

Digital Control Programmer | DCP552 Mark II



The DCP552 Mark II is an advanced function programmable controller supporting two channels (up to 49 program patterns per channel) and a variety of input types: thermocouple, resistance temperature detector (RTD), DC voltage, and DC current.

The DCP552 Mark II supports 16 event outputs, 16 external switch inputs and a wide range of other functions as part of the standard specification.



Specifications

Program	Number of programs	49 programs x 2 channels		
	Number of segments	99 segments per program, 2,000 segments in total		
Input	Input type	Thermocouple, resistance thermometer detector, DC current and DC voltage multi-range inputs		
	Input Sampling cycle	0.1 s		
External switch input	Number of inputs	16		
	Function	RUN, HOLD, RESET, ADV, program No., CH1 operation cancel, CH2 operation cancel, etc.		
Control	PID control	Auto-tuning: Automatic PID value setting by limit cycle method		
Output	Auxiliary output	Type: SP1, PV1, deviation 1, MV1, SP2, PV2, deviation 2, O ₂ sensor mV value		
	Output type	Current output	Voltage output	Open collector output
	Control action	Continuous PID	Time proportional PID	Time proportional PID
	Number of PID groups	16 groups for program operation		
	PID auto-tuning	Automatic PID value setting by limit cycle method		
Event	PV, deviation, w/ deviation standby, time event, code event, unique segment			
Communication specifications	RS-485, RS-232C			
General specifications	Rated power supply voltage	100 to 240 Vac 50/60 Hz		
	Power consumption	25 VA or less		
	Weight	1.5 kg		

Input list

Input type	Symbol	Input type	Symbol
Thermocouple	K, E, J, T, B, R, S, W (WR5-26)	DC current/voltage	4 to 20 mA, 2.4 to 20 mA, 0 to 10 mV
	PR40-20, N, PL II, Ni-Mo-Ni, Chromel/Gold-iron		-10 to +10 mV, 0 to 100 mV, 4 to 20 mA
	JIS'89 Pt100, JIS'89 JPt100		2.4 to 20 mA, 0 to 1 V, -1 to +1 V, 1 to 5 V
Resistance thermometer detector			0 to 5 V, 0 to 10 V, 0 to 1250 mV *

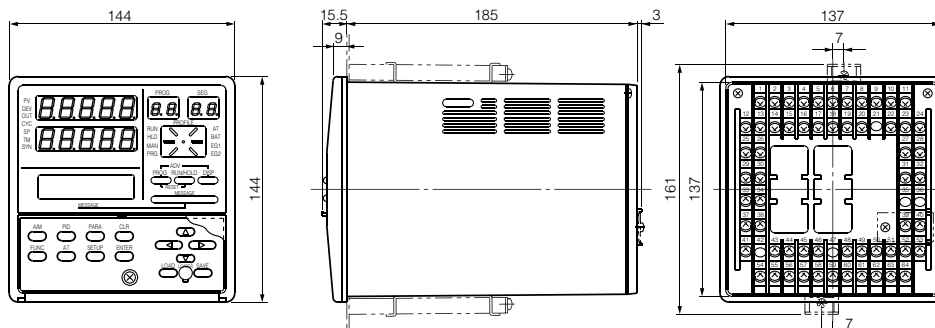
*. Carbon potential (CP value) indication range: 0.000 to 4.000%C
 (Note that PID control is calculated in input range 0.000 to 2.000%C.)
 O₂ partial pressure (PO₂) indication range: 0.000 to 1.500 x 10⁻²⁰ atm

Standards for input sensor

Thermocouple	K, E, J, T, B, R, S: JIS C 1602-1981 WR5-26: material from Hoskins PR40-20: material from Johnson Matthey N: N.B.S. Monograph 161 PL II: material from Engelhard Industries (IPTS68) Ni-Mo-Ni: material from General Electric Chromel/Gold-iron: material from Hayashi Denko
Resistance thermometer detector	Pt100, JPt100: JIS C 1604-1989

External dimensions

(Unit: mm)



Model No. configuration

Ex.: DCP552B20100

Basic model No.	Appended No.	Number of PV input	Carbon potential	Option	Addition	Description
DCP552	B	2	0	1	0	Digital Program Controller (2-loop control)
						Mark II
						PV input CH2
						None
						Available
						None
						Auxiliary output CH1
						Auxiliary output CH2, communications
						None
						Inspection certificate
						Supports traceability certification

Optional parts (sold separately)

Name	Model No.
Lithium battery set	81446140-001
Smart Loader Package (with dedicated cable)	SLP-P55J60
Smart Loader Package (without dedicated cable)	SLP-P55J61

1 DIGITAL CONTROLLERS
 2 RECORDERS, INDICATORS
 3 CONVERTERS
 4 FLAME SAFEGUARD SYSTEM
 5 ACTUATORS
 6 SENSORS
 7 GAS FLOW MEASUREMENT AND CONTROL PRODUCTS