

# Recommended Replacement Periods and Periodic Replacement for Preventive Maintenance

CSM\_Timer\_Replace\_TG\_E\_1\_1

Models of this product that are equipped with a relay in the output have a mechanical and electrical life that depends on the open/close count of the contact. The life of the output relay varies widely depending on the open/close capacity and open/close conditions. Please check the catalogue, specifications, manual, and other documentation to periodically replace the product at appropriate times.

This product has many electronic components, and aluminum electrolytic capacitors are used internally. The influence of the ambient temperature on aluminum electrolytic capacitors is large, and the service life is reduced by half for each 10°C rise in temperature (Arrhenius law). When the capacity reduction life of the electrolytic capacitor is reached, the Timer failures or accidents may occur. As part of the component structure, the aluminum electrolytic capacitors have a sealing rubber part on the bottom, and if used beyond the lifetime, the likelihood of electrolyte leakage becomes very high (guideline: 10 to 15 years). The electrolyte is highly corrosive, and is also conductive, so there is a risk not only of corrosion of peripheral components, but also emission of smoke and odor. For this reason, it is recommended that you replace the product each time the fixed interval elapses in order to prevent device failure and accidents in so far as is possible.

The recommended replacement period for preventive maintenance is greatly influenced by the application environment of the Timer. As a guideline, the recommended replacement period is 7 to 10 years. \* To prevent failures or accidents that can be caused by using a Timer beyond its service life, we recommend that you replace the Timer as early as possible within the recommended replacement period. However, bear in mind that the recommended replacement period is for reference only and does not guarantee the life of the Timer.

\* Rated input voltage and load rate 50% or less, ambient temperature 35°C or less, installed as a single item.