EWD-H-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.

| 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 <a>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($\pm 10\%$)/15mA. The operating current of the whole machine ≤ 100 mA. | | |
| 7 | Install Position | Movable elevator car platform | | |
| 8 | Overall Size | See figure 30X30X58mm ³ | | |

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:

• Adjustment: 1.Please Elevator car platform Car Platform installation diagram to the refer Induced magnet above figure to this device install Overload Device with the connecting Connecting bracket (users make by himself support against his needs) Bearing beam by the (made 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.

| Wire | Function | Explanation |
|---------------|-----------------------------------------|--------------------------------------|
| Brown Blue | System Operating Power | Operating Power AC/DC24V(±10%)/100mA |
| Black Gray | Overloading relay dynamic Close contact | Contact Capacity: |
| Orange Purple | Overloading relay dynamic Open contact | DC/AC 48V/500mA |

The principle of system wiring:

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

Others: Accessory: Inductive magnet [20×20×4mm3]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.