9. Diagnostics

9.1 Troubleshooting

9.1.1 Reset alarm

The alarms are not saved. To deactivate an alarm, the cause that generated it must be removed.

CAUTION! The controller automatically restarts as soon as the alarm condition is cleared.

9.1.2 Common problems

Following are the most common problems that are not due to faults.

Problem	Cause	Solution
The configuration cannot be changed	The **ENTER** and **ESCAPE** keys were released before the "-- Operation Mode -- Now Available" message appeared .Or the **ENTER** and **ESCAPE** keys have not been pressed or released simultaneously.	Correctly perform the procedure. See "Select a configuration" on page 45.
The keys do not respond when pressed	The microprocessor is executing complex algorithms.	Wait a few seconds and retry.

9.1.3 Alarm messages

***Note**: the priority with which the messages are displayed is equal to the order they are shown in the table. A priority alarm is displayed before less important alarms.*

In the event of the red LED FAIL alarm, the following messages appear blinking:

Message	Cause	Solution
Err P	No phase on the power supply	Make sure the power cables are correctly connected and that the terminal board screws are tight. If applicable, make sure the fuses in series at power supply are integral.
Err t	External thermal overload protection contact open **TK**	Make sure the connected circuit breakers are closed and correctly connected in series. Make sure the wires are correctly connected to the **TK** contact and that the screws are tight.
Err t.P.	Regulation stopped due to power board exceeding the maximum working temperature (85°C)	Check that the controller is installed in a ventilated room away from direct sunlight. Make sure room temperature is under 50°C. Make sure the controller dissipater is free of dirt, cobwebs, dust or anything else that hinders cooling. Clean the blades. Make sure the controller is correctly installed, see "Wall mount" on page 22.
Err t.L.	Regulation stopped due to control and regulation board exceeding the maximum working temperature (85 °C)	

Message	Cause	Solution
Err i.t.	Only with optional overload protection. Regulation stopped because maximum working current protection triggered. To know the current thresholds and trigger times, see chapter "Overload protection function (optional)" on page 41	Make sure the distributed current is less than or equal to the plate data.
cur NN,N	Only with optional overload protection. Real-time distributed current over the rated value. When the described time limits are exceeded, regulation stops, the relay opens (Off) and "Err.i.t." appears on the display	
Err i.P.	Only with optional overload protection. Regulation stopped because maximum pickup current protection triggered. To know the current thresholds and trigger times, see chapter "Overload protection function (optional)" on page 41	
Err U	Input signal under minimum value. See "Minimum and maximum limits for inputs IN1 and IN2" on page 65	Make sure the set configuration is suited to the control signal used. Make sure the transducer/sensor/probe is correctly connected.
Err o	Input higher than maximum value. See "Minimum and maximum limits for inputs IN1 and IN2" on page 65	Make sure the input used is foreseen by the configuration in use (parameter **C0**). Make sure the transducer/sensor/prove is in good conditions and working,

9.1.4 Minimum and maximum limits for inputs IN1 and IN2

Following are the minimum and maximum limits with a precision of ±5%.

Configuration	Minimum limit	Maximum limit	Unit of measure
rS-020	-	> 24	mA
rS-010	-	> 11	V dc
rS-420	< 2	> 24	mA
rtE-01	< -20	> 99	°C
rtE-02	< 14	> 99	°C
rPr420	< 2	> 24	mA
rPr015 (*)	< 2	> 24	mA
rPr025 (*)	< 2	> 24	mA
rPr030 (*)	< 2	> 24	mA
rPr045 (*)	< 2	> 24	mA
rPr050 (*)	< 2	> 24	mA
rUu-05	-	> 5.5	V dc
rPu030 (*)	-	> 35	V dc
rUu010	-	> 11	V dc

***(*)**: the value appears in pressure (bar) on the display.*