

Quick Start for:

ControlLogix

1756sc-IF8U/1756sc-IF8UK—8-Channel Universal Analog Input Module

1756sc-CTR8/1756sc-CTR8K—8-Channel Counter/Flowmeter Module

1756sc-IC32/1756sc-IC32K—32-Channel 48 V Discrete Input Module

1756-RMS-SC/1756-RMSK-SC—8-Channel Power Monitor Module

Installation Instructions/User Manuals: Refer to our website www.spectrumcontrols.com for wiring diagrams and user manuals.

Wire Size and Terminal Screw Torque

Each terminal accepts up to two wires with the following restrictions:

Wire Type		Wire Size	Terminal Screw Torque
Solid	Cu- 90 °C (194 °F)	0.34-2.1 mm ² (14-22 AWG)	0.5 Nm (4.4 in-lbs)
Stranded	Cu-90 °C (194 °F)	0.34-2.1 mm ² (14-22 AWG)	0.5 Nm (4.4 in-lbs)

Ambient Temperature 0 °C ≤ T_{amb} ≤ 60 °C

Cat. No.	Backplane Rating	Signal Rating
1756sc-IF8U/ 1756sc-IF8UK	5.1 VDC, 230 mA 24 VDC, 75 mA Limited V/I	Voltage Input: 0-5 VDC, 1-5 VDC, 0-10 VDC, ±10 VDC Millivolt Input: ±50 m VDC, ±150 m VDC Current Input: 0-20 mA, 4-20 mA Other: RTD, Thermocouple, Resistance
1756sc-CTR8/ 1756sc-CTR8K	5.1 VDC, 230 mA 24 VDC, 75 mA	8 Gate Inputs: 30 VDC max 8 Inputs: 50 VAC max (70 V peak)
1756sc-IC32 1756sc-IC32K	5 VDC, 200 mA 24 VDC, 2 mA	32 Inputs 48 VDC max
1756-RMS-SC 1756-RMSK-SC	5.1 VDC, 160 mA 24 VDC, 100 mA	16 Inputs: Voltage Inputs 5 VRMS, 2.5 VRMS, 1 VRMS, 0.5 VRMS, 10.5 VAC p-p

PRECAUTIONARY WARNINGS

CAUTION ELECTROSTATICALLY SENSITIVE COMPONENTS

Before handling the module, touch a grounded object to rid yourself of electrostatic charge. When handling the module, wear an approved wrist strap-grounding device. Handle the module from the front, away from the backplane connector. Do not touch backplane connector pins. Lastly, keep the module in its static-shield container when not in use or during shipment.

+ NOTE: Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods [Article 501-4 (b) of the National Electrical Code, NFPA 70] and in accordance with the authority having jurisdiction.

+ The backplane power and the inputs of the device are only to be supplied by an Isolated Secondary Limited Energy Low Voltage source.

+ Note: Provision shall be made to prevent the rated voltage being exceeded by the transient disturbances of more than 140% of the peak rated voltage.

+ Note: The system shall be mounted in an ATEX-certified enclosure with a minimum ingress protection rating of at least IP54 as defined in EN 60079-0 and used in an environment of not more than pollution degree 2. The enclosure must have a door or cover accessible only by the use of a tool.



ATEX standard is as follows:

Ex European Union 2014/34/EU.

La norme ATEX est la suivante:

Ex Union européenne 2014/34/EU.

ATEX-Norm ist wie folgt:

Ex Europäische Union 2014/34/EU.

La norma ATEX è la seguente:

ai sensi della direttiva 2014/34/EU dell'Unione Europea.

La norma ATEX es la siguiente:

Directiva de atmósferas explosivas (Ex) de la Unión Europea 2014/34/EU.

ATEX standard is as follows:

Ex European Union 2014/34/EU.



ATEX Directive, compliant with:

Directive ATEX, conforme aux normes suivantes:

ATEX-Richtlinie, konform mit:

Direttiva ATEX, conforme a:

Directiva ATEX, conforme a:

EN 60079-0:2018 & EN 60079-7 :2015+A1 :2018

- 1756sc-IF8u/756sc-IF8uK: II 3 G Ex ec IIC T5 Gc UL 20 ATEX 2411X
- 1756sc-CTR8/1756sc-CTR8K: II 3 G Ex ec IIC T4 Gc UL 20 ATEX 2411X
- 1756sc-IC32/1756sc-IC32K: II 3 G Ex ec IIC T4 Gc UL 20 ATEX 2411X
- 1756sc-RMS/1756-RMSK : II 3 G Ex ec IIC T5 Gc UL 20 ATEX 2411X

CCC:

This product has obtained CCC certification and meets the requirements of GB/T3836.1-2021, GB/T3836.3-2021.

- GBEx 2021312310000324
- GBEx 2021312310000344

+ For use in Allen-Bradley 1756 or Honeywell Experion chassis.

+ For use with UL R/C AMP connector terminal block Model 147021-1 or 104956-1.

This equipment is suitable for use in Class I, Division 2, Groups A, B, C, and D or nonhazardous locations only.

WARNING-EXPLOSION HAZARD

- Substitution of components may impair suitability for Class I, Division 2.
- When in hazardous locations, turn off power before replacing or wiring modules.
- Do not disconnect equipment unless power has been switched off or the area is known to be nonhazardous.

AVERTISSEMENTS PRÉVENTIFS

+ Remarque : Des dispositions doivent être prises pour empêcher que la tension nominale ne soit dépassée par les perturbations transitoires de plus de 140 % de la tension nominale de pointe.

+ Remarque : Le système doit être monté dans une armoire homologuée ATEX présentant au minimum un indice de protection IP54 (conformément à la définition fournie dans la norme EN 60079-0) et doit être utilisé dans un environnement n'excédant pas le degré de pollution 2 (conformément à la définition CEI 60664-1). L'enceinte doit disposer d'un capot ou d'une porte amovible à l'aide d'un outil.

La norme ATEX est la suivante:

Ex Union européenne 2014/34/EU:

AVERTISSEMENT-RISQUE D'EXPLOSION

- La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I, Division 2.
- Dans les environnements dangereux, coupez l'alimentation avant de remplacer ou connecter des modules.
- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.

VORSORGLICHE WARNHINWEISE

+ Hinweis: Maßnahmen müssen ergriffen werden, um zu verhindern, dass die Nennspannung durch transiente Störungen von mehr als 140 % der Spitzennennspannung überschritten wird.

+ Hinweis: Das System muss in einem ATEX-zertifizierten Gehäuse mit einer minimalen Eindringenschutzart von mindestens IP54 gemäß EN 60079-0 montiert und in einer Umgebung mit einem maximalen Verschmutzungsgrad von 2 verwendet werden. Das Gehäuse muss eine Tür oder Abdeckung aufweisen, die nur unter Verwendung eines Werkzeugs zugänglich ist.

ATEX-Norm ist wie folgt:

Ex Europäische Union 2014/34/EU:

WARNING-EXPLOSIONSGEFAHR

- Der Austausch von Komponenten kann die Eignung für Class I, Division 2 beeinträchtigen.
- Vor dem Auswechseln oder der Verdrahtung von Modulen den Strom in gefährdeten Bereichen ausschalten.
- Gerät erst abtrennen, wenn der Strom ausgeschaltet ist oder der Bereich als nicht gefährdet eingestuft ist.

AVVERTENZE DI SICUREZZA

+ Nota: devono essere implementate misure adeguate per evitare che la tensione nominale sia superata da disturbi transitori di oltre il 140% del picco di tensione nominale.

+ Nota: l'apparecchiatura deve essere montata in un alloggiamento certificato ATEX con un livello di protezione ingresso minimo di almeno IP54 (come definito in EN 60079-0) ed utilizzata in un ambiente con grado di inquinamento non superiore a 2. L'alloggiamento deve avere una porta o una copertura accessibili soltanto previo utilizzo di uno strumento.

La norma ATEX è la seguente:

ai sensi della direttiva 2014/34/EU dell'Unione Europea:

AVVERTENZA-RISCHIO DI ESPLOSIONE

- La sostituzione di componenti può compromettere l'idoneità per Classe I, Divisione 2.
- In ambienti pericolosi, spegnere l'alimentazione prima di sostituire o cablare moduli.
- Non scollegare l'apparecchiatura senza aver spento l'alimentazione o essersi accertati che l'ambiente non sia pericoloso.

ADVERTENCIAS DE PRECAUCIÓN

+ Nota: Se deberá disponer de medios para impedir que se rebasa la tensión nominal a causa de perturbaciones transitorias de más del 140 % de la tensión pico nominal.

+ Nota: El sistema debe montarse en una envolvente con certificación ATEX y que presente una clase de protección de al menos IP54, tal y como esta se define en la norma EN 60079-0; debe usarse en un entorno que presente un grado de contaminación no superior al 2. La envolvente debe presentar una puerta o una cubierta accesible únicamente mediante una herramienta.

La norma ATEX es la siguiente:

Directiva de atmósferas explosivas (Ex) de la Unión Europea 2014/34/EU:

ADVERTENCIA-PELIGRO DE EXPLOSIÓN

- La sustitución de cualquier componente podría perjudicar a la aptitud para la Clase I, División 2.
- En una ubicación peligrosa, apague la alimentación antes de sustituir o cablear cualquier módulo.
- No desconecte los equipos a no ser que haya apagado la alimentación o tenga la certeza de que el área no es peligrosa.

预防性警告

应采取适当措施来防止峰值电压因瞬态干扰而超过额定电压的 140%。

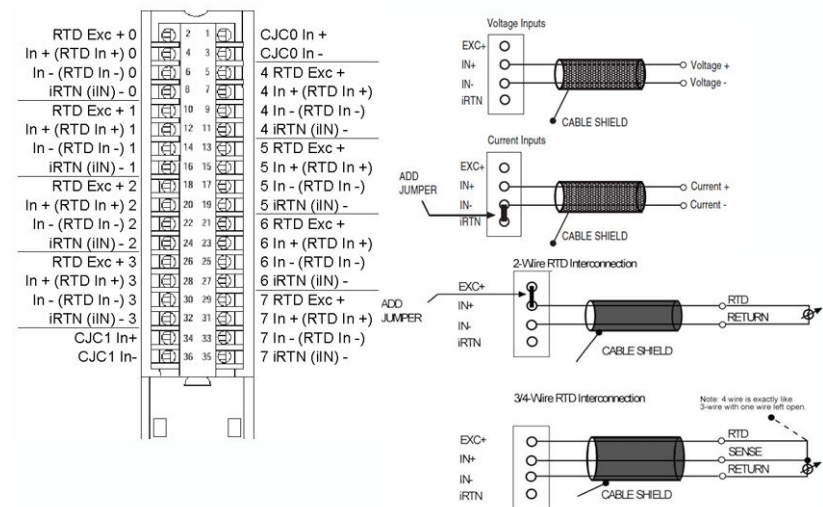
该系统应安装在GB 3836.1所定义的最低防护等级至少为IP54的外壳中，并在不超过GB / T 16935.1。定义的污染等级2的环境中使。外壳必须具有只能使用工具才能触及的门或盖。

- **警告：爆炸危险** 更换部件可能导致设备不再适用于1级2区危险环境。
- 在危险环境中更换模块或为模块配线时，务必先关闭电源。
- 除非已关闭电源或已知所在区域无危险，否则请勿断开设备的连接。

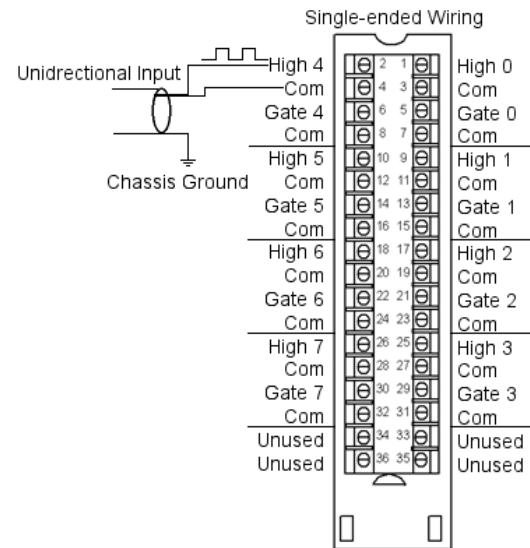
本产品已取得CCC认证，符合GB/T3836.1-2021, GB/T3836.3-2021标准要求。

Wiring Diagrams:

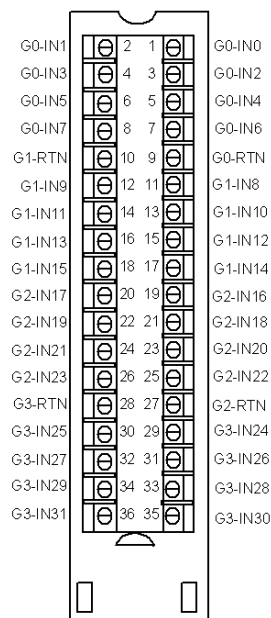
1756sc-IF8u-Channel Universal Analog Input Module



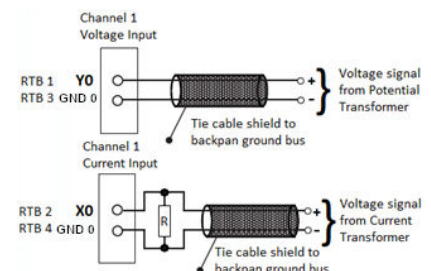
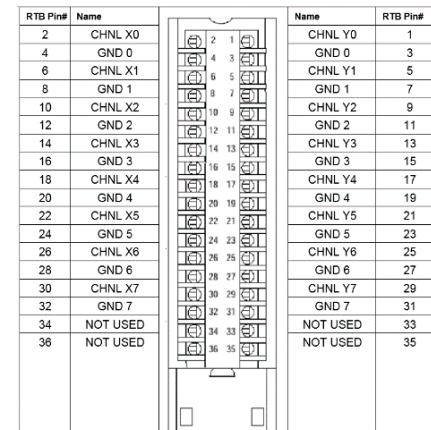
1756sc-CTR8-Channel Counter/Flowmeter Module



1756sc-IC32-Channel 48 V Discrete Input Module



1756-RMS-SC-8-Channel Power Monitor Module



产品中有害物质的名称及含量
Name and content of hazardous substances in product

模块名称 Module name(s)	有害物质 Hazardous substances					
	铅 Lead (Pb)	汞 Mercury (Hg)	镉 Cadmium (Cd)	六价铬 Hexavalent Chromium (Cr(VI))	多溴联苯 Polybrominated Biphenyls (PBB)	多溴二苯醚 Polybrominated Diphenyl Ethers (PBDE)
1756sc-IF8U 1756sc-CTR8 1756sc-IC32 1756sc-CTR8 CC 1756sc-IF8u CC 1756sc-IF8H Hart Differential 1756sc-IF8H Hart Differential CC 1756sc-OF8H 1756sc-OF8H CC 1756sc-RMS						
印刷电路板组件 Printed Circuit Board Assemblies	X	O	O	O	O	O
金属部件 Metal Components	O	O	O	O	O	O
塑料部件 Plastic Components	O	O	O	O	O	O

本表格依据SJ/T 11364B的规定编制。This table is made per guidance of SJ/T 11364
O: 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
O: Indicates that this hazardous substance contained in all of the homogeneous materials for the part is below the limit requirement in GB/T 26572.
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。
X: Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in GB/T 26572.
(企业可在此处，根据实际情况对上表中打“X”的技术原因进行进一步说明。)
(According to actual situation, extra explanations can be given here for the technical reasons of items with "X".)