

SDU10

Compact Operation Unit



The SDU10 is a compact operation display unit for the Modular Controller DMC10.

The SDU10 can be used as a monitor/operation device especially for on-site use in addition to use as a communications device with a personal computer, touch panel or other host device.

A "recipe" function enables DMC setup parameters (SP, P, I, D, etc.) that differ according to product lot to be stored internally on the SDU10 so that they can be batch changed by key operation, external switch input or remote communications.

Specifications

Additional functions	External switch input	No. of inputs	8 (two of which are shared with events)
		Functions	RUN/READY changeover, AT start/stop, recipe set changeover, event latch cancellation, clearing the max./min. PV value.
		Allowable ON contact resistance	Max. 250Ω
		Allowable OFF contact resistance	Min. 100KΩ
		Allowable ON residual voltage	Max. 1V
		Open terminal voltage	5Vdc
	Event output	ON terminal current	Approx. 4mA
		No. of outputs	2 (shared use with external switch input)
		Functions	ON output when error lamp lights, when desired channel is ready, when auto-tuning is executed on desired channel, when event 5 of all modules is ON, when event tables 5 to 8 of all modules are on, when event table 5 of a desired module is ON, when event tables 5 to 8 of a desired module are ON.
		Output type	Open collector
		Output rating	30Vdc, max. 70mA
	Host/slave communications	Signal level	RS-485 compliant
		Transmission path connection	Multi-point (Host: max. 31 units, Slave: max. 15 DMC10 units)
		Communications type	Half duplex, asynchronous
		Max. line length	Max. 500m
Parameter	Terminator	External terminator must not be attached because terminating resistance is built in.	
	Monitor mode	SP, PV, MV, CT, RUN/READY changeover	
Display function	Parameter mode	PID, AT start/stop, user defined items (20 types)	
	Display details	PV & PV, SP & PV, SP & SP display	

Additional functions	Recipe	No. of recipe sets	Max. 99	
		No. of parameter types	Max. 199	
General	Number of buffering parameters	10 types / DMC10 (per unit)		
	Memory backup	Nonvolatile semiconductor memory		
	Power	24Vdc		
	Power consumption	Max. 3W		
	Insulation resistance	Between power and secondary terminals: 20MΩ min. (by 500V megger)		
	Dielectric strength	Between power and secondary terminals: 500Vac for 1 min		
	Inrush current at power ON	Max. 10A		
	Isolation	• Between power circuit and secondary circuit		
		• Between host communications and slave communications		
		• Non-isolation between slave communications and RSW/EVENT		
	Operating conditions	Ambient temperature	0 to 50°C	
		Ambient humidity	10 to 90% RH	
		Power	21.6 to 26.4Vdc	
		Vibration resistance	0 to 2m/s ²	
	Storage/transportation	Shock resistance	0 to 10m/s ²	
Ambient temperature		-20 to +70°C		
Ambient humidity		10 to 90% RH		
Standards compliance	Package drop	60cm		
	CE: EN61010-1, EN61326			
Mass	cUL: File No. E246616			
	Terminal screw tightening torque	Max. 200g		
		Max. 0.25N·m		

Selection Guide

Model No.	Description
SDU10T0100	Compact operation unit for DMC10

Dimensions

(Unit: mm)

• SDU10

• Panel cutout

Individual mounting

Side-by-side mounting

(N: number of units installed)