



Radio Remote Control System for control from electrical proportional valves

Series RC400

The RC 400 is a complete remote control system for the proportional control of hydraulic mobile machines.

The RC 400 offers the driver a remote control system which is extremely easy to use with speed, precision and control under maximum safety. The remote control can be operated with a thin and flexible 3-core cable, an opto fibre cable or via radio control.

RC 400 remote control system is based on extremely advanced microprocessor technology and has a radio which enables a channel changing during operation. Years of hand and exacting tests have shown that the RC 400 remote control system can cope with the most demanding and roughest environments. The remote control system is tested so that it can be used with workmans basket for lifting personnel, in power stations, mines, on oil platforms, etc. The remote control system is protected against electro-magnetic and radio frequency radiation.



Technical Features:

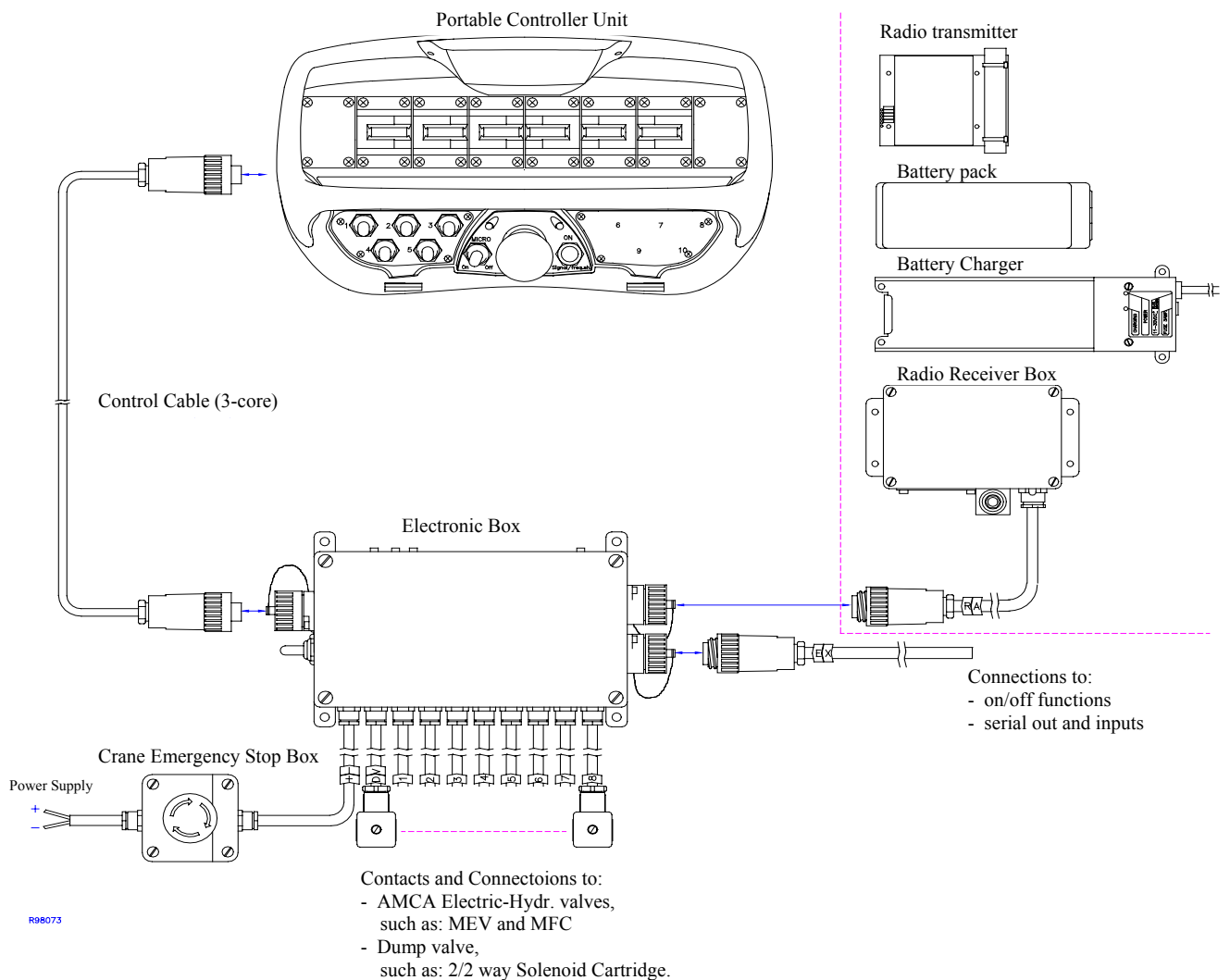
- * Connection for electro-hydraulic valves – AMCA valves, such as: MEV and MFC series.
- * Standard connection for Dump valve, such as: 2/2 way Solenoid Cartridge.
- * Maximal Safety by using own unique identity code (ID-code) and standard with Crane Emergency Stop.
- * Maximal 8 proportional functions and 10 on/off functions.
- * Possibility to choose manoeuvre-levers or joysticks (X-as, Y-as, X/Y-as, X/Y/Z-as) control.
- * Radio control or/and Cable (the Control Cable is standard by Radio control.)
- * Display or/and LED's for indicating system (load, pressure, status, alarm, temperature, etc.) optional
- * 8-10 hours battery effective operation, power-status indicated by Portable Control Unit.
- * Battery recharged by Battery Charger or Control Cable.
- * Reduction of speed in 5 steps (Micro operation), e.g.: from 100% to 60%, 50%, 40%, 30% and 20%.
- * 12 radio channels available for frequency automatically shifting.
- * Easy to reset directions, speeds and ramps individually for each function by using Portable Control Unit.
- * Parallel running of two or more electro-hydraulic valves at the same time from one manoeuvre-lever or joystick.
- * Speed-hold-function (cruise control), maximal 1 lever or joystick, or maximal 2 potentiometers.
- * Standard IP 65 protected, IP 67 optional
- * Self-test components-fault Portable Control Unit.
- * Electronicbox LED's indicating operating status, and during trouble shooting indicating error source from system.
- * Maximal 48 Electronicboxes in the serial optional.
- * Standard CANbus interface.
- * Circular type contact (Amphenol/Hirschmann).

The RC 400 Remote Control System is comprised of the following components:

- **Portable Control Unit (for cable or radio control).**



- **Electronic Box with max. 8 × valve amplifiers for AMCA valves.**
- **Crane Emergency Stop Box**
- **Expansion cable (EX)**
 - **Cable operation: Control Cable (3-core)**
 - **Radio operation: Radio Transmitter and Radio Receiver Box, 2 pieces of Battery Packs and Battery Charger.**



Technical Specification RC 400

General

Working temperature range : - 35 to + 70°C

Portable Control Unit:

Proportional functions : maximal 8 manoeuvre levers
maximal 3 joysticks (X-as, Y-as, X/Y-as, X/Y/Z-as)
On/Off functions : maximal 10 signals,
option, CANbus for more on/off functions.
Safety : 12 radio frequencies
Emergency stop
3° neutral position safety of the manoeuvre levers/joysticks.
Data transfer : 45 Hz with ID code
Resolution levers/joysticks : 256 steps
Batteries : NiMh 7.2 VDC
Protection class : IP 65, material ABS
Dimension : 348 × 200 × 145 mm (L×B×H)
Weight : ca. 1.50 kg without battery, 1.90 kg with battery

Electronicbox:

Power supply : 12 – 33 VDC
Dither frequency : 100 Hz, adjustable
Ramp/start/max. current : adjustable by A and B working port of hydraulic valve
Dump valve output : 1 × max. 2 A
On/Off output : 7 × max. 1.2 A
Protection class : IP 65, material Aluminum
Dimension : 290 × 185 × 87mm (L×B×H)

Radio Receiver:

Radio frequency : 405-490 MHz
Channel spacing : 25 kHz
Unique addressing : more than 65000 unique combinations.
Range : max. 200 meters
Protection class : IP 65, material Aluminum
Dimension : 150 × 100 × 190mm (L×B×H)

Battery Charger

Power supply : 11-30 VDC or 230 VAC.
Protection class : IP 50
Dimension : 217 × 66 × 30mm (L×B×H)

AMCA Hydraulic Fluid Power B.V.

P.O.BOX 18, 9790 AA Ten Boer
B. Kuiperweg 33, 9792 PJ Ten Post
The Netherlands

E-mail: sales@amca-nl.com
Homepage: www.amca-nl.com

Tel. : + 31 (0) 50 3023577
Fax.: + 31 (0) 50 3021226