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1. PRODUCT FEATURES

- AC 33B Utilization Category Standard (IEC 60947-6-1)
- High short circuit withstands capacity.
- Inbuilt microprocessor based AMF Controller
- Inbuilt control switch for Auto/Manual operation
- Overload tripping** with inverse curve Logic
- Motor Bandwidth operating voltage (**150-285 VAC**)
- RS485 & cloud connectivity for IoT Application
- Inbuilt **4kV** surge arrestor for the controller
- Easy installation and simple wiring
- Optional remote display for monitoring, programming & controlling

- 3 Position isolation lock for – Source I – Off – Source II
- Integrated switch position auxiliary contact for **Source I – Off – Source II** indication output.
- Inbuilt source availability LED

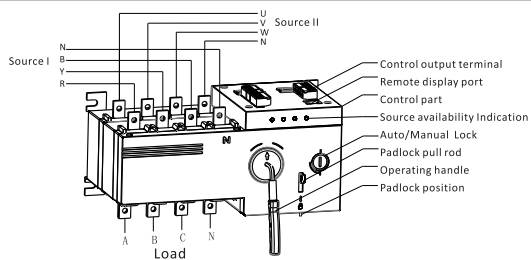
2. AMF CONTROLLER FEATURES

- Micro controller based technology.
- Source 1 & Source 2 Protection -Under/over voltage, under/over frequency, phase missing & overload.
- Mains failure based automatic DG start/stop operation.
- Timers for transfer delay, recovery delay, start & stop delay.
- Remote display for programming, controlling and monitoring the real-time system voltage and frequency for both sources.

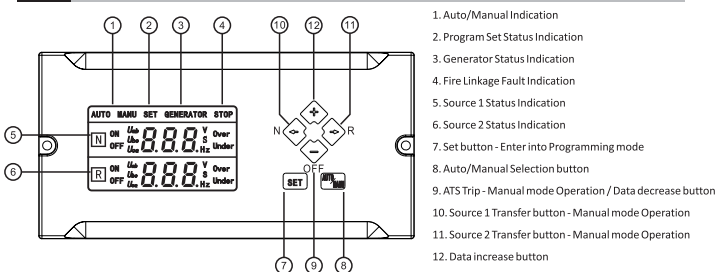
3. OPERATION MODES

- Auto Mode/ Manual Mode/ Remote

4. CONSTRUCTION DETAILS



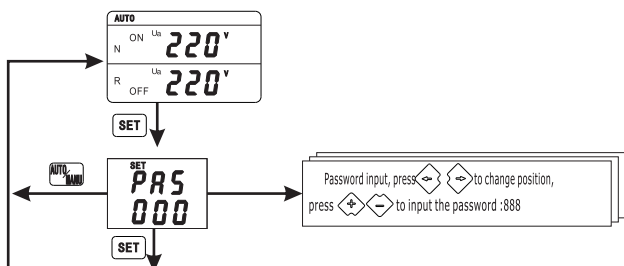
5. REMOTE DISPLAY TERMINAL DESCRIPTION



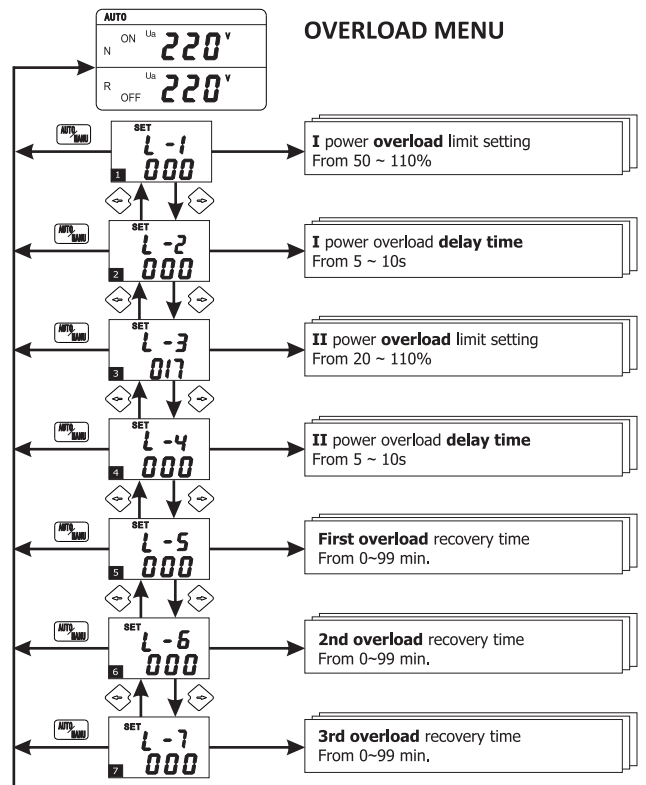
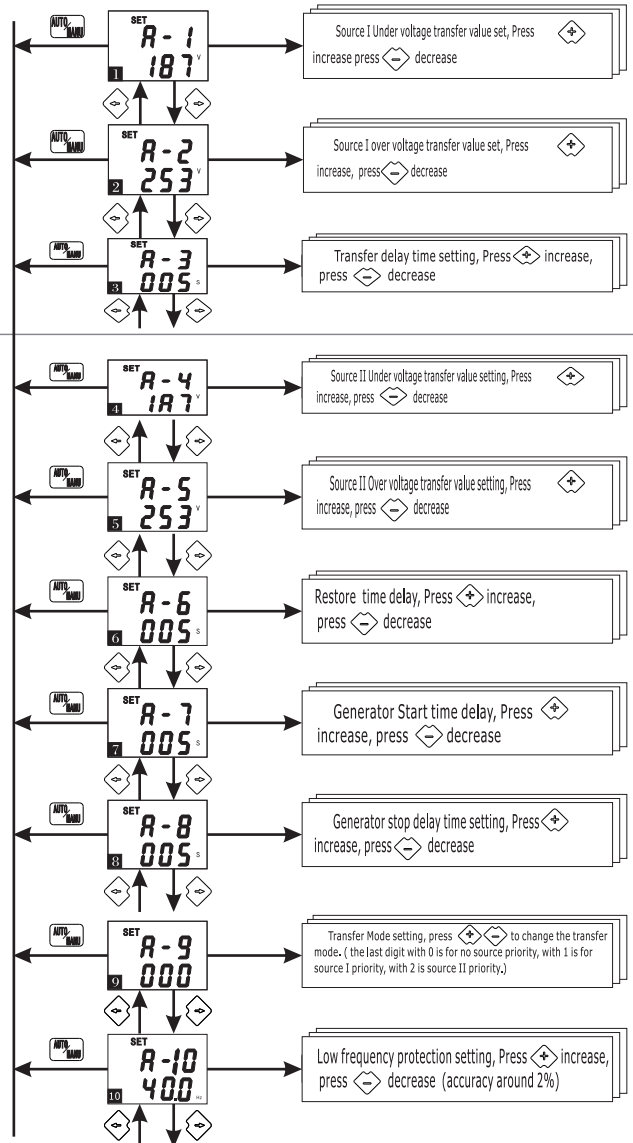
6. REMOTE DISPLAY PROGRAMMING MODE

Key-press instruction

When controller is working, press Set button, LCD display setting interface as picture above, under setting menu, press " " " " button can up-page and down-page setting item, if press " " button will escape setting menu; press " " " " button can modify the data value.



ATeS

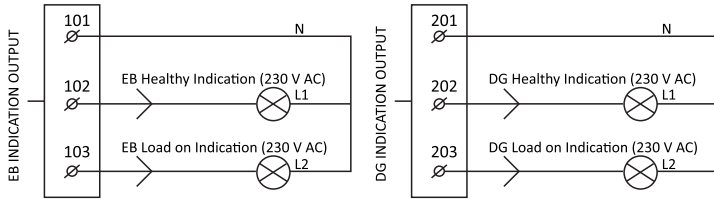




7. ATS CONTROLLER WIRING

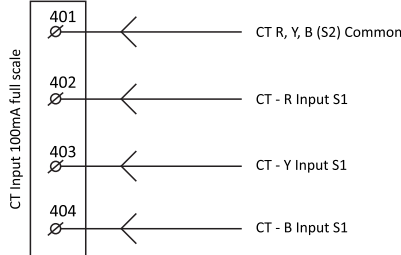
EB STATUS CONTROL WIRING

DG STATUS CONTROL WIRING



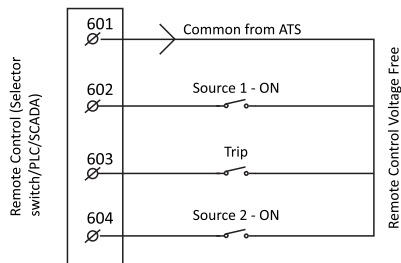
- Note:-**
- Don't connect any input supply to 101 ,102 , 103 & 201, 202, 203
 - All are 230 V AC output for status indication.

OVER LOAD TRIPPING LOGIC WIRING



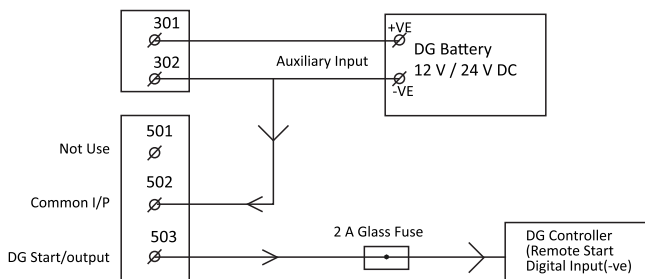
- Note:-**
- Don't connect more than 100mA Input to CT terminal (401 to 404)

REMOTE CONTROL WIRING



- Note:-**
- Don't connect any input supply to 601 common point (Voltage free)

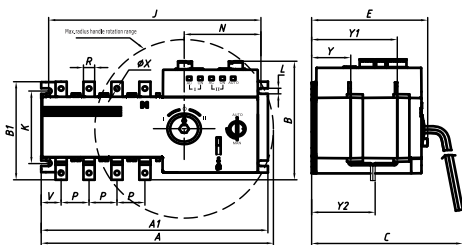
DG START/STOP LOGIC



- Note:-**
- 12 V/24 V DC Auxiliary input only required for generator Start/Stop Operation through the ATS Controller otherwise Auxiliary supply Not required.



8. MECHANICAL DIMENSION



Specification

		63-125A	160-250A	315-630A
Outline size (mm)	A1	244	301	433
	B	135	175	265
	B1	115	140	260
	C	165	200	295
	E	125	150	244
	J	128	285	416
	K	85	102	180
	L	6.5	7	9
	N	83	94	101
	P	30	36	65
Mounting size (mm)	R	12	20	40
	V	21	31	47.5
	X	6.5	8.5	12
	Y	41.5	55.5	83
	Y1	91.5	125.5	193
	Y2	66.5	92.5	140



9. PRECAUTIONARY MEASURES TO BE TAKEN

- Allow only professional to install, commissioning and maintenance.
- Switch off the primary and secondary source before installation, commissioning and maintenance.
- Mandatory use of a multimeter to check to ensure power is switched off.
- The device must be reliably earthed as per requirement. Reset the panel door and arc shield before powering the device. An unauthorized operation may result in electric shock, fire or explosion.



10. TROUBLESHOOTING GUIDELINES

ATeS does not operate electrically	<ol style="list-style-type: none"> 1. Verify the Source I and Source II power supply voltage and frequency healthiness. 2. Verify if the selector switch in the auto position 3. Verify the source healthiness LED (Red) is ON 4. Verify the Source I and Source II Glass Fuse 5A Condition. Verify the fire linkage fault alarm.
Source availability indication not blinking	<ol style="list-style-type: none"> 1. Verify the Source I and Source II power \ supply voltage & frequency healthiness. 2. Verify the Glass Fuse 5A status, replace the fuse if it is failed.
Fuse failure	<ol style="list-style-type: none"> 1. Verify the control wiring (short circuit or wrong wiring)

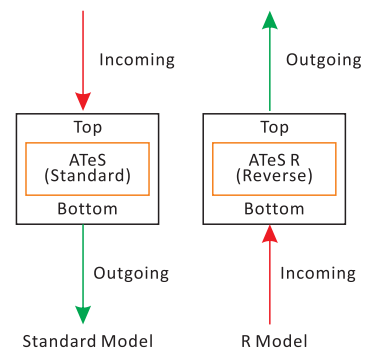
<p>DG does not start in auto mode / remote mode</p>	<ol style="list-style-type: none"> 1. Verify the DC auxiliary voltage (should be 12-30 VDC) 2. Verify the battery system voltage, If any fault in DG Controller. 3. Verify the (501-503) terminal connector. 4. Verify the selector switch is in position in auto. 5. Verify the generator control wiring. 6. 501- DG stop output 502 – common 503 – DG Start output
Source healthy indication is flashing	<ol style="list-style-type: none"> 1. This happens when ATeS timer is running for the changeover. 2. Verify the Source healthy condition. 3. Verify if the Fire Linkage Fault is active.

ATS Mounting orientation

Position - A



- Note:-**
- Recommended / Allowed
 - Don't mount in any other direction *



11. WARRANTY INFORMATION

- Warranty is provided by Elmeasure and covers defects in workmanship and materials in your product. The Period of warranty is 12 months from the date of Commissioning or 18 months from the date of Invoicing. The warranty claims that relate to defects caused by any of the following factors are not covered by the Contractual Warranty.
- Improper use or Non-compliance with installation, commissioning, operation or maintenance instructions (i.e. not according to the operation & installation manual).
 - Unauthorized modifications, changes or attempted repairs.
 - Failure to observe applicable safety standards & regulations.
 - Damages during transportation or storage.
 - If the original identification (trade-mark, serial number) markings have been defaced, altered, or removed.