



# ATS021, ATS022 Automatic Transfer Switches

Power and productivity  
for a better world™



# ATS021, ATS022

## Automatic Transfer Switches



ABB presents the new generation of Automatic Transfer Switch, the result of a worldwide experience on low voltage applications.

The new generation of ATS family – ATS021 and ATS022 offers the most advanced and comprehensive solution in power continuity.

Reliability, safety and intelligence are the top features of the brand new range of ATS family which is in compliance with world standards, simple to configure and fitting all application scenarios.

Moreover, the perfect integration with all ABB circuit-breakers and switch-disconnectors ensures a complete coordinated system.

### Multi-function logic to meet all requirements

- ATS family provides the standard logic to monitor the normal and emergency line, sends the commands to the generator and controls the circuit-breakers which have to be switched;
- Possibility to control a third circuit-breaker on bus-tie with the ATS022;
- No line priority: in this background, none of the two lines is of outmost importance.

### No auxiliary power supply required

The new ATS family is designed to work without auxiliary power supply. Auxiliary power supply is only required when Dialogue Modbus RS485 is used or in networks with rated frequency of 16 2/3 Hz.

### Compliance with IEC and EN 60947

The compliance with the Standard guarantees the new ATS family to provide the quality and safety that meet all the requirements of automatic transfer.

### Compatibility with ABB circuit-breakers and switch-disconnectors

The ATS family can be fit in perfectly with ABB circuit-breakers and switch-disconnectors, thereby ensuring availability of a complete and coordinated system.

### Advanced Operator interface and Communication

ATS022 is equipped with a communication unit which allows the integration with supervision systems via Modbus RS485. Graphic display is also provided for ATS022.

### Applications

ATS family is highly suited to use in all emergency power supply systems where a ready-to-install, easy to use and reliable solution is required. Some of its main applications are listed therefore:

- Power supply of UPS groups in general;
- Operating theatres and primary hospital services;
- Emergency power supplies for civil building, hotels and airports;
- Data banks and telecommunication systems;
- Power supply of industrial line for continuous processes.

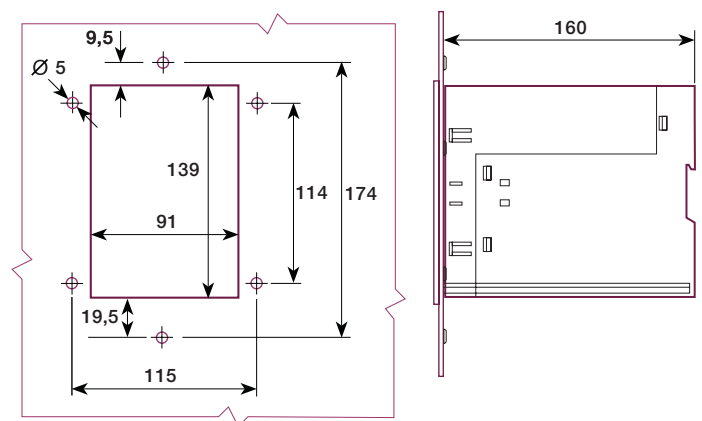
### Accessories

To connect Tmax and Emax circuit-breakers to the ATS, the following accessories are required\*.

	Shunt Opening Release
	Shunt Closing Release
	Springs Charging Motor
<b>Emax X1</b>	Auxiliary Contact for signalling of circuit-breaker Open/Closed
<b>Tmax T7</b>	Auxiliary Contact for signalling of overcurrent release tripped
	Auxiliary Contact for signalling of circuit-breaker Racked-in (only if withdrawable circuit breaker)
	Motor Operator
<b>Tmax T3</b>	Auxiliary Contact for signalling of circuit-breakers Open/Closed
<b>Tmax T4</b>	Auxiliary Position Contact for signalling of circuit-breaker Racked-in (only if withdrawable circuit-breaker)
<b>Tmax T5</b>	Key Lock only against Manual Operation for Motor Operator
<b>Tmax T6</b>	Mechanical Interlock

\* For more details please consult Emax and Tmax catalogues

### Dimensions




### Ordering Codes

Order Code	Description
1SDA065523R1	ATS021 Automatic transfer switch control unit
1SDA065524R1	ATS022 Automatic transfer switch control unit



## Technical Characteristics

				ATS021	ATS022
Auxiliary Power Supply				Not Required	Not Required (24-110 VDC is required only for Modbus dialogue and 16 2/3 Hz system)
General	Rated Voltage, Un			Max 480 VAC	Max 480 VAC
	Frequency, fn			50, 60 Hz	16 2/3, 50, 60, 400 Hz
	Dimensions		H mm	96	96
			L mm	144	144
D mm			170	170	
Type of installation				DIN-rail mounting - Door mounting	Door mounting - DIN-rail mounting
Operating Mode				Auto/Manual	Auto/Manual
Features	Monitoring of the Normal and Emergency lines			•	•
	Controlling CBs of the Normal and Emergency lines			•	•
	Generator set startup			•	•
	Generator set shutdown with adjustable delay			•	•
	Bustie			-	•
	No-priority Line			-	•
	Modbus RS485 Dialogue			-	•
	Display			-	•
Environmental conditions	Degree of protection			IP20	IP20
	Operating temperature			-20 ... +60 oC	-20 ... +60 oC
	Maximum humidity			5% - 90% without condensation	5% - 90% without condensation
Operating thresholds	Minimum voltage			-30% ... -5% Un	-30% ... -5% Un
	Maximum voltage			+5% ... +30% Un	+5% ... +30% Un
	Fixed frequency thresholds			-10% ... +10% fn	-10% ... +10% fn
Test	Test Mode			•	•
Compliance with standards	Electronic equipment for use in power installations			EN-IEC 50178	EN-IEC 50178
	Electromagnetic compatibility	EN 50081-2			EN 50081-2
		EN 50082-2			EN 50082-2
	Environmental conditions	IEC 68-2-1			IEC 68-2-1
IEC 68-2-2			IEC 68-2-2		
			IEC 68-2-3	IEC 68-2-3	