

Explosion protection

Manufacturers / Users / Operators

Directive 94/9/EC **Standard**

Free conformity for marking in the EU

CE 0344

Complies with the requirements of the EU

Ex

Complies with the EU marking requirements of the ATEX

Temperature class

Temperature class	Temperature range	Temperature class
T1	100-125°C	T4
T2	125-150°C	T5
T3	150-200°C	T6
T4	200-300°C	
T5	300-350°C	
T6	350-450°C	

Complies with the EU marking requirements of the ATEX

Equipment group

[Ex] II (1) GD

Ex II (1) GD

Ex II (1) GD

[E Ex ia] IIC T6

Ex

Users / Operators

Standard

Directive 1999/92/EC

Ex

PHOENIX CONTACT

INNOVATION IN INTERFACE

Free explosion protection poster

NEW POSTER

Free Explosion Protection Poster

The implementation of the ATEX Directives has prompted us to produce a wall mounting poster explaining the definitions and descriptions surrounding the referencing of product approvals.

The poster has been designed to provide a basic understanding for manufacturers, users and operators of the new standards with details of key information on such items as CE marking, temperature class, categories, and types of protection, to aid the selection of the ATEX approved components including rail mounted terminals, surge protection devices and interface products.

The A2 size full colour poster, primarily aimed at the Oil & Gas industry is equally of benefit to other industries where electrical equipment is installed in hazardous environments. It is available free of charge by using the faxback reply form.

NEW DATA CD

Free ATEX datasheets on CD

To complement our extensive CLIPLINE range of rail-mounted terminals, which are supplied, as standard and no extra cost, in the ATEX-compliant versions, we are now offering a free CD containing downloadable datasheets.



This means that CLIPLINE users who make equipment for hazardous areas now have the convenience of printing out data sheets and ATEX compliance certificates at no cost. These documents are ideal for inclusion in the project documentation, which is demanded by today's end users of automation systems.

Although the ATEX Directive relates specifically to equipment for hazardous areas, all users of rail-mounted terminals can benefit from the latest enhancements to the CLIPLINE range. To meet ATEX requirements, the terminals themselves are subjected to additional inspection and testing, which means that greater than ever levels of quality and performance are assured.

The CD-ROM is also of value to all users, as the datasheets that it includes are a valuable reference source for information on dozens of different terminals and accessories included in the range. In addition to the ATEX compliance certificates, it also features certificates relating to UL, GL, and FM approvals.

CLIPLINE ATEX-compliant rail-mounted terminals are available with a choice of screw-clamp, spring cage or QUIX insulation-displacement connectors. Both spring-cage and QUIX types offer greatly reduced wiring time, compared with conventional screw-clamp terminals and, in addition, they ensure that an efficient, low resistance connection is made with each conductor, without the need to use torque screwdrivers or other special tools.

The range also includes space-saving multi-level terminals, which permit very high wiring densities to be achieved, and is supported by a comprehensive family of marking products, jumpers and other accessories.

Complete the faxback reply form for your free copy.

FEATURES

- **Free Explosion Protection Poster** page 1
- **Free ATEX datasheets on CD** page 1
- **RJ 45 IP67 Plug Connector to the IAONA Standard** page 2
- **New Miniature Panel PC** page 2
- **Compact Double-level Spring Cage Terminal Blocks up to 6mm²** page 3
- **Clean Cutting of Wiring Ducts** page 3
- **Through Hole Reflow technology manual** page 4
- **Phoenix Contact transfers its Headquarters to Telford** page 4
- **Events – Exhibition and Conferences** page 4

RJ 45 IP67 Plug Connector to the IAONA Standard

The Variosub RJ 45 plug connector to protection category IP67 has been selected by IAONA for use in heavy-duty environments. The standard-compliant Variosub RJ 45/67 provides tool-free, push-pull locking and compatibility with the standard RJ45 plug.



The Variosub RJ 45 plug connector to protection category IP 67

As an independent platform for industrial Ethernet, IAONA's Planning and Installation Guide describes company-neutral, normative solutions for planning, installing and setting up industrial Ethernet networks. In the edition published for the SPS/IPC/Drives 2003 trade fair, the Variosub plug connector described in the draft standard IEC 61076-3-106 is documented as an RJ 45-based solution.

In addition to providing protection against dirt and moisture, to protection category IP67, it is built to withstand the chemical conditions and mechanical strains present in harsh industrial environments. The components are amply screened against adverse EMC conditions. The plug connector is suitable for Fast Ethernet transmissions at 100 Mbps and corresponds to the Cat5 requirements in accordance with EN 50173.

We have developed an entire installation concept based on this plug connector: Hence there are products such as sleeves, female connectors, couplings and pre-assembled cables available for most industrial installations.

NEW PRODUCTS

New Miniature Panel PC

With increasing pressures on Machine Builders to reduce machine sizes and enhance performance while reducing costs, we have developed a new rugged miniature panel PC designed for the OEM market. Showing for the first time in the UK at the Machine Building exhibition in February 2004, stand C88, the PPC5006 comes with a six inch LCD display, touch screen and full VGA or optionally available as a blind node.

PLC relay and cabling system and 6" LCD touch screen display



If required the unit can be supplied with an integral Soft-PLC, eliminating the need for multiple devices and reducing cabinet sizes to a minimum. Up to three slots enable connection to bus couplers for Interbus, Profibus, CANopen or DeviceNet, for maximum network connectivity.

Other products on show will be the PLC relay and cabling systems now available for selected PLC's including Mitsubishi, Siemens, Allen Bradley, Omron and Delta V, together with the latest additions to the range of industrial power supplies.

NEW PRODUCT

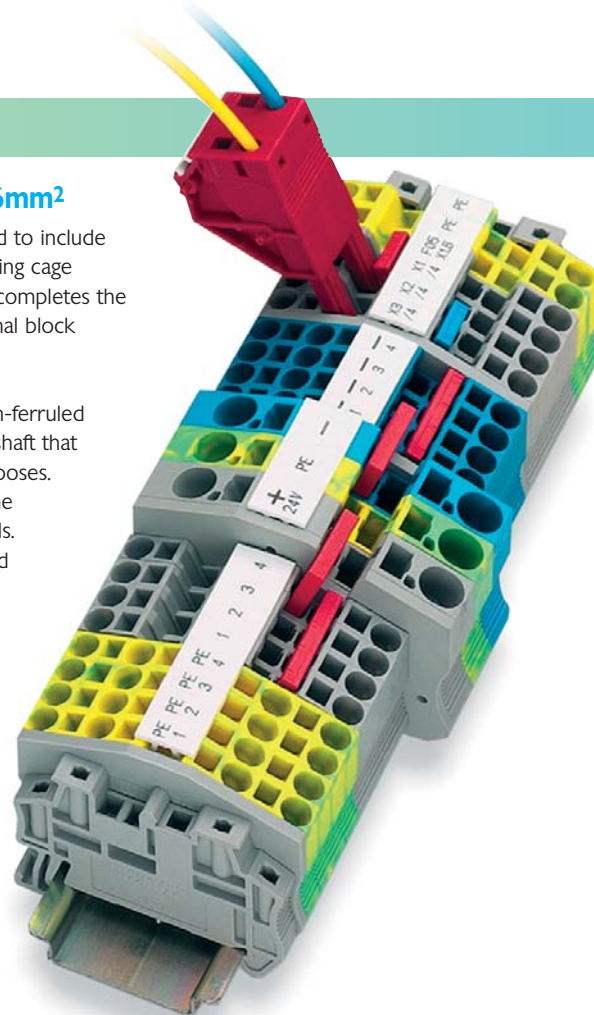
Compact Double-level Spring Cage Terminal Blocks up to 6mm²

The ST-Desk series of spring cage terminal blocks has now been expanded to include STS 6 universal terminals and the STS 6 TWIN three-wire terminal. The spring cage terminal blocks feature angled conductor entry with a compact design. It completes the product range of existing terminal types in two, three and four-wire terminal block variants for the 2.5 and 4mm² nominal cross-sectional areas.

The ST6-DESK will accept ferruled cables from 0.25mm² to 6mm² and non-ferruled cables up to 10mm². The 6mm² terminal blocks provide a double bridge shaft that carries out all individual bridging activities and can be used for testing purposes. Since the bridge shafts for these spring cage terminal blocks have the same profiles as the 2.5 and 4mm² terminals, they may be used as feed terminals. With the RB-ST 6 to 4/2.5 stepdown-bridger, the current can be distributed both to the left and to the right onto terminals with smaller nominal cross-sections.

Every ST-Desk terminal type possesses a large labeling surface in the middle of the terminal. This ensures clear identification of the clamps even when plugged in.

The ST-DESK series is part of a comprehensive range of spring cage terminals from Phoenix Contact including fuse, disconnect and pluggable all of which share common accessories reducing stock holdings and increasing flexibility.



Compact Double-level Spring Cage Terminal Blocks

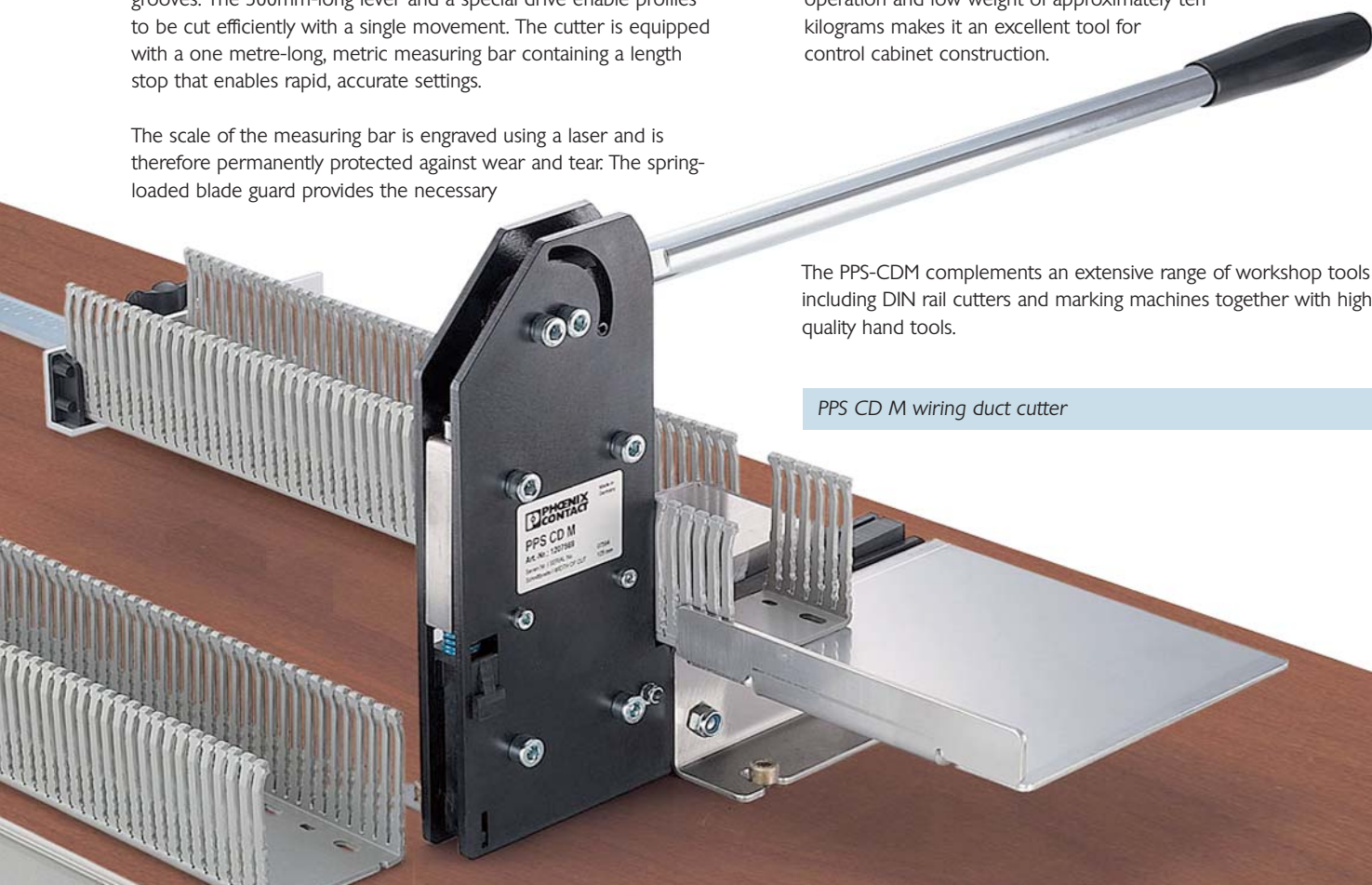
NEW PRODUCT

Clean Cutting of Wiring Ducts

The PPS CD M wiring duct cutter slices through wiring ducts and covers up to 125mm wide and 2.5mm thick without ridges or grooves. The 500mm-long lever and a special drive enable profiles to be cut efficiently with a single movement. The cutter is equipped with a one metre-long, metric measuring bar containing a length stop that enables rapid, accurate settings.

The scale of the measuring bar is engraved using a laser and is therefore permanently protected against wear and tear. The spring-loaded blade guard provides the necessary

degree of safety, while further mounting options offer the demanded stability when using the cutting machine. Its simple operation and low weight of approximately ten kilograms makes it an excellent tool for control cabinet construction.



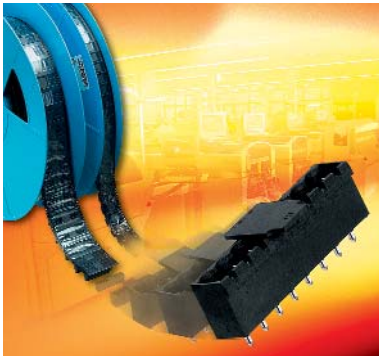
The PPS-CDM complements an extensive range of workshop tools including DIN rail cutters and marking machines together with high quality hand tools.

PPS CD M wiring duct cutter

NEW

Through Hole Reflow technology manual

The rapid developments in PCB manufacturing technology and the future evolution of new Directives on lead free has prompted us to create a technical manual on THR technology.



THR Technology

The 36 page, A5 pocket size manual designed in full colour, covers key topics including comparisons of different production methods, the integration of THR in the SMT process and a step by step implementation guide.

Suitability of components, PCB layout, tape-on-reel packaging and the use of pick and place machines are also explained, as is the

standard temperature profile to DIN EN 61760-1. In addition soldering evaluation criteria in accordance to IPC-A-610C is covered for the THR process and its impact on reliability and quality inspection of the final product.

We have also included details on the time and cost savings benefits of using the software design tool COMBICON SELECT available from our web site.

Primarily created for PCB Designers, the manual is equally of benefit to Production Engineers involved in process development and Contract Manufacturers working with companies involved in these future developments.

Free copies are available by completing the Faxback reply form.

READER SERVICE

Please copy, check and fax back to 01952 681799

Name _____

Title _____

Dept. _____

Company _____

Address _____

Post Code _____

Phone _____

E-mail _____

I am interested in:

- Ex poster Panel PC Duct cutter
- Ex CD PLC cabling THR
- RJ 45 ST-Desk

How can we help?

- Please send me literature on the above
- Please call me regarding the above

EVENTS

Machine Building

the exhibition for machine building,
automation and design

Machine Building Exhibition

11-12 February 2004
Hall 12, NEC, Birmingham
www.machinebuilding.co.uk

Hazard Ex

Coventry 18 - 19 February 2004

Hazard Ex Exhibition

18-19 February 2004
Britannia Royal Court Hotel,
Coventry
www.hazardexonthenet.net



ASI-tech 2004 Exhibition

2 March 2004, County Durham
4 March 2004, Bristol
www.asi-interface.com

NEW PREMISES

Phoenix Contact transfers its Headquarters to Telford

We have transferred our Headquarters to Halesfield, Telford, from Wokingham, Berkshire, to place us at the heart of UK manufacturing.

This move has generated local jobs, in addition to those of our existing staff, to enhance our sales, marketing, logistics and administrative functions for a growing customer and distributor base.

We have created purpose-designed customer areas for on-site meetings, training courses and a permanent exhibition in one central location with easier access to the motorway network.

Further information on the location and contact details can be found on the company web site www.phoenixcontact.co.uk.



UK Managing Director Tim O'Shea outside the new Telford offices



Update is published by

www.phoenixcontact.co.uk

Phoenix Contact Ltd

Halesfield 13

Telford

Shropshire

TF7 4PG

E-mail

info@phoenixcontact.co.uk

Tel: 01952 681700

Fax: 01952 681799