

Kinesys Pulse™ Range

Variable speed drives and winches for installations
incorporating the TAIT Navigator™ Platform and SIL3 safety



The **Kinesys Pulse™ Drive** provides an installation friendly and flexible solution for winch control. They come complete with **Navigator Infinity™** control and SIL3 safety.



The **Kinesys Pulse winches and hoist** offer standard formats and specifications for tours or installations requiring either 'fly bar' or flexible 'point hoist/touring' configurations.

Kinesys Pulse™ Range

KINESYS HAS A SIMPLE GOAL:
TO PROVIDE **EXCEPTIONAL** AUTOMATION EQUIPMENT THAT ALLOWS VENUES TO BE **OUTSTANDING** AND AUDIENCES TO BE **AMAZED**.

KINESYS is well known for versatile, dependable touring equipment for automation.

As a result of the merger with TAIT in 2019, the strategic investment has resulted in a new range of products that bring together the best of TAIT's and Kinesys' control and integration technology, engineering and manufacturing together to meet the market needs for high quality machinery and controls.

The **Kinesys Pulse Range** offers access to TAIT's vast experience of automating fixed installations around the world at a new price point and with the flexibility of single axis drives. Combined with built-in **Navigator** technology and SIL3 safety it offers a unique opportunity to own some of the world's most reliable and proven automation technologies.

2-3. Product Summary **4-5.** Pulse Drive Install
6-7. Pulse Winch Install **8-9.** Pulse Winch Flexi **10.** Kinesys Pulse™ Hoist
11. Navigator Infinity Panel **12.** Pulse Drive Data Tables **13.** Pulse Winch Data Tables

Kinesys Pulse™ Drive Install



Kinesys Pulse Drive Install 4kW
Kinesys Pulse Drive Install 7.5kW



Kinesys Pulse Drive Install 22kW

The Install range of **Kinesys Pulse Drives** combine the very best of Kinesys’ proven product engineering and TAIT’s award-winning control technology to create a supremely powerful, yet simple-to-use, variable-speed drive for precision machine control. Providing plug & play compatibility with the Kinesys **Pulse Winch** range, they facilitate a SIL3 level of system-safety combined with the most flexible and powerful control platform on the market, in Navigator Infinity.

The **Navigator Infinity Panel** features a 7” touchscreen that displays extensive diagnostics data and machine status for engineers, with the facility to customise the display for each installation’s particular needs.

The drives are completely connectorised enabling easy modular installation, (e.g. cables can be installed separately, in advance, allowing them to be fully tested before the drives even arrive). If the need arises to change a drive then the procedure is very quick and easy to swap units without needing expert on-site assistance. This minimises maintenance costs and axis down-time.

The brake resistor bank is external to the drive. This is convection cooled, which eliminates the need for fans. Cooling of the drive cabinet is achieved using low-noise, intelligent speed-controlled fans that regulate the temperature of the internal drive and electronics in a way that is as sensitive as possible to the environment where they are being used.

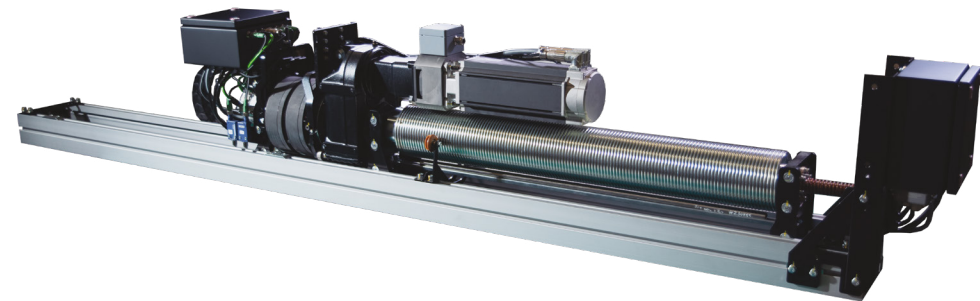
Manual controls are provided on the front panel, as standard, for easy local control of the machinery.

Pulse is designed to work directly with **epiQ™ Consoles** offering the latest **iQ™** software to operators for the best user experience.

FEATURES

- Plug and play direct compatibility with Kinesys Pulse Winches
- SIL3 safety technology is included as standard
- Pendant connection point in every drive for user convenience
- Multiple input voltage and power output options
- Fully connectorised for quick and simple installation
- Low noise cooling
- Navigator on-board
- Compatible with epiQ consoles and iQ software

Kinesys Pulse™ Winch Install



Kinesys Pulse Winch Install PWI20



Kinesys Pulse Winch Install PWI30

The **Kinesys Pulse Winch Install** range is curated from the industry-standard **TAIT BT2** winch range to offer two models optimised for permanent installation projects.

The smaller model, PWI-20, based on the BT-200, offers an ELL (Entertainment Load Limit) of 227kg, moving at 2.2m/s in single or two line versions. This machine pairs with the 4kW Pulse drive, which is offered in 200V, 208V, 400V and 480V versions for deployment anywhere worldwide.

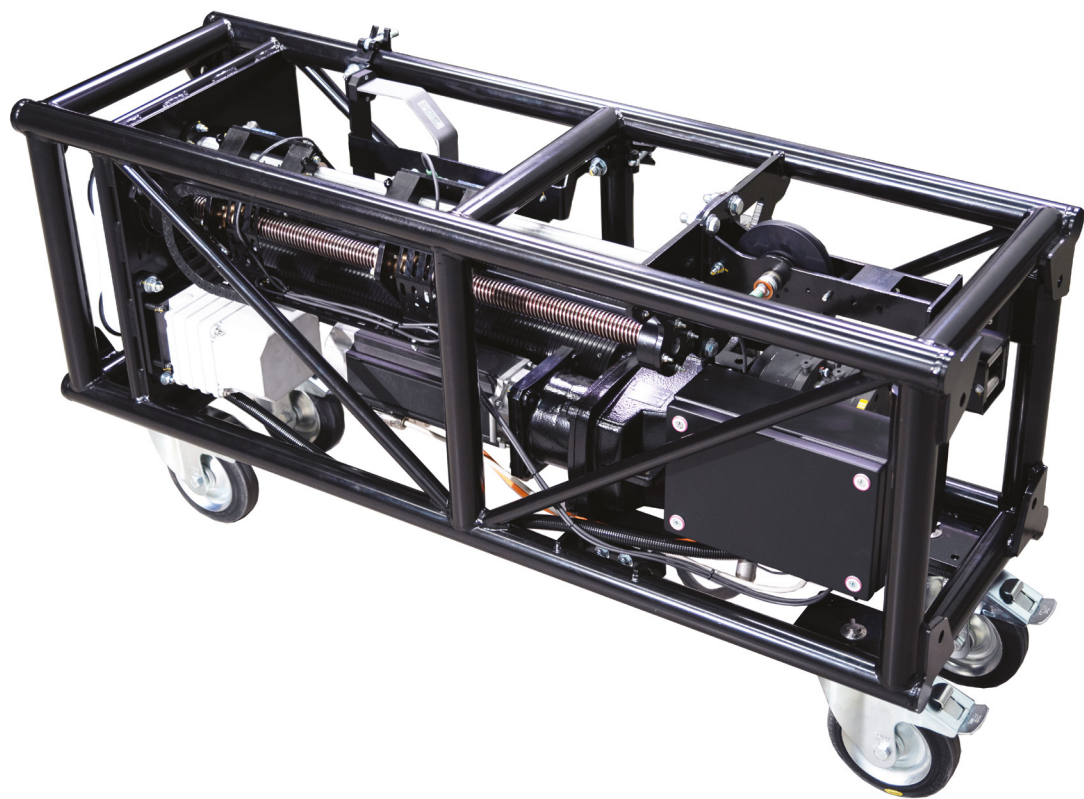
The larger model, PWI-30, based on the BT2-300, is for more substantial venues with traditional line-set requirements. It is a zero-fleet drum winch providing speeds up to 2.2 m/s with a lifting capacity of 1000kg across 6 lines and a stroke of 20m. It is suitable for use in locations with 400V or 480V supplies, it can be deployed in all venues where more substantial loads must be moved.

With countless miles and hours of movement accumulated in the world's most prestigious performance venues in the years these winches were first launched, they are already proven in the field and now available as part of the Kinesys Pulse range of products.

FEATURES

- Zero-fleet
- Multiple mounting orientations
- Slim design, 200mm or 300mm spacing between adjacent linesets in winch arrays
- Proven industry design and technology
- SIL3 Safety Encoder for software adjustable ultimate limits
- Performer Flying rated
- Dual, silent, monitored brakes

Kinesys Pulse™ Winch Flexi



Flexibility is at the heart of this winch design. Designed to operate as a Point Hoist for theatrical applications it is equally at home in a touring environment.

The **Kinesys Pulse Winch Flexi** is offered in both high-speed, low-load and low-speed, high-load versions for maximum flexibility, ideal for zero-fleet point-hoist applications, or for scenic movement, lifting either 125kg at 3.6m/s or 250kg at 1.8m/s with a stroke of 30m.

Zero fleet and incorporating the safety features mandated for performer flying, the Pulse Winch Flexi allows for single or twin lines on the drum. Multiple rope exit paths are possible including a full gimbal exit for the most exacting performer flying applications.

Dual brakes, full SIL3 safety and on-board load-monitoring are standard. Control is from the Pulse Drive range by default, but the Flexi winch can also be purchased ready to work with the Kinesys Apex Drive for seamless interchange with the Kinesys Apex range.

The truss frame design provides maximum flexibility for handling and rigging. It can be supplied either with large format wheels, to make easy work of moving around a theatre grid, or with smaller touring wheels, ideal for trucks and on arena floors. A fabric winch cover is also available providing guarding of the winch once in position but with easy maintenance access if required.

FEATURES

- Zero fleet
- Multiple mounting options
- Multiple rope exits or full gimbal for performer flying
- 125kg at 3.6m/s or 250kg at 1.8m/s versions
- Single or Dual line drum
- Roll-On Roll-Off possible direct from the drum
- Control with Pulse Drive or Apex Drive
- Can be installed inside HUD Truss for touring applications

Kinesys Pulse™ Hoist 2500



The Kinesys Pulse Hoist is a variable speed electric chain hoist with a lifting capacity of 2500 kg. The hoist is powered by the Kinesys Pulse Drive 7.5 kW and can be operated using the TAIT Navigator™ Automation Platform.

The maximum lift speed is 200 mm/s and the integrated load cell with overload and underload protection means that the hoist meets SIL 3 requirements.

The Pulse Hoist features dual silent brakes and ultra-smooth movement resulting from precision speed and position control.

In conjunction with Navigator™, key data such as load and temperature can be monitored. This allows users to ensure that the hoist is not over-exerted, that regulatory requirements are met, and that maintenance schedules are kept precisely.

FEATURES

- 2500 kg (5500 lbs) maximum load capacity
- 200 mm/s (0.65 ft/min) maximum lifting speed
- Full load capacity at any speed down to and including zero
- 13x36 mm chain; 8:1 safety factor
- Dual silent brakes
- Brushless servo motor
- Integrated dual-channel SIL3 load cell
- Compatible with TAIT Navigator™ Automation Platform
- 0mm/s minimum lifting speed

The **TAIT Navigator Infinity™ Panel** is the intelligence at the heart of the Kinesys Pulse range.

Each drive has its own Navigator Infinity Panel which enables pinpoint accuracy of movement for the attached machinery and also seamless integration into the Navigator Platform.



Kinesys Pulse Drive data tables

KINESYS PULSE™ DRIVE INSTALL 4KW / 7.5KW	
PARAMETER	VALUE / UNITS
Input voltage (3 phase + Earth)	208V or 400-480V
Typical input current	23A @ 208V, 14A @ 400-480V
Max. continuous output current	18.5A @ 208V, 10A @ 400-480V
Peak output current	37A @ 208V, 20A @ 400-480V
Dimensions (H x W x D)	750 x 378 x 420 mm / 29.5" x 14.9" x 16.5"
Ingress Protection options	IP45 (or IP65 (with waterproof fan covers)
Operating temperature	0-40°C (32 to 104 F)
Compliance	SIL3, EN 17206 UC1 to UC6

KINESYS PULSE™ DRIVE INSTALL 22KW	
PARAMETER	VALUE / UNITS
Input voltage (3 phase + Earth)	400-480V
Typical input current	54A
Max. continuous output current	47A
Peak output current	94A
Dimensions (H x W x D)	847 x 478 x 559 mm / 33.3" x 18.8" x 22.0"
Ingress Protection options	IP54 or IP65 (with waterproof fan covers)
Operating temperature	0-40°C (32 to 104 F)
Compliance	SIL3, EN 17206 UC1 to UC6

KINESYS PULSE™ WINCH INSTALL PWI-20	
PARAMETER	VALUE / UNITS
ELL (Entertainment Load Limit)	227 kg
ELL (Entertainment Load Limit)	500.4 lbs
Speed	2.2 m/s
Speed	7.2 ft/s
Stroke (including all limits)	45 m / 147ft (1 line) 20.5m / 67.25 (2 lines)
Number of ropes	1 or 2 qty
Rope diameter (must be low-rotation type rope)	6 mm or 1/4" SWR
Dimensions (L x W x H)	2590 x 274 x 437 mm / 101.9" x 10.78" x 17.2"
Self weight	238 kg / 525lbs
Rated voltage	208V or 400V AC
Compatible controller	4kW Kinesys Pulse Drive
Compliance	SIL3, EN 17206 UC1 to UC6

Kinesys Pulse Winch data tables

KINESYS PULSE™ WINCH INSTALL PWI-30	
PARAMETER	VALUE / UNITS
ELL (evenly distributed over 6 lines)	975 kg
ELL (evenly distributed over 6 lines)	2149.5 lbs
Speed	1.8 m/s
Speed	5.9 ft/s
Stroke (including all limits)	20 m / 65.6ft
Number of ropes	6 qty
Rope diameter	6mm or 1/4" SWR
Dimensions (L x W x H)	3053 x 357 x 619 mm / 120" x 14" x 24"
Self weight	425 kg / 937 lbs
Rated voltage (must be pre-stipulated)	400V
Compatible controller	22kW Kinesys Pulse Drive
Compliance	SIL3, EN 17206 UC1 to UC6

KINESYS PULSE™ WINCH FLEXI		
PARAMETER	VALUE / UNITS OPT 1	VALUE / UNITS OPT 2
ELL	125 kg	250 kg
ELL	275 lbs	550 lbs
Speed	3.6 m/s	1.8 m/s
Speed	11.8 ft/s	5.9 ft/s
Stroke (including all limits)	30m / 100ft	
Number of ropes	1 or 2 lines	
Rope diameter (must be low-rotation type rope)	6 mm SWR	
Dimensions (L x W x H)	1456 x 520 x 520 mm / 57.3" x 18.425" x 20.5" (excl wheels & handles)	
Self weight	220 kg / 485lbs	
Rated voltage	208 or 400-480VAC, 50-60Hz	
Compatible controllers	4kW Kinesys Pulse Drive or Kinesys Apex Drive v2	
Compliance	SIL3, EN 17206 UC1 to UC6	

KINESYS PULSE™ HOIST	
PARAMETER	VALUE / UNITS
ELL	2500kg
Speed	200mm/s down to 0mm/s
Stroke (including all limits)	Upto 88m – specify chain length on order.
Chain spec.	Black, 13x36 mm chain; 8:1 safety factor
Dimensions (L x W x H)	397 mm x 378 mm x 803 mm x (15.6 in x 14.9 in x 31.6 in)
Self weight	130 kg (287 lbs)
Compatible drive	Kinesys Pulse Drive 7.5kW
Compliance	SIL3, EN17206 UC1 to UC4

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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.

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