# Type EWD-H-XP2 Elevator Load Weighing Device

# **INTRODTION MANUAL**

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:

- 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.

1.		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≤Rated load adjusting point±0.05 mm Rated load→overload retention gap≈0.50mm			
3	System Error	≤1.5% (5~40°C)			
4	Output Mode	1 pair of relay dynamic <b>CLOSE</b> or dynamic <b>OPEN</b> contacts respectively with the capacity of DC/AC 48V/500mA.			
5	Operation Ambient Temperature	-25∼55℃			
6	Power Supply	AC/DC $24V(\pm 10\%)/15$ mA. The operating current of the whole machine $\leq 100$ mA.			
7	Install Position	Movable elevator car platform			
8	Overall Size	See figure 30X30X52.5mm <sup>3</sup>			

### Technical Specification:

# • 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:

Installing method for moveable car platform.



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



### Adjustment

- 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, red 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 green and red on.

The principle of system wiring:

Do use the Dyn. Open or Dyn. Close at the same time with full load or overload when system wiring, avoiding cross using.

Wire		Function		Explanation
Red, black(gray)		System Operating Power		Operating Power AC/DC24V(±10%)/100mA
White (brow	blue	Full load relay	Dyn. close contact	contact capacity: DC/AC 48V/500mA
n)	yellow		Dyn. open contact	The second se
green		Overload	Dyn. close contact	
	yellow	realy	Dyn. open contact	

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

#### Others:

Accessory: Inductive magnet  $[20 \times 20 \times 3 \text{mm}^3]$  1 piece Fastening Nut  $\Phi 4X20: 2$  sets If there is any abnormality during adjustment or operation, contact our company directly.

#### Attention:

1. 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  $100^{\circ}$ C to avoid demagnetization and our company will not be responsible for the personal hurt and equipment damage arising from this.

2. It is suitable for massive purchase.