ATS115

Micro-processed controller able to manage the automatic switch between two supply sources, both mains and genset(s)
DESCRIPTION

Automatic Transfer Switch controller with 3 phase (RMS) mains voltage and 3 phase (RMS) generator voltage and current monitoring, suitable for operation with two different power sources.

ATS115/ATS115Plus is a device suitable to manage the switch in different plants configuration. A or B sources can be set as “mains” or “genset” in any possible combination.

All the parameters can be set directly by the controller’s keyboard or, alternatively using the free software tool (BoardPRG3), available from SICES’ website.

ATS115, in both versions, has a graphic display that allows a real time check of the switch status, of measures and any occurred alarms.

ATS115 and ATS115Plus allows the remote control of the switch by its communication ports.

The plus version, have an extensive input and output capability with optional communication interfaces.

INPUTS - OUTPUTS AND AUXILIARY FUNCTIONS

- 8 Digital inputs
- 8 Digital outputs
- 4 Analogue inputs
- AND/OR Logic control
- Event history log
- 16 Calendars
- 4 timers
- USB port
- RS232 Plus Version
- RS485 Plus Version
- Ethernet connection

- N. 8 Digital inputs.
- N. 4 Analogue inputs, also available as non-isolated digital inputs.
- N. 2 Programmable relay Outputs.
- N. 4 Insulated digital Outputs.
- N. 2 Programmable relays (10A), usually used for the switch management.
- All inputs and Outputs are freely programmable.
MAIN FEATURES

- True RMS measure for voltages of both sources, currents on loads.
- Measure of active power and power factor.
- Measure of frequency for both sources, powers on load.
- 8 programmable digital inputs (insulated).
- 8 programmable digital outputs.
- USB Port and ETHERNET Port (for ATS115 Plus).
- Graphic display with single-line diagram representation.
- Real time clock.
- Events and data recording.
- Remote switch commands and remote start and stop commands.
- Embedded alarm horn.

COMMUNICATION

ATS115
- N.1 USB Port to program the controller through PC.

ATS115 Plus
- N. 1 USB Port.
- N. 1 Serial port RS232 Modbus RTU.
- N. 1 Isolated serial port RS485 Modbus RT.
- N. 1 RJ45 Port Ethernet interface TCP/IP.

Optional
- GSM/GPRS/GPS modem (REWIND): SMS in case of warnings and alarms.
- PSTN modem for data call in case of alarm and warning.
- Supervisor software for Windows®.

ATS115 and ATS115 Plus are multilingual devices. The selectable languages are, English, Italian, Spanish, French, Russian and Portuguese/Bra.
MEASURES

(mains or genset)
True RMS measure.
Lx-N max. voltage < 300Vac cat. IV.

(mains or genset)
True RMS measure.
Lx-N max. voltage < 300Vac cat. IV.

A or B Currents or towards load:
L1, L2, L3, N.
True RMS measure.
Rated current: /5A and /1A.
Overload of measure current: 4 x 5Aac (sinusoidal).

A or B Frequency:
Resolution = 0.1 Hz.
Accuracy = ± 50ppm, ±35ppm/°C (typical).

Battery Voltage:
Resolution = 0.1V.

PROTECTIONS

Status and Signals
- Source A live (Mains or Genset).
- Source B live (Mains or Genset).
- Source A circuit breaker closed.
- Source B circuit breaker closed.
- Source A or B Start/Stop.
- Remote Start.
- Battery failure (Max/Min Voltage).
- Max. controller temperature.
- Emergency stop.
- Clock set up failure.

Protections
- Genset “X” not stopped.
- Genset “X” out of threshold.
- Source A or B operation conditions not reached.
- Source A or B wrong phase sequence.
- Source A or B failure.
- Source A or B circuit breaker not open.
- Source A or B circuit breaker not closed.

A set of high efficiency LED is used for signaling the statuses of the genset and of potential alarms occurred. Secondary alarms are represented by their corresponding display code.
TECHNICAL DATA

- Supply voltage: 7...32 Vdc.
- Power consumption: typically, less than 2W (Auto mode, Standby, AMF active, LCD Lamp Saving active).
- Genset rated frequency 50Hz or 60Hz.
- LCD: transflective with LED backlight.
- Operating temperature: -25 °C to 60 °C.
- Protection degree: IP65 (gasket included).
- Weight: 600g - 650g (Plus version).
- Overall dimension: 244 (W) x 178 (H) x 40 (D).
- Panel cut-out: 218 x 159 (W x H).
- Graphic display dimensions: 70 x 38 mm - 128 x 64 pixel.
- EMC: compliant with EN61326-1.
- Safety: built in compliance with EN61010-1.