

# ATeS

## Automatic Transfer Switch

Real-Time Monitoring | Improve Productivity

CONTROL YOUR POWER SOURCES!

The smartest approach to provide continuous power for critical applications is to transfer sources between the load. ATeS (Automatic Transfer Switch) is designed with automatic start/stop DG operation to ease the transfer between primary source to alternate source for providing continuous power supply.

### Features:

- Automatic Transfer switch with inbuilt micro processor based AMF controller
- AC 33B Utilization Category and in coherence with IEC 60947-6-1
- Source I & Source II protection against under/over voltage, under/over frequency, Single phase missing and optional overload tripping logic.
- External remote control logic by using PLC, ATS Controller or Genset Controller.
- Availability of over load tripping with inverse curve logic.
- Optional RS485 communication and cloud connectivity for IoT applications.
- Automatic start/stop operation of DG on mains failure.
- Fire alarm / external fault trip feature is provided.
- Inbuilt control switch for selecting auto/manual mode.
- High capacity to withstand short circuit.
- External indication terminal output for Source healthy and load ON. Inbuilt fuse protection to avoid failure of AMF controller.
- 3 Position isolation lock for Source I – Off – Source II.
- Optional Remote display for real time monitoring and controlling of both sources.
- **Model-R** is available with Incoming Terminal in bottom & Outgoing Terminal on top

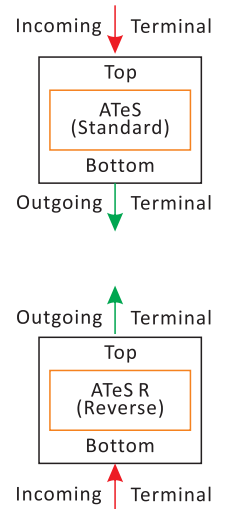
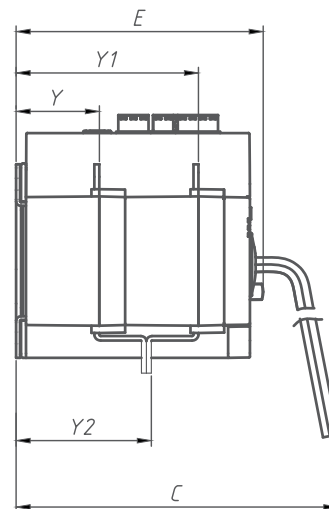
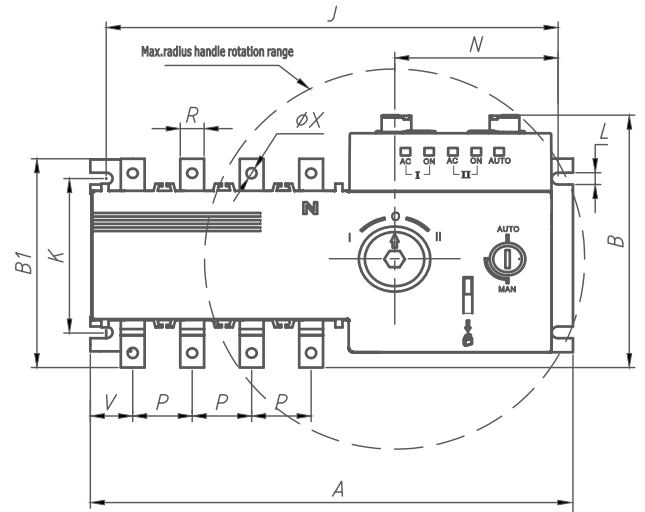
### Benefits:

- Smooth and high-speed load transfer in the event of power outage or disturbances in the power supply.
- Incorporated with Fire Alarm/External fault trip and plays a pivotal role in providing maximum immunity to the electrical system from fire risk/faults.
- Systematized with time delays (timers) to prolong the stability of power source during automatic switching of sources in the case of blackout or loss of power.
- Facilitates easy installation and ensures reliable performance.

### Application:

- Airport and Railways
- IT Malls and Commercial buildings
- Automobile Industry
- Data Centre and Telecommunications
- Oil and Gas Industry
- Manufacturing Industry
- Healthcare
- Banking and Finance

### Mechanical Specification:



Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	A	B	B1	C	E	J	K	L	N	P	R	V	ØX	ØY
63/100/125A	125	230	135	125	165	112	132	85	6.5	83	30	12	21	6.5	41.5

Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	A	B	B1	C	E	J	K	L	N	P	R	V	ØX	ØY
160/200/250A	250	375	175	175	253	198	350	107	7.5	105	50	25	25	12	67

Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	A	B	B1	C	E	J	K	L	N	P	R	V	ØX	ØY
315/400/630A	630	430	240	260	295	245	415	180	10	100	67	40	45	12	135

Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	A	B	B1	C	E	J	K	L	N	P	R	V	ØX	ØY
800/1000/1200/1600A	1600	636	345	337	373	320	612	220	11	83.5	120	80	71	13	196

## Technical Specification:

	63/100/125A	160/200/250A	315/400/630A	800/1000/1200/1600A
<b>ELECTRICAL CHARACTERISTICS</b>				
Current Rating	63/100/125A	160/200/250A	315/400/630A	800/1000/1200/1600A
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 withstand voltage (Uimp) - Power Circuit	8kV			
Rated impulse withstand voltage (Uimp) – Control Circuit	4kV			
Utilization Category	AC – 33B			
Rated control Power supply Voltage	230V/50Hz			
Rated short circuit withstand current (KA, Rms) Icw(0.1/1s)	9/5 kA	12/25 kA	50/25 kA	25/50 kA
Rated short circuit Making Capacity (KA, Peak) Icm	8 kA	17 kA	26 kA	55 kA
Rated Limit short circuit current (KA) Iq	120 kA			
Operating Cycle	10000	8000	6000	5000
Motor operating Voltage	220V AC / 50Hz			
Auxiliary DC voltage	12-24V DC			
Standard	IEC60947-6-1			
<b>MEASUREMENT PARAMETERS</b>				
Primary Source	Voltage, Frequency & Current (Optional)			
Secondary Source	Voltage, Frequency & Current (Optional)			
Measurements Monitored	Remote display via LCD			
Communication	(Optional) RS485 / Ethernet gateway			
<b>PROGRAM CONFIGURATION</b>				
Primary Source	Under Voltage(160-200V)/Over Voltage (240-290V) , Over Load with external CT, Under Frequency (40-48Hz) /Over Frequency (50-60Hz)			
Secondary Source	Under Voltage(150-200V) / Over Voltage (240-290V), Over Load with external CT, Under Frequency (40-48Hz) /Over Frequency (50-60Hz)			
Timers	Recovery delay (3 to 600s), Transfer delay(3 to 600s), Generator Start delay (3 to 600s), Generator stop delay(3 to 600s)			
Priority selection	Primary/Secondary source			
Overload	Source I (50-110%) and Source II (20-110%)			
Overload Cycles	3 Cycles			
Overload Recovery Time	0-99s			
Overload Delay Time	5-10s			
<b>APPLICATIONS</b>				
Transfer Between Main Power to Backup Power	Applicable			
Transfer between Backup Power to Main Power	Applicable			
<b>MODE OF OPERATION</b>				
Selection Mode	Auto/Manual/Remote/RS485			
Position order	I-OFF-II			
Functionality	On Load / Off Load			
Manual Emergency Operation	Available			
<b>MECHANICAL CHARACTERISTIC</b>				
Mounting	Position A			
Outline Dimension in mm	245X115X125	373X175X200	435X260X245	635x340x320
Weight in kg	5	10	20	60
<b>GENERAL CHARACTERISTIC</b>				
Ambient temperature	-20° to 55° C			
Air Humidity	Not more than 50% @ 40° C			
Altitude	Not more than 2000 m			
<b>ELECTROMAGNETIC CHARACTERISTIC</b>				
Class	Class B			
Radio Frequency Transmission Test	EN55011			
Radio Frequency radiation Transmission Test	EN55011			