Low Voltage Products

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
- Priority line selectable for the ATS022

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.

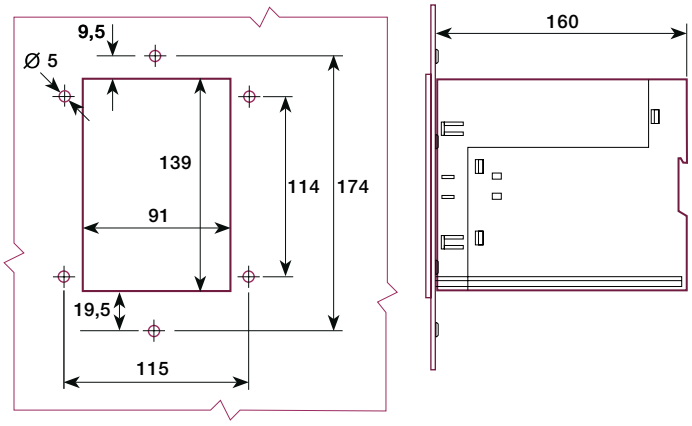
Advanced Operator interface and Communication
ATS022 is equipped with a communication unit which allows the integration with supervision systems via Modbus RS485. Graphic display is also provided for ATS022.

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
Emax	Springs Charging Motor
X1	Auxiliary Contact for Signaling of circuit-breaker Open/Closed
Tmax T7	Auxiliary Contact for Signaling of overcurrent release tripped
	Auxiliary Contact for Signaling of circuit-breaker Racked-in (only if withdrawable circuit breaker)
	Motor Operator
Tmax T3	Auxiliary Contact for Signaling of circuit-breakers Open/Closed
Tmax T4 Tmax T5	Auxiliary Position Contact for Signaling of circuit-breaker Racked-in (only if withdrawable circuit-breaker)
Tmax T6	Key Lock only against Manual Operation for Motor Operator
	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
General	Auxiliary Power Supply		Not Required	Not Required (24-110 Vdc is required only for Modbus dialogue and 16 2/3 Hz system)
	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

Contact us

ABB SACE
A division of ABB S.p.A.
L.V. Breakers
Via Baioni, 35
24123 Bergamo
Tel: +39 035 395111
Fax: +39 395.306-433

www.abb.com

1SDC001007B0201 - 2009.02

Power and productivity
for a better world™