DMC10D

DigitroniK
Distributed Multi-Channel Controller

The DigitroniK DMC10D is a modular 2- or 4-channel advanced-function digital controller. Input is full multiple, supporting thermocouple, RTD, DC voltage and DC current inputs.

Features include high accuracy (±0.3% FS), 0.1°C measurement for thermocouple input, heat/cool control, remote set point (SP) control and inter-channel deviation control for added stability.

Specifications

Model No.		DMC10D2T	DMC10D2C	DMC10D4C
No. of control channels		2	2	4
Wiring method with external device		Terminal	Connector	Connector
PV input	Input type	Thermocouple, RTD, DC voltage and DC current		
	Indication accuracy	±0.3% FS ± 1 digit (under standard conditions)		
	Sampling cycle	0.5s		
	Setting method	By a dedicated PC loader (SLP-D10J20) or communications program		
Control output	Type of control output	Relay output	Voltage pulse output	Voltage pulse output
	Control action	Time proportional PID or ON/OFF	Time proportional PID or ON/OFF	Time proportional PID or ON/OFF
	No. of PID groups	1 group/channel	1 group/channel	1 group/channel
Event output	No. of outputs	4 (model with event output) 4 (with event output module DMC10E)		
	Operation types	Upper PV, lower PV, upper & lower PV, upper dev., lower dev., upper & lower dev., etc.		
Remote switch input	No. of inputs	4 (model with external contact input) 4 (input from internal bus)		
	Operation types	SP selection, RUN/READY changeover, AUTO/MANUAL changeover, etc.		
Current transformer inputs		2		
Communications		RS-485 (3-wire type)		
General	Power	24Vdc		
	Power consumption	5W max. (under standard conditions)		
	Standards compliance	CE: EN61010-1,EN61326 cUL: File No. E246616		
	Mass	200g		

Selection Guide

Ⅰ Ⅱ Ⅲ Ⅳ Ⅴ Ⅵ Ⅶ Example: **DMC10D2TR0100**

Segment	Model No. selection		↓	↓	Description
Ⅰ	Basic No.	DMC10	↓	↓	Multi-channel controller
Ⅱ	Type	D	○	○	Advanced functions
Ⅲ	No. of channels	2	○	–	2 channels
		4	–	○	4 channels
Ⅳ	Wiring method	T	○	○	Terminal wiring
		C	○	○	Connector wiring
Ⅴ	Control output	R	○	○	Relay output
		V	○	○	Voltage pulse output
Ⅵ	Option 1	00	–	○	None
		01	○	–	4 event outputs, 2 current transformer inputs
		02	○	–	4 external contact inputs, 2 current transformer inputs
		03	○	–	4 event outputs, 2 continuous proportional PID (4–20mA 300Ω max.), auxiliary outputs
		04	○	–	4 external contact inputs, 2 continuous proportional PID (4–20mA 300Ω max.), auxiliary outputs
		05	○	–	2 current transformer inputs, 2 event relay outputs, 2 event voltage outputs
		06	○	–	2 current transformer inputs, 2 external switch inputs, 2 event voltage outputs
Ⅶ	Option 2	00	○	○	None
		D0	○	○	With test data
		Y0	○	○	With traceability certification

• A circle (○) denotes availability.

Accessories (sold separately)

Model No.	Description
SLP-D10J50	Smart Loader Package

Input Types and Ranges

• Thermocouple

Range code	Input type	Range (°C)
01	K:CA	0 to 1200
02	K:CA	0 to 600
03	K:CA	0 to 400
04	K:CA	-200 to +400
05	J:IC	0 to 800
06	J:IC	-200 to +400
07	E:CRC	0 to 600

Range code	Input type	Range (°C)
08	T:CC	-200 to +400
09	DIN U	-200 to +400
10	DIN L	0 to 800
11	R	0 to 1600
12	S	0 to 1600
13	PLII	0 to 1200
14	B	0 to 1800

• RTD

Range code	Input type	Range (°C)
21	Pt100	-200 to +500
22	Pt100	0 to 200
23	Pt100	-50 to +100
24	JPt100	-200 to +500
25	JPt100	0 to 200
26	JPt100	-50 to +100
27	Pt100	-100 to +300

Range code	Input type	Range (°C)
28	JPt100	-100 to +300
29	Pt100	-50 to +150
30	JPt100	-50 to +150
31	Pt100	-75 to +175
32	JPt100	-75 to +175
33	Pt100	-100 to +200
34	JPt100	-100 to +200

• DC current/voltage

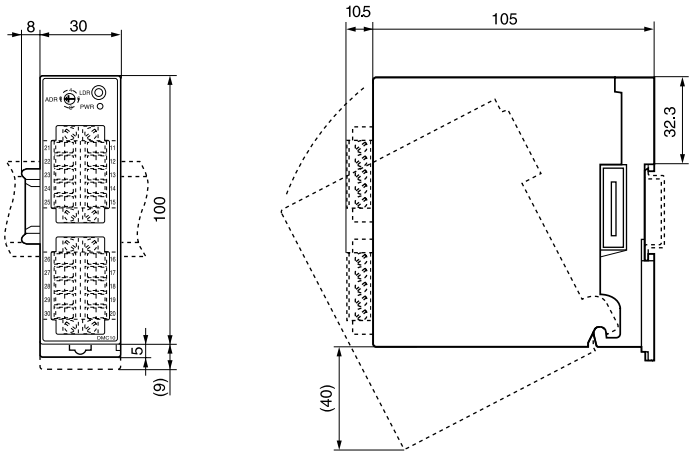
Range code	Input type	Range (programmable)
41	4 to 20mA	-2000 to +10000
42	1 to 5V	-2000 to +10000

Range code	Input type	Range (programmable)
43	0 to 5V	-2000 to +10000
44	0 to 1V	-2000 to +10000

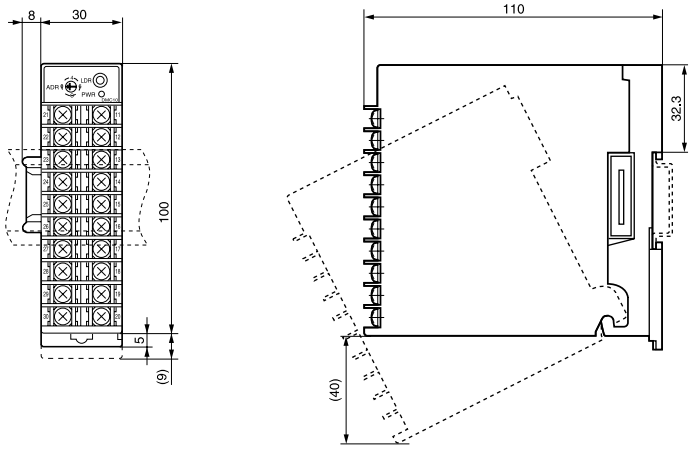
Dimensions

(Unit: mm)

• Connector model DIN rail mounting



• Terminal model DIN rail mounting



• Screw mounting