

## HGS / HGS-MOT Gravity Shutter

Installation and Maintenance Instructions.

**THESE INSTRUCTIONS MUST BE READ FULLY BEFORE COMMENCING INSTALLATION.**

**Owner / installer:** The life of this apparatus and its efficiency will be increased if its use and maintenance is carried out in accordance with these instructions and current statutory requirements. The installation and initial adjustments should be carried out by a qualified and competent technician. Hydor Limited should be consulted before substituting or fitting parts from another manufacturer. It is the responsibility of the installer to verify that the installation is in accordance with the following standards and the owner is given the current User's Manual.

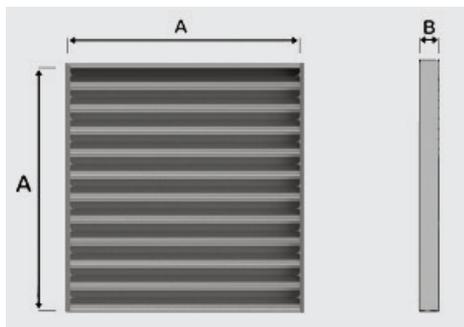
### 1. General

- 1.1 It is important these Installation and Maintenance Instructions are fully adhered to.
- 1.2 The shutters are designed to fit onto the wall as an inlet or an outlet.
- 1.3 The shutters are specifically sized to fit the range of HV Belt Drive Fans.
- 1.4 The shutters are constructed of galvanized steel with high protection against corrosion.
- 1.5 The shutter protects the fans, inlets and outlets from inclement weather and reduces the external light ingress.
- 1.6.1 The HGS Gravity Shutter is a gravity shutter which works with the airflow of a fan.
- 1.6.2 The HGS-MOT Gravity Shutter is a motorised shutter which operates when the electrical supply is energised by means of a switching device. The Shutter operation should be interlocked with the fans to prevent the overloading of the fan.
- 1.7 This product is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person. Young children should be supervised to ensure that they do not play with the shutter.
- 1.8 It is recommended that a guard be fitted in the internal face of the shutter for safety reasons. These are optional extras available from Hydor Limited.
- 1.9 The external face [blades and frame] can be powder coated to match the external cladding of the building, if required but must be stipulated at the time of initial order. There would be an additional cost for this procedure.

## 2. Warning and Safety Guidelines

- 2.1 Upon receipt, the equipment should be visually inspected to check for any damage. Ensure that all moving parts are free.
- 2.2 If there are any queries concerning the fan equipment, Hydor should be contacted prior to the installation.

## 3. Dimensional Data



Model	A	B
HGS800	920	85
HGS1000	1110	85
HGS1250	1337	85

Dimensions in mm.

## 4. Installation

- 4.1 Unpack the shutter and check for any damage and that the blades function correctly. Dispose of the packaging materials responsibly according to Local Regulations.
- 4.2 Switch off the fan and isolate. Particular attention should be carried out if the fan system involves automatic controls.
- 4.3 The wall should have an aperture cut into it slightly larger than the dimensions shown (A). Ensure this aperture is square.
- 4.4 A wooden frame should be constructed inside the aperture for the shutter allowing a recess where the motor of the actuator protrudes (if fitted).
- 4.5 The shutter should be fixed to this frame using pre-drilled holes in the top and bottom flanges ONLY, with appropriate sized screws (not supplied by Hydor).
- 4.6 The frame should be mounted in the wall centrally over the aperture and securely fixed using appropriate sized screws and wall plugs (not supplied Hydor).

**WARNING** It is important that the shutter is always fitted with the blades opening outwards to prevent ingress of rain, even if the shutter is being used as an inlet.

## 5. HGS-MOT Gravity Shutter Electrical Connection

- 5.1 The Actuator is a 230V 1Ph 50Hz nominal voltage unit, with a 1m long 3 core 0.75mm<sup>2</sup> cable. (Power open / Power close).
- 5.2 The cable cores: blue; brown and white need to be taken back to the Fan Control Box.
- 5.3 A minimum **thirty second** delay needs to be incorporated in the circuitry so when the fan is switched manually or automatically the shutter commences to open prior to the fan operation. Ensure the fan does not operate against a closed shutter. A closed shutter severely raises the back pressure and could damage the fan over time.

**NOTE:** The Actuator connections are: Blue - Neutral  
Brown - Open  
White - Close

230V 1Ph 50Hz nominal voltage

- 5.4 The Actuator needs to be powered in each direction.
- 5.5 With delay circuitry fitted, power can be reinstated and the fan and shutter be manually or automatically operated.

**WARNING** Only a suitably qualified and competent person may carry out maintenance after the electrical supply has been isolated.

## 6. Maintenance

- 6.1 Inspection of the shutter at least once every 12 months is recommended or at the same time maintenance is carried out on the fans. Any build-up of dust and deposits on the blades or guards should be removed using a non-abrasive cleaner. Particular attention should be given to the guard, if fitted.
- 6.2 All fastenings should be checked for tightness. In addition, all moving parts should be checked.
- 6.3 On the HGS-MOT model, the Actuator should also be inspected for electrical security, cleanliness and operation.

## **Guarantee**

Hydor or its agents will, within a period of one year from the date of dispatch from their works, at its option, replace any goods, which are proven to have defects as a result of defective materials or workmanship. The goods must be returned to Hydor, carriage paid, for examination.

Hydor Ltd

## **Hydor**

Unit 8, Parkers Close, Downton Business Centre,  
Downton, Salisbury, Wiltshire, SP5 3RB, UK

Tel: +44 (0) 1725 511422

Email: [info@hydor.co.uk](mailto:info@hydor.co.uk)

Web: [www.hydor.co.uk](http://www.hydor.co.uk)

## **idealair group**

Unit 1, Building 1, Sydney Corporate Park,  
85 O'Riordan Street, Alexandria NSW 2015

Tel: +61 (02) 8073 3310

Fax: +61 (02) 8073 3320

Email: [info@idealairgroup.com.au](mailto:info@idealairgroup.com.au)

## **AMS**

11 Ingrid Road, Montague Gardens,  
7442 Cape Town, Western Cape

Tel: +27 (0) 21 552 1077

Fax: +27 (0) 21 552 2797

**HGS** Inst Issue 2: 01.06.17