AUTOMATIC TRANSFER SWITCH

Features

- Automatic Transfer switch with inbuilt micro processor based AMF controller
- AC 32B Utilization Category and in coherence with IEC-60947-6-1
- Source I & Source II protection against under/over voltage, 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 Wi ficommunication 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 – O ff– Source II.

Benefits:

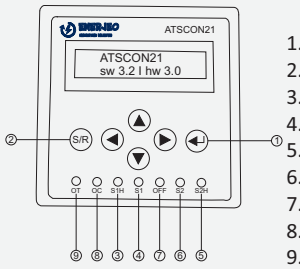
- Smooth and high-speed load transfer in the event of power outage or disturbances in the power supply.
- Incorporated with Fire Alarm/External fault trip and plays a pivotal role in providing maximum immunity to the electrical system from fire risk/faults.
- Systematized with time delays (timers) to 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

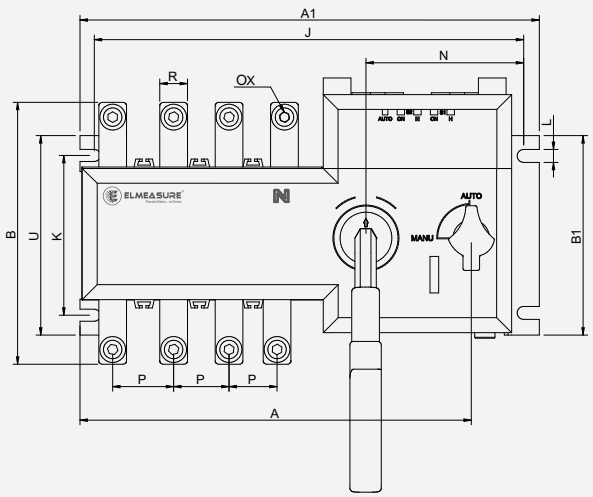
Remote display unit

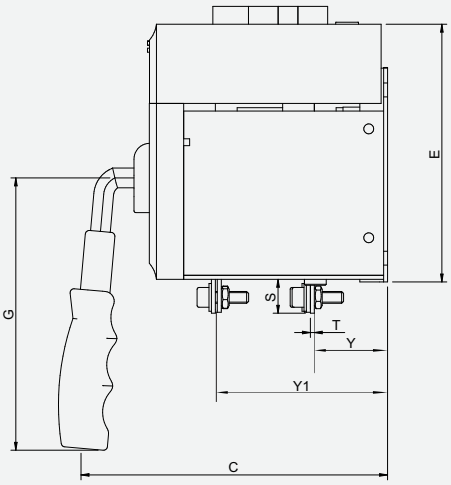
- Remote display unit for configuration

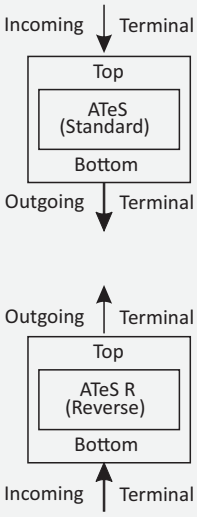


1. ENTER
2. SAVE
3. S1H - HEALTHY INDICATION
4. S1 - LOAD ON INDICATION
5. S2 - HEALTHY INDICATION
6. S2H - LOAD ON INDICATION
7. OFF - OFF INDICATION
8. OC - OVER CURRENT INDICATION
9. OT - OVER TEMPERATURE INDICATION

Mechanical Specification:







40/63/80A

Spec.	Outline Size (mm)							Mounting Size (mm)											
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
63	195	226	117	107	190	126	175	215	87	7	81	25	12	18	2	107	6	43	94

100/125A

Spec.	Outline Size (mm)							Mounting Size (mm)											
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
125	210	243	119	107	168	125	172	228	86	6.5	89	30	15	34.7	2.4	107	8	41	91

160A

Spec.	Outline Size (mm)							Mounting Size (mm)											
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
160	200	302	135	127	204	136	200.5	287	101	8	100	36	20	23.5	3.5	126.5	10	69	151

200/250A

Spec.	Outline Size (mm)							Mounting Size (mm)											
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
250	332	375	165	134	240	154	172	348	109	6.5	100	50	24	30	3.5	134	11	69	151

315/400/630A

Spec.	Outline Size (mm)							Mounting Size (mm)											
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
630	387	436	260	222	285	220	172	406	180	9	103	65	40	50.5	5	222	13	84	191

800/1000/
1200/1600A

Spec.	Outline Size (mm)							Mounting Size (mm)											
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	ØX	Y	Y1
1600	536	636	330	337	373	230	440	612	220	11	83.5	120	80	65	8	222	13	106	240

Technical Specification:

	40/63/80A	100/125A	160/200/250A	315/400/630A	800/1000/1200/1600A
ELECTRICAL CHARACTERISTICS					
Current Rating	40/63/80A	100/125A	160/200/250A	315/400/630A	800/100/1200/1600A
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)	7/5 kA	9/5 kA	12/25 kA	50/25 kA	25/50 kA
Rated short circuit Making Capacity (KA, Peak) Icm	8 kA	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				

MEASUREMENT PARAMETERS

Primary Source	Voltage, Frequency & Current (Optional)
Secondary Source	Voltage, Frequency & Current (Optional)
Measurements Monitored	In-Built Display
Communication	Wifi (Optional)

PROGRAM CONFIGURATION

Primary Source	Under Voltage(160-210V)/Over Voltage (240-285V) , Over Load with external CT, Under Frequency (40-48Hz) /Over Recovery delay (3 to 600s), Transfer delay(3 to 600s), Generator Start delay (3 to 9999s), Generator stop delay(3 to 9999s) Frequency (50-60Hz) and Phase sequence Enable / Disable
Secondary Source	Under Voltage(160-210V) / Over Voltage (240-285V), Over Load with external CT, Under Frequency (40-48Hz) /Over Frequency (50-60Hz) and Phase sequence Enable / Disable
Timers	
Priority selection	Primary/Secondary source
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

APPLICATIONS

Transfer Between Main Power to Backup Power	Applicable
Transfer between Backup Power to Main Power	Applicable

MODE OF OPERATION

Selection Mode	Auto/Manual/Remote/Cloud
Position order	I-OFF-II
Functionality	On Load / Off Load
Manual Emergency Operation	Available

MECHANICAL CHARACTERISTIC

Mounting	Position A				
Outline Dimension in mm	226X117X107	243X119X107	375X165X134	436X260X222	636x330x337
Weight in kg	4	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 CHARACTERISTIC

Class	Class B
Radio Frequency Transmission Test	EN55011
Radio Frequency radiation Transmission Test	EN55011