

OMRON

MODEL S8JX-P(300/600W)
SWITCHING POWER SUPPLY
EN INSTRUCTION MANUAL (2/2)
DE Bedienungsanleitung (2/2)
FR Manuel d'instructions (2/2)

Read the S8JX-P Instruction Manual (1/2) together with this manual without fail.

Bewahren Sie diese Anleitung griffbereit zum Nachschlagen auf, und beziehen Sie sich beim Betrieb darauf. Lesen Sie auf jeden Fall die "S8JX-P Bedienungsanleitung (1/2)" zusammen mit dieser Anleitung.

Lisez absolument le "Manuel d'instructions (1/2) S8JX-P" en plus de ce manuel.

Parallel Operation / Parallelbetrieb / Fonctionnement en parallèle

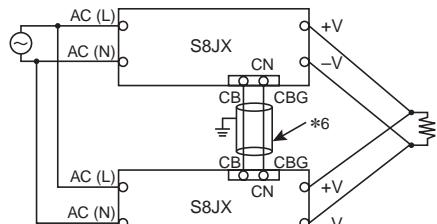


Fig.12

Remote sensing function / Extern Stromerkennung / Fonction de télédétection

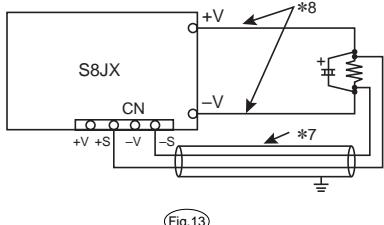


Fig.13

Remote Control Function / Freigabe Funktion / Fonction de télécommande

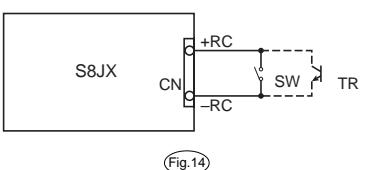


Fig.14

Alarm output function / Alarmausgangsfunktion / Fonction de sortie d'alarme

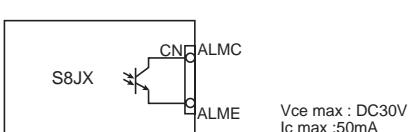


Fig.15

Crimping condition at wire insulation barrel / Crimpstellung an der Isolierhülse / Sertissage au niveau du fourreau de l'isolation du câble

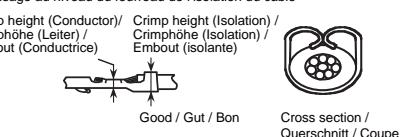


Fig.17

Examples of improper crimping / Beispiele einer unsachgemäßen Crimpverbindung / Exemples de mauvais sertissage

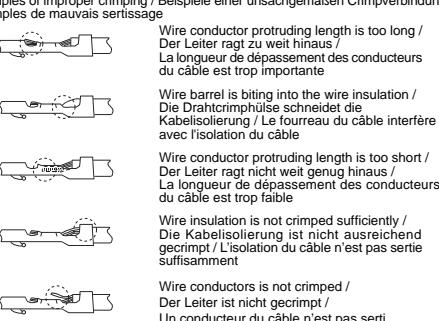


Fig.18

Insertion / Einsatz / Insertion

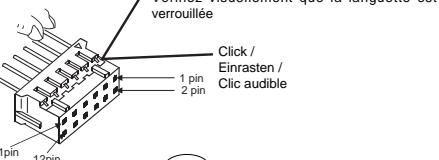


Fig.19

Signal I/O connector / Signal-E/A-Stecker / Connecteur E/S de signal

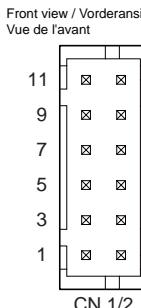


Fig.11

No.	Configuration / Konfiguration / Configuration
11	+V
9	+S
7	-V
8	-S
5	CB
6	CBG
3	NC
1	ALMC
12	ALME

1: DC output monitor pin (+V)	1: DC-Ausgangs -Überwachung (+V)
2: Remote sensing pin (+S)	2: Extern Stromerkennung (+S)
3: DC output monitor pin (-V)	3: DC-Ausgangs -Überwachung (-V)
4: Remote sensing pin (-S)	4: Extern Stromerkennung (-S)
5: Current balance pin (CB)	5: Stromausgleich (CB)
6: Signal ground pin for Current balance (CBG)	6: Signalaufladung Stromvergleich (CBG)
7: Remote control pin (+RC)	7: Freigabe (+RC)
8: Remote control pin (-RC)	8: Freigabe (-RC)
9: No connect	9: Nicht benutzen
10: No connect	10: Nicht benutzen
11: Alarm output pin (ALMC) (collector)	11: Alarmausgangsanschluss (ALMC) (Kollektor)
12: Alarm output pin (ALME) (emitter)	12: Alarmausgangsanschluss (ALME) (Emitter)

Signal I/O connector: Provided as a standard accessory.
Shorted: (1 ~ 2), (3 ~ 4), and (7 ~ 8)
Mounted to CN at shipment.

Note:

Do not connect a load to the DC output monitor pins
(+V or -V).

Signal I/O connector: Als Standardzubehör geliefert.
Kurzgeschlossen: (1 ~ 2), (3 ~ 4) und (7 ~ 8)
Bei Versand auf das CN-Gerät montiert.

Anmerkung:
Schließen Sie keine Last an die für die Überwachung
des DC-Ausgangs Klemmen an (+V oder -V).

Connecteur E/S de signal : Fourni en tant qu'accès-
soire standard.
Court-circuité : (1 ~ 2), (3 ~ 4) et (7 ~ 8)
Monté sur la CN lors de l'expédition.

Remarque:
Ne connectez pas de charge aux broches de sortie en
c.c. du moniteur (+V ou -V).

EN Nomenclature (CN)

- 1: DC output monitor pin (+V)
- 2: Remote sensing pin (+S)
- 3: DC output monitor pin (-V)
- 4: Remote sensing pin (-S)
- 5: Current balance pin (CB)
- 6: Signal ground pin for Current balance (CBG)
- 7: Remote control pin (+RC)
- 8: Remote control pin (-RC)
- 9: No connect
- 10: No connect
- 11: Alarm output pin (ALMC) (collector)
- 12: Alarm output pin (ALME) (emitter)

Signal I/O connector: Provided as a standard accessory.
Shorted: (1 ~ 2), (3 ~ 4), and (7 ~ 8)
Mounted to CN at shipment.

Note:
Do not connect a load to the DC output monitor pins
(+V or -V).

Signal I/O connector: Als Standardzubehör geliefert.
Kurzgeschlossen: (1 ~ 2), (3 ~ 4) und (7 ~ 8)
Bei Versand auf das CN-Gerät montiert.

Anmerkung:
Schließen Sie keine Last an die für die Überwachung
des DC-Ausgangs Klemmen an (+V oder -V).

Connecteur E/S de signal : Fourni en tant qu'accès-
soire standard.
Court-circuité : (1 ~ 2), (3 ~ 4) et (7 ~ 8)
Monté sur la CN lors de l'expédition.

DE Bezeichnungen (CN)

- 1: DC-Ausgangs -Überwachung (+V)
- 2: Extern Stromerkennung (+S)
- 3: DC-Ausgangs -Überwachung (-V)
- 4: Extern Stromerkennung (-S)
- 5: Stromausgleich (CB)
- 6: Signalaufladung Stromvergleich (CBG)
- 7: Freigabe (+RC)
- 8: Freigabe (-RC)
- 9: Nicht benutzen
- 10: Nicht benutzen
- 11: Alarmausgangsanschluss (ALMC) (Kollektor)
- 12: Alarmausgangsanschluss (ALME) (Emitter)

Signal-E/A-Stecker: Als Standardzubehör geliefert.
Kurzgeschlossen: (1 ~ 2), (3 ~ 4) und (7 ~ 8)
Bei Versand auf das CN-Gerät montiert.

Anmerkung:
Schließen Sie keine Last an die für die Überwachung
des DC-Ausgangs Klemmen an (+V oder -V).

Connecteur E/S de signal : Fourni en tant qu'accès-
soire standard.
Court-circuité : (1 ~ 2), (3 ~ 4) et (7 ~ 8)
Monté sur la CN lors de l'expédition.

Remarque:
Ne connectez pas de charge aux broches de sortie en
c.c. du moniteur (+V ou -V).

FR Nomenclature (CN)

- 1: Broche de sortie en c.c. du moniteur (+V)
- 2: Broche de détection (+S)
- 3: Broche de sortie en c.c. du moniteur (-V)
- 4: Broche de détection (-S)
- 5: Broche d'équilibrage de courant (CB)
- 6: Broche de mise à la terre du signal pour équilibrage
du courant (CBG)
- 7: Broche de télécommande (+RC)
- 8: Broche de télécommande (-RC)
- 9: Non connecté
- 10: Non connecté
- 11: Broche de sortie d'alarme (ALMC)
(collecteur)
- 12: Broche de sortie d'alarme (ALME)
(émetteur)

Connecteur E/S de signal : Fourni en tant qu'accès-
soire standard.
Court-circuité : (1 ~ 2), (3 ~ 4) et (7 ~ 8)
Monté sur la CN lors de l'expédition.

Remarque:
Ne connectez pas de charge aux broches de sortie en
c.c. du moniteur (+V ou -V).

EN Precautions for Correct Use

■ Parallel operation

When the CB pin (pin 5 on CN) and the CBG pin (pin 6 on CN) are connected, the current balance function operates and parallel operation is possible.
Up to 5 Units can be connected.
Notes:
1. Use 2-conductor shielded cable as connection wire (* 6).

2. Adjust the output voltage of each power supply to the same value within 1% or 100 mV, whichever is smaller.During parallel operation, it is possible that the load current will flow excessively to either power supply and damage internal components.

3. Parallel operation is used to increase static capacity. Output voltage may drop with sudden load fluctuations.

4. There may be steps in the rising waveform of the output voltage during parallel operation.

5. Remove the standard supplied connector and prepare a connector separately.

6. When N units are connected, a rush current equal to XN the current of one unit will flow.

Check the characteristics of the external fuse or breaker and select appropriately so that the fuse does not blow or the breaker does not trip due to the rush current.

7. The minimum load current is 100 mA.

8. The total line voltage drop (ΔV) must be less than 0.3 V.

9. If the sensing line is too long, it is necessary to put an electrolytic capacitor across the load terminals. Please take note that the electrolytic capacitor may generate heat due to the ripple current, depending on connected load. Therefore, the electrolytic capacitor must have a ripple current allowance higher than the output ripple current.

10. The stability and accuracy of the output will deteriorate if the +S or -S pins are open.

11. Remove the standard supplied connector and prepare a connector separately.

12. Make sure the remote sensing pins (+S, -S) are not open.

■ Remote Sensing Function

This function is used to compensate for voltage drops on the load lines.Connect the +S pin (pin 2 on CN) to the positive load terminal and the -S pin (pin 4 on CN) to the negative load terminal to enable remote sensing.

When not using the remote sensing function, use the standard connector. The +S and +V pins (pin 1 on CN) and the -S and -V pins (pin 3 on CN) will be connected.

Notes:
1. Use 2-conductor shielded cable as connection wire (* 7).

2. Use as thick a wire as possible since high voltage drops on the load lines (* 8) may activate the overvoltage protection function.

3. The total line voltage drop (ΔV) must be less than 0.3 V.

4. If the sensing line is too long, it is necessary to put an electrolytic capacitor across the load terminals. Please take note that the electrolytic capacitor may generate heat due to the ripple current, depending on connected load. Therefore, the electrolytic capacitor must have a ripple current allowance higher than the output ripple current.

5. The stability and accuracy of the output will deteriorate if the +S or -S pins are open.

6. Remove the standard supplied connector and prepare a connector separately.

7. Make sure the remote sensing pins (+S, -S) are not open.

■ Remote Control Function

This function outputs ON and OFF using an external signal while input voltage is applied, using the +RC pin (pin 7 on CN) and the -RC pin (pin 8 on CN). Connect a switch or transistor to the +RC and -RC pins to use the remote control function.

When not using this function, the +RC and -RC pins are shorted by using the standard connector.

+RC Level for -RC Output

Short or L (0 ~ 0.8V) ON Rotate

Open or H (2.4 ~ 12V) OFF Stop

The Maximum input voltage: 12V max.

The Maximum allowable reverse voltage: -1V max. Sink Current: 3.5mA

Notes:
1. Use 2-conductor shielded cable or twisted-pair cable as connection wire.

2. The remote control circuit is isolated from the input and output circuits of the power supply.

3. Remove the standard supplied connector and prepare a connector separately.

4. If a reverse voltage is applied to the remote control pin, output voltage ON/OFF will not be possible. Exercise caution when wiring.

■ Alarm output function

The Power failure alarm indicator will light red to indicate an output voltage error if overloaded, overvoltage, or overheat protection is activated, if a drop in the input voltage causes the output voltage to drop, if the built-in fan motor stops, and during remote control standby. The alarm is also output externally by a transistor.

Transistor output: 30 VDC max., 50 mA max. Residual voltage when ON: 2 V max., leakage current when OFF: 0.1 mA max.

Alarm detection voltage: Approx. 80% of output voltage setting

The transistor output is turned OFF if an alarm is detected (no power to pins 11 and 12 on CN), and the LED indicator is lit (④: red).

Notes:
1. This function monitors the voltage at the power supply output terminals. To check actual voltage, measure the voltage on the load side.

2. Remove the standard supplied connector and prepare a connector separately.

■ Peak Output Current (S8JX-P30024□□/S8JX-P60024□□)

See product catalogue for details.

Notes:
1. Do not allow the peak load current to continue for more than 10 seconds, and do not allow the duty cycle to exceed the conditions indicated in Fig. 16. This may damage the power supply.

2. Lessen the load of the peak load current by adjusting the ambient temperature and the mounting orientation.

3. Ensure that the average current of one cycle of the peak current does not exceed the rating. This may damage the power supply.

