

ES Braking Resistors

- Continuous power 0.6kW to 8kW
- High overload capacity
- Rated for repetitive duty
- Resistance never lower than specified
- Robust construction
- Low inductance element
- Close tolerance (+5% to 0%)
- Noise free
- Temperature stable element



A comprehensive range of compact, IP20 dynamic braking resistors with a choice of accessories that keeps both purchase and installation costs low - all available at short notice.

IMO ES braking resistors are based on HP Coils, spiral wire-wound on ceramic formers.

These elements have a high overload capacity and cool rapidly. The resistance material is a high grade stainless steel with no more than 7% resistance increase over the whole temperature range. Cheaper designs using 304 stainless steel can increase in resistance during the heating cycle by as much as 50%, which results in lower current and less effective braking.

The enclosures are made of galvanized steel. Ingress protection is IP 20.

Options are a thermal switch and/or terminal cover.

Applications

- Dynamic braking
- Motor control
- Variable speed drives
- Lifts & elevators
- Cranes & winches
- Conveyors
- Test loads

Enclosure	ESH	EST	ES1	EST2	ES2	ES3	ES4	ES8
Continuous Power/kW	0.6	1.0	1.5	2.0	3.0	4.5	6.0	8.0
Min Ω	2.5	4.0	6.0	2.0	3.0	2.0	1.5	0.75
Max Ω	180	300	450	600	900	1350	1800	3600

Mechanical Data

Maximum operating voltage: 1000V DC or AC rms

Connections:

Power: Screw terminals for up to 10mm² cable (ESH-ES3), M8 stud terminals (ES4-8)

Earth: Self tapper, near screw terminals

Thermal sensor: 6.25mm male blade (faston) connections (receptacles not supplied)

Terminal cover

(optional for ESH-ES3)

Two 20mm gland holes with cover grommets provided on end face. The cover overhangs the resistor by 22mm. The open overhang area can be used for cable entry.



Thermal sensor (optional)

Located near screw terminals
Normally closed contact, opens at ~250°C, re-closes at ~210°C
Voltage: 240V AC rms; current: 7A AC rms



Installation

Units have slotted mounting points suitable for M6 fixings. Mount horizontally with base facing down. Other orientations may result in increased element temperatures.

Warning: Units must never be mounted with the terminal area or base uppermost.

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