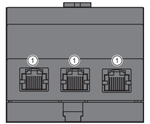
SIEMENS

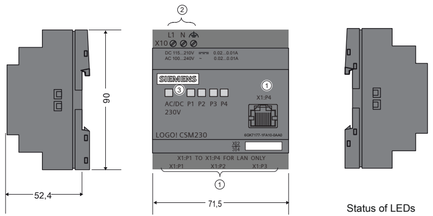
LOGO!

Installation, Connection, Technical specifications

CSM 230 Order number: 6GK7177-1FA10-0AA0 Release 01/2013

A5E03733191-06 Product information





① RJ-45 jacks for connections via Ethernet (10/100 Mbps)

② Three screw terminals:
L1 Conductor
N Neutral Conductor
Noiseles earth

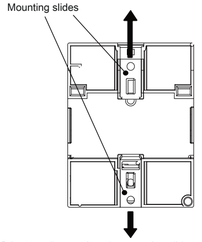
③ LED for the power supply (AC/DC 230V) and LEDs for the Ethernet communication status (P1 - P4)

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Status of LEDs

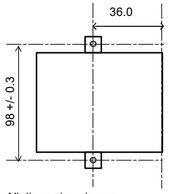
LED	Status	Meaning
AC/DC 230V	Off	Power is not connected or the connected power is too low.
AC/DC 230V	On	Power is connected.
P1 - P4	Off	No connection via Ethernet (link down).
P1 - P4	On	The connection via Ethernet is established (link up).
P1 - P4	Flashing	LOGO! receives / sends data via Ethernet.

Wall mounting



Prior to wall-mounting, the mounting slides on the back of the device are pushed open.

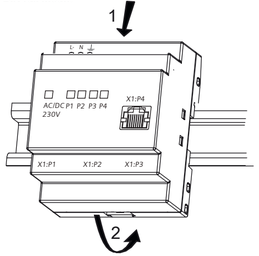
Hole pattern for wall mounting



All dimensions in mm

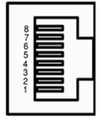
○ Hole for screw Ø 4 mm
Tightening torque 0.8 ... 1.2 Nm

DIN rail mount



1. Fit the LOGO! onto the DIN rail.
2. Press down the lower part until the device locks in place. The mounting slide on the back must snap into place.

RJ-45 jacks with MDI-X assignment



Pin 8 - n. c.
Pin 7 - n. c.
Pin 6 - TD -
Pin 5 - n. c.
Pin 4 - n. c.
Pin 3 - TD +
Pin 2 - RD -
Pin 1 - RD +

Technical specifications

Ethernet interface	
Communications connector	4 x RJ-45 jacks with MDI-X assignment 10/100 Mbps (half / full duplex), autopolarity, autonegotiation
Network cable	A standard Ethernet cable can be connected to the Ethernet interface. However, to minimize electromagnetic interference, Siemens recommends a shielded Ethernet cable with a twisted pair (category 5) with a shielded RJ-45 connector at both ends.
Largest data packet	1518 byte
Smallest data packet	64 byte
Delay resulting from latency	When a frame passes through the CSM 230, it is delayed by the store and forward function of the switch: - with a 64 byte frame length by approx. 8 µs (at 100 Mbps). - with a 1518 byte frame length by approx. 125 µs (at 100 Mbps).
Topology	Star and bus topology Note that the direct connection of two ports on the switch or accidental connection over several switches causes an illegal loop. Such a loop can lead to network overload and network failures.
Insulation of the ports	All ports adhere to 1.5 kV insulation voltage: - to shield - between the ports.
Learnable MAC addresses	1024
Aging Time	300 seconds
Electrical specification	
Input voltage	AC 100 ... 240 V DC 115 ... 210 V
Permitted line power frequency	AC 47... 63 Hz
Current consumption (I)	- AC 100 ... 240 V: 0.05 ... 0.03 A - DC 115 ... 210 V: 0.02 ... 0.012 A
Effective power loss	1.8 W
Connection	Per terminal for L+ and M Cable cross section: 1 x 2.5 mm² or 2 x 1.5 mm² Tightening torque 0.57 Nm (5 lb in) Use 75 °C conductors only. Use copper conductors only.
Functional grounding	Functional grounding can be established by connecting a cable from terminal 3, for example to the DIN rail. Such a cable should be kept as short as possible. Grounding is, however, not necessary for interference-free operation.

Technical specifications

Further technical specifications	
Operating temperature	0 … 55°C
Transport/storage temperature	- 40°C … +70°C
Relative humidity during operation	< 90% (no condensation)
Dimensions (W x H x D) in mm	72 (4 TE) x 90 x 55 mm
Net weight	155 g
Installation	35 mm DIN rail (DIN EN 60715 TH35) or wall mounting
Degree of protection	IP 20

Approvals

You will find the currently valid approvals on the type plate.

cULus C-Tick	- UL 508 Listed - CSA C22.2 Number 142 AS/NZS 2064 Class A
cULus Haz.Loc. FM	You can use the device in the following hazardous locations: IND. CONT. EQ., E223122, UL 1604, UL 2279-15 UL 60079-0, 6th Edition, UL 60079-15, 4th Edition CSA C22.2 No. 60079-15, 1st Edition – Issue 2012/01/01 CSA C22.2 No. 60079-0, 1st Edition – Issue 2007/03/01 FM3600 and 3611: CL. I, Div. 2, Group A, B, C, D, T4 CL. I, Zone 2, Group IIC, T4, Ta = 55°C

Installation

For use in Pollution Degree 2 Environment

Prior to installation, connecting up and commissioning, read the relevant sections in the LOGO! manual:
http://support.automation.siemens.com/WW/view/en/50074616
Entry ID: 50074616

When installing and connecting up, keep to the procedures described in the LOGO! manual.

To fulfill the requirements according radiated emission EN 55022 Class B, the shield of all connected LAN cables must be grounded.

CE

The product meets the requirements and aims of the following EC directives:

EU Directive 2004/108/EC "Electromagnetic Compatibility" (EMC Directive)
- Emission: EN 55022 Class B: 2010
- Immunity: EN 61000-6-2: 2005

EU Directive 2006/95/EC "Low Voltage Directive" (LVD)
- Safety: EN 61131-2: 2008

The EC Declaration of Conformity is available for all responsible authorities at:

Siemens Aktiengesellschaft
Industry Automation, I IA SC CI
Postfach 4848
D-90026 Nuernberg
Germany

You will find the EC Declaration of Conformity for this product on the Internet at the following address:

http://support.automation.siemens.com/WW/view/en/10805878
→ Tab "Entry List"
Filter settings: Entry type: "Certificates"
Certificate Type: "Declaration of Conformity"
Search items(s): <name of the module>

Sources of information and other documentation

The "SIMATIC NET Industrial Ethernet Network Manual" contains detailed information on the network structure, maximum cable lengths, cabling technology etc.

http://support.automation.siemens.com/WW/view/en/27069465
Entry ID: 27069465

You will find additional information on the Siemens LOGO! Web page:

http://www.siemens.com/logo

Important notes

Notice
Always ensure that the wiring of your LOGO! is compliant with current rules and standards. Also, conform with all national and regional regulations when you install and operate the devices. For information on standards and regulations that apply to your specific case, contact your local authorities.

Warning
Modules of a LOGO! are open equipment. This means that you must install LOGO! only in an enclosure or cabinet. You will find more detailed information in the LOGO! manual.

Danger
This product can only function correctly and safely if it is transported, stored, set up, and installed correctly, and operated and maintained as recommended. Connecting and disconnecting may only be performed by an electrical specialist. Connect or disconnect power supply cables only when the power is turned off!

Notices regarding use in hazardous areas

Warning - Explosion hazard
Risk of explosion when connecting or disconnecting the device
Do not connect or disconnect equipment when a flammable or combustible atmosphere is present.

Warning - Explosion hazard
Replacing components
Replacing components may impair suitability for class I, division 2 or zone 2.

Warning
Requirements for the cabinet/enclosure
When used in hazardous areas corresponding to Class I, Division 2 or Class I, Zone 2, the device must be installed in a cabinet or a suitable enclosure.

Wichtige Hinweise

Hinweis
Stellen Sie sicher, dass Sie bei der Verdrahtung Ihrer LOGO! alle geltenden und verbindlichen Richtlinien und Normen befolgen. Beachten Sie bei Installation und Betrieb der Geräte die entsprechenden nationalen und regionalen Vorschriften. Erfragen Sie bei den Behörden vor Ort die Normen und Vorschriften, die für Ihren speziellen Fall zu befolgen sind.

Warnung
Baugruppen einer LOGO! sind offene Betriebsmittel. Das heißt, Sie dürfen LOGO! nur in Gehäuse oder Schränke einbauen.
Weitere Informationen finden Sie im Handbuch zu LOGO!

Gefahr
Der einwandfreie und sichere Betrieb des Produkts setzt sachgemäßen Transport, sachgemäße Lagerung, Aufstellung und Montage sowie sorgfältige Bedienung und Instandhaltung voraus. Das Anschließen/Abklemmen darf nur von einer Elektrofachkraft durchgeführt werden! Leitungen für die Spannungsversorgung dürfen nur in spannungslosem Zustand angeschlossen oder abgeklemmt werden.

Hinweise für den Einsatz im Ex-Bereich

Warnung - Explorsionsgefahr
Explosionsgefahr beim Anschließen oder Abklemmen des Geräts
In einer leicht entzündlichen oder brennbaren Umgebung dürfen keine Leitungen an das Gerät angeschlossen oder vom Gerät getrennt werden.

Warnung - Explorsionsgefahr
Austausch von Komponenten
Der Austausch von Komponenten kann die Eignung für Class I, Division 2 oder Zone 2 beeinträchtigen.

Warnung
Anforderungen an den Schaltschrank
Bei Einsatz in explosionsgefährdeter Umgebung entsprechend Class I, Division 2 oder Class I, Zone 2 muss das Gerät in einen Schaltschrank oder in ein Gehäuse eingebaut werden.

Remarques importantes

Remarque
Assurez-vous toujours que le câblage de votre LOGO! est conforme aux règles et normes en vigueur. Lors de l'installation et de l'utilisation des appareils, respectez également les réglementations nationales et régionales. Consultez les administrations locales pour savoir quelles normes et réglementations doivent être appliquées dans votre cas particulier.

Attention
Les modules de LOGO! sont des équipements ouverts. Cela signifie que que vous devez installer LOGO! uniquement dans un boîtier ou une armoire.
Vous trouverez davantage d'informations dans le manuel de LOGO!

Danger
Un transport, un stockage, une installation et un montage en bonne et due forme ainsi qu'une manipulation et un entretien effectués avec soin sont des conditions préalables essentielles pour que le matériel puisse fonctionner parfaitement et en toute sécurité. Seul un électricien qualifié est autorisé à effectuer le branchement/débranchement ! Il est interdit de brancher ou de débrancher des câbles d'alimentation sous tension.

Consignes pour une mise en oeuvre en atmosphère explosible

Attention - Danger l'explosion
Danger d'explosion lors de la connexion ou déconnexion de l'appareil
Il est interdit, dans un environnement facilement inflammable ou combustible, de connecter des câbles à l'appareil ou de les déconnecter.

Attention - Danger l'explosion
Echange de composants
L'échange de composants peut porter préjudice à la conformité à Class I, Division 2 ou Zone 2.

Attention
Exigences relatives à l'armoire électrique
En cas d'utilisation en atmosphère explosible selon Class I, Division 2 ou Class 1, Zone 2, l'appareil doit être incorporé à une armoire électrique ou à un boîtier.

Avvertenze importanti

Nota
Accertarsi sempre che il cablaggio di LOGO! sia conforme alle regole e alle norme correnti. Durante l'installazione e l'uso dei dispositivi attenersi alle norme nazionali e regionali vigenti. Per informazioni sulle norme e le prescrizioni applicabili al proprio caso specifico rivolgersi agli enti locali preposti.

Avvertenza
I moduli LOGO! sono dispositivi elettrici aperti e vanno pertanto installati in un case o un armadio. Ulteriori informazioni si trovano nel manuale di LOGO!

Pericolo
Il funzionamento coretto e sicuro del prodotto presuppone un trasporto, un magazzinaggio, un'installazione e un montaggio appropriati nonché un comando e una manutenzione accurati. Il collegamento/la rimozione possono essere eseguiti solo da personale elettrico specializzato! I cavi per l'alimentazione possono essere collegati o rimossi solo in assenza di tensione.

Avvertenze per l'impiego in zone Ex

Avvertenza - Pericolo di esplosione
Pericolo di esplosione durante il collegamento o la rimozione dell'apparecchio
In un ambiente facilmente infiammabile o incendiabile non devono essere collegati o scollegati cavi dall'apparecchio.

Avvertenza - Pericolo di esplosione
Sostituzione di componenti
La sostituzione di componenti può compromettere l'idoneità per Dlass I, Division 2 o Zone 2.

Avvertenza
Requisiti richiesti per il quadro elettrico
In caso di impiego in ambiente a rischio di esplosione secondo la Class I, Division 2 o Class I, Zone 2, l'apparecchio deve essere montato in un quadro elettrico o in una custodia.

Indicaciones importantes

Nota
Vigile siempre que el cableado del LOGO! cumpla todas las reglas y normas vigentes. Observe asimismo todos los reglamentos nacionales y regionales durante el montaje y la operación de los dispositivos. Para más información sobre las normas y reglamentos aplicables a su caso específico, contacte con las autoridades locales.

Advertencia
Los módulos LOGO! son material eléctrico abierto. Por tanto, LOGO! debe montarse en una carcasa o armario eléctrico.
Encontrarán más informaciones en el manual sobre LOGO!

Peligro
El funcionamiento correcto y seguro del producto presupone que se realicen correctamente el transporte, el almacenamiento, la instalación y el montaje así como un manejo y un mantenimiento esmerados. Las operaciones de conexión y desconexión deben ser realizadas sólo por electricistas profesionales. Los cables de alimentación de tensión se deben conectar o desconectar sólo en estado sin tensión.

Indicaciones para el uso en la zona Ex

Advertencia - Riesgo de explosión
Riesgo de explosión al conectar o desconectar el aparato
En una atmósfera fácilmente inflamable o combustible no se deben conectar cables al aparato ni desconectarlos del mismo.

Advertencia - Riesgo de explosión
Sustitución de componentes
La sustitución de componentes puede mermar la aptitud para la Class I, Division 2 o Zone 2.

Advertencia
Requisitos exigidos al armario de distribución
Para el uso en atmósferas potencialmente explosivas según Class I, Division 2 o Class I, Zone 2, el aparato se tiene que montar en un armario de distribución o en una carcasa.

重要事项

说明
始终确保 LOGO! 的接线符合当前的规定和标准。 并且确保设备的安装和操作符合国家和地区的所有规定。 请联系本地机构了解您具体情况下应遵守的标准和规章。

警告
LOGO! 模块是开放式设备。 也就是说，LOGO! 必须安装在外罩或者机柜中。
在 LOGO! 使用手册中有详细说明。

危险
只有正确地运输、存储、设置和安装本产品，并且按照推荐的方式操作和维护，产品才能正常、安全地运行。
只能让电气专业人员执行连接和断开操作。
只能在电源已关闭的情况下连接或断开电源电缆。

有关在危险场所使用的通用注意事项

警告 – 爆炸危险
连接或断开本设备时有爆炸风险
请勿在易燃环境下连接或断开设备。

警告 – 爆炸危险
更换组件
更换组件可能损害在 I 级 2 分区或 2 区的适用性。

警告
机柜/机壳要求
在相当于 I 级 2 分区或 I 级 2 区的危险环境下使用本设备时，必须将其安装在机柜或适当的机壳内。