

HDC-P2 Elevator Load Weighing Device introduction manual V2.2

- **This system is applicable to all elevators with movable 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 characters:**

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 Electro-technical Commission (IEC).
4. Rated relay dynamic open, overload relay -dynamic close and output-break are easy for customers to use.
5. More accurately positioning, small overall size, easy installation and adjustment, simple structure and low price.

- **Technical Specification:**

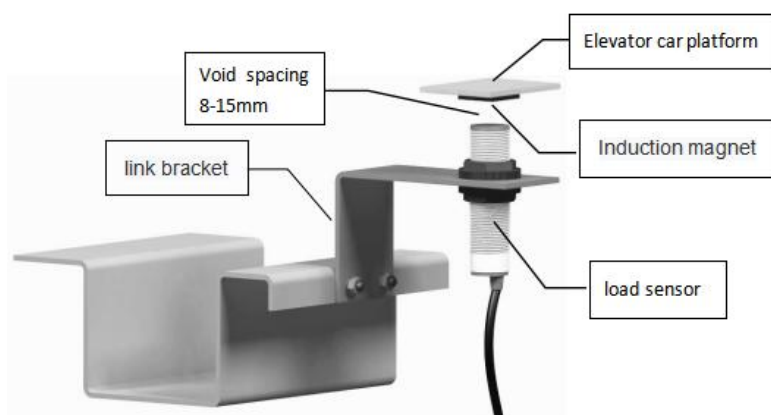
1.	Application Range	Applicable to all elevators with movable car platform in need of overload signal with a inspection clearance of 8~15 mm.
2	Sensitivity	Overload turning point \leq Rated load adjusting point ± 0.05 mm Rated load \rightarrow overload retention gap ≈ 0.50 mm
3	System Error	$\leq 1.5\%$ (5~40℃)
4	Output Mode	1 pair of relay dynamic CLOSE or dynamic OPEN contacts respectively with the capacity of DC/AC 48V/500mA.
5	Operation Ambient Temperature	-25~55℃
6	Power Supply	AC/DC 24V($\pm 10\%$)/15mA. The operating current of the whole machine ≤ 100 mA.
7	Install Position	Moveable elevator car platform
8	Overall Size	Column of $\Phi 24 \times 83$ mm

- **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.

● Installing Method:

Traction rope head installation diagram



Note: The system connection bracket requires the user to make it according to the specific situation.

● Adjustment

1. Please refer to the above figure to install this device with the connecting support (made by the customer himself) closing 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 aiming 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 load, adjust this device up and down to make the indicator just turn green, yellow one (red one + green one) turn down, at this time, fasten this device and the adjustment is finished.
5. At the time of overload, indicator of this device keeps yellow (green+red)

● The principle of system wiring:

Wire	Function	Explanation
brown, blue	System Operating Power	Operating Power AC/DC24V($\pm 10\%$)/100mA
Purple, Black	Rated load relay dynamic Close contact	Contact Capacity: DC/AC 48V/500mA
Purple, Orange	Overloading relay dynamic close contact	
Purple, Grey	Overloading relay dynamic open contact	

● Attention : Output wire of this device must not be connected with external power supply to avoid everlasting damage.

● Others:

Accessory: Inductive magnet $[20 \times 20 \times 4\text{mm}^3]$ 1 piece Fastening Nut: 2 sets
If there is any abnormality during adjustment or operation, contact our company directly.