

# ControlPro

Innovative solution for cranes and hoists



**Safety and Performance  
Control System**

# Innovative solution for cranes

**ControlPro is KCI Konecranes' new system for hoist and crane safety, condition and performance control. It makes handling of heavy loads more safe and productive. ControlPro provides also valuable information for effective maintenance planning and increased uptime of equipment.**

## **ControlPro PERFORM increases personnel and equipment safety**

### **Protection against overloading**

Overload protection is a matter of personnel safety. Overloading of the crane and hoist not only causes undue wear to the crane but it can destroy the crane structures and support structures of the building. In addition to overload protection ControlPro switches automatically from fast speed to slow speed when the load increases rapidly. This minimises the impact forces.

### **Select different maximum loads for specified factory areas - intermediate load limits**

Safe use of the crane requires in some applications intermediate load limits. If e.g. the runway and building structures in specified factory areas stand less than the maximum lifting capacity even up to three intermediate load limits can be given to prohibit the lifting with too heavy loads.

## **ControlPro PERFORM improves productivity**

### **Soft speed changes for faster positioning and smooth load handling**

In two-speed hoisting applications ControlPro makes the starts, stops as well as speed and direction changes smooth. In addition to the faster and safer load handling, the wear and mechanical stresses on equipment is substantially reduced.

### **Motor temperature supervision**

By controlling the starting and stopping characteristics, ControlPro reduces the temperature rise in the hoist motor. In exceptional peak usage situations additional performance guarantee is provided by switching the motor off when the temperature limit is exceeded.

## **Optimised maintenance saves money - ControlPro LIFETIME provides valuable information**

Versatile measuring, calculation and monitoring functions provide valuable information of the actual usage of the hoist. This information makes it possible to plan the maintenance based on actual use of the hoists rather than calendar time. The information allows optimising maintenance costs and is an additional guarantee for maximal uptime.

Also future modernisation in the material handling processes and equipment can be planned easier and without unnecessary safety margins in calculations.



# nes and hoists



## ControlPro OPTIC keeps you informed at any moment - improved control in less time

The pendant controller is equipped with an easy to use and read display showing not only the load but also many other relevant information processed in ControlPro. ControlPro Optic allows you to check the usage and condition of your crane at any moment, without climbing up to the crane. This saves your time and enhances safety and long lasting performance.

## All benefits also for cranes with several hoists - ControlPro MULTICARE

In applications where there are several hoist on the crane ControlPro Multicare provides the continuous control of the sum load of each hoist on the bridge. This is vital in applications where the capacity of the crane is less than the lifting capacity of the individual hoists counted together.

The operator can also read and receive the information from each hoist from any pendant controller equipped with ControlPro Optic display.

## High flexibility for our modern world - ControlPro INTERFACE

Data exchange with PC or PLC is possible via serial RS232 data interface. This offers interfacing with high-level automation systems as well as advanced maintenance management systems.



Continuous load control and overload protection for **increased safety**.



Continuous motor temperature control and versatile performance monitoring for **maximal uptime**.



Safe Working Period calculation and condition monitoring for **optimal maintenance**.



Konecranes is a world leading engineering group specialising in advanced overhead lifting solutions and maintenance services, operating from over 250 locations in more than 40 countries. Our people are dedicated to delivering the optimal solution for your lifting application. With Konecranes you can focus on your core business, while we take care of your lifting requirements.

Visit our [konecranes.com](http://konecranes.com) website to find more about industry leading products and services.



## Technical Features

### ControlPro Perform

- Overload protection
- Intermediate load limits as option
- Soft hoisting speed and direction change
- Motor temperature control

### ControlPro Lifetime

- Calculation of Safe Working Period (FEM 9.755)
- Versatile performance and condition monitoring: operating hours, number of starts, number of hoisting cycles, average load, number of overloads, remaining life time of hoisting brake lining

### ControlPro Optic

- Interactive easy to use display in the pendant controller
- Load monitoring
- Monitoring of Safe Working Period
- Monitoring of other performance and condition values
- Automatic warnings

### ControlPro Multicare

- Common supervision of several ControlPro systems via CAN bus
- Continuous control of the total load lifted with several hoists
- Monitoring of every ControlPro system via any Optic display
- Levelling of two or more hoists as option

### ControlPro Interface

- Serial RS232 data interface

## Technical Data

Maximum supply voltage	690 VAC +10%
Nominal supply frequency	50/60 Hz
Control voltage range	42...48 VAC/115...230 VAC +/- 10%
Ambient temperature	-20C...+65C
Load measuring accuracy	<ul style="list-style-type: none"> <li>• <i>2-speed hoisting:</i> Motor torque control method +/- 10% from nominal load</li> <li>• <i>Inverter controlled hoisting (strain gauge sensor):</i> Strain gauge sensor +/- 5% from nominal load</li> </ul>
Humidity	<ul style="list-style-type: none"> <li>• <i>2-speed hoisting:</i> +/- 5% from nominal load</li> <li>• <i>Inverter controlled hoisting (strain gauge sensor):</i> +/- 5% from nominal load</li> </ul>
Analog output	0...10V, Rmin=1kQ
Potentially free relay output	230V, 3A (Programmable)
Height (including assembly rail)	120mm
Length	123mm
Width	108mm



[www.konecranes.com](http://www.konecranes.com)