

Important safety information

Be sure to read this section before starting use.

When designing and manufacturing a unit using CKD products, the manufacturer is obligated to ensure safety of the system operated by the mechanism with electrical control. It is important to select, use, handle and maintain the products appropriately to ensure that the CKD product is used safely. Observe warnings and precautions to ensure unit safety. Confirm that unit safety is ensured, and manufacture a safe unit.

A WARNING

■ Use the products within their product specifications.

This product must be used within its stated specifications. Use with load or speed exceeding the specifications range may result in damage, operation faults, or inaccurate operation. It must not be modified or machined. This product is intended for use as a unit or part for general-purpose industrial machinery. It is not intended for use outdoors or for use under the following conditions or environment.

(Note that this product can be used when CKD is consulted prior to use and the customer consents to CKD product specifications. The customer must provide safety measures to avoid risks in the event of problems.)

- Úse for special applications for which safety is required, including but not limited to nuclear energy, railways, aircrafts, marine vessels, vehicles, medicinal devices, devices or applications coming into contact with beverages or foodstuffs, amusement devices, emergency cutoff circuits, press machines, brake circuits, or safety devices or applications.
- 2 Use for applications where life or property could be adversely affected and special safety measures are required.
- Do not touch any moving parts while the unit is running. This would lead to injury.
- 3 Do not stop the input shaft abruptly while the output section is operating.
 - If the input shaft is stopped abruptly with an inverter, load torque exceeding the design value may apply causing the unit to be damaged resulting in the table to overrun, which causes serious injury or damage on the entire unit.
 - If it should be stopped for emergency to ensure safety, think of a procedure to avoid abrupt stopping and select the unit of size that can withstand the load torque of an emergency stop.
- 4 Do not service or inspect the units while power is being supplied.

It may sudden run due to an error or control circuit failure resulting in injury.

5 Do not use this product in an environment where explosion or corrosion may occur.

▲ CAUTION

■ The installation of the unit to the machinery should be conducted by a qualified person who has knowledge of machine assembly.

Incorrect installation may cause injury or damage of the unit.

2 Start/Stop the unit when it is in dwell intervals.

If the input shaft is started/stopped at a spot other than dwell section, load torque exceeding the design value applies resulting in damage.

When the input shaft is equipped with a position detection cam, check its position periodically for any misalignment.

If there is a misalignment due to a loosened screw, the unit may malfunction resulting in injury.

- 4 Do not use the products in the environment where water or oil may be splashed over the unit. (no condensation) CKD products are not water-proof nor splash-proof. If water or oil is splashed, the unit may malfunction or get damaged. Provide countermeasures such as a cover if water or oil may be splashed.
- Units are filled with lubricating oil. Oil may seep out of oil seal while being used. Conduct periodic inspection and provide countermeasures such as an oil drip pan if this may cause a product defect.
- The precautions are ranked as "DANGER", "WARNING" and "CAUTION" in this section.

DANGER: When a dangerous situation may occur if handling is mistaken leading to fatal or serious injuries, and when there is a high degree of emergency to a warning.

WARNING: When a risk of death or serious injury is expected if the product is misused.

CAUTION: When a risk of minor injury or property damage is expected if the product is misused.

Note that some items described as "CAUTION" may lead to serious results depending on the situation. All these items are very important. Be sure to observe all of these.

Limited warranty and disclaimer

Terms and conditions of warranty

The warranty period and scope of warranty are defined as below.

Term of warranty

The warranty period is 1 year from the first delivery to the customer. (The running time per day is assumed to be 8 hours or less.) When the product reaches its service life specified in the catalogs/specifications within 1 year, this shall be the period for warranty.

2 Scope of warranty

In case any defect attributable to CKD is found during the warranty period defined above, CKD shall, at its own discretion, repair or replace the product in whole or in part with no charge.

This Limited Warranty will not apply to:

This limited warranty shall not apply to:

- (1) Use contrary to conditions/environment specified in its product specifications,
- (2) Abuse/misuse due to carelessness or incorrect management,
- (3) Failure caused by factors other than the product,
- (4) Use other than original design purposes,
- (5) Modification and/or repair after delivery on the construction, performance, or specification which CKD does not approve and has no knowledge of.
- (6) Failure which could have been avoided if the customer's system in which the product is installed is equipped with the industry standard functionality,
- (7) Failure due to causes not foreseeable with the technology at the time of delivery,
- (8) Failure attributable to external factors including but not limited to fire, earthquake, flood, lightning, other force majeure, pollution, salty or gaseous atmosphere, abnormal voltage, etc.
- (9) Failure caused by the component supplied or specified by the customer.
- (10) Failure due to wear or deterioration of the repair parts such as bearings and oil seals.

The service life of optional parts (switches and drive system parts) varies depending on the operation conditions, and they should be warrantied under the terms and conditions specified by the manufacturer.

The warranty covers the actually delivered product, and does not cover any damage resulting from losses induced by faults in the delivered product.

3 Limited warranty for export

- The product should be returned to our plant or the company/plant which CKD specifies for any warranty services. The cost of returning the product shall not be covered by the warranty.
- The repaired product shall be delivered to the specified location in Japan in domestic packing specifications.

The terms and conditions of warranty define the fundamental conditions. The terms and conditions specified in the specification drawing or the specification sheet take precedence if they differ from the terms and conditions specified here.

4 Compatibility confirmation

The customer is responsible for confirming the compatibility of CKD products with the customer's systems, machines and equipment.

Precautions for export

Security trade control

The products in this catalog and their related technologies may require approval before export or provision.

To contribute to world peace and safety, there may be cases in which approval under the Foreign Exchange and Foreign Trade Control Law is required depending on the country to where the product or related technology is being exported or provided.

The scope of products and related technologies requiring approval are listed in the Export Trade Control Order Appendix Table 1 or Foreign Exchange Order Appendix Table. The Export Trade Control Order Appendix Table 1 and Foreign Exchange Order Appendix Table contain the following 2 types of information:

- "List control," which is specified for each item from 1 to 15
- "Catchall controls," that do not specify specifications by item, but restrict by application (Section 16).



An application for approval is

received by the Security Export Licensing Division of the Ministry of Economy, Trade and Industry or local bureaus of the Ministry of Economy, Trade and Industry.

2 Products in this catalog and their related technologies

The products and related technologies in this catalog are subject to the catch-all control of the Foreign Exchange and Foreign Trade Control Law. When exporting or providing the products or related technologies in this catalog, ensure that they are not used for arms or weapons.

3 Contact

Contact your local CKD Sales Office for information on the Security Trade Control of the products and related technologies in this catalog.