Alarms Function

⚠ CAUTION

Before doing the check of the malfunction cause and recovery, always perform the power breaker of control panel “OFF”.
The work with power “ON”, causes the trouble and the accident.
Don't do absolutely.

When the malfunction occurs during operation of the equipment, the protection unit operates, the alarm character is displayed in the control panel and the alarm buzzer sounds and informs the malfunction.

When pushing Reset key, the buzzer stops.

Alarm indication	Description	Remedy
Memory error (E 0)	Can not to read right the setting value that was memorized on the controller.	Once, tune on power once again after power being downed.
Negative phase (E1)	It is in wrong phase operation. Or, it is doing missing phase.	3-phase power is not missing phase and it confirms power supplying. Makes the primary side power OFF and connecting and changing R phase (Red) and T phase (Black) of power code.
A dryer is overloaded (E 2)	The thermal relay of solenoid switch unit for the Drying blower trips.	Turn OFF the electric power supply, and check for foreign object intruded in the movable part of blower body. Check filter for clog or dust accumulation. Check if the material and the foreign material is blockaded the conveying pipe inside. Press the solenoid switch reset button in the panel, and use the “RESET” switch in the alarm screen to restore the condition.
Conveying blower over load (E 3)	Thermal relay in the solenoid switch for conveying Blower failed.	Turn OFF the electric power supply, and check for foreign object intruded in the movable part of blower body. Check filter for clog or dust accumulation. Check for clogged material or foreign object congestion in conveying pipes.Press the solenoid switch reset button in the panel, and use the “RESET” switch in the alarm screen to restore the condition.

Alarm indication	Description	Remedy
Overheat (E4)	The attached thermostats of heater detected overheat.	Confirms whether or not that solid State contactor (SSR-1,2) is stopping, too, is not in ON condition. Replaces if it does ON condition. Refer to "Blower doesn't rotate", "A little air flow rate of blower" of "CHAPTER. Troubleshooting".
	Occurs when the drying heater reaches an abnormally high temperature. The unit is automatically shut off. **⚠ DANGER** The E4 alarm is an important alarm that detects abnormally high temperatures and automatically shuts the unit off. If improper measures such as modifying the unit to prevent the E4 alarm from being triggered are taken, the unit will continue to operate in a state of abnormally high temperature for a long period of time, which is extremely dangerous. Be sure to follow the correct measures as described in the column at the right. Replacement of parts should be conducted by a certified electrical engineer after turning off the power breaker.	After cooling for one hour or longer, press the CONTROL ON button. If the E4 alarm triggers again, the overheat protector is defective. Replace the drying overheat protector. Press the RUN/STOP key to operate the unit. Inspect the drying blower and replace the blower if it does not rotate. If the cause is not identified and the E4 alarm triggers again, an inspection by a service engineer is necessary. Contact our Service Division to request an inspection.

Alarm indication	Description	Remedy
Disconnection of the dry temperature sensor (E5)	A sensor for the dry temperature control was broken or the temperature detection became abnormal.	Confirm that it is normal to connect for the dry temperature sensor (Thermocouple).Also, confirm the short circuit and the disconnection.Replace a dry temperature sensor (Thermocouple) by need.
Disconnection of the dry loop (E 7)	It reports when the dry heater condition of 100 % of output continues in the setting time after the dry start-up (The condition where the dry hot air temperature doesn't rise even if it operates in the heating) when set to the detection time "dLP" of the dry loop disconnection in the time.	Confirm if the setting value of dry loop disconnection detection time "dLP" is short. Confirm if the dry ventilator (Blower) is fanning normally. The recovery of disconnection and replaces the defective parts after making the power OFF and confirming thermocouple (K1), heater (EH1), heater drive contactor (MC-0, SSR-1), disconnection of connection wire and defective operation.
Upper limit temperature is Abnormal (E 9)	Emits when detection temperature "PV" of dryness exceeds the deviation level with upper limit temperature setting value (Dry side "dUS") from setting value "SV" during dry operation. The operation has a standby sequence.When the setting value "SV" is downed, too, functions after once downed to the setting temperature.	The dryness and the setting temperature "SV" setting confirm whether the dryness, and "dUS" setting of the deviation with the temperature upper limit of appropriate in the standard setting range. Check if the dryness or the fanning by the ventilator (Blower) is normal. Also, checks the filter clogging. Returns to normal temperature and resets with Reset switch operating.
Lower limit temperature is abnormal (E10)	Emits when the detection temperature "PV" of dryness downs at the deviation above lower limit temperature provision fixed command (Dry side "dLS") than setting value "SV" during dry operating. As the operation attaches to the standby sequence, when ups the setting value "SV", too, it functions after reaching the setting temperature once.	Confirms the dryness the setting temperature "SV" .Checks the disconnection of heater.To dry or fanning of the ventilator (Blower) is normal or confirms the filter clogging. Resets automatically when returns to normal temperature.

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Dust cleaning (E15)	Emits when the number of times of conveyances (dust cleaning count monitor “dUP”) exceeds the dust cleaning counter set value “dUC.”	Clean the filter and dispose of powder dust in the dust box. (Refer to Chapter 6 Maintenance.) Set the dust cleaning count monitor “dUP” to “0” and reset.
The dry hopper conveyance is abnormal (E 20)	Emits when the drying hopper remains empty although the primary conveying operation was performed up to the number of times of primary conveyance abnormal detection “LCt,” when the drying hopper raw material level switch does not become empty although secondary side conveying operation of any of No.1 to No.9 was performed up to the number of times set in the number of times of secondary conveyances “FCt” at the time when the primary side was full, or when the conveyance abnormal detection delay time “PEd” elapsed with the raw material empty condition of the drying hopper maintained during conveyance to the dryer.	Feeds after confirms with or without of the materials of material tank. Confirms the feeding condition to the Drying hopper and Checks the normal conveying condition. Checks the installing of level switch connector. Checks the trouble of level switch. Resets automatically with abnormal recovery.
No.1 conveyance is abnormal. (E 21)	The delay time "1Ed" of abnormal convey detection passed by the raw material empty condition of hopper on the injection molding machine during convey starting to No.1 injection molding machine.	Confirms the feeding condition to hopper on the injection molding machine and checks normal conveying. Correcting if there is the damage, the material blockade, and failure in a pipe and a hose. Check whether the connector for level switch doesn't fail.Correcting it when there are the failure and the damage of the level switch connection.Checking the trouble of level switch and replace it when having the trouble.
No.2 conveyance is abnormal. (E 22)	The delay time "2Ed" of abnormal convey detection passed by the raw material empty condition of hopper on the injection molding machine during convey starting to No.2 injection molding machine.	Confirms the feeding condition to hopper on the injection molding machine and checks normal conveying. Correcting if there is the damage, the material blockade, and failure in a pipe and a hose. Check whether the connector for level switch doesn't fail.Correcting it when

Alarm indication	Description	Remedy
		there are the failure and the damage of the level switch connection.Checking the trouble of level switch and replace it when having the trouble.