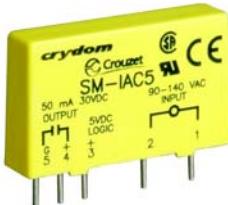


SM SERIES INPUT MODULES



- 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
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	24	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	3.0-6.0
Maximum Current [mA](10)	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0
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	1.0
Maximum Turn-Off Time [msec] (13)	20	20	20	1.0

SPECIFICATIONS (1)

Input

Part Number	SM-IDC24	SM-IDC5F	SM-IDC5N
Voltage Range	3.3-32 VDC/AC	4-32 V	10-48 VDC/AC
Maximum Current [mA](4)	34	68	34
Resistance [Ohms](2)(3)	1 k	500	1 k
Drop-out Current [mA](5)	1	1	1
Voltage for No Output [VAC/VDC](6)	2	2	4
Allowable Current [mA]	1.5	1.5	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]	24	5.0	5.0
Logic Supply Voltage Range [VDC]	20-30	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)	1.0	0.05	8.0
Maximum Turn-Off Time [msec] (13)	1.0	0.10	7.0

GENERAL SPECIFICATIONS

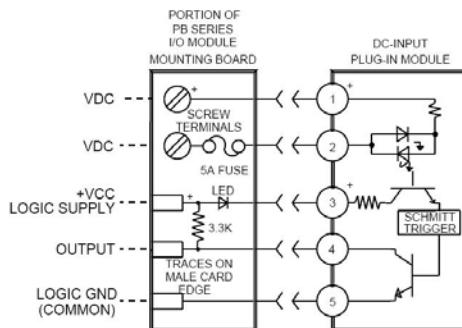
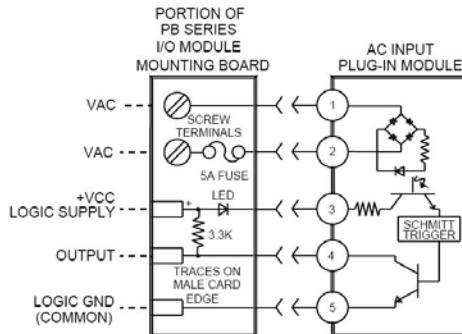
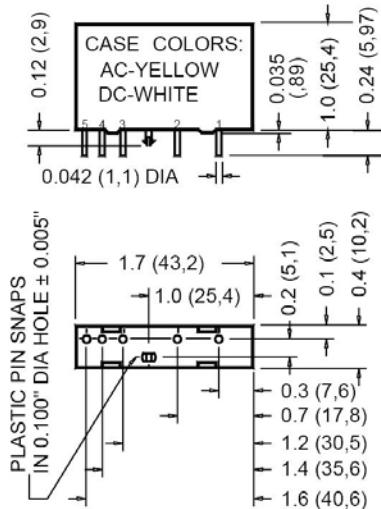
Description

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



E46203



38595



Rev. 121311

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO					
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION.	RISQUE DE DESCHARGE ELECTRIQUE OU EXPLOSION.	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSI ONE.	RISCO DE DESCARGA ELÉTRICA OU EXPLOSÃO.
<p>• Disconnect all power before installing or working with this equipment.</p> <p>• Verify all connections and replace all covers before turning on power.</p> <p>Failure to follow these instructions will result in death or serious injury.</p>	<ul style="list-style-type: none"> Desconectar todos los suministros de energía a este equipo antes de trabajar con este equipo. Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. <p>EI El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.</p>	<ul style="list-style-type: none"> 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 <p>De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.</p>	<ul style="list-style-type: none"> Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen Vor der Inbetriebnahme alle Anschlüsse überprüfen und alle Gehäuseteile montieren. 	<ul style="list-style-type: none"> Spenga tutta l'alimentazione che fornisce questa apparecchiatura prima del lavoro a questa apparecchiatura Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione <p>L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie</p>	<ul style="list-style-type: none"> 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 ligar o equipamento <p>O não cumprimento destas instruções pode levar à morte ou lesões sérias.</p>

⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO		
RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG
<ul style="list-style-type: none"> 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. <p>Failure to follow this instruction can result in serious injury, or equipment damage.</p>	<ul style="list-style-type: none"> 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. <p>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</p>	<ul style="list-style-type: none"> 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. <p>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</p>
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO	RISCO DE DANO MATERIAL E DE AQUECIMENTO
<ul style="list-style-type: none"> Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfrie 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. <p>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</p>	<ul style="list-style-type: none"> 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. <p>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</p>	<ul style="list-style-type: none"> 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. <p>A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.</p>

ANNEX - ENVIRONMENTAL 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	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

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Сотрудничество с глобальными дистрибуторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru
moschip.ru_4

moschip.ru_6
moschip.ru_9