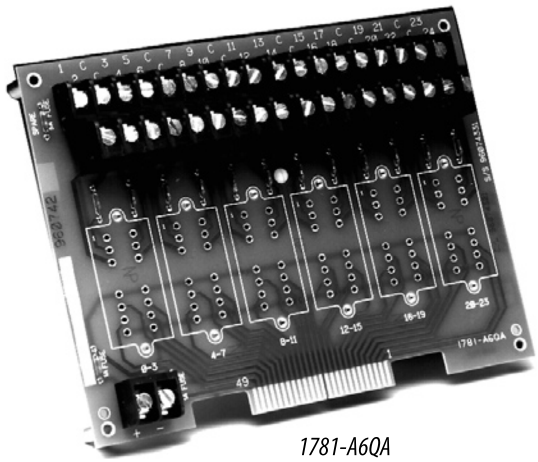
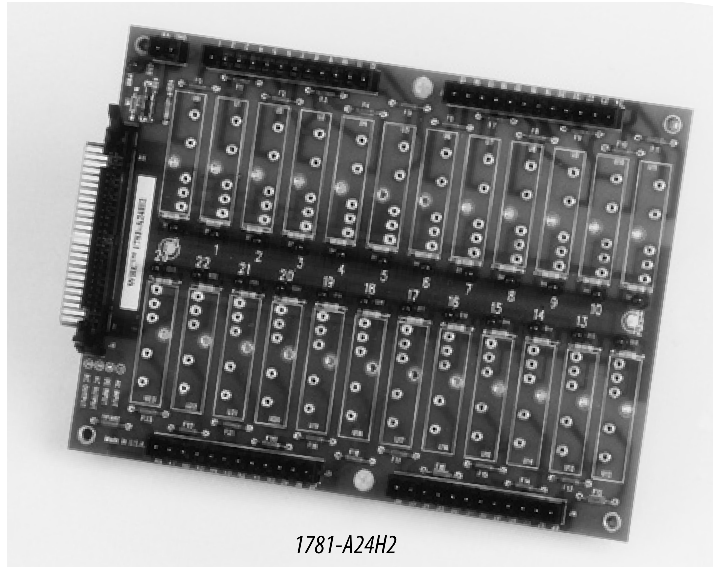
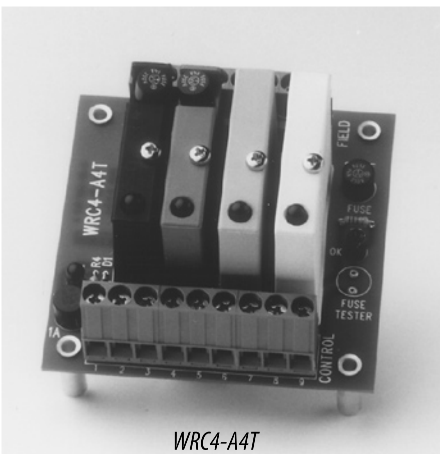


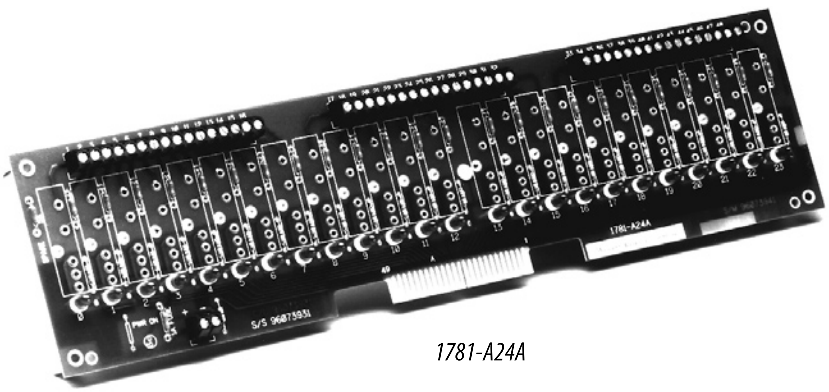
1781-A6QA



1781-A24H2



WRC4-A4T



1781-A24A

WRC offers an extensive range of mounting boards for all versions of WRC discrete I/O modules as well as other vendors modules. The general types available include:

- 1781 slim series of mounting boards are available for 1, 4, 8 , 16, 24 , and 32 points of I/O and provide the space savings available by the use of the 1781 series of slim modules.
- 1781 quad mounting boards are available for 24 or 32 points of quad I/O
- WRC4 series of mounting boards provide a selection of 1, 4, 8, 16, and 24 points of I/O in different configurations to meet you application needs.
- Mounting boards that accept 1781 mini series miniature modules are available in 4, 8, 16 and 24 point sizes.
- 1771 series of mounting boards are available to handle the slim, mini and 0.6” size modules in 8 or 16 point configurations.

Choose the logic side connection to meet your application from card-edge connector, 50-conductor header connector, or terminal screws for point to point wiring.

Mounting options include the traditional panel mounting swaged stand-off as well as the convenient DIN-Rail mounting. Consult the following table for details showing the options available.

Custom DIN-rail mounting board sizes may be available. Consult WRC or your local distributor for details.

All units are UL recognized and CE compliant.

wrcakron.com

WRC **Discrete I/O Mounting Boards**

Digital mounting board compatibility

Board	Standard I/O/	Slim I/O	Mini I/O	WRC4 I/O	Quad I/O	Wire Gage	Logic Connector	Isolated Logic Inputs	UL	CE	Notes
1771-JMB	8	8	8			12-22	Terminals		✔	✔	2
1771-JMB	16	16	16			12-18	Edge		✔	✔	2, 3
1771-JMBH	16	16	16			12-18	Edge & Header		✔	✔	2, 3
1781-A4R	4 out	4 out	4			12-18	Terminals	✔	✔	✔	1, 2
1781-A4T	4	4	4			12-18	Terminals		✔	✔	2
1781-A8A		8				14-22	Edge		✔	✔	2
1781-A16A		16	16			14-22	Edge		✔	✔	2
1781-A16H		16	16			14-22	Header		✔	✔	2
1781-A16T		16				14-22	Terminals		✔	✔	2
1781-A24A		24				14-22	Edge		✔	✔	2
1781-A24H2	24	24	24			14-22	Edge & Header			✔	
1781-A32A2		32				14-22	Edge			✔	
1781-A32H2		32				14-22	Header			✔	
1781-A6QA						12-22	Edge		✔	✔	
1782-IBAS		1				14-22	Terminals	✔		✔	2
1782-A16R		16				14-22	Terminals	✔		✔	2
WRC4-A4I				4		12-22	Terminals	✔	✔	✔	2
WRC4-A4T				4		12-22	Terminals		✔	✔	2
WRC4-A8H				8		12-22	Header		✔	✔	2
WRC4-A16H				16		12-22	Header		✔	✔	2
WRC4-A16I				16		12-22	Terminals	✔	✔	✔	2
WRC4-A16T				16		12-22	Terminals		✔	✔	2
WRC4-A24H				24		12-22	Header		✔	✔	
WRC4-IBAS				1		14-22	Terminals	✔		✔	2

NOTES: 1 A4R accepts only output modules, excluding the Relay ,Watchdog and normally closed AC Output modules: -RO5S, -RC5S, -ROXS, -RCXS, -WO5S, -WC5S and OM5SC.
2. DIN mounting available. 3. For use with 1781-JPC. 3.JMB and JMBH have jumpers

Conditions of UL acceptability

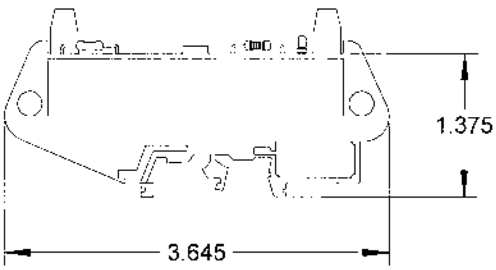
1. These devices must be used within their recognized rating as specified below:
   - Logic Terminals: 50 V dc, 80 mA maximum per contact
   - Signal Terminals: 50 V dc, 80 mA maximum per contact
   - Power Terminals: 300 V ac/dc, 3 A maximum per contact
2. This mounting board has exposed traces that could present a shock hazard, and should be mounted in an enclosure having adequate strength and thickness, to provide adequate protection from shock hazard.
3. The electrical isolation between the power and signal side is determined by the modules installed into the mounting board.
4. The input power for multiple output devices should be limited to a current value not greater than:
   - 30 A for 51 to 150 V ac/dc operating voltage
   - 20 A for 151 to 300 V ac/dc operating voltage
5. The fuses on most 1781 and 1782 mounting boards are rated at 125 V. In installations where the power side voltage is greater than 125 V, the following steps must be performed:
   - Remove the 5 A, 125 V fuse.
   - Replace the fuse with a number 22 AWG jumper
   - The output circuits must beprotected with an external fuse and fuse holder
6. UL File No. E150818

for a single 1781 slim or WRC4 I/O module

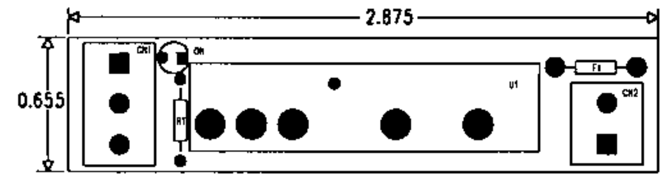
1782-I/O Base & WRC4-I/O Base mounting boards can be used with either a single 1781-series slim I/O module or a single WRC4-series I/O module, respectively. The terminal blocks accept insulated wire with stripped ends or ferrules. Inputs or Outputs can be used for either sinking or sourcing applications. They are designed to be mounted on DIN rails, such as the WRC50022.

MOUNTING DIMENSIONS

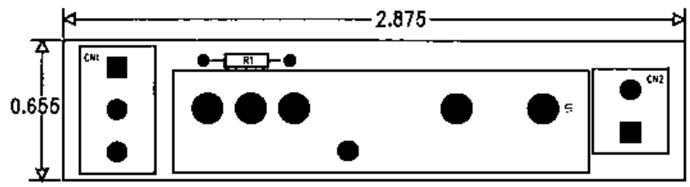
1782-IBAS & WRC4-IBAS



1782-IBAS

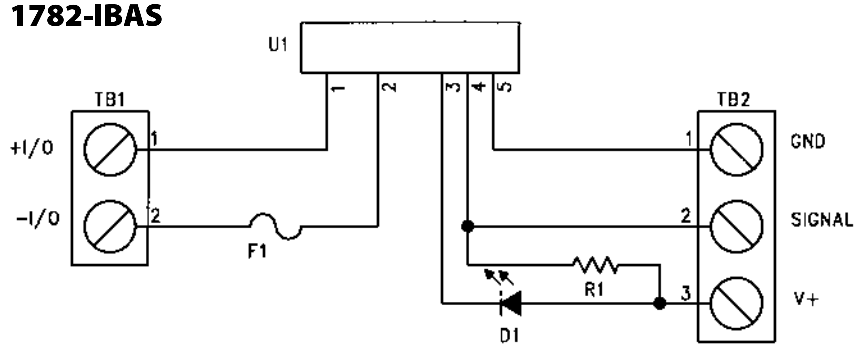


WRC4-IBAS

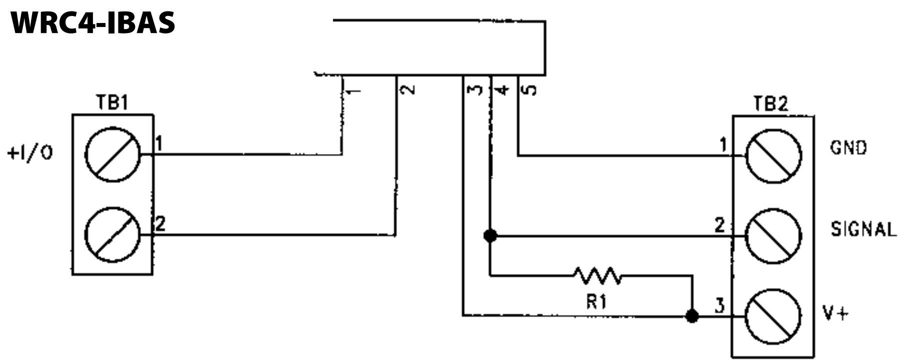


SCHEMATIC DIAGRAM

1782-IBAS



WRC4-IBAS



WRC4-A4I

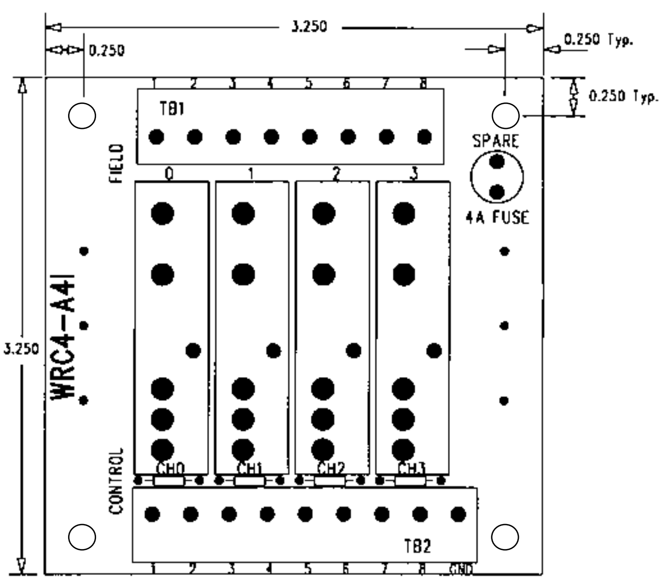
	Power Side		Signal Side	
Bit	**Pos.**	**Neg.**	**Pos.**	**Neg.**
Bit 0	1	2	1	2
Bit 1	3	4	3	4
Bit 2	5	6	5	6
Bit 3	7	8	7	8

WRC4-A4I mounting boards can be used with up to four WRC4-series I/O modules. The terminal blocks accept insulated wire with stripped ends or ferrules. Power side points are individually isolated. The signal side has a common dc return so that they can be used for either positive-true or negative-true logic applications. It is designed for panel mounting with four stand-offs. Specify WRC4-A4I-DIN for mounting on DIN rails, such as the WRC50022.

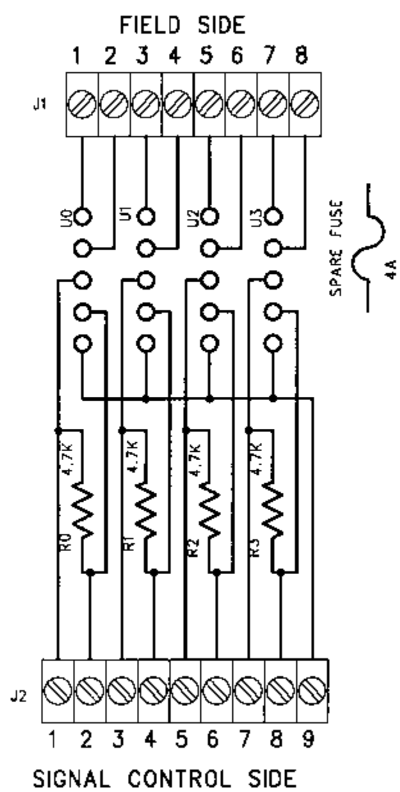
NOTES:

1. Signal-side odd numbered terminals supply the sinking signal or the DC return.
2. Signal-side even numbered terminals supply the +5, +15 or +24 V dc logic voltage or the sourcing signal.
3. Module can be turned on by applying a positive voltage to the odd terminals (active high logic), or by applying a dc return to the even pins (active low logic).
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.

MOUNTING DIMENSIONS



SCHEMATIC DIAGRAM



for up to four single-point slim, miniature or standard I/O modules

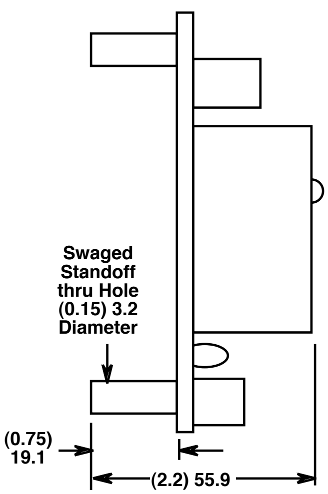
	Power Side		Signal Side	
Bit	**Pos.**	**Neg.**	**Pos.**	**Neg.**
Bit 0	2	3	2	3
Bit 1	4	5	4	5
Bit 2	6	7	6	7
Bit 3	8	9	8	9

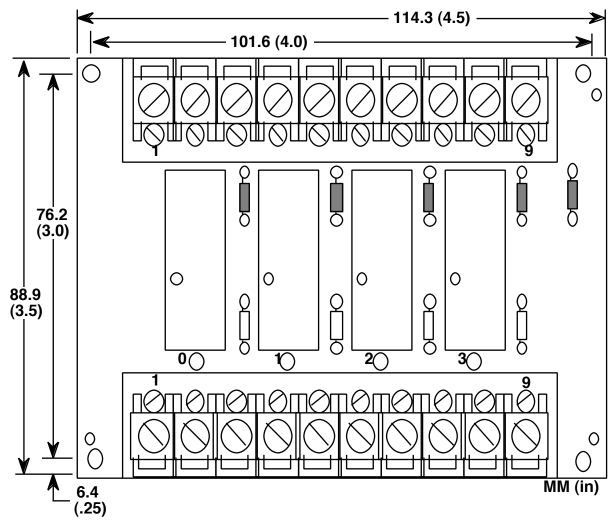
The 1781-A4R mounting board can be used with up to 4 single-point slim, miniature or standard size discrete output modules only. The barrier strip accepts ring or spade lug, and insulated wire with stripped ends. The mounting board provides individually isolated output points. Channel-to-channel isolation is obtained by not having any common connections between points on the power (field) side and the signal (logic) side. Specify 1782-A4R for mounting on DIN rails such as the WRC50022.

NOTES:

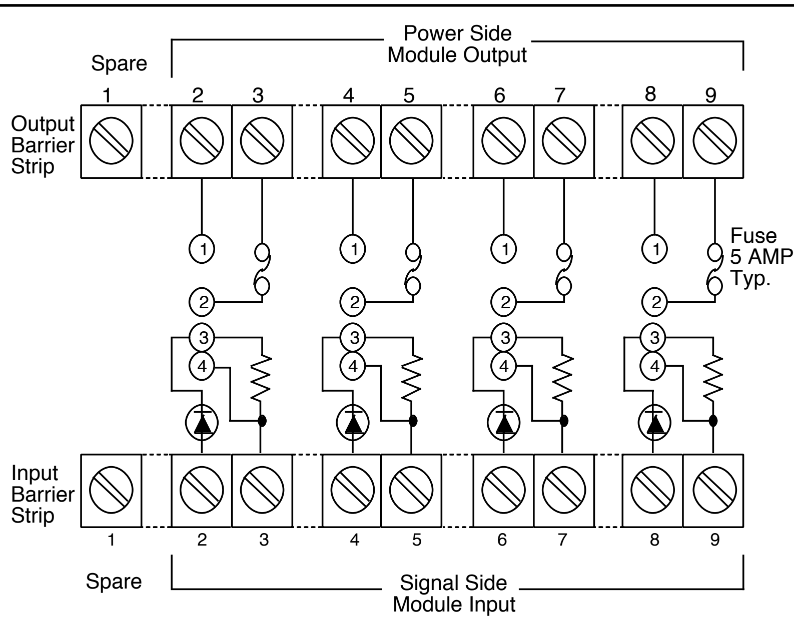
1. Signal-side odd-numbered terminals supply the sinking signal or the DC return.
2. Signal-side even-numbered terminals supply the +5, +15 or +24 V dc logic voltage or the sourcing signal.
3. Module can be turned on by applying a positive voltage to the even terminals (active high logic), or by applying a dc return to the odd pins (active low logic).
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. Power-side terminal 1 and signal-side terminal 1 are not connected.
6. Use the 1781-A4T for relay and watchdog modules, 1781-RO5S, 1781-RC5S, 1781-ROXS, 1781-RCXS, 1781-WO5S, 1781-WC5S, 1781-RCYS, 1781-ROYS.

MOUNTING DIMENSIONS





SCHEMATIC DIAGRAM



for up to four WRC4 or standard, slim or miniature I/O modules

	Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return
Bit 0	2	3	3	2
Bit 1	4	5	5	4
Bit 2	6	7	7	6
Bit 3	8	9	9	8

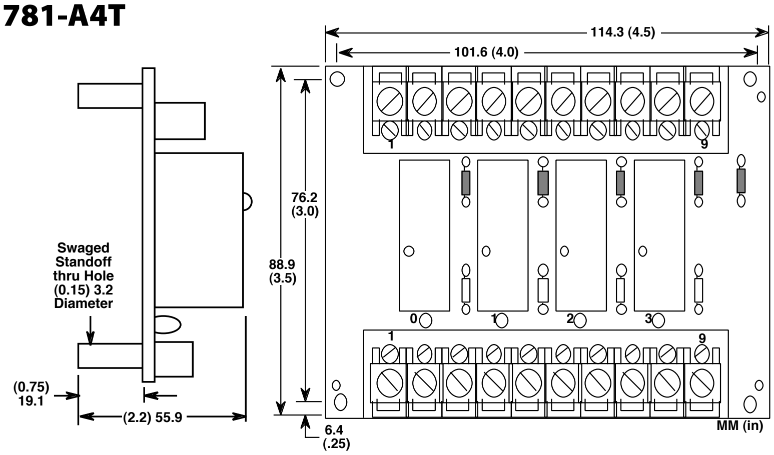
WRC4-A4T and 1781-A4T mounting boards can be used with up to four WRC4-series I/O modules (WRC4-A4T) or four standard, slim or miniature I/O modules (1781-A4T). The barrier strips on the 1781-A4T accept ring or spade lug, while they both accept insulated wire with stripped ends or ferrules. Each power side point is individually isolated. The signal side has a common dc return and common logic supply bus (+Vcc) for negative-true logic applications. They are designed for panel mounting with four stand-offs. Specify 1782-A4T or WRC4-A4T-DIN for mounting on DIN rails such as the WRC50022.

NOTES:

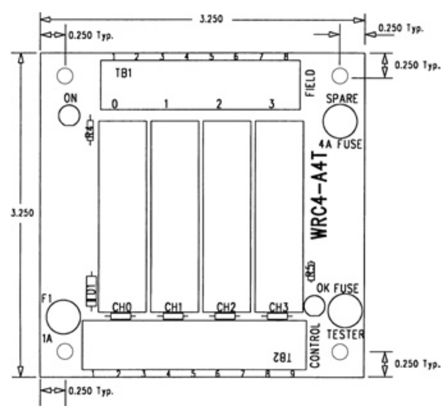
1. Signal-side +Vcc (terminal 1) supplies +5, +15 or +24 V dc logic voltage.
2. Logic-side dc return is connected to all even terminals on the signal side.
3. Signal terminal is pulled up to +Vcc when not asserted, and pulled down to dc return when asserted.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. Power-side terminal 1 is not connected on 1781-A4T.

MOUNTING DIMENSIONS

1781-A4T

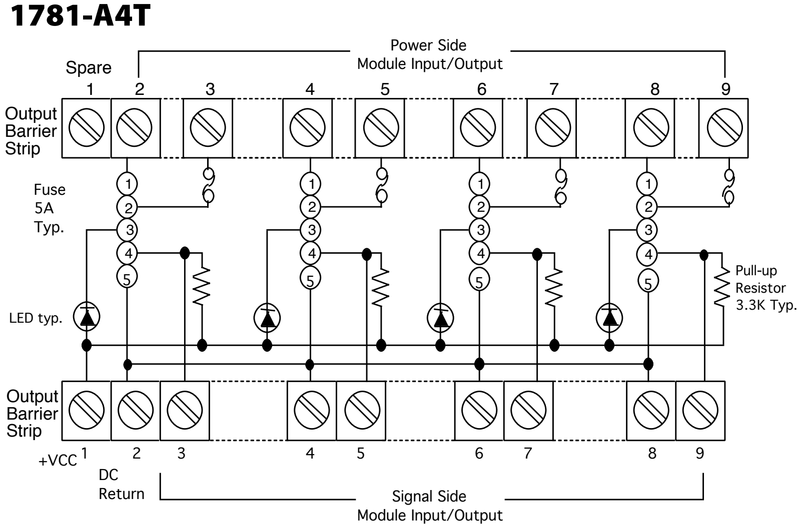


WRC4-A4T

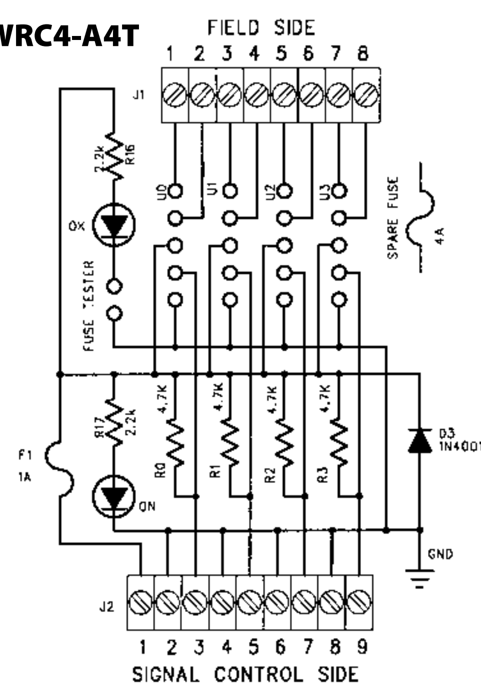


SCHEMATIC DIAGRAMS

1781-A4T



WRC4-A4T



WRC4-A8H, 1771-JMB8(H) & 1781-A8A

for up to eight WRC4, standard, miniature or 1781 slim I/O modules

	Power Side		Signal Side	
Bit	**Pos.**	**Neg.**	**Signal**	**DC Return**
Bit 0	1	2	47 (23)	48 (24)
Bit 1	3	4	45 (21)	46 (22)
Bit 2	5	6	43 (19)	44 (20)
Bit 3	7	8	41 (17)	42 (18)
Bit 4	9	10	39 (15)	40 (16)
Bit 5	11	12	37 (13)	38 (14)
Bit 6	13	14	35 (11)	36 (12)
Bit 7	15	16	33 (9)	34 (10)

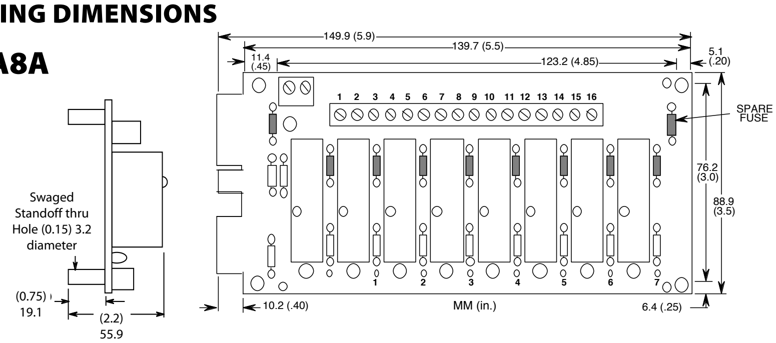
The WRC4-A8H, 1771-JMB8, 1771-JMB8H and 1781-A8A mounting boards can be used with up to 8 WRC4, standard, miniature and 1781 slim modules respectively. The terminal block accepts only insulated wire with stripped ends. Each power side point is individually isolated from each other. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. Specify 1781-CxEx Cable Assembly for 1771-JMB8 and 1781-A8A. Specify 1781-CxHx Cable Assembly for WRC4-A8H and 1771-JMB8(H). Specify WRC4-A8H-DIN and 1782-A8A for mounting on DIN rails such as WRC50022. 1771-JMB8 and 1771-JMB8H are not available for DIN mounting.

NOTES:

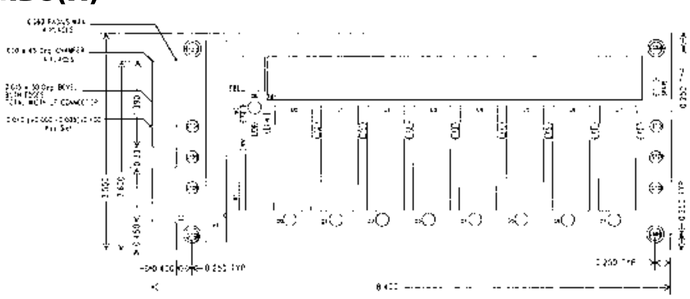
1. Logic supply +Vcc (+5, +15 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked with + or –.
2. Logic supply dc return is connected to all even pins of the 25 or 50 pin edge card connector
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. The backplane is shipped with a jumper configuration to supply the logic voltage through pins 1 and 49 (1 and 25) of the edge connector.
5. Logic-side connector pin numbers are for 50-pin connector. Pin numbers in ( ) are for 26-pin connector.
6. 1781-A8A and 1771-JMB8 signal-side connections are via a 50 conductor edge connector. WRC4-A8H and 1771-JMB8H use a header connector.

MOUNTING DIMENSIONS

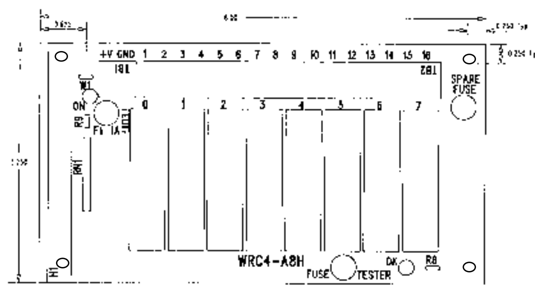
1781-A8A



1771-JMB8(H)

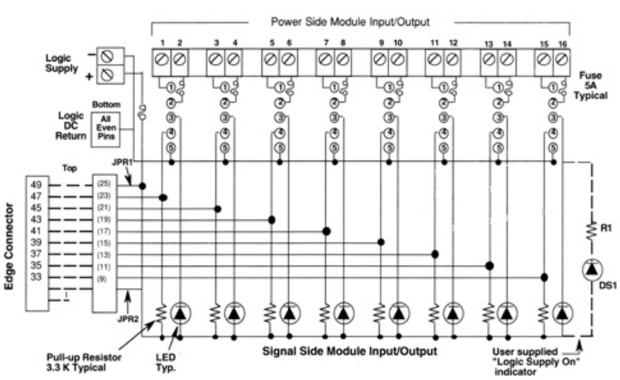


WRC4-A8H

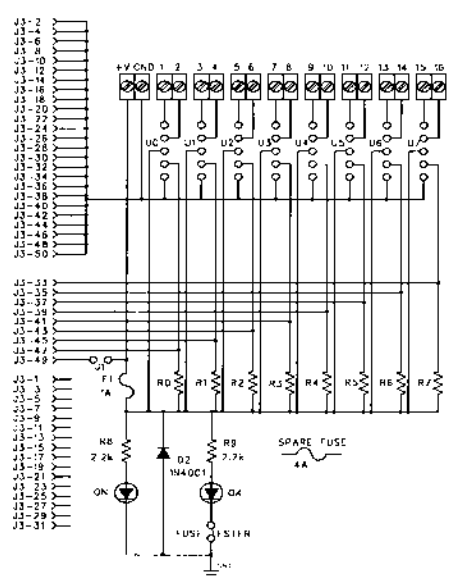


SCHEMATIC DIAGRAM

1781-A8A/1771-JMB8(H)



WRC4-A8H



Discrete I/O Mounting Boards — 1781-A16A(H)

for up to 16 1781 slim or miniature I/O modules

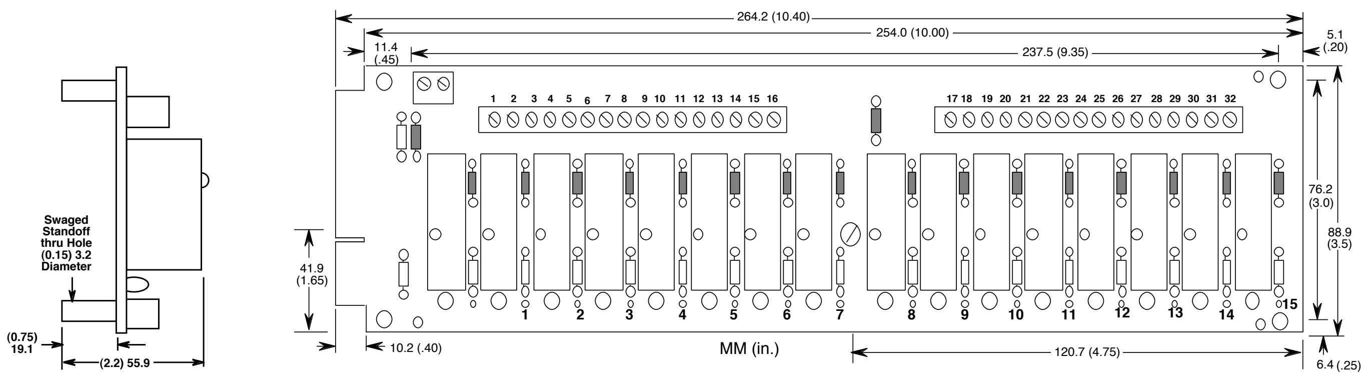
The 1781-A16A(H) mounting board can be used with up to 16 1781-series slim or miniature modules. The terminal block accepts only insulated wire with stripped ends or ferrules. Each power side point is individually isolated from each other. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. Signal-side connection is via a card edge connector for the 1781-A16A and a header connector for the 1781-A16H. Specify 1781-CxEx Cable Assembly for 1781-A16A and 1781-CxHx Cable Assembly for 1781-A16H. Specify 1782-A16A for mounting on DIN rails such as WRC50022. The backplane is shipped with a jumper configuration to supply the logic voltage through the edge connector.

	Power Side		Signal Side			Power Side		Signal Side	
Bit	**Pos.**	**Neg.**	**Signal**	**DC Return**	**Bit**	**Pos.**	**Neg.**	**Signal**	**DC Return**
Bit 0	1	2	47	48	Bit 8	17	18	31	32
Bit 1	3	4	45	46	Bit 9	19	20	29	30
Bit 2	5	6	43	44	Bit 10	21	22	27	28
Bit 3	7	8	41	42	Bit 11	23	24	25	26
Bit 4	9	10	39	40	Bit 12	25	26	23	24
Bit 5	11	12	37	38	Bit 13	27	28	21	22
Bit 6	13	14	35	36	Bit 14	29	30	19	20
Bit 7	15	16	33	34	Bit 15	31	32	17	18

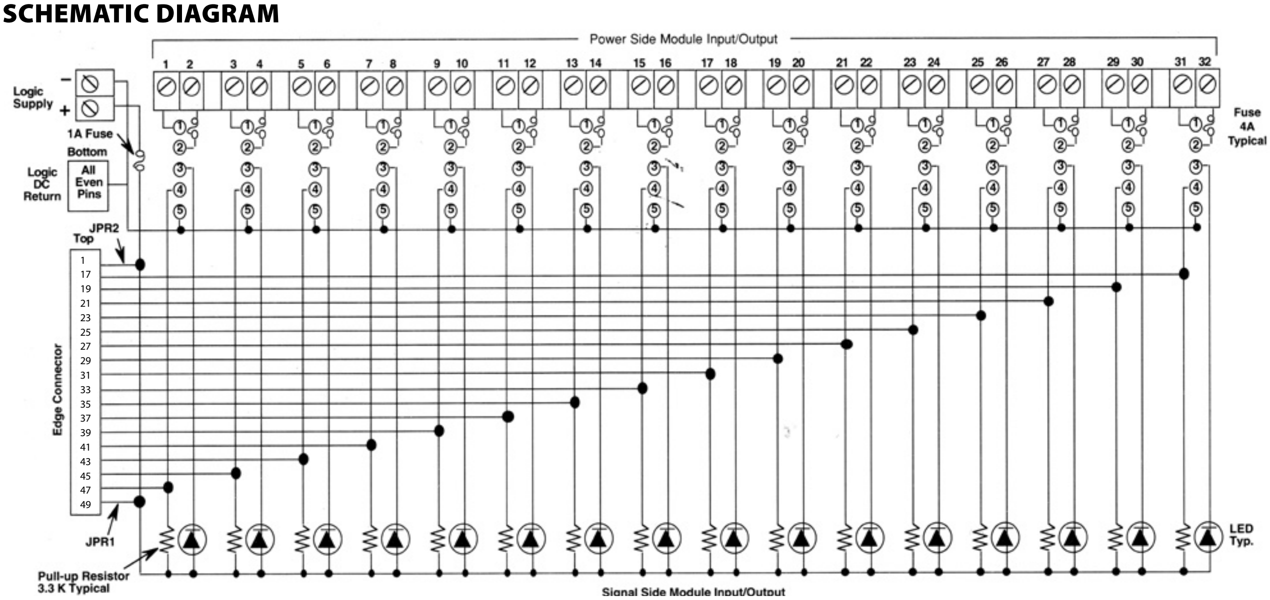
NOTES:

1. Logic supply +Vcc (+5, +15 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked with + or –.
2. Logic supply dc return is connected to all even pins of the 50 pin edge card connector
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power side terminals are polarized for dc applications, and non-polarized for ac applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage through pins 1 and 49 of the edge connector.
6. Logic side connector pin numbers are for 50 pin connector.

MOUNTING DIMENSIONS



SCHEMATIC DIAGRAM



Discrete I/O Mounting Boards

for up to 16 WRC4 I/O modules

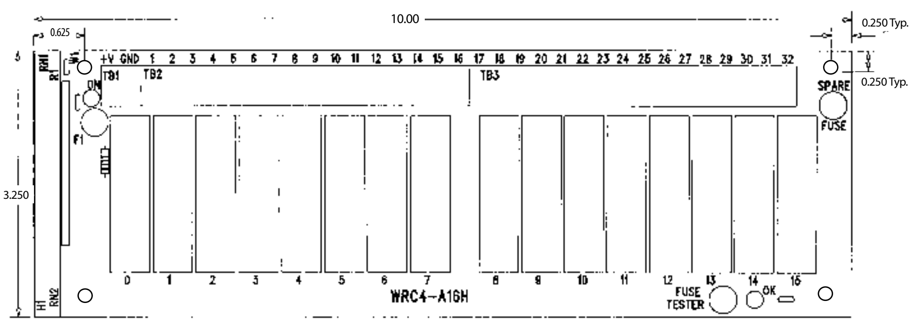
WRC4-A16H can be used with up to 16 WRC4-series I/O modules. The terminal blocks both accept insulated wire with stripped ends or ferrules. Each power side point is individually isolated. The signal side has a common dc return and common logic supply bus (+Vcc) for negative-true logic applications. They are designed for panel mounting with four stand-offs. Specify WRC4-A16H-DIN for mounting on DIN rails, such as the WRC50022. Logic side connections are via a 50-conductor header connector. Specify 1781-CxHx Cable Assembly.

	Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1	2	47	48	Bit 8	17	18	31	32
Bit 1	3	4	45	46	Bit 9	19	20	29	30
Bit 2	5	6	43	44	Bit 10	21	22	27	28
Bit 3	7	8	41	42	Bit 11	23	24	25	26
Bit 4	9	10	39	40	Bit 12	25	26	23	24
Bit 5	11	12	37	38	Bit 13	27	28	21	22
Bit 6	13	14	35	36	Bit 14	29	30	19	20
Bit 7	15	16	33	34	Bit 15	31	32	17	18

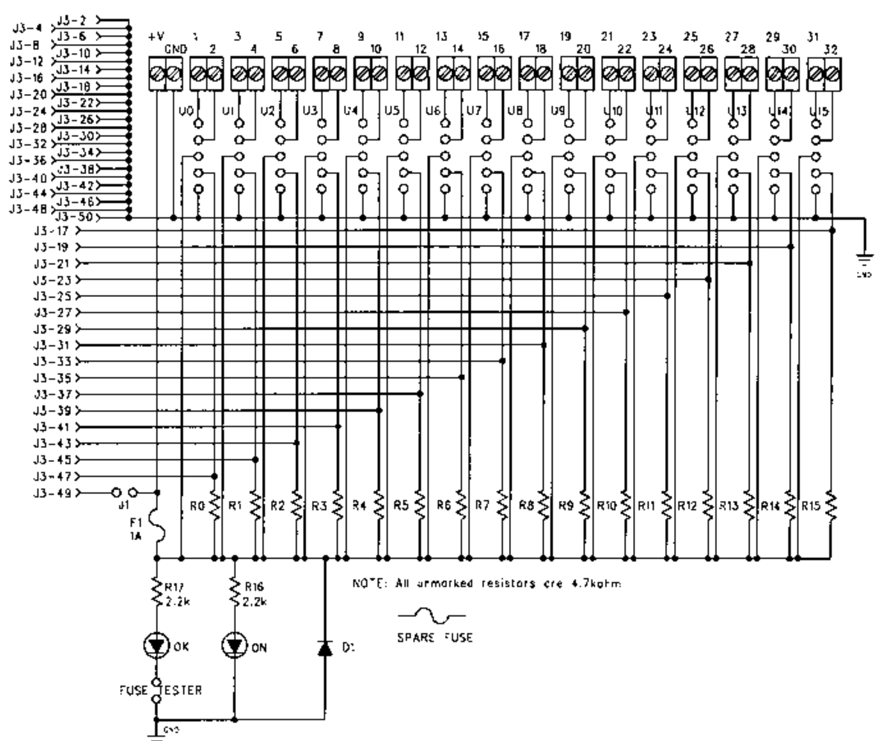
NOTES:

1. Logic supply +Vcc (+5, +15 or +24Vdc) and dc return is supplied through the 2 terminal logic supply connector, marked with + or –.
2. Logic supply dc return is connected to all even pins of the 50 pin header connector
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage through pins 1 and 49 of the edge connector.
6. Logic-side connector pin numbers are for 50 pin connector.

MOUNTING DIMENSIONS



SCHEMATIC DIAGRAM



for up to 16 WRC4 I/O modules

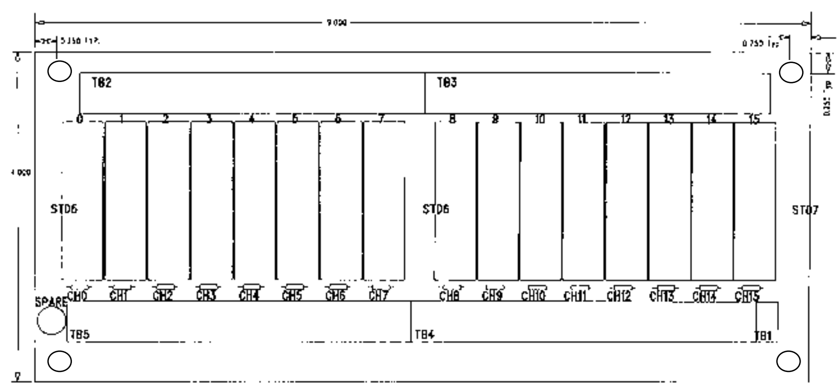
WRC4-A16I can be used with up to 16 WRC4-series I/O modules. The terminal blocks both accept insulated wire with stripped ends or ferrules. Each power side point is individually isolated. The signal side has individual control signals for positive-true or negative-true logic applications, plus a common dc return. They are designed for panel mounting with four stand-offs. Specify WRC4-A16I-DIN for mounting on DIN rails, such as the WRC50022.

	Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1	2	- 2	+1	Bit 8	17	18	-18	+17
Bit 1	3	4	- 4	+3	Bit 9	19	20	-20	+19
Bit 2	5	6	- 6	+5	Bit 10	21	22	-22	+21
Bit 3	7	8	- 8	+7	Bit 11	23	24	-24	+23
Bit 4	9	10	-10	+9	Bit 12	25	26	-26	+25
Bit 5	11	12	-12	+11	Bit 13	27	28	-28	+27
Bit 6	13	14	-14	+13	Bit 14	29	30	-30	+29
Bit 7	15	16	-16	+15	Bit 15	31	32	-32	+31

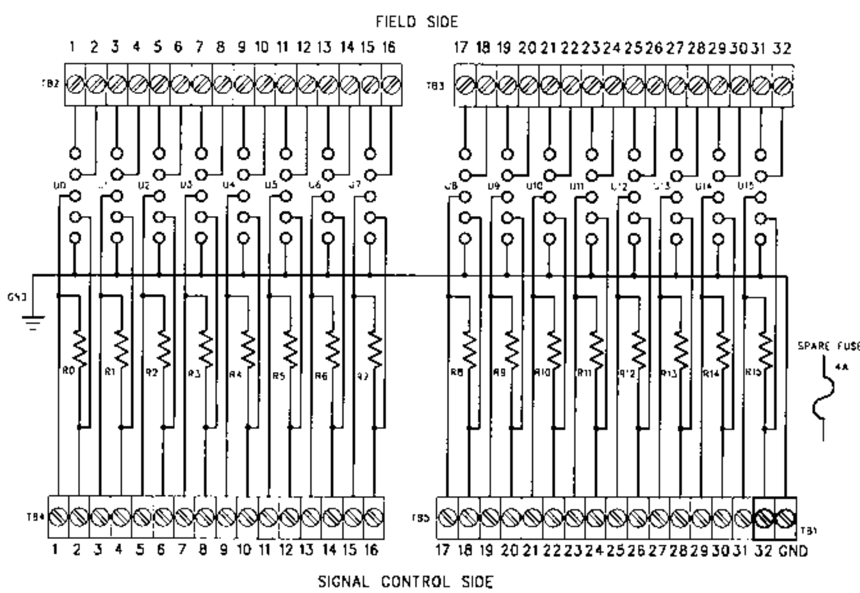
NOTES:

1. Signal-side odd numbered terminals supply the DC return.
2. Signal-side even numbered terminals supply the +5, +15 or +24 V dc logic voltage signal.
3. Module can be turned on by applying a positive voltage to the odd terminals (active high logic), or by applying a dc return to the even pins (active low logic).
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.

MOUNTING DIMENSIONS

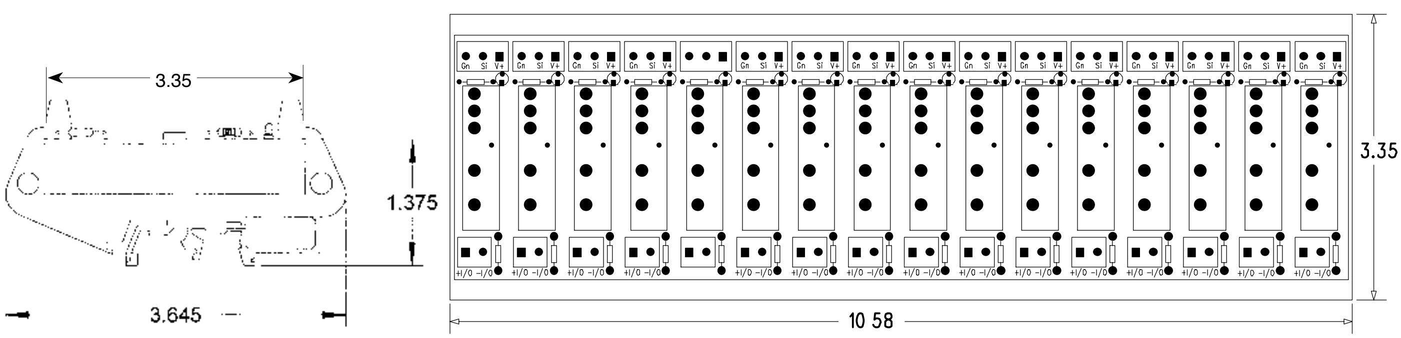


SCHEMATIC DIAGRAM

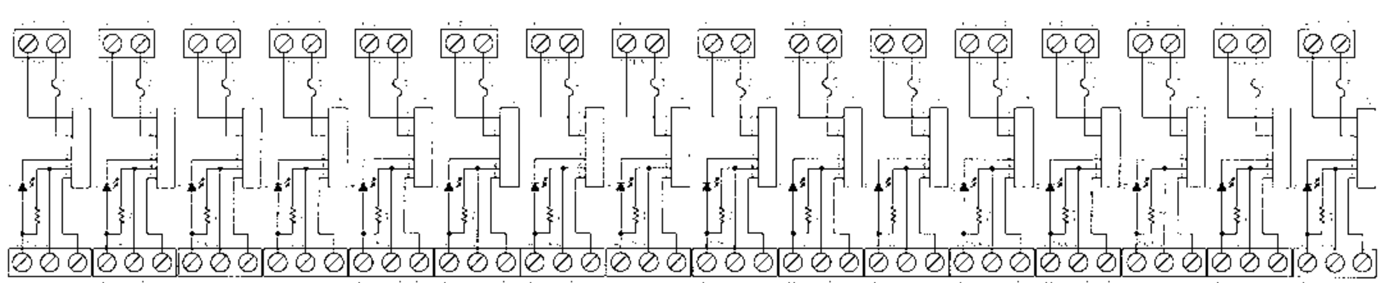


The 1782-A16R mounting boards can be used with up to 16 1781-series slim modules, respectively. The terminal block accepts insulated wire with stripped ends or ferrules. Each power side point is individually isolated from each other. Channel-to-channel isolation is provided on the signal side, as well as the power side. The 1782-A16R is only available for DIN mounting on DIN rails such as WRC50022.

MOUNTING DIMENSIONS



SCHEMATIC DIAGRAM



Discrete I/O Mounting Boards

WRC4-A16T & 1781-A16T

for up to 16 WRC4 or 1781 slim I/O modules

The WRC4-A16T and 1781-A16T mounting boards can be used with up to 16 WRC4 series and 1781 series slim modules, respectively. The terminal block accepts only insulated wire with stripped ends. Each power side point is individually isolated from each other. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. Specify WRC4-A16T-DIN and 1782-A16T for mounting on DIN rails, such as WRC50022.

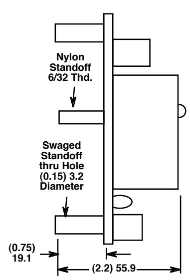
	Power Side		Signal Side			Power Side		Signal Side	
Bit	**Pos.**	**Neg.**	**Signal**	**DC Return**	**Bit**	**Pos.**	**Neg.**	**Signal**	**DC Return**
Bit 0	1	2	2	1	Bit 8	17	18	18	17
Bit 1	3	4	4	3	Bit 9	19	20	20	19
Bit 2	5	6	6	5	Bit 10	21	22	22	21
Bit 3	7	8	8	7	Bit 11	23	24	24	23
Bit 4	9	10	10	9	Bit 12	25	26	26	25
Bit 5	11	12	12	11	Bit 13	27	28	28	27
Bit 6	13	14	14	13	Bit 14	29	30	30	29
Bit 7	15	16	16	15	Bit 15	31	32	32	31

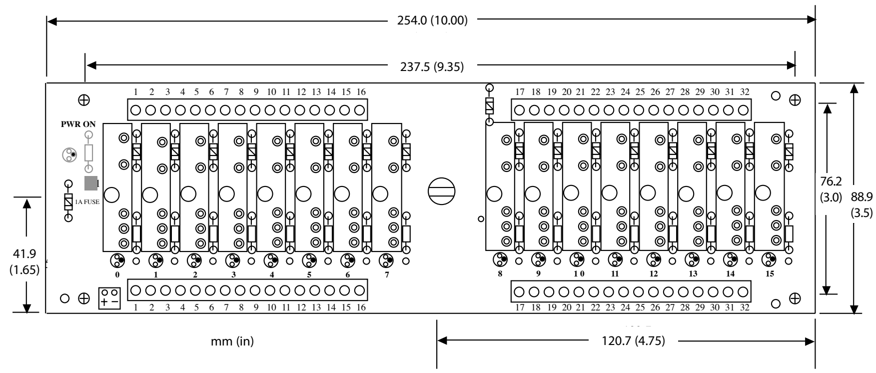
NOTES:

1. Logic supply +Vcc (+5 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked with + or –.
2. Logic supply dc return is connected to all odd terminals on the signal side.
3. Signal terminal is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.

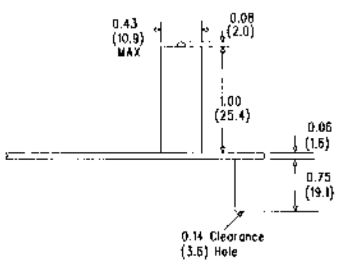
MOUNTING DIMENSIONS

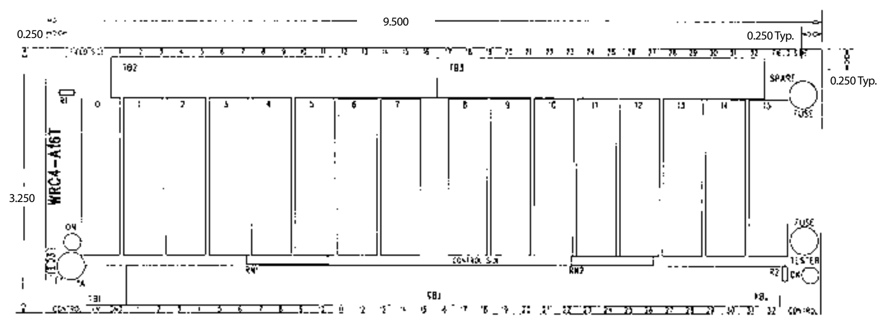
1781-A16T





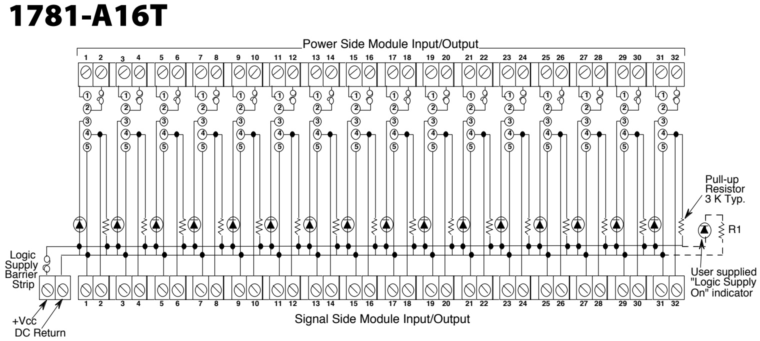
WRC4-A16T



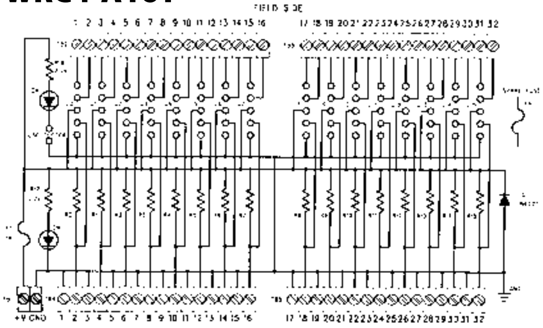


SCHEMATIC DIAGRAM

1781-A16T



WRC4-A16T



Discrete I/O Mounting Boards

1771-JMB Series

for up to 16 1781 standard, miniature or slim I/O modules

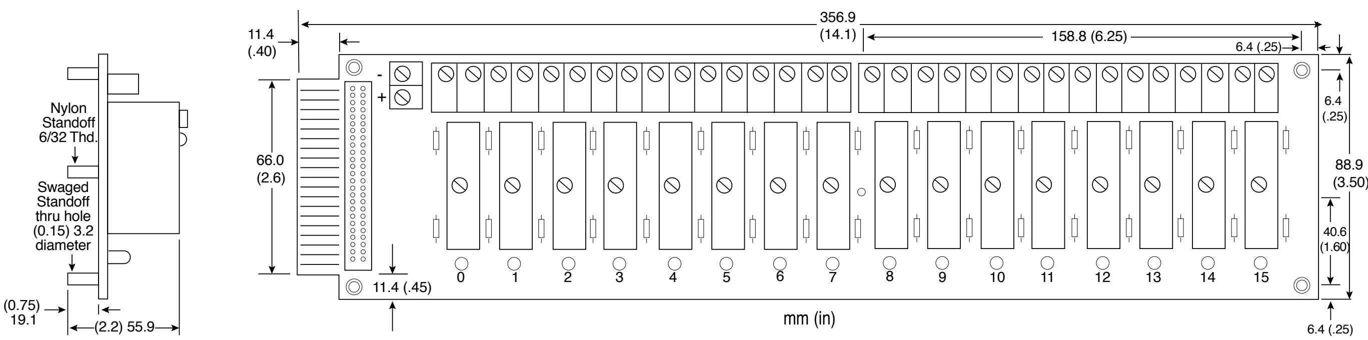
The 1771-JMB mounting board can be used with 16, 1781-series slim, miniature or standard size modules. The terminal block accepts ring or spade lugs, and insulated wire with stripped ends. Each power side point is individually isolated from each other. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. The 1771-JMB has an edge connector. The 1771-JMBH has both an edge and a header connector. Both models have a jumper connecting power from the ribbon cable. Specify 1781-CxEx Cable Assembly for 1771-JMB or JMBJ; or 1781-CxHx Cable Assembly for 1771-JMBH or 1771-JMBHJ. 1771-JMBxx is not available for mounting on DIN-rails.

	Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1	2	47	48	Bit 8	17	18	31	32
Bit 1	3	4	45	46	Bit 9	19	20	29	30
Bit 2	5	6	43	44	Bit 10	21	22	27	28
Bit 3	7	8	41	42	Bit 11	23	24	25	26
Bit 4	9	10	39	40	Bit 12	25	26	23	24
Bit 5	11	12	37	38	Bit 13	27	28	21	22
Bit 6	13	14	35	36	Bit 14	29	30	19	20
Bit 7	15	16	33	34	Bit 15	31	32	17	18

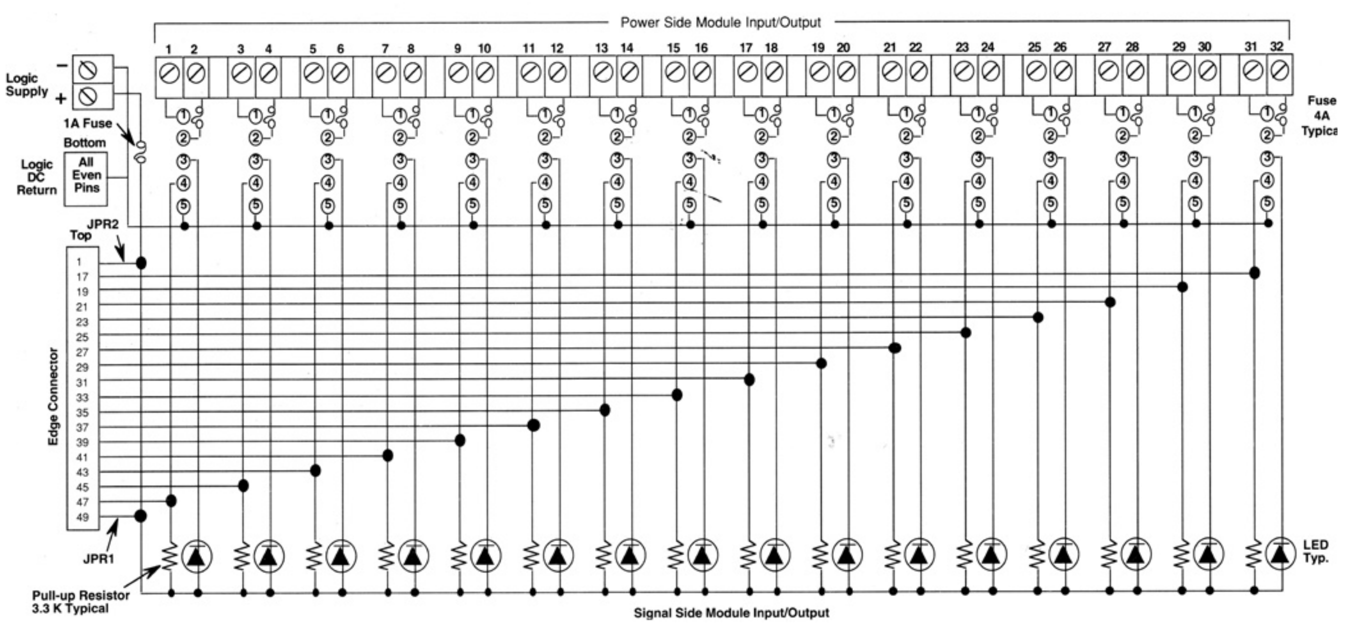
NOTES:

1. Logic supply +Vcc (+5, +15 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked with + or –.
2. Logic supply dc return is connected to all even pins of the 50 pin edge card connector
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage through pins 1 and 49 of the edge connector.
   If logic voltage is not desired on these pins the J suffix.
6. Logic-side connector pin numbers are for 50 pin connector.

MOUNTING DIMENSIONS



SCHEMATIC DIAGRAM



Discrete I/O Mounting Boards

for up to 24 1781 slim I/O modules

1781-A24A

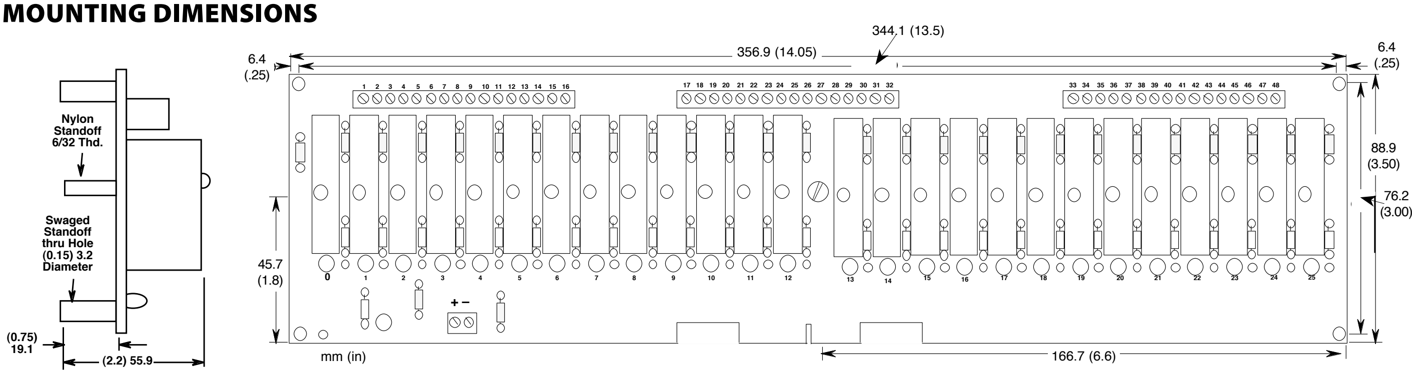
The 1781-A24A mounting board can be used with up to 24 1781-series slim modules. The terminal block accepts insulated wire with stripped ends or ferrules. Each power side point is individually isolated from each other. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. Specify 1781-CxEx Cable Assembly. Specify 1782-A24A for mounting on DIN rails, such as WRC50022.

	Power Side		Signal Side			Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1	2	47	48	Bit 8	17	18	31	32	Bit 16	33	34	15	16
Bit 1	3	4	45	46	Bit 9	19	20	29	30	Bit 17	35	36	13	14
Bit 2	5	6	43	44	Bit 10	21	22	27	28	Bit 18	37	38	11	12
Bit 3	7	8	41	42	Bit 11	23	24	25	26	Bit 19	39	40	9	10
Bit 4	9	10	39	40	Bit 12	25	26	23	24	Bit 20	41	42	7	8
Bit 5	11	12	37	38	Bit 13	27	28	21	22	Bit 21	43	44	5	6
Bit 6	13	14	35	36	Bit 14	29	30	19	20	Bit 22	45	46	3	4
Bit 7	15	16	33	34	Bit 15	31	32	17	18	Bit 23	47	48	1	2

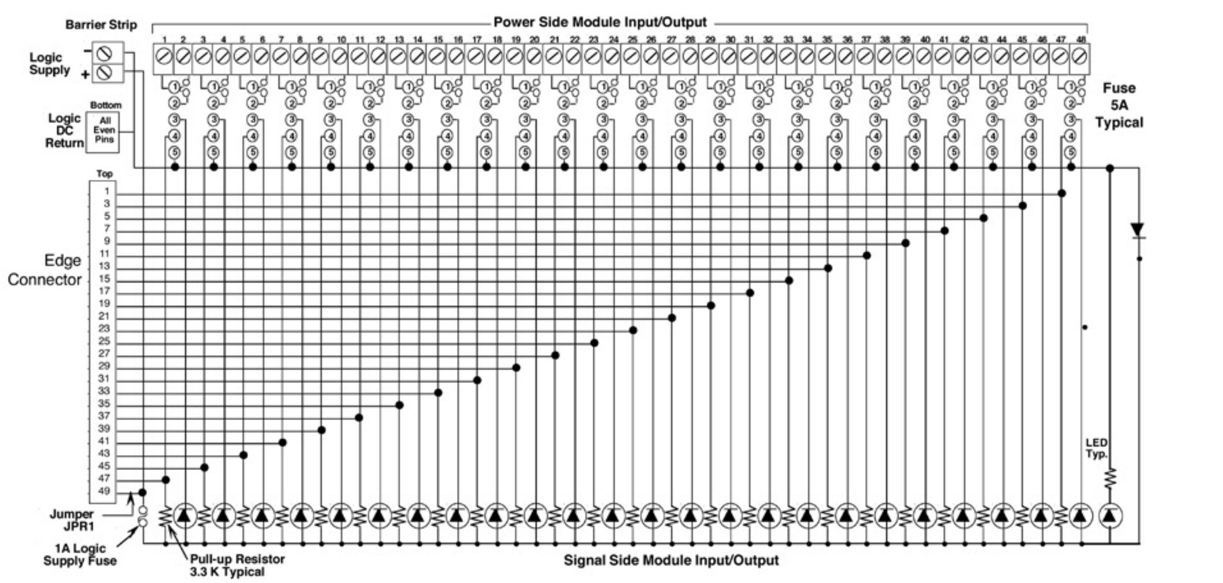
NOTES:

1. Logic supply +Vcc (+5, +15 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked with + or –.
2. Logic supply dc return is connected to all odd pins on the signal side.
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage through pin 49 of the edge connector.

MOUNTING DIMENSIONS



SCHEMATIC DIAGRAM



for up to 24 1781 standard, miniature or slim I/O modules

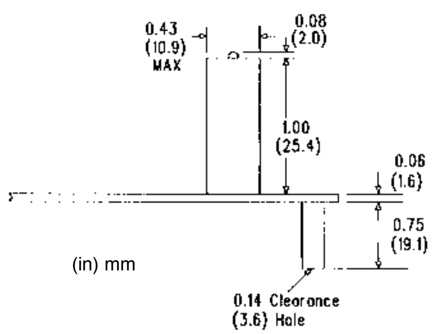
1781-A24H2 mounting boards can be used with up to 24, 1781-series slim, miniature or standard modules. The terminal block accepts insulated wire with stripped ends or ferrules. Each power side point is individually isolated from each other. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. The 1781-A24H2 has a header connector. The field connection and logic power are made via removable terminal blocks. (For spare connectors, use WRC part number 1781-A24H2-CK.) Specify 1781-CxHx Cable Assembly for the 1781-A24H2. DIN-rail mounting is not available.

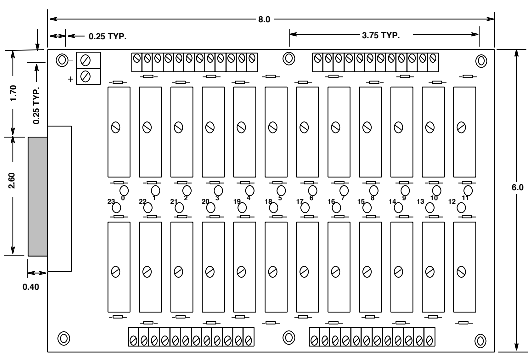
	Power Side		Signal Side			Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1	2	47	48	Bit 8	17	18	31	32	Bit 16	33	34	15	16
Bit 1	3	4	45	46	Bit 9	19	20	29	30	Bit 17	35	36	13	14
Bit 2	5	6	43	44	Bit 10	21	22	27	28	Bit 18	37	38	11	12
Bit 3	7	8	41	42	Bit 11	23	24	25	26	Bit 19	39	40	9	10
Bit 4	9	10	39	40	Bit 12	25	26	23	24	Bit 20	41	42	7	8
Bit 5	11	12	37	38	Bit 13	27	28	21	22	Bit 21	43	44	5	6
Bit 6	13	14	35	36	Bit 14	29	30	19	20	Bit 22	45	46	3	4
Bit 7	15	16	33	34	Bit 15	31	32	17	18	Bit 23	47	48	1	2

NOTES:

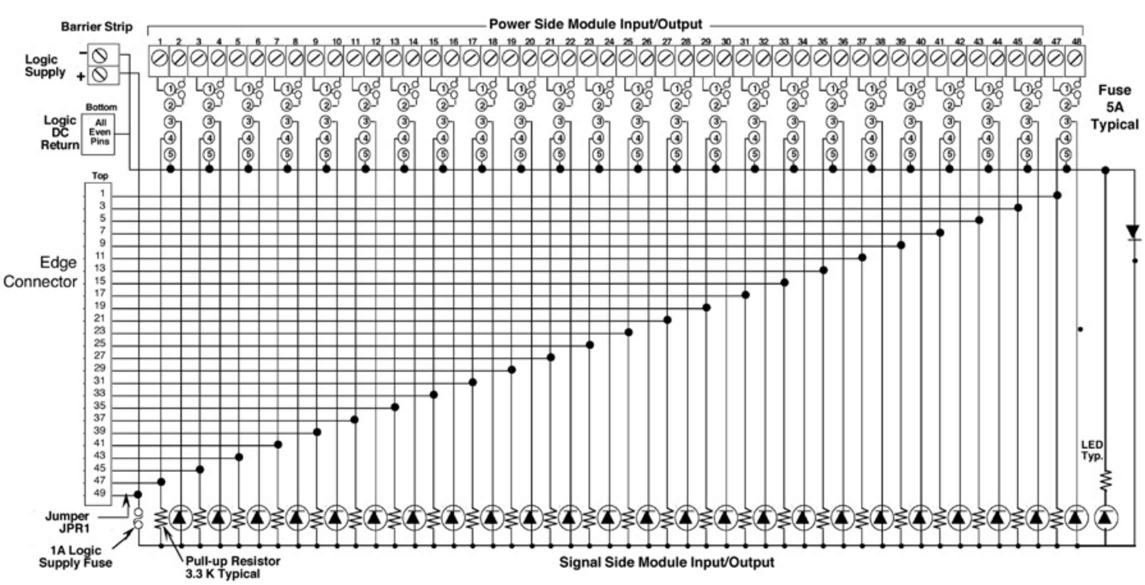
1. Logic supply +Vcc (+5, +15 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked + or –.
2. Logic supply dc return is connected to all odd pins on the signal side.
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage on pin 49 of the edge connector.

MOUNTING DIMENSIONS





SCHEMATIC DIAGRAM



Discrete I/O Mounting Boards

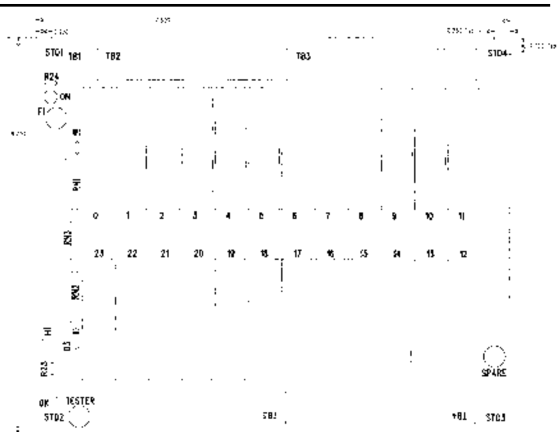
WRC4-A24H & WRC4-A24H2

for up to 24 WRC4 or 1781 Slim I/O modules

WRC4-A24H and WRC4-A24H2 mounting boards can be used with up to 24 WRC4 series I/O modules. The terminal blocks accept insulated wire with stripped ends or ferrules. Each power side point is individually isolated. The signal side has a common logic supply bus (+Vcc and dc return) for negative-true logic applications. Logic connections are via a 50-pin header connector. The WRC4-A24H has fixed terminal blocks. The WRC4-A24H2 has removable terminal blocks for field connection and logic power. (For spare connectors use part 1781-A24H2-CK.) Specify the 1781-Cx_H Cable Assembly. The boards are designed for panel mounting. (DIN-rail mounting is not available.)

	Power Side		Signal Side			Power Side		Signal Side			Power Side		Signal Side	
Bit	**Pos.**	**Neg.**	**Signal**	**DC Return**	**Bit**	**Pos.**	**Neg.**	**Signal**	**DC Return**	**Bit**	**Pos.**	**Neg.**	**Signal**	**DC Return**
Bit 0	1	2	47	48	Bit 8	17	18	31	32	Bit 16	33	34	15	16
Bit 1	3	4	45	46	Bit 9	19	20	29	30	Bit 17	35	36	13	14
Bit 2	5	6	43	44	Bit 10	21	22	27	28	Bit 18	37	38	11	12
Bit 3	7	8	41	42	Bit 11	23	24	25	26	Bit 19	39	40	9	10
Bit 4	9	10	39	40	Bit 12	25	26	23	24	Bit 20	41	42	7	8
Bit 5	11	12	37	38	Bit 13	27	28	21	22	Bit 21	43	44	5	6
Bit 6	13	14	35	36	Bit 14	29	30	19	20	Bit 22	45	46	3	4
Bit 7	15	16	33	34	Bit 15	31	32	17	18	Bit 23	47	48	1	2

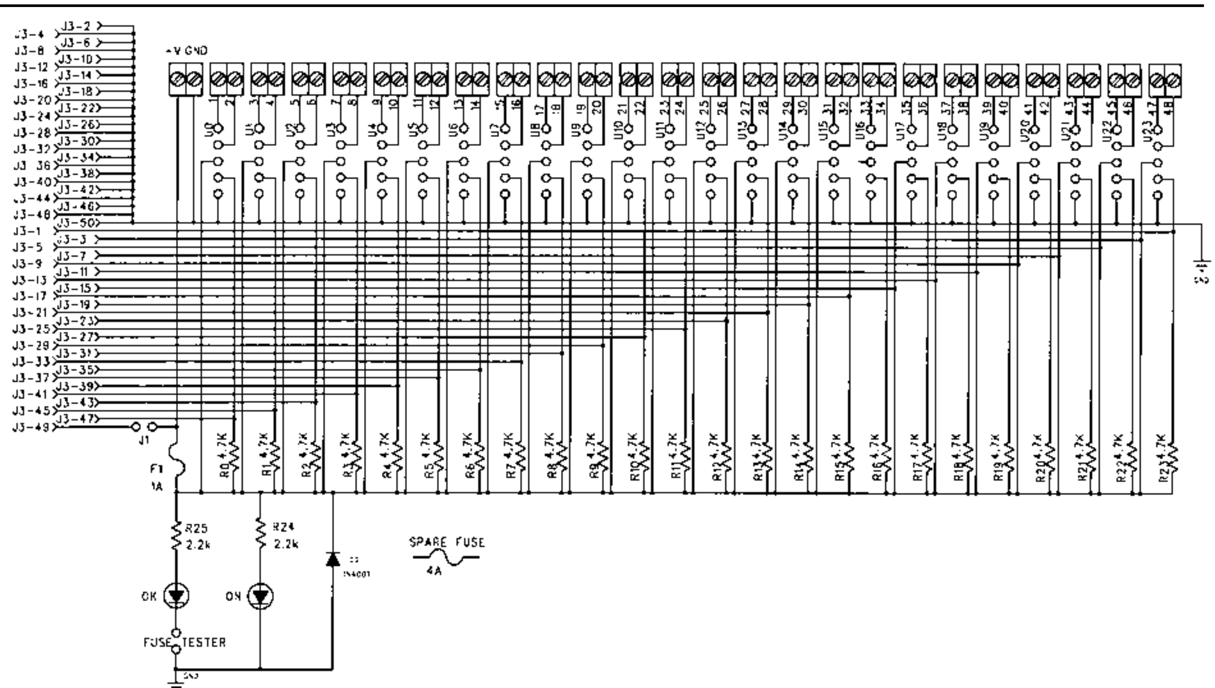
MOUNTING DIMENSIONS



NOTES:

1. Logic supply +Vcc (+5, +15 or +24 V dc) and dc return is supplied through the 2 terminal logic supply connector, marked + or –.
2. Logic supply dc return is connected to all odd pins on the signal side.
3. Signal pin is pulled up to +Vcc when not asserted, down to dc return when asserted.
4. Power-side terminals are polarized for DC applications, and non-polarized for AC applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage on pin 49 of the edge connector.

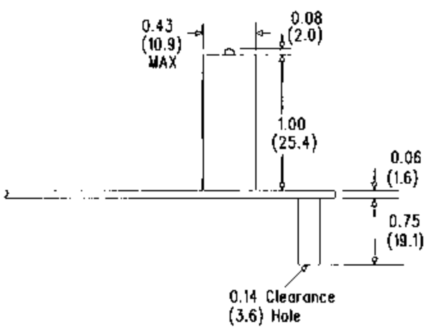
SCHEMATIC DIAGRAM

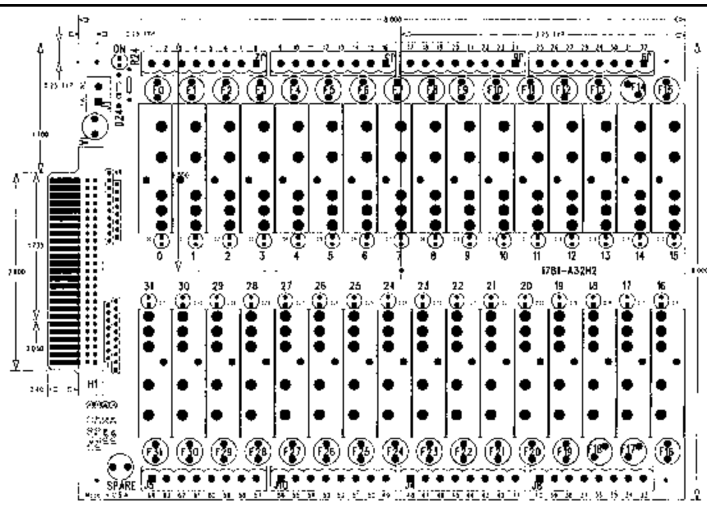


1781-A32A2 and 1781-A32H2 mounting boards can be used with up to 32 1781 series slim I/O modules. The terminal blocks accept insulated wire with stripped ends or ferrules. Each power side point is individually isolated. The signal side has a common dc return and common logic supply bus (+Vcc) for negative-true logic applications. They are designed for panel mounting with four stand-offs. Logic side connections are via a 50-conductor header connector for the 1781-A32H2 and a card edge connector for the 1781-A32A2. Specify 1781-CxEx Cable Assembly for the 1781-A32A2, and 1781-CxHx Cable Assembly for the 1781-A32H2. DIN mounting is not available.

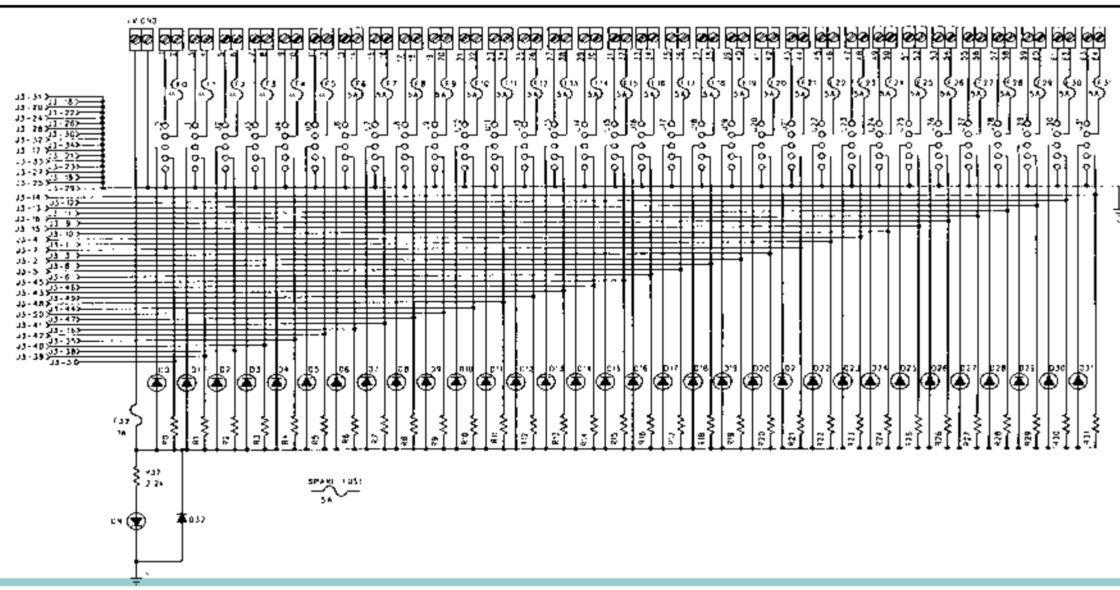
	Power Side		Signal Side			Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1	2	37	(17-34)	Bit 11	23	24	48	(17-34)	Bit 22	45	46	1	(17-34)
Bit 1	3	4	39	(17-34)	Bit 12	25	26	49	(17-34)	Bit 23	47	48	4	(17-34)
Bit 2	5	6	38	(17-34)	Bit 13	27	28	43	(17-34)	Bit 24	49	50	10	(17-34)
Bit 3	7	8	40	(17-34)	Bit 14	29	30	46	(17-34)	Bit 25	51	52	15	(17-34)
Bit 4	9	10	35	(17-34)	Bit 15	31	32	45	(17-34)	Bit 26	53	54	9	(17-34)
Bit 5	11	12	42	(17-34)	Bit 16	33	34	6	(17-34)	Bit 27	55	56	16	(17-34)
Bit 6	13	14	36	(17-34)	Bit 17	35	36	5	(17-34)	Bit 28	57	58	11	(17-34)
Bit 7	15	16	41	(17-34)	Bit 18	37	38	8	(17-34)	Bit 29	59	60	13	(17-34)
Bit 8	17	18	47	(17-34)	Bit 19	39	40	2	(17-34)	Bit 30	61	62	12	(17-34)
Bit 9	19	20	50	(17-34)	Bit 20	41	42	3	(17-34)	Bit 31	63	64	14	(17-34)
Bit 10	21	22	44	(17-34)	Bit 21	43	44	7	(17-34)					

MOUNTING DIMENSIONS





SCHEMATIC DIAGRAM



Discrete I/O Mounting Boards 1781-A6QA

for six 1781 quad I/O modules

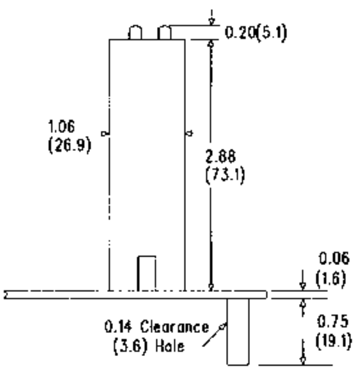
The 1781-A6QA mounting board can be used with 6 1781-series quad modules (24 I/O points). A total of 4 points within each quad module share 2 common connections on the mounting board terminal strip. The barrier strip will accept ring or spade lugs, insulated wire with stripped ends, or ferrules. The power side allows each module to have a shared common for only that module, and each module is isolated from remaining modules. The signal side has a common logic supply bus (+Vcc and dc return) shared with each of the modules. Specify 1781-CxEx Cable Assembly. DIN mounting is not available.

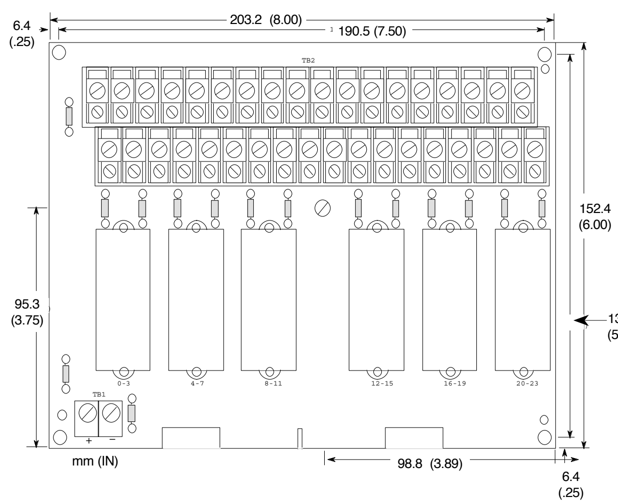
	Power Side		Signal Side			Power Side		Signal Side			Power Side		Signal Side	
Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return	Bit	Pos.	Neg.	Signal	DC Return
Bit 0	1-4 COM	1	47	48	Bit 8	9-12 COM	9	31	32	Bit 16	17-20 COM	17	15	16
Bit 1	1-4 COM	2	45	46	Bit 9	9-12 COM	10	29	30	Bit 17	17-20 COM	18	13	14
Bit 2	1-4 COM	3	43	44	Bit 10	9-12 COM	11	27	28	Bit 18	17-20 COM	19	11	12
Bit 3	1-4 COM	4	41	42	Bit 11	9-12 COM	12	25	26	Bit 19	17-20 COM	20	9	10
Bit 4	5-6 COM	5	39	40	Bit 12	13-16 COM	13	23	24	Bit 20	21-24 COM	21	7	8
Bit 5	5-6 COM	6	37	38	Bit 13	13-16 COM	14	21	22	Bit 21	21-24 COM	22	5	6
Bit 6	5-6 COM	7	35	36	Bit 14	13-16 COM	15	19	20	Bit 22	21-24 COM	23	3	4
Bit 7	5-6 COM	8	33	34	Bit 15	13-16 COM	16	17	18	Bit 23	21-24 COM	24	1	2

NOTES:

1. Logic supply +Vcc (+5 V dc) and dc return is supplied through the 2 terminal, j20 logic-supply connector, marked with + or –.
2. Logic supply dc return is connected to all even pins of the 50-pin edge card connector
3. Logic-side (signal) connector pin numbers are for 50-pin connector.
4. Power-side terminals are polarized for dc applications, and non-polarized for ac applications.
5. The backplane is shipped with a jumper configuration to supply the logic voltage through pin 49 of the edge connector
6. The signal pin is pulled up to +Vcc when not asserted through a module's internal pull-up resistor, and pulled down to dc return when asserted.

MOUNTING DIMENSIONS





SCHEMATIC DIAGRAM

Note:
Signal pull-up resistors are located in quad modules.