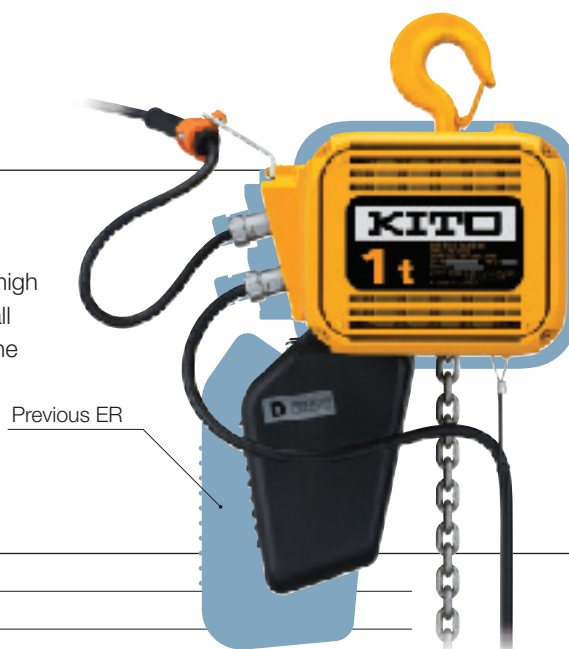


# Compact Body

## Light weight

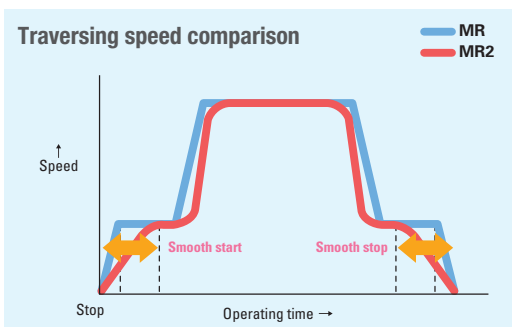
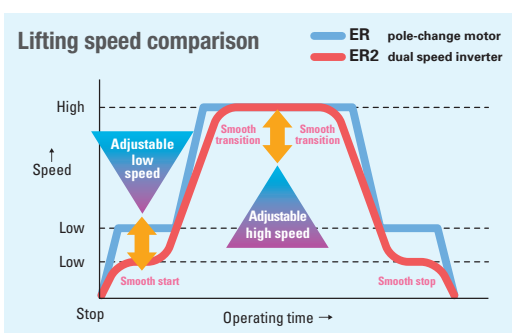
The compact aluminum die-cast body has exceptional rigidity as well as, high dust-protection and water-protection. It has a simple structure with a small number of parts. Fine-tuned profile of the load chain link benefits loss of the hoist body weight compared to the previous ER.



## ER2 Outline

Rated capacity:	Single speed – 125 kg to 20 t Dual speed – 125 kg to 5 t
Voltage:	220-230 V 50/60Hz 380-415 V 50 Hz 380-440 V 60 Hz 500 V 50 Hz (pole change for dual speed) (460 V 60 Hz for specific regions)
Control voltage:	24 V (110 V for specific regions)
Duty rating:	Single speed – 60% ED (60 min.) Dual speed – 40/20% ED (30/10 min.)
Classification:	M4, M5 (ISO); 1 Am, 2m (FEM); H4 (ASME)
Motor insulation:	Class B for 220-230-50/60 and 500-50 (460-60) Class F for 380-415-50 and 380-440-60
Enclosure:	Hoist body – IP55, Push button control - IP 65
Suspension varieties:	Hook, manual trolley, motorized trolley
Operating temperature:	-20 to 40 °C (-4 to 104 °F)
Operating humidity:	85%RH or less

# Smooth & Ergonomic Operation



## Inverter

### smooth transitional speed

The dual speed inverter delivers smoother movement than the pole change motor, reducing load swing. The high to low speed ratio can be set to a large value. This results in smooth starts, improved low speed stops, and improved positioning accuracy. The standard speed ratio is 6:1 adjustable up to 12:1\* for lifting and 10:1\* for traversing.

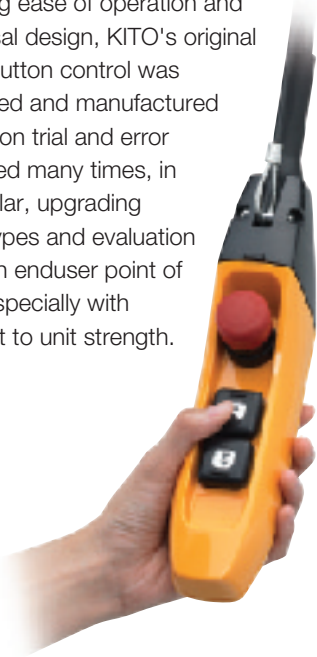
ER2/MR2 inverter unit is well-customized for lifting/traversing applications including exclusive software with optimum control and is also provided with measures against impact and heat which were verified through long run tests.

\*For a speed ratio other than the standard, please make a request at the time of placing an order.

Accelerating and decelerating time in addition to speed are adjustable for dual speed inverter trolley.

## Push button control **original design**

The push button control is designed in an ergonomic shape that is operator friendly. Seeking ease of operation and universal design, KITO's original push button control was designed and manufactured based on trial and error repeated many times, in particular, upgrading prototypes and evaluation from an enduser point of view especially with respect to unit strength.



Contoured to comfortably fit into your hand. The button has a light operating sensation which responds to fine adjustments in pressure. The pressing stroke is short. The operator, therefore, will not become fatigued after long-periods of operation.



Back lug for firm grip

As for a crane fabrication with a motorized end truck, a control box is available if necessary.

Resistant to the collisions and shocks that may occur during work, KITO's original push button control can be used in various environments, thus supporting efficient work.



## Load sheave **reduced vibration**

Increasing the number of load sheave pockets helps relieve vibrations produced by the revolving polygonal sheave on the hoist's body and load chain.



# Reliable Safety

## Friction clutch & upper-lower limit switch **double safety**

Maintaining safety is the most important task for lifting equipment, and is essential for stable operation. To ensure safety, KITO utilizes a double safety mechanism consisting of an originally developed friction clutch and upper-lower limit switch.

The friction clutch is an emergency overload protection device that idles the motor when subjected to an excessive load over the rated capacity. Friction clutch performance is not easily compromised with changes in the surrounding temperature. In the case of irregular loading, this operates in advance to prevent the hoist body or load chain from being damaged.



In the event that a load is lifted or lowered excessively, the limit switch stops the motor, preventing hoist or load chain damage. (Not regular use)

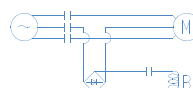


## Thermal protector

To prevent the motor from burning out due to excessive usage, a standard thermal protector is installed in the motor.

## Electromagnetic brake **fail-safe connection**

Connected in series to a motor circuit, a current-driven electromagnetic brake does not release unless the motor is energized. This concurrent drive increases safety of the circuit compared to separate circuits for the motor and the brake.



## Emergency stop

The emergency stop, provided as standard, allows the motor power to be disconnected in an emergency without cutting off the main power supply.

