

Kinesys DigiHoist Range

A fixed speed digital control range for chain hoists with safety group functionality which has been created to be a flexible, configurable, next generation control solution.



03



Kinesys
DigiHoist

05



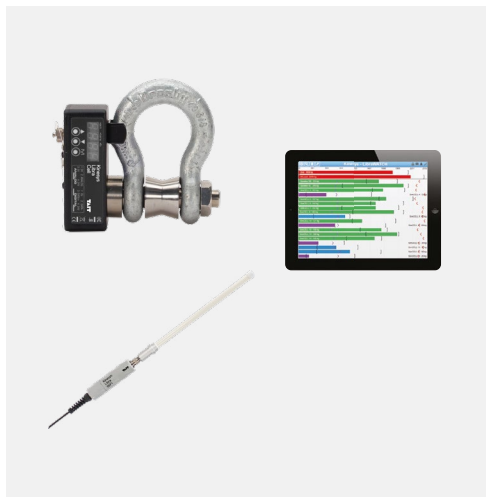
Kinesys
DigiHoist
DigiHandset

06



Kinesys
DigiHoist
DigiLink

07



Load
monitoring

08



Kinesys
Vector

09

DigiHoist
conformity

10

Output
connector
options

DigiHoist incorporates all the safety functionality required to work in group hoist mode and is in compliance with many strict EU standards. Load monitoring, group stop, positioning and self healing emergency stop are standard DigiHoist features, all working within a user friendly digital platform.

Kinesys DigiHoist

Kinesys DigiHoist offers digital communications, limit monitoring, load and position feedback and group halt functionality in a compact package.



At the system's core is a digital communications link enabling daisy-chaining of multiple units, which automatically assign channels based on their position. High-resolution displays provide detailed feedback, including channel number, status, and load cell data.

FEATURES

8 CHANNEL CAPACITY

STANDARD MODEL WITH UP TO 32A MAINS INPUT
FOR STANDARD HOISTS

PLUS MODEL WITH UP TO 63A MAINS INPUT
FOR LARGER HOISTS

LINK UP TO 12 UNITS TOGETHER (96 CHANNELS)

LOW VOLTAGE AND DIRECT CONTROL
VERSIONS AVAILABLE

HOIST PRESENCE AND LIMIT DETECTION
(LOW VOLTAGE UNITS ONLY) WITH INDIVIDUAL
CHANNEL FEEDBACK

SELF-HEALING EMERGENCY STOP CONNECTIONS

8, 16 AND 32 CHANNEL HANDHELD REMOTES

LOCAL CONTROLS ON THE FRONT PANEL

AUTOMATIC PHASE REVERSAL CORRECTION,
WITH USER OVERRIDE FACILITY
(OVERRIDE ON LV UNITS ONLY)

UNIVERSAL VOLTAGE INPUT FOR WORLDWIDE USE

PERMANENT AND SWITCHED HOIST POWER MODES
FOR USE WITH 'PICKLES' (LV UNITS ONLY)

OUTPUT OPTIONS INCLUDE INDUSTRY STANDARD SOCAPEX
& HARTING CONNECTIONS

'GO' LINK TO ALLOW MULTIPLE UNITS TO BE
CONTROLLED FROM A SINGLE GO BUTTON

MINIATURE CIRCUIT BREAKER (MCB) PROTECTION
FOR EACH PAIR OF HOISTS


MOTOR CIRCUIT BREAKER PROTECTION FOR EACH HOIST
ON DIGIHOIST PLUS

OPTIONAL RCD PROTECTION AVAILABLE

LIBRA CELL INPUT

POSITIONING AND ETHERNET VERSIONS AVAILABLE

Kinesys DigiHoist




01 02 03 04
146 Kg 112 Kg 146 Kg 108 Kg

05 06 07 08
108 Kg 196 Kg 134 Kg 158 Kg

CHANNELS AND LOAD MONITORING

The DigiHoist automatically assigns channel numbers and then displays them alongside load cell information.




450 mm 450 mm 450 mm 242 mm
149 Kg 158 Kg 144 Kg 112 Kg

05 06 07 08
122 mm 433 mm 231 mm 231 mm
107 Kg 199 Kg 136 Kg 157 Kg

DIRECTION AND POSITION

When hoists are moving, the screens show motion direction, encoder position and applied loads.




134 Kg 128 Kg 154 Kg 92 Kg

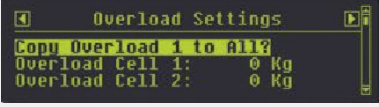
112 Kg 184 Kg 126 Kg 162 Kg

EXAMPLE SYMBOLS

From Left: Direction UP, Hard limit UP, Soft Limit DOWN, No Hoist Detected, Overload, Direction DOWN, Underload, No Load Cell data.



Settings



Overload Settings


Copy Overload 1 to All?

Overload Cell 1: 0 Kg

Overload Cell 2: 0 Kg

ADJUSTING SETTINGS

The DigiHoist menu allows setting of all options including load cells, limits and group halt.



ESTOP

Pressed

INFORMATION AND MESSAGES

Screen displays message errors, controller status, suggested actions and the devices connected.

The digital link integrates SIL2 emergency stop connections, removing the need for shorting plugs. Safety features include hoist presence indication, limit monitoring, and group halting on faults.*

MAINS INPUT

- 5-PIN 32A 'CEEFORM' TYPE PLUG TO IEC60309
- 5-PIN 63A 'CEEFORM' TYPE PLUG TO IEC60309 ON PLUS VERSION
- 5-PIN 30A L21-30 TYPE PLUG FOR USA
- 4-PIN 50A CS8365C TYPE PLUG FOR USA ON PLUS VERSION

CONTROL CONNECTIONS

- AMPHENOL C16-3 LINK IN FEMALE 14 + PE
- AMPHENOL C16-3 LINK OUT MALE 14 + PE

*Not all features are available on Direct Control versions

Kinesys DigiHoist DigiHandset

Digital user-friendly pendant which allows safe fixed speed set up or scenic movements.



Kinesys DigiHoist Handset has channel selection switches, Emergency Stop, GO and RESET buttons and a simple intuitive display to communicate the status of the controller. As soon as the handset is plugged into a DigiHoist it will begin the auto addressing process. A solid blue status indicator above each channel states that a chain hoist is connected and ready to use.

The RESET button is used to acknowledge and reset a fault condition within the motor controller, it will flash when action is required. The GO button is used to initiate hoist movement, it will only illuminate if movement is possible.

FEATURES

8, 16 AND 32 CHANNEL VERSIONS

STARBURST LED DISPLAY FOR MESSAGE AND MENU SETTINGS

1U 19" RACK MOUNTING CASE

CONTROL CONNECTIONS

AMPHENOL C16-3 MALE 14 + PE

Kinesys DigiHoist DigiLink

Kinesys DigiHoist DigiLink unit that allows multiple handsets to work together to control large arrays of DigiHoists.



The Kinesys DigiHoist DigiLink unit allows users to control large numbers of DigiHoists remotely. To manage a system with more than 32 channels, multiple handsets are required. The Kinesys DigiHoist DigiLink connects up to four handsets, enabling a single handset's GO button to control up to 96 hoists. While centralizing movement control to one GO button, the Kinesys DigiHoist DigiLink ensures all emergency stops remain active for maximum safety.

The Kinesys DigiHoist DigiLink also features an innovative Clone function, allowing multiple handsets to interface with the same DigiHoist controllers. The system ensures that only one DigiHoist Handset can control the hoists at a time while maintaining active emergency stops. Control is transferred between handsets by pressing the emergency stop on any handset, followed by RESET on the handset taking control.

FEATURES

EXTERNAL POWER VIA POWERCON
R POWERED FROM DIGIHOIST CONTROLLER

STATUS AND PRESENCE INDICATORS
FOR ALL CONNECTIONS

2U 19" RACK FORMAT

CONTROL CONNECTIONS

4 X AMPHENOL C16-3 FEMALE 14 + PE
FOR DIGIHANDSETS

1 X AMPHENOL C16-3 MALE 14 +
PE FOR DIGIHOISTS

Load monitoring

Kinesys Libra Cell



Kinesys Libra Cell is a load measuring shackle with a highly visible LED display which allows users to view the live load being placed on the shackle. Switching between kg and lbs as well as inputting a tare value is all achieved via an easy to use menu system.

Kinesys Libra Watch



Kinesys Libra Watch is a multi-platform load monitoring software application that enables data to be viewed on both computer and mobile devices.

Kinesys Libra WiFi



Kinesys Libra WiFi permits Kinesys Libra Watch to connect wirelessly, allowing load data to be monitored on the go using multiple devices while at the same time allowing key parameters to be edited remotely.

D8+ & CATEGORY A SYSTEMS - LOAD MONITORING

For D8+ systems, with 'statically indeterminate' loads, the overload protection should cut out at 120% of the lifting capacity. For a Category A system, each hoist must be fitted with a load measurement device. This device must be capable of halting lifting operations in excess of SWL + 15% and lowering operations in the event of a chain becoming slack.

THIS LOAD MEASUREMENT DEVICE OR OVERLOAD PROTECTION MAY BE:

INTEGRAL TO THE HOIST AND CONNECTED TO ITS INTERNAL CONTROL CIRCUIT.

INTEGRAL TO THE HOIST AND CONNECTED TO THE DIGIHOIST CONTROLLER VIA A SUITABLE INTERFACE.

SEPARATE TO THE HOIST AND CONNECTED TO THE DIGIHOIST CONTROLLER.

Libra Cell load shackles may be used in a system to help achieve Category A or D8+ compliance.

Kinesys Vector



Kinesys Vector is a software program that allows cues to be built and run with a variety of linking options.

The number of cues that can be built and channels that can be controlled are limited only by your imagination.

Vector has a wealth of cue creation and editing features designed to allow the rapid programming of cues. Advanced linking features allow complex cue sequences to be easily constructed while maintaining maximum flexibility over the overall operation of the devices in motion.

Four cue playbacks to allow cues to be run simultaneously and manual running features make all aspects of movement easy and safe. Vector runs on compatible Windows computers with the option of a USB keypad for faster editing and operation.

DigiHoist conformity

ACHIEVING D8+ (SQ P2) AND BS7906-1 COMPLIANCE WITH THE DIGIHOIST SYSTEM

The DigiHoist controller may be used as part of a D8+ (SQ P2) system, for suspension of loads above people without the need of a secondary suspension, and as part of a BS7906-1 Category A system, for lifting and suspension of loads above people. In order to achieve full conformity with the above codes of practice the following conditions must be respected:

D8+ SYSTEM

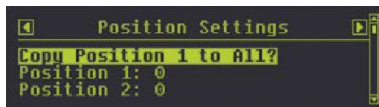
Hoist must be compliant with DIN 56950 and SQ P2.

CATEGORY A SYSTEM

Hoist must be compliant with BS7905-1 and BS7906-1 Category A.

POSITIONING FEEDBACK

When complex (statically indeterminate) loads are being lifted, position feedback may be required in addition to load monitoring. This is to ensure that the position relationship between all the hoists in the group is maintained. To achieve this the hoists must be fitted with incremental or absolute encoders and connected to a DigiHoist Controller fitted with the position control option. A risk assessment of the lifting operation will determine whether position feedback is required.

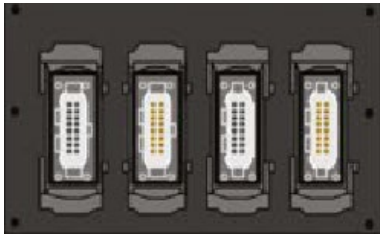


E-STOP SYSTEM

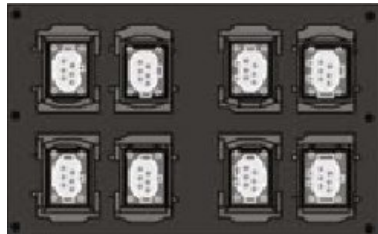
DigiHoist includes an Emergency Stop System compliant with SIL2 in accordance with EN 62061. Emergency stop switches are located on the DigiHoist Controller and on the DigiHoist Handset. One additional emergency stop switch may be connected into a standard DigiHoist system (SIL3 Estop available on request).

Output connector options

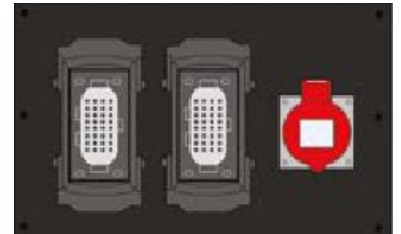
Low voltage control



4 X HARTING 16



8 X HARTING 6



2 X HARTING 32 + 32A



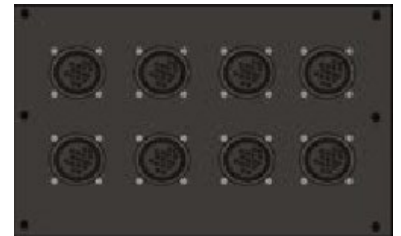
4 X SOCAPEX 19

8 X CEEFORM



8 X SOCAPEX 7

2 X HARTING 16+32AT



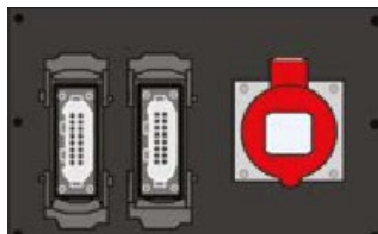
8 X P14T

2 X SOCAPEX 19+32A

Direct control



4 X HARTING 16



8 X HARTING 6



2 X HARTING 32 + 32A

Learn more about the Kinesys family of TAIT Products.

Explore ranges



**Kinesys
Apex
Range**



**Kinesys
Libra
Range**



**Kinesys
Elevation
Range**

TELEPHONE

AMERICAS: +1 (717) 626 9571

REST OF WORLD: +44 (0)20 8481 9850

FACEBOOK: [taitproducts](#)

LINKEDIN: [taitproducts](#)

INSTAGRAM: [@taitproducts](#)

EXPLORE
MORE



SALES

PRODUCT.SALES@TAITTOWERS.COM

SUPPORT

SUPPORT@TAITTOWERS.COM

WEB

TAITTOWERS.COM/PRODUCTS

DISCLAIMER:

These specifications are general guidelines only and may not be appropriate for your particular project. All product specifications and data are subject to change without notice. Data, performance features, and images may vary from the final project quote.

DIG-2024-47

A TAIT PRODUCT

DESIGNED IN THE UK

© TAIT INTERNATIONAL LIMITED

TAIT