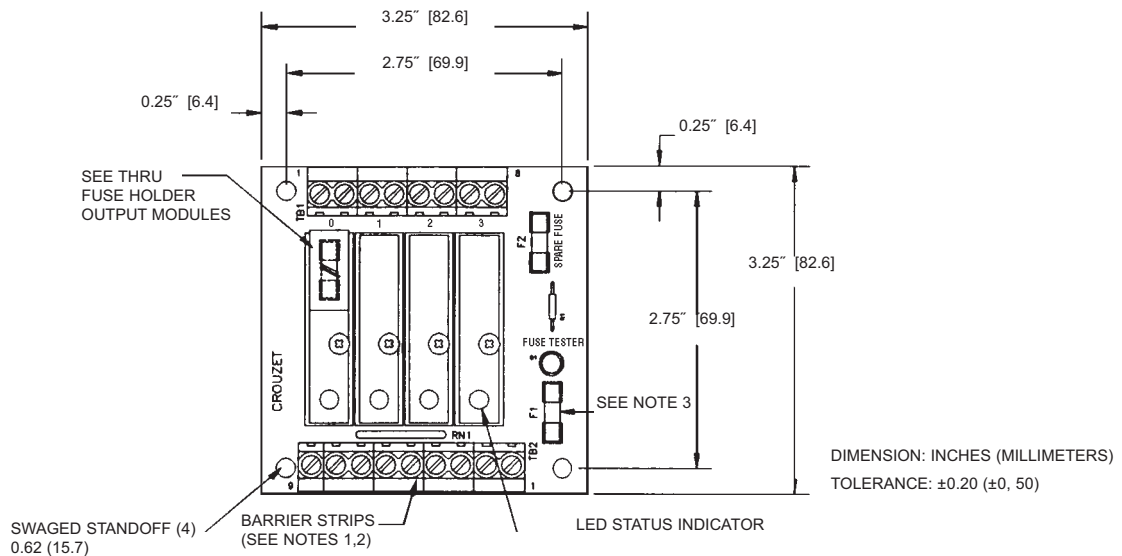


PB4C4

MOUNTING BOARD

- Screw terminal barrier block for logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for C4 Modules

MECHANICAL SPECIFICATIONS



⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求

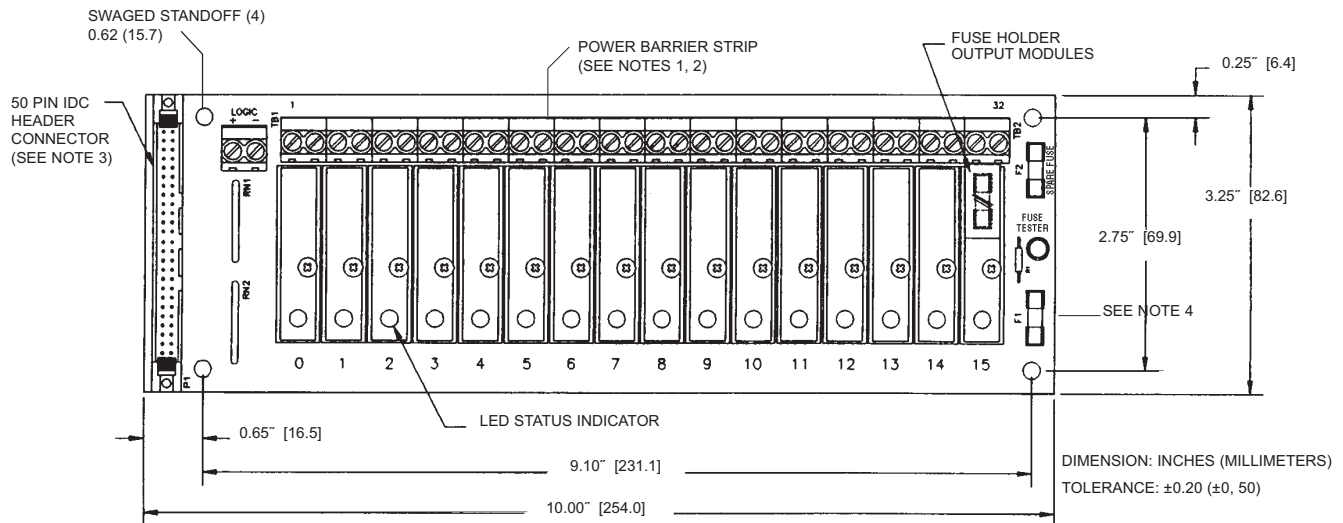


部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

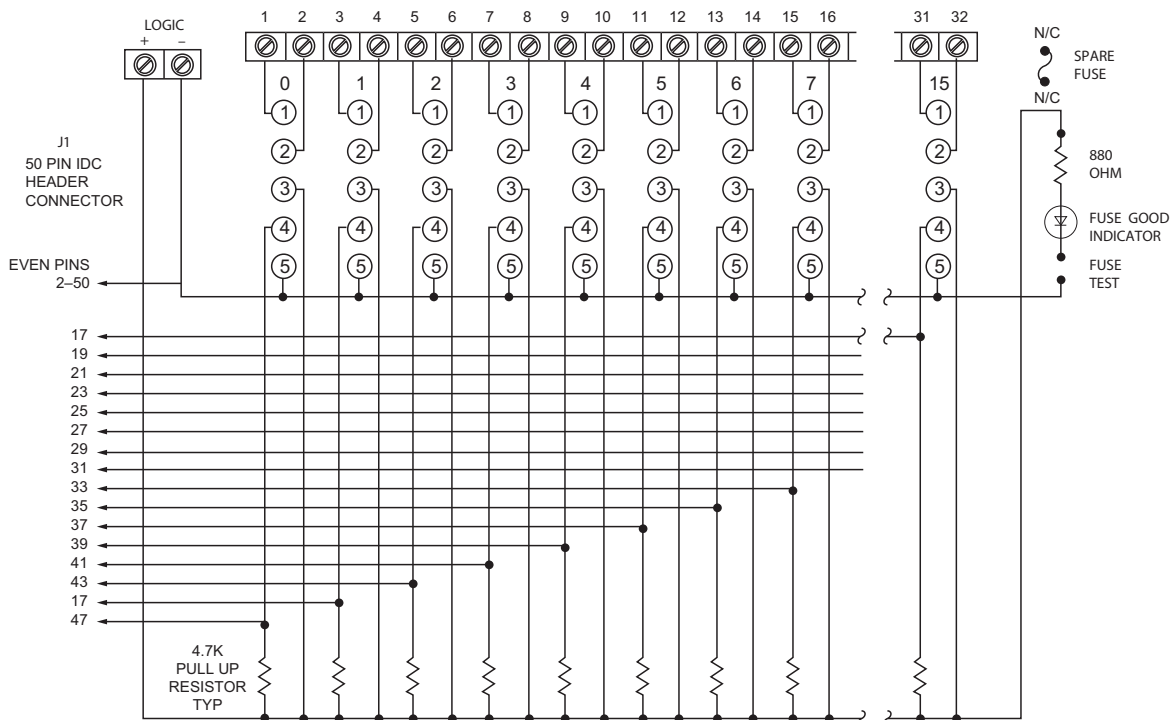
PB16C4 MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for C4 modules

MECHANICAL SPECIFICATIONS



NOTES: 1) BARRIER STRIP IS PHOENIX MKDS5/X 6.35mm
2) ACCEPTS UP TO 10 AWG WIRE
3) CONNECTOR IS CIRCUIT ASSEMBLY CA-50H-2B OR EQUIVALENT
4) LITTLE FUSE 229003S OR EQUIVALENT



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



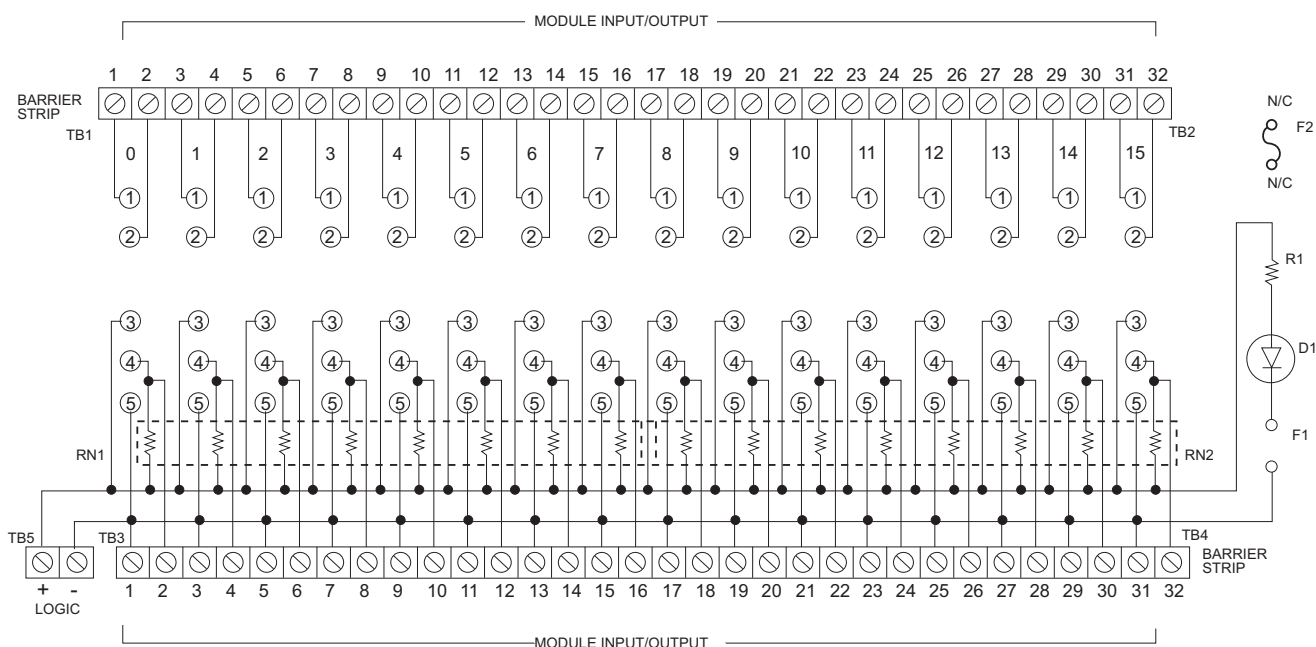
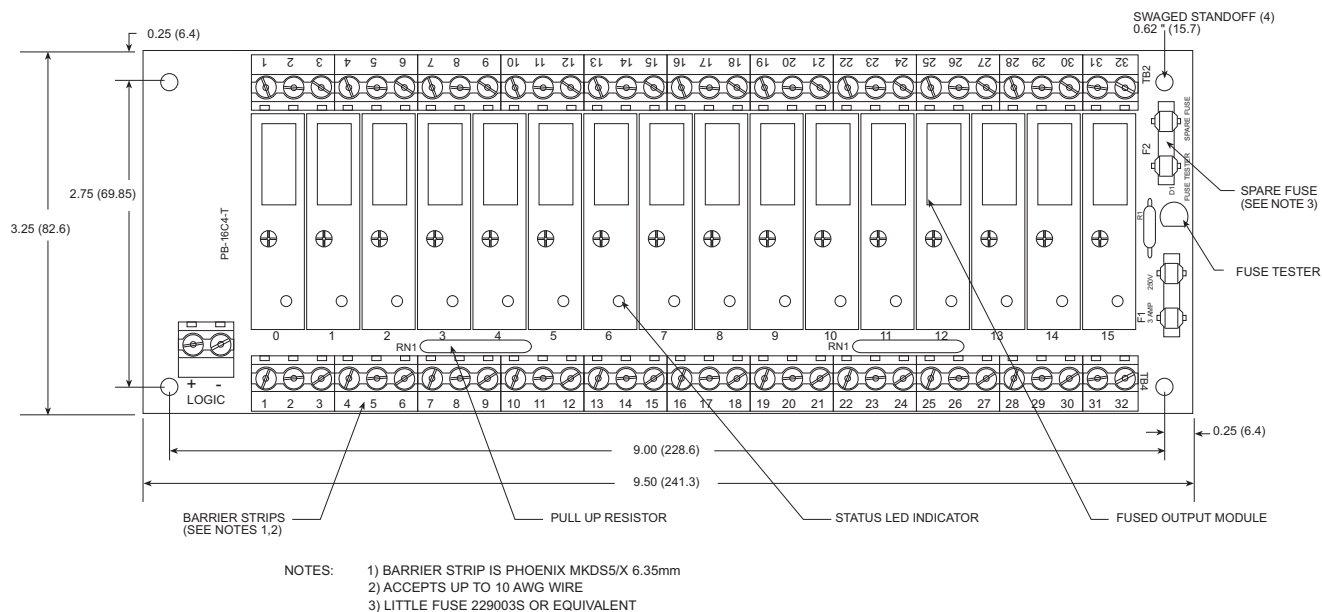
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16C4T

MOUNTING BOARD

- Screw terminal barrier block for logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for C4 modules

MECHANICAL SPECIFICATIONS



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



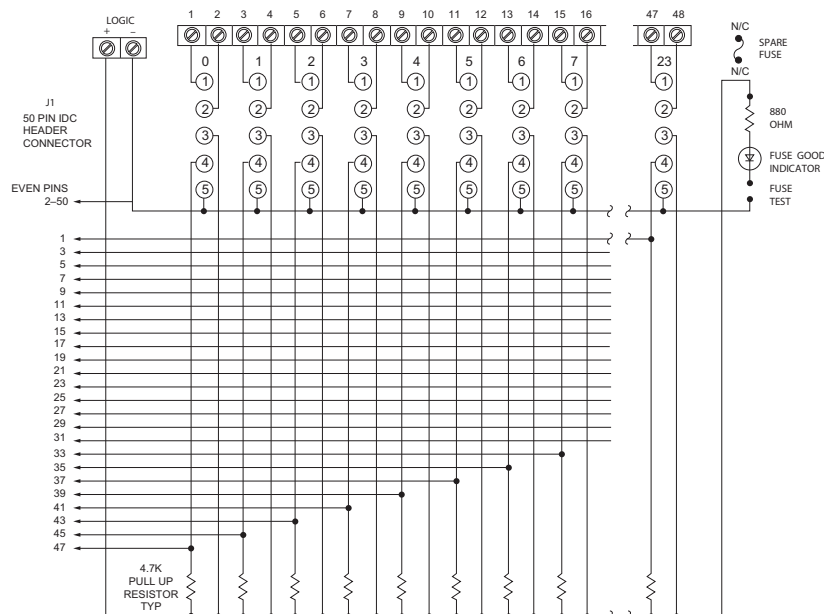
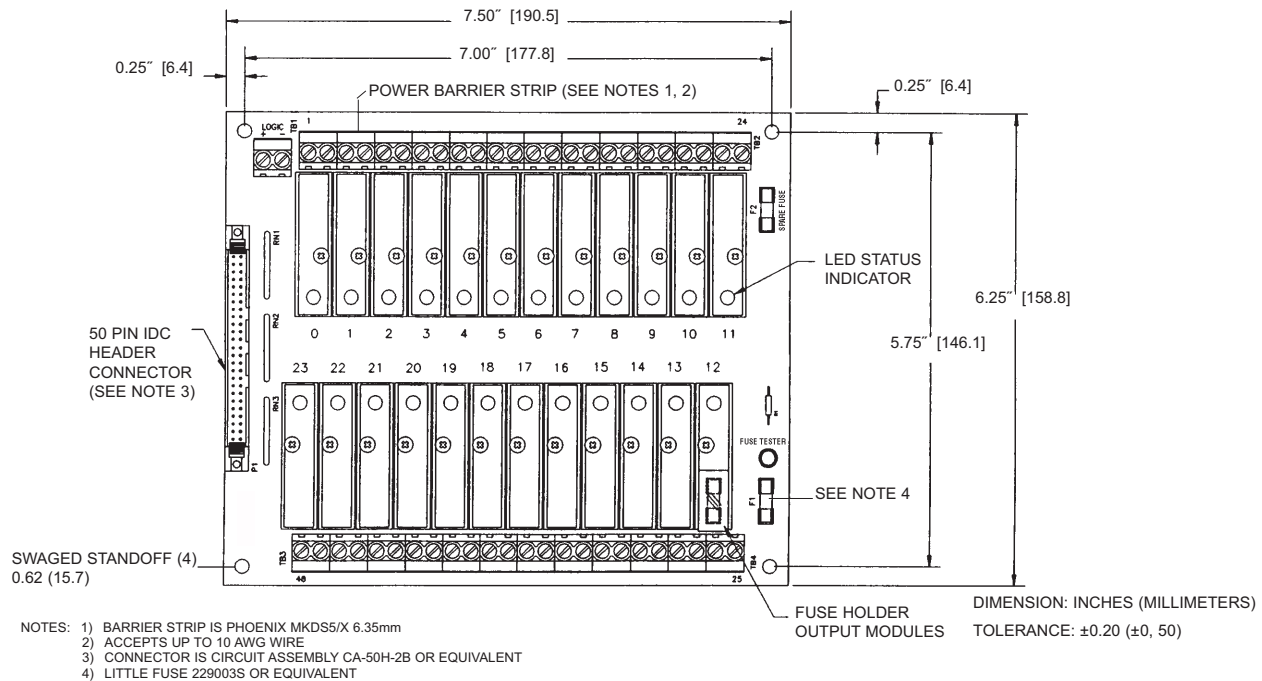
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB24C4

MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for C4 modules

MECHANICAL SPECIFICATIONS



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求

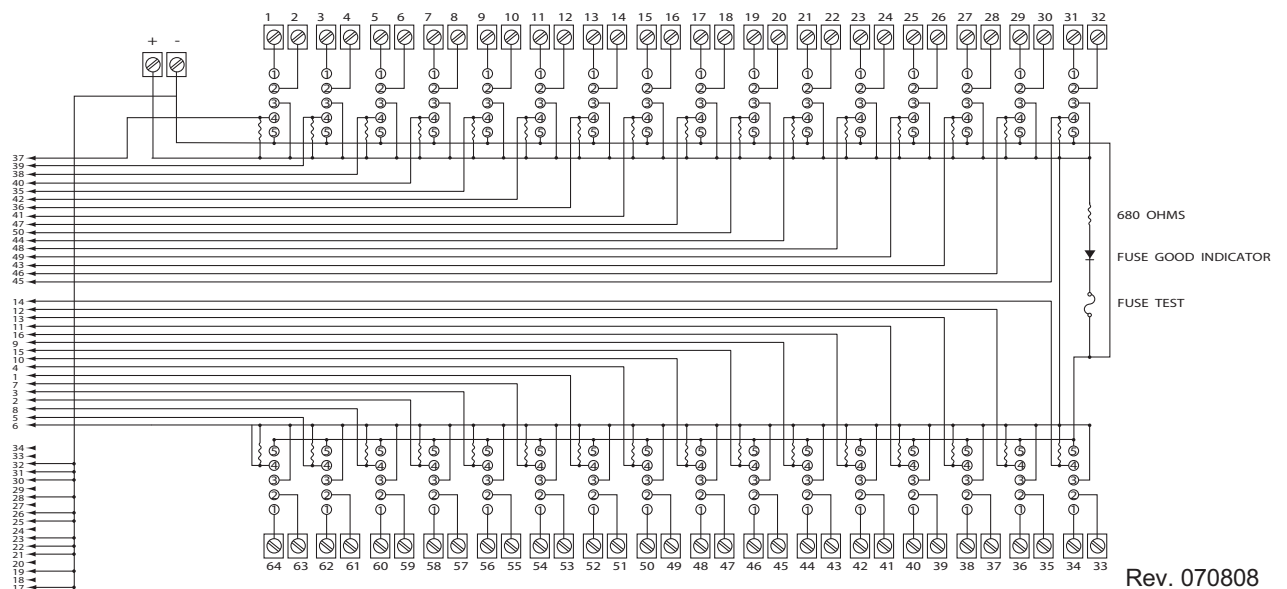
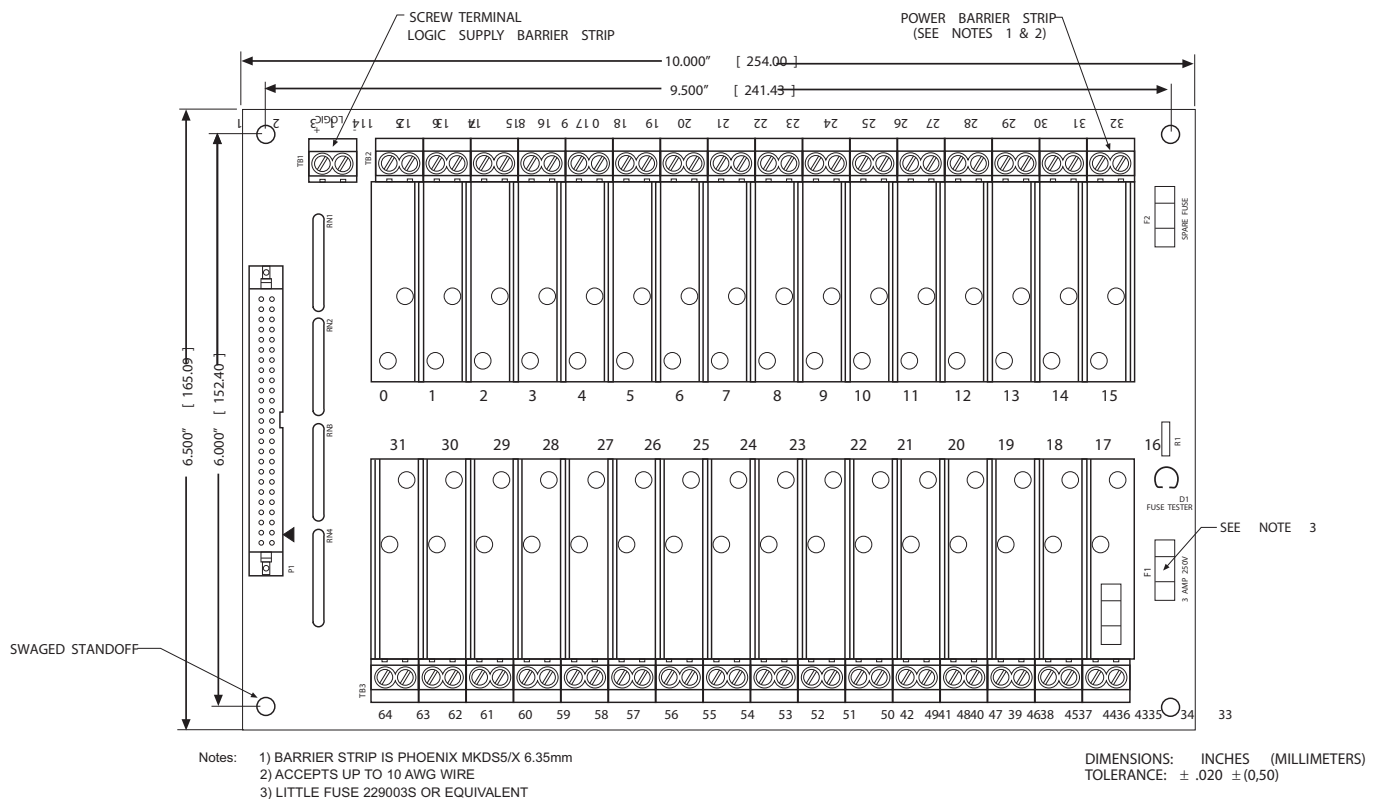


部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB32C4 MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for C4 modules

MECHANICAL SPECIFICATIONS



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

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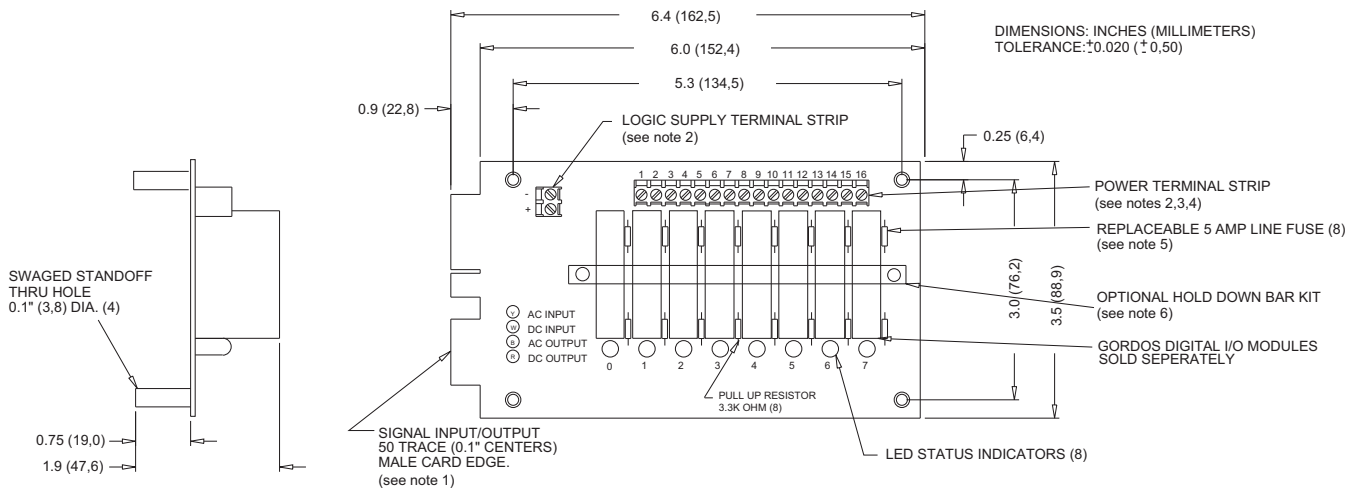
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB8M

MOUNTING BOARD

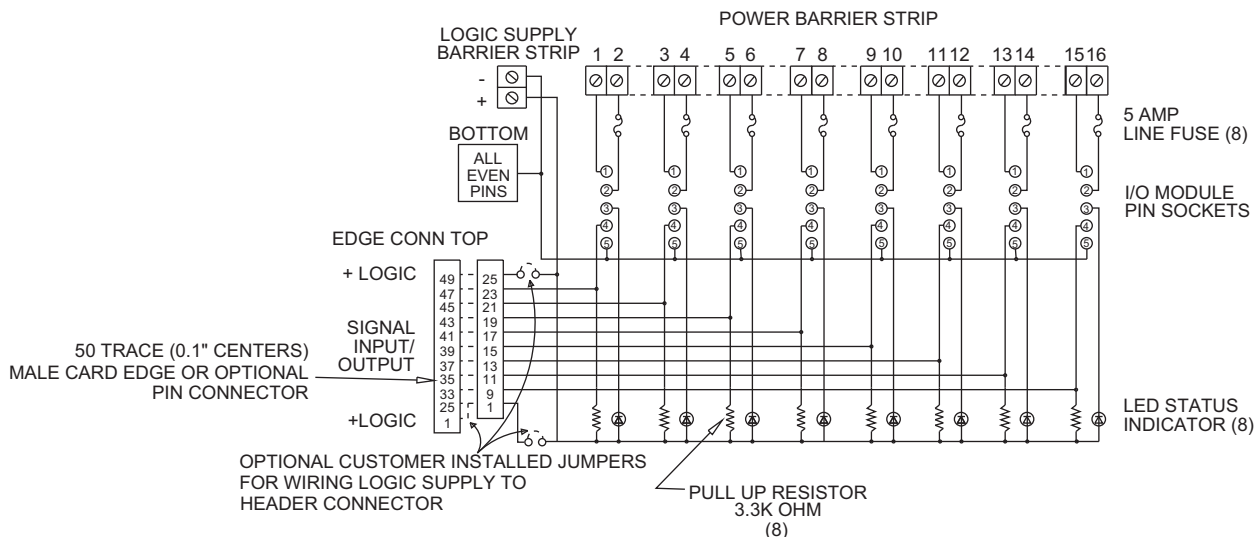
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Optional Hold Down Bar for retaining "M" series modules

MECHANICAL SPECIFICATIONS



NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX 'C' FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX 'V' FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
2) 4-40 SCREW TERMINAL STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 1 EACH "JM8".

4) PHOENIX MKD51.5 5.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX "A" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX "B" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBVA 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE, SCREW-TERMINAL PLUG-IN CONNECTOR.
5) LITTLE FUSE 251005 OR EQUIVALENT.
6) TWO HOLD-DOWN BAR KITS ARE AVAILABLE SEPARATELY. MODEL NO. 11.06.414 EMPLOYS A PLAIN ALUMINUM CHANNEL WHILE MODEL NO. 11.06.293 PROVIDES POCKETS IN THE CHANNEL FOR INDIVIDUAL MODULES.



Rev. 070808

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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



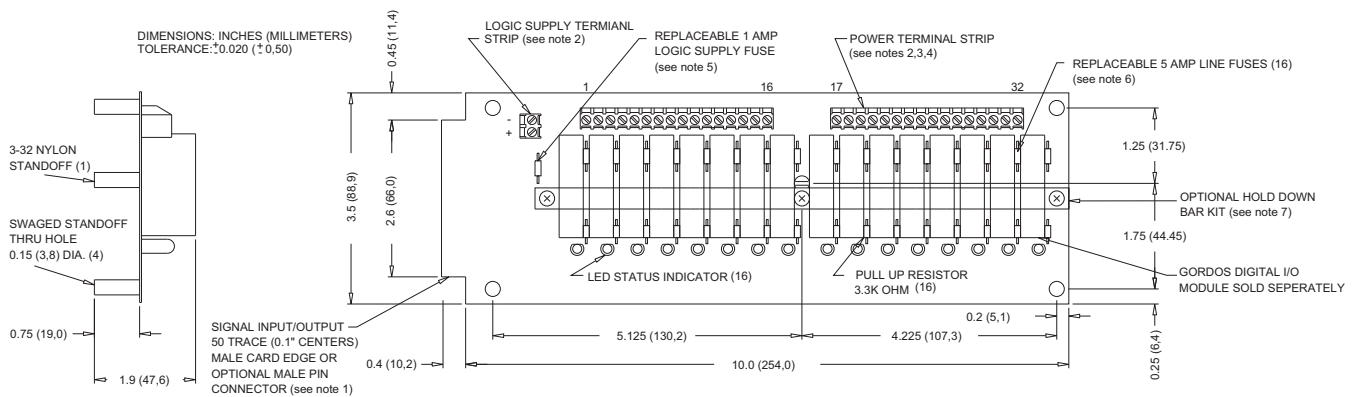
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16M

MOUNTING BOARD

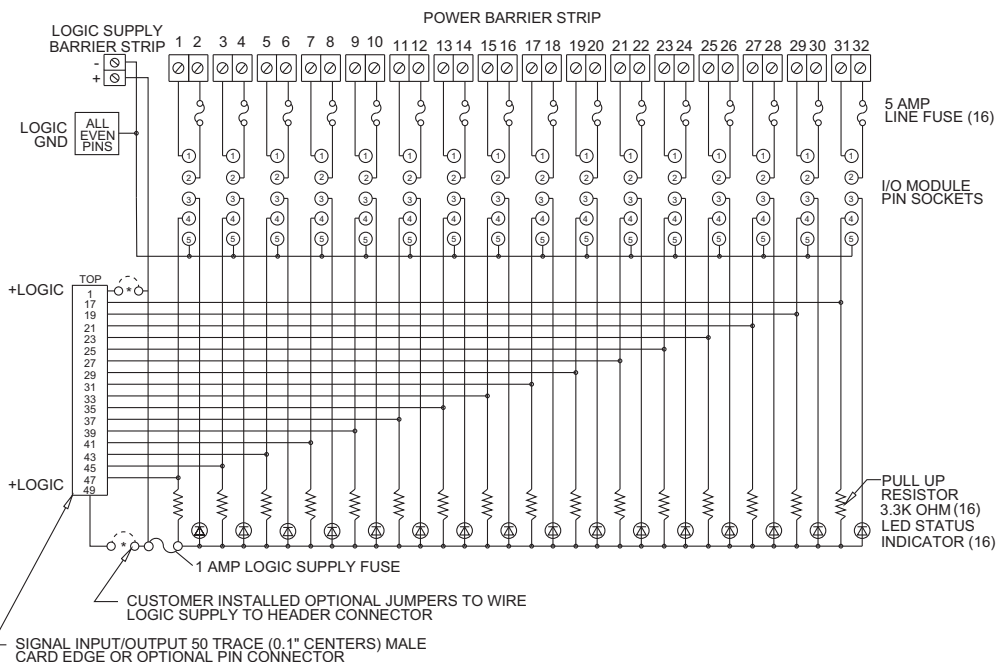
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Optional Hold Down Bar for retaining "M" series modules

MECHANICAL SPECIFICATIONS



NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX 'C' FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX 'V' FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
2) 4-40 SCREW TERMINAL STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP ORDER 1 EACH "JM2" AND 2 EACH "JM8".

4) PHOENIX MKD51.5 5.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX "A" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX "B" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBVA 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE. SCREW-TERMINAL PLUG-IN CONNECTOR.
5) LITTLE FUSE 251001 OR EQUIVALENT.
6) LITTLE FUSE 251005 OR EQUIVALENT.
7) TWO HOLD-DOWN BAR KITS ARE AVAILABLE SEPARATELY. MODEL NO. 11.06.415 EMPLOYS A PLAIN ALUMINUM CHANNEL WHILE MODEL NO. 11.06.278 PROVIDES POCKETS IN THE CHANNEL FOR INDIVIDUAL MODULES.



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



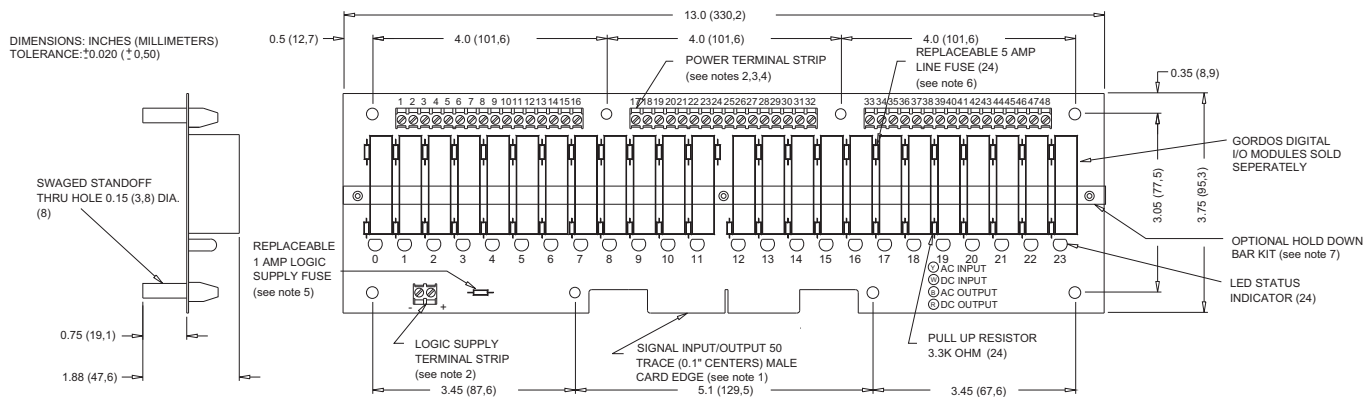
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB24M

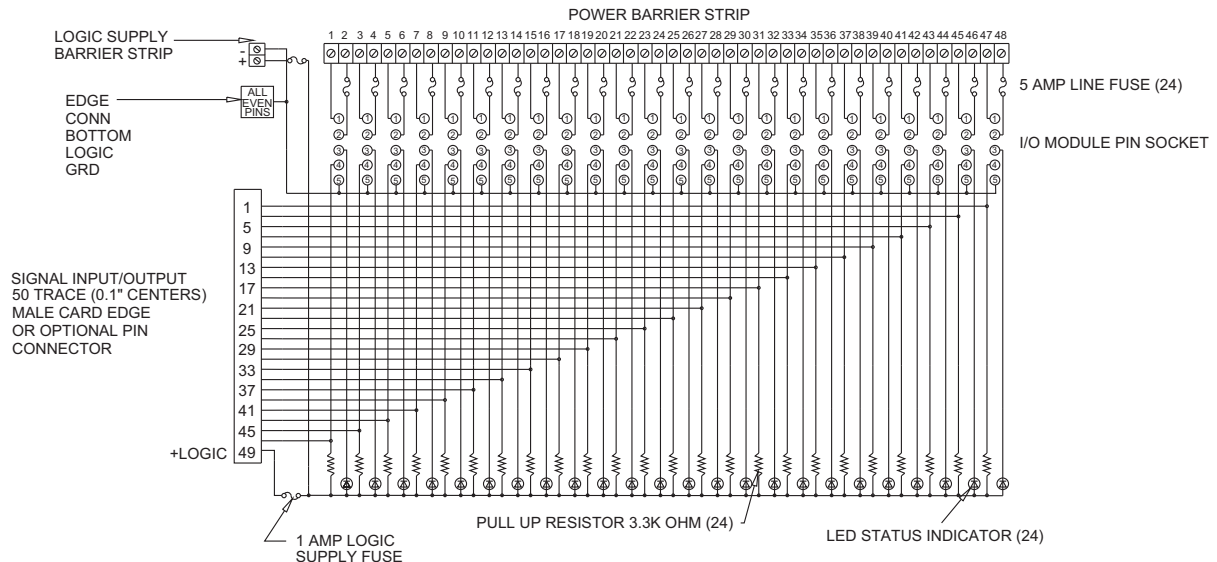
MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Optional Hold Down Bar for retaining "M" series modules

MECHANICAL SPECIFICATIONS



- NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX "C" FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX "V" FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
- 2) 4-40 TERMINAL STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
- 3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP ORDER 3 EACH "JMB".
- 4) PHOENIX MKD51.5 5.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX "A" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX "B" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBVA 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE. SCREW-TERMINAL PLUG-IN CONNECTOR.
- 5) LITTLE FUSE 251001 OR EQUIVALENT.
- 6) LITTLE FUSE 251005 OR EQUIVALENT.
- 7) TWO HOLD-DOWN BAR KITS ARE AVAILABLE SEPARATELY. MODEL NO. 11.06.413 EMPLOY A PLAIN ALUMINUM CHANNEL WHILE MODEL NO. 11.06.288 PROVIDES POCKETS IN THE CHANNEL FOR INDIVIDUAL MODULES.



Rev. 070808



DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



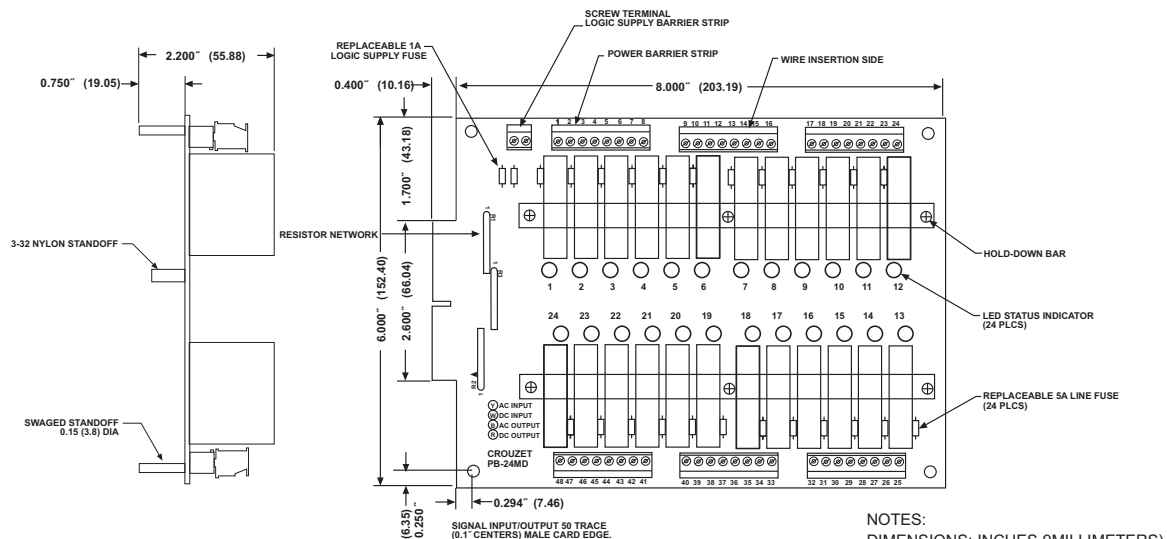
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB24MD

MOUNTING BOARD

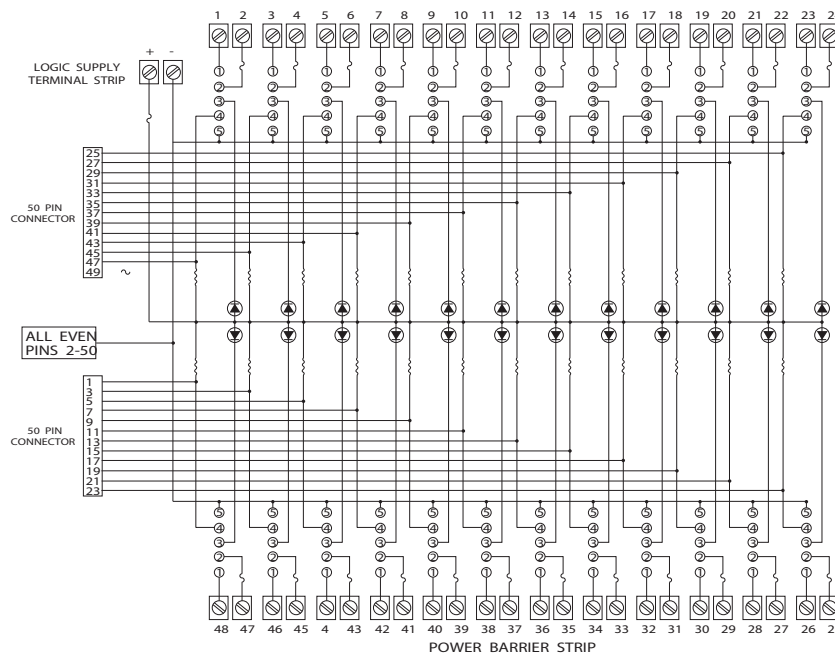
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Optional Hold Down Bar for retaining "M" series modules

MECHANICAL SPECIFICATIONS



- NOTES:
- 1) MATING CONNECTOR IS BERG66317-150 OR EQUIVALENT. SPECIFY SUFFIX 'C' FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX 'V' FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
 - 2) 4-40 TERMINAL STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
 - 3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP ORDER "JM8"
 - 4) PHOENIX MKD51.5 5.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX "A" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX "B" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBVA 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE. SCREW-TERMINAL PLUG-IN CONNECTOR.
 - 5) LITTLE FUSE 251001 OR EQUIVALENT.
 - 6) LITTLE FUSE 251005 OR EQUIVALENT.

NOTES:
DIMENSIONS: INCHES 9MILLIMETERS
TOLERANCE: +0.020 (+.50)



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求

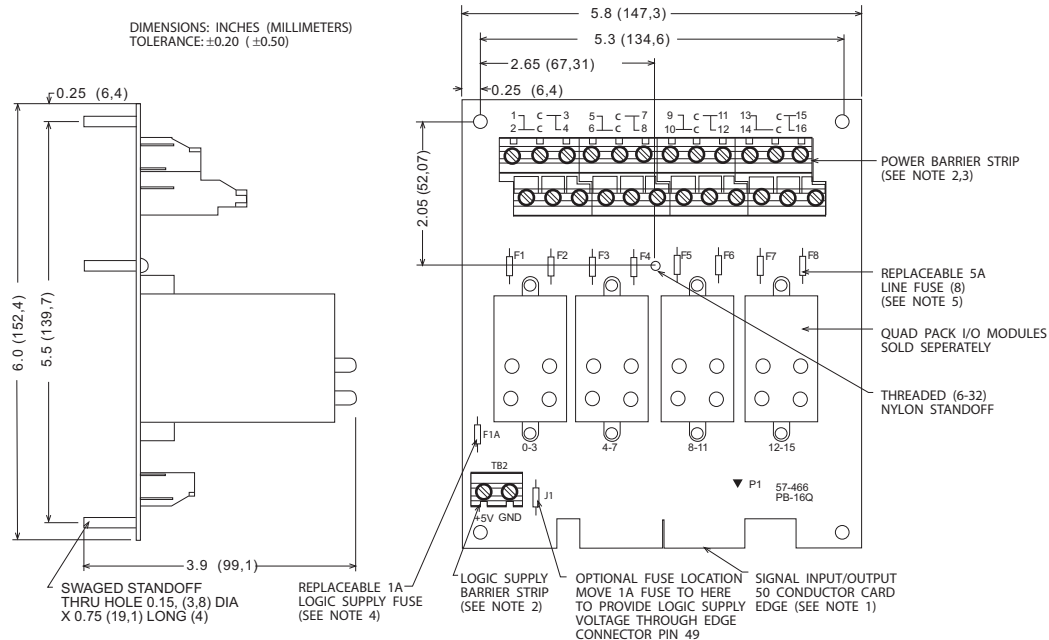


部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16Q MOUNTING BOARD

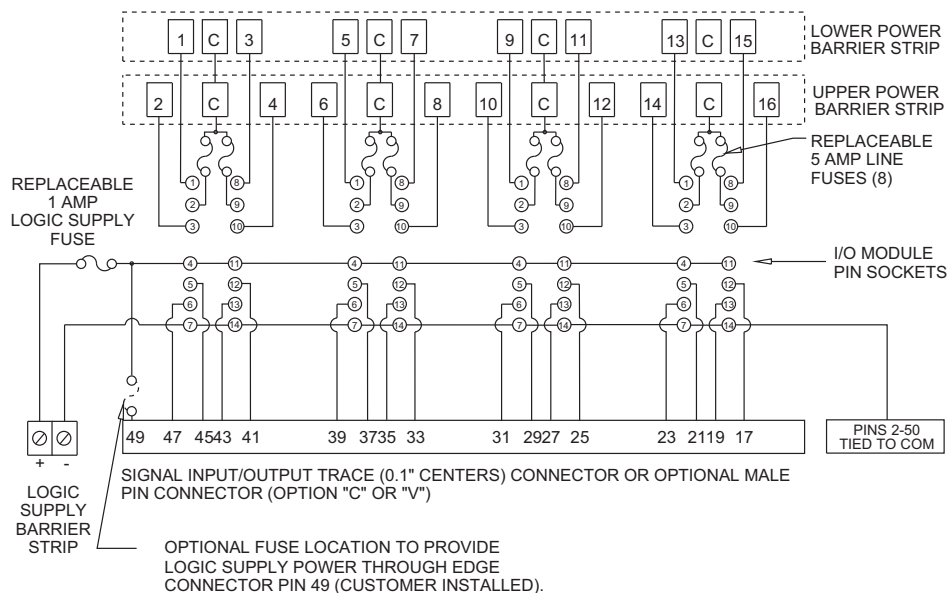
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for Quad-Pack modules

MECHANICAL SPECIFICATIONS



NOTES:

- MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX "C" FOR OPTIONAL BERG 65823-093 (OR EQUIVALENT) MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX "V" FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR (OR EQUIVALENT) MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
- BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
- OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 2 EACH JUMPER "JQ4".
- LITTLE FUSE 251001 OR EQUIVALENT.
- LITTLE FUSE 251005 OR EQUIVALENT.



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



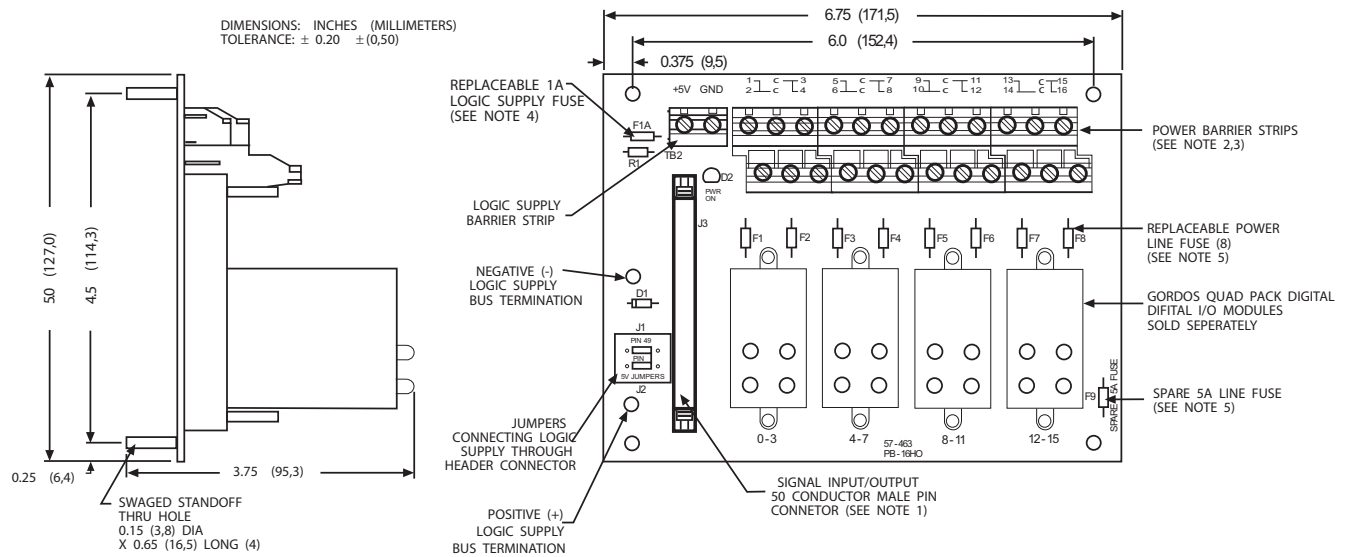
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16HQ

MOUNTING BOARD

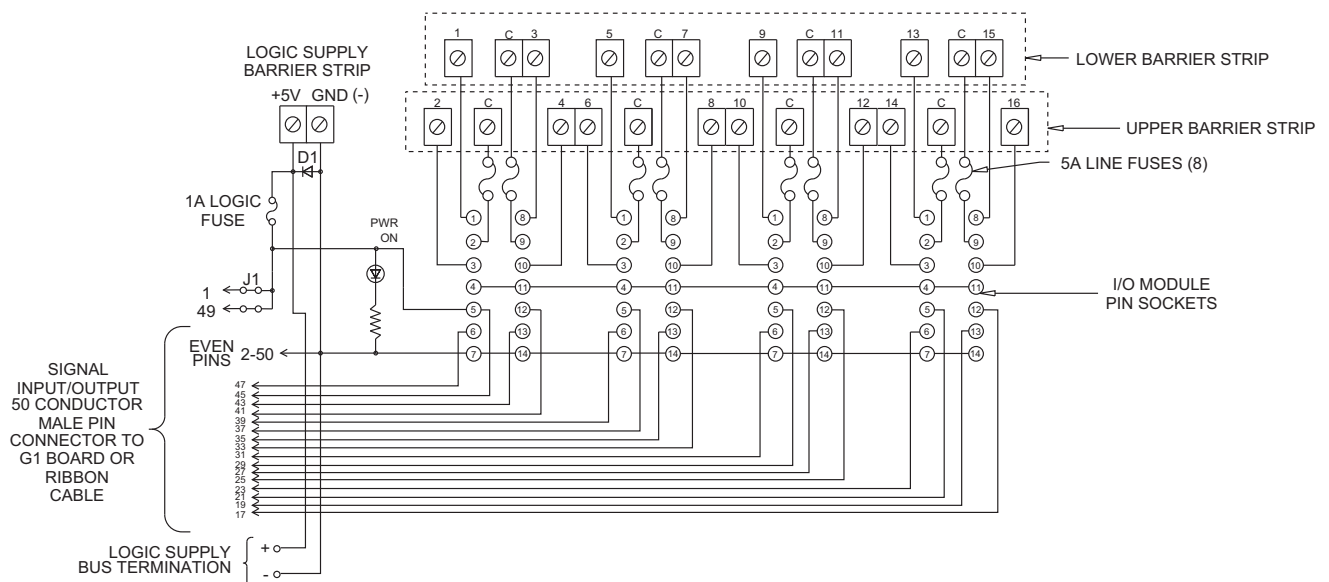
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for Quad-Pack modules

MECHANICAL SPECIFICATIONS



NOTES:

- 1) CONNECTOR IS BERG 65863-145 OR EQUIVALENT.
- 2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
- 3) OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 2 EACH JUMPER "JQ4".
- 4) LITTLE FUSE 251001 OR EQUIVALENT.
- 5) LITTLE FUSE 251005 OR EQUIVALENT.



Rev. 070808



DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



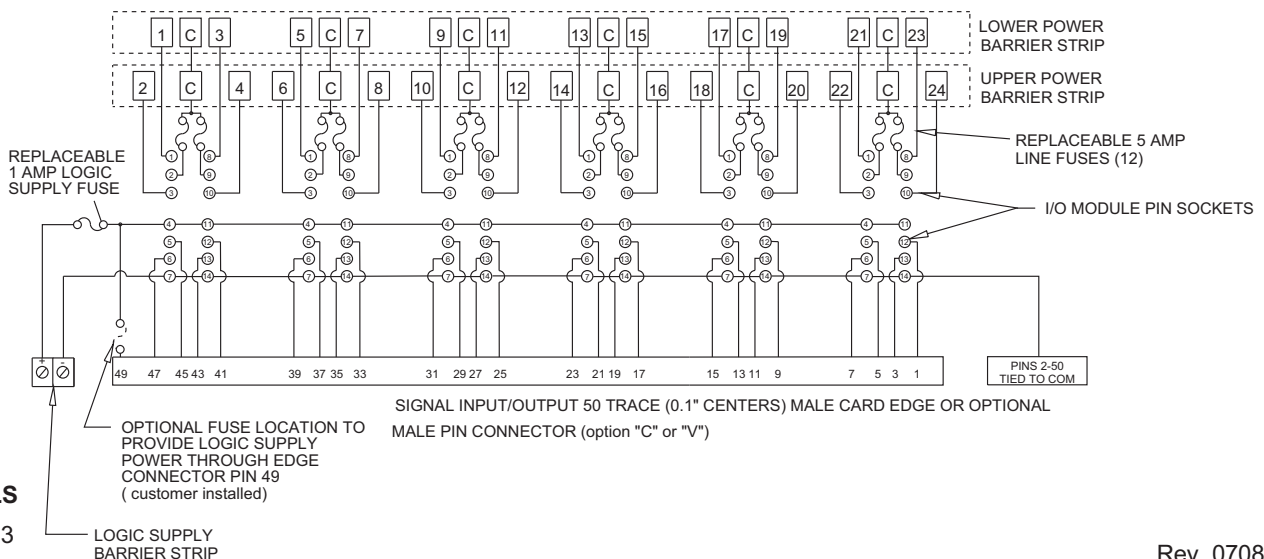
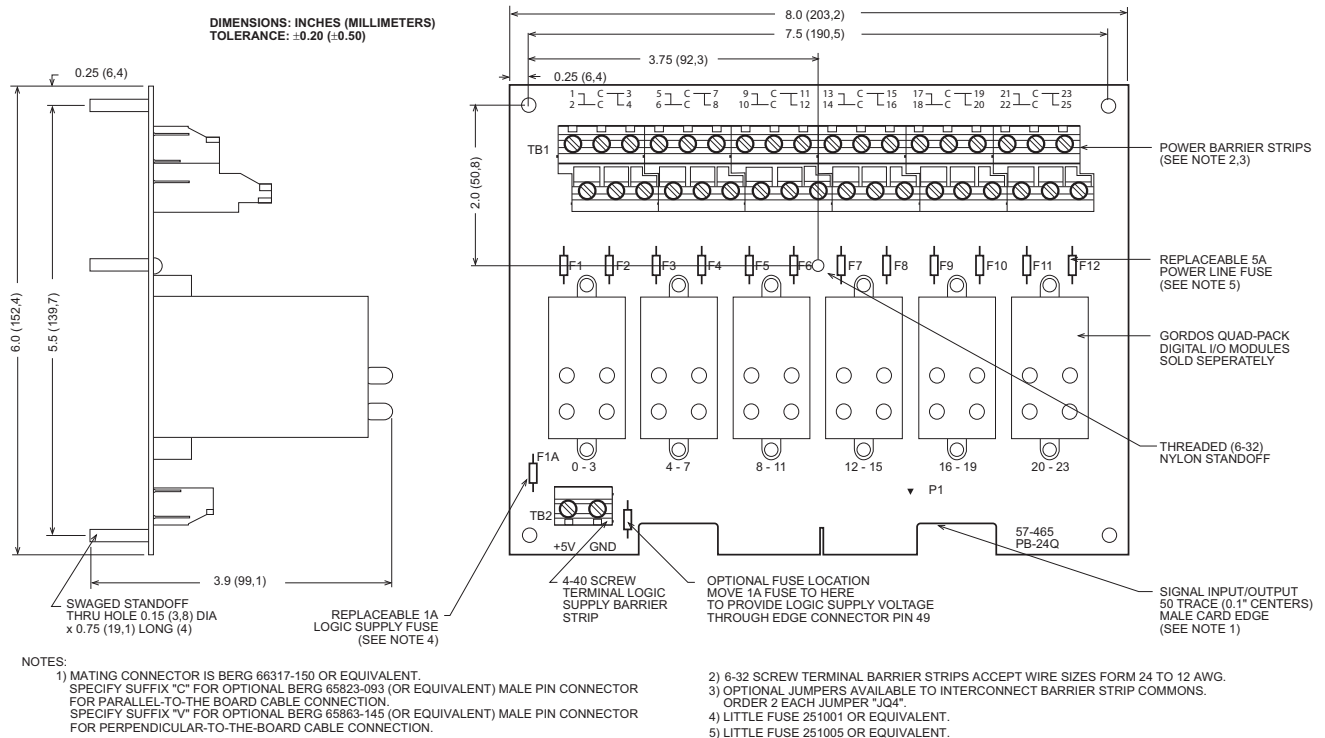
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB24Q

MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for Quad-Pack modules

MECHANICAL SPECIFICATIONS



APPROVALS

UL E79183
CSA 38595

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



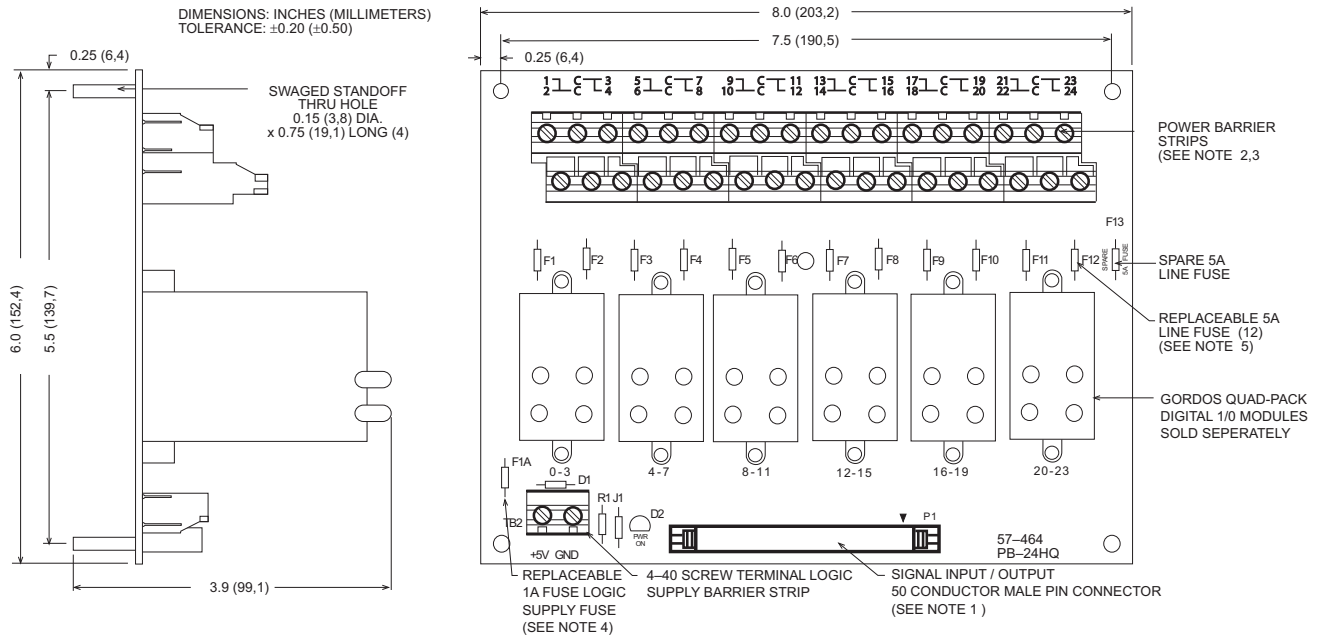
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB24HQ

MOUNTING BOARD

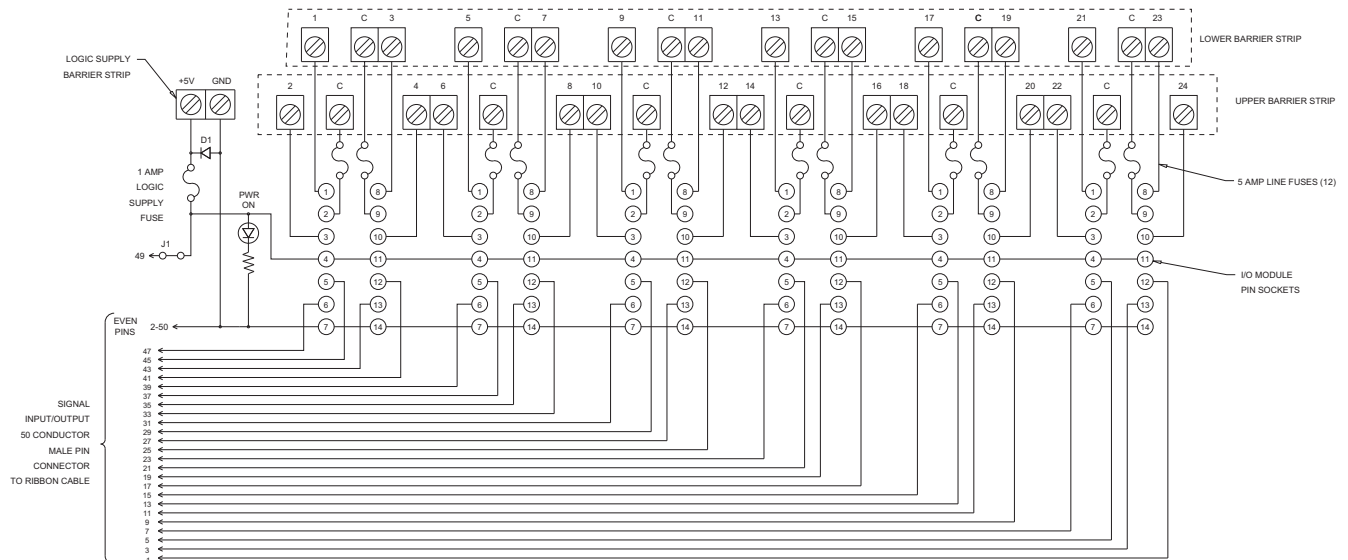
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for Quad-Pack modules

MECHANICAL SPECIFICATIONS



NOTES: 1) CONNECTOR IS CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT.
2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
3) OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS.
ORDER 2 EACH JUMPERS "JQ2" AND 4 EACH JUMPERS "JQ4".
JQ4 REQUIRES CUSTOMER MODIFICATIONS TO USE WITH PB24HQ.

4) LITTLE FUSE 251001 OR EQUIVALENT.
5) LITTLE FUSE 251005 OR EQUIVALENT.



Rev. 070808



DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



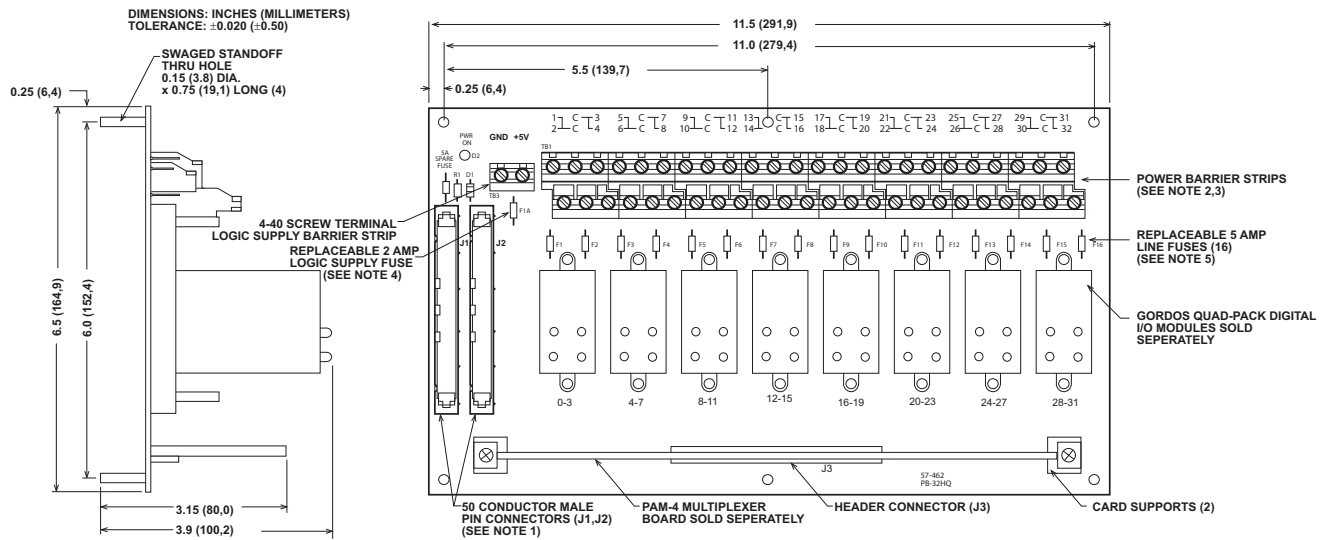
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB32HQ

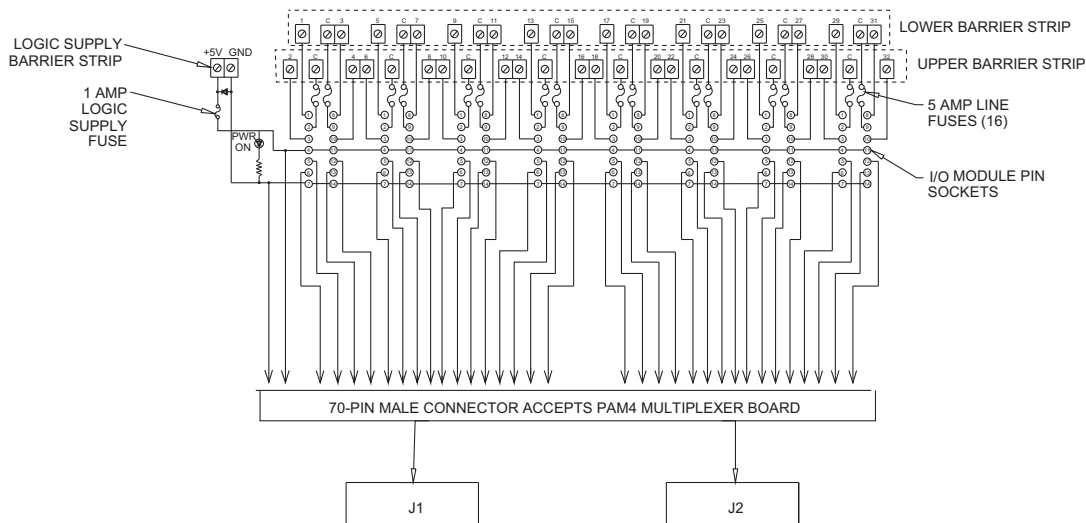
MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for Quad-Pack modules

MECHANICAL SPECIFICATIONS



- NOTES: 1) CONNECTOR IS CIRCUIT ASSEMBLY CA-50H-28-SR OR EQUIVALENT.
CONNECTORS ARE WIRED IN PARALLEL.
2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
3) OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS.
ORDER 2 EACH JUMPERS "JQ2" AND 4 EACH JUMPERS "JQ4".
4) LITTLE FUSE 251001 OR EQUIVALENT.
5) LITTLE FUSE 251005 OR EQUIVALENT.



SIGNAL INPUT/OUTPUT 50 CONDUCTOR MALE PIN CONNECTORS. J1 AND J2 ARE WIRED IN PARALLEL.

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



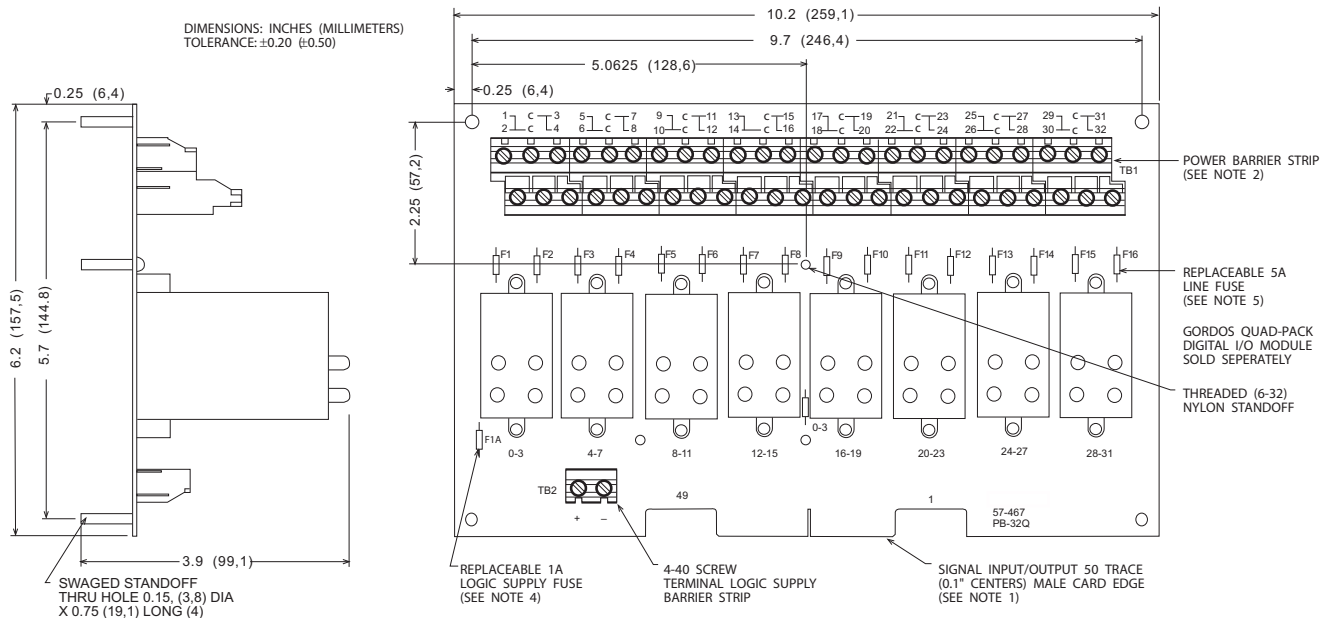
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB32Q

MOUNTING BOARD

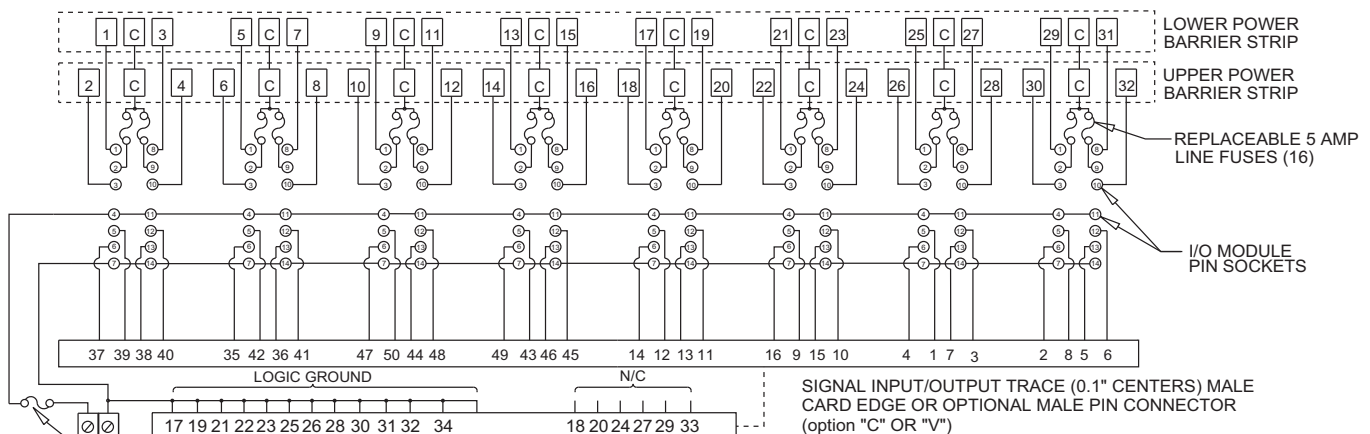
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for Quad-Pack modules

MECHANICAL SPECIFICATIONS



NOTES:

- 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX "C" FOR OPTIONAL BERG 65823-093 (OR EQUIVALENT) MALE PIN CONNECTOR FOR PARALLEL-TO-THE BOARD CABLE CONNECTION. SPECIFY SUFFIX "V" FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR (OR EQUIVALENT) MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
- 2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
- 3) OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 2 EACH JUMPERS "JQ2" AND 2 EACH JUMPERS "JQ4".
- 4) LITTLE FUSE 251001 OR EQUIVALENT.
- 5) LITTLE FUSE 251005 OR EQUIVALENT.



APPROVALS
UL E79183
CSA 38595

LOGIC SUPPLY
BARRIER STRIP
REPLACEABLE 1 AMP
LOGIC SUPPLY FUSE

Rev. 070808



DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



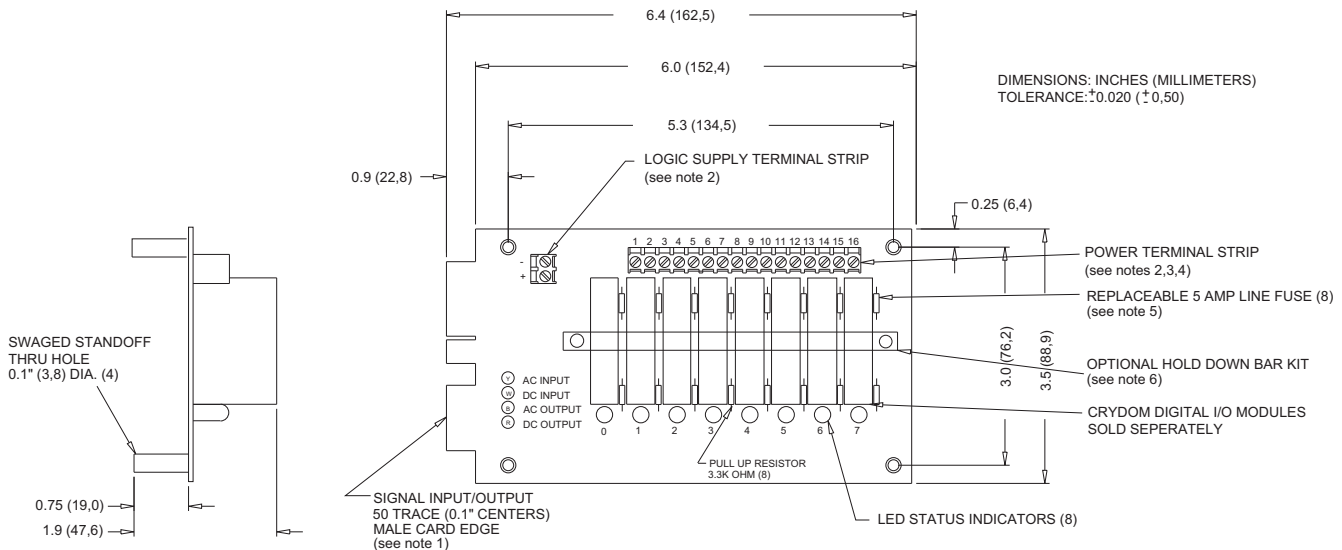
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB8SM

MOUNTING BOARD

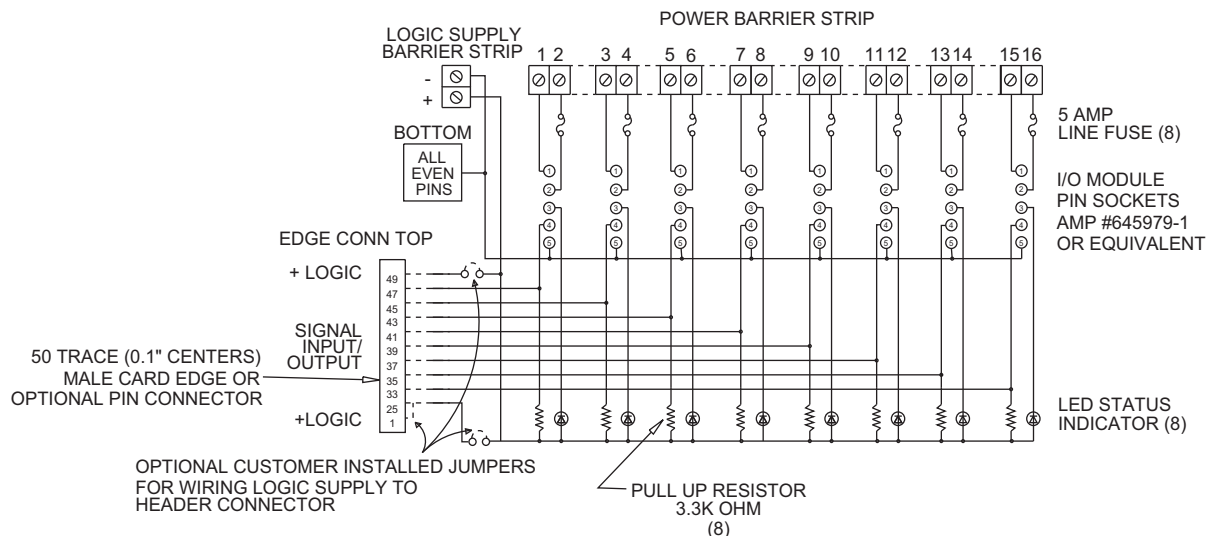
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Pin retaining system for "SM" series miniature modules.

MECHANICAL SPECIFICATIONS



- NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX 'C' FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX 'V' FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
- 2) 4-40 SCREW TERMINAL STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
- 3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 1 EACH "JM8".

- 4) PHOENIX MKD51.5 5.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX "A" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX "B" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBVA 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE, SCREW-TERMINAL PLUG-IN CONNECTOR.
- 5) LITTLE FUSE 251005 OR EQUIVALENT.
- 6) TWO HOLD-DOWN BAR KITS ARE AVAILABLE SEPARATELY. MODEL NO. 11.06.414 EMPLOYS A PLAIN ALUMINUM CHANNEL WHILE MODEL NO. 11.06.293 PROVIDES POCKETS IN THE CHANNEL FOR INDIVIDUAL MODULES.



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



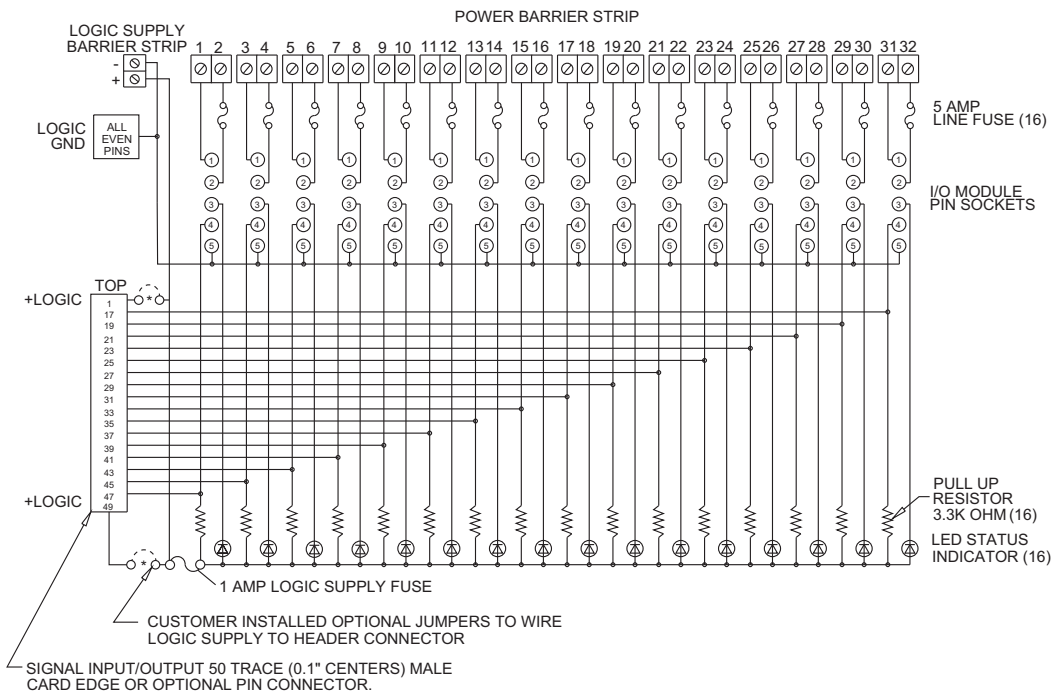
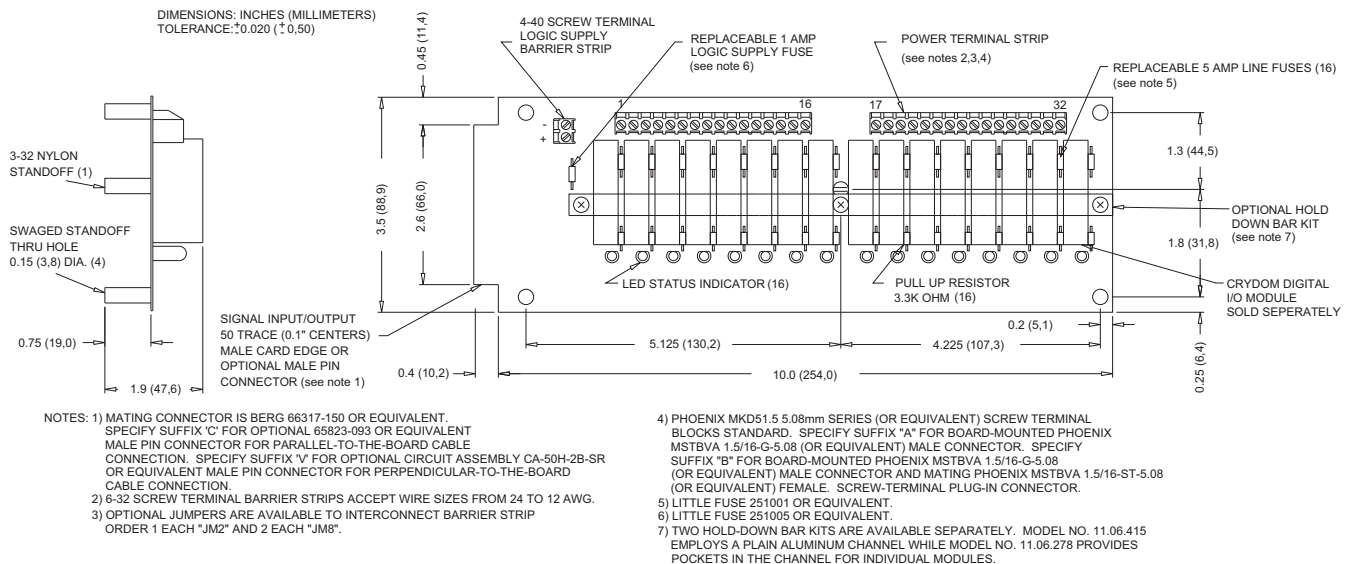
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16SM

MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Pin retaining system for "SM" series miniature modules.

MECHANICAL SPECIFICATIONS



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



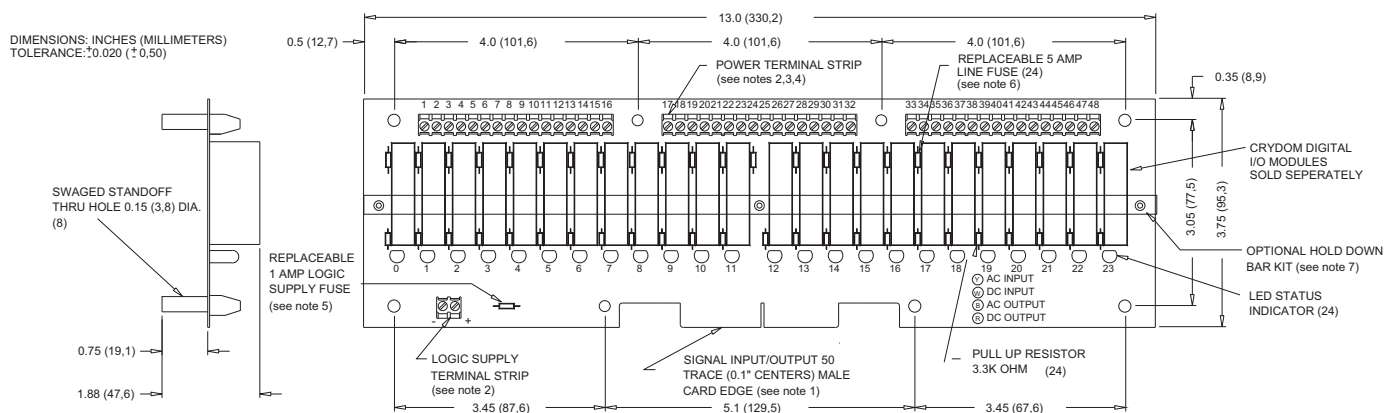
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB24SM

MOUNTING BOARD

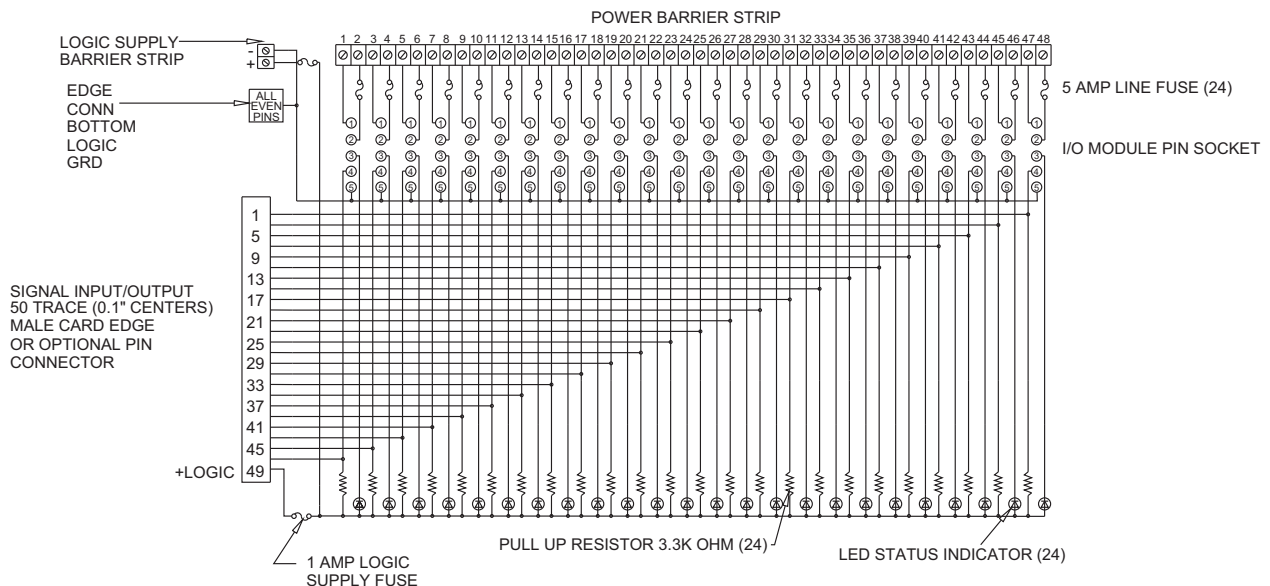
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Pin retaining system for "SM" series miniature modules

MECHANICAL SPECIFICATIONS



NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX "C" FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX "V" FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
2) 4-40 SCREW TERMINAL STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP ORDER 3 EACH "JM8".

4) PHOENIX MKD51.5 5.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX "A" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX "B" FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBVA 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE. SCREW-TERMINAL PLUG-IN CONNECTOR.
5) LITTLE FUSE 251001 OR EQUIVALENT.
6) LITTLE FUSE 251005 OR EQUIVALENT.
7) TWO HOLD-DOWN BAR KITS ARE AVAILABLE SEPARATELY. MODEL NO. 11.06.413 EMPLOYS A PLAIN ALUMINUM CHANNEL WHILE MODEL NO. 11.06.298 PROVIDES POCKETS IN THE CHANNEL FOR INDIVIDUAL MODULES.



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



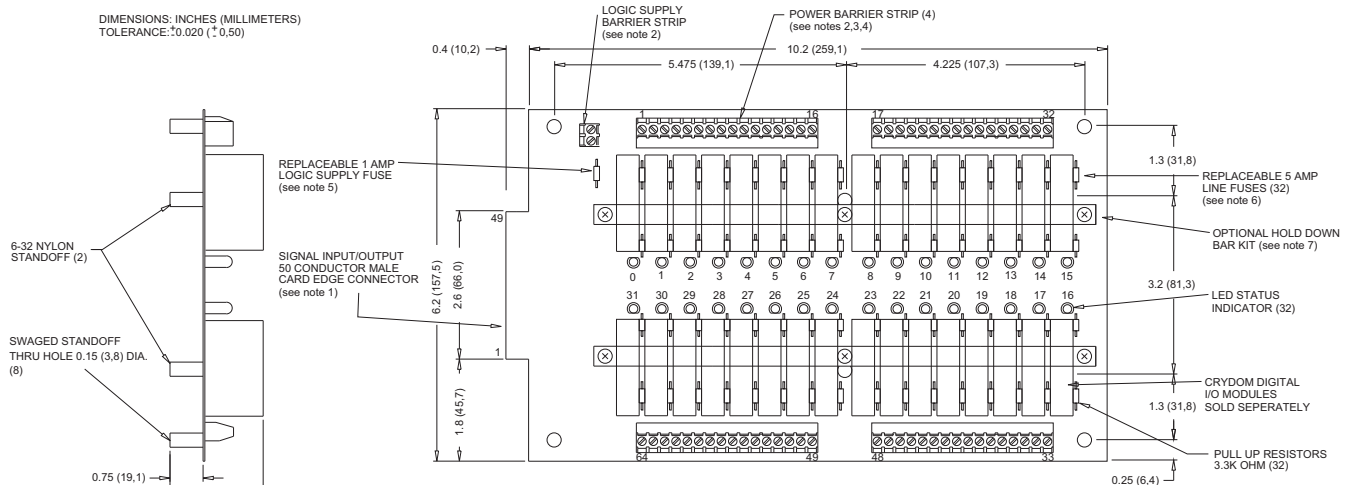
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB32SM

MOUNTING BOARD

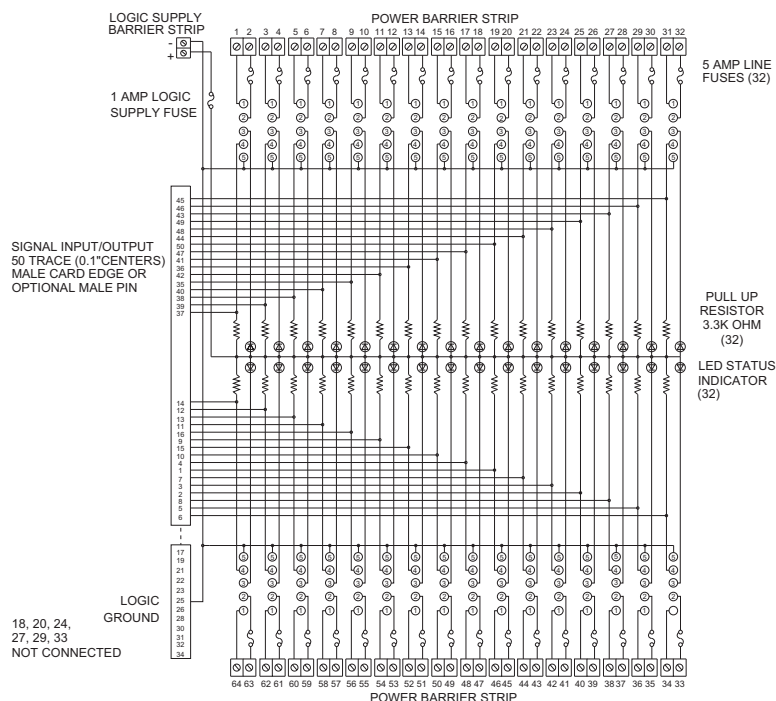
- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Pin retaining system for "SM" series miniature modules

MECHANICAL SPECIFICATIONS



NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX 'C' FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-BOARD CABLE CONNECTION. SPECIFY SUFFIX 'V' FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2R-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-BOARD CABLE CONNECTION.
2) BARRIER STRIPS ACCEPT WIRE SIZES FROM 26 TO 14 AWG.
3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP ORDER 2 EACH "JM2" AND 4 EACH "JM6".

4) PHOENIX MKD51 5.5 0.08mm SERIES (OR EQUIVALENT) SCREW TERMINAL BLOCKS STANDARD. SPECIFY SUFFIX 'A' FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR. SPECIFY SUFFIX 'B' FOR BOARD-MOUNTED PHOENIX MSTBVA 1.5/16-G-5.08 (OR EQUIVALENT) MALE CONNECTOR AND MATING PHOENIX MSTBV 1.5/16-ST-5.08 (OR EQUIVALENT) FEMALE. SCREW-TERMINAL PLUG-IN CONNECTOR.
5) LITTLE FUSE 251001 OR EQUIVALENT.
6) LITTLE FUSE 251005 OR EQUIVALENT.
7) OPTIONAL HOLD DOWN BAR KITS AVAILABLE. ORDER KIT 11.06.418 FOR LOW COST CLAMPING VERSION, OR KIT 11.06.305 FOR FULLY RETAINED VERSION.



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

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ANNEX - ENVIROMENTAL INFORMATION

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

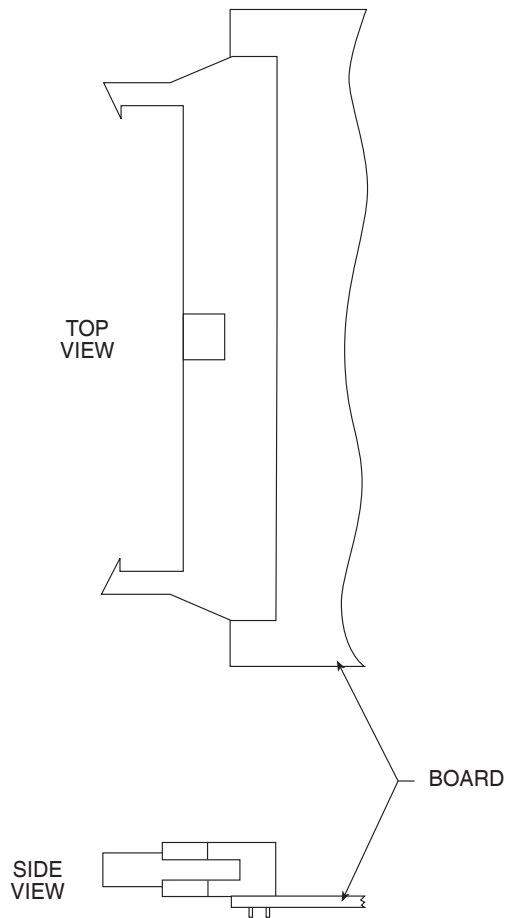
此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



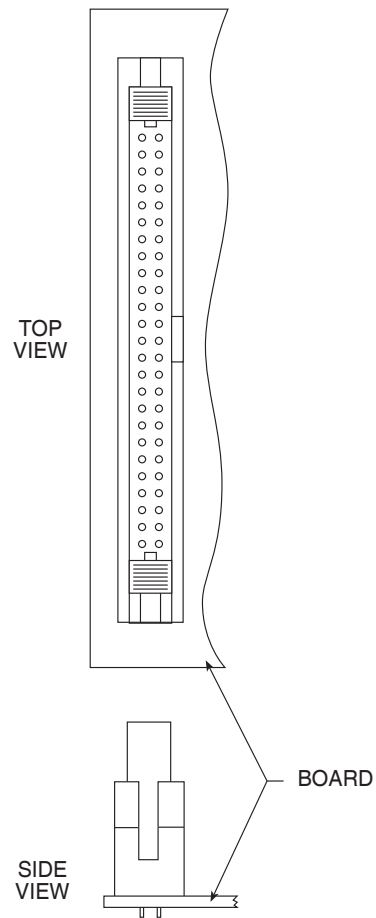
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

HEADER CONNECTOR OPTION

"-C" CONNECTOR OPTION (1)

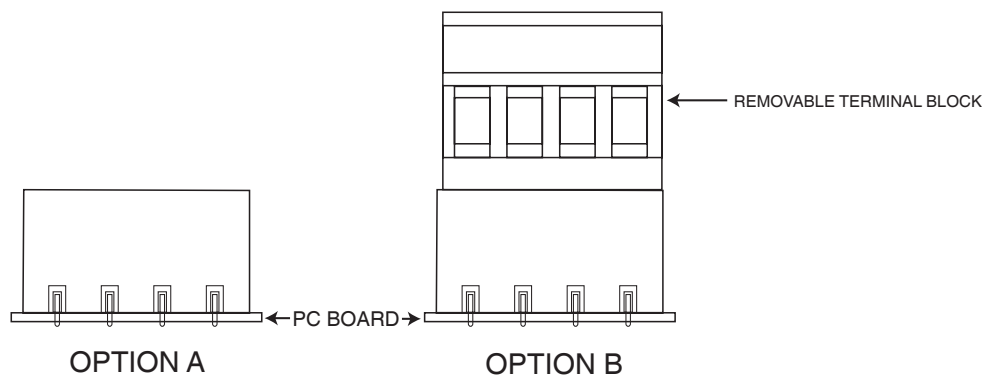


"-V" CONNECTOR OPTION (2)



NOTES: 1.) CONNECTOR IS BERG 65823-093 OR EQUIVALENT
2.) CONNECTOR IS CIRCUIT ASSEMBLY CA-50H-2B OR EQUIVALENT

TERMINAL OPTIONS FOR "M" AND "SM" I/O MOUNTING BOARDS

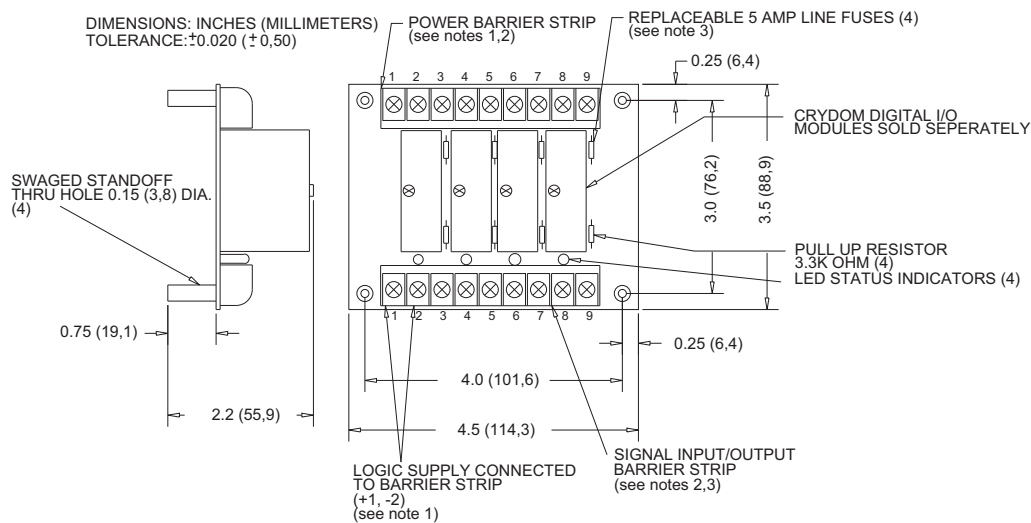


PB4

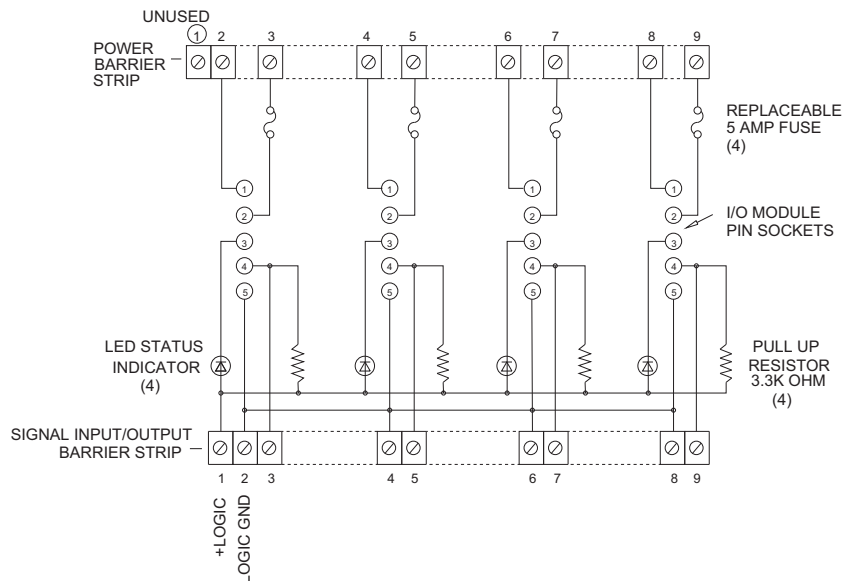
MOUNTING BOARD

- Screw terminal barrier block for logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



NOTES: 1) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
2) OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 1 EACH "JS8" AND CUT IN HALF.
3) LITTLE FUSE 251005 OR EQUIVALENT.



APPROVALS

UL E79183
CSA 38595

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



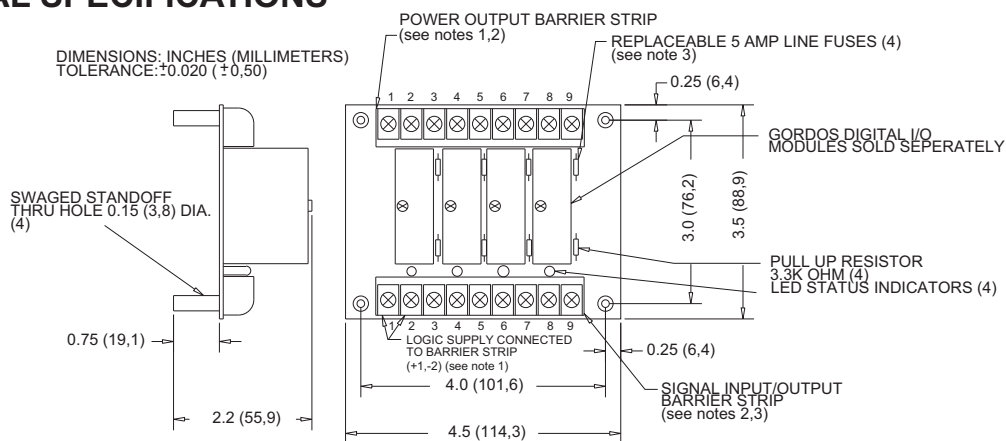
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB4R

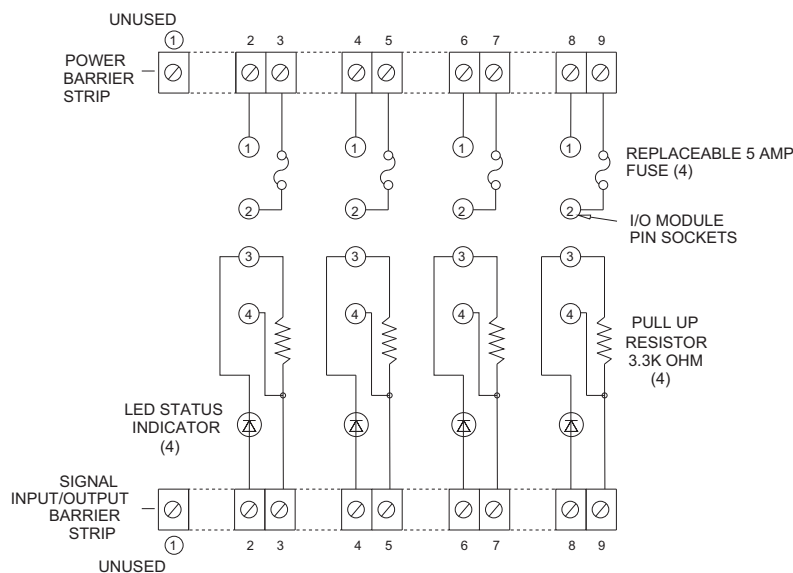
MOUNTING BOARD

- Screw terminal barrier block for logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Accepts only output modules
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



- NOTES: 1) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
2) OPTIONAL JUMPERS AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 1 EACH "JS8" AND CUT IN HALF.
3) LITTLE FUSE 251005 OR EQUIVALENT.
4) **PB4R ACCEPTS ONLY OUTPUT MODULES. INPUT MODULES WILL NOT PLUG INTO PB4R.**



APPROVALS

UL E79183
CSA 38595

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



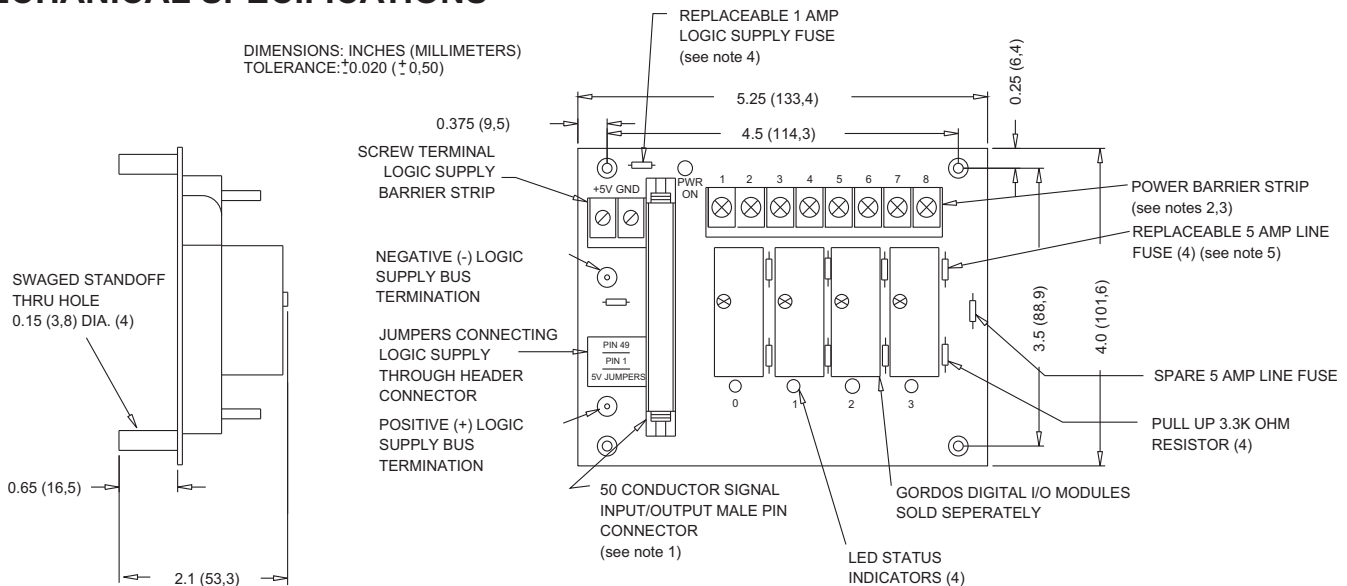
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB4H

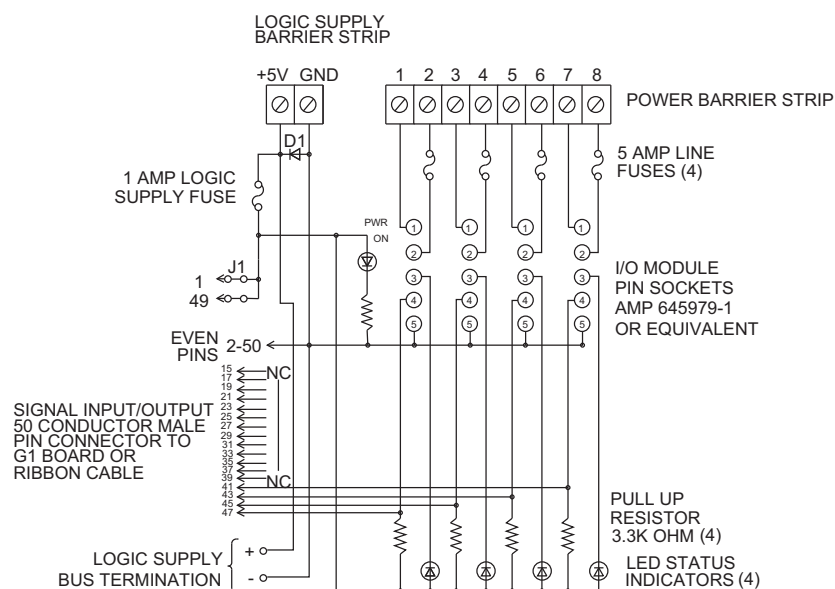
MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



- NOTES: 1) CONNECTOR IS CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT.
2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 1 EACH "JS8" AND



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



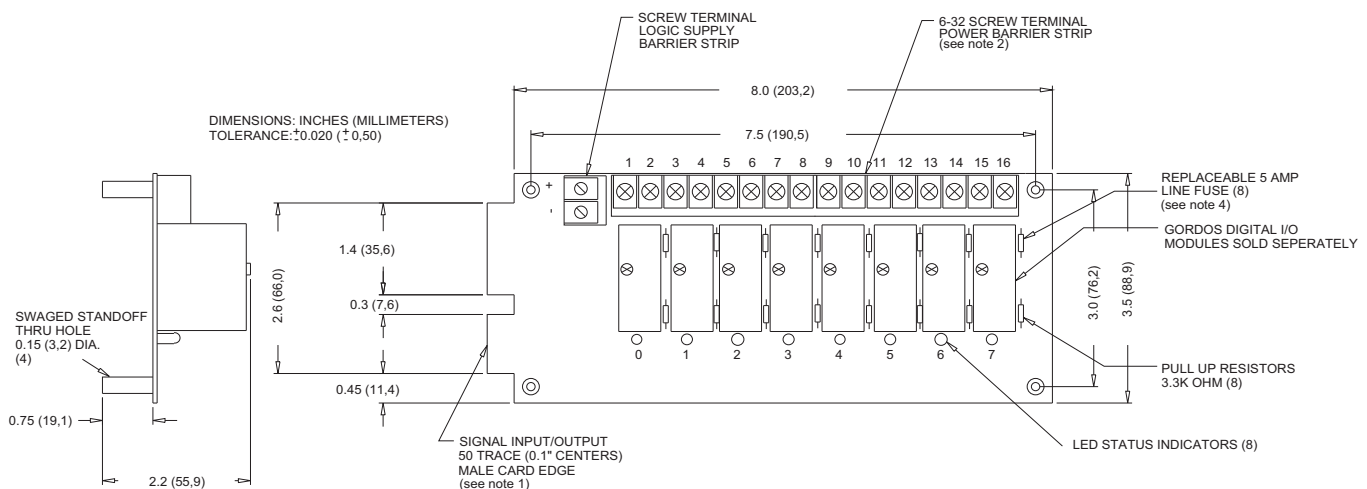
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB8

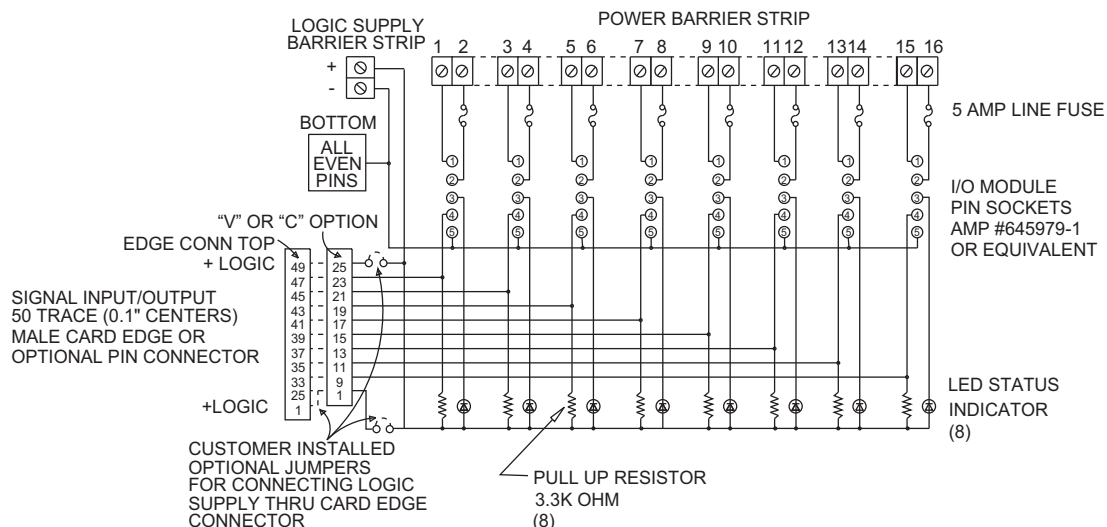
MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



- NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX "V" FOR OPTIONAL CA26HM-2F-SR CIRCUIT ASSEMBLY OR EQUIVALENT 26 CONDUCTOR PERPENDICULAR-TO-THE-BOARD MALE PIN CONNECTOR.
- 2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
- 3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 1 EACH "JS8".
- 4) LITTLE FUSE 251005 OR EQUIVALENT.



APPROVALS

UL E79183
CSA 38595

Rev. 070808



DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



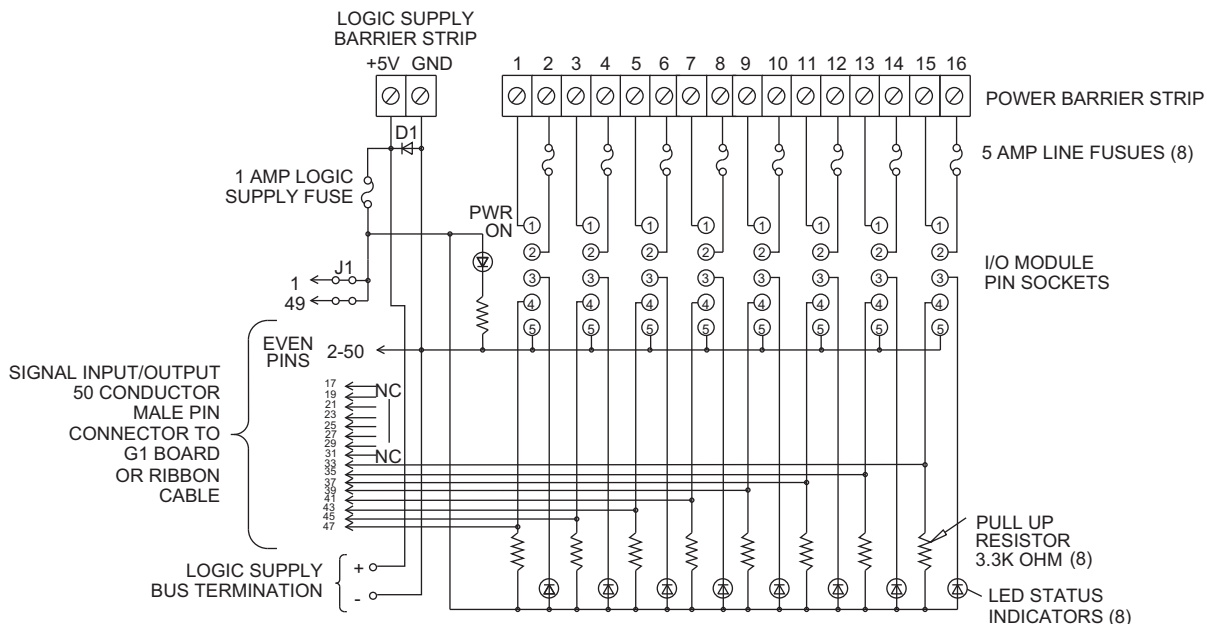
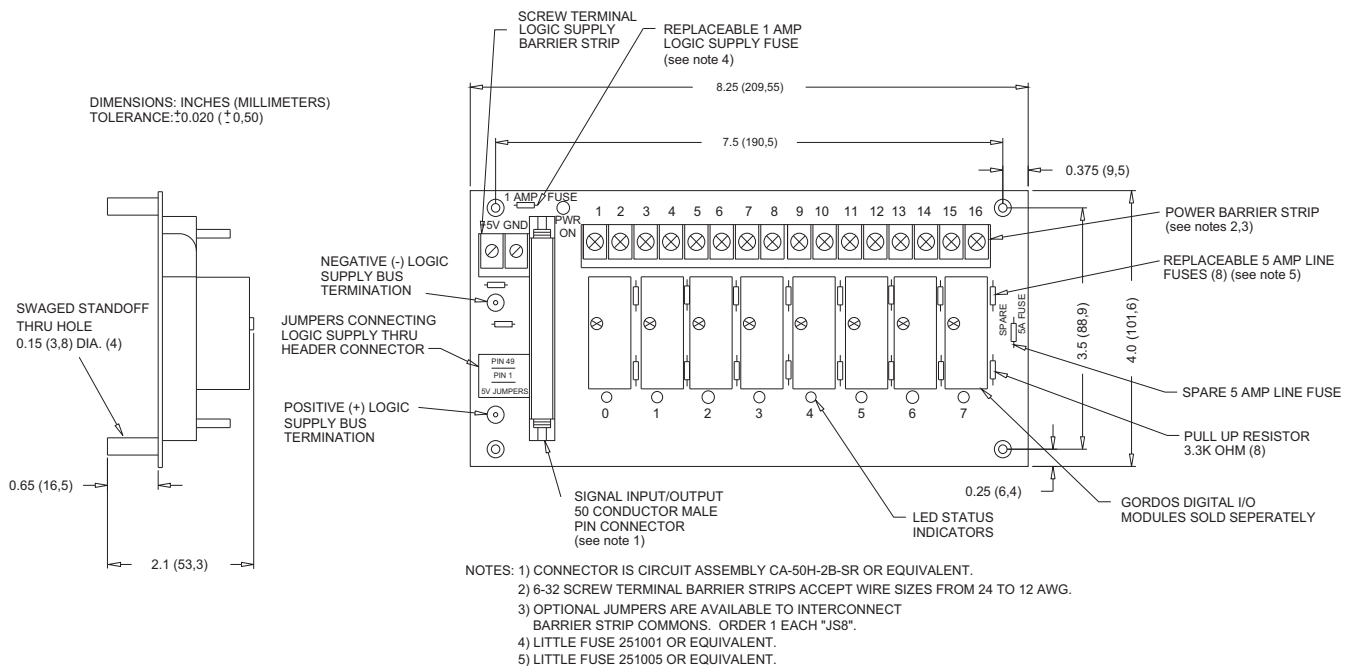
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB8H

MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



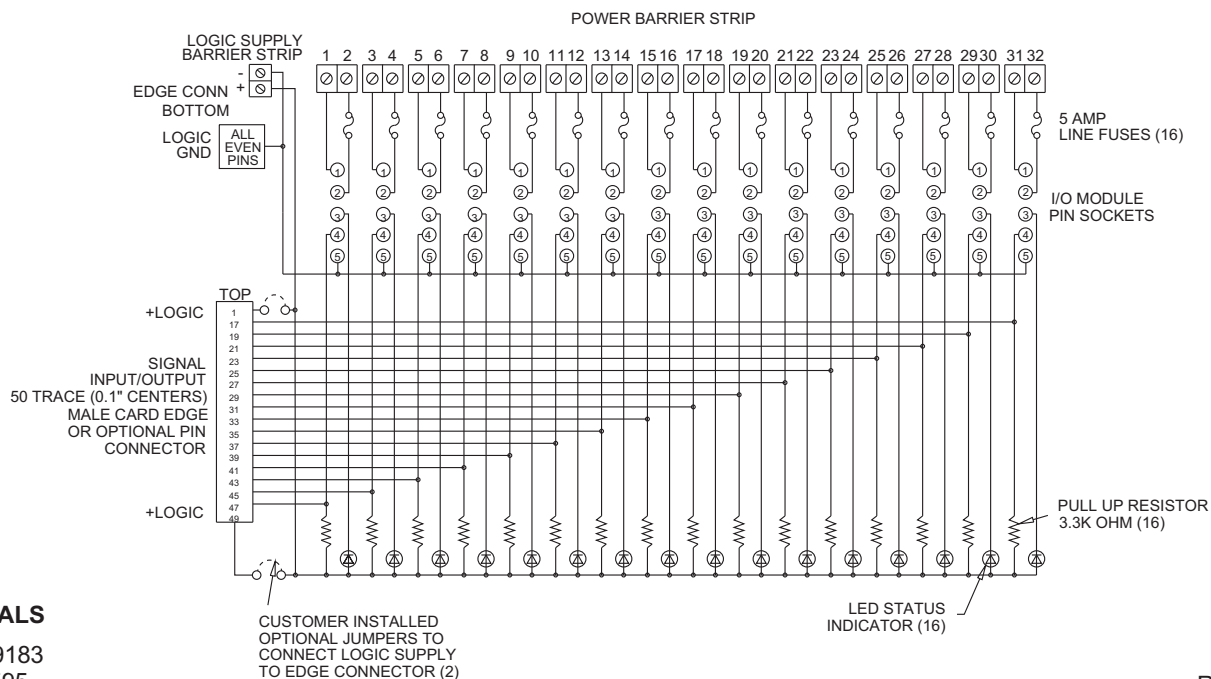
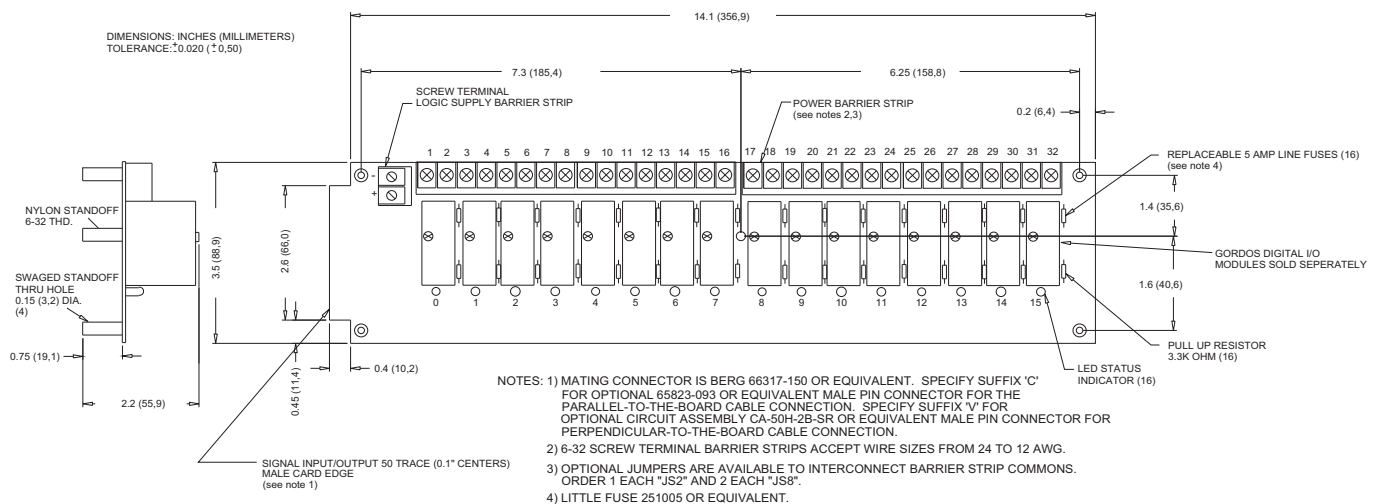
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16

MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



APPROVALS

UL E79183
CSA 38595

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



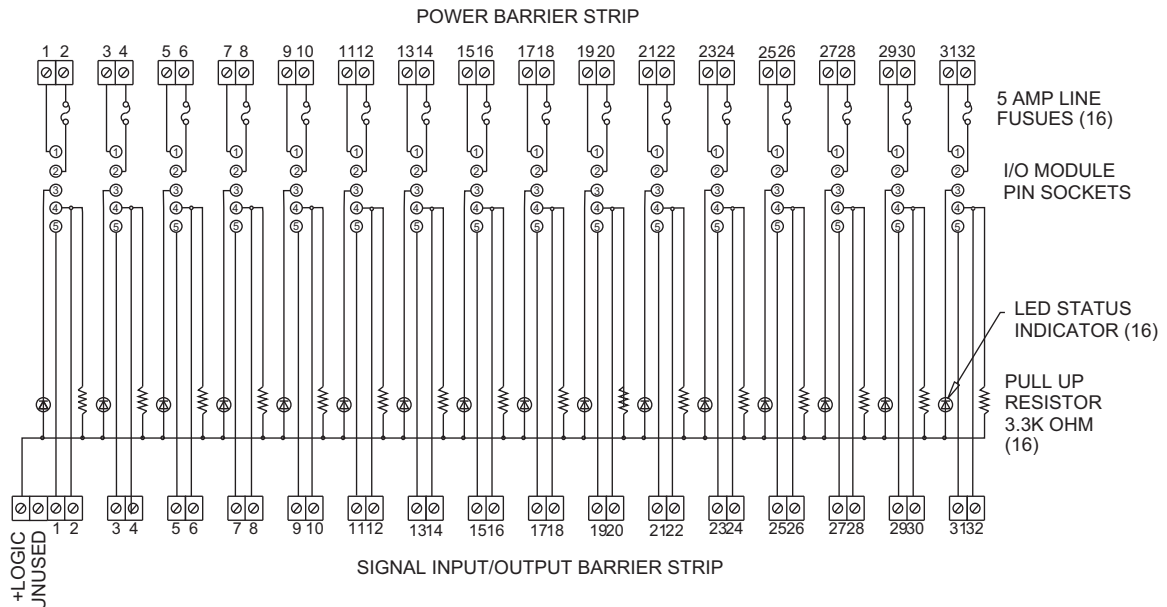
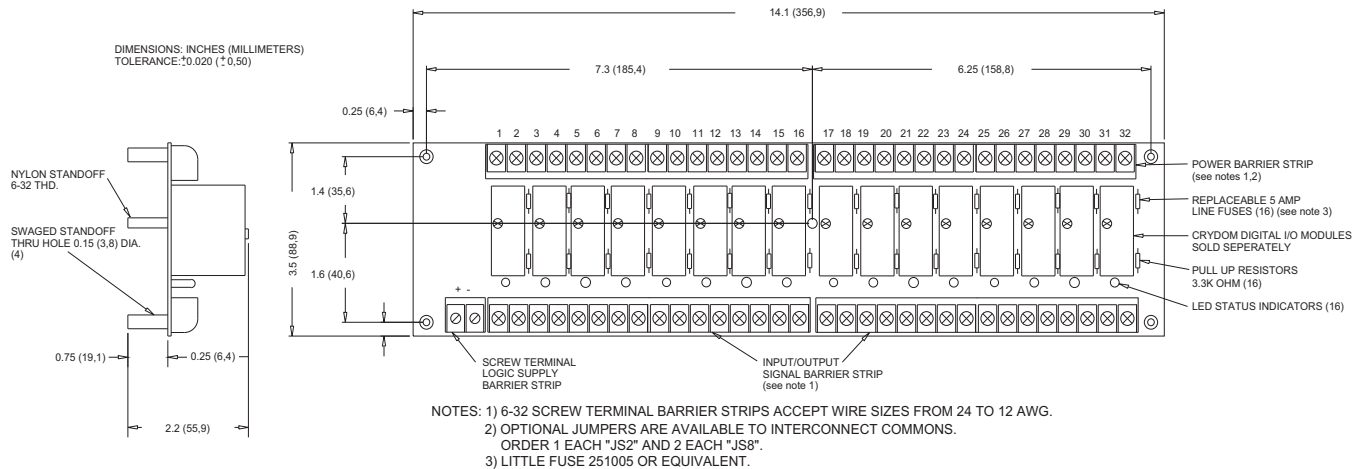
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16S

MOUNTING BOARD

- Screw terminal barrier block for logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- Logic ground separate for each channel (no common)
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



APPROVALS

UL E79183
CSA 38595

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉCTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



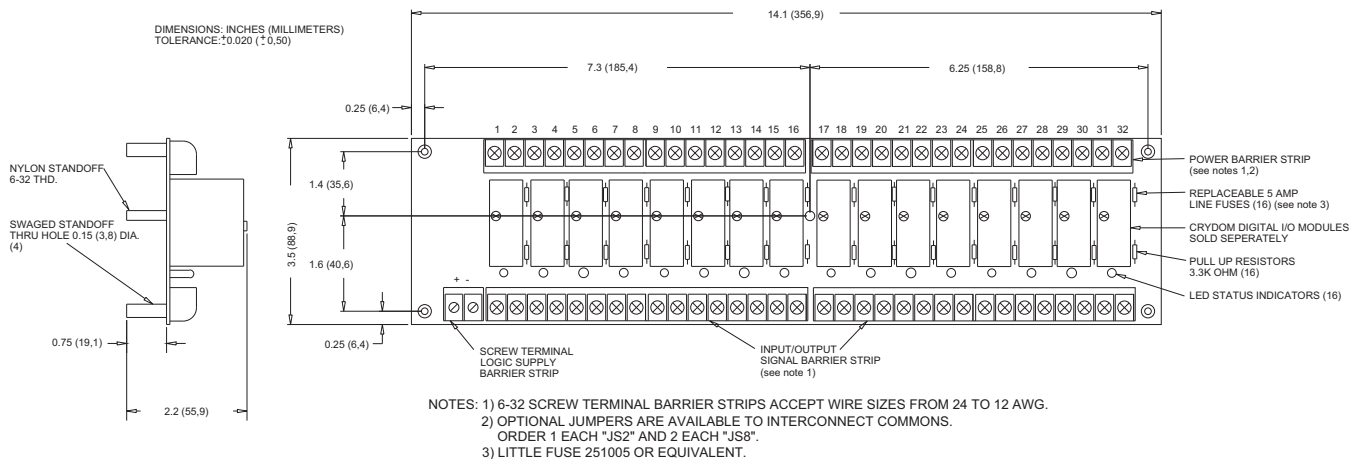
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB16T

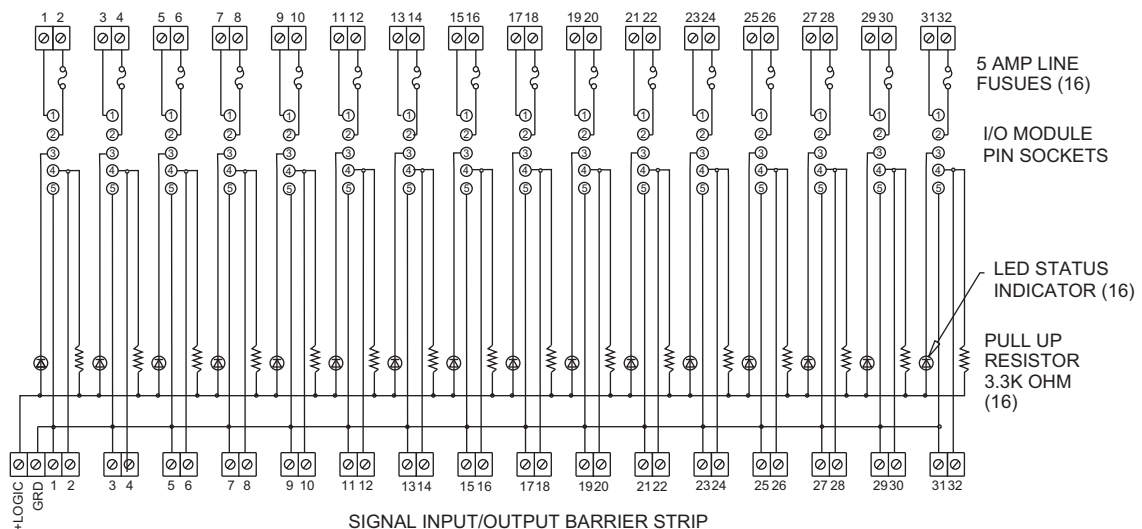
MOUNTING BOARD

- Screw terminal barrier block for logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



POWER BARRIER STRIP



APPROVALS

UL E79183
CSA 38595

Rev. 070808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○



DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. • Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO • Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.
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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



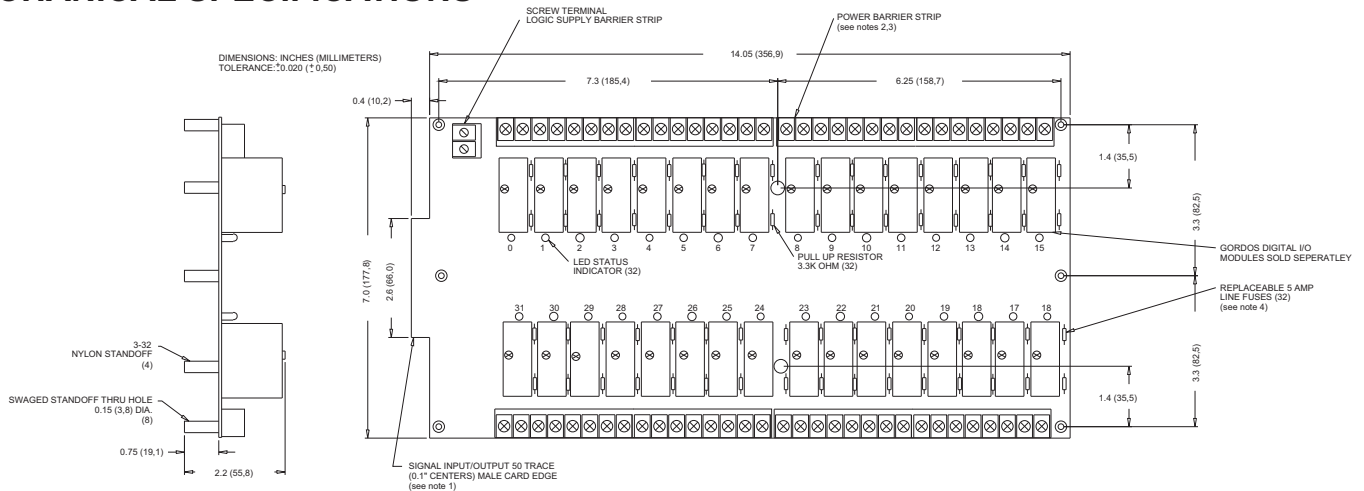
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

PB32D

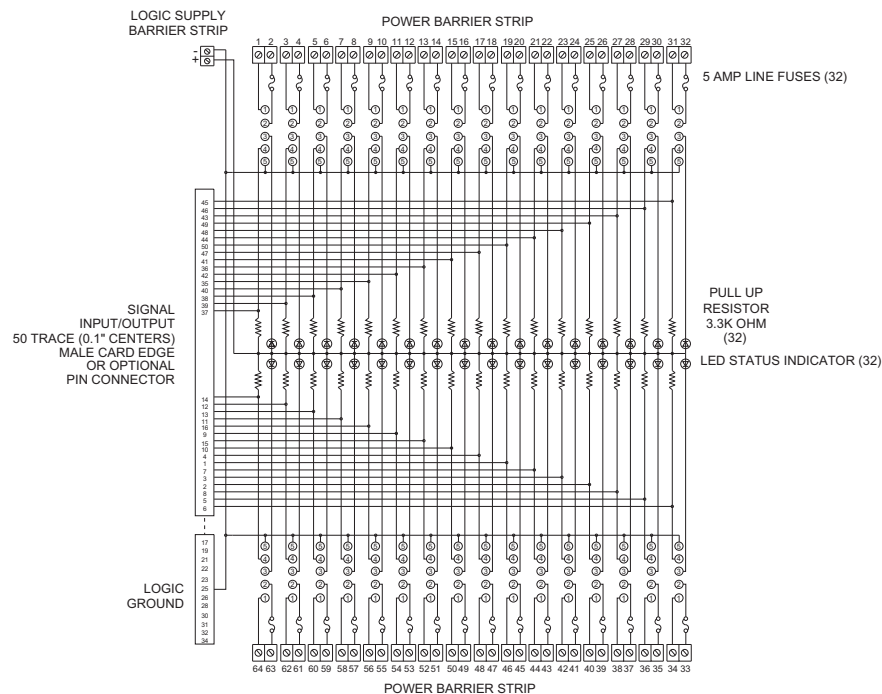
MOUNTING BOARD

- Plug-compatible logic connections
- Screw terminal barrier block for load connections
- Resident pull-up resistors
- 5 amp field-replaceable fuses (LITTLEFUSE #251005 or equivalent)
- LEDs indicate logic status
- All even-numbered logic connections are logic ground
- Input and output modules accepted interchangeably
- Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard-size modules

MECHANICAL SPECIFICATIONS



- NOTES: 1) MATING CONNECTOR IS BERG 66317-150 OR EQUIVALENT. SPECIFY SUFFIX 'C' FOR OPTIONAL 65823-093 OR EQUIVALENT MALE PIN CONNECTOR FOR PARALLEL-TO-THE-BOARD CABLE CONNECTION. SPECIFY SUFFIX 'V' FOR OPTIONAL CIRCUIT ASSEMBLY CA-50H-2B-SR OR EQUIVALENT MALE PIN CONNECTOR FOR PERPENDICULAR-TO-THE-BOARD CABLE CONNECTION.
- 2) 6-32 SCREW TERMINAL BARRIER STRIPS ACCEPT WIRE SIZES FROM 24 TO 12 AWG.
- 3) OPTIONAL JUMPERS ARE AVAILABLE TO INTERCONNECT BARRIER STRIP COMMONS. ORDER 2 EACH "JS2" AND 4 EACH "JS8".
- 4) LITTLE FUSE 251005 OR EQUIVALENT.



Rev. 070808

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ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	○	○	○	○	○	○
Solder	○	○	○	○	○	○

此附件所标示的包括电子信息产品污染图标的环保信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
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部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	○	○	○	○	○	○
焊接点	○	○	○	○	○	○

C4 SERIES INPUT MODULES



- Plug into mounting boards for C4 Series modules
- AC Inputs (Yellow Case)
- DC Inputs (White Case)
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging
- Built-in LED Status Indicator

SPECIFICATIONS (1)

Input

Part Number	C4IAC	C4IACA	C4IDC
Voltage Range	90-140 VAC	180-280 VAC	10-32 VDC
Maximum Current [mA](4)	14	5	20
Resistance [Ohms](2)(3)	22 k	75 k	2 k
Drop-out Current [mA](5)	3	1	1.5
Allowable Voltage for No Output [VAC/VDC](6)	50	50	3.0
Allowable Current for No Output [mA](6)	2.5	0.7	1.0

Output

Maximum Logic Supply Voltage[VDC](9)	30	30	30
Maximum Output Voltage Drop [VDC](12)	0.2	0.2	0.2
Minimum Logic Supply Voltage [VDC]	4.5	4.5	4.5
Logic Supply Voltage Range [VDC]	4.5-30	4.5-30	4.5-30
Maximum Current [mA](10)	50	50	50
Maximum Logic Supply Current [mA](7)	25.0	25.0	25.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	5.0
Maximum Turn-Off Time [msec] (13)	20	20	5.0

SPECIFICATIONS (1)

Input

Part Number	C4IDCB	C4IDCG	C4IDCK
Voltage Range	4-16 VDC	35-60 VDC	2.5-16 VDC
Maximum Current [mA](4)	40	10	60
Resistance [Ohms](2)(3)	400	10 k	300
Drop-out Current [mA](5)	2	1	2
Allowable Voltage for No Output [VAC/VDC](6)	1	7	1
Allowable Current for No Output [mA](6)	0.7	0.7	0.2

Output

Maximum Logic Supply Voltage[VDC](9)	30	30	30
Maximum Output Voltage Drop [VDC](12)	0.2	0.2	0.2
Minimum Logic Supply Voltage [VDC]	4.5	4.5	4.5
Logic Supply Voltage Range [VDC]	4.5-30	4.5-30	4.5-30
Maximum Current [mA](10)	50	50	50
Maximum Logic Supply Current [mA](7)	25.0	25.0	25.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	0.05	10.0	0.025
Maximum Turn-Off Time [msec] (13)	0.1	10.0	0.025

GENERAL SPECIFICATIONS

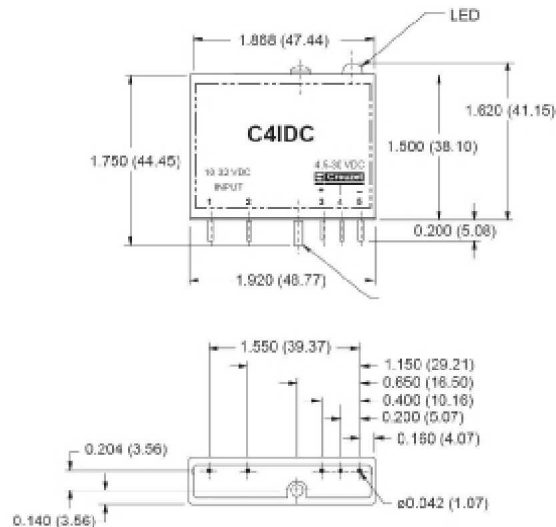
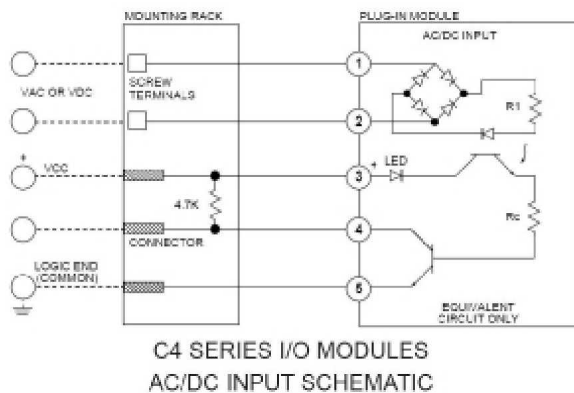
Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 100°C
Weight	1.1 oz. (31.2g)

GENERAL NOTES:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Resistance values for C4IAC modules are effective impedance values at 25 °C.
- (3) Resistance values are +/-10% at 25 °C.
- (4) Measured at maximum specified input voltage, 25°C.
- (5) Defined as the maximum current allowed through the module's input to guarantee that the output will switch from "on" to "off". Higher currents may result in the output remaining in the "on" state.
- (6) Defined as the maximum current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) At maximum logic supply voltage and 25°C.
- (8) At maximum specified logic voltage and 25°C.
- (9) Maximum allowable sinking current through open collector output transistor.
- (10) At maximum output voltage and 25°C.
- (11) At maximum output current and 25°C.
- (12) At 15 VDC logic, 30 VDC output, 50 mA, 25°C and nominal input voltage.
- (13) At 25°C for 1 second maximum duration.

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO

RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.

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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

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部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

C4 SERIES OUTPUT MODULES



- Plug into mounting boards for C4 Series modules
- AC Outputs (Black Case)
- DC Outputs (Red Case)
- 4kV Optical isolation
- Replaceable 2 AG Type Fuse
- Industry standard packaging
- Built-in LED Status Indicator

SPECIFICATIONS (1)

Input

Part Number	C4OAC	C4OACA	C4OACR	C4OACAR	C4ODC	C4ODCA
Nominal Voltage VDC	4-32	4-32	4-32	4-32	4-32	4-32
Minimum Voltage VDC	4.0	4.0	4.0	4.0	4.0	4.0
Maximum Voltage VDC	32	32	32	32	32	32
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0	1.0
Maximum Current (2) (3)	22	22	22	22	16	16
Resistance	Regulated Input	Regulated Input	Regulated Input	Regulated Input	Regulated Input	Regulated Input

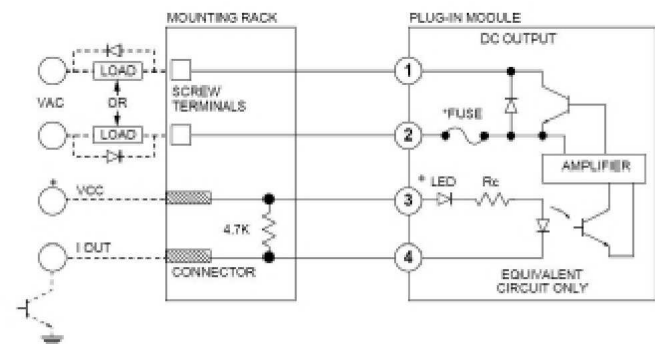
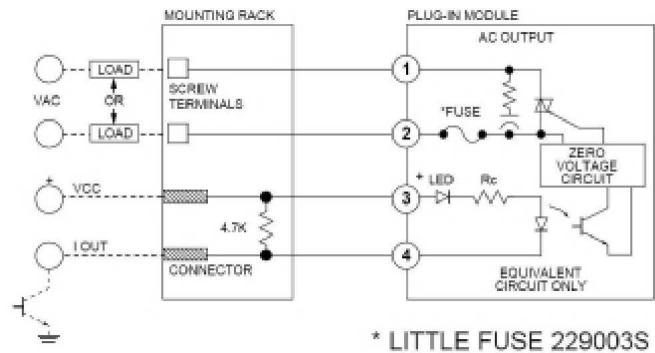
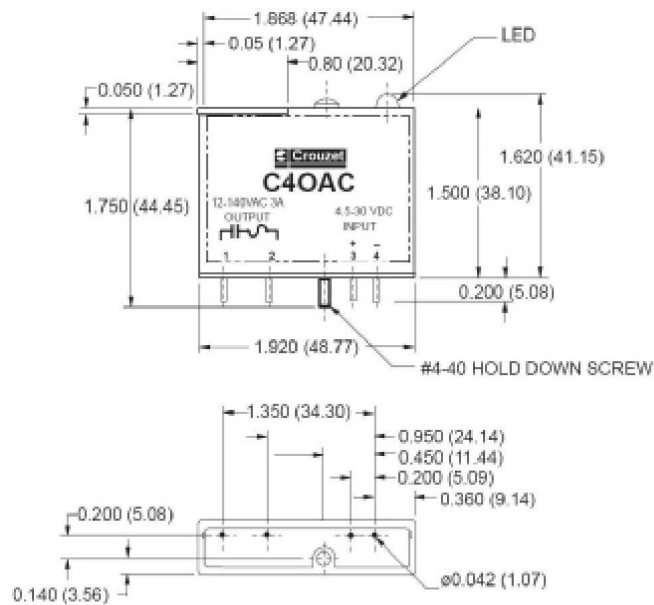
Output

Nominal Line Voltage	120 VAC	240 VAC	120 VAC	240 VAC	5-48 VDC	5-150 VDC
Minimum Line Voltage	12 VAC	12 VAC	12 VAC	12 VAC	5.0 VDC	3 VDC
Maximum Line Voltage	140 VAC	280 VAC	140 VAC	280 VAC	60 VDC	250 VDC
Max Off-State Voltage (4)	600 Vpeak	600 Vpeak	600 Vpeak	600 Vpeak	60 VDC	250 VDC
Max Off-State Leakage (5)	0.1mArms	0.1mArms	0.1mArms	0.1mArms	10 uA	10 uA
Static Off-State dv/dt (6)	200 V/usec	200 V/usec	200 V/usec	200 V/usec	n/a	n/a
Maximum Rated On-State Current (7)	3.0 Arms	3.0 Arms	3.0 Arms	3.0 Arms	3.0 A	1.0 A
Minimum On-State Current	50 mArms	50 mArms	50 mArms	50 mArms	10 mA	10 mA
Max Surge Current (8)	100 Apeak	100 Apeak	100 Apeak	100 Apeak	5.0 Apeak	5.0 Apeak
On-State Voltage Drop or Resistance (9)	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V
HP Rating	1/4	1/4	1/4	1/4	n/a	n/a
Maximum Turn-On Time [msec] (10)	8.33	8.33	0.1	0.1	0.05	0.05
Maximum Turn-Off Time [msec]	8.33	8.33	8.33	8.33	0.05	0.05
Input/Output Isolation Voltage (11)	4000	4000	4000	4000	4000	4000
Input/Output Capacitance	4	4	4	4	4	4
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 100°C	-40 to 100°C	-40 to 100°C	-40 to 100°C	-40 to 100°C	-40 to 100°C
Line Frequency Range	47 to 63 Hz	47 to 63 Hz	47 to 63 Hz	47 to 63 Hz	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

General Notes:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) At 32 VDC typical.
- (3) 13 m at 5 VDC for AC output modules only.
- (4) Maximum 1 minute duration.
- (5) At maximum rated line voltage, TA=80°C.
- (6) Minimum DV/DT per EIA/NARM RS433, method RS397. DV/DT ratings do not apply to DC output modules.
- (7) Without any external heat sink in still air, TA=45°C, at 40°C derate 40 mA/°C to 80°C.
- (8) At 25°C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- (9) At peak rated current.
- (10) Before zero voltage, Vin=4V AC modules only based on 60Hz. Vin=15V for DC modules.
- (11) For 1 second maximum duration TA= 25°C.

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar a morte ou lesões sérias.
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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO

RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.

ANNEX - ENVIROMENTAL INFORMATION

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

Solid State Relays

I/O Modules

DR INPUT MODULES



- DIN-Rail Mountable Single Point Input Modules
- AC Inputs (Yellow Case)
- DC Inputs (White Case)
- 4kV Optical isolation
- Input and Output Barrier Strips Accept 14 to 28 AWG Wire
- Configured for Panel Mounting
- Open-Collector Output, with LED Status Indicator

SPECIFICATIONS (1)

Input

Part Number	DR-IAC5	DR- IAC5A	DR- IAC24	DR- IAC24A
Voltage Range	90-140 VAC/DC	180-280 VAC/DC	90-140 VAC/DC	180-280 VAC/DC
Maximum Current [mA](4)	6	5	6	5
Resistance [Ohms](2)(3)	28 k	75 k	28 k	75 k
Drop-out Current [mA](5)	2	1.5	2	1.5
Voltage for No Output [VAC/VDC](6)	50	50	50	50
Allowable Current [mA]	2.5	2	2.5	2

Output

Maximum Voltage[VDC](9)	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	24	24
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30
Maximum Current [mA](10)	50	50	50	50
Maximum Logic Supply Current [mA](7)	28	28	28	28
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	20	20
Maximum Turn-Off Time [msec] (13)	30	30	30	30

SPECIFICATIONS (1)

Input

Part Number	DR-IDC5	DR-IDC5A	DR-IDC24	DR-IDC24A
Voltage Range	4-32 VDC/AC	10-48 VDC	4-32 VDC/AC	10-48 VDC
Maximum Current [mA](4)	34	34	34	34
Resistance [Ohms](2)(3)	1 k	2 k	1 k	2 k
Drop-out Current [mA](5)	1	1	1	1
Voltage for No Output [VAC/VDC](6)	2	4	2	4
Allowable Current [mA]	1.5	1.5	1.5	1.5

Output

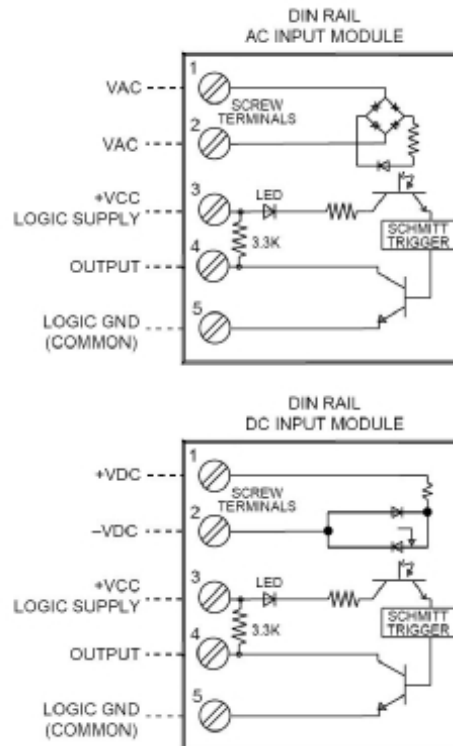
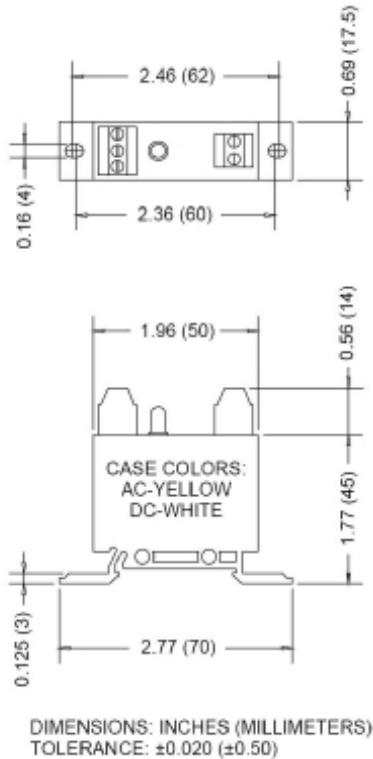
Maximum Voltage[VDC](9)	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30
Maximum Current [mA](10)	50	50	50	50
Maximum Logic Supply Current [mA](7)	28	28	28	28
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	1.0	1.0	1.0
Maximum Turn-Off Time [msec] (13)	1.0	1.0	1.0	1.0

GENERAL SPECIFICATIONS

Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 100°C
Line Frequency Range	47 to 63
Weight	1.1 oz. (31.2g)

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

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 WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO		
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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

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部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

DR OUTPUT MODULES



- DIN-Rail Mountable Single Point Output Modules (35mm DIN)
- Plug into mounting boards for 0.6" modules
- Zero Voltage Turn-On for AC Modules
- 4kV Optical isolation with LED Indicator
- UL Recognized, CSA Certified, CE Compliant
- Industry standard Color Coding Black (AC Output) Red (DC Output)
- Barrier Strips Accept 14 to 28 AWG Wire.

SPECIFICATIONS (1)

Input

Part Number	DR-OAC	DR-ODC5	DR-ODC24
Nominal Voltage VDC	5-24	5.0	24.0
Minimum Voltage VDC	3.7	3.5	18.0
Maximum Voltage VDC	32	8.0	32.0
Drop-out Voltage	1.0	1.0	1.0
Maximum Current (2)	18	18	13
Resistance (3)	NA	250	2000

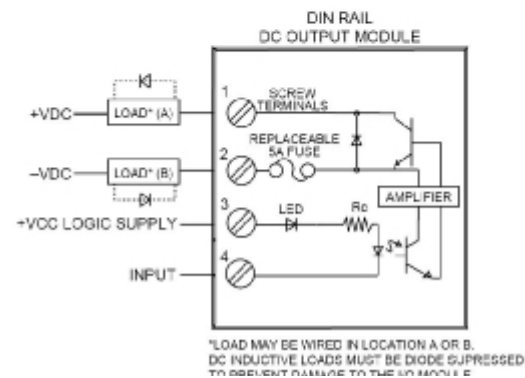
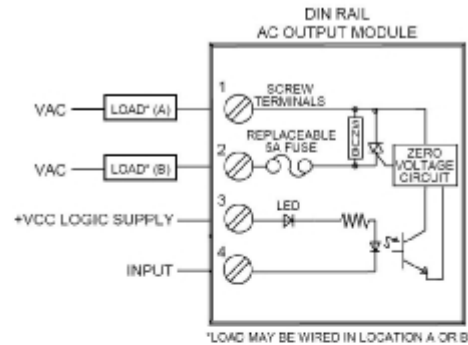
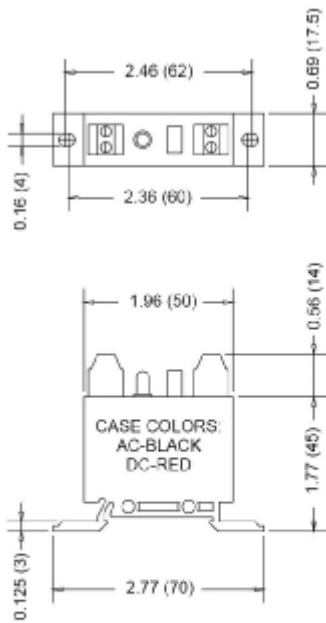
Output

Nominal Line Voltage	240 VAC	5-48 VDC	5-48 VDC
Minimum Line Voltage	12 VAC	3 VDC	3 VDC
Maximum Line Voltage	280 VAC	60 VDC	60 VDC
Max Off-State Voltage (4)	600 Vpeak	60 VDC	60 VDC
Max Off-State Leakage (5)	0.1mA _{rms}	10 μ A	10 μ A
Static Off-State dv/dt (6)	200 V/ μ sec	N/A	N/A
Maximum Rated On-State Current (7)	5.0 Arms	3.0 A	3.0 A
Minimum On-State Current	50 mA _{rms}	10 mA	10 mA
Max Surge Current (8)	250 A _{peak}	5.0 A	5.0 A
On-State Voltage Drop or Resistance (9)	1.6 V	1.6 V	1.6 V
Horse P _O wer Rating (13)	1/2 H.P.	N/A	N/A
Maximum Turn-On Time [msec] (13)	8.33	0.1	0.1
Maximum Turn-Off Time [msec] (13)	8.33	0.75	0.75
Input/Output Isolation Voltage (14)	4000	4000	4000
Input/Output Capacitance	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

General Notes:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) At nominal input voltage, without external LED status indicator.
- (3) +/-10% at 25°C.
- (4) Maximum 1 minute duration for OAC modules when applied as a DC voltage rather than a peak AC voltage.
- (5) At maximum line voltage, 25°C for OAC modules, and 80°C for ODC modules.
- (6) Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to DC output models
- (7) At 40°C, derate OAC modules 58 mA/°C to 80°C, derate ODC, ODCxMC and ODCxML modules 50 mA/°C to 80°C. CSA rating of OAC modules is 3.0 Arms at 40°C.
- (8) At 25°C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- (9) At maximum rated on-state current and 25°C.
- (10) At maximum line voltage, maximum rated output current, nominal input voltage and 25°C. Switching speed of OAC modules is based upon 60 Hz line frequency.
- (11) At 25°C for 1 second maximum duration.
- (12) 1/3 H.P. at 240 VAC, 1/8 H.P. at 120 VAC.

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

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	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

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	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

M SERIES INPUT MODULES



- Plug into mounting boards for M Series modules
- AC Inputs (Yellow Case) for 24 V, 120 V, 240 V
- DC Inputs (White Case) for 3.3 to 32 V, 10 to 48 V
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging

SPECIFICATIONS (1)

Input

Part Number	M-IAC5	M- IAC5A	M- IAC24	M- IAC24A	M-IDC5
Voltage Range	90-140 VAC/DC	180-280 VAC/DC	90-140 VAC/DC	180-280 VAC/DC	3.3-32 VDC/AC
Maximum Current [mA](4)	6	5	6	5	34
Resistance [Ohms](2)(3)	28 k	75 k	28 k	75 k	500
Drop-out Current [mA](5)	2	1.5	2	1.5	1.0
Voltage for No Output [VAC/VDC](6)	50	50	50	50	2.0
Allowable Current [mA]	2.5	2	2.5	2	1.5

Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30	3.0-6.0
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	20	20	1.0
Maximum Turn-Off Time [msec] (13)	20	20	20	20	1.0

SPECIFICATIONS (1)

Input

Part Number	M-IDC24	M-IDC5F	M-IDC24F	M-IDC5N	M-IDC24N
Voltage Range	3.3-32 VDC/AC	4-32 V	4-32 V	10-48 VDC/AC	10-48 VDC/AC
Maximum Current [mA](4)	34	68	68	34	34
Resistance [Ohms](2)(3)	1 k	500	500	1 k	1 k
Drop-out Current [mA](5)	1	1	1	1	1
Voltage for No Output [VAC/VDC](6)	2	2	2	4	4
Allowable Current [mA]	1.5	1.5	1.5	1.5	1.5

Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	3.0-6.0	20-30
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	0.05	0.05	8.0	8.0
Maximum Turn-Off Time [msec] (13)	1.0	0.10	0.10	7.0	7.0

GENERAL SPECIFICATIONS

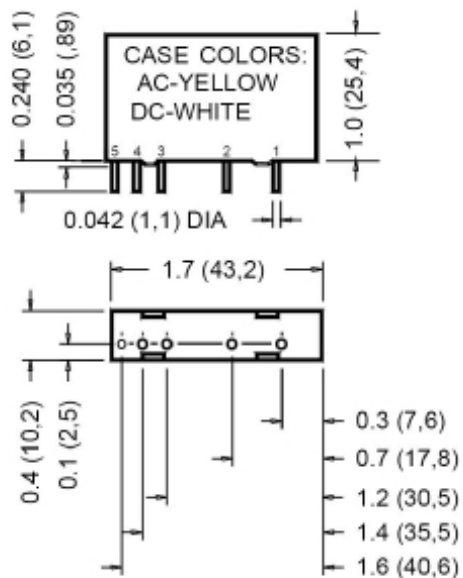
Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 80°C
Line Frequency Range	47 to 63
Weight	1.1 oz. (31.2g)

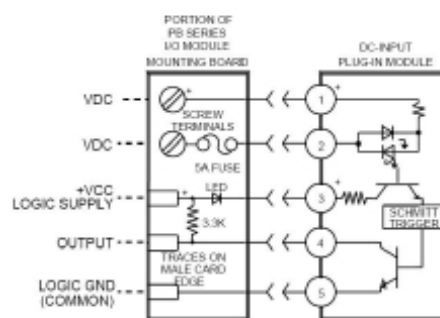
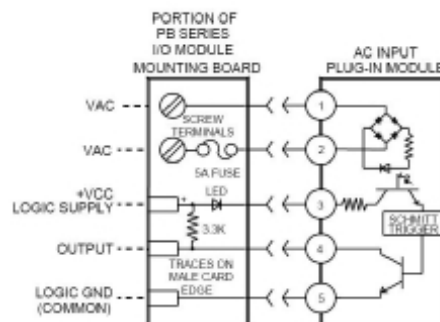
GENERAL NOTES:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Resistance values for IAC modules are effective impedance values at 25 °C.
- (3) Resistance values are +/-10% at 25 °C.
- (4) Measured at maximum specified input voltage, 25°C.
- (5) Defined as the maximum current allowed through the module's input to guarantee that the output will switch from "on" to "off". Higher currents may result in the output remaining in the "on" state.
- (6) Defined as the maximum current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) With external LED status indicator at maximum specified logic supply voltage and 25°C. 18mA without external LED.
- (8) At maximum specified logic voltage and 25°C.
- (9) Applied across open collector output transistor.
- (10) Sinking current through the open collector output transistor.
- (11) At maximum output voltage and 25°C.
- (12) At maximum output current and 25°C.
- (13) At nominal logic supply voltage, 25mA output sinking current, nominal input voltage and 25°C
- (14) At 25°C for 1 second maximum duration.

MECHANICAL SPECIFICATIONS



DIMENSIONS: INCHES (MILLIMETERS)
TOLERANCE: ± 0.020 (± 0.50)



(EQUIVALENT CIRCUIT DIAGRAMS)

AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

For Contact information visit our web site.

www.crydom.com

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 DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO					
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.

 WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO			
RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.	
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.	

ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

M SERIES OUTPUT MODULES



- AC Modules have High Current Thyristors with 100 Amp Surge Capability
- Plug into mounting boards for 0.6" modules
- Zero or Random Turn-On Available in AC Modules
- 4kV Optical isolation (1500 VAC Isolation for FET DC Output Modules)
- UL Recognized, CSA Certified, CE Compliant
- Industry standard packaging and Color Coding
Black (AC Output) Red (DC Output)

SPECIFICATIONS (1)

Input

Part Number	M-OAC5	M-OAC5A	M-OAC5AH	M-OAC5AR	M-OAC5R
Nominal Voltage VDC	5.0	5.0	5.0	5.0	5.0
Minimum Voltage VDC (2)	2.75	2.75	2.75	2.75	2.75
Maximum Voltage VDC	8.0	8.0	8.0	8.0	8.0
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	20	20	20	20	20
Resistance (4)	220	220	220	220	220

Output

Nominal Line Voltage	120 VAC	240 VAC	240 VAC	240 VAC	120 VAC
Minimum Line Voltage	12 VAC	24 VAC	24 VAC	24 VAC	12 VAC
Maximum Line Voltage	140 VAC	280 VAC	280 VAC	280 VAC	140 VAC
Max Off-State Voltage (5)	400 Vpeak	600 Vpeak	600 Vpeak	600 Vpeak	400 Vpeak
Max Off-State Leakage (6)	0.1mArms	0.1mArms	0.1mArms	0.1mArms	0.1mArms
Static Off-State dv/dt (7)	200 V/usec	200 V/usec	200 V/usec	200 V/usec	200 V/usec
Maximum Rated On-State Current (8)	3.5 Arms	3.5 Arms	5.0 Arms	3.5 Arms	3.5 Arms
Minimum On-State Current	50 mArms	50 mArms	50 mArms	50 mArms	50 mArms
Max Surge Current (9)	100 Apeak	100 Apeak	100 Apeak	100 Apeak	100 Apeak
On-State Voltage Drop or Resistance (10)	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V
Maximum Turn-On Time [msec] (13)	8.33	8.33	8.33	0.1	0.1
Maximum Turn-Off Time [msec] (13)	8.33	8.33	8.33	8.33	8.33
Input/Output Isolation Voltage (14)	4000	4000	4000	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	47 to 63	47 to 63	47 to 63	47 to 63
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

SPECIFICATIONS (1)

Input

Part Number	M-OAC24	M-OAC24A	M-ODC5	M-ODC5A	M-ODC5F
Nominal Voltage VDC	24	24	5.0	5.0	5.0
Minimum Voltage VDC (2)	18	18	2.75	2.75	2.75
Maximum Voltage VDC	32	32	8.0	8.0	8.0
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	13	13	18	18	18
Resistance (4)	2000	2000	250	250	250

Output

Nominal Line Voltage	120 VAC	240 VAC	5-48 VDC	5-150 VDC	5-48 VDC
Minimum Line Voltage	12 VAC	24 VAC	3.0 VDC	3.0 VDC	3.0 VDC
Maximum Line Voltage	140 VAC	280 VAC	60 VDC	250 VDC	60 VDC
Max Off-State Voltage (5)	400 Vpeak	600 Vpeak	60 VDC	250 VDC	60 VDC
Max Off-State Leakage (6)	0.1mAmps	0.1mAmps	10 uA	10 uA	10 uA
Static Off-State dv/dt (7)	200 V/usec	200 V/usec	N/A	N/A	N/A
Maximum Rated On-State Current (8)	3.5 Arms	3.5 Arms	3.0 A	1.0 A	3.0 A
Minimum On-State Current	50 mAmps	50 mAmps	10 mA	10 mA	10 mA
Max Surge Current (9)	100 Apeak	100 Apeak	5.0 A	5.0 A	5.0 A
On-State Voltage Drop or Resistance (10)	1.6 V	1.6 V	1.5 V	1.5 V	1.5 V
Maximum Turn-On Time [msec] (13)	8.33	8.33	0.1	0.1	0.025
Maximum Turn-Off Time [msec] (13)	8.33	8.33	0.75	0.75	0.05
Input/Output Isolation Voltage (14)	4000	4000	4000	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	47 to 63	DC	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

SPECIFICATIONS (1)

Input

Part Number	M-ODC5MA	M-ODC5MC	M-ODC5ML	M-ODC24	M-ODC24A
Nominal Voltage VDC	5.0	5.0	5.0	24	24
Minimum Voltage VDC (2)	2.75	2.75	2.75	18	18
Maximum Voltage VDC	8.0	8.0	8.0	32	32
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	18	18	18	13	13
Resistance (4)	250	250	250	2000	2000

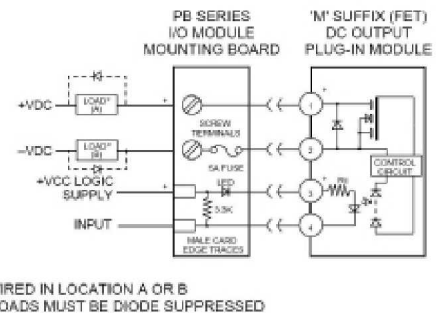
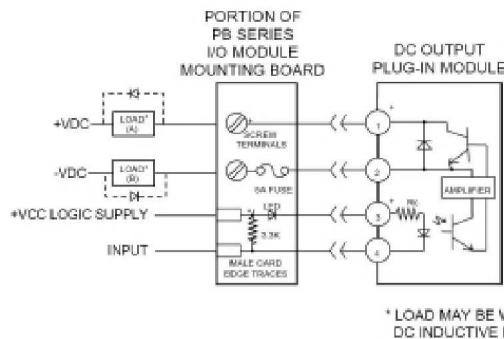
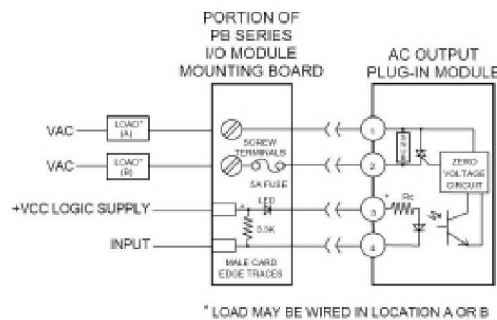
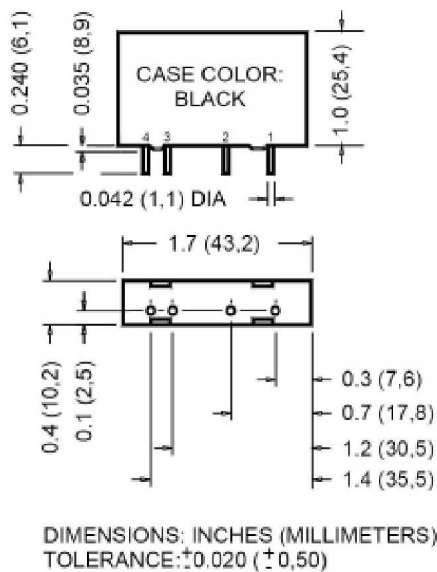
Output

Nominal Line Voltage	5-150 VDC	5-90 VDC	5-48 VDC	5-48 VDC	5-150 VDC
Minimum Line Voltage	1.0 VDC	1.0 VDC	50 VDC	60 VDC	250 VDC
Maximum Line Voltage	200 VDC	100 VDC	50 VDC	60 VDC	250 VDC
Max Off-State Voltage (5)	200 VDC	100 VDC	50 VDC	60 VDC	250 VDC
Max Off-State Leakage (6)	10 uA	10 uA	10 uA	10 uA	10 uA
Static Off-State dv/dt (7)	N/A	N/A	N/A	N/A	N/A
Maximum Rated On-State Current (8)	3.0 A	5.0 A	1.0 A	3.0 A	1.0 A
Minimum On-State Current	1.0 mA	1.0 mA	10 mA	10 mA	10 mA
Max Surge Current (9)	10 A	10 A	10 A	5.0 A	5.0 A
On-State Voltage Drop or Resistance (10)	0.25 Ohms	0.10 Ohms	0.05 Ohms	1.5 V	1.5 V
Maximum Turn-On Time [msec] (13)	1.0	1.0	1.0	0.1	0.1
Maximum Turn-Off Time [msec] (13)	0.05	0.05	0.05	0.75	0.75
Input/Output Isolation Voltage (14)	1500	1500	1500	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	DC	DC	DC	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

General Notes:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Without external LED status indicator. Add 1.7 volts for external LED if utilized.
- (3) At nominal input voltage, without external LED status indicator.
- (4) +/-10% at 25°C.
- (5) Maximum 1 minute duration for OAC modules when applied as a DC voltage rather than a peak AC voltage.
- (6) At maximum line voltage, 25°C for OAC modules, and 80°C for ODC modules.
- (7) Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to DC output models
- (8) At 40°C, derate OAC modules 58 mA/°C to 80°C, derate ODC, ODCxMC and ODCxML modules 50 mA/°C to 80°C. CSA rating of OAC modules is 3.0 Arms at 40°C.
- (9) At 25°C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- (10) At maximum rated on-state current and 25°C.
- (11) At maximum line voltage, maximum rated output current, nominal input voltage and 25°C. Switching speed of OAC modules is based upon 60 Hz line frequency.
- (12) At 25°C for 1 second maximum duration.
- (13) 1/3 H.P. @ 240 VAC, 1/8 H.P. @ 120 VAC.

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connexions, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar a morte ou lesões sérias.
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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO

RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

QUAD SERIES INPUT MODULES



- Plug into mounting boards for Quad Series modules
- AC Inputs (Yellow Case) for 24 V, 120 V, 240 V
- DC Inputs (White Case) for 4 to 32 V, 10 to 60 V
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging

SPECIFICATIONS (1)

Input

Part Number	IAC5Q	IAC5AQ	IAC5EQ
Voltage Range	90-140 VAC/DC	180-280 VAC/DC	18-36 VAC/DC
Maximum Current [mA](4)	6	5	10
Resistance [Ohms](2)(3)	28 k	75 k	3.3 k
Drop-out Current [mA](5)	2	1.5	1.0
Voltage for No Output [VAC/VDC](6)	50	50	50
Allowable Current [mA]	2.5	2	1.5

Output

Maximum Voltage[VDC](9)	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	3.0-6.0
Maximum Current [mA](10)	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	60
Maximum Turn-Off Time [msec] (13)	20	20	30

SPECIFICATIONS (1)

Input

Part Number	IDC5Q	IDC5BQ
Voltage Range	12-60 VDC/AC	5-32 VDC
Maximum Current [mA](4)	34	68
Resistance [Ohms](2)(3)	2 k	500
Drop-out Current [mA](5)	1	1
Voltage for No Output [VAC/VDC](6)	1	2
Allowable Current [mA]	4	1.5

Output

Maximum Voltage[VDC](9)	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0
Maximum Current [mA](10)	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	0.05
Maximum Turn-Off Time [msec] (13)	1.0	0.10

GENERAL SPECIFICATIONS

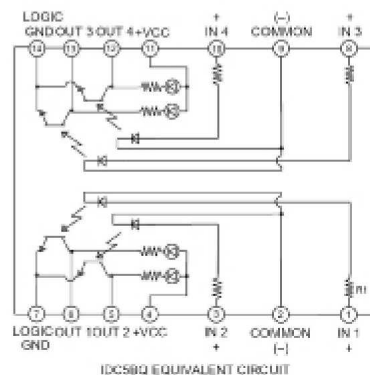
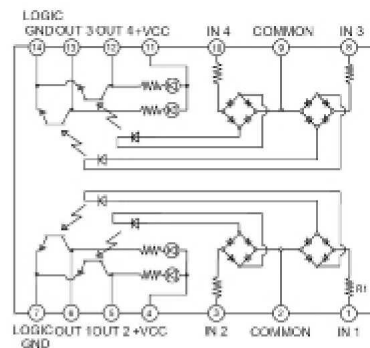
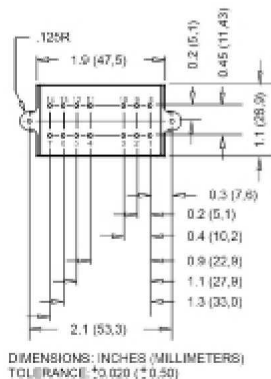
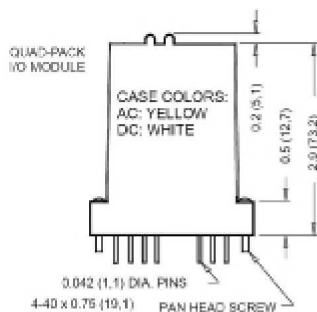
Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 100°C
Line Frequency Range	47 to 63

GENERAL NOTES:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Resistance values for IAC modules are effective impedance values at 25 °C.
- (3) Resistance values are +/-10% at 25 °C.
- (4) Measured at maximum specified input voltage, 25°C.
- (5) Defined as the maximum current allowed through the module's input to guarantee that the output will switch from "on" to "off". Higher currents may result in the output remaining in the "on" state.
- (6) Defined as the maximum current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) With external LED status indicator at maximum specified logic supply voltage and 25°C. 18mA without external LED.
- (8) At maximum specified logic voltage and 25°C.
- (9) Applied across open collector output transistor.
- (10) Sinking current through the open collector output transistor.
- (11) At maximum output voltage and 25°C.
- (12) At maximum output current and 25°C.
- (13) At nominal logic supply voltage, 25mA output sinking current, nominal input voltage and 25°C.
- (14) At 25°C for 1 second maximum duration.

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

For Contact information visit our web site.

www.crydom.com

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⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar a morte ou lesões sérias.
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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO

RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.

ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

QUAD SERIES OUTPUT MODULES



- AC Modules have High Current Thyristors with 100 Amp Surge Capability
- Plug into mounting boards for Quad modules
- Zero or Random Turn-On Available in AC Modules
- 4kV Optical isolation
- 4 Outputs per Quad-Pack Module
- UL Recognized, CSA Certified, CE Compliant
- Industry standard packaging and Color Coding
Black (AC Output) Red (DC Output)

SPECIFICATIONS (1)

Input

Part Number	OAC5Q	OAC5AQ	OAC5RQ	OAC5ARQ	ODC5Q	ODC5Q-11
Nominal Voltage VDC	5	5	5	5	5	5
Minimum Voltage VDC	4.0	4.0	4.0	4.0	4.0	4.0
Maximum Voltage VDC	8	8	8	8	8	8
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0	1.0
Maximum Current (2) (3)	20 mA	20 mA	20 mA	20 mA	18 mA	18 mA
Resistance	220 Ohms	220 Ohms	220 Ohms	220 Ohms	250 Ohms	250 Ohms

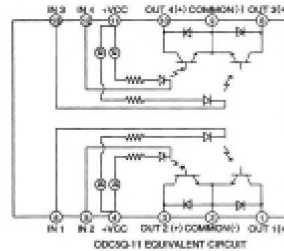
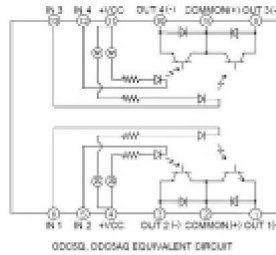
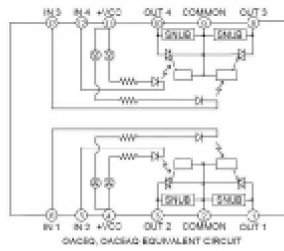
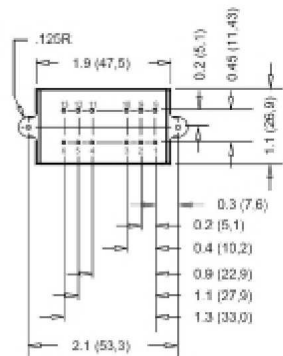
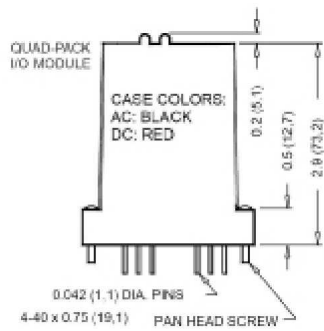
Output

Nominal Line Voltage	120 VAC	240 VAC	120 VAC	240 VAC	5-48 VDC	5-48 VDC
Minimum Line Voltage	12 VAC	12 VAC	12 VAC	12 VAC	3.0 VDC	3.0 VDC
Maximum Line Voltage	140 VAC	280 VAC	140 VAC	280 VAC	60 VDC	60 VDC
Max Off-State Voltage (4)	600 Vpeak	600 Vpeak	600 Vpeak	600 Vpeak	60 VDC	60 VDC
Max Off-State Leakage (5)	0.1mA _{rms}	0.1mA _{rms}	0.1mA _{rms}	0.1mA _{rms}	10 uA	10 uA
Static Off-State dv/dt (6)	200 V/usec	200 V/usec	200 V/usec	200 V/usec	n/a	n/a
Maximum Rated On-State Current (7)	3.0 Arms	3.0 Arms	3.0 Arms	3.0 Arms	3.0 A	1.0 A
Minimum On-State Current	50 mA _{rms}	50 mA _{rms}	50 mA _{rms}	50 mA _{rms}	10 mA	10 mA
Max Surge Current (8)	100 Apeak	100 Apeak	100 Apeak	100 Apeak	5.0 Apeak	5.0 Apeak
On-State Voltage Drop or Resistance (9)	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V
HP Rating	1/4	1/4	1/4	1/4	n/a	n/a
Maximum Turn-On Time [msec] (10)	8.33	8.33	0.1	0.1	0.1	0.05
Maximum Turn-Off Time [msec]	8.33	8.33	8.33	8.33	0.05	0.05
Input/Output Isolation Voltage (11)	4000	4000	4000	4000	4000	4000
Input/Output Capacitance	4	4	4	4	4	4
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 100°C	-40 to 100°C	-40 to 100°C	-40 to 100°C	-40 to 100°C	-40 to 100°C
Line Frequency Range	47 to 63 Hz	47 to 63 Hz	47 to 63 Hz	47 to 63 Hz	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

General Notes:

- (1) Specifications apply to Each Quad-Pack channel at an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) At nominal input voltage, without external LED status indicator.
- (3) +/-10% at 25 °C.
- (4) Maximum 1 minute duration for OACQ modules when applied as a DC voltage rather than peak AC voltage.
- (5) At maximum line voltage, 25°C for OACQ modules, and 80°C for ODCQ modules.
- (6) Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to ODCQ models.
- (7) At 40 °C, derate OACQ modules by 58mA/°C to 80°C; derate ODCQ modules By 50 mA/°C to 80°C; CSA rating for OACQ modules is 3.0 Arms at 40°C.
- (8) At 25°C maximum duration: 1 AC cycle for OACQ modules, 1 second for ODCQ modules.
- (9) At maximum rated on-state current and 25°C.
- (10) At maximum line voltage, maximum rated output current, nominal input voltage, 25°C. Switching speed for OACQ modules based upon 60Hz.
- (11) At 25 °C for 1 second maximum duration.

MECHANICAL SPECIFICATIONS



DC INDUCTIVE LOADS MUST BE DIODE SUPPRESSED TO PREVENT DAMAGE TO THE I/O MODULE.

AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

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RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.

ANNEX - ENVIROMENTAL INFORMATION

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

SM SERIES INPUT MODULES



- Plug into mounting boards for SM Series modules
- AC Inputs (Yellow Case) for 24 V, 120 V, 240 V
- DC Inputs (White Case) for 3.3 to 32 V, 10 to 48 V
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging

SPECIFICATIONS (1)

Input

Part Number	SM-IAC5	SM- IAC5A	SM- IAC24	SM- IAC24A	SM-IDC5
Voltage Range	90-140 VAC/DC	180-280 VAC/DC	90-140 VAC/DC	180-280 VAC/DC	3.3-32 VDC/AC
Maximum Current [mA](4)	6	5	6	5	34
Resistance [Ohms](2)(3)	28 k	75 k	28 k	75 k	500
Drop-out Current [mA](5)	2	1.5	2	1.5	1.0
Voltage for No Output [VAC/VDC](6)	50	50	50	50	2.0
Allowable Current [mA]	2.5	2	2.5	2	1.5

Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30	3.0-6.0
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	20	20	1.0
Maximum Turn-Off Time [msec] (13)	20	20	20	20	1.0

SPECIFICATIONS (1)

Input

Part Number	SM-IDC24	SM-IDC5F	SM-IDC24F	SM-IDC5N	SM-IDC24N
Voltage Range	3.3-32 VDC/AC	4-32 V	4-32 V	10-48 VDC/AC	10-48 VDC/AC
Maximum Current [mA](4)	34	68	68	34	34
Resistance [Ohms](2)(3)	1 k	500	500	1 k	1 k
Drop-out Current [mA](5)	1	1	1	1	1
Voltage for No Output [VAC/VDC](6)	2	2	2	4	4
Allowable Current [mA]	1.5	1.5	1.5	1.5	1.5

Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	3.0-6.0	20-30
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	0.05	0.05	8.0	8.0
Maximum Turn-Off Time [msec] (13)	1.0	0.10	0.10	7.0	7.0

GENERAL SPECIFICATIONS

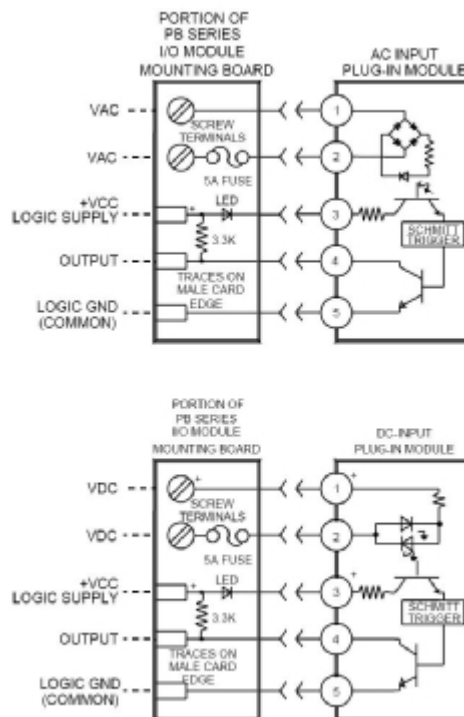
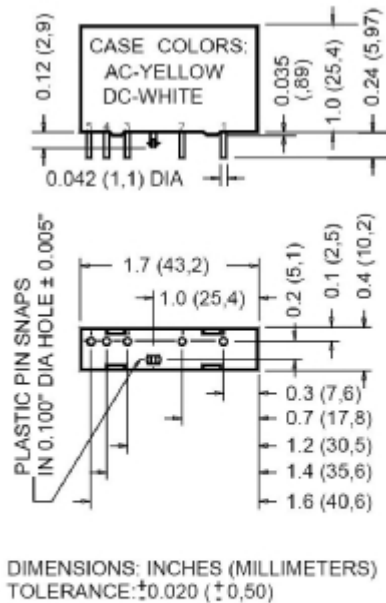
Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 80°C
Line Frequency Range	47 to 63
Weight	1.1 oz. (31.2g)

GENERAL NOTES:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Resistance values for IAC modules are effective impedance values at 25 °C.
- (3) Resistance values are +/-10% at 25 °C.
- (4) Measured at maximum specified input voltage, 25°C.
- (5) Defined as the maximum current allowed through the module's input to guarantee that the output will switch from "on" to "off". Higher currents may result in the output remaining in the "on" state.
- (6) Defined as the maximum current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) With external LED status indicator at maximum specified logic supply voltage and 25°C. 18mA without external LED.
- (8) At maximum specified logic voltage and 25°C.
- (9) Applied across open collector output transistor.
- (10) Sinking current through the open collector output transistor.
- (11) At maximum output voltage and 25°C.
- (12) At maximum output current and 25°C.
- (13) At nominal logic supply voltage, 25mA output sinking current, nominal input voltage and 25°C
- (14) At 25°C for 1 second maximum duration.

MECHANICAL SPECIFICATIONS



AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

For Contact information visit our web site.

www.crydom.com

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 DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO					
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.

 WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO			
RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.	
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.	

ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

SM SERIES OUTPUT MODULES



- AC Modules have High Current Thyristors with 100 Amp Surge Capability
- Plug into mounting boards for 0.6" modules
- Zero or Random Turn-On Available in AC Modules
- 4kV Optical isolation (1500 VAC Isolation for FET DC Output Modules)
- UL Recognized, CSA Certified, CE Compliant
- Industry standard packaging and Color Coding
Black (AC Output) Red (DC Output)

SPECIFICATIONS (1)

Input

Part Number	SM-OAC5	SM-OAC5A	SM-OAC5AH	SM-OAC5AR	SM-OAC5R
Nominal Voltage VDC	5.0	5.0	5.0	5.0	5.0
Minimum Voltage VDC (2)	2.75	2.75	2.75	2.75	2.75
Maximum Voltage VDC	8.0	8.0	8.0	8.0	8.0
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	20	20	20	20	20
Resistance (4)	220	220	220	220	220

Output

Nominal Line Voltage	120 VAC	240 VAC	240 VAC	240 VAC	120 VAC
Minimum Line Voltage	12 VAC	24 VAC	24 VAC	24 VAC	12 VAC
Maximum Line Voltage	140 VAC	280 VAC	280 VAC	280 VAC	140 VAC
Max Off-State Voltage (5)	400 Vpeak	600 Vpeak	600 Vpeak	600 Vpeak	400 Vpeak
Max Off-State Leakage (6)	0.1mArms	0.1mArms	0.1mArms	0.1mArms	0.1mArms
Static Off-State dv/dt (7)	200 V/usec	200 V/usec	200 V/usec	200 V/usec	200 V/usec
Maximum Rated On-State Current (8)	3.5 Arms	3.5 Arms	5.0 Arms	3.5 Arms	3.5 Arms
Minimum On-State Current	50 mArms	50 mArms	50 mArms	50 mArms	50 mArms
Max Surge Current (9)	100 Apeak	100 Apeak	100 Apeak	100 Apeak	100 Apeak
On-State Voltage Drop or Resistance (10)	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V
Maximum Turn-On Time [msec] (13)	8.33	8.33	8.33	0.1	0.1
Maximum Turn-Off Time [msec] (13)	8.33	8.33	8.33	8.33	8.33
Input/Output Isolation Voltage (14)	4000	4000	4000	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	47 to 63	47 to 63	47 to 63	47 to 63
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

SPECIFICATIONS (1)

Input

Part Number	SM-OAC24	SM-OAC24A	SM-ODC5	SM-ODC5A	SM-ODC5F
Nominal Voltage VDC	24	24	5.0	5.0	5.0
Minimum Voltage VDC (2)	18	18	2.75	2.75	2.75
Maximum Voltage VDC	32	32	8.0	8.0	8.0
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	13	13	18	18	18
Resistance (4)	2000	2000	250	250	250

Output

Nominal Line Voltage	120 VAC	240 VAC	5-48 VDC	5-150 VDC	5-48 VDC
Minimum Line Voltage	12 VAC	24 VAC	3.0 VDC	3.0 VDC	3.0 VDC
Maximum Line Voltage	140 VAC	280 VAC	60 VDC	250 VDC	60 VDC
Max Off-State Voltage (5)	400 Vpeak	600 Vpeak	60 VDC	250 VDC	60 VDC
Max Off-State Leakage (6)	0.1mA _{rms}	0.1mA _{rms}	10 uA	10 uA	10 uA
Static Off-State dv/dt (7)	200 V/usec	200 V/usec	N/A	N/A	N/A
Maximum Rated On-State Current (8)	3.5 Arms	3.5 Arms	3.0 A	1.0 A	3.0 A
Minimum On-State Current	50 mA _{rms}	50 mA _{rms}	10 mA	10 mA	10 mA
Max Surge Current (9)	100 Apeak	100 Apeak	5.0 A	5.0 A	5.0 A
On-State Voltage Drop or Resistance (10)	1.6 V	1.6 V	1.5 V	1.5 V	1.5 V
Maximum Turn-On Time [msec] (13)	8.33	8.33	0.1	0.1	0.025
Maximum Turn-Off Time [msec] (13)	8.33	8.33	0.75	0.75	0.05
Input/Output Isolation Voltage (14)	4000	4000	4000	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	47 to 63	DC	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

SPECIFICATIONS (1)

Input

Part Number	SM-ODC5MA	SM-ODC5MC	SM-ODC5ML	SM-ODC24	SM-ODC24A
Nominal Voltage VDC	5.0	5.0	5.0	24	24
Minimum Voltage VDC (2)	2.75	2.75	2.75	18	18
Maximum Voltage VDC	8.0	8.0	8.0	32	32
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	18	18	18	13	13
Resistance (4)	250	250	250	2000	2000

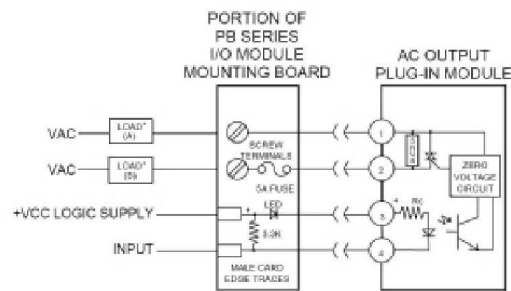
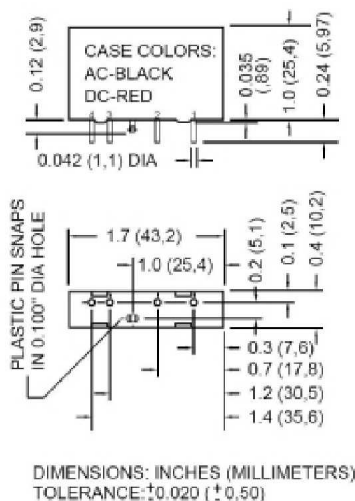
Output

Nominal Line Voltage	5-150 VDC	5-90 VDC	5-48 VDC	5-48 VDC	5-150 VDC
Maximum Line Voltage	200 VDC	100 VDC	50 VDC	60 VDC	250 VDC
Max Off-State Voltage (5)	200 VDC	100 VDC	50 VDC	60 VDC	250 VDC
Max Off-State Leakage (6)	10 uA	10 uA	10 uA	10 uA	10 uA
Static Off-State dv/dt (7)	N/A	N/A	N/A	N/A	N/A
Maximum Rated On-State Current (8)	3.0 A	5.0 A	1.0 A	3.0 A	1.0 A
Minimum On-State Current	1.0 mA	1.0 mA	10 mA	10 mA	10 mA
Max Surge Current (9)	10 A	10 A	10 A	5.0 A	5.0 A
On-State Voltage Drop or Resistance (10)	0.25 Ohms	0.10 Ohms	0.05 Ohms	1.5 V	1.5 V
Maximum Turn-On Time [msec] (13)	1.0	1.0	1.0	0.1	0.1
Maximum Turn-Off Time [msec] (13)	0.05	0.05	0.05	0.75	0.75
Input/Output Isolation Voltage (14)	1500	1500	1500	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	DC	DC	DC	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

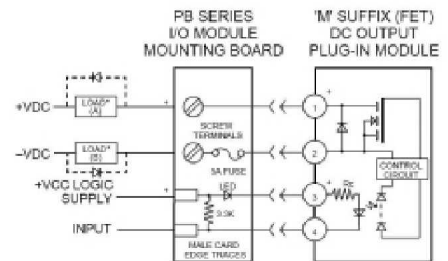
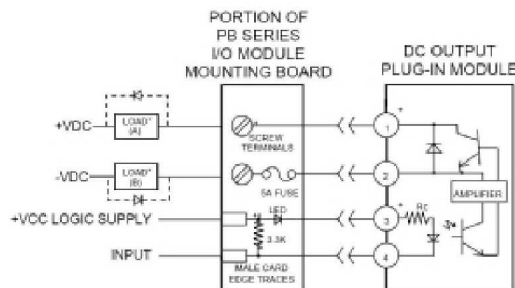
General Notes:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Without external LED status indicator. Add 1.7 volts for external LED if utilized.
- (3) At nominal input voltage, without external LED status indicator.
- (4) $\pm 10\%$ at 25°C.
- (5) Maximum 1 minute duration for OAC modules when applied as a DC voltage rather than a peak AC voltage.
- (6) At maximum line voltage, 25°C for OAC modules, and 80°C for ODC modules.
- (7) Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to DC output models.
- (8) At 40°C, derate OAC modules 58 mA/°C to 80°C, derate ODC, ODCxMC and ODCxML modules 50 mA/°C to 80°C. CSA rating of OAC modules is 3.0 Arms at 40°C.
- (9) At 25°C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- (10) At maximum rated on-state current and 25°C.
- (11) At maximum line voltage, maximum rated output current, nominal input voltage and 25°C. Switching speed of OAC modules is based upon 60 Hz line frequency.
- (12) At 25°C for 1 second maximum duration.
- (13) 1/3 H.P. at 240 VAC, 1/8 H.P. at 120 VAC.

MECHANICAL SPECIFICATIONS



* LOAD MAY BE WIRED IN LOCATION A OR B



* LOAD MAY BE WIRED IN LOCATION A OR B
DC INDUCTIVE LOADS MUST BE DIODE SUPPRESSED TO PREVENT DAMAGE TO THE I/O MODULE.

AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar a morte ou lesões sérias.
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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO

RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.

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Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

0.6" SERIES INPUT MODULES



- Plug into mounting boards for 0.6" modules
- AC Inputs for 24 V, 120 V, 240 V
- DC Inputs for 3.3 to 32 V, 10 to 48 V
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging

SPECIFICATIONS (1)

Input

Part Number	IAC5	IAC5A	IAC24	IAC24A	IDC5
Voltage Range	90-140 VAC/DC	180-280 VAC/DC	90-140 VAC/DC	180-280 VAC/DC	3.3-32 VDC/AC
Maximum Current [mA](4)	6	5	6	5	34
Resistance [Ohms](2)(3)	28 k	75 k	28 k	75 k	500
Drop-out Current [mA](5)	2	1.5	2	1.5	1.0
Voltage for No Output [VAC/VDC](6)	50	50	50	50	2.0
Allowable Current [mA]	2.5	2	2.5	2	1.5

Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30	3.0-6.0
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	20	20	1.0
Maximum Turn-Off Time [msec] (13)	20	20	20	20	1.0

SPECIFICATIONS (1)

Input

Part Number	IDC24	IDC5F	IDC24F	IDC5N	IDC24N
Voltage Range (VAC or VDC)	3.3-32 VDC/AC	4-32 VDC	4-32 VDC	10-48 VDC/AC	10-48 VDC/AC
Maximum Current [mA](4)	34	68	68	34	34
Resistance [Ohms](2)(3)	1 k	500	500	1 k	1 k
Drop-out Current [mA](5)	1	1	1	1	1
Voltage for No Output [VAC/VDC](6)	2	2	2	4	4
Allowable Current [mA]	1.5	1.5	1.5	1.5	1.5

Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	3.0-6.0	20-30
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [μA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [μA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	0.05	0.05	8.0	8.0
Maximum Turn-Off Time [msec] (13)	1.0	0.10	0.10	7.0	7.0

GENERAL SPECIFICATIONS

Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 80°C
Line Frequency Range	47 to 63
Weight	1.1 oz. (31.2g)

GENERAL NOTES:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Resistance values for IAC modules are effective impedance values at 25 °C.
- (3) Resistance values are +/-10% at 25 °C.
- (4) Measured at maximum specified input voltage, 25°C.
- (5) Defined as the maximum current allowed through the module's input to guarantee that the output will switch from "on" to "off". Higher currents may result in the output remaining in the "on" state.
- (6) Defined as the maximum current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) With external LED status indicator at maximum specified logic supply voltage and 25°C. 18mA without external LED.
- (8) At maximum specified logic voltage and 25°C.
- (9) Applied across open collector output transistor.
- (10) Sinking current through the open collector output transistor.
- (11) At maximum output voltage and 25°C.
- (12) At maximum output current and 25°C.
- (13) At nominal logic supply voltage, 25mA output sinking current, nominal input voltage and 25°C.
- (14) At 25°C for 1 second maximum duration.

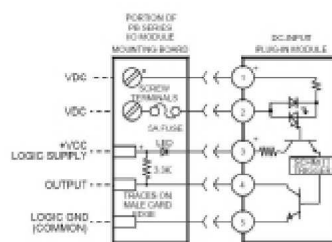
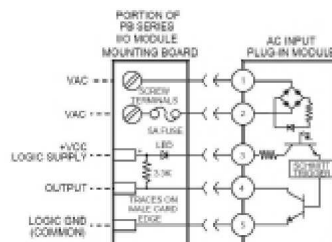
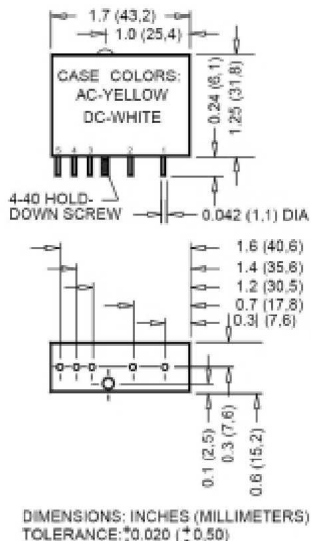
AGENCY APPROVALS

UL E46203
CSA 38595



Rev. 072808

MECHANICAL SPECIFICATIONS



(EQUIVALENT CIRCUIT DIAGRAMS)

ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

0.6" SERIES OUTPUT MODULES



- AC Modules have High Current Thyristors with 100 Amp Surge Capability
- Plug into mounting boards for 0.6" modules
- Zero or Random Turn-On Available in AC Modules
- 4kV Optical isolation (1500 VAC Isolation for FET DC Output Modules)
- UL Recognized, CSA Certified, CE Compliant
- Industry standard packaging and Color Coding
Black (AC Output) Red (DC Output)

SPECIFICATIONS (1)

Input

Part Number	OAC5	OAC5A	OAC5AH	OAC5AR	OAC5R	OAC24
Nominal Voltage VDC	5.0	5.0	5.0	5.0	5.0	24
Minimum Voltage VDC (2)	2.75	2.75	2.75	2.75	2.75	18
Maximum Voltage VDC	8.0	8.0	8.0	8.0	8.0	32
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	20	20	20	20	20	13
Resistance (4)	220	220	220	220	220	2000

Output

Nominal Line Voltage	120 VAC	240 VAC	240 VAC	240 VAC	120 VAC	120 VAC
Minimum Line Voltage	12 VAC	24 VAC	24 VAC	24 VAC	12 VAC	12 VAC
Maximum Line Voltage	140 VAC	280 VAC	280 VAC	280 VAC	140 VAC	140 VAC
Max Off-State Voltage (5)	400 Vpeak	600 Vpeak	600 Vpeak	600 Vpeak	400 Vpeak	400 Vpeak
Max Off-State Leakage (6)	0.1mArms	0.1mArms	0.1mArms	0.1mArms	0.1mArms	0.1mArms
Static Off-State dv/dt (7)	200 V/usec	200 V/usec	200 V/usec	200 V/usec	200 V/usec	200 V/usec
Maximum Rated On-State Current (8)	3.5 Arms	3.5 Arms	5.0 Arms	3.5 Arms	3.5 Arms	3.5 Arms
Minimum On-State Current	50 mArms	50 mArms	50 mArms	50 mArms	50 mArms	50 mArms
Max Surge Current (9)	100 Apeak	100 Apeak	100 Apeak	100 Apeak	100 Apeak	100 Apeak
On-State Voltage Drop or Resistance (10)	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V	1.6 V
Maximum Turn-On Time [msec] (13)	8.33	8.33	8.33	0.1	0.1	8.33
Maximum Turn-Off Time [msec] (13)	8.33	8.33	8.33	8.33	8.33	8.33
Input/Output Isolation Voltage (14)	4000	4000	4000	4000	4000	4000
Input/Output Capacitance	8	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	47 to 63	47 to 63	47 to 63	47 to 63	47 to 63
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

Input

Part Number	OAC24A	ODC5	ODC5A	ODC5F	ODC5MA
Nominal Voltage VDC	24	5.0	5.0	5.0	5.0
Minimum Voltage VDC (2)	18	2.75	2.75	2.75	2.75
Maximum Voltage VDC	32	8.0	8.0	8.0	8.0
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	13	18	18	18	18
Resistance (4)	2000	250	250	250	250

Output

Nominal Line Voltage	240 VAC	5-48 VDC	5-150 VDC	5-48 VDC	5-150 VDC
Minimum Line Voltage	24 VAC	3.0 VDC	3.0 VDC	3.0 VDC	1.0 VDC
Maximum Line Voltage	280 VAC	60 VDC	250 VDC	60 VDC	200 VDC
Max Off-State Voltage (5)	600 Vpeak	60 VDC	250 VDC	60 VDC	200 VDC
Max Off-State Leakage (6)	0.1mA _{rms}	10 uA	10 uA	10 uA	10 uA
Static Off-State dv/dt (7)	200 V/usec	N/A	N/A	N/A	N/A
Maximum Rated On-State Current (8)	3.5 Arms	3.0 A	1.0 A	3.0 A	3.0 A
Minimum On-State Current	50 mA _{rms}	10 mA	10 mA	10 mA	1.0 mA
Max Surge Current (9)	100 Apeak	5.0 A	5.0 A	5.0 A	10 A
On-State Voltage Drop or Resistance (10)	1.6 V	1.5 V	1.5 V	1.5 V	0.25 Ohms
Maximum Turn-On Time [msec] (13)	8.33	0.1	0.1	0.025	1.0
Maximum Turn-Off Time [msec] (13)	8.33	0.75	0.75	0.05	0.05
Input/Output Isolation Voltage (14)	4000	4000	4000	4000	1500
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63	DC	DC	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

Input

Part Number	ODC5MC	ODC5ML	ODC24	ODC24A	ODC24F
Nominal Voltage VDC	5.0	5.0	24	24	24
Minimum Voltage VDC (2)	2.75	2.75	18	18	18
Maximum Voltage VDC	8.0	8.0	32	32	32
Drop-out Voltage	1.0	1.0	1.0	1.0	1.0
Maximum Current (3)	18	18	13	13	13
Resistance (4)	250	250	2000	2000	2000

Output

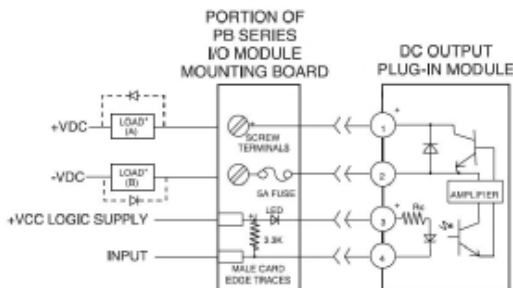
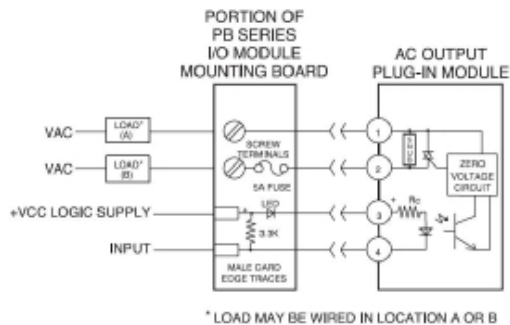
Nominal Line Voltage	5-90 VDC	5-48 VDC	5-48 VDC	5-150 VDC	5-48 VDC
Minimum Line Voltage	1.0 VDC	1.0 VDC	3.0 VDC	3.0 VDC	3.0 VDC
Maximum Line Voltage	100 VDC	50 VDC	60 VDC	250 VDC	60 VDC
Max Off-State Voltage (5)	50 VDC	60 VDC	250 VDC	60 VDC	60 VDC
Max Off-State Leakage (6)	10 uA	10 uA	10 uA	10 uA	10 uA
Static Off-State dv/dt (7)	N/A	N/A	N/A	N/A	N/A
Maximum Rated On-State Current (8)	5.0 A	1.0 A	3.0 A	1.0 A	3.0 A
Minimum On-State Current	1.0 mA	10 mA	10 mA	10 mA	10 mA
Max Surge Current (9)	10 A	10 A	5.0 A	5.0 A	5.0 A
On-State Voltage Drop or Resistance (10)	0.10 Ohms	0.05 Ohms	1.5 V	1.5 V	1.5 V
Maximum Turn-On Time [msec] (13)	1.0	1.0	0.1	0.1	0.025
Maximum Turn-Off Time [msec] (13)	0.05	0.05	0.75	0.75	0.05
Input/Output Isolation Voltage (14)	1500	1500	4000	4000	4000
Input/Output Capacitance	8	8	8	8	8
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	DC	DC	DC	DC	DC
Weight	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)	1.1 oz. (31.2g)

GENERAL NOTES

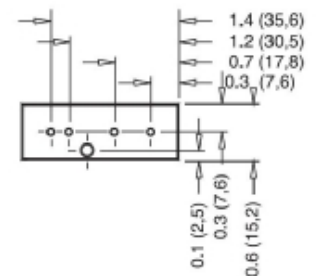
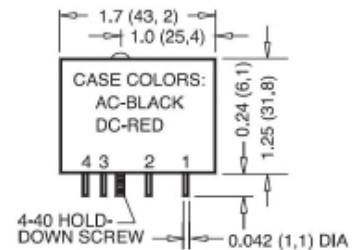
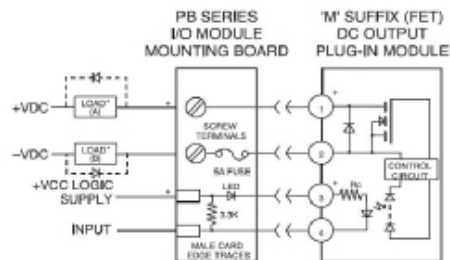
General Notes:

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Without external LED status indicator. Add 1.7 volts for external LED if utilized.
- (3) At nominal input voltage, without external LED status indicator.
- (4) +/-10% at 25°C.
- (5) Maximum 1 minute duration for OAC modules when applied as a DC voltage rather than a peak AC voltage.
- (6) At maximum line voltage, 25°C for OAC modules, and 80°C for ODC modules.
- (7) Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to DC output models
- (8) At 40°C, derate OAC modules 58 mA/°C to 80°C, derate ODC. ODCxMC and ODCxML modules 50 mA/°C to 80°C. CSA rating of OAC modules is 3.0 Arms at 40°C.
- (9) At 25°C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- (10) At maximum rated on-state current and 25°C.
- (11) At maximum line voltage, maximum rated output current, nominal input voltage and 25°C. Switching speed of OAC modules is based upon 60 Hz line frequency.
- (12) At 25°C for 1 second maximum duration.
- (13) 1/3 H.P. at 240 VAC, 1/8 H.P. at 120 VAC.

MECHANICAL SPECIFICATIONS



* LOAD MAY BE WIRED IN LOCATION A OR B
DC INDUCTIVE LOADS MUST BE DIODE SUPPRESSED
TO PREVENT DAMAGE TO THE I/O MODULE.



DIMENSIONS: INCHES (MILLIMETERS)
TOLERANCE: ±0.020 (±0.50)

AGENCY APPROVALS

UL
CSA
CE

For Contact information visit our web site.

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Specifications subject to change without notice.

 DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO					
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH. - Disconnect all power before installing or working with this equipment. - Verify all connections and replace all covers before turning on power. Failure to follow these instructions will result in death or serious injury.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION. - Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. - Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.	RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION - Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil - Vérifier tous connections, et remettre tous couverts en place avant de mettre sous De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.	GEFAHR EINES ELEKTRISCHEN SCHLAGES ODER EINER EXPLOSION. - Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen - Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE. - Spenda tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura - Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie	RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO - Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento - Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento O não cumprimento destas instruções pode levar à morte ou lesões sérias.

 WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO			
RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE - The product's side panels may be hot, allow time for product to cool before touching. - Follow proper mounting instructions including torque values. - Do not allow liquids or foreign objects to enter this product. Failure to follow this instruction can result in serious injury, or equipment damage.	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER - Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. - Respecter les consignes de montage, et notamment les couples de serrage. - Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG - Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. - Beachten Sie die Montageanweisungen, - Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.	
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD - Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. - Respetar las instrucciones de montaje, y en particular los pares de apretado. - No dejar que penetren líquidos o cuerpos extraños en el producto. Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO - I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. - Seguire le istruzioni di montaggio corrette. - Non far entrare liquidi o oggetti estranei in questo apparecchio. La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	RISCO DE DANO MATERIAL E DE AQUECIMENTO - Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. - Siga devidamente as instruções de montagem. - Não permita a entrada de líquidos e de objectos estranhos no produto. A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.	

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

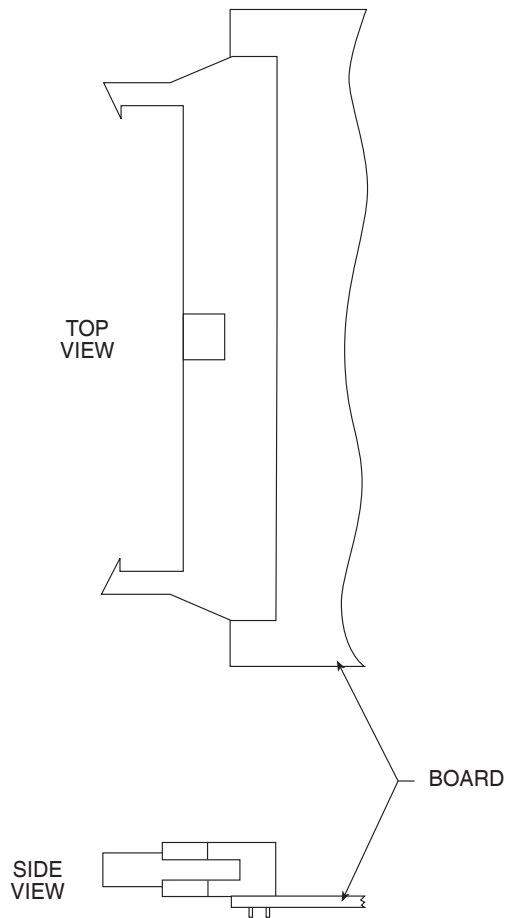
此附件所标示的包括电子信息产品污染图标的环境信息
符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**,
电子信息产品污染控制标识要求



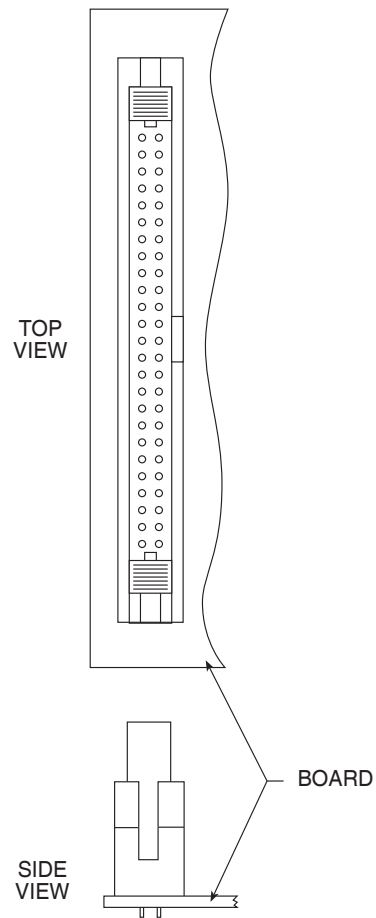
部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

HEADER CONNECTOR OPTION

"-C" CONNECTOR OPTION (1)



"-V" CONNECTOR OPTION (2)



NOTES: 1.) CONNECTOR IS BERG 65823-093 OR EQUIVALENT
2.) CONNECTOR IS CIRCUIT ASSEMBLY CA-50H-2B OR EQUIVALENT

TERMINAL OPTIONS FOR "M" AND "SM" I/O MOUNTING BOARDS

