

# HART SMOKE CONTROL DAMPER



## Introduction

Hart Smoke Control Dampers are design to integrate into building's smoke and fire ventilation system where dampers provide an automatic means of detecting, controlling and regulating the spread of smoke and toxic gas. The two function of a smoke damper can either be;

- 1) To be normally closed and opened only for the channeling of smoke to outdoor during fire breakout.
- 2) To be normally opened and closed only during a fire breakout to prevent the progression of smoke through the system.

The unique and uncomplicated design allows for ease in installation and low cost maintenance. Hart Dampers are suitable for installation in sheet metal ductwork, partition walls, ceiling slabs, concrete or brickwork. Installation is subjected to local building rule and regulation.

Tested in accordance to UL 555S ( AMCA Standard 500-D-98 ). The leakage factor at 0.25kpa or 1" w.g. differential pressure is measured at 9.8 cfm/ft<sup>2</sup>.

## Smoke Control Damper (SCD)

Hart Smoke Control Damper is constructed with a robust casing of 1.5mm thick galvanised steel and blades with 1.0mm thick galvanised steel.

The blades are fitted with diameter 12mm ms spindle in parallel operation and securely linked together on the sides with brass bushing. Stainless Steel grade 304 side seals are fitted to close gap between the casing and the blades.

SCD can be connected by an actuator with electric response to an external control or mounted by a worm gear for manual control operate as an air damper.

Spring return actuator can either be mounted on the side of the damper or inside the ductwork.



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 \*\*\* TX REPORT \*\*\*  
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JOB NO. 0004  
 DEPT. ID 4560  
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 PGS. 1  
 SEND DOCUMENT NAME  
 TX/RX INCOMPLETE -----  
 TRANSACTION OK gcy@hart.com.sg  
 ERROR 62724565

Gn Chiang Yam

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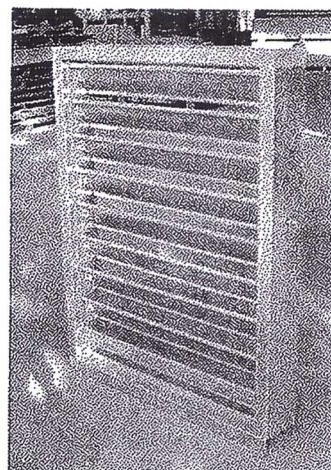
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**( Model VCD-OB / Model VCD – PB ) Motorised / Manual  
volume control damper.**

**GENERAL**

Hart VCD-OB or VCD-PB provides highly efficient air flow control in conventional air handling system. Both damper types are available with parallel blade configuration for Variable air volume application and opposed Blade for air mixing application. The damper Blades and frames are constructed of galvanized sheet with brass or nylon bushes. Multiple sections are inter-connected with a solid drive shaft and provide, together With individually adjustable internal blades linkages, positive connection for optimum close-off sealing.

Total damper design and close manufacturing tolerances of Hart dampers result in LONG CONTROL and ENERGY SAVINGS.

This range of Motorized VCD finds it's application in building construction and mining industry where ventilation, heating, cooling air-conditioning systems are employed.

The design concept is based on an interlinked set of blades connected with a solid drive shaft using a standard pneumatic actuator or electric-electronic fail-safe spring return actuator with a fusible link incorporated into closing mechanism and spring clip holding the blades in the closed position after closure. VCD is a precision designed damper with specific purpose, to control volumes of air passing through air-conditioning or ventilation systems either manually or via an actuator.

