

UDC2500 Universal Digital Controller

Model Selection Guide

New! Easy To Use UDC2500 1/4 DIN Single Loop Controller

The UDC2500 Controller packs new powerful features while retaining all the simplicity, flexibility and the industry standard HMI of the UDC2300 Controller that it replaces.

Many new optional features include:

- NEMA 4X, IP66 Front Face
- Built-in infrared communications port for configuring with a Pocket PC or Laptop
- PC Based Configuration Tools
- Ethernet Communications
- Limit Model Available
- Thermocouple Health Monitoring
- Accutune III (Fast/Slow, Heat/Cool)



Instructions

- Select the desired key number. The arrow to the right marks the selection available.
- Make the desired selections from Tables I through VI using the column below the proper arrow. A dot (•) denotes availability.

Key Number I II III IV V VI
 - - - - - -

UDC2500 Controller

KEY NUMBER - UDC2500 Single Loop Controller

Description
Digital Controller for use with 90 to 264Vac Power
Digital Controller for use with 24Vac/dc Power

If Applicable

Selection	Availability	Stocking P/N
DC2500	↓	
DC2501	↓	

TABLE I - Specify Control Output and/or Alarms

Output #1	None (Can be used as an indicator only) Current Output (4 to 20ma, 0 to 20 ma) Electro Mechanical Relay (5 Amp Form C) Solid State Relay (1 Amp) Open Collector transistor output Dual 2 Amp Relays (Both are Form A) (Heat/Cool Applications)
Output #2 and Alarm #1 or Alarms 1 and 2	No Additional Outputs or Alarms One Alarm Relay Only E-M Relay (5 Amp Form C) Plus Alarm 1 (5 Amp Form C Relay) Solid State Relay (1 Amp) Plus Alarm 1 (5 Amp Form C Relay) Open Collector Plus Alarm 1 (5 Amp Form C Relay)

0 _	•	•	
C _	•	•	
E _	•	•	
A _	•	•	
T _	•	•	
R _	•	•	
_ 0	•	•	
_ B	•	•	
_ E	•	•	
_ A	•	•	
_ T	•	•	

TABLE II - Communications and Software Selections

Communications	None Auxiliary Output/Digital Inputs (1 Aux and 1 DI or 2 DI) RS-485 Modbus Plus Auxiliary Output/Digital Inputs 10 Base-T Ethernet (Modbus RTU) Plus Auxiliary Output/Digital Inputs
Software Selections	Standard Functions, Single Display Dual Display with Auto/Manual Set Point Programming (12 Segments) Dual Display, Auto/Manual Limit Controller
Reserved	No Selection
Infrared interface	None Infrared Interface Included (Can be used with a Pocket PC)

0 _ _ _	•	•	
1 _ _ _	•	•	
2 _ _ _	•	•	
3 _ _ _	•	•	
_ 0 _ _	•	•	
_ A _ _	•	•	
_ B _ _	•	•	
_ L _ _	a	a	
_ _ 0 _	•	•	
_ _ _ 0	•	•	
_ _ _ R	•	•	

TABLE III - Input 1 can be changed in the field using external resistors

Input 1	TC, RTD, mV, 0-5V, 1-5V TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA, 0-10V
Input 2	None 0-5V, 1-5V, 0-20mA, 4-20mA

Selection	Availability		If Applicable Stocking P/N
	DC	2500 2501	
1 __	•	•	
2 __	•	•	
3 __	•	•	
_ 00	•	•	
_ 10	b	b	

TABLE IV - Options

Approvals	CE, UL and CSA (Standard) CE, UL, CSA and FM CE Only
Tags	None Stainless Steel Customer ID Tag - 3 lines w/22 characters/line
Future Options	None
	None
	None

0 ____	•	•	
1 ____	c	c	
2 ____	•	•	
_ 0 ____	•	•	
_ T ____	•	•	
_ _ 0 _ _	•	•	
_ _ _ 0 _	•	•	
_ _ _ _ 0	•	•	

TABLE V - Product Manuals

Manuals	Product Information on CD - English	
	English (Hard Copy) Manual	(51-52-25-127)
	French (Hard Copy) Manual	(51-52-25-127-FR)
	German (Hard Copy) Manual	(51-52-25-127-DE)
	Italian (Hard Copy) Manual	(51-52-25-127-IT)
	Spanish (Hard Copy) Manual	(51-52-25-127-SP)
Certificate	None	
	Certificate of Conformance (F3391)	

0 _	•	•	
E _	•	•	
F _			
G _			
I _			
S _			
_ 0	•	•	
_ C	•	•	

TABLE VI

No Selection	None
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0	•	•	
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RESTRICTIONS

Restriction Letters	Available Only With		Not Available With	
	Table	Selection	Table	Selection
a	I	E _		
	I	A _		
	I	T _		
Limit Controller Restrictions/Comments: 1. FM approved units with communications are limited to read only. 2. UL listed for regulatory use only.				
b			II	_ L _ _
c	II	_ L _ _	I	C _ , R _

ORDERING INSTRUCTIONS: These are provide as guidance for ordering such as those listed

1. Part numbers are provided to facilitate Distributor Stock.
2. Orders may be placed either by model selection or by part number.
3. Part numbers are shown within the model selection tables to assist with compatibility information.
4. Orders placed by model selection are systematically protected against incompatibility.
5. Compatibility assessment is the responsibility of the purchaser for orders placed by part number.
6. Items labeled as N/A are not available via the stocking program and must be ordered by model selection.

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Supplemental Accessories & Kits

Description	Part Number	List Price	
Bezel Assembly and Bezel Gasket	51453143-501	**	
Display/Keyboard (with IR)	51452758-502	**	
Dual Display with Auto/Manual	50004634-501	**	
SPP (includes Dual Display, Auto/Manual)	50004634-502	**	
Power/Output PWA with 2 E-M Relays (90-264 Vac Operation)	51452822-502	**	
Power/Output PWA with 2 E-M Relays (24 Vac/dc Operation)	51452822-503	**	
Auxiliary Output/Digital Input/RS-422/485 Communications PWA	51452810-501	**	
Auxiliary Output/Digital Input/Ethernet Communications PWA	51452816-501	**	
MCU/Inputs PWA (with 2nd Input and IR) for Controllers	51452801-503	**	
MCU/Inputs PWA (with IR) for Limit Controllers	51452801-504	**	
Electro-Mechanical Relay	30755306-501	**	
Open Collector Output PWA	30756679-501	**	
Solid State Relay	30756725-501	**	
Current Output PWA	51452804-501	**	
Dual Electromechanical Relay PWA	51452807-501	**	
Ethernet Cable Jack Assembly	50002382-501	**	
Case Assembly (including Mounting Kit with four brackets)	51452759-501	**	
Varistor (MOV) 120 Vac	30732481-501	**	
Varistor (MOV) 240 Vac	30732481-502	**	
4-20 mA Input Resistor Assembly (250 ohm)	30731996-506	**	
0-10 Volt Input Resistor Assembly (100K pair)	30754465-501	**	
Mounting Kits (12 Brackets)	51452763-501	**	
DIN Adaptor Kit	30755223-003	**	
Process Instrument Explorer Software for UDC2500	50001619-001	**	
Panel Bracket Kit	50004821-501	**	
Configuration Cable Kit (used when IR is not specified)	46188694-501	**	
Product Information on CD	All Languages	51453375-501	**
Quick Start Manual (2 page) Standard & Limit Controller	English	51-52-25-124	**
Product Manual	English	51-52-25-127	**
Limit Controller Manual	English	51-52-25-118	**
Product Manual	French	51-52-25-127-FR	**
Product Manual	German	51-52-25-127-DE	**
Product Manual	Italian	51-52-25-127-IT	**
Product Manual	Spanish	51-52-25-127-SP	**

** Consult Honeywell Order Entry Systems for current parts pricing.