Table 13-1-1 Details of alarms and displays there of

Protective Function	Function Explanation		Display	Protective operation
Overcurrent protection Short circuit Ground short circuit	Protects the Inverter if the Inverter output current momentarily exceeds the overcurrent detection level. Protects the Inverter from overcurrent resulting from a short circuit in the output circuit or ground circuit.	During acceleration	0C1	• Inverter output stops • Motor coasts to a stop • Alarm (1c) is output • Alarm signal is held internally until alarm reset command is given [1]
		During deceleration	0C2	
		During steady speed operation	0C3	
Momentary power failure Undervoltage protection	Avoids being out of control of the Inverter caused by drops in the input voltage level. ※Operation will continue if the momentary power failure or undervoltage period is less than 15 msec.		LU	• Inverter output stops If the restart after momentary power failure mode is selected, operation will restart automatically when the power is restored
Overvoltage protection	Protects the Inverter if momentary overvoltage (regenerative overvoltage) which exceeds the overvoltage detection level is detected.	During acceleration	0U1	• Inverter output stops • Motor coasts to a stop • Alarm (1c) is output • Alarm signal is held internally until alarm reset command is given [1]
		During deceleration	0U2	
		During steady speed operation	0U3	
Inverter overheating	Detects overheating of the Inverter caused by an overload, cooling fan problem or abnormal ambient temperature.		0H1	
External alarm input	Acts as an external alarm to stop output, if protective device such as the electronic thermal overload relay connected between THR and CM terminals switches from on to off.		0H2	
Electronic thermal overload relay	Protects semiconductor devices such as the IGBT from overloads.		0LU	
	Protects Fuji standard 4-pole motors or Fuji FV motors from overloads even if an electronic thermal overload relay is not connected.		0L	

Protective Function	Function Explanation	Display	Protective operation
Memory error	Operates when a memory error occurs due to a data writing error, etc.	Er 1	• Inverter output stops • Motor coasts to a stop • Alarm (1c) is output • Alarm signal is held internally until alarm reset command is given [1]
Communication error [2]	Displayed when there is communication error occurs continuously between the Inverter and the keypad panel.	Er 2	
CPU error	Stops the Inverter when an error is detected in the CPU.	Er 3	
Optional circuit board communication error	Displayed when there is a communication checksum error or interruption of communication between the Inverter and the optional circuit board.	Er 4	
Option problem	Displayed when a link error etc. is detected.	Er 5	
Output wiring error	Stops the Inverter when it is detected that the output wiring is not connected during automatic tuning.	Er 7	

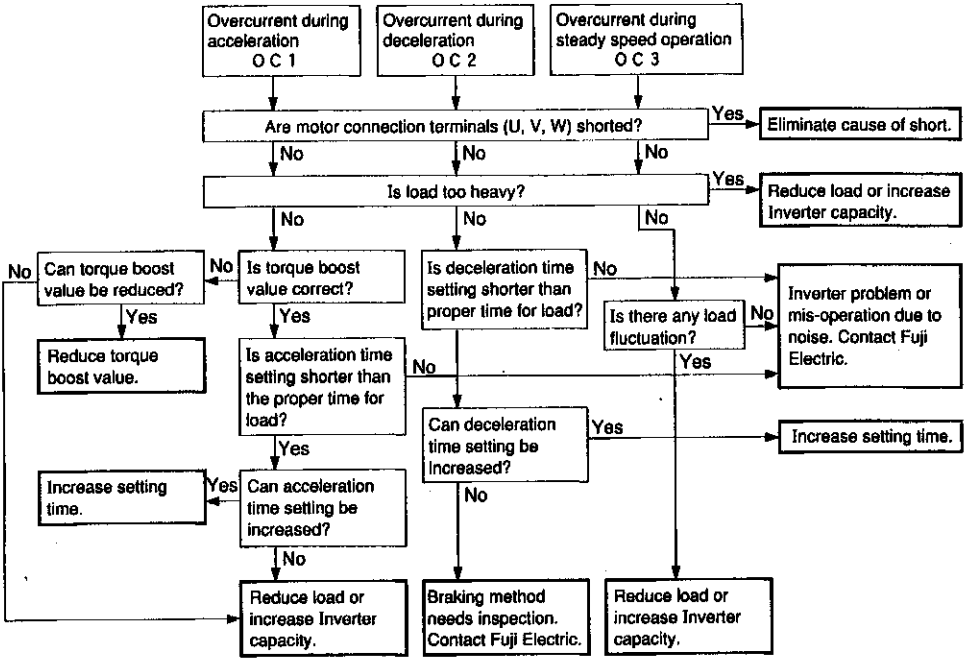
[1] Alarm signal holding

If the automatic breaker at the power supply side of the Inverter switches off when the protective function has operated and an alarm signal is being output, the control power supply for the Inverter is turned off and the alarm cannot be held internally.

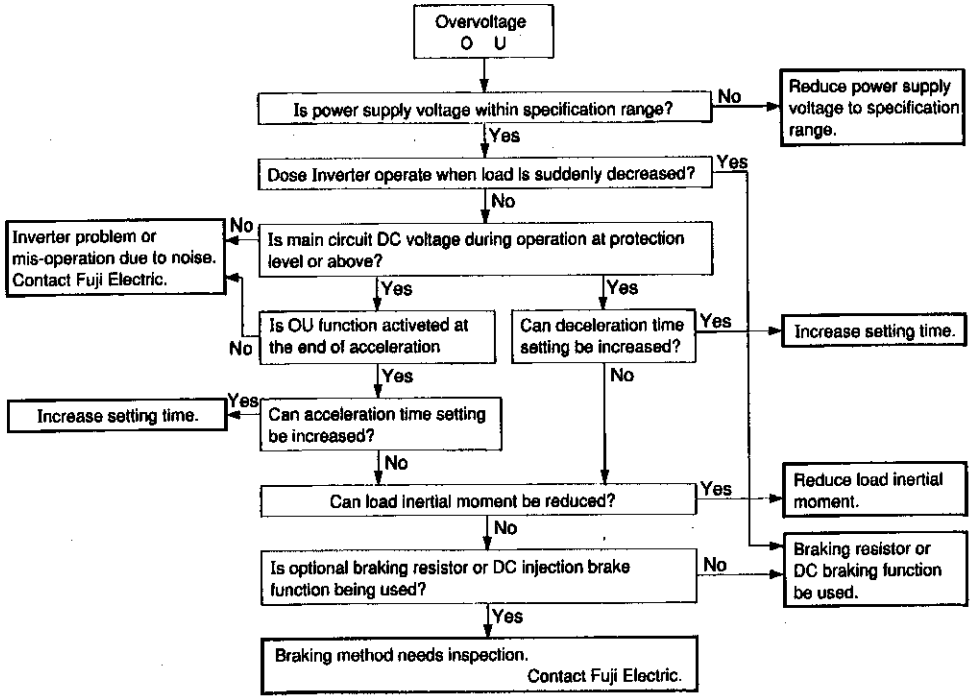
[2] During external terminal operation (F02=1), the Inverter will continue running without an alarm being output even if error Er2 is displayed. If communication is restored, the Er2 display will disappear.

13-2. Troubleshooting when protective function operates

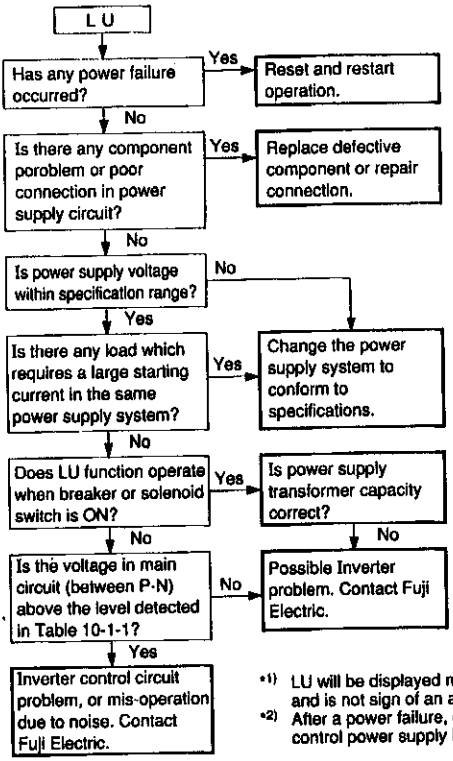
(1) Overcurrent (OC)



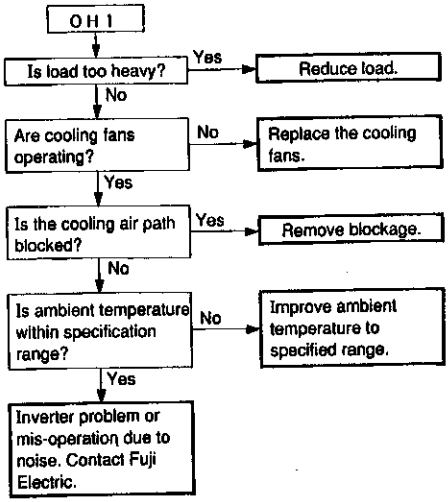
(2) Overvoltage (OU)



(3) Undervoltage (LU) [1),2)]



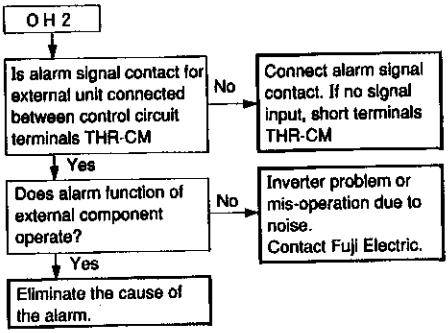
(4) Inverter overloading or overheating (OH1)



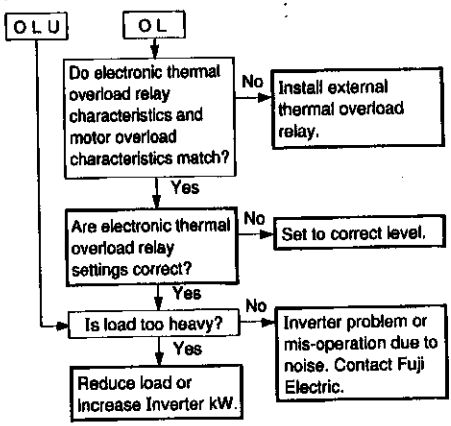
*1) LU will be displayed momentarily when the power supply is turned on, but this is normal and is not sign of an abnormality.

*2) After a power failure, once the smoothing capacitor has discharged and the Inverter control power supply has dropped, resetting will be made automatically.

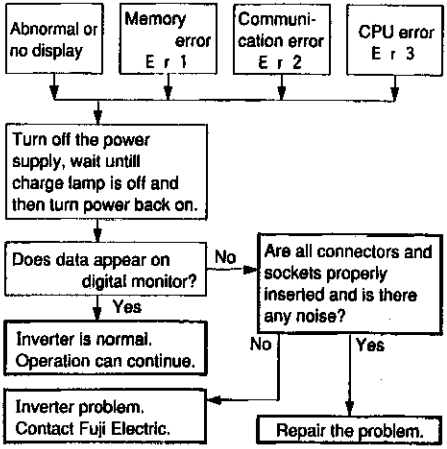
(5) External alarm input (OH2)



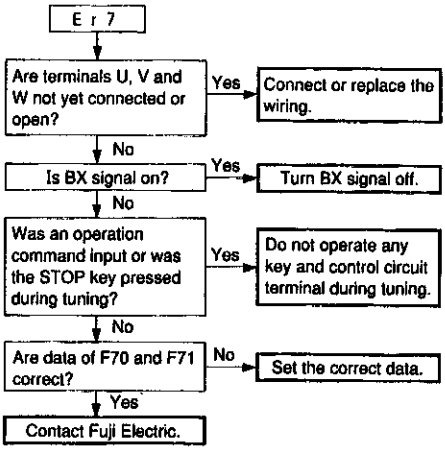
(6) Motor overload or Inver overload (OL)



(7) Memory error, communication error or CPU error

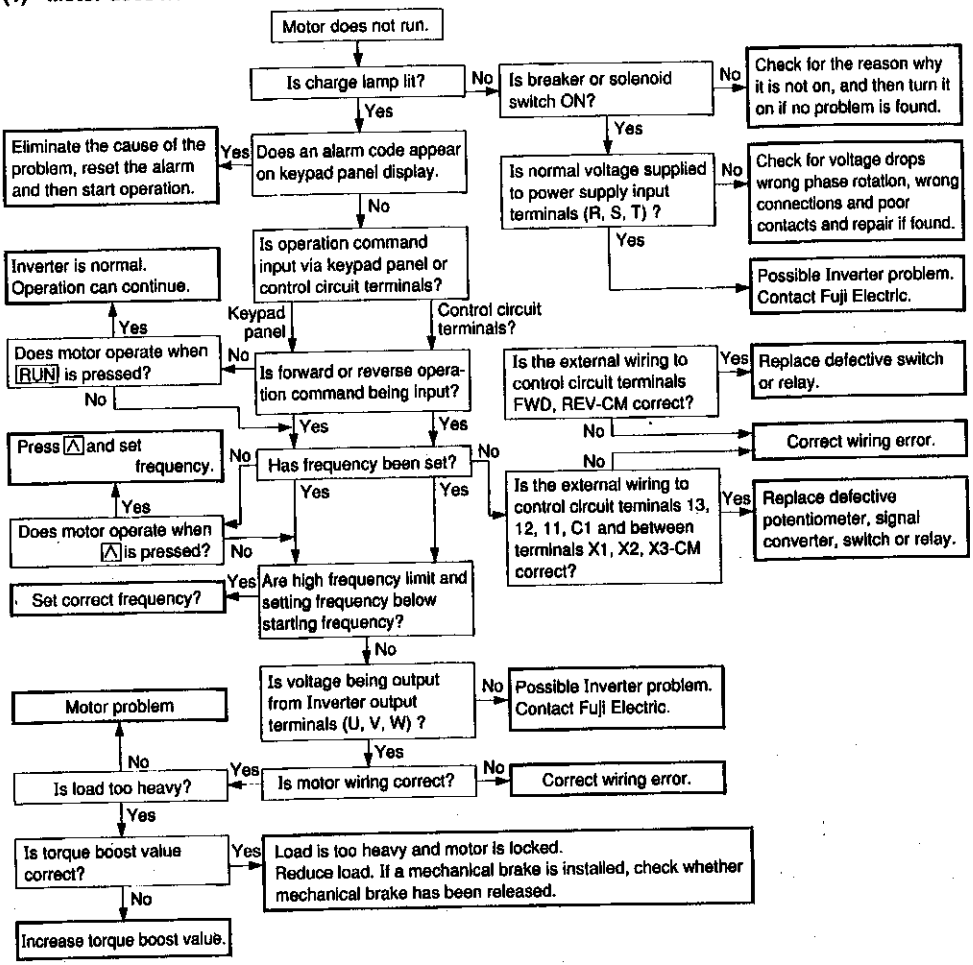


(8) Inverter output circuit error



13-3. Troubleshooting when motor problem occurs

(1) Motor does not run



(2) Motor overheats