

## HC900 Hybrid Controller Assemblies

## Model Selection Guide

RACKS		NUMBER
4 I/O Slot Rack		900R04 - 0001
8 I/O Slot Rack		900R08 - 0001
12 I/O Slot Rack		900R12 - 0001
Power Supplies		
120/240VAC, 60W		900P01 -0001
120/240VAC, 28W	Note 5	900P02 -0001
CPU Assemblies		
Controller C50 CPU Config.SW & Docs		900C51 - 0021
Controller C50 CPU	Note 1	900C52 - 0021
Controller C30 CPU Config. SW & Docs		900C31 - 0021
Controller C30 CPU	Note 1	900C32 - 0021
I/O Scanner (for remote rack)		900C53 - 0021
I/O Card Selections		
Analog Input (8 channel)		900A01 - 0002
Analog Output, 0 to 20mA, (4 channel)		900B01 -0001
Digital Input, Contact type, (16 channel)		900G01 - 0001
Digital Input, 24VDC (16 channel)		900G02 - 0001
Digital Input, 120/240 VAC, (16 channel)		900G03 - 0001
Digital Output, Relays ( 8 channel)		900H01 - 0001
Digital Output, 24VDC (16 channel)		900H02 - 0001
Digital Output, 120/240 VAC (8 channel)		900H03 - 0001
Terminal Blocks, Cables, Jumpers		
Low VoltageTerminal Block (Euro style)	Note 3	900TEK - 0001
Low VoltageTerminal Block (Barrier Style)	Note 3	900TBK -0001
High VoltageTerminal Block (Euro style)	Note 3	900TER - 0001
High Voltage Terminal Block (Barrier Style)	Note 3	900TBR - 0001
Analog Input Remote Terminal Panel (RTP)	Note 6	900RTA - L001
Relay Output Remote Terminal Panel (RTP)	Note 6	900RTR - H001
DI, DO, AO Remote Terminal Panel (RTP)	Note 6	900RTS - 0001
Low Voltage RTP Cable (1.0M, 3.28ft.)	Note 6	900RTC - L010
Low Voltage RTP Cable (2.5M, 8.2ft.)	Note 6	900RTC - L025
Low Votage RTP Cable (5.0M, 16.4ft.)	Note 6	900RTC - L050
High Voltage RTP Cable (1.0M, 3.28ft.)	Note 6	900RTC - H010
High Voltage RTP Cable (2.5M, 8.2ft.)	Note 6	900RTC - H025
High Votage RTP Cable (5.0M, 16.4ft.)	Note 6	900RTC - H050
Filler Block Terminal Cover		900TNF - 0001
Shield Terminal Strip (package of 2)		900TSS - 0001
Terminal board jumpers (10, two pos jumpers)	Note 4	900J02 - 0001
Terminal board jumpers (10, ten pos.jumpers)	Note 4	900J10 - 0001
Manuals		
Full Document set on CD	Note 2	900ME1-0021
Full document set, hard copy - English	Note 2	900ME2-0021
Software		
HC Designer Config. Software CD		900W01 - 0021
HC Utilities Software/Documentation CD		900W02 - 0021

**Note 1:** Documentation and Hybrid Control Designer Configuration Software are not provided with this model. If required, specify CPU model numbers 900C51-0011, 900C31-0011 or order items separately.

**Note 2:** A full documentation set on CD is provided with CPU 900C51-0011 and 900C31-0011. If additional copies or if a hard copy manual set is desired, specify them as separate items. The manual set contains one each of all HC900 product manuals. Documenta

**Note 3:** Terminal blocks for I/O modules must be ordered separately. Two styles are available for each of the two types, Euro style and Barrier style. The type of terminal block (gold or tin contacts) must be matched to the appropriate I/O board type. S

Card Type	Terminal Blocks	
Analog Input (8 channel)	900TEK-0001	900TBK-0001
Analog Output, 0 to 20mA, (4 channel)	900TEK-0001	900TBK-0001
Digital Input, Contact type, (16 channel)	900TEK-0001	900TBK-0001
Digital Input, 24VDC (16 channel)	900TEK-0001	900TBK-0001
Digital Input, 120/240 VAC, (16 channel)	900TER-0001	900TBR-0001
Digital Output, Relays ( 8 channel)	900TER-0001	900TBR-0001
Digital Output, 24VDC (16 Channel)	900TEK-0001	900TBK-0001
Digital Output, 120/240 VAC (8 channel)	900TER-0001	900TBR-0001

**Note 4:** Jumpers available for Barrier Style terminals only.

**Note 5:**

To determine if the 900P02 power supply will support the needs of the specific rack, use the table and limit tests below to calculate power requirements.

Enter quantity of each card type, calculate 5V and 24V max current and sum for all card types.

	"A"	"B"	"C"		"D"		"E"
		Max Current	Max Current		5V		24V
Card type	Quantity	@ 5 V in mA	@ 24 V in mA		mA Sub. Tot		mA Sub. Tot
					( D = A * B )		( E = A * C )
Controller	( )	600	0		( )		( )
Scanner	( )	600	0		( )		( )
Analog Input (8 pts)	( )	40	25		( )		( )
Analog Output (4 pts)	( )	40	200		( )		( )
AC Digital Input (16 pts)	( )	230	0		( )		( )
DC Digital Input (16 pts)	( )	230	0		( )		( )
Contact Input (16 pts)	( )	230	40		( )		( )
AC Digital Output (8 pts)	( )	220	0		( )		( )
DC Digital Output (16 pts)	( )	430	0		( )		( )
Relay Output (8 pts)	( )	140	100		( )		( )
Total mA				Total 5V=	( )	Total 24V=	( )
				1 Is total 5V less than 2000?	Yes	No	
				2 Is total 24V less than 900?	Yes	No	
				3 If the answer to 1 and 2 are YES, go to 4.			
				If the answer to 1 or 2 is NO, use power supply 900P01-0001			
				4 Multiply 5V total by 5.1	( )		
				5 Multiply 24V total by 24.5	( )		
				6 Sum results of 4 and 5	( )		
				7 Divide results of 6 by 1000	( )		
				8 Is the result of 7 less than "28"?	Yes	No	
				9 If the answer to 8 is Yes, Use power supply 900P02-0001			
				If the answer to 8 is No, use power supply 900P01-0001			

**Note 6**

Using the table below, select a Remote Terminal Panel and Cable Assembly to match the module type.

<b>Module Types</b>	<b>Module Model</b>	<b>Remote Terminal Panel</b>	<b>Acceptable Cables</b>
Analog Input Module	900A01 - 0002	<b>900RTA – L001</b>	<b>900RTC – L010 900RTC – L025 900RTC – L050</b>
Relay Output Module	900H01 - 0001	<b>900RTR – H001</b>	<b>900 RTC – H010 900 RTC – H025 900 RTC – H050</b>
Analog Output Module	900B01 – 0001	<b>900RTS - 0001</b>	<b>900RTC – L010</b>
Contact Discrete Input Module	900G01 – 0001		<b>900RTC – L025</b>
DC Discrete Input Module	900G02 – 0001		<b>900RTC – L050</b>
DC Discrete Output Module	900H02 - 0001	<b>900RTS - 0001</b>	
AC Discrete Input Module	900G03 – 0001		<b>900 RTC – H010</b>
AC Discrete Output Module	900H03 - 0001		<b>900 RTC – H025 900 RTC – H050</b>