

# Ates Automatic Transfer Switch

Real-Time Monitoring | Improve Productivity

CONTROL YOUR POWER SOURCES!

# **Mechanical Specification:**

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 start/stop operation of DG on mains failure.
- Availability of over load tripping (optional) with inverse curve logic.
- Fire alarm / external fault trip feature is provided.
- Inbuilt control switch for selecting auto/manual mode.
- High capacity to withstand short circuit.
- Inbuilt source selection and trip button for Auto/Manual mode and load ON indication.
- 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.
- AC 33B Utilization Category and in coherence with IEC 60947-6-1
- Optional RS485 communication and cloud connectivity for IoT applications.
- Optional Remote display for real time monitoring and controlling of both sources.
- External remote control logic by using PLC, ATS Controller or Genset Controller.
- Source I & Source II protection against under/over voltage, under/over frequency, Single phase missing and optional overload tripping logic.

#### **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





Spec. Outline Size (mm) Mo					lounti	unting Size (mm)										
63-125A	In	А	A1	В	B1	С	Ε	J	К	L	Ν	Р	R	V	ØХ	ØΥ
	125	243	230	135	125	165	112	132	85	6.5	83	30	12	21	6.5	41.5
160-250A	Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	А	A1	В	B1	С	Ε	J	К	L	Ν	Р	R	۷	ØХ	ØΥ
	250	430	375	175	175	253	198	350	107	7.5	105	50	25	25	12	67
315-630A	Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	А	A1	В	B1	С	Ε	J	К	L	Ν	Ρ	R	۷	ØХ	ØΥ
	630	520	430	240	260	295	245	415	180	10	100	67	40	45	12	135
800-1600A	Spec.	Outline Size (mm)					Mounting Size (mm)									
	In	А	A1	В	B1	С	E	J	К	L	Ν	Р	R	V	ØХ	ØΥ
	1600	1050	636	345	337	373	320	612	220	11	83.5	120	80	71	13	196

## **Technical Specification:**

	60-125A	160-250A	315-630A	800-1600A						
ELECTRICAL CHARACTERISTICS										
Current Rating	63-125A	160-250A	315-630A							
No. of Poles	4									
Rated Operating Voltage Rated Insulation Voltage	415V 690V									
(Ui) V – Power Circuit Rated Insulation Voltage	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) lcw(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) lq	120 kA									
Operating Cycle	10000	8000	6000	5000						
Motor operating Voltage	220V AC / 50Hz									
Auxiliary DC Voltage										
Standard	1600947-0-1									
MEASUREMENT PARAMETERS										
Primary Source	Voltage, Frequency & C	urrent (Optional)								
Secondary Source	Voltage, Frequency & Current (Optional)									
Measurements Monitored	Remote display via LCD									
Communication	(Optional) RS485 / Ethe	rnet gateway								
PROGRAM CONFIGURATION										
Primary Source	Under Voltage(160-200V)/Over Voltage (240-290V) , Over Load (optional), Under Frequency (40-48Hz) /Over Frequency (50-60Hz)									
Secondary Source	Under Voltage(150-200V) / Over Voltage (240-290V), Over Load (optional), Under Frequency (40-48Hz) /Over Frequency (50-60Hz)									
Timers	Recovery delay (3 to 60	0s), Transfer delay(3 to 600s),	Generator Start delay(3 to 600	s), Generator stop delay(3 to 600s)						
Priority selection	Primary/Secondary sou	rce								
Overload	Source I (50-110%) and Source II (20-110%)									
Overload Cvcles	3 Cycles									
Overload Recovery Time	0-995									
Overload Delay Time	5-10s									
	0.000									
Transfer Between Main Power	Applicable									
to Backup Power Transfer between Backup Power	Applicable									
MODE OF OPERATION										
Selection Mode	Auto/Manual/Remote/F	RS485								
Position order	I-OFF-II									
Functionality	On Load / Off Load									
	Available									
	Position A									
Outling Dimonsion in mm		272V17EV200	12EV260V24E	625,2240,220						
Weight in kg	5	10	20	60						
GENERAL CHARACTERISTIC										
Ambient temperature	-20° to 55° C									
Air Humidity	Not more than 50% @ 40°C									
Altitude	Not more than 2000 m									
ELECTROMAGNETIC CHARACTE	RISTIC									
Class	Class B									
Radio Frequency Transmission Test	EN55011									
Radio Frequency radiation Transmission Test	EN55011									