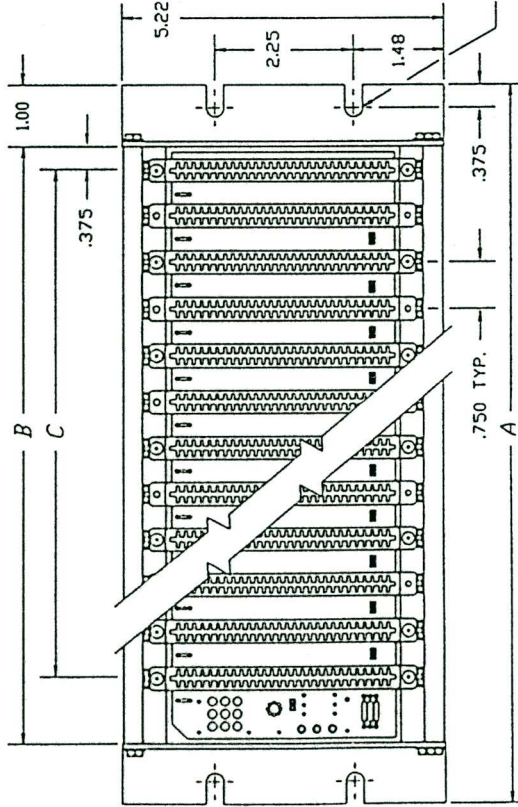
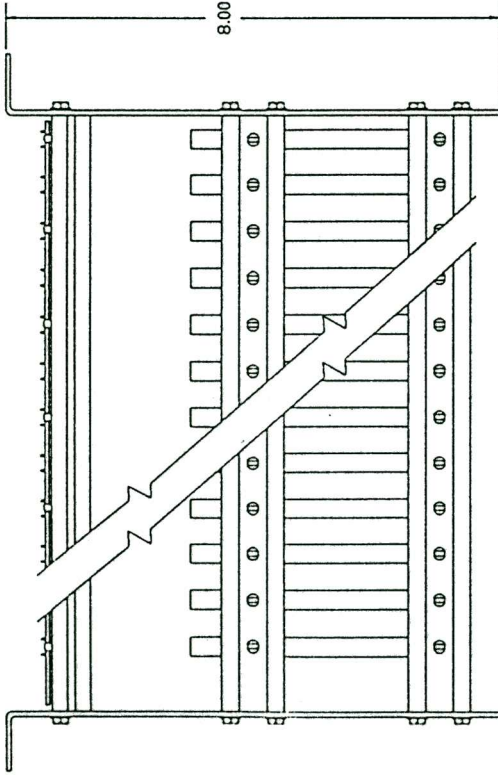
MODEL NO.	NO. SLOTS	A DIM.	B DIM.
MB2	2	2.05	0.75
MB4	4	3.55	2.25
MB6	6	5.05	3.75
MB8	8	6.55	5.25
MB9	9	7.30	6.00
MB12	12	9.55	8.25
MB16	16	12.55	11.25
MB21	21	16.20	15.00



WinSystems, Inc.			
THE STD BUS AUTHORITY			
TITLE: STANDARD STD MOTHER BOARD			
DATE: 5-11-90	BY: J. THOMAS	APP: J. THOMAS	DATE: 5-11-90
SCALE: 1/8" = 1"	NOTES:	REV: 1	DATE: 5-11-90
FIG. NO. 1	REV. NO. 1	REV. NO. 1	REV. NO. 1

CARD CAGE WALL MOUNT

MODEL NO.	NO. SLOTS	A DIM.	B DIM.	C DIM.
CC2-VM	2	4.20	2.20	0.75
CC4-VM	4	5.70	3.70	2.25
CC6-VM	6	7.50	5.50	3.75
CC8-VM	8	9.50	7.50	5.25
CC9-VM	9	9.50	7.50	6.00
CC12-VM	12	11.70	9.70	8.25
CC16-VM	16	19.00	17.00	11.25
CC21-VM	21	19.00	17.00	15.00



WinSystems, Inc.
THE WIN SYSTEMS

MODEL: CARD CAGE WALL MOUNT

REV: 1.00

DATE: 5-11-80

BY: J. J. JONES

CHK'D: J. J. JONES

FILE NO: 100-100

REV: 1.00

DATE: 5-11-80

BY: J. J. JONES

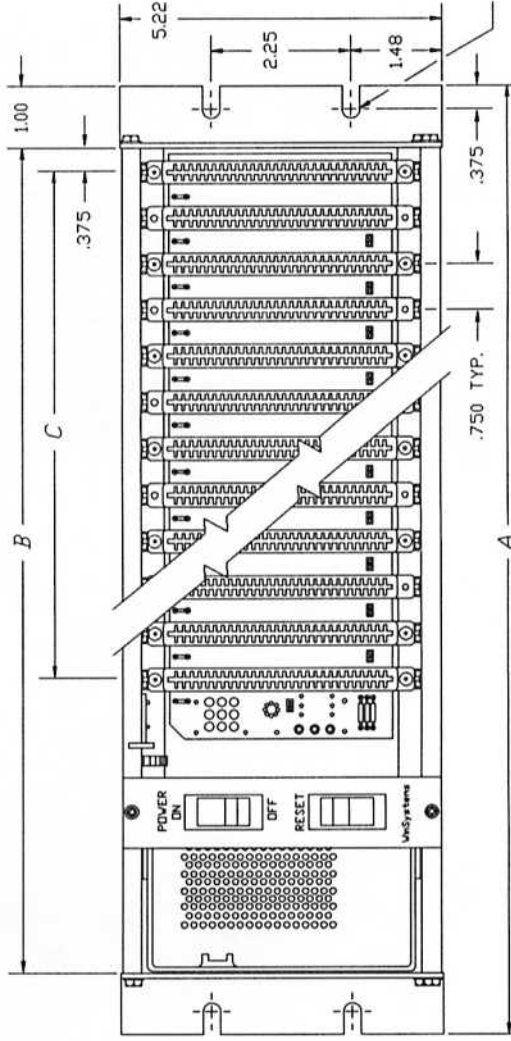
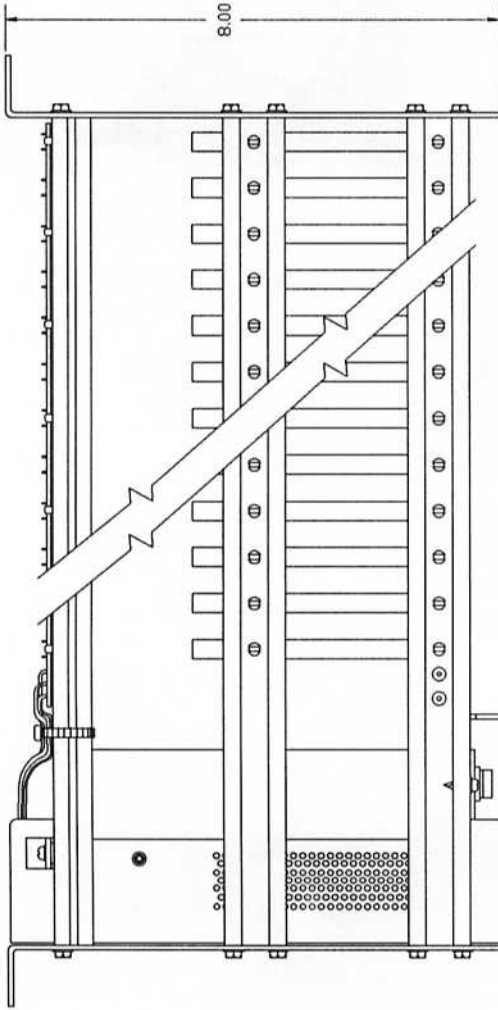
CHK'D: J. J. JONES

FILE NO: 100-100

CARD CAGE WALL MOUNT W/POWER SUPPLY

MODEL NO.	NO. SLOTS	A DIM.	B DIM.	C DIM.
CC2-VM-PSXX	2	7.90	5.90	0.75
CC4-VM-PSXX	4	9.40	7.40	2.25
CC6-VM-PSXX	6	11.20	9.20	3.75
CC8-VM-PSXX	8	12.25	10.25	5.25
CC12-VM-PSXX	12	15.40	13.40	8.25
CC16-VM-PSXX	16	19.00	17.00	11.25

PSXX PS50 - 50 WATT POWER SUPPLY
PS70 - 70 WATT POWER SUPPLY
PS100 - 100 WATT POWER SUPPLY



.281 SLOT, (4) PLCS.

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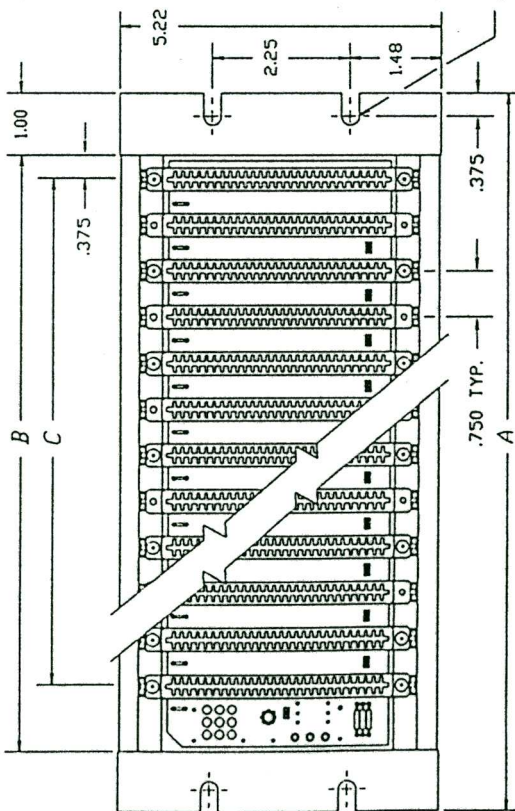
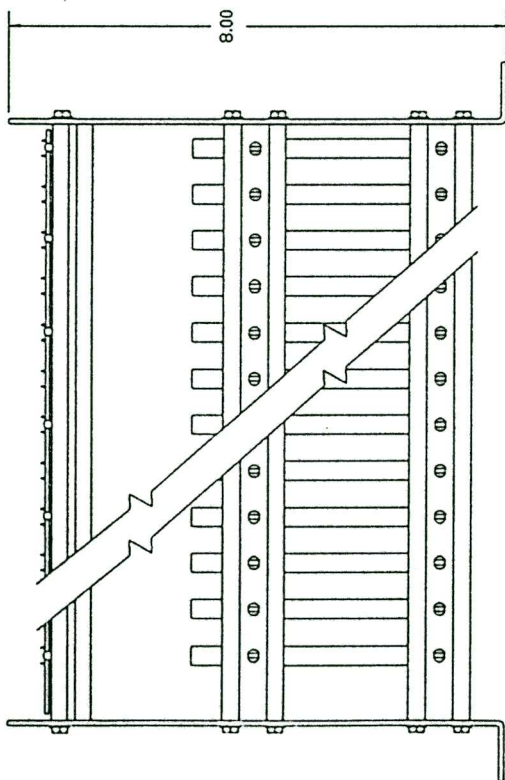
.281

.750

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CARD CAGE RACK MOUNT

MODEL NO.	NO. SLOTS	A DIM.	B DIM.	C DIM.
CC2-RM	2	4.20	2.20	0.75
CC4-RM	4	5.70	3.70	2.25
CC6-RM	6	7.50	5.50	3.75
CC8-RM	8	9.50	7.50	5.25
CC9-RM	9	9.50	7.50	6.00
CC12-RM	12	11.70	9.70	8.25
CC16-RM	16	19.00	17.00	11.25
CC21-RM	21	19.00	17.00	15.00



WinSystems, Inc.

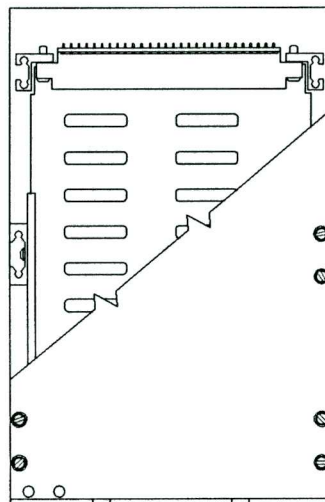
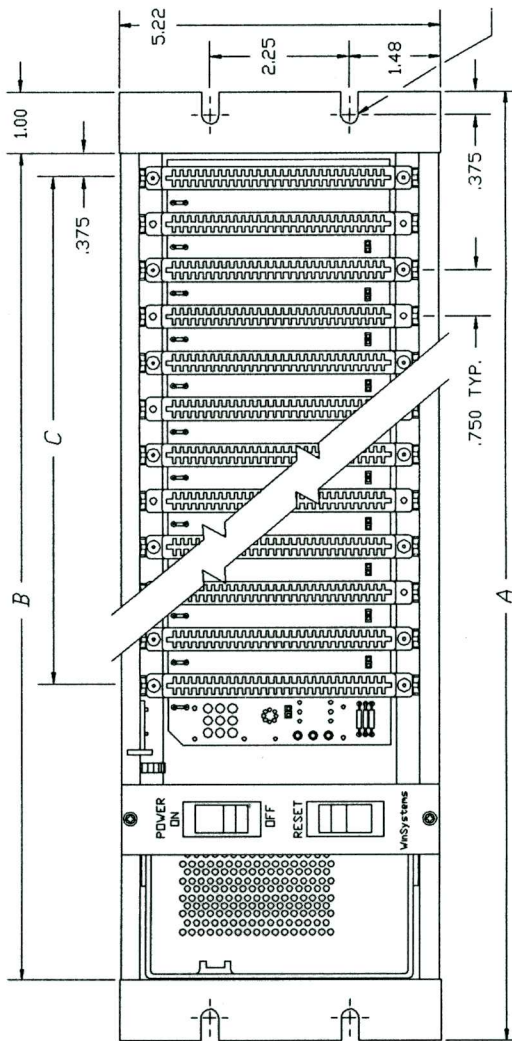
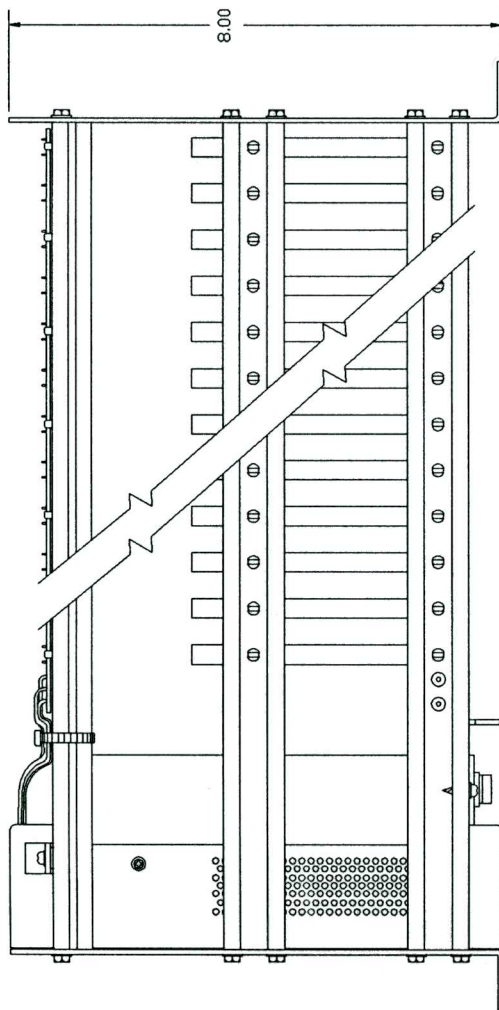
CARD CAGE RACK MOUNT

DATE	REV	BY	DATE
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10/10/80	2	J. J. J.	10/10/80
10/10/80	3	J. J. J.	10/10/80
10/10/80	4	J. J. J.	10/10/80
10/10/80	5	J. J. J.	10/10/80
10/10/80	6	J. J. J.	10/10/80
10/10/80	7	J. J. J.	10/10/80
10/10/80	8	J. J. J.	10/10/80
10/10/80	9	J. J. J.	10/10/80
10/10/80	10	J. J. J.	10/10/80
10/10/80	11	J. J. J.	10/10/80
10/10/80	12	J. J. J.	10/10/80
10/10/80	13	J. J. J.	10/10/80
10/10/80	14	J. J. J.	10/10/80
10/10/80	15	J. J. J.	10/10/80
10/10/80	16	J. J. J.	10/10/80
10/10/80	17	J. J. J.	10/10/80
10/10/80	18	J. J. J.	10/10/80
10/10/80	19	J. J. J.	10/10/80
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10/10/80	21	J. J. J.	10/10/80
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10/10/80	45	J. J. J.	10/10/80
10/10/80	46	J. J. J.	10/10/80
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10/10/80	48	J. J. J.	10/10/80
10/10/80	49	J. J. J.	10/10/80
10/10/80	50	J. J. J.	10/10/80
10/10/80	51	J. J. J.	10/10/80
10/10/80	52	J. J. J.	10/10/80
10/10/80	53	J. J. J.	10/10/80
10/10/80	54	J. J. J.	10/10/80
10/10/80	55	J. J. J.	10/10/80
10/10/80	56	J. J. J.	10/10/80
10/10/80	57	J. J. J.	10/10/80
10/10/80	58	J. J. J.	10/10/80
10/10/80	59	J. J. J.	10/10/80
10/10/80	60	J. J. J.	10/10/80
10/10/80	61	J. J. J.	10/10/80
10/10/80	62	J. J. J.	10/10/80
10/10/80	63	J. J. J.	10/10/80
10/10/80	64	J. J. J.	10/10/80
10/10/80	65	J. J. J.	10/10/80
10/10/80	66	J. J. J.	10/10/80
10/10/80	67	J. J. J.	10/10/80
10/10/80	68	J. J. J.	10/10/80
10/10/80	69	J. J. J.	10/10/80
10/10/80	70	J. J. J.	10/10/80
10/10/80	71	J. J. J.	10/10/80
10/10/80	72	J. J. J.	10/10/80
10/10/80	73	J. J. J.	10/10/80
10/10/80	74	J. J. J.	10/10/80
10/10/80	75	J. J. J.	10/10/80
10/10/80	76	J. J. J.	10/10/80
10/10/80	77	J. J. J.	10/10/80
10/10/80	78	J. J. J.	10/10/80
10/10/80	79	J. J. J.	10/10/80
10/10/80	80	J. J. J.	10/10/80
10/10/80	81	J. J. J.	10/10/80
10/10/80	82	J. J. J.	10/10/80
10/10/80	83	J. J. J.	10/10/80
10/10/80	84	J. J. J.	10/10/80
10/10/80	85	J. J. J.	10/10/80
10/10/80	86	J. J. J.	10/10/80
10/10/80	87	J. J. J.	10/10/80
10/10/80	88	J. J. J.	10/10/80
10/10/80	89	J. J. J.	10/10/80
10/10/80	90	J. J. J.	10/10/80
10/10/80	91	J. J. J.	10/10/80
10/10/80	92	J. J. J.	10/10/80
10/10/80	93	J. J. J.	10/10/80
10/10/80	94	J. J. J.	10/10/80
10/10/80	95	J. J. J.	10/10/80
10/10/80	96	J. J. J.	10/10/80
10/10/80	97	J. J. J.	10/10/80
10/10/80	98	J. J. J.	10/10/80
10/10/80	99	J. J. J.	10/10/80
10/10/80	100	J. J. J.	10/10/80

CARD CAGE RACK MOUNT W/POWER SUPPLY

MODEL NO.	NO. SLOTS	A DIM.	B DIM.	C DIM.
CC2-RM-PSXX	2	7.90	5.90	0.75
CC4-RM-PSXX	4	9.40	7.40	2.25
CC6-RM-PSXX	6	11.20	9.20	3.75
CC8-RM-PSXX	8	12.25	10.25	5.25
CC12-RM-PSXX	12	15.40	13.40	8.25
CC16-RM-PSXX	16	19.00	17.00	11.25

PSXX PS50 - 50 WATT POWER SUPPLY
PS70 - 70 WATT POWER SUPPLY
PS100 - 100 WATT POWER SUPPLY

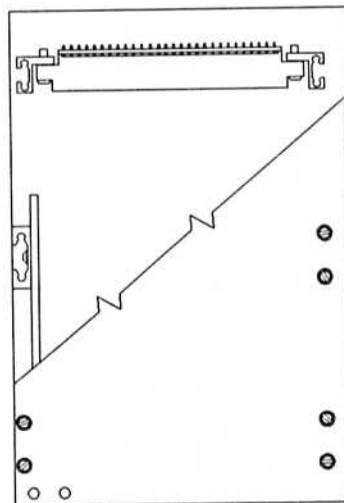
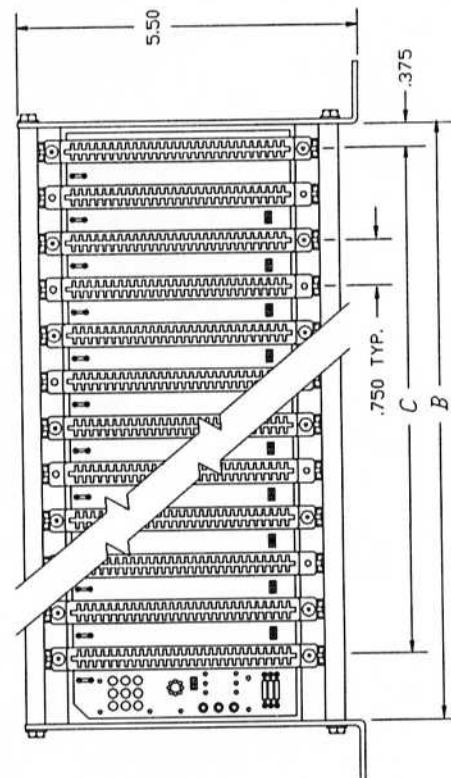
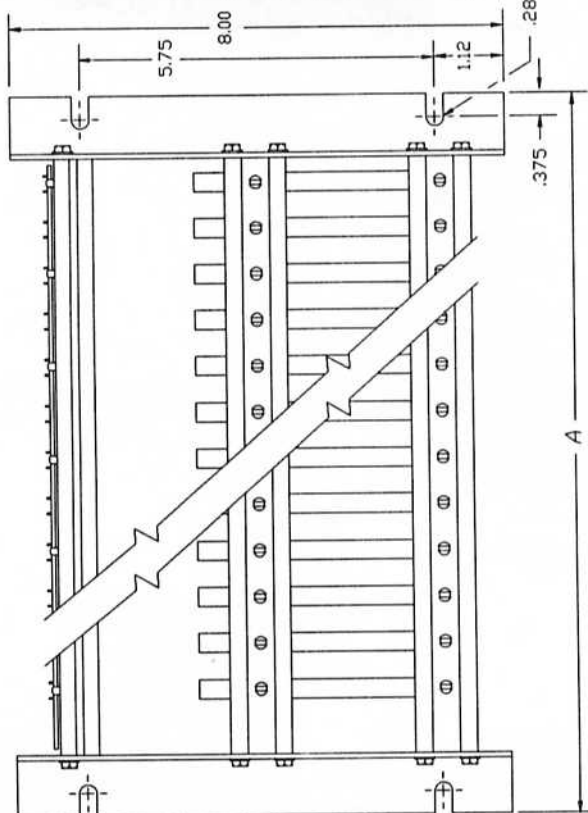


.281 SLDT, (4) PLCS.

WinSystems, Inc.	
THE 875 BUS ARCHITECTURE	
TITLE: CARD CAGE RACK MOUNT W/PS	
REV. NO.	DATE
1	5-11-90
DESIGNED BY	DATE
K. THOMAS	
CHECKED BY	DATE
J. THOMAS	
APPROVED BY	DATE

CARD CAGE SIDE ENTRY

MODEL NO.	NO. SLOTS	A DIM.	B DIM.	C DIM.
CC2-SE	2	4.20	2.20	0.75
CC4-SE	4	5.70	3.70	2.25
CC6-SE	6	7.50	5.50	3.75
CC8-SE	8	9.50	7.50	5.25
CC9-SE	9	9.50	7.50	6.00
CC12-SE	12	11.70	9.70	8.25
CC16-SE	16	19.00	17.00	11.25
CC21-SE	21	19.00	17.00	15.00



WinSystems, Inc.

THE SYSTEM AUTHORITY

CARD CAGE SIDE ENTRY

DATE: 5-11-90

DESIGN: A. THOMAS

SCALE: 1/8" = 1"

FIG. NO. 101

REV. 1

DATE: 5-11-90

DESIGN: A. THOMAS

SCALE: 1/8" = 1"

FIG. NO. 101

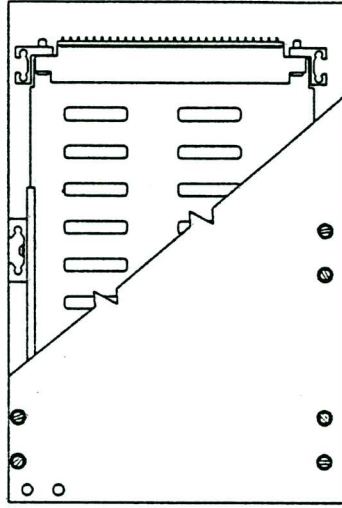
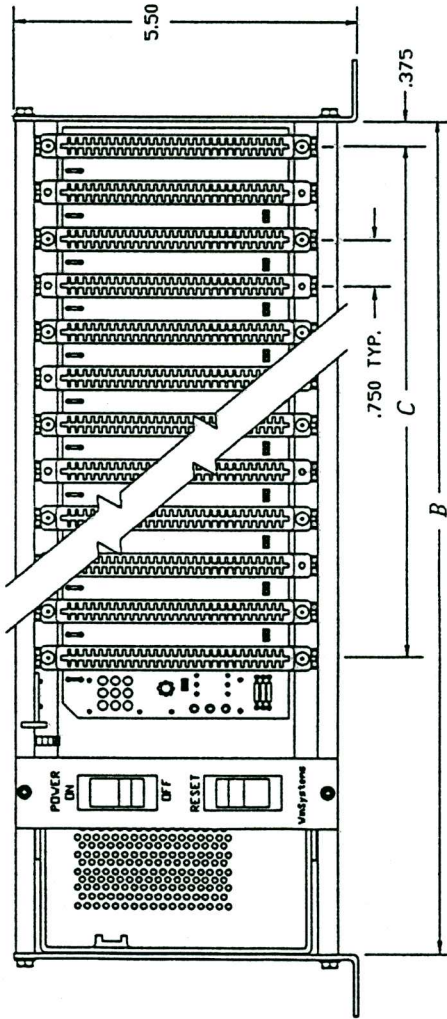
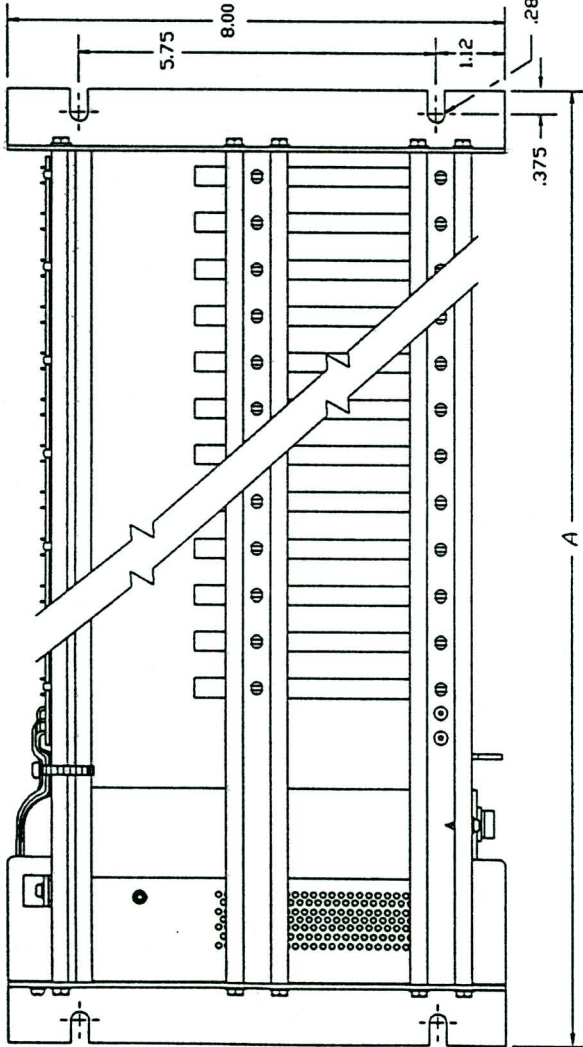
REV. 1

CARD CAGE SIDE ENTRY W/POWER SUPPLY

MODEL NO.	NO. SLOTS	A DIM.	B DIM.	C DIM.
CC2-SE-PSXX	2	7.90	5.90	0.75
CC4-SE-PSXX	4	9.40	7.40	2.25
CC6-SE-PSXX	6	11.20	9.20	3.75
CC8-SE-PSXX	8	12.25	10.25	5.25
CC12-SE-PSXX	12	15.40	13.40	8.25
CC16-SE-PSXX	16	19.00	17.00	11.25

PSXX PS50 - 50 WATT POWER SUPPLY
PS70 - 70 WATT POWER SUPPLY
PS100 - 100 WATT POWER SUPPLY

.281 SLOT, (4) PLCS.



WinSystems, Inc.

THE STD. AND AUTHORITY

CARD CAGE SIDE ENTRY W/PS

REV. 5-11-90

DATE

REV. 5-11-90

DATE

REV. 5-11-90

DATE

REV. 5-11-90

DATE

REV. 5-11-90

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