

# **Total Automation & Safety Solutions**

Proven world-class automation & safety products





- » Innovative technologies
- » Easy to use, install and integrate
- » Powerful solutions



# Omron delivers engineering expertise and cost effective Automation and Safety solutions

With over 80 years in the control business, OMRON Automation and Safety is a leading global supplier of automation systems.

Omron manufactures products to help you improve the quality and efficiency of everything you make. Our broad range of proven automation and safety products bring you an extra measure of value in space savings, ease-of-use, and down-time reducing diagnostics.

We can help you simplify design, reduce engineering effort and lower installation costs. It all adds up to providing greater machine reliability, increased throughput, and a competitive advantage for you.

#### **Omron Facts**

- » 80 years in the automation and controls business, founded in 1933
- » \$6.5 billion sales (USD, April 2013)
- » 40% of our sales come from industrial automation. Electronic components, social systems, automotive electronics and healthcare make up the balance
- » 35,411 employees worldwide

# **Primary Industries Served**

- » Automotive
- » Food/Beverage
- » Semiconductor
- » Electronics and Small Parts Assembly
- » Pharmaceutical/Cosmetics

### **Automation Expertise**

- » Packaging & Material Handling
- » Measurement & Gauging
- » Inspection
- » Track & Trace
- » Quality Improvement



Quick Link and SpeedSPEC Shortens Your Search





# **Photoelectric Sensors**

# E3FA/E3FB & E3RA/E3RB

Full line-up of cylindrical M18 threaded photoelectric sensors designed for standard or special applications





- Compact plastic or nickel-plated brass housing in straight or 90° angled designs.
- High power red LED for improved power and sensing distance.
- IP67, IP69K for wash down resistance.
- Comparable sensors: Banner S18, Sick V18 & MH15, P+F GLV18

# **Proximity Sensors**

# E<sub>2</sub>B



- M8 M30 sizes, Single or Double sensing distances in Short or Long body housing
- All-around 360° visible output indicator.
- · Laser-etched part numbers that won't wear off.
- IP67 water resistance.

# Fiber-optic Amplifier and Sensor Heads

# E3X-HD & E32-Series

Wide selection of shapes, environmentresistant, and special beam fiber optic heads to pair with the E3X-HD amplifier.







- Simple one-button smart tuning for intuitive sensor set-up.
- Dual digital display to easily confirm settings and sensor status.
- Automatic compensation function for debris build-up or sensor misalignment.
- Comparable sensors: Keyence FS-N & FS-V, Panasonic FX-300, Banner DF-G1 & D10 series

# XS2F/XS3F **Connector Cables**

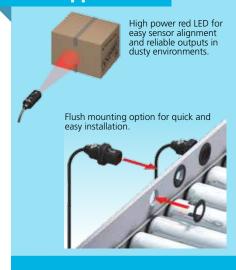
M8 and M12 cordsets to pair with connector type sensors.





- Single-ended cables with M8 and M12 connectors available in a variety of lengths
- PVC and PUR cable materials available
- IP67 water resistance

# E3FA applications



# E32 applications

Small fiber beam spots

are ideal for detecting minute targets.



# E2B applications



# **Power Supplies**

# S8VK-G

Reliable and Easy Operation Switch Mode Power Supply





- Large venting on top allows heat to escape quick allowing the S8VK-G to last longer
- Space-saving compact design.
- 15/30/60/120/240/480 W models available
- Safety standards for worldwide applications Power Boost to 120% of rated current

# S8VK-G Design Flexibility



# Temperature Controllers and Temperature Sensors

# **E5** C

**Easy-to-Read Large White LCD Display** 



**Quick Link** 

R635



- Omron's E5\_C series offers a variety of temperature controllers designed to meet many of today's needs
- 60 mm depth allows E5\_C series controllers to be used in shallow electrical panels
- Unique flat front allows E5\_C series to mount flush on a panel enclosure

# E52

A great variety of high-precision temperature sensors.





- Sheathed platinum resistance thermometer, sheathed thermocouple.
- Broad line offering which can be order in many different lengths
- Completes the temperature controller bundling package

# **Monitoring Relays**

# **K8AK-AW**

**Current Monitoring Alarms** 



- 22.5mm wide housing
- Single Phase & 3-Phase Monitoring
- Over & Under Current Monitoring
- Over & under Voltage Monitoring
- Phase loss & Phase Failure Monitoring

# **K8AK-TH**

**Temperature Monitoring Alarms** 



- Multi-input support for thermocouple or Pt100 and Pt1000 sensor input
- Changeover relay: fail-safe selectable
- Single or two point level control
- · Level controller can be used as a float switch

# **General Purpose Relays**

# MK-S series

**Exceptionally reliable General-Purpose Relay** 





# MY series

Versatile plug-in relay that sets the standard





- Exceptionally reliable General Purpose Relay with lockable test button.
- Octal base style relay which contains 2 and 3 pole contact configuration
- Mechanical indicator is standard on all models

- Track Record of One Billion Relays Sold Worldwide
- · Multi-pole configuration and compact size makes MY series ideal for various applications
- Standard LED indicator allows operators to visually check relay operation

# **General Purpose Relays**

# LY series

Miniature power relay







# G2RV

General purpose plug-in ultra slim 6mm





- Compact, General Purpose 15-A and 10-A Relays ideal for many applications.
- · LED indicator which allows user to instantaneously check relay operating status
- Capable of switching 15A resistive and inductive loads

- 6mm width capable of switching 6A @ 250VAC
- Strong mechanical pins makes allows G2RV to easily mount into socket
- LED indicator allows operator to easily check relay operation

# Solid State Relays

# G3RV

Slim 6mm wide Plug-in Solid State Relay



# **G3NE**

Compact, low-cost, SSR switching 5 to 20A





- Solid state plug-in ultra slim 6mm relay ideal for automation applications
- · Strong mechanical pins allows G3RV to easily mount into socket
- · LED indicator allows operator to easily check relay operation

- Quick connect terminals #110 (line side) and #250 (load side) make installation quick and easy
- · Thin profile allows G3NE to be used in limited space conditions

# **Push Buttons**

# **A22R/M22R**

22 mm Dia. Lighted/Non-Lighted Pushbutton Switches





- · Shiny metal bezel
- · Short mounting depth
- Easy to wire
- Pushbutton, Selector, Key-selector, and Indicator are available

# **Basic Switch Product**

# **Z** series

**Most Popular Basic Switches** 



- Best selling basic switch boasts wide variety, high precision
- 15A switching capacity
- Long life, high-accuracy and high quality
- Micro load models available
- Molded terminal-type models available

# **Basic Switches**

# A series

Basic Switches designed for High-capacity Switching





- High capacity switch handles 20A loads with large inrush currents
- Long life with high-accuracy and high quality
- Direct switches loads such as motors, halogen lamps and solenoids

# X series

**Basic Switches designed for DC circuits** 





- Direct current switch with AC / DC load rating 10A @ 125VDC/AC
- Incorporates a magnet in the contact mechanism to deflect the arc
- Ideal for switching DC circuits
- · Wide variety of actuators for a wide applications

# **Limit Switches**

# ZE/ZV/ZV2 series

**High Breaking Capacity Switches** 





- Large 15 A, 250 VAC switching
- Long service life
- Wide range of actuators
- Rugged die-cast aluminum housing

# **WL-N** series

**Robust Single-Pole/Double Break Switches** 





- Rugged die-cast aluminum housing with high mechanical strength
- Rated IP67 with waterproof, oil-tight and dust-proof construction
- · Easy to install and maintain
- Wide range of actuators

# **Emergency Stop Devices**

# **ER6022**

Rope Pull Emergency Stop Switch - Spans to 80m



SpeedSPEC

CM

# A22E E-Stop Switch – 22mm





- · Rope tension indicator makes setup easy
- IP67 (NEMA 6) for wet environments
- Manual reset button can only be operated with proper tension on rope



- · Lighted and Non-lighted versions
- Push-pull to push-turn manual reset
- Direct opening mechanism to open the circuit when the contact welds

# Safety Interlock Switches

# **CM** series

Coded Magnetic Safety Interlocks and Controllers



- Combine door switch and E-stop monitoring
- Monitor multiple switches
- Stainless steel available for harsh environments

# D4N Safety Limit Switch SpeedSPEC D4N sti.com

- Conforms to international standards
- · High contact reliability for standard and microloads
- Slow-action and snap-action models with isolated contacts

# **Safety Interlock Switches**

# D4NS

**Safety Door Switch** 





- Up to 3 contacts with metal or plastic operation head
- High contact reliability for standard and microloads
- M12 connector models available

# D4SL-N

**Guard Lock Safety-Door Switch** 



**SpeedSPEC** 

D4SLN

- Super compact, 6-contact
- Reduced wiring time with connector models
- Drive low current solenoids directly from controller

# **Programmable Relays**

# ZEN

**CPU Units/Expansion Units** 



- · Easy to use
- For small scale Control Applications
- Offers precision and space savings



# CP1E/L/H

**CPU Units/Expansion Units** 





- Fully featured Compact PLC family.
- Integrated Ethernet available.
- Integrated Analog available.

# **AC Drives**

# **AC Drives**

**Multi-function Compact Inverters** 





- V/Hz or sensorless control
- Built-in Modbus
- Safety Features

# **Human Machine Interface**

# **NB** series

**Operator Interface Terminals** 





- Value displays from 3.5 to 10.1 inch.
- Feature-rich standard interface with class leading color, brightness, and longevity, as well as timesaving maintenance/troubleshooting options.

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