

Specifications		Model and Suffix Code											
		RB100 (48 X 48mm, 1/16 DIN) RB400 (48 X 96mm, 1/8 DIN, Vertical type) RB500 (96 X 48mm, 1/8 DIN, Horizontal type) RB700 (72 X 72mm, 3/16 DIN) RB900 (96 X 96mm, 1/4 DIN)											
①	Control Method	PID control with AT (Reverse action)	F										
		PID control with AT (Direct action)	D										
②	Input and range	Heat/Cool PID control with AT	G										
		Heat/Cool PID control with AT for extruder (Air cooling type)	A										
③	Output 1 (OUT1)	Heat/Cool PID control with AT for extruder (Water cooling type)	W										
		See Input range Code Table		□ □ □									
④	Output 2 (OUT2) ^{1,2}	See Output 1 Code Table (Control output)			□								
		Not supplied See Output 2 Code Table (Control output or analog retransmission output (AO))				N							
⑤	Power Supply	24V AC/DC 100 to 240V AC					3						
							4						
⑥	Digital output (DO)	*3 Not supplied DO 1 points (DO1) DO 2 points (DO1, DO2) DO 4 points (DO1 to DO4)					N						
		▪ Available for RB400/900 only				1							
⑦	CT input	Not supplied For CTL-6-P-N (0 to 30A) 1 point For CTL-12-S56-10L-N (0 to 100A) 1 point For CTL-6-P-N (0 to 30A) 2 point For CTL-12-S56-10L-N (0 to 100A) 2 point					N						
		▪ When digital output code is "N", cannot be specified. ▪ When digital output code is "P", can be specified. ▪ When digital output code is "S", cannot be specified. ▪ When digital output code is "T", cannot be specified. ▪ When digital output code is "U", cannot be specified.				P							
⑧	Communication/ Digital input (DI)	Not supplied RS-485 (ANSI/RKC standard protocol) RS-485 (MODBUS protocol) DI 2 points RS-485 (ANSI/RKC standard protocol) + DI 2 points RS-485 (MODBUS protocol) + DI 2 points					N						
		▪ Available for RB400/900 only ▪ Available for RB400/900 only				5							
⑨	Waterproof/ Dustproof	Not supplied Waterproof/Dustproof protection					N						
						1							
⑩	Case color	White case Black case									N		
											A		
⑪	Quick start code	No quick start code (Default setting) Specify quick start code (DO type)										N	
												1	
⑫	Instrument version	Version symbol											Y

*1 When control method is selected for PID control (Code : F, D), output 2 is available for analog retransmission output.

*2 On the RB100, the event 3 output function can be specified for output 2.

*3 The number of DO points is limited in some combinations of OUT1 and OUT2 (control output) types.

● Event Code Table (Programmable)

Specifications	Quick start code	□ □ □ □-□
Digital output 1 (DO1) (Event 1 type)	None See event code table	N □
Digital output 2 (DO2) (Event 2 type)	None See event code table	N □
Digital output 3 (DO3) (Event 3 type) *1	None See event code table	N □
Digital output 4 (DO4) (Event 4 type) *2	None See event code table	N □
Digital input (DI)	None SV1 to SV4 select	N 1
	SV1/SV2 select + STOP/RUN	2
	SV1 to SV2 select + MANUAL/AUTO	3
	SV1 to SV2 select + Alarm interlock reset	4
	STOP/RUN + MANUAL/AUTO	5
	STOP/RUN + Alarm interlock reset	6
	MANUAL/AUTO + Alarm interlock reset	7

*1: On the RB100, this can be specified when event 3 (Code : "P") is selected in output 2.

*2: On the RB100, this is fixed at "none".

Code	Event Type
A	Deviation High
B	Deviation Low
C	Deviation High/Low (Common high/low setting)
D	Band (Common high/low setting)
E	Deviation High with Hold
F	Deviation Low with Hold
G	Deviation High/Low with Hold (Common high/low setting)
H	Process High
J	Process Low
K	Process High with Hold
L	Process Low with Hold
Q	Deviation High with Alarm Re-hold
R	Deviation Low with Alarm Re-hold
T	Deviation High/Low with Re-Hold (Common high/low setting)
U	Band (Individual high and low settings)
V	Set value High
W	Set value Low
X	Deviation High/Low (Individual high and low settings)
Y	Deviation High/Low with Alarm Hold (Individual high and low settings)
Z	Deviation High/Low with Alarm Re-Hold (Individual high and low settings)
1	Heater break alarm (HBA)
2 *1	Loop break alarm
3	FAIL
4	RUN status
5	Output of the communication monitoring result

*1 Loop break alarm is not available for Heat/Cool PID control type.

Quick Start

Specifications	Quick start code	<input type="checkbox"/>				
Digital output 1 (DO1) (Event 1 type)	None See event code table	N				
Digital output 2 (DO2) (Event 2 type)	None See event code table		N			
Digital output 3 (DO3) (Event 3 type) *1	None See event code table			N		
Digital output 4 (DO4) (Event 4 type) *2	None See event code table				N	
Digital input (DI)	None SV1 to SV4 select SV1/SV2 select + STOP/RUN SV1 to SV2 select + MANUAL/AUTO SV1 to SV2 select + Alarm interlock reset STOP/RUN + MANUAL/AUTO STOP/RUN + Alarm interlock reset MANUAL/AUTO + Alarm interlock reset				N	1 2 3 4 5 6 7

*1: On the RB100, this can be specified when event 3 (Code : "P") is selected in output 2.

*2: On the RB100, this is fixed at "none".

● Event Code Table (Programmable)

Code	Event Type
A	Deviation High
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1	Heater break alarm (HBA)
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5	Output of the communication monitoring result

*1 Loop break alarm is not available for Heat/Cool PID control type.

● Maximum number of digital outputs (DO) by combinations of output (OUT1 and OUT2)

		OUT2 (Including transmission output)					
		No OUT2 output	M, T, D	V (10 mA)	V (20 mA)	Current output	Voltage output
OUT1	*1 M, T, D	4	4	4	4	4	4
	V (Load: 10 mA)	4	4	4	4	2	2
	V (Load: 20 mA)	4	4	4	2	2	2
	Current output	4	4	2	2	2	2
	Voltage output	4	4	2	2	2	2

(: Represents selection of digital outputs
-DO3 and DO4 are not available.)

*1 When the instrument has two digital outputs (DO1 and DO2) and no OUT2 output, "V" type output (load: 40mA) can be specified for OUT1.

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