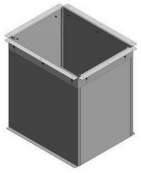
Product: Passive Chimney - Through Ceiling

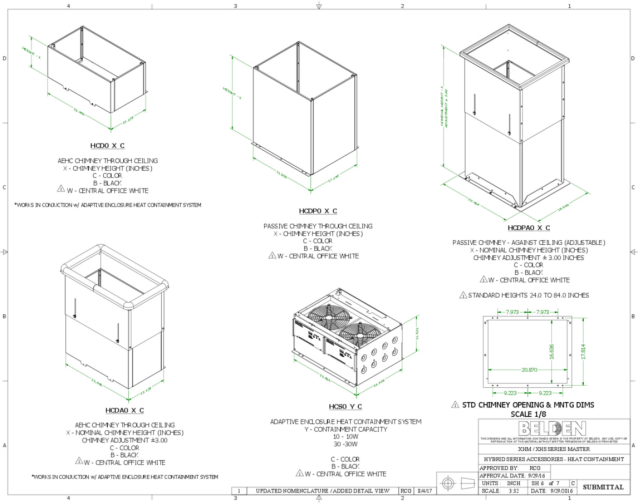


Passive Chimney

Product Description

AEHC Active Chimney, Through ceiling

Technical Drawing



Technical Specifications

Application

Product Overview:	Belden's active Adaptive Enclosure Heat Containment (AEHC) System is a highly efficient and cost-effective method for cooling cabinets while preventing the mixing of hot and cold air in the data center. When networked, AEHC chimneys allow aggregation of exhaust air volume of entire cabinet pods, enabling real-time control of CRAC units and creating a logical link between the cooling plant and the computing load. this unique attribute allows reduction of cooling-operating costs, particularly in virtualized, clustered computing environments characterized by highly dynamic computing loads. AEHC uses high-capacity fans controlled by a pressure sensor to ensure dynamic balancing of intake and exhaust air volumes Maintains neutral pressure in the cabinet plenum for highly efficient server fan operation Can be networked in a pod/row for redundancy in virtualized, clustered computing environments Multiple cabinets can share AEHC chimneys based on hosted computing density (three cabinets per chimney is typical) AEHC is highly scalable with chimneys added as needed with increased computing loads A pair of hot swappable brush-less fans with a combined capacity of 10 kW or 30 kW connect to the AEHC controller, enabling quick and easy capacity upgrades (different capacity fans cannot be used in the same cabinet) Fan motors are engineered to ensure longevity, high air displacement and low power consumption for mission-critical facilities Ideal for existing data centers, and non-Belden cabinets can be retrofitted with chimney by using a customized adapter plate The AEHC system is powered (auto-sensing 120V or 208V) via the cabinet PDUs and accepts two distinct power feeds for redundancy A combination of temperature-humidity sensors with AEHC controller can collect and store environmental data. When networked, real-time data can be accessed via the intuitive user interface or Belden Corman-CS Infrastructure Management Software using SNMP (MIB File) Environmental, mechanical and electrical thresholds and alarms are easy to configure and can be sent directly to e-mail addresses (through an escalation process)
Benefits:	Passive systems rely on the effectiveness of server fans, combined with pressure differential between the cabinet and return spaces, Passive system capacity peaks around 10 kW (but can be higher) and varies based on chimney length, position in relation to CRAC, return plenum pressure and exhaust air temperature., Passive chimneys are available as through-ceiling chimneys that protrude approximately 2" into the plenum, and against-the-ceiling chimneys that adjust and feature rubber gasket for effective sealing against the drop sealing, To account for fans and controller units, chimney length for active containment should be sized by deducting 11.5" from distance between cabinet top and return ceiling, Belden X Series cabinets equipped with containment top panels accept both passive and active chimneys, allowing for easy passive-to-active conversion
Environmental Space:	Indoor

Related Part Numbers

Variants

Part #	Chimney Height	Color
HCDP024B	24.0 in	Black
HCDP024W	24.0 in	White
HCDP033B	33.0 in	Black

HCDP033W	33.0 in	White
HCDP036B	36.0 in	Black
HCDP036W	36.0 in	White
HCDP042B	42.0 in	Black
HCDP042W	42.0 in	White
HCDP048B	48.0 in	Black
HCDP048W	48.0 in	White
HCDP054B	54.0 in	Black
HCDP054W	54.0 in	White
HCDP060B	60.0 in	Black
HCDP060W	60.0 in	White
HCDP066B	66.0 in	Black
HCDP066W	66.0 in	White
HCDP072B	72.0 in	Black
HCDP072W	72.0 in	White
HCDP078B	78.0 in	Black
HCDP078W	78.0 in	White
HCDP084B	84.0 in	Black
HCDP084W	84.0 in	White

Update and Revision:	Revision Number: 0.31 Revision Date: 03-27-2024