FEATURES

Dual Displays and Bar-graph.

Two 4 digits displays to display the PV and SP and one bar-graph to display the control output.

Programmer Functionality(Setpoint Profile).

18 programs available, each of 8 segments. Programs can be linked to form a single 144 segments

Easy to Configure.

Two different configuration levels provide easy access to parameters. A 4-digit security code prevents unauthorized changes. Parameters can be hidden to the user to prevent mis-configuration of the unit.

Various Control Algorithms

•PID or ON/OFF control.

•Heat/Cool Algorithm.

•Motor Position control (No-Feedback).

Extended Alarm Capability.

Up to 3 different alarm outputs per instrument, 18 different alarm modes available. Heater Break Alarm

Universal Power Supply.

Operates on any line voltage from 90Vac to 240Vac at 50/60Hz and optionally 20 to 38Vdc.

Communication.

RS485 communication available. Modbus rtu(HEX) is available.

Global Approvals

CE certified for standard models, and UL/cUL approvals and IP65 will be optional.

Remote Setpoint Capability

Setpoint can be set remotely and changed continually

Manual/Automatic Modes

In manual mode, control output can be manually entered. In automatic mode, control output will be determined by the unit's own PID algorithm.

Honeywell

DC1010/DC1020/DC1030/DC1040 Series

TECHNICAL DATA

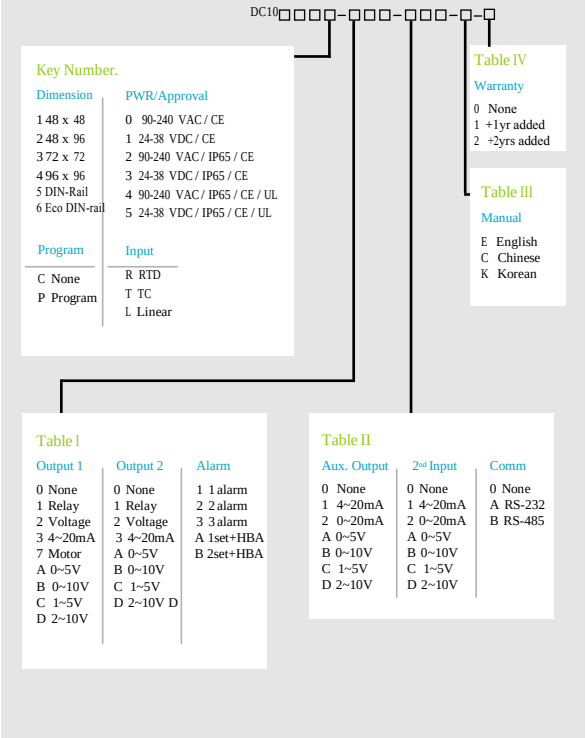
PV Input	Type of Input	TC (K, J, R, S, B, E, N, T, W, PL II, L) RTD (Pt100) Linear (4 ~ 20mA)
	Input Sampling Time	50 ms
	Input Resolution	18 bit (each)
Indication	PV/SP Indication	4-digit, 7 segment display
	Constant Value Storage System	Non-volatile memory (EEPROM)
	Indication Accuracy	± 0.1%FS
Control Mode	Proportional Band (P)	0~200% (On/Off action at P=0)
	Integral Time (I)	0~3600 sec (PD action at I=0)
	Derivative Time (D)	0~900 sec (PI action at D=0)
	Cycle Time	0~150 sec (4~20mA‡0, SSR‡1, relay‡10)
Output	Relay Output	Contact, SPST(DC1010)/SPDT(1020,1030,1040), 3A/240VAC
	Voltage Output	Voltage Pulse, 24VDC/20mA
	Linear Output	4~20mA, 0~5V, 0~10V, 1~5V, 2~10V
	Motor Control Output	Three Position Step Control (Time proportional motor control)
Alarm	Channel	Up to 3 channels with HBA for DC1010/20/30/40
	Mode	19 alarm mode available
	Timer	Flicker alarm, continued alarm, on delay timer alarm
Aux. Output	Output Signal/Accuracy	SP, PV / ± 0.1%FS
	Type of Output	4~20mA, 0~20mA, 0~5V, 0~10V, 1~5V, 2~10V
2nd Input (RSP)	Type of Input	4~20mA, 0~20mA, 0~5V, 0~10V, 1~5V, 2~10V
	Accuracy / Sampling Time	± 0.1%FS / 100 ms
Program	Pattern/Segment	18 pattern/ 8 segment (each), totally 144 segments
	Availability	Pattern link & repeat, program/segment end alarm
Communication	Type of Communication	RS-485 (Modbus rtu) /RS232(for DC1010/20/30/40)
General Specifications	Rated Power Supply Voltage & Frequency	AC 100-240V, 50/60Hz or DC20-50V, 4VA
	Power Consumption	Max. 8VA
	Storage Temperature	-25℃~65℃
	Ambient Temperature	0℃~50℃
	Ambient Humidity	50~85% RH (no condensation)

Note. HBA : Heater Breaker Alarm

INPUT ACTUATIONS

TC	K		-50.0~600, -50~1200 ℃ / -58.0~999.9, -58~2192 ℉
	J		-50.0~600, -50~1200 ℃ / -58.0~999.9, -58~2192 ℉
	R		-50~1760 ℃ / -58~3200 ℉
	S		-50~1760 ℃ / -58~3200 ℉
	B		-50~1820 ℃ / -58~3308 ℉
	E		-50.0~900 ℃ / -58~1652 ℉
	N		-50.0~1300 ℃ / -58~2372 ℉
	T		-199.9~400.0, -199~400 ℃ / -199.9~752.0, -326~752 ℃
	W		-50.0~2320 ℃ / -58~4208 ℉
	PL II		-50.0~1200 ℃ / -58~2192 ℉
	L		-50.0~800.0 ℃ / -58~1472 ℉
RTD	Pt100		-199.9~600.0, 400.0, 200.0 ℃, 0.0~200.0, 400.0, 600.0 ℃
Linear	AN4	0~50mV	0~20mA, 0~1V, 0~5V, 0~10V
	AN5	10~50mV	4~20mA, 1~5V, 2~10V

MODEL INTERPRETATION



DIMENSIONS(mm)

DC1010	Size (WxHxD)	48.0x48.0x94.0
	Panel Cutout (WxH)	45.5x45.5
DC1020	Size (WxHxD)	48.0x96.0x94.0
	Panel Cutout (WxH)	45.5x91.0
DC1030	Size (WxHxD)	72.0x72.0x94.0
	Panel Cutout (WxH)	69.5x69.5
DC1040	Size (WxHxD)	96.0x96.0x94.0
	Panel Cutout (WxH)	90.0x90.0

For more information,
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