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8-7

User Manual

www.enerjeometers.com



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1. PRODUCT FEATURES

- AC 32B Utilization Category Standard (IEC 60947-6-1)
- High short circuit withstands capacity.
- Inbuilt microprocessor based AMF Controller
- Inbuilt control switch for Auto/Manual operation
- Optional Overload tripping with inverse curve Logic
- Motor Bandwidth operating voltage (${\bf 160\text{-}\ 300VAC}$)
- 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

- Microcontroller based technology.
- Mains source & Alternative source Protection -Under/over voltage, and phase missing.
- Mains failure based automatic DG start/stop operation.
- Timers for transfer delay, recovery delay, start & stop delay.
- Remote display for programming, and monitoring the real-time system voltage Current for both sources.

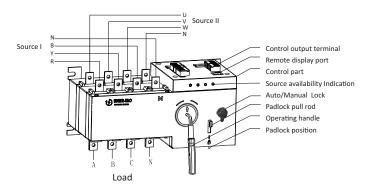


3. OPERATION MODES

- Auto Mode
- Manual Mode
- Remote Mode

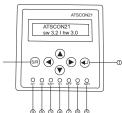


4. WIRING DIAGRAM





Վեր 5. REMOTE DISPLAY TERMINAL DESCRIPTION



- 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

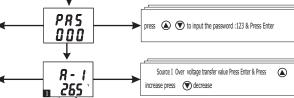


6. REMOTE DISPLAY PROGRAMMING MODE

Key-press instruction

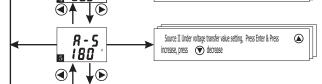
When controller is working, press 🕒 button, Password Screen Will Appear, Use 🔷 🔾 To Set Password 123, After Editing Program Press SIR Button to Save the program.

ATSCON21 Press Enter sw 3.2 I hw 3.0



Source I Under voltage transfer value , Press Enter & Press R-2 180 2 1









Transfer time delay, Press Enter & Press













 $\bigcirc \uparrow \downarrow \bigcirc$ Phase sequence Press Enter (to Enable R-31 press 🕡 to Disable **™** Disable

7. ATS CONTROLLER WIRING

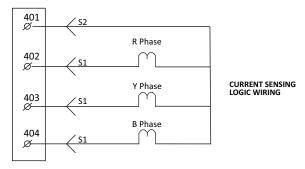
EB STATUS CONTROL WIRING

101 Ø ealthy Indication (230 V AC) EB Load on Indication (230 V AC) 103

DG STATUS CONTROL WIRING

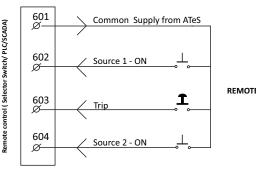


on't give a any input supply to 101 ,102 , 103, 201, 202, 203. All are 230 V AC Output for status indication.



Note:

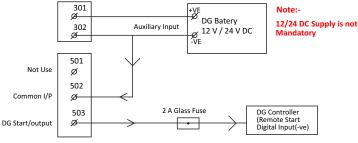
Don't Connect more than 100mA Input to CT terminal (401, 402, 403, 404)



REMOTE CONTROL WIRING

Don't connect any input supply to 601, 602,603, 604.

DG START/STOP LOGIC



ded Cable for ATS-DG Controller

- 2.5 Sq.mm 4 Core Copper Cable
- Maximum Distance 25 Mtrs
- Generator Controller wiring should be done by Generator Manufacturing Company

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	Verify the Source I and Source II power supply voltage and frequency healthiness. Verify if the selector switch in the auto position Verify the source healthiness LED (Red) is ON Verify the Source I and Source II Glass Fuse 5A Condition.
Manual operation of ATeS not possible	Verify if front selector switch is in manual mode. Make sure that the product is padlocked. Verify the direction of the handle.

Source availability indication not blinking	 Verify the Source I and Source II power \ supply voltage & frequency healthiness. Verify the Glass Fuse 5A status, replace the fuse if it is failed.
Fuse failure	Verify the control wiring (short circuit or wrong wiring)
DG does not start in auto mode / remote mode	 Verify the DC auxiliary voltage (should be 12-30 VDC) Verify the batery system voltage, If any fault in DG Controller. Verify the (501-503) terminal connector. Verify the selector switch is in position in auto. Verify the generator control wiring. 501-DG stop output 502 – common 503 – DG Start output
Source healthy indication is flashing	This happens when ATeS timer is running or the changeover. Verify the Source healthy condition. Verify if the Fire Linkage Fault is acti e.



11. WARRANTY INFORMATION

Warranty is provided by Enerjeo 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.

ATes Mounting orientation

Position - A



