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KO

ATS-S

Automatic Transfer Switch Control Unit



Product Description:

ATS-S "Automatic Transfer Switch" control panel is designed to connect any LOAD between two independent AC supply sources.

The unit monitors 3-phase voltage and frequency from the two incoming independent AC supply sources and can switch the load, depending on which AC source is available.

Load current is also monitored, and various load protection functions can be enabled, depending on application requirements.

If the unit is connected across mains (utility) and a generator, a "Remote Start" signal is generated, based on the programmed parameters, (voltage, frequency, and time delays). Once the second source is established within the healthy limits, the load is automatically switched to generator and at the same time, monitoring both incoming AC sources. When utility is back within the healthy limits, load will be switched back to the mains and remote-start signal will be removed to shut the generator down.

All protection functions are built into the system so that, even generator cool-down timing can be programmed into the unit. This allows even the simplest power generators to be connected safely to the load with mains (Utility) connection.

ATS-S control panel has extensive built-in functions to safely control the load under any circumstances. It allows the user to program switching time delays, start delays and can also allocate certain output

signals to control any peripheral equipment depending on the operation conditions.

The unit is equipped with 6 configurable solid-state outputs and 4 configurable inputs to control the load and the switchgear. Load current can be monitored and if load limit exceeds programmed limits while feeding from generator source, an alarm can be generated, and load can be switched off safely.

The unit has a 1.4" colour LCD display to display all system variables in alphanumeric and graphical formats. The display background changes colour in case an alarm is generated, and it can be seen from long distance.

Built-in USB communication port is used to program the unit directly from a USB connection cable. No external power is needed for configuring the unit.

Module front panel is manufactured with silicone rubber keypad for harsh environmental conditions and high IP protection. Plastic frame has built-in sealing gasket to ensure IP65 protection class on the front side of the module.

Unit can operate over a wide range of temperature and humidity conditions. Plug-in type connectors on the back side of the panel reduces the installation and servicing time.

These units also comply to a wide range of safety and quality standards.

MAIN FEATURES:

- ✓ Smallest size ATS control panel on the market,
- ✓ 1.4" Graphical colour display for indication of all mains and generator parameters and alarms,
- ✓ Automatic transfer of LOAD between Mains and Generator,
- ✓ 3-phase mains voltage reading,
- ✓ 3-phase generator voltage reading,
- ✓ 4 Configurable Digital inputs
- ✓ 6 Configurable Digital solid-state (failsafe) outputs,
- ✓ Continuous Load current measurement,
- ✓ 8-32Vdc wide range DC power input
- ✓ USB2.0 type-B configuration port
- ✓ Plug-in type signal connectors
- ✓ Remote-start function output
- ✓ Silicone rubber keypad with IP65 protection class from the front side, with sealing gasket,
- ✓ EMC immunity and emissions compatibility: EN61000-6-2 EN61000-6-4
- ✓ Electrical Safety: EN60950
- ✓ Temp. and Humidity: EN60068-2-30
- ✓ Flammability: UL94
- ✓ Overall dimensions: 82mmx94mmx50mm
- ✓ Panel cutout: 68mmx80mm

Technical Specifications	Value	Description
DC Power input voltage:	8Vdc to 32Vdc	Maximum power dissipation is <2.5W
Display:	1.4" LCD Colour graphic	TFT type with high resolution, high brightness,
Keypad:	Silicone rubber	IP65 protection from the front side (with gasket)
Digital inputs:	4 configurable inputs	Active low input connections (sink type)
Mains voltage measurement:	3-phase	True RMS measurement
Generator voltage measurement:	3-phase	
Analogue inputs:	2 analogue inputs	For Load current measurement
Digital outputs:	6 digital outputs	Solid-State fail-safe outputs (active sink logic)
Communication ports:	USB2.0 Type-B	Parameter configuration
Operating temperature:	-10°C to +60°C	UV resistant keypad and enclosure
Storage temperature:	-25°C to +85°C	
Operating humidity:	10%RH to 97%RH	Non-condensing
EMC compatibility:	EN61000-1-2/3/4	Industrial level
Safety:	CATIII, 300V	
Vibration & shock:	MIL810G	Transportation
Protection class:	IP65	From front side (with gasket)
	IP00	From back side
Overall dimensions:	94 x 82 x 50	Measurements are in mm
Panel cutout:	80 x 68	
Mounting type:	Panel mounting	With screw type retention clamps
Weight:	140gr	Approximate weight



Figure 1: ATS-S Front side view

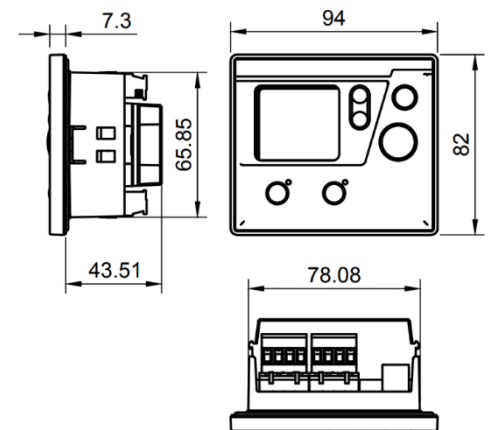
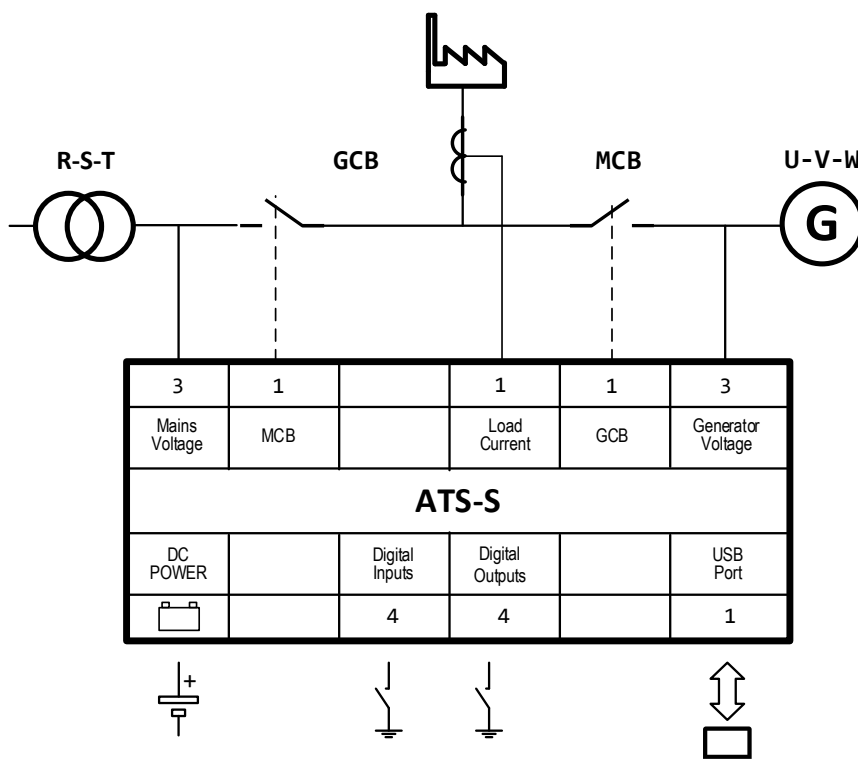


Figure 2: ATS-S Dimensions (mm)



UL94
V-2

Connection Diagram:



Compliance:

ATS-S series control panels are tested and compliant to CE regulations for emitted and conducted RFI interference, according to EN61000-6-4 class-A. Immunity is tested against EN61000-6-2. Vibration: EN60068-6-2 Dielectric strength: IEC255, Flammability: UL94, Safety: UL508