

## Setting Tool User Version Description:

### ■ General Configuration:

1. Connect: Click to start the communication between computer and ATS
2. Company Name: Displays ATS company name
3. Model Name: Displays the ATS model name
4. Serial Number: Displays the ATS serial number
5. Firmware version: Displays the ATS firmware version
6. Cabinet Temperature: Displays internal temperature of ATS
7. Installation date: ATS installation date (month/day/year)
8. Default: Click to recover all displayed parameters As default values
9. Read: Click to read the setting information from ATS.
10. Write: Click to write all setting values on the current page to ATS
11. ID Number: It is for multi-units monitoring purpose
12. Input rating voltage:
  - Settable value for 110V system: 100/110/115/120/127
  - Settable value for 220V system: 200/208/220/230/240
13. Input rating frequency:
  - Settable value: 50 Hz /60 Hz
14. Output current limit:
  - The setting value must be greater than 5A and less than the current rating of ATS
15. Preference source: It is for active ATS auto-return function
  - N/A: Disable ATS auto-return function; which means that the input power's transfer action will only occur when the current power source is abnormal.
  - Source A: ATS will transfer back to source A whenever its power condition is normal.
  - Source B: ATS will transfer back to source B whenever its power condition is normal.
16. Delay recognized: It is a delay time before auto-return function acting.
  - Settable range: 3sec ~ 60sec
17. Auto Return Retry No. of Times:
  - Settable range: 1 ~ 99 times/hour.

- The preference source will be changed to the other source if the retry time exceeds the setting value.

ATS transfer to the other source while preference source is abnormal; and then automatically transfer back when preference source power recovered. The process above will be seen as one automatic return cycle.

Example:

Preference source	A
Auto Return Retry no. of time	10

When the number of automatic return exceeds 10 times within an hour, the system will automatically change preference source as B.

18. Synchronized Transfer Only:

- NO: Phase difference between 2 power sources will be ignored for transferring.
- YES: When ATS needs to perform transferring, checks whether the phase difference of the two inputs is within the range set in item 21.
  - ✧ If the phase of the two inputs is within the allowed range: Allow transferring.
  - ✧ If the phase of the two inputs exceeds the range set: Forbids transferring, shuts OFF output, displays Er31 and locks down the system.

19. Phase angle  $\leq$ : It is limited phase angel difference when “Synchronized Transfer Only” is active.

- Settable range: 10°~ 180°.

20. Overload transferring:

- ON: When overloading condition is over time limit, ATS will turn OFF the output before transferring to the other input source.
- OFF: When overloading condition is over time limit, ATS will turn OFF the output and lockdown the unit.

21. Manual transferring: The button setting of manual transferring.

- Complex Trans Mode: Must use the panel’s combination buttons to perform transferring.
- Direct Trans Mode: Simply press on transfer button to perform manual transferring.

22. Source sensitivity: The input power waveform detecting sensitivity. Lower sensitivity has greater tolerance in harmonic distortion.

- Settable values: High sensitivity, Medium sensitivity and Low sensitivity.

23. Source A trip voltage Upper window: Overvoltage trigger point of source A

24. Source A trip voltage Lower window: Low voltage trigger point of source A

25. Source A recovery Upper error voltage: Overvoltage recover tolerance of source A

26. Source A recovery Lower error voltage: Low voltage recovery tolerance of source A

27. Source A trip frequency Upper window: Over Frequency trigger point of source A

28. Source A trip frequency Lower window: Frequency low trigger point of source A

29. Source A recovery Upper error frequency: Over frequency recover trigger point tolerance of source A

30. Source A recovery Lower error frequency: Frequency low recover trigger point tolerance of source A

31. Source B trip voltage Upper window: Overvoltage trigger point of source B

32. Source B trip voltage Lower window: Low voltage trigger point of source B

33. Source B recovery Upper error voltage: Overvoltage recover tolerance of source B

34. Source B recovery Lower error voltage: Low voltage recovery tolerance of source B

35. Source B trip frequency Upper window: Over Frequency trigger point of source B

36. Source B trip frequency Lower window: Frequency low trigger point of source B

37. Source B recovery Upper error frequency: Over frequency recover trigger point tolerance of source B

38. Source B recovery Lower error frequency: Frequency low recover trigger point tolerance of source B

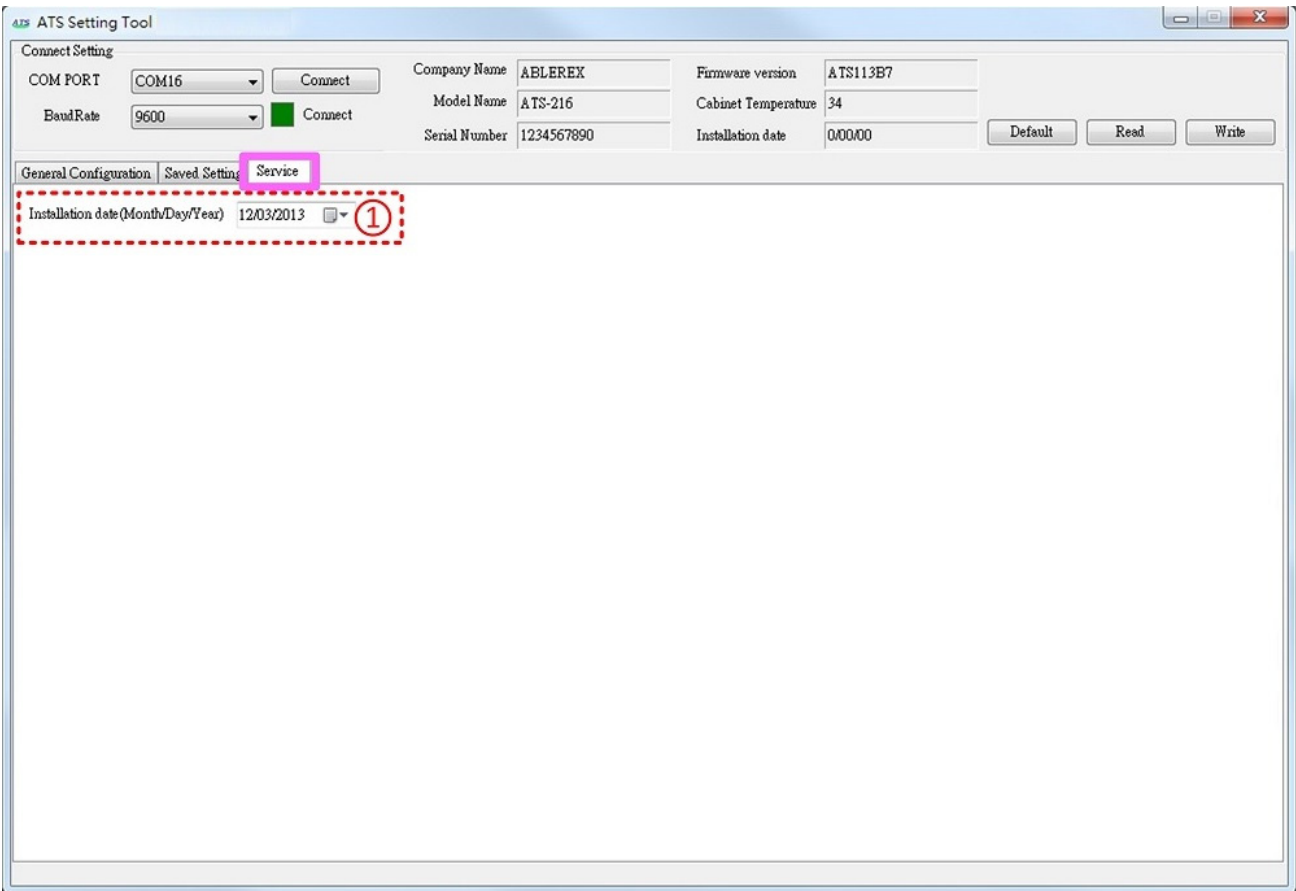
39. 111% overload shutdown delay: Overload 111~125% shutdown delay time, settable range 30~60 seconds.

40. 126% overload shutdown delay: Overload 126~150% shutdown delay time, settable range 5~30 seconds.
41. 151% overload shutdown delay: Overload 151~200% shutdown delay time, settable range 1~5 seconds.
42. 201% overload shutdown delay: Overload  $\geq 201\%$  shutdown delay time, settable range 0~1 second.
43. Pre-alarm load level  $>$ : ATS can give warning while ATS loading exceed a specific level.
  - Settable range: 20% ~ 110%.
  - For example: If set pre-alarm level at 80%, when the loading of ATS is higher the 80%, the system will display Er32 and alarm to warn user in advance. This function only give alarm, will not shutdown output.
44. Delay Time for Recognition Power: Recovery time delay acknowledge the input source
  - When the input source from the abnormal returns to normal, you can set the delay time to determine how much of this input source has returned to normal.
  - Range: 0~600 Second , default:0Second ◦
45. Contact: Relay contact position parameter
  - NC: When no events occur, the default for Relay is NC (Normally Closed); when events occurred, Relay contactors will be opened.
  - NO: When no events occur, the default for Relay is NO (Normally Open); when events occurred, Relay contactors will be closed.
46. Event 01: The primary relay trigger event. Please refer to page 5 for useable events list.
47. Logic: Relay trigger events calculating logic.
  - Settable parameter: OR and AND
48. Event 02: The second relay trigger event, it can be set as “N/A” to be ignored.
49. Keep active before shutdown: Enable to keep activated relay condition after event recovered until unit shutdown.

■ Saved Setting:

1. Last Time Turn Off Source A Voltage : Display Last Time Turn Off Source A Voltage
2. Last Time Turn Off Source A Frequency : Display Last Time Turn Off Source A Frequency
3. Last Time Turn Off Source B Voltage : Display Last Time Turn Off Source B Voltage
4. Last Time Turn Off Source B Frequency : Display Last Time Turn Off Source B Frequency
5. Last Time Turn Off system temperature : Display Last Time Turn Off system temperature
6. Last Time Turn Off Output Voltage : Display Last Time Turn Off Output Voltage
7. Last Time Turn Off Output Frequency : Display Last Time Turn Off Output Frequency
8. Last Time Turn Off Output Current : Display Last Time Turn Off Output Current
9. Last Time Turn Off Output Load Percent : Display Last Time Turn Off Output Load Percent
10. Trans Index : Transform events occurring sequence
11. Source A Voltage : Display the input source when the last A voltage transform
12. Source A Frequency : Display the input source when the last A Frequency transform
13. Source B Voltage : Display the input source when the last B voltage transform
14. Source B Frequency : Display the input source when the last B Frequency transform
15. Output Current : Display the Output Current when the last transform
16. Output Load Percent : Display the Output Load Percent when the last transform

■ Service:



Installation date (Month/Day/Year): The system installation date

## ■ Dry Contact Event Description:

<b>Event Name</b>	<b>Status Description</b>
Source A Voltage Abnormal	Input source A voltage abnormal
Source B Voltage Abnormal	Input source B voltage abnormal
Source A Frequency Abnormal	Input source A frequency abnormal
Source B Frequency Abnormal	Input source B frequency abnormal
Output Over Load	Output overload
Unit fault (Source A circuit power defected)	Equipment malfunction (Defective input A circuit power)
Unit fault (Source B circuit power defected)	Equipment malfunction (Defective input B circuit power)
Cabinet temperature abnormal	Cabinet temperature abnormal
Unit fault (Sensor circuit defect)	Equipment malfunction (Defective sensor circuit)
Unit fault (EEPROM data abnormal)	Equipment malfunction (Memory data abnormal)
LCD panel connection abnormal	LCD panel connection abnormal
Overload time out	Output exceeds the overload delay time
Transferring fail by sync setting condition	Input phase difference exceeds the range set by the user; system lockdown
Pre-alarm active	Output load percentage reached pre-alarm setting value