ATS-3
Automatic Transfer Switching Controller for LV Switchgear

GENERAL CHARACTERISTICS

ATS-3 controller is dedicated to automatic switching of back-up incoming feeder and automatic recover of main incoming feeder in LV switchgears. Automatic transfer switching controllers are basic devices which ensure high level of service security. The ATS-3 is dedicated for switchgear of three-circuit-breakers topology. In case of outage, the feeder where it occured is automatically switched off and simultanously, the CB in coupling bay is switched on. Annonciuator panel provides the staff neccesary information about current status in precise and quick way. The device serves as the event recorder too. Recorded data can be transfered to SCADA system via fiber-optic port, RS485 port or Ethernet. The available communication protocols are: „ZEG", IEC 60870-5-103 and (optionally) MODBUS or DNP-3.

MAIN FEATURES

- flush-mounted enclosure of dimensions 144/144/141 mm
- 16 binary inputs – fully configurable
- 8 measuring inputs with voltage unbalance detection
- 16 relay outputs in order to control circuit-breakers or to signalling purposes
- 3,5 inch LCD display (mimic diagram, settings, configuration, control)
- 8 RGB LED diodes – fully configurable
- lack of auxilliary voltage or supply module failure signalled by NC watchdog contact
- back-up auxilliary voltage by additonal supply module
- input/output modules eqiupped with plug-in connectors with screw flanges
- ALARM TEST button in order to test of alarm outputs proper operation
- 4 communication ports: 2 x RS485, 1 x fiber-optic ST, USB
- programmable selection of communication protocol: IEC 60870-5-103, ZEG

TECHNICAL DATA

Rated supply voltage	110-230 V DC/AC
	or other on request
Burden in supply module	<25 VA
No. of inputs	24
Insulation	optical
Inputs rated voltage	U_{in}=220 V DC/AC
	or other on request
Inputs burden	0,3W
Settable time-delay	25s
Time resolution	1 ms
No. of communication ports	4

- fiber-optic ST / IEC 870-5-103
- 2 x RS485
- 1 x USB

Weight	2kg
Ambient temperature	-5 ÷ +40 ºC

PRINCIPLE OF OPERATION

The incoming feeder of switchgear where outage occures is automatically switched off and simultanously the close command is sent to circuit breaker in coupling bay. ATS-3 is freely programmable device which by: annunciator panel, 3,5 in display and set of output relays indicates the current status of supervised auxilliary switchgear. Input signals are excited by voltage occurrence or drop. Signals can be programmable delayed up to 25 sec. The 3,5 in LCD display allows to: supervise and control of circuit-breakres, settings change, preview of inputs and outputs statuses, language version selection, time preview, event recorder preview and measured values preview.