

MANUAL INFORMATION

**• This system is applicable to all elevators with moveable car platform in need of overload signals.**

This device is of extremely high performance-price ratio. This appliance is to overcome the inherent disadvantage of the mechanical overload switch and to replace it.

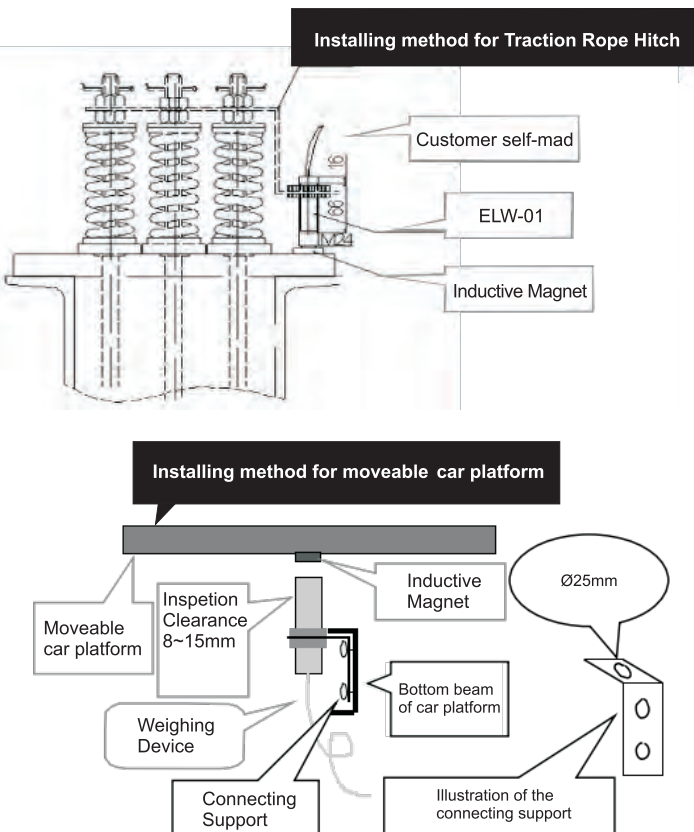
**• Main Property**

1. Working in a contactless and inductive way. No mechanical movement itself. Being directly installed in the original place of overload switch. No necessity of changing the mechanism of elevator car.
2. Adopting strong inductive magnet, improving the anti-interference of the system to the utmost.
3. The electrical property is in compliance with the standard of the International Electrotechnical Commission (IEC).
4. More accurately positioning, small overall size, easy installation and adjustment, simple structure and low price.

**• Technical Specification**

1	Application Range	Applicable to all elevators with moveable car platform in need of overload signal with a inspection clearance of 8-15mm.
2	Sensitivity	Overload turning point $\leq$ Rated load adjusting point $\pm 0.05\text{mm}$
3	System Error	$\leq 1.5\%$ (5~40°C)
4	Output Mode	1 pair of relay dynamic CLOSE or dynamic OPEN contacts respectively with the capacity of DC/AC 48V/500mA.
5	Ambient Temperature	(-25 ~ +55°C)
6	Power Supply	AC/DC 24V( $\pm 10\%$ )/15mA. The operating current of the whole machine $\leq 100$ mA.
7	Install Position	Moveable elevator car platform
8	Overall Size	Column of $\varnothing 24 \times 83$ mm

**• Installing Method**



Attention: The system connecting support should be prepared by the customer according to the concrete condition.

**• Working Principle**

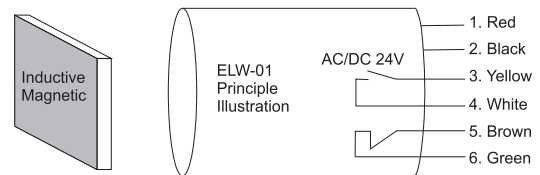
This system weighs the elevator car load based on the principle of the elastic deformation of movable elevator car platform caused by loading with the HALL sensor measuring the change of displacement, fulfilling the aim of load weighing.

**• Adjustment**

1. Please refer to the above figure to install this device with the connecting support (made by the customer himself) close to the middle part of the car platform as near as possible.
2. Let the magnet adhesive on the car platform with the marking-face right facing the induction point of the device.
3. Install and adjust this device so that the magnet on the car platform aims at the center point of its upper face. Meanwhile, assure the end face of this device in parallel with that of the magnet.
4. When elevator is of rated loaded, adjust this device up and down to make the indicator just turn from dark to bright (or oscillating), at this time, fasten this device and the adjustment is finished.

**• The principle of system wiring**

Wire	Function	Explanation
Red, Black	System Operating Power	AC/DC24V( $\pm 10\%$ )/100mA
Yellow, White	Overloading relay dynamic CLOSE contact	Contact Capacity: DC/AC 48V/500mA
Brown, Green	Overloading relay dynamic OPEN contact	



**• Comparison of the functions with other load weighing devices**

	Function	Explanation
Working Principle	By the use of Hall sensor, the working way of contactless induction is realized. Advantages: ① The system doesn't bear the elevator load directly, extending its life. ② Overloading signal is of point turning to position more accurately. ③ No system damage caused by the insufficiency of overloading competence or mechanical vibration.	Directly bearing the effect and impact of elevator load, unstable and damageable.
Installing and Adjusting	Just adjust the system up and down so that the indicator will turn from dark to bright. At the turning point, fasten this device well.	Field adjustment is complicated.
Output Signal	A pair of relay dynamic CLOSE and OPEN contacts respectively.	Single function
Economic Analysis	High ratio of property to price, easy use, high reliability.	Average

**• Others**

1. Accessory: Inductive magnet [20x20x4mm] 1 piece  
Fastening Nut: 2 sets
2. If there is any abnormality during adjustment or operation, contact our company directly.
3. Attention: The terbium magnet with strong magnetic is specially made for this products, please be careful in the installation process; do avoid the temperature above 100°C in case of demagnetization; our company will not responsible for any loss for person and the device caused by unsuitable operation otherwise.