

DCP551 Parameter Work Sheet

■ Setup data setting

No.	Item code	Item	Factory default settings	User settings	Settings and descriptions
1	C 01	PV1 range number	0		0 to 16 : Thermocouple 48 to 52 : Linear (DC current and DC voltage) 64 to 71 : Resistance temperature detector 96 to 103 : Resistance temperature detector 128 to 134: Linear (DC current and DC voltage)
2	C 02	PV1 temperature unit	0		0 : Celsius (°C) 1 : Fahrenheit (°F)
3	C 03	PV1 decimal point position	1		0 to 2
4	C 04	PV1 linear decimal point position	1		0 to 4
5	C 05	PV1 linear range lower limit	0 PVU		-19999 to +20000 PVU(PV1)
6	C 06	PV1 linear range upper limit	10000 PVU		-19999 to +20000 PVU(PV1)
7	C 07	PV1 cold junction compensation	0		0 : Provided (Compensated inside the instrument) 1 : Not provided (Compensated outside the instrument)
8	C 08	PV1 root extraction	0		0 : Not provided 1 : Provided
9	C 09	PV1 root extraction dropout	0.2		0.2 to 10.0% (Ratio to input range)
10	C 10	PV1 cold junction bias	0.0		-1.0 to + 1.0°C
11	C 11	PV2 range number	0		0 to 16 : Thermocouple 48 to 52 : Linear (DC current and DC voltage) 64 to 71 : Resistance temperature detector 96 to 103 : Resistance temperature detector 128 to 134: Linear (DC current and DC voltage)
12	C 12	PV2 temperature unit	0		0 : Celsius (°C) 1 : Fahrenheit (°F)
13	C 13	PV2 decimal point position	1		0 to 2
14	C 14	PV2 linear decimal point position	1		0 to 4
15	C 15	PV2 linear range lower limit	0 PVU		-19999 to +20000 PVU(PV2)
16	C 16	PV2 linear range upper limit	10000 PVU		-19999 to +20000 PVU(PV2)
17	C 17	PV2 cold junction compensation	0		0 : Provided (Compensated inside the instrument) 1 : Not provided (Compensated outside the instrument)
18	C 18	PV2 root extraction	0		0 : Not provided 1 : Provided
19	C 19	PV2 root extraction dropout	0.2		0.2 to 10.0% (Ratio to input range)
20	C 20	PV2 cold junction bias	0.0		-1.0 to + 1.0°C
21	C 21	Control output system	1		0 : 5S output (Current proportional SP output) 1 : 5G output (Current proportional control output) 2 : 6D output (Voltage time proportional control output) system A 3 : 6D output (Voltage time proportional control output) system B 4 : 8D output (open collector time proportional control output) system A 5 : 8D output (open collector time proportional control output) system B
23	C 23	Control action	0		0 : PID - A reverse operation 1 : PID - A normal operation 2 : PID - B reverse operation 3 : PID - B normal operation
25	C 25	PV channel switching type	0		0 : PV1 low-temperature sensor, PV2 high-temperature sensor 1 : PV1 high-temperature sensor, PV2 low-temperature sensor 2 : PV1 tied 3 : PV2 tied 4 : Backup switching
26	C 26	PV channel switching system	0		0 : External switch switching 1 : Automatic switching (switching + dead band) 2 : Automatic switching B (switching + dead band + external switch) 3 : Automatic switching C (2-point proportional)
27	C 27	PV channel switching point	10000 PVU		-19999 to +20000 PVU(PV1)
28	C 28	PV channel switching dead band	100 PVU		1 to 1000 PVU(PV1)

■ denotes items settable only on models with two PV input channels.

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29	C 29	Selections available when power is on during PV channel switching	0		0 : Continues until power is turned off. 1 : PV1 2 : PV2 3 : High-temperature PV 4 : Low-temperature PV
30	C 30	PV equalizer	0		0 : Not provided 1 : PV1 only 2 : PV2 only 3 : Both PV1 and PV2
31	C 31	End of operation	0		0 : READY mode 1 : END mode
32	C 32	Manipulated variable in READY mode	0.0		-5.0 to +105.0%
33	C 33	Manipulated variable setting in PV overrange	0		0 : Not provided 1 : Provided
34	C 34	Manipulated variable in PV overrange	0.0		-5.0 to +105.0%
35	C 35	MANUAL change mode	0		0 : Smooth 1 : Preset
36	C 36	Preset MANUAL value	0.0		-5.0 to +105.0%
43	C 43	Service interruption time when running can be continued		0	0 to 3600sec
45	C 45	Auxiliary output 1 type	0		0 : SP 1 : PV 2 : Deviation (DEV) 3 : Manipulated variable (MV) 4 : PV1 5 : PV2
46	C 46	Auxiliary output 1 lower limit (4mA)	0 SPU		-19999 to +20000 SPU (C45 not equal to 3) -1999.9 to +2000.0% (C45 set to 3)
47	C 47	Auxiliary output 1 upper limit (20mA)	10000 SPU		-19999 to +20000 SPU (C45 not equal to 3) -1999.9 to +2000.0% (C45 set to 3)
48	C 48	Auxiliary output 2 type	0		0 : SP 1 : PV 2 : Deviation (DEV) 3 : Manipulated variable (MV) 4 : PV1 5 : PV2
49	C 49	Auxiliary output 2 lower limit (4mA)	0 SPU		-19999 to +20000 SPU (C48 not equal to 3) -1999.9 to +2000.0% (C48 set to 3)
50	C 50	Auxiliary output 2 upper limit (20mA)	10000 SPU		-19999 to +20000 SPU (C48 not equal to 3) -1999.9 to +2000.0% (C48 set to 3)
52	C 52	SP output lower limit (4mA)	0 SPU		-19999 to +20000 SPU
53	C 53	SP output upper limit (20mA)	10000 SPU		-19999 to +20000 SPU
57	C 57	Programming item Event	0		0 : Displayed 1 : Not displayed
58	C 58	Programming item PID group, output limiter group	0		0 : Displayed 1 : Not displayed
59	C 59	Programming item G.SOAK, PV shift, repeat	0		0 : Displayed 1 : Not displayed
60	C 60	Programming item PV start, cycle, pattern link	0		0 : Displayed 1 : Not displayed
61	C 61	Programming system	0		0 : RAMP-X and RAMP-T (θ) combined 1 : RAMP-X and RAMP-E (AcSP) combined
62	C 62	Program time unit	0		0 : Hours, min (SPU/hour for RAMP-T) 1 : Min, sec (SPU/min for RAMP-T) 2 : 0.1 sec (SPU/sec for RAMP-T)
63	C 63	Time display (display panel 2)	0		0 : Remaining segment time 1 : total operation time (after READY → RUN start)
65	C 65	SP decimal point position	1		0 to 4

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No.	Item code	Item	Factory default settings	User settings	Settings and descriptions
66	C 66	SP limit lower limit	PV1 range lower limit		-19999 to +20000 SPU
67	C 67	SP limit upper limit	PV1 range upper limit		-19999 to +20000 SPU
71	C 71	External switch input RSW5	0		0 : NOP (does not function.) 1 : RAMP-E 2 : FAST
72	C 72	External switch input RSW6	0		3 : G.SOAK is cleared using OR. 4 : G.SOAK is cleared using AND. 5 : MANUAL/AUTO
73	C 73	External switch input RSW7	0		6 : AT start /terminate 7 : PV1/PV2 8 : Auto load
74	C 74	External switch input RSW8	0		9 : PV1 → PV2 standby 10 : PV2 → PV1 standby 11 : NOP (does not function.) 12 : Normal operation/reverse operation
75	C 75	External switch input RSW9 to 16 (program selection)	0		0 : BCD4 bit × 2 digits 1 : Binary 7 bits
76	C 76	Communication address	0		0 to 127
77	C 77	Transmission rate	0		0 : 9600bps 1 : 4800bps 2 : 2400bps 3 : 1200bps
78	C 78	Transmission code	0		0 : 8 bits, even parity, 1 stop bit 1 : 8 bits, no parity, 2 stop bits
79	C 79	Communication protocol	0		0 : CPL 1 : ST221 (no PV trend) 2 : ST221 (PV trend)
80	C 80	Communication method	0		0 : RS-485 1 : RS-232C
81	C 81	ROM ID	---		< Description >
82	C 82	ROM ITEM	---		Can only be referenced for mechanical service use.
83	C 83	ROM revision	---		
84	C 84	Data version	---		
85	C 85	CPU board ID	---		
86	C 86	I/O board ID	---		
91	C 91	PV1 burnout	0		0 : Provided 1 : Not provided
92	C 92	PV2 burnout	0		0 : Provided 1 : Not provided
93	C 93	Time proportional output system	0		0 : Does not go on a second time off in time proportional cycle. 1 : Goes on a second time in time proportional cycle.
95	C 95	Voltage output tuning	15		2 to 22 mA
97	C 97	Communication port	0		0 to 15 Uses back plate terminal to setting 0. Uses loader jack to setting 1 to 15.
98	C 98	Special function	0		0 to 255
99	C 99	PV1 zener barrier adjustment	---		-20.00 to +20.00
100	C100	PV2 zener barrier adjustment	---		-20.00 to +20.00

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DCP551 Parameter Work Sheet

■ Constant value control data setting

No.	Item code	Item	Factory default settings	User settings	Settings and descriptions
1	<i>ConSt</i>	Control mode	0		0 : Program run mode 1 : Fixed command control mode
2	<i>SP</i>	Set point	0		Within setup C66 to C67 setting (SP limit)
3	<i>P</i>	Proportional band	100.0		0.0 to 1000.0% (0.0 : On-off control)
4	<i>I</i>	Integral time	0		0 to 3600sec (0: no integral operation)
5	<i>d</i>	Derivative time	0		0 to 1200sec (0: no derivative operation)
6	<i>zR</i>	Manual reset	50.0		0.0 to 100.0%
7	<i>oL</i>	Manipulated variable lower limit	0.0		-5.0 to upper limit %
8	<i>oH</i>	Manipulated variable upper limit	100.0		Lower limit to +105.0%