

# ON LOAD TAP CHANGER ONLINE OIL FILTER

### Product Introduction

This device is mainly used for the bypass circulation filtering of the insulating oil of the on-load tap-changer. It can effectively remove the free carbon, moisture, metal particles and other parts of the insulating oil in the on-load tap-changer under the normal operation of the transformer system. Impurities such as oxidizing substances ensure the insulation strength and service life of the insulating oil, reduce the number of power failure inspections, and improve the reliability of the on-load tap-changer.

#### **Product features**

- ❖ Filter element: Provided by the Italian FILTREC SRL Group. It has high filtration accuracy, large dirt holding capacity, long service life, high pressure collapsibility, high flowability, and relatively stable filtration ratio; the pressure of the built-in bypass valve of the impurity removal filter element in the filter element When the rated value is exceeded, it can be opened accurately to ensure the safety of the filter system and the transformer oil in the circulating system from
- ❖ Power system: NOP oil pump of Japan Oil Pump Co., Ltd. It achieves the integration of machine and pump, small size, low noise, stable and reliable operation, and the built-in overflow valve can accurately overflow and relieve pressure when the system pressure exceeds the rated value. Ensure the safety of the circulation system and the transformer oil in the system does not
- \* Control system: PLC of German SIEMENS company, its small size, large capacity, strong function, stable and reliable work. When compiling the program, preset the system to run various bad conditions and immediately deal with the plan to ensure the safety of the system and the reliability of work.
- ❖ Differential pressure indicator: installed on the filter element, it can accurately identify the pressure difference formed in the filter element, and send signals in different states to the PLC, so that the PLC will make the system work state according to the preset filter element life end and failure alarm shutdown procedures Change.
- \* Chassis: made of stainless steel with temperature control system inside. Ensure that it has a constant temperature working environment, and ensure that all components in the chassis are not affected by the external environment and work stably, which can be applied to different climatic conditions.
- \* X1 terminal block: the input of the three-phase power supply, the output of the filter element failure alarm signal and the input of the operation signal of the on-load tap changer are all concentrated on the X1 terminal block, which is convenient and simple to connect. (The operating signal of the on-load tap changer is a passive normally open contact)
- Multi-lamp display panel: The multi-lamp display structure of the control panel is convenient for users to check and repair.

## **Operating Method**

The on-load tap-changer on-line oil filter adopts Siemens advanced PLC control technology and control elements, and has three operating modes: automatic, manual, and timing start. The operating mode and working time can be set freely, and It can perform logic calculations and record and display operating parameters by itself according to the preset program.

## Technical Data

Rated working pressure	0.5Mpa
Motor Power	0.2kW
Impurity filter accuracy	1μm(β1(c)≥1000)
Heater power	50W
Oil inlet and outlet	DN15
Protection level	IP55
Rated working flow	10L/min
power supply	3-phase, 380V/50Hz/5A
Insulating oil function theory	≤20ppm(≤20mg/L)
Medium temperature	-25℃~90℃
Dimensions mm	275×580×730
Machine weight kg	85



