

Environment resistance

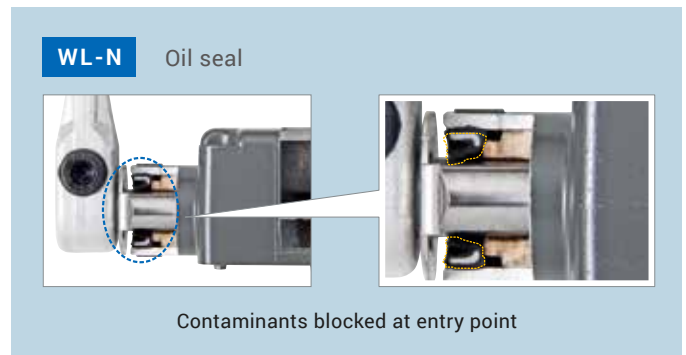
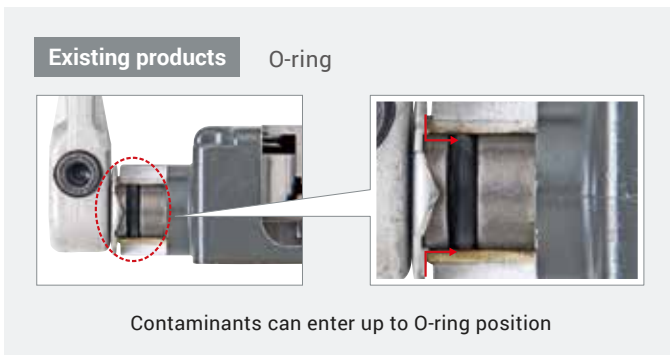
Stabilizing operation of infrastructure equipment by boosting environment resistance

Stable operation is a must for construction elevators, railway gates, and other infrastructure equipment. These machines, however, often operate under harsh conditions, with high humidity, dust (sand, soil, etc.), and electrical noises, that raise their risk of failure compared to devices used within factories.



Delivering environment resistance and high reliability under harsh conditions such as high temperatures, high humidity, and dust

The WL-N limit switch, used to detect construction elevator cage position and the opening and closing of elevator doors, employs our unique oil seal structure to keep out contaminants. This allows for better resistance against contamination by oil and other substances compared to existing devices, reducing the risk of failure. The P1 weather-resistant WL-N limit switch can be used outdoors.



P-level reliability (estimated failure rate of 1 / 10 million uses)

The WL-N limit switch is standardly equipped with crossbar contacts with high contact reliability to support standard loads and micro loads. With 5 VDC and 1 mA resistive load, the environment resistant WL-N model delivers high P-level reliability (whereas the WL model is of N-level reliability).

| | | |
|------|---------|-----------------------------------------------|
| WL | N-level | Estimated failure rate of 1 / 2 million uses |
| WL-N | P-level | Estimated failure rate of 1 / 10 million uses |

Once a contact has been used to open and close a load, it can no longer be used for lower loads.

Preventing control panel issues by using site-appropriate products

Device failure in infrastructure equipment and at construction sites can lead to major accidents. Control panels equipped with devices such as relays, power supplies, and monitoring relays therefore must be of a quality suited for use in construction site environments.

Highly-sealed plug-in terminal relays for your environment and purpose

Plastic sealed relay MYQ

High reliability even in dusty environments and environments that can cause salt damage.



Hermetically sealed relay MYH

High reliability even in environments with flying dust and corrosive gases (such as chloric, sulfuric, and silicone gases).



Power supplies with PCBs coating for better humidity/dust resistance

Our power supplies support ambient operating temperatures of -40° C to 70° C and humidity of up to 95%, with PCBs coated for dust resistance, allowing for use in cold to tropical regions and in humid and dusty environments. They meet safety standards even in altitudes as high as 3,000 m with low air pressure. * 1

S8VK-S

(Single-phase 100 to 240 VAC input)



S8VK-WA

(Three-phase 200 to 240 VAC input)

S8VK-WB

(Three-phase 380 to 480 VAC input)



* 1. Refer to the datasheets for S8VK-S (Cat. No. T205-E1-11) and S8VK-W (Cat. No. T219-E1-08) for information on supported standards.

Monitoring relays with less risk of failure caused by inverter noise from motors

Our noise-resistant products have higher noise resistance compared to existing devices, reducing the risk of failure caused by inverter noise from motors of construction elevators and other infrastructure equipment. Our monitoring relays (K8AK/K8DS) detect power supply failures in motors.

| Existing products | Condenser voltage divider method | K8AK/K8DS | Switching-mode power supply method | K8AK Series | K8DS Series |
|-------------------|----------------------------------|-----------|------------------------------------|-------------|-------------|
| | | | | | |
| | Heating caused by inverter noise | | No heating | | |

Existing general phase-sequence/phase-loss and other relays use the condenser voltage divider method, which could lead to heating caused by inverter noise. The K8AK/K8DS Series ensures safe and reliable use by employing the switching-mode power supply method, which prevents heating caused by inverter noise and similar factors.

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* The product photographs and figures that are used in this catalog may vary somewhat from the actual products.

Note: Do not use this document to operate the Unit.

OMRON AUTOMATION AMERICAS HEADQUARTERS • Chicago, IL USA • 847.843.7900 • 800.556.6766 • automation.omron.com

OMRON CANADA, INC. • HEAD OFFICE

Toronto, ON, Canada • 416.286.6465 • 866.986.6766 • automation.omron.com

OMRON ELECTRONICS DE MEXICO • HEAD OFFICE

Ciudad de México • 52.55.5901.4300 • 01.800.386.6766 • mela@omron.com

OMRON ELECTRONICS DE MEXICO • SALES OFFICE

San Pedro Garza García, N.L. • 81.12.53.7392 • 01.800.386.6766 • mela@omron.com

OMRON ELECTRONICS DE MEXICO • SALES OFFICE

Eugenio Garza Sada, León, Gto • 01.800.386.6766 • mela@omron.com

OMRON ELETRÔNICA DO BRASIL LTDA • HEAD OFFICE

São Paulo, SP, Brasil • 55 11 5171-8920 • automation.omron.com

OMRON ARGENTINA • SALES OFFICE

Buenos Aires, Argentina • +54.11.4521.8630 • +54.11.4523.8483
mela@omron.com

OTHER OMRON LATIN AMERICA SALES

+54.11.4521.8630 • +54.11.4523.8483 • mela@omron.com