

## DCP 50 Digital Controller Programmer

*A small but powerful programmer*

### Extraordinary value in a 1/16 DIN package

The DCP 50 is a microprocessor-based 1/16 DIN controller programmer that combines a high degree of functionality and reliability at a low price. It is fully dedicated to monitor and control temperatures, pressures, and levels in a wide range of applications such as the plastics and food industries, furnaces, and environmental chambers. The large and easy to read dual four digit display and tactile keypad make the DCP 50 easy to configure and use. With features like four programs, sixteen segments per program, auto/manual modes, universal power, universal analog inputs, and NEMA 3 / IP65 front panel protection, the DCP 50 stands apart from the competition. Options including RS485 Modbus\* communications, digital input, and alarm relays give you the flexibility to choose the configuration that best meets your needs.

**Programs / Segments** – A maximum of four program profiles can be stored and up to 16 segments can be programmed to each profile.

**Guaranteed Soak, Profile Recovery, and Cycling** – Guaranteed soak feature allows the profile to sense if the PV is in range of the end of a ramp before starting a soak. Profile recovery feature allows a 'cold start' or 'warm start'. Profile cycling provides a range from 'no cycling' to 'infinite cycling'

**Saves space** – The 1/16 DIN sized faceplate and shallow case depth allow the DCP 50 Controller Programmer to be installed in places where panel space is limited.

**Accurate** – Automatic tuning, 0.25% accuracy, and temperature stability of .01% of span per °C ensures process parameters are closely maintained.



**Easy to configure and read** – Configuration via the faceplate or the configuration port with the optional configuration software is easy using the straightforward menu. The DCP 50 Controller Programmer's faceplate features four 10 mm bright red digits for clear viewing at a distance.

**Flexible** – The DCP 50 can operate on any line voltage from 90 VAC to 264 VAC at 50/60 Hz. A 24 to 48VAC/DC line voltage option is also available, adding more installation flexibility.

**Suitable for many applications** – The DCP 50 Controller Programmer can be used to control temperature and other process variables in many industries. It's an affordable solution for controlling ovens, kilns, and much more.

## Technical Data

<b>Accuracy</b>	0.25% of span $\pm 1$ LSD
<b>Number of Programs/Segments</b>	4 programs / 16 segments per program maximum
<b>Segment Time</b>	0 to 99 hours 59 minutes; or 0 to 99 minutes 59 seconds (time unit selectable)
<b>Guaranteed Soak</b>	Sets Guaranteed soak width 0 to 1000 U
<b>Cycle</b>	Sets program count 0 to 9999 or INF (infinite)
<b>Pattern Link</b>	Sets program number 0 to 4 (0: no link)
<b>Front Face Protection</b>	Nema 3 / IP65
<b>Operating Temperature &amp; RH</b>	0 to 55°C / 32 to 131°F, relative humidity of 20% to 95%
<b>PV Input</b>	Keyboard selectable: Thermocouple (R,S,J,T,K,L,B,N,C/W5), RTD (PT100), Linear (0-20mA, 4-20mA, 0-50mV, 10-50mV, 0-5V, 1-5V, 0-10V, 2-10V)
<b>Input Sampling Rate</b>	4 times per second
<b>Control Outputs</b>	Current-proportioning (0-20mA or 4-20mA) Time proportioning (Electromechanical SPDT relay 2A/240V, SSR driver >4.3V into 250 ohms minimum, time and current proportional duplex)
<b>Event Outputs</b>	Up to 2 (optional) SPDT relays of 2A/240V based on: PV high or low alarm, deviation high or low alarm, band alarm, logical AND or OR alarm combination, loop alarm
<b>Digital Inputs</b>	One (optional) for remote run/hold (mutually exclusive with communications option)
<b>Power Supply</b>	90 to 264 VAC 50/60 Hz, or 24 to 48 VAC/DC optional
<b>Dimensions</b>	Front face: 48 x 48 mm (1.89 x 1.89 inches) Depth: 110 mm (4.33 inches) Panel cutout: 45 x 45 mm (1.77 x 1.77 inches)
<b>Communications</b>	RS485, Modbus protocol, Half Duplex, Baud Rate: 1200, 2400, 4800, or 9600 bps (optional and mutually exclusive of digital input option)

The reliability, accuracy and quality of Honeywell's industry-proven LeaderLine™ family of controllers are second to none, offering the best total value of ownership.

*Honeywell provides a complete line of temperature sensors including thermocouples, RTDs, and non-contact sensors that are compatible with the UDC 700 and other industrial control products.*

\*Modbus is a trademark of Modicon

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