TROUBLESHOOTING AND ACTION

Applicable Units

Model	Order Specification
PSM-5.5i	A06B-6110-H006
PSM-11i	A06B-6110-H011
PSM-15i	A06B-6110-H015
PSM-26i	A06B-6110-H026
PSM-30i	A06B-6110-H030
PSM-37i	A06B-6110-H037

Fanuc Alpha-*i* Series POWER SUPPLY MODULE (PSM)

If an alarm occurs, in the STATUS display, the ALM LED lights red, and the one-digit 7-segment display indicates an alarm code or warning code. The meaning of each warning code is the same as that of the corresponding alarm code. If a warning code is displayed, an alarm condition will occur in a certain period of time. The PSM remains operable while the warning code stays displayed.

Alarm Code 1

For the PSM-5.5i to PSM-15 i

      (1)Meaning

            The main circuit power module (IPM) has detected an abnormal condition.

      (2)Cause and troubleshooting

            (a)Control supply voltage decrease of the power module (IPM) Replace the power unit.

            (b)Input supply voltage imbalance Check the input power supply specification.

            (c)The specification of the AC reactor does not match the PSM in use. Check the PSM and the specification of the AC reactor.

            (d)IPM failure Replace the IPM.

For the PSM-15i to PSM-37i

      (1)Meaning

            Over current flowed into the input of the main circuit.

      (2)Cause and troubleshooting

            (a)Input supply voltage imbalance Check the input power supply specification.

            (b)The specification of the AC reactor does not match the PSM in use. Check the PSM and the specification of the AC reactor.

            (c)IGBT defective Replace IGBT.

Alarm Code 2

(1)Meaning

(a)A cooling fan for the control circuit has stopped.

(2)Cause and troubleshooting

(a)Cooling fan broken Check whether the cooling fan rotates normally. Replace it.

Alarm Code 3

(1)Meaning

The temperature of the main circuit heat sink has risen abnormally.

(2)Cause and troubleshooting

(a)Cooling fan for the main circuit broken. Check whether the cooling fan for the main circuit rotates normally. Replace it.

(b)Dust accumulation Clean the cooling system with a vacuum cleaner or the factory air blower.

(c)Overload Examine the operating conditions.

Alarm Code 4

(1)Meaning

In the main circuit, the DC voltage (DC link) has dropped.

(2)Cause and troubleshooting

(a)A small power dip has occurred. Check the power supply.

(b)Low input power supply voltage Check the power supply specification.

(c)The main circuit power supply may have been switched off with an emergency stop state released. Check the sequence.

Alarm Code 5

(1)Meaning

(a)The input power supply is abnormal (open phase).

(b)The main circuit capacitor was not recharged within the specified time.

(2)Cause and troubleshooting

      (a)The input power supply has an open phase. Check the connection.

      (b)Too many SVM and/or SPM units are connected. Check the specification of the PSM.

      (c)The DC link is short-circuited. Check the connection.

      (d)The recharge current limiting resistor is defective. Replace the distributing board.

Alarm Code 6
(1)Meaning

      The control power supply voltage decrease.

(2)Cause and troubleshooting
      (a)Input voltage decrease Check the power supply.

Alarm Code 7
(1)Meaning

      In the main circuit, the DC voltage at the DC link is abnormally high.

(2)Cause and troubleshooting

      (a)Excessive regenerated power The PSM does not have a sufficient capacity. Check the specification of the PSM.

      (b)The output impedance of the AC power source is too high. Check the power source output impedance. (Normal if the voltage variation at maximum output time is within 7%)

      (c)The main circuit power supply may have been switched off with an emergency stop state released. Check the sequence.

Alarm Code A
(1)Meaning

      (a)A cooling fan of external cooling fin has stopped.

(2)Cause and troubleshooting
      (a)Cooling fan for the control circuit broken. Check whether the cooling fan for the control circuit rotates normally. Replace it.

Alarm Code E

(1)Meaning

The input power supply is abnormal (open phase).

(2)Cause and troubleshooting

(a)The input power supply has an open phase. Check the connection.