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

	Table 13-1-1 Details of a	alarms and dis	plays the	re oi
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	ם כי	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	002	
		During steady speed operation	O C 3	
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	ו עם	Alarm (1c) is output Alarm signal is held internally until alarm reset
		During deceleration	0 U 2	
		During steady speed operation	0 U 3	
Inverter overheating	Detects overheating of the Inverter caused by an overload, cooling fan problem or abnormal ambient temperature.		0 H I	
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.		0 H 2	
Electronic thermal overload relay	Protects semiconductor devices such as the IGBT from overloads.		OLU	
	Protects Fuji standard 4-pole motors or Fuji FV motors from overloads even if an electronic thermal overload relay is not connected.		OL	

Protective Function	Function Explanation	Display	Protective operation
Memory error	Operates when a memory error occurs due to a data writing error, etc.	E - 1	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.	E ~ 2	
CPU error	Stops the Inverter when an error is detected in the CPU.		
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.	E ~ 4	
Option problem	Displayed when a link error etc. is detected.	E r 5	
Output wiring error	Stops the Inverter when it is detected that the output wiring is not connected during automatic tuning.	£ ~ 7	

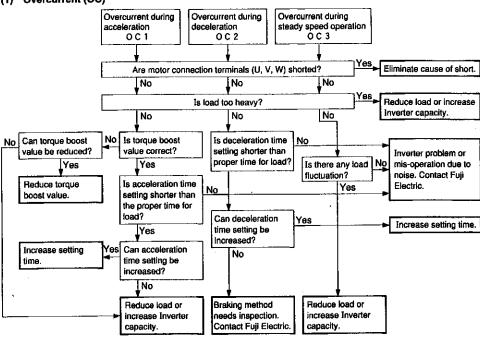
9 Alarm signal holding

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.

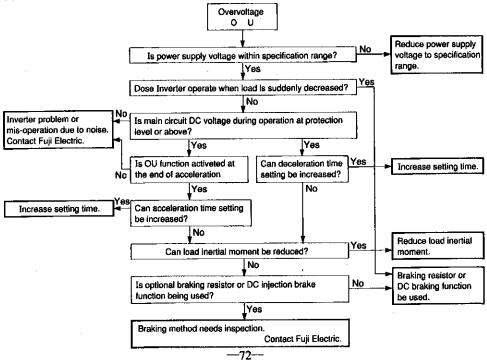
2) During external terminal operation (F02=1), the Inverter will continue running without an alarm being output even if error Er2 is displayed. If communication is restored, the Er2 display will disappear.

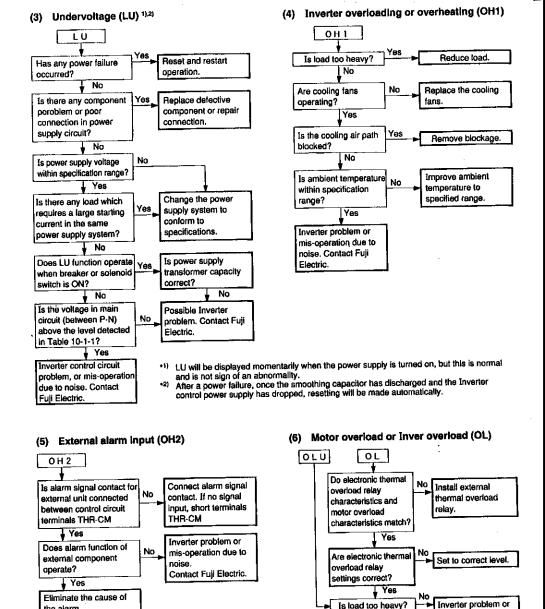
13-2. Troubleshooting when protective function operates

(1) Overcurrent (OC)



(2) Overvoltage (OU)





mis-operation due to

noise. Contact Fuji

Electric.

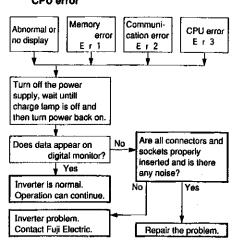
Yes

Reduce load or

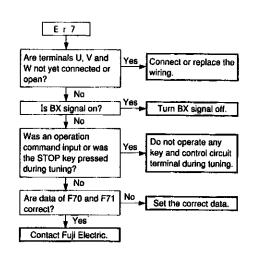
increase Inverter kW

the alarm.

(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 Motor does not run. Check for the reason why Is charge lamp lit? Is breaker or solenoid it is not on, and then turn it switch ON? on if no problem is found. Yes Yes Eliminate the cause of the Yes Does an alarm code appear Check for voltage drops problem, reset the alarm on keypad panel display. Is normal voltage supplied No wrong phase rotation, wrong and then start operation. to power supply input connections and poor No terminals (R. S. T) ? contacts and repair if found. Yes Is operation command Inverter is normal. input via keypad panel or Possible Inverter problem. Operation can continue. control circuit terminals? Contact Fuji Electric. Control circuit Keypad terminals? panel Does motor operate when Is the external wiring to Replace defective switch ls forward or reverse opera-RUN is pressed? or relay. control circuit terminals tion command being input? No FWD, REV-CM correct? No Correct wiring error. Press Aand set Has frequency been set? No I frequency. Is the external wiring to Yes Yes Replace defective Yes control circuit terninals 13, potentiometer, signal Does motor operate when 12, 11, C1 and between converter, switch or relay. terminals X1, X2, X3-CM is pressed? No correct? Yes Are high frequency limit and Set correct frequency? setting frequency below starting frequency? Is voltage being output Possible Inverter problem. from Inverter output Motor problem Contact Fuli Electric. terminals (U, V, W) ? Yes Correct wiring error. Is motor wiring correct? Is load too heavy? Yes Load is too heavy and motor is locked. Is torque boost value Reduce load. If a mechanical brake is installed, check whether correct? mechanical brake has been released. No Increase torque boost value Motor overheats Motor overheats. Change V/F pattern setting. Do motor and V/F patterns match? Yes Use special Inverter motor. Continuous low-speed operation? No Yes Reduce load or increase motor Is load too heavy? kW. No Is Inverter output voltage (terminals U, V, W) Motor problem

correctly balanced?

Possible Inverter problem. Contact Fuji Electric.