

MOTORISED AUTOMATIC CHANGEOVER SWITCHES

Protect your mission-critical facilities from power uncertainties.



INBUILT AMF Controller

IEC 60947-6-1 TSE standards

63A 3200A Wide range of applications



AUTOMATIC TRANSFER SWITCHES

The microprocessor-based ATS with in-built AMF controller provides advanced monitoring and control capabilities, allowing for precise and automated switching between the main power source and backup generator. This ensures a seamless transition of power during a power outage, minimizing downtime and protecting equipment from damage. The ATS with an inbuilt microprocessor-based AMF controller also allows for remote monitoring and control, which can be useful for monitoring power usage, diagnosing problems, and scheduling maintenance. Additionally, it can provide a detailed history of power events, which can be useful for troubleshooting and identifying patterns of power usage. All these features, coupled with the AMF function, will be beneficial for the smooth running of the manufacturing plant.

ADVANCED MONITORING AND CONTROL.

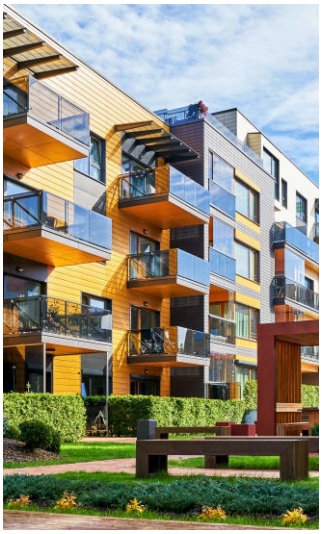
PRECISE AUTOMATED SWITCHING.

SEAMLESS TRANSITION OF POWER DURING OUTAGE.

BENEFICIAL FOR SMOOTH RUNNING FOR OPERATIONS.

Meets Standards
IEC-60947-6-1 (TSE)
IEC-60947-3 (Switches)

Residential



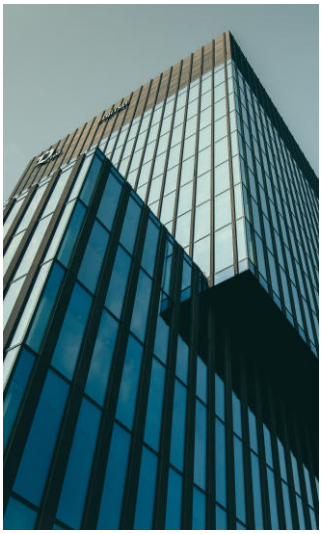
In a residential setting, power outages can be disruptive to systems such as heating, cooling, and security systems, and can cause inconvenience. ATS can help to minimize these risks by providing an uninterrupted power supply, and ensure the safety and comfort of the residents.

Restaurants



ATS ensures that important systems such as refrigeration and lighting, remain operational, minimizing disruption to the restaurant's operations, preserving food safety and making sure the customers have a lovely experience. Additionally, the ATS can also improve overall efficiency by automatically switching back to the primary power source eliminating the need for manual intervention.

Banking/Financial Institutions



In the banking industry, where even a few minutes of downtime can cause significant financial losses. ATS can ensures that systems such as ATM machines, servers, and data centers, remain operational during a power outage, minimizing disruption to banking operations and preserving data integrity. The use of ATS can be an essential component in maintaining business continuity and customer trust.

Educational Institutions



In the case of educational institutions, ATS can help to ensure that major systems that support technology-based learning such as servers, internet connections, and labs for experiential learning remain operational. Moreover, during a power outage, the ability to maintain lighting and heating systems, allows students and staff to remain safe and comfortable.

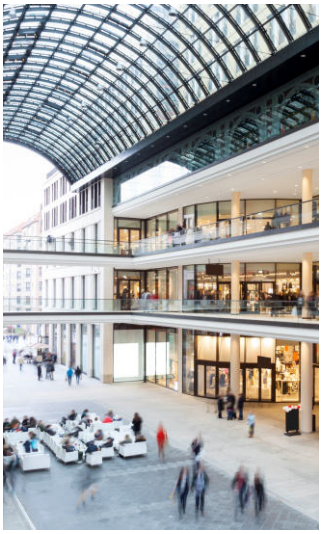
Protect your mission-critical facilities from power uncertainties.



- Inbuilt Micro-processor based AMF controller.
- Automatic DG Start/Stop operation during main's failure.
- AC-32B Utilization category as per IEC 60947-6-1.
- PC-class ATS with breaker co-ordination.
- 3 operational position (Source 1, Center off, Source 2).
- Incomer level self monitoring and protection against under/over voltage, frequency, phase sequence and optional over load tripping logic.
- Systematic with time delays to prelong the stability of power source during automatic switching of sources in the case of blackout or loss of power.
- Dual contact design extinguishes the arc effectively.
- Optional fire fighting DG Start/Stop logic.
- Mode of operation Auto/Manual/ RS-485 Communication
- Free 12 months IoT cloud connectivity
- Optional Wi-Fi communication
- Remote monitoring / Controlling / Configuration through Cloud

Ensuring a seamless transition of power during a power outage.

Commercial Malls / Retails Shops



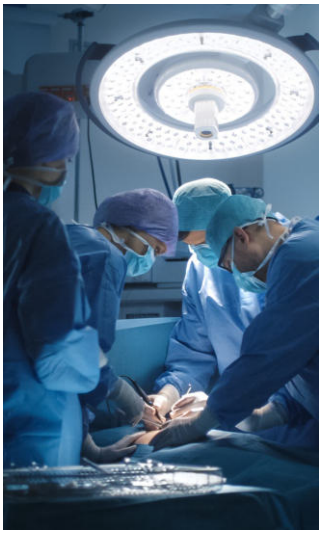
A retail mall requires constant power supply for its various functions like lighting, HVAC, escalators, elevators, security systems, and many more, so having an advanced control system like this can ensure that there is no interruption in the power supply, which in turn will help in providing a comfortable and safe environment for the visitors, and also help in maintaining the image of the mall as a reliable and safe destination.

Industries



ATS ensures a seamless transition of power during a power outage, minimizing downtime and protecting equipment from damage.

Healthcare



ATeS can help hospitals and healthcare centers to maintain a reliable power supply to operate critical systems, such as life support equipment, during a power outage. They also reduces the risk of equipment failures, and ensure patient safety during power outages.

Transportation



In transportation systems such as railways, power failures can cause signaling systems to fail and communication systems to go down, trains to stop, all of which can lead to severe delays and even accidents. By providing an uninterrupted power supply, ATS can help minimize these risks and ensure the safe and efficient operation of the railway system. Moreover, ATS can also be used in rail yards and maintenance facilities, where they can ensure that the necessary power is always available for engines and other maintenance equipment.

High-end Micro-processor based ATS Controller

AMF inbuilt controllers in automatic transfer switches play a crucial role in ensuring a reliable, efficient, and safe power supply to critical loads during power outages, making it an indispensable component for any critical power application.

- DG Start/Stop potential free contacts
- Remote Controlling through PLC / SCADA / EMS
- Source 1 & 2 - Indications output
- Fire fighting DG Start/Stop
- Optional overload tripping logic S1 & S2
- Universal Auxilary Supply 12–24V DC



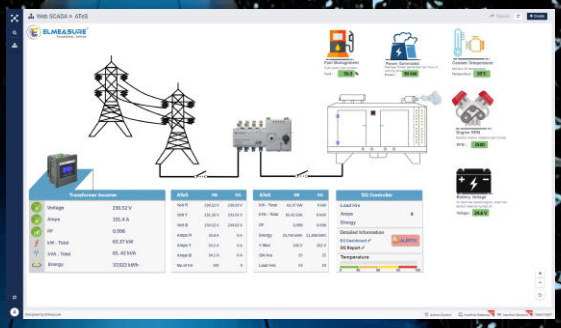
Improved Uptime: By automatically switching to the backup generator power in case of a main power failure, AMF inbuilt controllers ensure that critical loads are never left without power, which results in improved uptime.

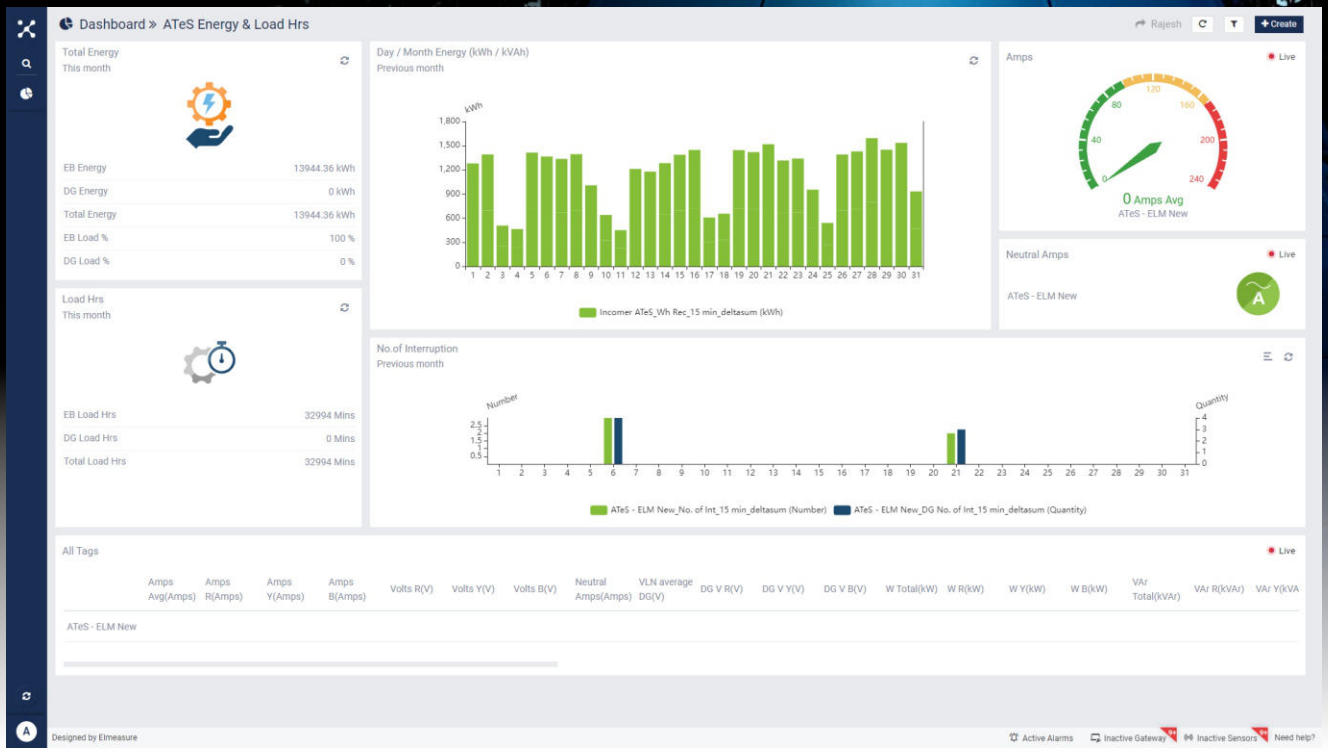
Increased Efficiency: The AMF controller automatically starts and stops the generator based on the load demand, which ensures that the generator runs only when necessary, reducing fuel consumption and increasing efficiency.

Improved Monitoring and Reporting: The AMF controller provides real-time monitoring and reporting of the power system status, mains failure and source unhealthy conditions, allowing users to take proactive measures to maintain the reliability of the power supply.

Remote Connectivity with IoT Cloud Monitoring.

- Incomer level monitoring
- EB / DG energy consumption
- Number of interruptions
- Historical data on faults
- ON Hour / Load Hr monitoring
- Remote configuration (Voltage/frequency high/low thresholds, timers)

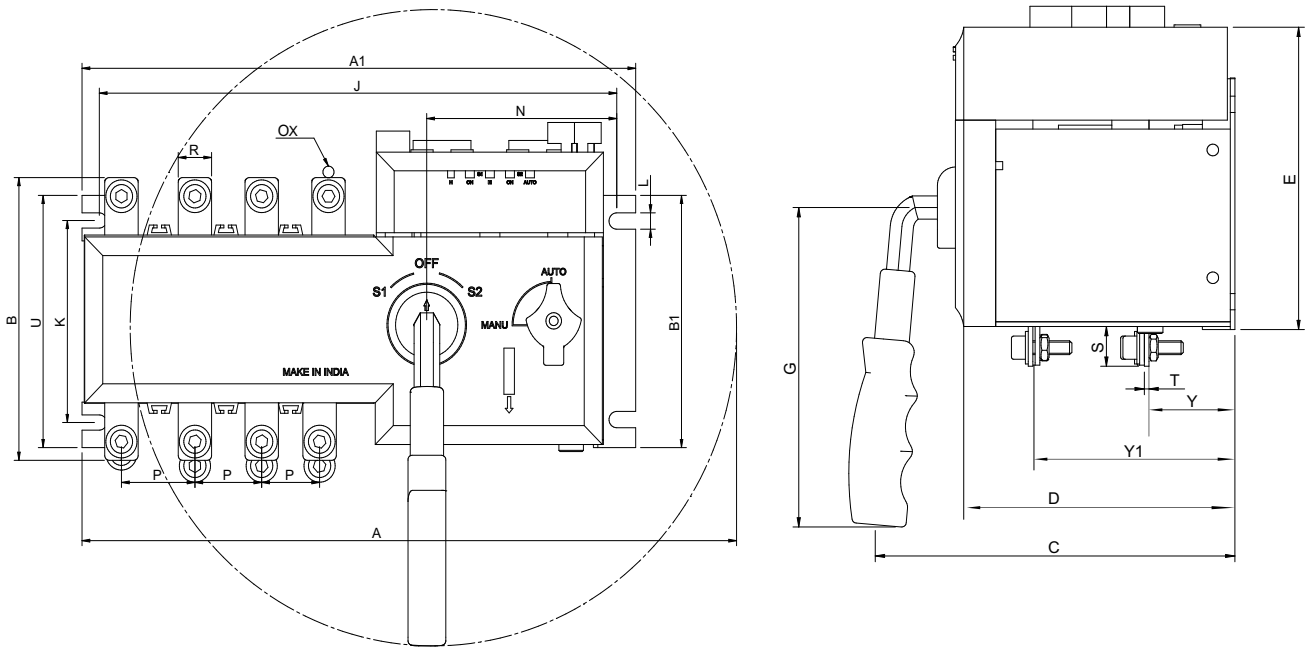




Technical Specification

Current Rating	40/63/80A	100/125A	160/200/250A	315/400/630A	800-3200A
GENERAL CHARACTERISTICS					
No. of Poles	4				
Rated Operating Voltage	415V				
Rated Insulation Voltage (Ui) V - Power Circuit	690V				
Rated Insulation Voltage (Ui) V - Control Circuit	500V				
Rated Impulse with stand Voltage (Uimp)-Control Circuit	8kV			12kV	
Rated Impulse with stand Voltage (Uimp)-Control Circuit	4kV				
Utilization Category	AC - 32B				
Rated Control Power Supply Voltage	230V / 50Hz				
Rated Short Circuit with stand current (KA, Rms) lcw (0.1/1s)	7/5 kA	9/5 kA	12/25 kA	50/25 kA	25/50 kA
Rated Short Circuit Making Capacity (KA, Peak) lcm	8 kA	8 kA	17 kA	26 kA	55 kA
Rated Limit Short Circuit Current (KA) lq	120 kA				
Operating Cycle	10000		8000	6000	5000
Motor Operating Voltage	220V AC (150-280V AC) / 50-60Hz				
Auxiliary DC Voltage	12-24V DC				
Standard	IEC 60947-6-1				
MEASUREMENT PARAMETERS					
Primary Source	Voltage, Frequency & Current (Optional)				
Secondary Source	Voltage, Frequency & Current (Optional)				
Measurements Monitored	In-Built Display / Remote Display				
Communication	Rs485 / WiFi (Optional)				
PROGRAM CONFIGURATION					
Primary Source	Under Voltage (160-210V)/Over Voltage (240-280V), Over Load with external CT, Under Frequency (40-48Hz)/Over Frequency (50-60Hz) and Phase sequence enable / disable.				
Secondary Source	Under Voltage (160-210V)/Over Voltage (240-280V), Over Load with external CT, Under Frequency (40-48Hz)/Over Frequency (50-60Hz) and Phase sequence enable / d isable.				
Timers	Recovery delay (3 to 600s), Transfer delay (3 to 600s), Generator Start / Stop delay (3 to 600s), Trip Delay (3-60)				
Priority Selection	Source I and Source II				
Overload	Source I (10-110%) and Source II (10-110%)				
Overload Trip Cycles	Up to 4 cycles (6-150s)				
AC System Selection	3Phase / 1Phase for both Sources				
Phase Sequence	Enable / Disable				
MODE OF OPERATION					
Selection Mode	Auto / Manual / Remote / Cloud				
Position Order	I-OFF-II				
Functionality	On Load				
Manual Emergency Operation	Available				
GENERAL CHARACTERISTIC					
Ambient Temperature	-20°C to 55°C				
Air Humidity	Not more than 50% @ 40°C				
Altitude	Not more than 2000 m				
ELECTROMAGNETIC CHARACTERISTICS					
Class	Class B				
Radio Frequency Transmission Test	EN55011				
Radio Frequency Radiation Transmission Test	EN55011				

Mechanical Specification : 40A - 630A



		Spec.	Outline Size (mm)						Mounting Size (mm)													
Frame 1	40/63/80A	In	A	A1	B	B1	C	D	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
		63	267	228	108	107	195	132	126	174	211	87	7	85	25	13	18	2.5	107	6	43	94

		Spec.	Outline Size (mm)						Mounting Size (mm)													
Frame 2	100/125A	In	A	A1	B	B1	C	D	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
		125	284	244	119	107	195	132	126	174	228	87	7	89	30	15	34	2.5	107	8	41	91

		Spec.	Outline Size (mm)						Mounting Size (mm)													
Frame 3	160A	In	A	A1	B	B1	C	D	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
		160	330	302	135	127	204	166	136	174	287	101	7	100	36	20	24	3.5	126.5	10	69	151

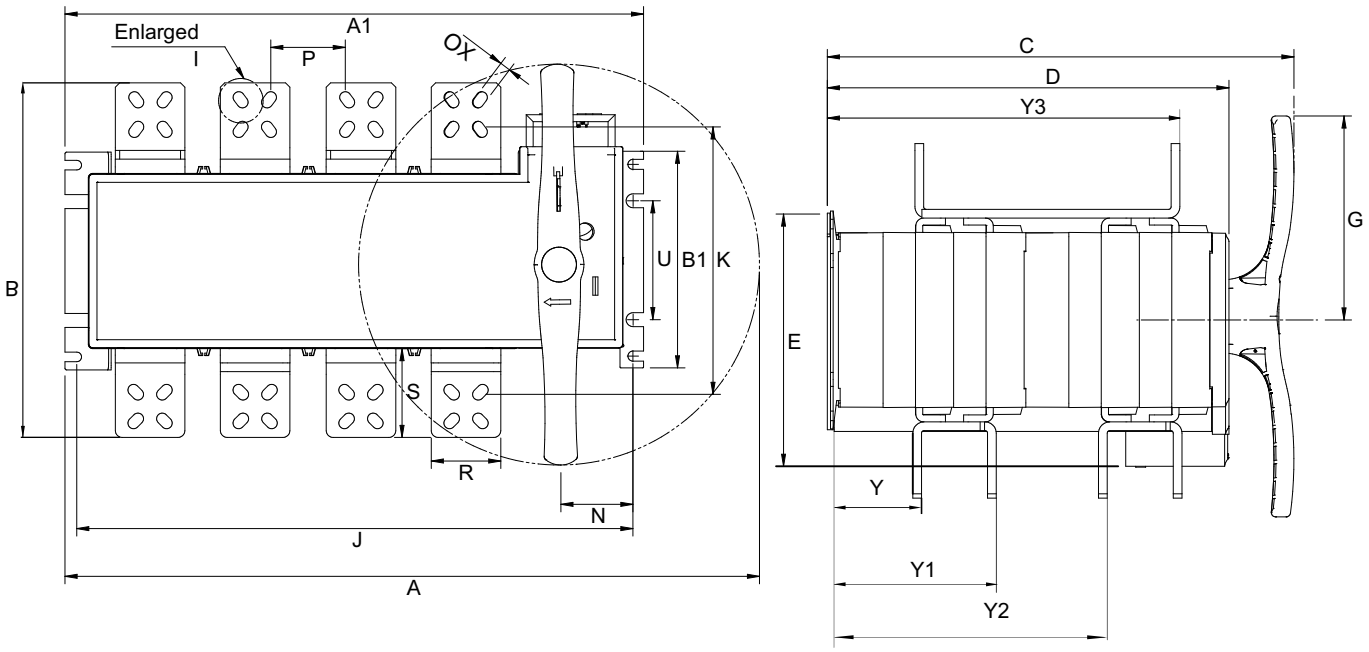
		Spec.	Outline Size (mm)						Mounting Size (mm)													
Frame 4	200/250A	In	A	A1	B	B1	C	D	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
		250	452	375	171	134	230	202	154	174	348	109	7	100	50	24	30	3.5	134	11	69	151

		Spec.	Outline Size (mm)						Mounting Size (mm)													
Frame 5	315/400/630A	In	A	A1	B	B1	C	D	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
		630	517	436	260	222	290	252	220	174	406	180	9	103	65	40	50	5	222	13	84	191

Mechanical Characteristics

	40/63/80A	100/125A	160/200/250A	315/400/630A	800-3200A
Outline Dimension in mm	228 x 108 x 195	244 x 119 x 195	375 x 165 x 230	436 x 260 x 290	665 x 350 x 400
Mounting	Surface Mounting				

Mechanical Specification: 800A - 3200A



Specification	Outline Size (mm)						Mounting Size (mm)															
ATeS/800A-3200A	**A**	**A1**	**B**	**B1**	**C**	**D**	**E**	**G**	**J**	**K**	**L**	**N**	**P**	**R**	**S**	**T**	**U**	**ØX**	**Y**	**Y1**	**Y2**	**Y3**
ATeS-800A	845	665	350	220	400	248.3	373	450	645	220	12	85	120	60	64	8	250	12	103	227	330	427
ATeS-1000A	845	665	350	220	400	248.3	373	450	645	220	12	85	120	60	64	8	250	12	103	227	330	427
ATeS-1250A	845	665	355	220	400	248.3	373	450	645	220	12	85	120	80	72	8	250	13	103	227	330	427
ATeS-1600A	845	665	355	220	400	248.3	373	450	645	220	12	85	120	80	72	10	250	13	103	227	330	427
ATeS-2000A	845	665	355	220	530	448.1	373	450	645	220	12	85	120	80	72	10	250	13	103	227	330	427
ATeS-2500A	845	665	384	220	530	448.1	373	450	645	220	12	85	120	80	90	15	250	13	103	227	330	427
ATeS-3200A	845	665	384	220	530	448.1	373	450	645	220	12	85	120	120	90	15	250	13	103	227	330	427