

HUBBELL
Industrial Controls

PRODUCT OVERVIEW

VariLink DC Radio Systems

Custom radio systems for DC motors





A Smarter Way to Manage Heavy-Duty Equipment

Experience unparalleled crane control, precision, and reliability with VariLink™ DC radio control systems. Built for demanding industries like steel mills, pulp and paper, mining, and various outdoor applications, these systems keep your DC crane operations running smoothly.

Each VariLink radio system's modular design supports up to 64 relay connections, ensuring functionality that adapts effortlessly to any DC-powered application. Our state-of-the-art receivers can also be integrated with Uppercut or Haymaker belly boxes for seamless control with up to 6 motion switches and 8 auxiliary switches.

VariLink DC radio control systems provide a smarter, more efficient way to manage your heavy-duty equipment.



Belly Box Crane Controls

VariLink Uppercut and Haymaker crane remote controls are belly box units for larger cranes where precision control is required. Featuring multiple Aux functions including toggles, switches, push buttons, selector switches, and potentiometers. A 900 MHz frequency hopping spread spectrum reduces interference with other systems in the area.



Digital Receiver

The digital receiver serves as the central intelligence of the DC receiver cabinet. It is equipped with relays for the horn, start, and run signals, and houses the radio program for the CAN bus system. This ensures seamless integration of additional components, creating a fully customized system tailored to your specific needs.



Intermediate Relay Card

The intermediate relay card is a key accessory that enhances the functionality of the digital receiver through a CAN bus connection. Optimized for DC isolated control, each card features four Form C robust relays. Our system supports up to 16 cards and 64 connections, making it a versatile, scalable solution for comprehensive control from a single system.



Latching Relay Module

Built for controlling crane magnet operations, our latching relay module is an advanced system that integrates with your existing setup through CAN bus technology. It features a 2-function circuit for precise, safe drops and efficient power system shutdowns, significantly enhancing safety and efficiency.



Batteries and Battery Charger

Our 3-slot (bank) battery charger system is designed specifically for charging the battery packs of the Haymaker and Uppercut Belly Boxes. This state-of-the-art charger features a backlit OLED status display for clear, real-time charging updates and an AC power card for enhanced efficiency.

Technical Information

System Ordering Prerequisite Checklist

The following information is required to place an order.



Number of motions



Number & type of auxiliaries



Drawings of system



Man-Mag information



Magnet information

Power

Voltage	24 VDC +/-10%
Idle	1.5 W
Maximum	7 W

Outputs

External Sounder Output Contacts	AC	0.3 A / 125 V ac
	DC	1.0 A / 30 V dc
MLC/START Contacts	AC	5.0 A/ 250 V ac
	DC	1.0 A / 30 V dc
Panel Sounder	90 dBA SPL@ 1 m	

CAN Communications

Protocol	CAN
Data Rate	100/250 kbps
Length	200 m(Max.)
Devices	64 (Max.)

MODBUS Communications

Protocol	MODBUS
Data Rate	19.2 kbps`
Length	200 m(Max.)
Devices	64 (Max.)

Radio Transceiver

Operating Frequency	902.971 to 926.653 MHz
Modulation	FHHS
Encryption	AES-128

Power	-9dBm to +25dBm
Range	1000 ft line of sight

Under FCC regulations, the ER064 Digital Receiver may only operate using the antennas and cable assemblies listed below:

Approved Antennas / Cables

ANT-916-CW-HW	Antennas RPSMA 1/2 Wave Dipole Whip 916MHz
ANT-915-NUB-RPS	Antennas 915MHz Ultracompact, RP-SMA Plug
ANT-916-ID-1000-RPS	Antennas 916MHz, 1m, RP-SMA
ANT-916-ID-2000-RPS	Antennas 916MHz, 2m, RP-SMA
CSI-RSFB-100-UFFR	RF Cable Assemblies CABLE RPS BLKHD PLUG 100mm
CO-058SMAMFRP-025	RF Cable Assemblies RG58 REV POLARITY SMA M/F 25ft

Environmental

Temperature range (operation and storage)	13 °F to 158 °F (-25 °C to 70 °C)	Humidity	95% non-condensing
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740TXSB Battery

Physical	TBD	Humidity	TBD
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740TXMB Battery

Physical	TBD	Humidity	TBD
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Environmental

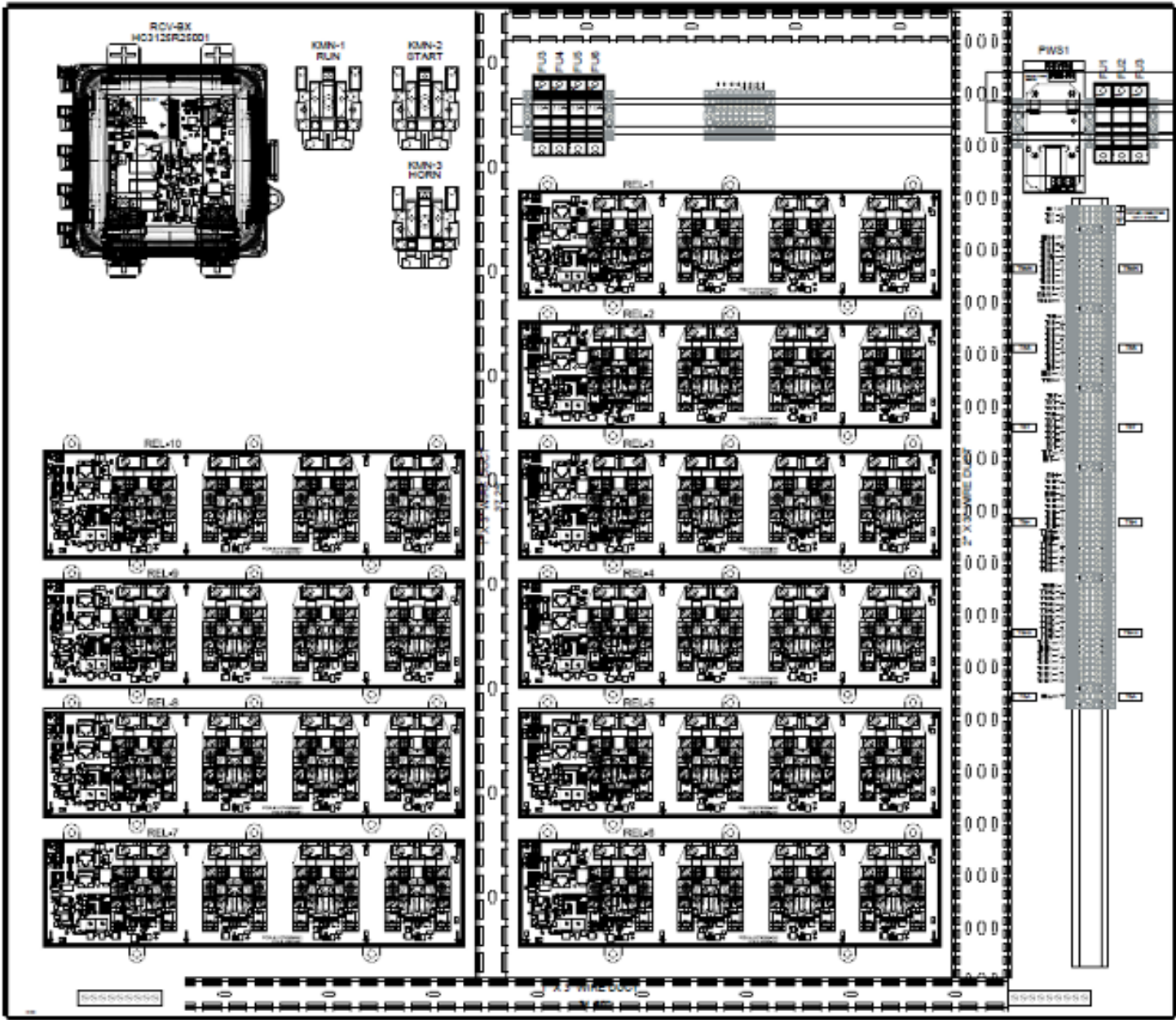
Temperature Range	-25° C to +50° C	Radio	
Shipping Weight	IP65	Operating Frequency	FHSS 902.971 - 926.653MHz
Humidity	95% non-condensing	Modulation	2FSK
		Antenna Impedance	50 ohms
		TX Power	-15 to +13 dBm
		Range - Line of Sight	1,000 Ft

Battery Module

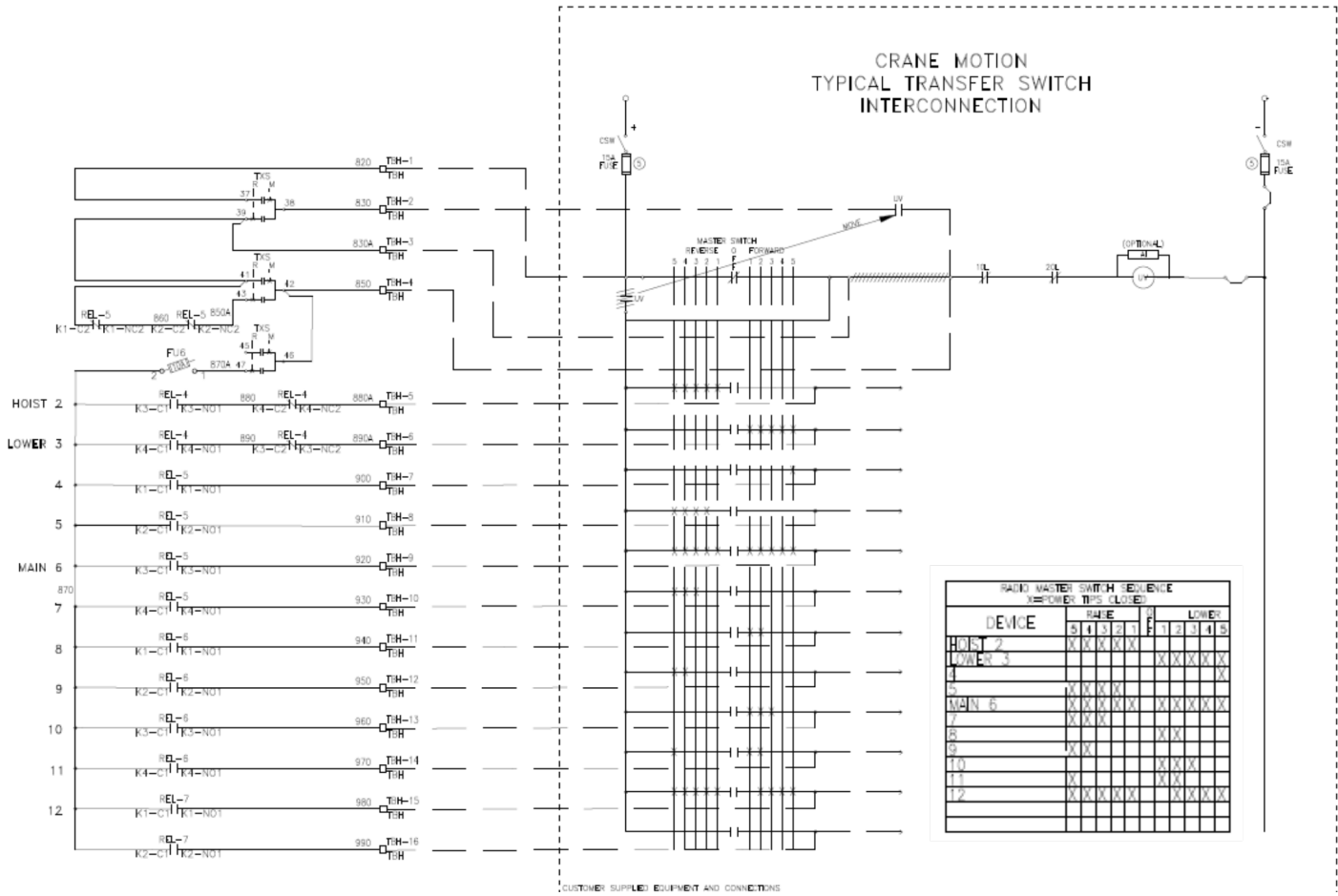
Type	Li Polymer	Battery Life 740TXSB	- Battery Installed 7 hours - Batteries Installed 14 hours - Batteries Installed 21 hours
Voltage	8.4V	Battery Life 740TXMB	- Battery Installed 6.5 hours - Batteries Installed 13 hours - Batteries Installed 19.5 hours
Capacity	2.3A*Hr		

Typical Enclosure Layout

This layout illustrates a standard enclosure configuration.



Typical Wiring Diagram Layout



HUBBELL **Industrial Controls**

Hubbell Industrial Controls is a worldwide leader in DC contactor technology and products for use in the control of overhead cranes, locomotives, transit vehicles, oil and gas drilling rigs, mining vehicles, and alternative energy conversion systems.

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