

PREVENTION OF FAILURES IN ELECTRIC ACTUATORS

At Diagtuator we have developed our own software, for the analysis of functional data and the working environment of electric actuators, which allows individual analysis of each actuator, as well as group analysis of a group of actuators. This enables the identification of anomalies and helps to avoid equipment failures, which would entail repair costs, unavailability of facilities and incidents with potential impact on safety and the environment.

WHAT IS THE CURRENT SITUATION

Rotork IQ3 electric actuators are normally put into service by the manufacturer's personnel, although it can also be done by the user. For this, the manufacturer of the actuators has its own software, which allows each unit to be configured via PC, but which presents limitations for the user when it comes to maintaining the actuators, since this software only allows the analysis of a single actuator and with a short term analysis approach.

Rotork is one of the world's leading manufacturers of electric actuators.

The worldwide installed base of this type of actuators is over 1,000,000 units, and will continue to grow as the equipment of the previous generations (IQ1 and IQ2, declared obsolete by Rotork in 2003 and 2017 respectively) are replaced by the new model IQ3.

The cost of a Rotork IQ3 actuator depends on its size, and can range between €3.000 and €15.000 in most cases.

Rotork IQ3 actuators are used in processes whose unforeseen stoppage can lead to significant economic losses, even in the order of \$1,000,000/day in large industrial facilities.

Rotork IQ3 actuators are used in highly responsible services, so an unforeseen failure in them can have an impact on the safety of people, facilities or the environment.

In most cases, Rotork IQ3 actuators are installed isolated, but they can also be included in a network of actuators, making their diagnostic data easier to access.

In most cases, the analysis of the diagnostic data is carried out in an inefficient way with the manufacturer's own software, actuator by actuator, so that in general the analysis makes it possible to identify the causes of a failure once it has happened, but not identify anomalies to prevent the failure from materializing.

WHAT IS OUR REMOTE SERVICE FOR

Diagtuator remote diagnostic service software is designed to automatically process the information available in the memory of Rotork IQ3 motorized actuators, allowing early identification of anomalies that, if not corrected in time, can lead to equipment failure.



ABOUT

Diagtuator remote diagnostic service can provide added value in preventive and predictive maintenance processes of electric actuators, allowing the user to avoid failures, either by changing the way the equipment operates or by planning a preventive intervention on actuators under risk.

It is applicable in a wide variety of industries and sectors, where cost, safety and the environment are critical parameters.



Simple,

Reliable,

Confidential.

www.diagtuator.com

WHAT ADVANTAGES DOES OUR REMOTE SERVICE PROVIDES

The manufacturer of the actuators has its own software, but with important limitations for the user, since it only allows analyzing each actuator individually and with a short term analysis approach.

On the other hand, our service makes it possible to analyze each actuator individually, but providing a vision over a period of time, which makes it possible to detect anomalous situations in the operation of an actuator.

Additionally, it allows the joint analysis of a group of actuators, which facilitates the identification of equipment in an anomalous situation within a group.

And of course, because it is a remote service, no loss of time and money in travels to your site.

WHAT IS THE FIELD OF APPLICATION OF OUR SERVICE

Some of the industries where Rotork IQ3 actuators are installed, and therefore our software could be applied are:

- Chemical and petrochemical industry
- Power generation (Hydraulic, gas, nuclear, etc.)
- Natural gas liquefaction / regasification plants
- Oil and gas pipelines
- Sewage treatment
- Desalination plants
- Ships
- Etc.



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