

Vapormatic starters for slip ring motors M 350

The M350 starter is of heavy duty metal construction suitable for use in dust laden atmospheres or outdoors.

- For motors from 200 to 750 kW
- Suitable for outdoor or dust laden atmosphere

These starters have numerous advantages:

- Reliability

- No moving parts other than the contactors,
- Unaffected by damp, dusty or corrosive atmospheres.

- Economy

- Cable saving: integral contactors facilitate installation beside the motor,
- Minimal electrical and mechanical maintenance,
- Competitive prices.

- Adaptability

Easy adjustment gives "made to measure" starting conditions and conversion to suit different drives.

operating principle

This is based on the difference in resistivity between a liquid electrolyte and its vapour, contained in an electrode chamber.

The passage of the initial rotor current causes immediate partial vaporisation of

the electrolyte and instantaneously adjusts resistance and starting torque to optimum values. During the run-up to speed, the thermal interchanges which occur progressively decrease the resistance.

A timed contactor then short circuits the

low residual resistance.

The starting torque is determined according to the requirements of the driven machine or the current limitation.

specifications

Electrical characteristics.....

- Rating

M350/2A: 200 to 300 kW (270 to 400 HP),

M350/2B: 300 to 440 kW (400 to 600 HP),

M350/3: 440 to 750 kW (600 to

1000 HP).

Above these ratings, and up to 20,000 kW, see starters EPM.

- Rotor voltage between slip rings: 1500 V maximum,

- Integral short circuit contactor: 1300 A maximum,

- Number of electrode assemblies: 2 or 3,

- Connection: 2 or 3 stages (tank divided into two sections),

- Cabling via undrilled gland plates,

- Delay time: timing relay.

Electrolyte.....

- Electrolyte temperature thermostatically controlled,
- Electrolyte level indication by magnetically operated float switch (250 V - 60 VA) in each compartment,
- Electrolyte included with each starter in powder or crystal form for mixing with drinking water and anti-evaporation oil.

Tank

- Tank capacity: 350 litres,
- Filling via tubes,
- Emptying via drain taps.

Environment

Protection IP 54.

Presentation.....

- Paint finish.
- Thickness: 60 microns minimum.
- Grey-beige RAL7032.
- Average weight with contactor
 - . without electrolyte: 170 kg,
 - . with electrolyte: 530 kg.

rotor starter protection system .

On request we can supply your starter with an electronic module type DRS. This module allows

- locked rotor detection of your motor

- optimisation of the starting time by measuring the true speed of the motor
- temperature monitoring of the electrolyte
- limitation of the number of starts per

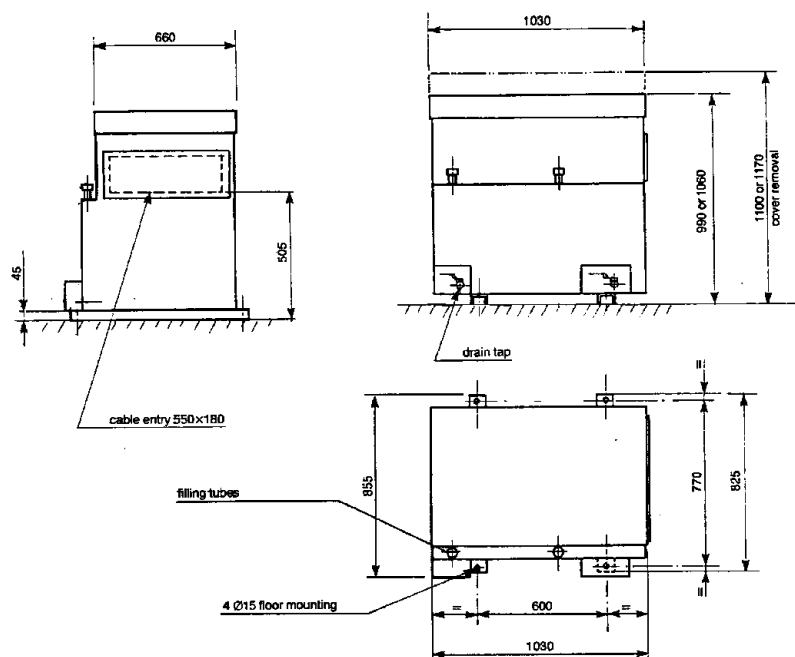
hour.

Any anomaly in the starting sequence is detected by a fault relay which can be connected to your control circuit.

options .

- Antifrost protection,
- Tropicalisation,
- Level detector.

dimensions .



Dimensions in mm

ordering instructions .

Starter 200 to 300 kW	M350-2A
Starter 300 to 440 kW	M350-2B
Starter 440 to 750 kW	M350-3

Consumables and accessories.....

Electrolyte	On request
Thermostat	SR00140

Options.....

Heater with thermostat	On request
Level detector	ER60136-000
Antifreeze	On request



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The above characteristics are subject to modification.