

GENERAL CATALOGUE 2006/2007

Control & Switching Components



realizing

Advanced Industrial Automation

OMRON



GENERAL CATALOGUE 2006/2007

Control & Switching Components

www.omron-industrial.com

Control & Switching Components

This catalogue features products that are ideally suited for use in today's control panels. What makes our products so special is that they are designed to deliver high performance and total reliability. With Omron's control and switching components in your automation system your products never fail, and your production never stops.

The attached CD-ROM contains comprehensive information of our control and switching components. In addition you can find our latest innovations on www.omron-industrial.com or give us a call!



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Omron – a global corporation

...right on your doorstep



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Omron Corporation

Omron Industrial Automation is a leading manufacturer of technologically advanced industrial automation products and worldwide supplier of application expertise. It is part of the global Omron Corporation, which has been anticipating and meeting social needs since 1933. Using pioneering technology Omron has developed into a \$5 billion global manufacturing company in sensing and control.

Omron continues to make significant contributions in a wide variety of fields such as industrial automation, electronic and automotive components, and healthcare. Omron Industrial Automation technologies can be found in factories and machines all over the world. Our solutions continue to be flexible and innovative, but our standards remain rigid: never stop, never fail, just create!

Omron Industrial Automation Europe

In Europe we have maintained a leading position in machine and industrial automation for over 30 years. Our infrastructure is designed to think globally while acting locally. From sales, application knowledge and support to R&D and customised production, we can support your needs wherever you are located, and through every step of your manufacturing process.

You'll find Omron's expertise in control systems, motion & drives, sensing, safety and control components.

- 50 years in industrial automation
- Over 24,000 employees
- Support in every European country
- Over 1,800 employees in 18 European countries
- 8% of turnover invested in R&D
- More than 200,000 products
- More than 6,950 patents registered to date

Application support

As an Omron customer you have unprecedented support from our application engineers, who can advise you on-site anywhere in Europe. We can carry out tests on your design on-site or demonstrate a new product without disturbing or halting your production process.



“From the moment you contact Omron you get direct access to our application expertise, wherever and whenever you need it...”

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◀ European manufacturing

Omron has manufacturing sites in s'Hertogenbosch, the Netherlands and Nufringen, Germany where, in addition to our standard product range, we can provide fast and flexible customised solutions using on-site R&D facilities and expertise. Both factories meet very strict quality assurance standards, and are the forefront of meeting global environmental standards. Omron actively welcomes visitors to these facilities.



◀ Online support

Omron's website is designed to provide fast, no-nonsense support, enabling you to quickly find the latest information on manuals, data sheets and brochures, read about our latest product releases, and check out the most frequently asked questions. You can also download our latest software versions or patch upgrades along with 2-D and 3-D CAD drawings. All the support you need is available on www.omron-industrial.com.



◀ European Repair Centre

Omron has set up a special repair service with DHL that enables your product to be collected, repaired and returned within 5 days. This repair service is totally free of charge for products under Omron's warranty conditions, and includes a direct collection and delivery at your site. You can get more information about this service at www.repair.europe.omron.com.

Smart Platform

One software – One connection – One minute



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Total machine integration with the robustness offered by PLCs and the flexibility of the IPC. What was a dream in the eighties, a vision in the nineties is now materialising into reality.

Enabling complete machine and plant automation from one single platform without having to worry about field-buses, integration of various software and above all without being locked with one dominant supplier. FDT/DTM, messaging across networks and Internet are the main contributors.

Our aim is to minimize the time and effort you spend in automation and focus your resources in creativity. Hence our motto JUST CREATE!

The Smart Platform concept is built around three major advantages for the user:

- One software
- One connection
- One minute



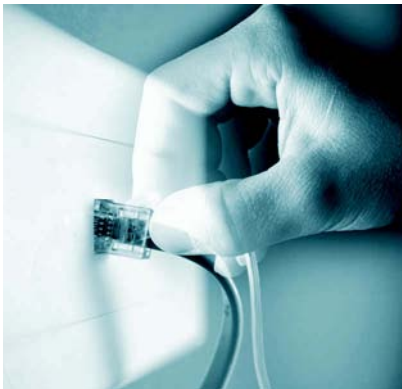
Easy programming and configuration with Omron's CX-One software.

For a demonstration and to order your 30 days' trial version for free please visit www.smartplatform.info



One software

CX-one allows you to control, visualise, position, detect and regulate from one automation suite.



One connection

No matter what device, what fieldbus and what task you are performing, one connection is all you need to give you full access to your machine.



One minute

Drag & drop, plug and work in minutes to control, visualise and maintain your machine.

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... just create

Why Smart Platform?

Smart Platform can help you increase the flexibility and efficiency of your machines or production lines. It provides:

- A single software environment for your machine covering sensing, regulation, control, motion, and visualisation.
- Easy drag & drop object-based programming and configuration of the complete system.
- Communications and architecture that is network independent.
- Distributed intelligent devices that are self-reporting and self-maintaining to reduce downtime and identify the source of production problems.



New products

G3ZA – Multi-channel power controller



Main features and benefits

- Compact size
- Capable of driving up to eight SSRs
- Connects to RS-485 Compoway-F network (ModBus in preparation)
- Better performance with standard SSRs
- Lower noise than with Phase Angle (SCR) control
- Lower peak current when using offset control

Compact and easy to integrate!

The G3ZA can control up to 8 solid state relays (SSRs) via a single RS-485 2-wire link to your PLC or PC. There's no need for conversion units or digital output cards – the G3ZA automatically converts the power control signal into a more manageable trigger signal for standard SSRs.

This multi-channel power controller uses a special trigger method and offset control to provide precise heater power regulation. It's faster than standard SSR switching, and it's less noisy and more cost-effective than phase angle control. Available in four versions, the compact G3ZA is easy to install, program and operate.

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E5_N series – Temperature controllers

UP DATE



COLOUR CHANGE DISPLAY



Main features and benefits

- High-intensity LCD display with a wide viewing angle
- 3 colour change PV for easy status recognition
- 11-segment display for easy-to-understand text
- Unique 2-PID for optimum control performance
- Easy set-up and operation
- Customisable menus and parameter protection
- PC software tools for parameter cloning, setting and tuning
- Basic (2-step) programmer
- (Partial) heater-break and SSR short-circuit detection system, for 1- or 3-phase configurations
- Loop break alarm and sensor break alarm (with forced MV option)

Evolution in temperature control

Based on the success of the new E5CN series, Omron has introduced upgrades of the E5AN and E5EN temperature controllers.

Each model's back-lit LCD display gives better resolution and sharper digits with a wide viewing angle. These E5_N models are easy to install, configure and operate. They provide maximum temperature control performance, thanks to Omron's unique 2-PID control.



K8 series – Monitoring relays

The smart way to protect your system

The K8 series offers a complete range of first-class quality monitoring products, all in compact 22.5 mm wide DIN-rail housing. The K8 series includes single-phase relays that monitor current or voltage variations, three-phase relays that monitor phase-sequence, phase asymmetry, phase-loss or voltage variations, and a conductive level controller.

With innovative features, these relays provide timely warnings of system errors. This series of just eight models offers you a flexible one-stop-shopping solution for your monitoring requirements.

Typical applications include monitoring generator voltages, providing chain breakage protection for conveyors, checking battery voltage, protecting pumps against idle running, monitoring phase sequence or phase loss on escalators, and monitoring liquid levels in tanks.

- Main features and benefits
- LED status indication
 - Clear setting of SV, HYS, output ON, delay timer and start-up timer
 - Compact 22.5 mm DIN-rail housing, with a depth of 100 mm and a height of 90mm
 - Space-saving design of K8AB-PA, -PM, and -PW
 - Full installation details on side of product
 - Configuration DIP switches
 - This new range has been certified for CE approval; UL certification is pending

K8AB-TH – Temperature monitoring relay



Protect your heating application

The K8AB-TH is a temperature-monitoring relay that embodies both temperature-alarm functionality and simple ON/OFF temperature control. The unit is designed specifically for monitoring abnormal temperatures to prevent excessive temperature increases and to protect equipment. It comes in a slim housing with a width of just 22.5 mm suitable for DIN-rail or direct panel mounting. Settings are selected by DIP switches, making the K8AB-TH easy to configure.

- Main features and benefits
- Flexibility: simple and intelligent features for temperature alarm
 - Easy to set up, field-configurable DIP switch for multi-input and unit selection
 - Space-saving design, compact and slim (22.5 mm wide) DIN-rail & direct panel mounting
 - Only 4 application-specific models, high- and low-temperature range, 24 V or 100-240 V
 - Change-over type output relay, with or without latching and front button reset
 - Self protecting against power or unit failure thanks to selectable relay fail-safe mode
 - Clear status indication; one LED for power and SV protection, one LED for alarm and unit condition



S8VM – Power supplies

For fast and accurate action to minimise machine downtime

Featuring a new undervoltage alarm with a unique troubleshooting function, S8VM power supplies provide not only a clear indication that a DC output voltage drop has occurred, but also indicate the likely cause – allowing fast, effective corrective action to be taken.

The S8VM series is also designed for direct, easy DIN-rail mounting. And supporting today’s trend towards ever-greater downsizing in industrial equipment, the series comes in a new ultra-compact housing that, depending on output power, can be up to 40 % smaller than conventional ‘compact’ power supplies.

Excellent reasons then, for choosing Omron’s new S8VM power supplies. Designed by Omron to provide optimum quality management of your industrial processes and ease of maintenance.

Main features and benefits

- Timely, efficient on-site troubleshooting for optimum quality management
- New ultra-compact housing supports cabinet downsizing
- Early-warning system
- Easy installation
- Broad product range of DC output voltages from 5 V up to 24 V and in powers from 15 W to 150 W

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E5CSV – Temperature controller



Main features and benefits

- Easy setting-up using DIP and rotary switches
- End-user friendly since the menu only has 3 parameters
- Meets broad range of basic temperature-control requirements with only 4 models
- No expert knowledge needed to optimise performance because of Self- and Auto-Tuning functions

The easy way to perfect temperature control

The E5CSV temperature-controller series is the enhanced successor to our E5CS series, the most widely sold temperature-controller that has established itself throughout the world as the ideal choice for simple, cost-effective temperature control.

The new series shares many of the outstanding features that made its predecessor such a success – including easy setting up, a large 7-segment LED display and choice of control with Self-Tuning.

Building on the success of the previous E5CS, however, the new E5CSV series offers much more. Like an Auto-Tune function and the fact that as standard you can now select multiple input types (thermocouple/RTD).

A new 3.5 digit display also means that E5CSV can show a larger range, now extending up to 1999 °C. The series also meets new RoHS requirements and complies with the stringent IP66 standard. What’s more, depth has been reduced to a mere 78 mm.