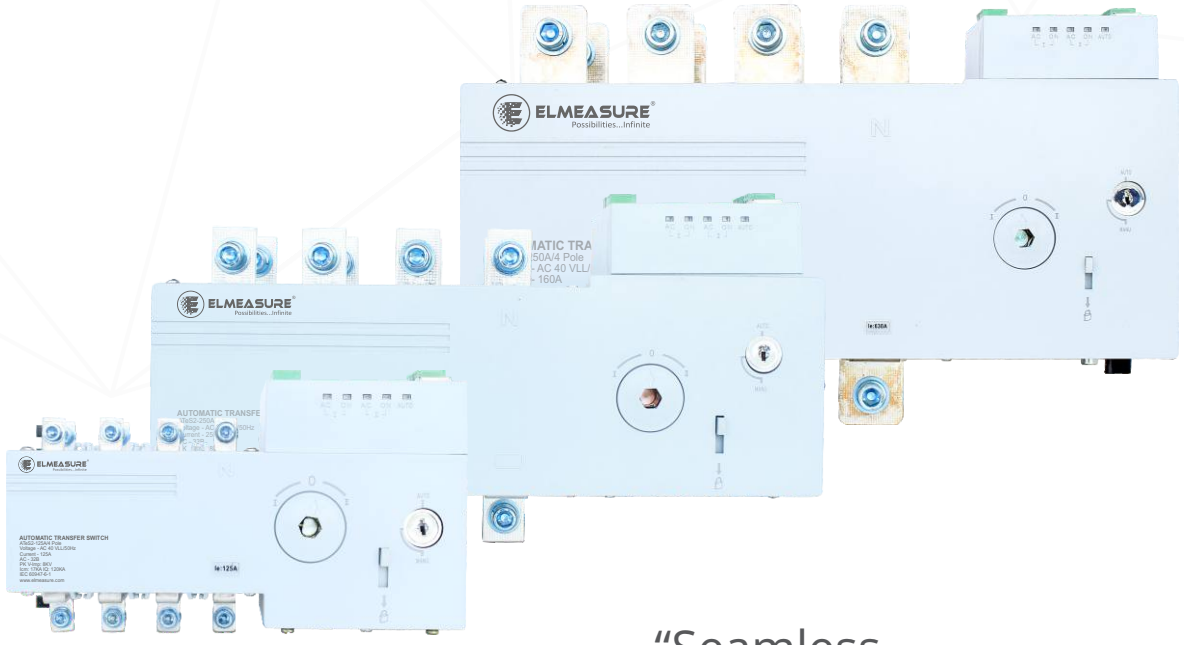
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ELMEASURE®
Possibilities...Infinite

ATeS

AUTOMATIC TRANSFER EQUIPMENT SWITCH



"Seamless switching between sources for uninterrupted supply & power outage protection"

- Over load Tripping Logic
- Automatic DG start/stop
- Fire/External Fault Trip
- Safe and Rapid switching action

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ATeS

AUTOMATIC TRANSFER EQUIPMENT SWITCH



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



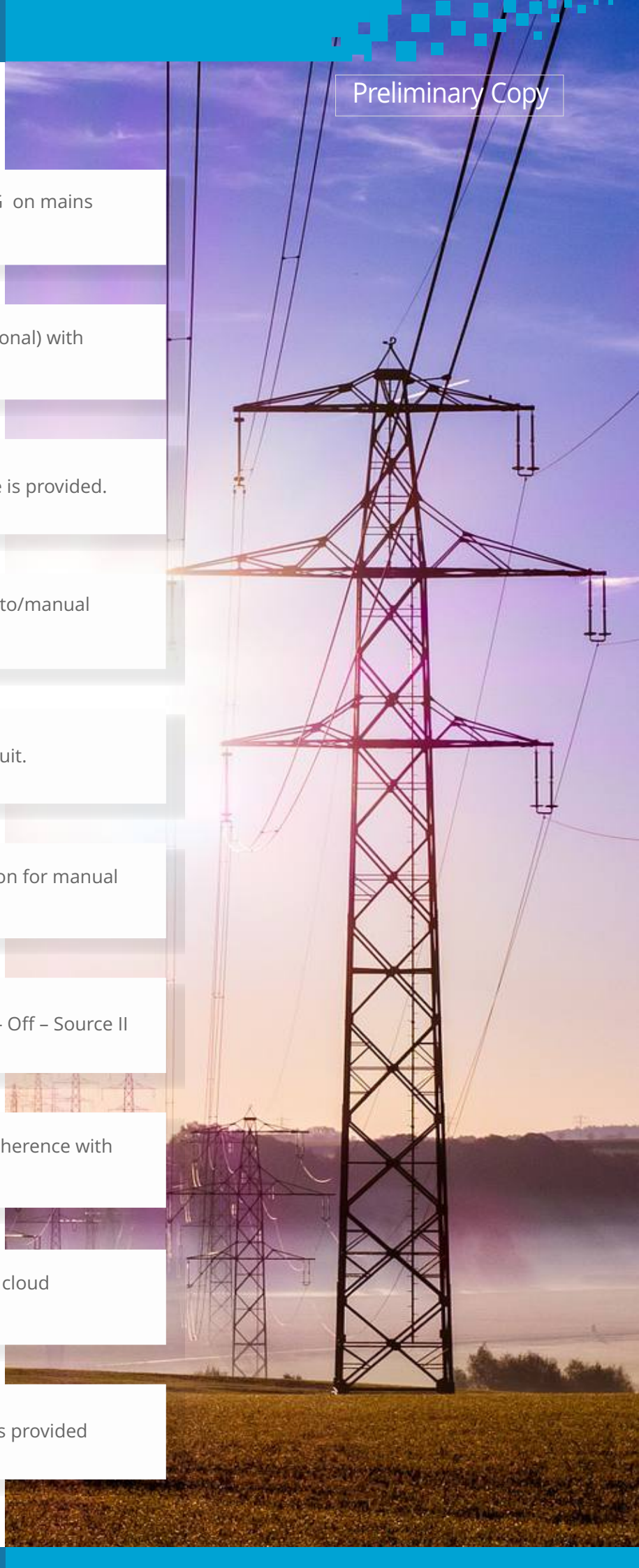
Allow users to

- protection against **undervoltage/overvoltage, under frequency/over frequency** and **phase missing**
- monitor and indicate **source healthiness** & **output** for both Source
- to select a wide range of motor operating voltage from **150VAC – 285V AC** (high bandwidth voltage)
- eliminate the need for external AMF Controller due to the availability of **in built Microprocessor controller** with DG start/stop option
- provide the **safest** changeover during the failure of a primary source
- monitor the **real time system voltage** and **frequency** for EB/DG
- facilitate **easy installation** and **simplified wiring connections**
- retain safe, reliable and maintenance free operation.

Preliminary Copy

Salient Features

1. Automatic start/stop operation of DG on mains failure.
2. Availability of over load tripping (optional) with inverse curve logic.
3. Fire alarm / external fault trip feature is provided.
4. Inbuilt control switch for selecting auto/manual mode.
5. High capacity to withstand short circuit.
6. Inbuilt source selection and trip button for manual mode operation
7. 3 Position isolation lock for Source I – Off – Source II
8. AC 33B Utilization Category and in coherence with IEC 60947-6-1
9. Optional RS485 communication and cloud connectivity for IoT applications.
10. Cost effective in terms of the features provided



Preliminary Copy

Switch to ATeS:

- Elmeasure ATeS is a perfect dual power transfer switch ranging from 63A-630A, to ensure smooth and high-speed load transfer in the event of power outage or disturbances in the power supply.
- ATeS is incorporated with Fire Alarm/External fault trip and plays a pivotal role in providing maximum immunity to the electrical system from fire risk/faults.
- ATeS is 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.
- ATeS facilitates easy installation and ensures reliable performance.

ATeS Switching Operation:

Utility-to-Generator

ATeS continuously monitors the utility power supply to sense any interruptions and transfers the load to the generator as the utility power fails. The load is switched back as the utility power is restored.

Generator-to-generator

In remote locations, source powers are transferred between two generator sets to provide uninterrupted power supply by installing ATeS.

Utility-to-Utility

In applications for a continuous power supply, ATeS can be used to transfer the load between two utility system in the absence of standby generators.

ATeS Timers:

- Transfer Delay: ATeS transfers the load to the standby generator on the failure of the primary source after a configurable time delay in the range of 0 to 300s.
- Recovery Delay: Programmable timer(0 to 300s) allows the transfer of load back as the primary source is restored.
- Generator Start /Stop delay: The timer helps to delay (0to 300s) the supply of electric power from the generator on mains failure, preventing electrical damage due to fluctuation in supply.



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Control Function:

AF Auto Mode:

ATeS provides automatic operation of a genset during any failure of the primary source/exceeding operating limits/occurrence of the fault.

MF Manual Mode:

ATeS Key switch is used to perform Start/Stop Logic for the selection of primary/secondary source.



Remote Modes (RS-485 Modbus Protocol):

Derived from the Master/Slave architecture to enhance man-machine communication for monitoring and controlling the equipment. The real-time system parameters like 3 phase voltage, frequency and source availability of primary and secondary source are monitored continuously.

Applications

- Commercial centres
- Manufacturing
- Oil & Gas
- Airports & Railways
- Automation Process
- Medical Facilities
- Banking & Finance
- Infrastructure & Telecommunications.
- Data centres

Datasheet



ATES – 125



ATES – 250



ATES – 630

Electrical Characteristics			
Current Rating	63-125A	160-250A	315-630A
No. of Poles	3 / 4		
Rated Operating Voltage	415V		
Rated Insulation Voltage (Ui) V – Power Circuit	500V		
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 – 33iB		
Rated control Power supply Voltage	230V/50Hz		
Rated short circuit withstand current (KA, Rms) Icw	9/5 kA	12/25 kA	50/25 kA
Rated short circuit Making Capacity (KA, Peak) Icm	8 kA	17 kA	26 kA
Rated Limit short circuit current (KA) Iq	120 kA		
Operating Cycle	10000	8000	4000
Motor operating Voltage	220V AC / 50Hz (0.2A)		
Auxiliary DC voltage for Controller	12/24V DC		
Standard	IEC60947-6-1		
Measurement Parameters			
Primary Source	Voltage & Frequency		
Secondary Source	Voltage & Frequency		
Measurements Monitored	Remote display via LCD		
Communication	(Optional) RS485 / Ethernet gateway		

Program Configuration			
Primary Source	Under Voltage(150-200V)/Over Voltage (240-290V)		
	Under/Over Load (optional)		
	Under/Over Frequency (50Hz+_ 20%)		
Secondary Source	Under Voltage(150-200V)		
	Over Voltage (240-290V)		
	Under/Over Load (optional)		
Timers	Recovery delay (0 to 300s)		
	Transfer delay(0 to 300s)		
	Generator Start delay(0 to 300s)		
	Generator stop delay(0 to 300s)		
Priority selection	Primary/Secondary source		
Applications			
Transfer Between Main Power to Backup Power	Applicable		
Transfer between Backup Power to Main Power			
Mode of Operation			
Selection Mode	Auto/Manual/Remote/RS485		
Position order	I-OFF-II		
Functionality	On Load / Off Load		
Manual Emergency Operation	Available		
Mechanical Characteristics			
Mounting	Split		
Outline Dimension in mm	245X115X125	373X175X200	435X260X245
Weight in kg	5	10	20
General Characteristics			
Ambient temperature	-20 to 40°		
Air Humidity	Not more than 50% @ 40°		
Altitude	Not more than 2000 m		
Electromagnetic Compatibility			
Class	Class B		
Radio Frequency Transmission Test	EN55011		
Radio Frequency radiation Transmission Test	EN55011		



ELMEASURE®
Possibilities...Infinite

Registered Office

BENGALURU
PLOT NO.: 47-P, HARDWARE PARK, KIADB,
HUVINAYAKANAHALLI, JALA HOBLI, YELAHANKA TALUK,
BENGALURU - 562 149. KARNATAKA INDIA

Manufacturing Units

UNIT I
PLOT NO.: 47-P, HARDWARE PARK, KIADB,
HUVINAYAKANAHALLI, JALA HOBLI, YELAHANKA TALUK,
BENGALURU - 562 149. KARNATAKA, INDIA

UNIT II
GOWTHAM GARDEN NO. 4, VEERAPANDI
COIMBATORE - 641 019. TAMIL NADU, INDIA

UNIT III
#764, 4TH PHASE, 707, YELAHANKA NEW TOWN,
BENGALURU - 560 064. KARNATAKA, INDIA

Service Hotline:
support@elmeasure.com
+91 639-1010-320
Monday to Friday 8:00 am. to 5:00 pm. IST

Sale Offices

BENGALURU
#57, EBENEZER ENCLAVE, NORRIS ROAD, NEAR
NANJAPPA CIRCLE LANGFORD TOWN,
BENGALURU - 560 025. KARANATAKA, INDIA

COIMBATORE
150, RAJ ILLAM, NVM LAYOUT NEW SIDDHAPUDHUR
COIMBATORE - 641 019. TAMIL NADU, INDIA

CHENNAI
945, GROUND FLOOR, MIG, FIRST MAIN ROAD, TNHB
COLONY, VELACHERY,
CHENNAI – 600 042. TAMIL NADU, INDIA

SECUNDERABAD
51, 1ST FLOOR, CHANDRAGIRI COLONY, NEAR RTA,
THRIMUGHERRY,
SECUNDERABAD - 500 015. TELANGANA, INDIA

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101, MILLENIUM PLAZA BEHIND SAKINAKA
TELEPHONE EXCHANGE, ANDHERI - KURLA ROAD
SAKINAKA, ANDHERI (EAST)
MUMBAI - 400 072. MAHARASTRA, INDIA

DELHI
G-10, G-11, GROUND FLOOR, BAISOYA COMPLEX,
NAYABANS, SECTOR-15,
NOIDA – 201301. INDIA.