1. Controller setting value in shipping

Parameter of user setting mode

The parameter display switches in the following order every time presses SV switch. But, shifts to the engineering setting mode when pressing over SV switch over 5 seconds. Be careful.

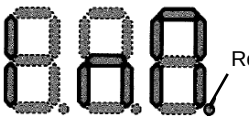
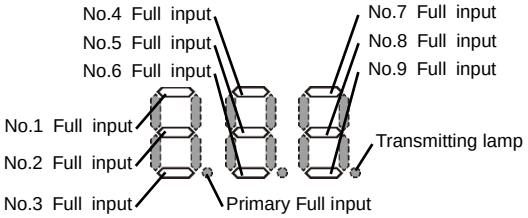
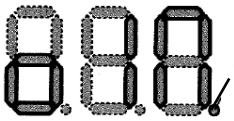
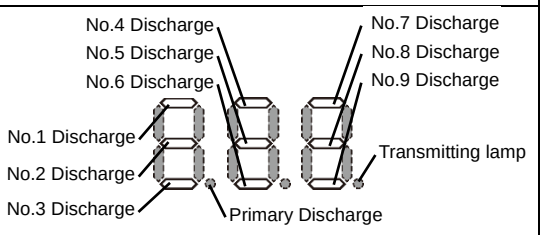
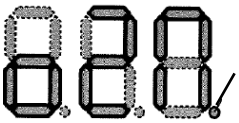
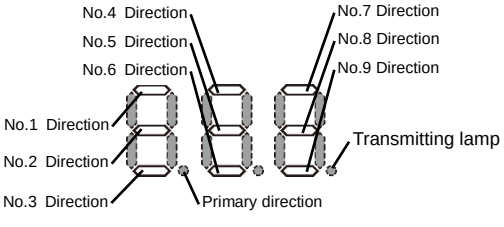
Use		Character	Setting range	Initial setting value	Remark
Dry temperature		SV	0～160°C or 32～320°F	80°C or 176°F	
Automatic start timer		dLY	oFF, 0.1 – 99.5 hours	0.0 hours	Stops function in " oFF ".
Feed conveying time for dryer	*1	FdP	0 - 999 sec.	20 sec. (MJ3-10~150) 25 sec. (MJ3-200~300)	
No.1 Conveying time	*1	Fd1	0 - 999 sec.	15 sec. (MJ3-10~150) 25 sec. (MJ3-200~300)	
No.2 Conveying time	*1	Fd2	0 - 999 sec.	15 sec. (MJ3-10~150) 25 sec. (MJ3-200~300)	
No.3 Conveying time	*1, *2	Fd3	0 - 999 sec.	15 sec.	
No.4 Conveying time	*1, *2	Fd4	0 - 999 sec.	15 sec.	
No.5 Conveying time	*1, *2	Fd5	0 - 999 sec.	15 sec.	
No.6 Conveying time	*1, *2	Fd6	0 - 999 sec.	15 sec.	
No.7 Conveying time	*1, *2	Fd7	0 - 999 sec.	15 sec.	
No.8 Conveying time	*1, *2	Fd8	0 - 999 sec.	15 sec.	
No.9 Conveying time	*1, *2	Fd9	0 - 999 sec.	15 sec.	
Feed discharging time for dryer	*1	dCP	0 - 999 sec.	25 sec.	
No.1 Discharging time	*1	dC1	0 - 999 sec.	25 sec.	
No.2 Discharging time	*1	dC2	0 - 999 sec.	25 sec.	
No.3 Discharging time	*1, *2	dC3	0 - 999 sec.	25 sec.	
No.4 Discharging time	*1, *2	dC4	0 - 999 sec.	25 sec.	
No.5 Discharging time	*1, *2	dC5	0 - 999 sec.	25 sec.	
No.6 Discharging time	*1, *2	dC6	0 - 999 sec.	25 sec.	
No.7 Discharging time	*1, *2	dC7	0 - 999 sec.	25 sec.	
No.8 Discharging time	*1, *2	dC8	0 - 999 sec.	25 sec.	
No.9 Discharging time	*1, *2	dC9	0 - 999 sec.	25 sec.	

Use		Character	Setting range	Initial setting value	Remark
No.1 Material beginning time	*1	bt1	0.0～99.9 sec.	2.0 sec.	
No.2 Material beginning time	*1	bt2	0.0～99.9 sec.	2.0 sec.	
No.3 Material beginning time	*1, *2	bt3	0.0～99.9 sec.	2.0 sec.	
No.4 Material beginning time	*1, *2	bt4	0.0～99.9 sec.	2.0 sec.	
No.5 Material beginning time	*1, *2	bt5	0.0～99.9 sec.	2.0 sec	
No.6 Material beginning time	*1, *2	bt6	0.0～99.9 sec.	2.0 sec.	
No.7 Material beginning time	*1, *2	bt7	0.0～99.9 sec.	2.0 sec.	
No.8 Material beginning time	*1, *2	bt8	0.0～99.9 sec.	2.0 sec.	
No.9 Material beginning time	*1, *2	bt9	0.0～99.9 sec.	2.0 sec.	
Dust cleaning counter setting	*2	dUC	oFF, 1-999 times	oFF	Stops function in " oFF "
Dust cleaning counter monitor	*2	dUP	0.0～999	0	
Conveying destination full status check monitor		InM	-	-	Reffer to *3
General-purpose output ① monitor		o1M	-	-	Reffer to *3
General-purpose output ② monitor		o2M	-	-	Reffer to *3

*1. The setting of material supplying relation isn't displayed when setting the function that supports by each conveying function (「PEn」,「1En」～「9En」) of the engineering setting to 「oFF」 (Function stop).

*2. It isn't sometimes displayed by the unit composition.

*3. Segments of the Conveying destination full status check monitor and general-purpose output monitor

	PV Display digit (Red)	SV Display digit (Green)
Conveying destination full status check monitor		 *The light does not illuminate the direction that is not selected.
General-purpose output ① monitor		
General-purpose output ② monitor		

Parameter of engineering setting mode

Shifts to the engineering setting mode when pressing SV switch over 5 seconds. The character switches in following order every time presses SV switch by the engineering setting mode.

Name		Character	Setting range	Initial setting value	Remark
Dryer feeding function		PEn	on/oFF	on	
No.1 feeding function		1En	on/oFF	on	
No.2 feeding function		2En	on/oFF	on	
No.3 feeding function	*2	3En	on/oFF	on	
No.4 feeding function	*2	4En	on/oFF	on	
No.5 feeding function	*2	5En	on/oFF	on	
No.6 feeding function	*2	6En	on/oFF	on	
No.7 feeding function	*2	7En	on/oFF	on	
No.8 feeding function	*2	8En	on/oFF	on	
No.9 feeding function	*2	9En	on/oFF	on	
Dryer level switch Request delay	*1	LPd	0 - 999 sec.	15 sec.	
No.1 level switch Request delay	*1	L1d	0 - 999 sec.	15 sec.	
No.2 level switch Request delay	*1	L2d	0 - 999 sec.	15 sec.	
No.3 level switch Request delay	*1,*2	L3d	0 - 999 sec.	15 sec.	
No.4 level switch Request delay	*1,*2	L4d	0 - 999 sec.	15 sec.	
No.5 level switch Request delay	*1,*2	L5d	0 - 999 sec.	15 sec.	
No.6 level switch Request delay	*1,*2	L6d	0 - 999 sec.	15 sec.	
No.7 level switch Request delay	*1,*2	L7d	0 - 999 sec.	15 sec.	
No.8 level switch Request delay	*1,*2	L8d	0 - 999 sec.	15 sec.	
No.9 level switch Request delay	*1,*2	L9d	0 - 999 sec.	15 sec.	
Secondary conveying start conditions	*2	2nd	0:have no startup condition 1: activated during drying operation 2: activated after drying completion	1	

Name		Character	Setting range	Initial setting value	Remark
Abnormal detection time for dryer conveying		LCt	oFF, 1 - 999 times	100 times	Stops function in " oFF ".
Abnormal detection time for dryer level switch		FCt	oFF, 1 - 999 times	20 times	Stops function in " oFF ".
Abnormal detection for dryer conveying Detection delay time	*1	PEd	oFF, 1 - 999 min	120 min	Stops function in " oFF ".
No.1 Convey abnormal Detection delay time	*1	1Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.2 Convey abnormal Detection delay time	*1	2Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.3 Convey abnormal Detection delay time	*1,*2	3Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.4 Convey abnormal Detection delay time	*1,*2	4Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.5 Convey abnormal Detection delay time	*1,*2	5Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.6 Convey abnormal Detection delay time	*1,*2	6Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.7 Convey abnormal Detection delay time	*1,*2	7Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.8 Convey abnormal Detection delay time	*1,*2	8Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
No.9 Convey abnormal Detection delay time	*1,*2	9Ed	oFF, 1 - 999 sec.	180 sec.	Stops function in " oFF ".
Feeding discharge valve for dryer Biting insert prevention motion Times		PEr	oFF, 1-10 times	oFF	Stops function in "oFF".
Feeding discharge valve for dryer insert prevention motion Opening time		PEo	1-10 sec.	2 sec.	
Feeding discharge valve for dryer Biting insert prevention motion Closing time		PEC	1-10 sec.	2 sec.	
Collection unit discharging valve on injection-molding machine Biting insert prevention motion Times		SEr	oFF, 1-10 times	oFF	Stops function in "oFF".
Collection unit discharging valve on injection-molding machine Biting insert prevention motion Opening time		SEo	1-10 sec.	2 sec.	
Collection unit discharging valve on injection-molding machine Biting insert prevention motion Closing time		SEC	1-10 sec.	2 sec.	

Name	Character	Setting range	Initial setting value	Remark
Discharge valve Before conveying Opening time	Pdt	oFF, 1-10 sec.	oFF	Stops function in "oFF".
Convey starting Delay time	Pdd	1-10 sec.	1 sec.	
Convey air blower starting Delay time	PdH (PdW)	1-10 sec.	1 sec.	
Tank material low Detection delay time	TTEt (MEt)	oFF, 0 - 999 sec.	60 sec.	Stops function in " oFF ".
Detection delay for material residual	rTTd (rMd)	oFF, 1 - 999 sec.	oFF	Stops function in " oFF ".
Drying completion time	dEd	oFF, 0.1 – 99.5 h	oFF	Stops function in " oFF "
Upper limit temperature alarm Detection delay time	ULt	0 - 999 sec.	5 sec.	
Upper limit deviation of dry temperature	dUS	oFF, 1 – 40℃ or 1-72°F	10℃ or 18°F	Stops function in " oFF ".
Upper limit deviation of regeneration temperature	rUS	oFF, 1 – 40℃ or 1-72°F	10℃ or 18°F	Stops function in " oFF ".
Lower limit deviation of dry temperature	dLS	oFF, 1 – 40℃ or 1-72°F	10℃ or 18°F	Stops function in " oFF ".
Lower limit deviation of regeneration temperature	rLS	oFF, 1 – 40℃ or 1-72°F	20℃ or 36°F	Stops function in " oFF ".
Detection time of dry loop disconnection	dLP	oFF, 1 - 999 min.	0 min.	Stops function in " oFF ".
Detection time of regeneration loop disconnection	rLP	oFF, 1 - 999 min.	0 min.	Stops function in " oFF ".
Reverse phase/Missing phase Detection function	rSt	on/oFF	1	Stops function in " oFF ".

*1. The setting of material supplying relation isn't displayed when setting the function that supports by each conveying function (「PEn」,「1En」～「9En」) of the engineering setting to 「oFF」 (Function stop).

*2. It isn't sometimes displayed by the unit composition.

2. The start-up method for the auto tuning

This controller doesn't display an auto tuning error. Therefore, don't to do the display and the alarm motion by a buzzer when the auto tuning error (Sensor disconnection or auto tuning time passes over 3 hours) occurs. Also, when the auto tuning error occurs once. The auto tuning can not be resumed in the power unless doing turn on again.

The regeneration temperature is adjusted at the time of shipment. Normally, it is not necessary to perform auto tuning. The regeneration temperature controller may notify the lower limit temperature alarm "E10" immediately after auto tuning, but it is not abnormal. Stop the buzzer with the Reset switch. Once the control status is stable, the alarm will be automatically canceled.

1) While the dryer is running with the measured drying temperature displayed, press and hold the ▲ switch for 5 seconds to start the auto tuning of the drying temperature controller.
Also, press and hold the ▼ switch for 5 seconds to start auto tuning of regeneration temperature control.
(During auto tuning, displays the measurement temperature and "At" alternately in 1-second cycle.)

2) Returns to usual PV display when the auto tuning ends. Then, starting PID control by the adjusting result.

3) The operation when doing auto tuning in the forced outage is operation that is same as
(Not changed into the setting value that is P.I.D. in this case because it is the setting that is same as before auto tuning.)

3. About influence of gas that occurs from the resin

The information on influence of gas that occurs from the resin

The unit sometimes can't function normally with influence of gas that occurs from the resin.
As for the resin that releases gases, suppressing the influence of gas becomes necessary.
There are different methods of installing a gas collecting unit which are compatible. However, the method must be chosen by the dry material.
Also, currently there is not a solution to all resins.
Therefore, depending on the resin, the constant regular maintenance and the replacements of consumable parts become necessary.
When the following phenomenon is confirmed during use, there is possibility that the unit undergoes influence by gas. In such case, please consult with us.

1) The oily liquid that oozes from the filter box, the pipe connection part and the dry hopper etc.
2) There is discoloration in the filter box. Or, adheres to oil.
3) The thin smoke from the regeneration exhaust port.
4) Oil covering the whole unit.
5) Oil adheres to the floor.

As for the resin that has possible influence of gas, refer to the list the next page