#### Type EWD-H-XP1 Elevator Load Weighing Device

### **INTRODTION MANUAL**

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:

- 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 $8 \sim 15$ mm.
2	Sensitivity	Overload turning point $\leq$ Rated load adjusting point $\pm 0.05$ 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	-25~55°C
	Ambient	
	Temperature	
6	Power Supply	AC/DC $24V(\pm 10\%)/15$ mA. The operating current of the
		whole machine≤100 mA.
7	Install Position	Movable elevator car platform
8	Overall Size	See figure 30X30X52.5mm <sup>3</sup>

## 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:



### **Adjustment**

- 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:



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

Wire	Function	Explanation
Red, black(gray)	Sys Operating Power	Operating Power AC/DC24V(± 10%)/100mA
Yellow, White	Overloading relay dynamic <b>Close</b> contact	
Blue, green	Overloading relay dynamic <b>Open</b> contact	DC/AC 48V/500mA

• Output wire of this device must not be connected with external power

supply to avoid everlasting damage.



Others:

Accessory: Inductive magnet [20×20×4mm<sup>3</sup>]1piece

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.