

Series DR4500A Digital  
Circular Chart Recorders

Model Selection Guide

Instructions

- Select the desired Key Number. The arrow to the right marks the selection available.
- Make one selection each from Tables I through VI, using the column below the proper arrow. A dot (•) denotes unrestricted availability. A letter denotes restricted availability.

Key Number

I

II

III

IV

V

VI

KEY NUMBER	Selection	Availability						
1 Pen - Classic	DR45A1	↓						
2 Pen - Classic	DR45A2		↓					
Truline	DR45AT			↓				
Truline - Relay Expansion	DR45AR				↓			
Truline - Flow Recorder	DR45AW					↓		
Truline - HTST	DR45AH						↓	
Truline - Pasteurization Recorder - Flow	DR45AP							↓
Truline - Safety Thermal Limit Recorder	DR45AS							↓

TABLE I - INPUT

Channel 1	T/C, RTD, mV, 0-5 VDC, 4-20 mA, Radimatic 0-10 VDC	1 _ _ _ 3 _ _ _	• •	• •	• •	c c	• •	• •	• •
Channel 2	None T/C, RTD, mV, 0-5 VDC, 4-20 mA, Radimatic T/C, RTD, mV, 0-5 VDC, 4-20 mA, Radimatic 0-10 VDC 0-10 VDC	_ 0 _ _ _ 1 _ _ _ 1 _ _ _ 3 _ _ _ 3 _ _	•   •  	• • •  	•  c • c	•  • • •	•   •  	• • • • •	
Channel 3	None T/C, RTD, mV, 0-5 VDC, 4-20 mA, Radimatic 0-10 VDC	_ _ 0 _ _ _ 1 _ _ _ 3 _	•  	•  	• • •	• e e	• • •	• d •	• d •
Channel 4	None T/C, RTD, mV, 0-5 IVDC, 4-20 mA, Radimatic 0-10 VDC	_ _ _ 0 _ _ _ 1 _ _ _ 3	•  	•  	• • •	• g g	• • •	• f •	• f f

		Availability								
		DR45A	↓	↓	↓	↓	↓	↓	↓	↓
TABLE II - EXTERNAL OUTPUTS (Note 2)		Selection	1	2	T	R	W	H	P	S
None	0 _	•	•	•	•	•				•
Control Output #1	1 _	•	•							
Control Output #1	1 _							h	h	
Control Output #1	4 _			•	•					
Pulse Output	5 _					•				
Control Output #1 with FM Approval	6 _	h	h	h						
None	_ 0	•	•	•	•	•	•	•	•	•
Control Output #2	_ 1		j						r	
Control Output #2	_ 4			j	u					
Control Output #2 with FM Approval	_ 6		r	r						

TABLE III - EXTERNAL INTERFACE AND PEN SELECTION

None	0 _ _	•	•	•	•	•	•	•	•	•
Auxiliary 4-20 mA Output	1 _ _	•	•	•	•	•	•	•	•	•
RS485 Modbus RTU Communications	3 _ _	•	•	•	•	•	•	•	•	•
RS485 Modbus RTU plus Auxiliary 4-20mA Output	4 _ _	•	•	•	•	•	•	•	•	•
Standard Pen (Classic) or Truline High Speed Pen	_ 0 _	•	•	•	•	•	•	•	•	•
Abrasion Resistant Pen on Truline	_ 1 _			k	k	k	k	k	k	k
None	_ _ 0	•	•	•	•	•	•	•	•	•
2 Alarms/2 Digital Inputs	_ _ 1	•	•	•	•	•	•	•	•	•
4 Alarms/2 Digital Inputs	_ _ 2				v					
6 Alarms/2 Digital Inputs	_ _ 3				w					
1 Alarm/1 Timer Output/2 Digital Inputs	_ _ 4	•	•	•	•	•	•	•	•	•

TABLE IV - SOFTWARE OPTIONS

None	0	•	•	•	•	•	•	•	•	•
Totalization (Input #1)	A	•	•	•	•	•	•	•	•	•
Totalization (Inputs #1 and #2)	E		•	•	•	•	•	•	•	•
Totalization (Inputs #1, #2, #3, and #4)	H					•	•	•	•	•
FO Sterilization Calculation	F				•	•	•	•	•	•
Math (Note 3)	B			•	•	•	•	•	•	•
Totalization (Input #1) Plus Math	K			•	•	•	•	•	•	•
Totalization (Inputs #1 and #2) Plus Math	L			•	•	•	•	•	•	•
Totalization (Inputs #1, #2, #3 and #4) Plus Math	M					•	•	•	•	•

TABLE V - OPTIONS		Availability								
		DR45A	1	2	T	R	W	H	P	S
Gray Door with Glass Window	0 _ _ _ _ _	•	•	•	•	•				
Gray Door with Acrylic Window	1 _ _ _ _ _	•	•	•	•	•		•		
Gray Door with Glass Window and Key Pad	E _ _ _ _ _	•	•	•	•	•				
Gray Door with Acrylic Window and Key Pad	F _ _ _ _ _	•	•	•	•	•		•		
Blue Door with Glass Window	5 _ _ _ _ _	•	•	•	•	•				
Blue Door with Acrylic Window	6 _ _ _ _ _	•	•	•	•	•				
Black Door with Glass Window	L _ _ _ _ _	•	•	•	•	•				
Black Door with Acrylic Window	9 _ _ _ _ _	•	•	•	•	•				
Stainless Steel Door with Glass Window	2 _ _ _ _ _	•	•	•	•	•				
Stainless Steel Door with Arylic Window	3 _ _ _ _ _	•	•	•	•	•				
NEMA4X Door with Glass Window	P _ _ _ _ _	•	•	•	•	•		•		
NEMA4X Door with Acrylic Window	R _ _ _ _ _	•	•	•	•	•		•		
NEMA4X Door HTST	S _ _ _ _ _						•		•	
Standard Door Latch	_ 0 _ _ _ _	q	q	q	q	q				
Keyed Latch	_ A _ _ _ _	•	•	•	•	•	•	•	•	
Door Lock with Key	_ K _ _ _ _	m	m	m	m	m				
None	_ _ 0 _ _ _	•	•	•	•	•	•	•	•	
Configuration Lockout/Chart Plate Seal	_ _ L _ _ _	•	•	•	•	•				
Configuration Lockout/Chart Plate Seal & Chart Illum.	_ _ M _ _ _	t	t	t	t	t				
Chart Illumination	_ _ N _ _ _	t	t	t	t	t				
None	_ _ _ 0 _ _	•	•	•	•	•	•	•	•	
CE Mark	_ _ _ K _ _	•	•	•	•	•				
CE Mark plus UL Listing/CSA Certification	_ _ _ L _ _	•	•	•	•	•				
CE Mark plus FM Approval	_ _ _ M _ _	p	p	p	p	p				
CE Mark plus UL Listing and FM Approval/CSA Certification	_ _ _ N _ _	p	p	p	p	p				
UL Listing/CSA Certification	_ _ _ P _ _	•	•	•	•	•	•	•	•	
FM Approved - Class 1, Div. 2, Groups A, B, C, D	_ _ _ R _ _	p	p	p	p	p				
UL Listing, CSA Certification, FM Approval	_ _ _ U _ _	p	p	p	p	p				
None	_ _ _ _ 0 _	•	•	•	•	•	•	•	•	
Customer Identification Tag (30 characters max)	_ _ _ _ T _	•	•	•	•	•	•	•	•	
Certificate of Conformance (F3391)	_ _ _ _ B _	•	•	•	•	•	•	•	•	
Custom Calibration/Test Report (F3399) (Note 1)	_ _ _ _ C _	•	•	•	•	•	•	•	•	
Certificate of Conformance and Identification Tag	_ _ _ _ D _	•	•	•	•	•	•	•	•	
Customer Calibration and Identification Tag (Note 1)	_ _ _ _ E _	•	•	•	•	•	•	•	•	
Product Information on CD	_ _ _ _ _ 0	•	•	•	•	•	•	•	•	
Product Manual - English	_ _ _ _ _ E	•	•	•	•	•	•	•	•	
Product Manual - German	_ _ _ _ _ G			•	•					
Product Configuration (with CD & Hardcopy) (Note 4)	_ _ _ _ _ 1	•	•	•	•	•	•	•	•	

TABLE VI - FACTORY USE

None	0	•	•	•	•	•	•	•	•
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**RESTRICTIONS**

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
<b>c</b>				Not available with T/Cs B, N, R, W; but includes 200 ohm RTD Actuation
<b>d</b>	I	11 __, 31 __, 13 __, 33 __		
<b>e</b>	I	11 __, 31 __, 13 __, 33 __ Not available with T/Cs B, N, R, W; but includes 200 ohm RTD Actuation		
<b>f</b>	I	111 __, 113 __, 131 __, 133 __, 311 __, 313 __, 331 __, 333 __		
<b>g</b>	I	111 __, 113 __, 131 __, 133 __, 311 __, 313 __, 331 __, 333 __ Not available with T/Cs B, N, R, W; but includes 200 ohm RTD Actuation		
<b>h</b>		Available only with 4-20 mA control output		
<b>j</b>	I II	11 __, 31 __, 13 __, 33 __ 1 _ for Classic, 4 _ for Truline (DR45AT or DR45AR)		
<b>k</b>		Available only with chart rotations of 24 to 744 hours on Truline.		
<b>m</b>			V	2 ____, 3 ____ P ____, R ____, S ____,
<b>p</b>	II III	00, 60, 66 __ 0		
<b>q</b>		Not available with NEMA4 Door	V	P ____, R ____, S ____,
<b>r</b>	I II	11 __, 31 __, 13 __, 33 __ 6 __, (1 __, for DR45AP Model) available only with 4-20 mA control output		
<b>t</b>		Not available with CE Mark Option	V	XXXXXX, XXXLXX, XXXMXX, XXXNXX
<b>u</b>	I II	11 __, 31 __, 13 __, 33 __ 1 _ for Classic, 4 _ for Truline (DR45AT or DR45AR) available only with 4 - 20 mA control output		
<b>v</b>	II	4 __, Alarms 1 - 4 Plus 4-20ma Control Output Supplied		
<b>w</b>	II	_ 4, Alarms 1 - 6 Plus 2nd 4-20ma Control Output Supplied		

**Note 1:** Customer must supply Input Actuation Type and Range for each input in free form in order to have unit custom calibrated.

**Note 2:** All control outputs come standard with Accutune II<sup>®</sup> tuning capability. Setpoint Programming capability is available on all models except DR45AH/AS/AP. Each Output Board to be used for control purposes requires an Analog Input be ordered to work properly.

**Note 3:** Math includes Summer, Multiple Divider with Square Root, Multiplier with Square Root, Multiplier Divider, Multiplier, Subtractor Multiplier, HiLo Select.

**Note 4:** Customer must supply completed "Configuration Worksheets" with order for units to be Factory Configured (York Customer Service FAX 717-771-8236)