

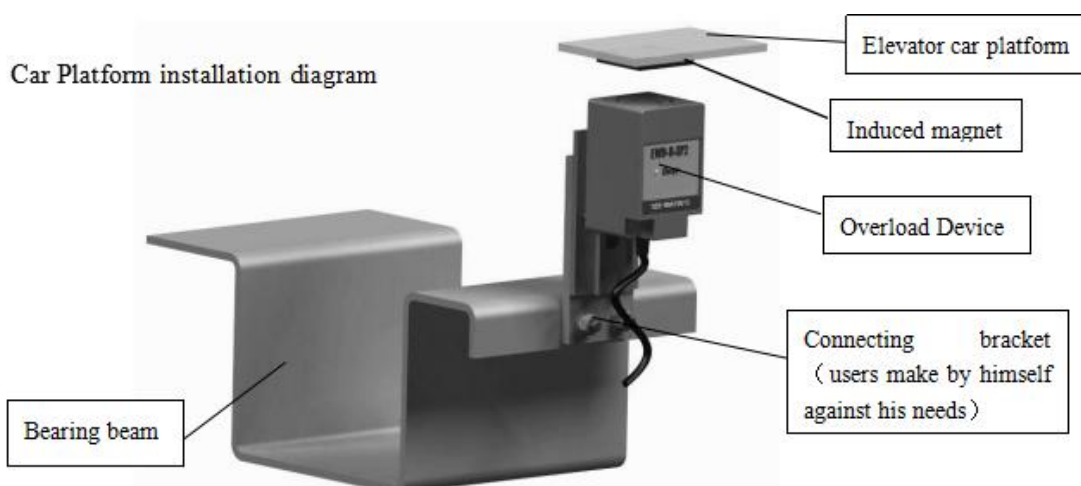
HDC-XP1 Induction Elevator Load Weighing Device Manual V2.2

- **This system is applicable to all elevators with movable car platform and energy-saving operation escalator 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 contact less 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 Electromechanical 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 movable car platform in need of overload signal with a inspection clearance of 8~15 mm.
2	Sensitivity	Overload turning point≤Rated load adjusting point±0.05 mm
3	System Error	≤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	Operation Ambient Temperature	-25~55°C
6	Power Supply	AC/DC 24V(±10%)/15mA. The operating current of the whole machine≤100 mA.
7	Install Position	Movable elevator car platform
8	Overall Size	See figure 30X30X58mm ³

- **Installing Method:**



● 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
Brown Blue	System Operating Power	Operating Power AC/DC24V($\pm 10\%$)/100mA
Black Gray	Overloading relay dynamic Close contact	Contact Capacity: DC/AC 48V/500mA
Orange Purple	Overloading relay dynamic Open contact	

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

Others: Accessory: Inductive magnet [20×20×4mm³] 1 piece Fastening Nut: 2 sets

If there is any abnormality during adjustment or operation, contact our company directly.

- Attention: The inductive magnet is specially made of rare earth magnet with strong magnetism for this product. Take special care in the course of installation. Don't let it close to the high temperature above 100°C to avoid demagnetization and our company will not be responsible for the personal hurt and equipment damage arising from this.