Title (en)

Device for controlling an assembly

Title (de)

Anordnung zum Steuern einer Anlage

Title (fr)

Agencement de commande d'une installation

Publication

EP 2511984 A1 20121017 (DE)

Application

EP 12163231 A 20120404

Priority

DE 102011001961 A 20110411

Abstract (en)

The arrangement for controlling a system, comprises a control and/or data transmission module (1) for mounting on a mounting rail (2), E/A connector modules (3), and an expansion module (9). Each connector module comprises: terminal contacts for connecting the system; plug-in contacts for mounting on the control and/or data transmission module in such a manner that, in the fitted state, an electrical connection is formed between the plug-in contacts and the control and/or data transmission module; and an electrical circuit element. The arrangement for controlling a system, comprises a control and/or data transmission module (1) for mounting on a mounting rail (2), E/A connector modules (3), and an expansion module (9). Each connector module comprises: terminal contacts for connecting the system; plug-in contacts for mounting on the control and/or data transmission module in such a manner that, in the fitted state, an electrical connection is formed between the plug-in contacts and the control and/or data transmission module; and an electrical circuit element (11) arranged, in the current path, between the terminal contact and the plug-in contacts. The electrical circuit element comprises a passive and/or active electrical component such as a resistor, a filter inductor, a capacitor, a semiconductor circuit, a direct current/direct current voltage converter, a signal conditioner, a line driver, and/or a safety relay. The safety relay comprises an alarm contact, which is connected to the plug-in contacts. The plug-in contacts comprise a housing, and the electrical circuit element is disposed within the housing and/or the terminal contact is arranged outside of the housing. The electrical circuit element is: attachable from outside the housing to the terminal contact disposed at the housing; connectable to the connector module by pushing on the terminal contact; and connectable to the connector module by attaching to a second part of the terminal contact. The connector module is designed such that the system is connected with the connector module via the terminal contact and via a first part of the terminal contact to the connector module. The second part of the terminal contacts is spaced from the first part of the terminal contact. The control and/or data transmission module is configurable as a pluggable connector module. The expansion module is connected with the data transmission module such that, in the connected state, an electrical connection is formed between the expansion module and the data transmission module. The connector module is arranged on the expansion module such that the electrical connection is formed between the connector module and the expansion module. The plug-in contacts, in the area in which the connector module rests on the data transmission module, comprises a width of 12 mm and a height of 18 mm.

Abstract (de)

Gegenstand der Erfindung betrifft eine Anordnung zum Steuern einer Anlage, mit einem Steuerungs- und/oder Datenübertragungsmodul (1) zum Aufrasten auf eine Montageschiene (2) und einer Mehrzahl von E/A Steckmodulen (3), wobei jedes E/A Steckmodul (3) eine Mehrzahl von Klemmkontakten (8) zum Anschließen der Anlage aufweist, jedes E/A Steckmodul (3) eine Mehrzahl von Steckkontakten (5) zum Aufstecken auf das Steuerungs- und/oder Datenübertragungsmodul (1) derart aufweist, dass im aufgesteckten Zustand eine elektrische Verbindung zwischen dem E/A Steckmodul (3) und dem Steuerungs- und/oder Datenübertragungsmodul (1) hergestellt ist, und wenigstens ein E/A Steckmodul (3) ein elektrisches Schaltungselement (11) aufweist und das elektrische Schaltungselement (11) im Strompfad zwischen wenigstens einem Klemmkontakt (8) und wenigstens einem Steckkontakt (5) angeordnet ist. Durch die erfindungsgemäße Anordnung wird es in Schaltschränken mit hohen Packungsdichten möglich, dass die installierten Automatisierungslösungen (1, 3) äußerst flexibel an geänderte Anlagenanforderungen angepasst werden können.

IPC 8 full level

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CPC (source: EP US)

H01R 4/4816 (2023.08 - EP US); **H01R 9/2458** (2013.01 - EP); **H01R 9/2625** (2013.01 - EP); H01R 4/484 (2023.08 - EP US)

Citation (search report)

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- [XI] DE 202007005373 U1 20080821 - WEIDMUELLER INTERFACE [DE]
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CN113228837A; EP3610566A4; US10971921B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (application)

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