Priceless Price List

ABB low voltage drives
ACH550, 1 to 550 Hp

Power and productivity
for a better world™

Contact ABB Inc., Low Voltage Drives

www.abb.us/drives

U.S. Headquarters, Low Voltage Drives
ABB Inc.
Low Voltage Drives
16250 W. Glendale Drives
New Berlin, WI 53151

U.S. ABB Low Voltage Drives Technical Support
Tel: (800) 435-7365, Fax: (262) 780-5135, email: DrivesSupportLine@us.abb.com

Trademarks

DriveWindow is a registered trademark of ABB
Modbus is a trademark of Schneider Electric
Profibus is a trademark of Siemens
ControlNet is a trademark of ControlNet International, Ltd.
DeviceNet is a trademark of the Open DeviceNet Vendor Association.
Windows in a registered trademark of Microsoft Corp.

General Terms and Conditions of Sale

1. General. The terms and conditions contained herein, together with any additional or different terms contained in ABB's Proposal, if any, submitted to Purchaser (which Proposal shall control over any conflicting terms), constitute the entire agreement (the "Agreement") between the parties with respect to the order and supersede all prior communications and agreements regarding the order. Acceptance by ABB of the order, or Purchaser's acceptance of ABB's Proposal, is expressly limited to and conditioned upon Purchaser's acceptance of these terms and conditions, payment for or acceptance of any performance by ABB being acceptance. These terms and conditions may not be changed or superseded by any different or additional terms and conditions proposed by Purchaser to which terms ABB hereby objects. Unless the context otherwise requires, the term "Equipment" as used herein means all of the equipment, parts, accessories sold, and all software and software documentation, if any, licensed to Purchaser by ABB ("Software") under the order. Unless the context otherwise requires, the term "Services" as used herein means all labor, supervisory, technical and engineering, installation, repair, consulting or other services provided by ABB under the order. As used herein, the term "Purchaser" shall include the initial end use of the Equipment and/or services; provided, however, that Paragraph 13(a) shall apply exclusively to the initial end user.

2. Prices.
(a) Unless otherwise specified in writing, all Proposals expire thirty (30) days from the date thereof.
(b) Unless otherwise stated herein, Services prices are based on normal business hours (8 a.m. to 5 p.m. Monday through Friday). Overtime and Saturday hours will be billed at one and one-half (1 1/2) times the hourly rate; and Sunday hours will be billed at two (2) times the hourly rate; holiday hours will be billed at three (3) times the hourly rate. If a Services rate sheet is attached hereto, the applicable Services rates shall be those set forth in the rate sheet. Rates are subject to change without notice.
(c) The price does not include any federal, state or local property, license, privilege, sales, use, excise, gross receipts, or other like taxes which may now or hereafter be applicable. Purchaser agrees to pay or reimburse any such taxes which ABB or its suppliers are required to pay or collect. If Purchaser is exempt from the payment of any tax or holds a direct payment permit, Purchaser shall, upon order placement, provide ABB a copy, acceptable to the relevant governmental authorities of any such certificate or permit.
(d) The price includes customs duties and other importation or exportation fees, if any, at the rates in effect on the date of ABB's Proposal. Any change after that date in such duties, fees, or rates, shall increase the price by ABB's additional cost.

3. Payment.
(a) Unless specified to the contrary in writing by ABB, payment terms are net cash, payable without offset, in United States Dollars, 30 days from date of invoice by wire transfer to the account designated by ABB in the Proposal.
(b) If in the judgment of ABB the financial condition of Purchaser at any time prior to delivery does not justify the terms of payment specified, ABB may require payment in advance, payment security satisfactory to ABB, or may terminate the order, whereupon ABB shall be entitled to receive reasonable cancellation charges. If delivery is delayed by Purchaser, payment shall be due on the date ABB is prepared to make delivery. Delays in delivery or nonconformities in any installments delivered shall not relieve Purchaser of its obligation to accept and pay for remaining installments.
(c) Purchaser shall pay, in addition to the overdue payment, a late charge equal to the lesser of 1 1/2% per month or any part thereof or the highest applicable rate allowed by law on all such overdue amounts plus ABB's attorneys' fees and court costs incurred in connection with collection.

4. Changes.
(a) Any changes requested by Purchaser affecting the ordered scope of work must be accepted by ABB and resulting adjustments to affected provisions, including price, schedule, and guarantees mutually agreed in writing prior to implementation of the change.
(b) ABB may, at its expense, make such changes in the Equipment or Services as it deems necessary, in its sole discretion, to conform the Equipment or Services to the applicable specifications. If Purchaser objects to any such changes, ABB shall be relieved of its obligation to conform to the applicable specifications to the extent that conformance may be affected by such objection.

5. Delivery.
(a) All Equipment manufactured, assembled or warehoused in the continental United States is delivered F.O.B. point of shipment. Equipment shipped from outside the continental United States is delivered F.O.B. United States port of entry. Purchaser shall be responsible for any and all demurrage or detention charges.
(b) If the scheduled delivery of Equipment is delayed by Purchaser or by Force Majeure, ABB may move the Equipment to storage for the account of and at the risk of Purchaser whereupon it shall be deemed to be delivered.
(c) Shipping and delivery dates are contingent upon Purchaser's timely approvals and delivery by Purchaser of any documentation required for ABB's performance hereunder.
(d) Claims for shortages or other errors in delivery must be made in writing to ABB within ten days of delivery. Equipment may not be returned except with the prior written consent of and subject to terms specified by ABB. Claims for damage after delivery shall be made directly by Purchaser with the common carrier.

6. Title & Risk of Loss. Except with respect to Software (for which title shall not pass, use being licensed) title to Equipment shall remain in ABB until fully paid for. Notwithstanding any agreement with respect to delivery terms or payment of transportation charges, risk of loss or damage shall pass to Purchaser upon delivery.

7. Inspection, Testing and Acceptance.
(a) Any inspection by Purchaser of Equipment on ABB's premises shall be scheduled in advance to be performed during normal working hours.
(b) If the order provides for factory acceptance testing, ABB shall notify Purchaser when ABB will conduct such testing prior to shipment. Unless Purchaser states specific objections in writing within ten (10) days after completion of factory acceptance testing, completion of the acceptance test constitutes Purchaser's factory acceptance of the Equipment and its authorization for shipment.
(c) If the order provides for site acceptance testing, testing will be performed by ABB personnel to verify that the Equipment has arrived at site complete, without physical damage, and in good operating condition. Completion of site acceptance testing constitutes full and final acceptance of the Equipment. If, through no fault of ABB, acceptance testing is not completed within thirty (30) days after arrival of the Equipment at the site, the site acceptance test shall be deemed completed and the Equipment shall be deemed accepted.

General Terms and Conditions of Sale

8. Warranties and Remedies.
(a) Equipment and Services Warranty. ABB warrants that Equipment (excluding Software, which is warranted as specified in paragraph (d) below) shall be delivered free of defects in material and workmanship and that Services shall be free of defects in workmanship. The Warranty Remedy Period for Equipment (excluding Software, Spare Parts and Refurbished or Repaired Parts) shall end twelve (12) months after installation or eighteen (18) months after date of shipment, whichever first occurs. The Warranty Remedy Period for new spare parts shall end twelve (12) months after date of shipment. The Warranty Remedy Period for refurbished or repaired parts shall end ninety (90) days after date of shipment. The Warranty Remedy Period for Services shall end ninety (90) days after the date of completion of Services.
(b) Equipment and Services Remedy. If a nonconformity to the foregoing warranty is discovered in the Equipment or Services during the applicable Warranty Remedy Period, as specified above, under normal and proper use and provided the Equipment has been properly stored, installed, operated and maintained and written notice of such nonconformity is provided to ABB promptly after such discovery and within the applicable Warranty Remedy Period, ABB shall, at its option, either (i) repair or replace the nonconforming portion of the Equipment or re-perform the nonconforming Services or (ii) refund the portion of the price applicable to the nonconforming portion of Equipment or Services. If any portion of the Equipment or Services so repaired, replaced or re-performed fails to conform to the foregoing warranty, and written notice of such nonconformity is provided to ABB promptly after discovery and within the original Warranty Remedy Period applicable to such Equipment or Services or 30 days from completion of such repair, replacement or re-performance, whichever is later, ABB will repair or replace such nonconforming Equipment or re-perform the nonconforming Services. The original Warranty Remedy Period shall not otherwise be extended.
(c) Exceptions. ABB shall not be responsible for providing working access to the nonconforming Equipment, including disassembly and re-assembly of non-ABB supplied equipment, or for providing transportation to or from any repair facility, all of which shall be at Purchaser's risk and expense. ABB shall have no obligation hereunder with respect to any Equipment which (i) has been improperly repaired or altered; (ii) has been subjected to misuse, negligence or accident; (iii) has been used in a manner contrary to ABB's instructions; (iv) is comprised of materials provided by or a design specified by Purchaser; or (v) has failed as a result of ordinary wear and tear. Equipment supplied by ABB but manufactured by others is warranted only to the extent of the manufacturer's warranty, and only the remedies, if any, provided by the manufacturer will be allowed.
(d) Software Warranty and Remedies. ABB warrants that, except as specified below, the Software will, when properly installed, execute in accordance with ABB's published specification. If a nonconformity to the foregoing warranty is discovered during the period ending one (1) year after the date of shipment and written notice of such nonconformity is provided to ABB promptly after such discovery and within that period, including a description of the nonconformity and complete information about the manner of its discovery, ABB shall correct the nonconformity by, at its option, either (i) modifying or making available to the Purchaser instructions for modifying the Software; or (ii) making available at ABB's facility necessary corrected or replacement programs. ABB shall have no obligation with respect to any nonconformities resulting from (i) unauthorized modification of the Software or (ii) Purchaser-supplied software or interfacing. ABB does not warrant that the functions contained in the software will operate in combinations which may be selected for use by the Purchaser, or that the software products are free from errors in the nature of what is commonly categorized by the computer industry as "bugs".
(e) THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF QUALITY AND PERFORMANCE, WHETHER WRITTEN, ORAL OR IMPLIED, AND ALL OTHER WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USAGE OF TRADE ARE HEREBY DISCLAIMED. THE REMEDIES STATED HEREIN CONSTITUTE PURCHASER'S EXCLUSIVE REMEDIES AND ABB'S ENTIRE LIABILITY FOR ANY BREACH OF WARRANTY.

9. Patent Indemnity.
(a) ABB shall defend at its own expense any action brought against Purchaser alleging that the Equipment or the use of the Equipment to practice any process for which such Equipment is specified by ABB (a "Process") directly infringes any claim of a patent of the United States of America and to pay all damages and costs finally awarded in any such action, provided that Purchaser has given ABB prompt written notice of such action, all necessary assistance in the defense thereof and the right to control all aspects of the defense thereof including the right to settle or otherwise terminate such action in behalf of Purchaser.
(b) ABB shall have no obligation hereunder and this provision shall not apply to: (i) any other equipment or processes, including Equipment or Processes which have been modified or combined with other equipment or process not supplied by ABB; (ii) any Equipment or Process supplied according to a design, other than an ABB design, required by Purchaser; (iii) any products manufactured by the Equipment or Process; (iv) any patent issued after the date hereof; or (v) any action settled or otherwise terminated without the prior written consent of ABB.
(c) If, in any such action, the Equipment is held to constitute an infringement, or the practice of any Process using the Equipment is finally enjoined, ABB shall, at its option and its own expense, procure for Purchaser the right to continue using said Equipment; or modify or replace it with non-infringing equipment or, with Purchaser's assistance, modify the Process so that it becomes non-infringing; or remove it and refund the portion of the price allocable to the infringing Equipment. THE FOREGOING PARAGRAPHS STATE THE ENTIRE LIABILITY OF ABB AND EQUIPMENT MANUFACTURER FOR ANY PATENT INFRINGEMENT.
(d) To the extent that said Equipment or any part thereof is modified by Purchaser, or combined by Purchaser with equipment or processes not furnished hereunder (except to the extent that ABB is a contributory infringer) or said Equipment or any part thereof is used by Purchaser to perform a process not furnished hereunder by ABB or to produce an article, and by reason of said modification, combination, performance or production, an action is brought against ABB, Purchaser shall defend and indemnify ABB in the same manner and to the same extent that ABB would be obligated to indemnify Purchaser under this "Patent Indemnity" provision.

10. Limitation of Liability.
(a) In no event shall ABB, its suppliers or suBCRontractors be liable for special, indirect, incidental or consequential damages, whether in contract, warranty, tort, negligence, strict liability or otherwise, including, but not limited to, loss of profits or revenue, loss of use of the Equipment or any associated equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs, delays, and claims of customers of the Purchaser or other third parties for any damages. ABB's liability for any claim whether in contract, warranty, tort, negligence, strict liability, or otherwise for any loss or damage arising out of, connected with, or resulting from this Agreement or the performance or breach thereof, or from the design, manufacture, sale, delivery, resale, repair, replacement, installation, technical direction of installation, inspection, operation or use of any equipment covered by or furnished under this Agreement, or from any services rendered in connection therewith, shall in no case (except as provided in the section entitled "Patent Indemnity") exceed one-half (1/2) of the purchase price allocable to the equipment or part thereof or Services which gives rise to the claim.
(b) All causes of action against ABB arising out of or relating to this Agreement or the performance or breach hereof shall expire unless brought within one year of the time of accrual thereof.
(c) In no event, regardless of cause, shall ABB be liable for penalties or penalty clauses of any description or for indemnification of Purchaser or others for costs, damages, or expenses arising out of or related to the Equipment and/Services.

General Terms and Conditions of Sale

11. Laws and Regulations. ABB does not assume any responsibility for compliance with federal, state or local laws and regulations, except as expressly set forth herein, and compliance with any laws and regulations relating to the operation or use of the Equipment or Software is the sole responsibility of the Purchaser. All laws and regulations referenced herein shall be those in effect as of the Proposal date. In the event of any subsequent revisions or changes thereto, ABB assumes no responsibility for compliance therewith. If Purchaser desires a modification as a result of any such change or revision, it shall be treated as a change per Article 4. Nothing contained herein shall be construed as imposing responsibility or liability upon ABB for obtaining any permits, licenses or approvals from any agency required in connection with the supply, erection or operation of the Equipment. This Agreement shall be governed by the laws of the State of New York, but excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods and excluding New York law with respect to conflicts of law. Purchaser agrees that all causes of action against ABB under this Agreement shall be brought in the State Courts of the State of New York, or the U.S. District Court for the Southern District of New York. If any provision hereof, partly or completely, shall be held invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision or portion hereof and these terms shall be construed as if such invalid or unenforceable provision or portion thereof had never existed.

12. OSHA. ABB warrants that the Equipment will comply with the relevant standards of the Occupational Safety and Health Act of 1970 ("OSHA") and the regulations promulgated thereunder as of the date of the Proposal. Upon prompt written notice from the Purchaser of a breach of this warranty, ABB will replace the affected part or modify it so that it conforms to such standard or regulation. ABB's obligation shall be limited to such replacement or modification. In no event shall ABB be responsible for liability arising out of the violation of any OSHA standards relating to or caused by Purchaser's design, location, operation, or maintenance of the Equipment, its use in association with other equipment of Purchaser, or the alteration of the Equipment by any party other than ABB.

13. Software License.
(a) ABB owns all rights in or has the right to sublicense all of the Software, if any, to be delivered to Purchaser under this Agreement. As part of the sale made hereunder Purchaser hereby obtains a limited license to use the Software, subject to the following: (i) The Software may be used only in conjunction with equipment specified by ABB; (ii) The Software shall be kept strictly confidential; (iii) The Software shall not be copied, reverse engineered, or modified; (iv) The Purchaser's right to use the Software shall terminate immediately when the specified equipment is no longer used by the Purchaser or when otherwise terminated, e.g. for breach, hereunder; and (v) the rights to use the Software are non-exclusive and non-transferable, except with ABB's prior written consent.
(b) Nothing in this Agreement shall be deemed to convey to Purchaser any title to or ownership in the Software or the intellectual property contained therein in whole or in part, nor to designate the Software a "work made for hire" under the Copyright Act, nor to confer upon any person who is not a named party to this Agreement any right or remedy under or by reason of this Agreement. In the event of termination of this License, Purchaser shall immediately cease using the Software and, without retaining any copies, notes or excerpts thereof, return to ABB the Software and all copies thereof and shall remove all machine readable Software from all of Purchaser's storage media.

14. Inventions and Information. Unless otherwise agreed in writing by ABB and Purchaser, all right, title and interest in any inventions, developments, improvements or modifications of or for Equipment and Services shall remain with ABB. Any design, manufacturing drawings or other information submitted to the Purchaser remains the exclusive property of ABB. Purchaser shall not, without ABB's prior written consent, copy or disclose such information to a third party. Such information shall be used solely for the operation or maintenance of the Equipment and not for any other purpose, including the duplication thereof in whole or in part.

15. Force Majeure. ABB shall neither be liable for loss, damage, detention or delay nor be deemed to be in default for failure to perform when prevented from doing so by causes beyond its reasonable control including but not limited to acts of war (declared or undeclared), Acts of God, fire, strike, labor difficulties, acts or omissions of any governmental authority or of Purchaser, compliance with government regulations, insurrection or riot, embargo, delays or shortages in transportation or inability to obtain necessary labor, materials, or manufacturing facilities from usual sources or from defects or delays in the performance of its suppliers or suBCRontractors due to any of the foregoing enumerated causes. In the event of delay due to any such cause, the date of delivery will be extended by period equal to the delay plus a reasonable time to resume production, and the price will be adjusted to compensate ABB for such delay.

16. Cancellation. Any order may be cancelled by Purchaser only upon prior written notice and payment of termination charges, including but not limited to, all costs identified to the order incurred prior to the effective date of notice of termination and all expenses incurred by ABB attributable to the termination, plus a fixed sum of ten (10) percent of the final total price to compensate for disruption in scheduling, planned production and other indirect costs.

17. Termination. No termination by Purchaser for default shall be effective unless, within fifteen (15) days after receipt by ABB of Purchaser's written notice specifying such default, ABB shall have failed to initiate and pursue with due diligence correction of such specified default.

18. Export Control.
(a) Purchaser represents and warrants that the Equipment and Services provided hereunder and the "direct product" thereof are intended for civil use only and will not be used, directly or indirectly, for the production of chemical or biological weapons or of precursor chemicals for such weapons, or for any direct or indirect nuclear end use. Purchaser agrees not to disclose, use, export or re-export, directly or indirectly, any information provided by ABB or the "direct product" thereof as defined in the Export Control Regulations of the United States Department of Commerce, except in compliance with such Regulations.
(b) If applicable, ABB shall file for a U.S. export license, but only after appropriate documentation for the license application has been provided by Purchaser. Purchaser shall furnish such documentation within a reasonable time after order acceptance. Any delay in obtaining such license shall suspend performance of this Agreement by ABB. If an export license is not granted or, if once granted, is thereafter revoked or modified by the appropriate authorities, this Agreement may be canceled by ABB without liability for damages of any kind resulting from such cancellation. At ABB's request, Purchaser shall provide to ABB a Letter of Assurance and End-User Statement in a form reasonably satisfactory to ABB.

19. Assignment. Any assignment of this Agreement or of any rights or obligations under the Agreement without prior written consent of ABB shall be void.
20. Nuclear Insurance – Indemnity. For applications in nuclear projects, the Purchaser and/or its end user customer shall have complete insurance protection against liability and property damage resulting from a nuclear incident to and shall indemnify ABB, its suBCRontractors, suppliers and vendors against all claims resulting from a nuclear incident.
21. Resale. If Purchaser resells any of the Equipment, the sale terms shall limit ABB's liability to the buyer to the same extent that ABB's liability to Purchaser is limited hereunder.
22. Entire Agreement. This Agreement constitutes the entire agreement between ABB and Purchaser. There are no agreements, understandings, restrictions, warranties, or representations between ABB and Purchaser other than those set forth herein or herein provided.

Pricing List Overview

The ACH550 is an adjustable frequency AC drive designed specifically for the HVAC market that achieves the ultimate in flexible motor control performance. Offering two modes of motor control: Scalar (V/Hz) and Sensorless Vector, the ACH550 performs accurate speed control of any standard squirrel cage motor.

With drives ranging from 1 to 550 HP, the ACH550 series features an 'intuitively obvious' multi-lingual, full graphic display panel that also provides an assistant to aid users in start-up. The control panel can be mounted on the cover of the drive, or remotely, and can upload, store, and download parameters.

The ACH550 comes equipped with an extensive library of preprogrammed HVAC application macros that, at the touch of a button, allow rapid configuration of inputs, outputs, and parameters for specific HVAC applications to maximize convenience and minimize start-up time.

The ACH550 can be used for the simplest to the most demanding HVAC applications. Two integral option slots can be configured with additional relay outputs as well as a host of different communication bus adapters.

The ACH550 has a 110% short term overload rating for one (1) minute out of ten (10) and is capable of >130% short-term overload rating for 2 seconds out of each minute.

How to use these Price Pages

The ACH550 family of drives was designed to meet virtually every customer's application requirements. These Price Pages were developed to allow quick and easy selection of Standard ACH550 products.

Application Considerations

Because of the variety of uses for the ACH550, those responsible for the application and control of these drives must satisfy themselves that all necessary steps have been taken to insure that they meet all performance and safety requirements regarding national and local laws, regulations, codes and standards. Unless otherwise noted, ACH550 products found in these price pages are designed to meet NEMA (National Electrical Manufacturers Association) standards. ACH550 products also carry third party approvals through UL and cUL. Approval for installation in a CE first environment, restricted distribution is also provided with the 480V ACH550 and these products carry the CE mark. These listings are based on standard product and any exceptions to this will be noted in the appropriate section.

Selecting the Correct Drive Capacity

All ACH550 drives are current rated devices. The HP ratings provided are for reference only and are based on typical 4-pole motors at nominal voltages (NEC Table 430-150). If full motor torque is required, ensure the drive has a continuous current rating equal to, or greater than, the full load amp rating of the motor.

Standard Documentation

All ACH550 drives are shipped with a User's Manual. The user's manual contains all necessary dimensional and installation drawings, generic wiring drawings, and all programming instructions.

Delivery

ABB is a worldwide AC Drive manufacturing organization. As a result, some items may not be manufactured in the United States. Lead-times for ACH550 products are based on where the drive is manufactured and the size of the drive. Wall mount ACH550 drives through 200HP are typically manufactured in the United States. These ACH550s, without installed modifications, are forecast with availability's ranging from stock to two (2) weeks. Free standing floor mount ACH550 drives from 250 to 550 HP with input voltage of 480 VAC are manufactured in our US or European Manufacturing Facility. Lead times for these products, without installed modifications, are from stock to two (2) weeks. All ACH550s with installed options are scheduled and manufactured based upon manufacturing capacity. Please consult the factory when lead times for ACH550 products with installed options are required. For current lead times of all products, please contact your local ABB Sales Representative or log in to the www.abbdrives.com website.

Hardware Description

The ACH550 is available in several mounting configurations. A brief description and photo are provided to facilitate model selection and understanding of what is offered with each standard product.

Standard Features

UL, cUL labeled, CE marked, BTL listed (BACnet Testing Lab) & UL Plenum Rated
EMI/RFI Filter (1st Environment, Restricted Distribution)
Seismic Certification in accordance to
- IBC 2000 referencing ASCE 7-98 and ICC AC156
- IBC 2003 referencing ASCE 7-02 and ICC AC156
- IBC 2006 referencing ASCE 7-05 and ICC AC156

Start-Up Assistants
Maintenance Assistants
Diagnostic Assistants
Real Time Clock
Includes Day, Date and Time
Operator Panel Parameter Backup (read/write)
Full Graphic and Multilingual Display
for Operator Control, Parameter Set-Up and Operating
Data Display:
- Output Frequency (Hz)
- Speed (RPM)
- Motor Current
- Calculated % Motor Torque
- Calculated Motor Power (kW)
- DC Bus Voltage
- Output Voltage
- Heatsink Temperature
- Elapsed Time Meter (resettable)
- KWh (reset-able)
- Input / Output Terminal Monitor
- PID Actual Value (Feedback) & Error
- Fault Text
- Warning Text
- Three (3) Scalable Process Variable Displays
- User Definable Engineering Units

Two (2) Programmable Analog Inputs
Six (6) Programmable Digital Inputs
Two (2) Programmable Analog Outputs
Up to six (6) Programmable Relay Outputs (Three (3) Standard)
Adjustable Filters on Analog Inputs and Outputs
Mathematical Functions on Analog Reference Signals
All Control Inputs Isolated from Ground and Power
Four (4) Resident Serial Communication Protocols
- Johnson Controls N2
- Siemens Buildings Technologies FLN (P1)
- Modbus RTU
- BACnet (MS/TP)

Input Speed Signals
- Current 0 (4) to 20 mA
- Voltage 0 (2) to 10 VDC
- Increase/Decrease Reference Contacts (Floating Point)
- Serial Communications

Start/Stop
- 2 Wire (Dry Contact Closure)
- 3 Wire (Momentary Contact)
- Application of Input Power
- Application of Reference Signal (PID Sleep/Wake-Up)
- Serial Communications

Start Functions
- Ramp
- Flying Start
- Premagnetization (DC brake) on Start
- Automatic Torque Boost
- Automatic Torque Boost with Flying Start
- Auto Restart (Reset) – Customer Selectable and Adjustable

Stop Functions
- Ramp or Coast to Stop
- Emergency Stop
- DC Braking / Hold at Stop
- Flux Braking

Accel/Decel
- Two (2) sets of Independently Adjustable Ramps
- Linear or Adjustable ‘S’ Curve Accel/Decel Ramps

HVAC Specific Application Macros
Separate Safeties (2) and Run Permissive Inputs
Damper Control
Override Input (Fire Mode)
Timer Functions
- Four (4) Daily Start/Stop Time Periods
- Four (4) Weekly Start/Stop Time Periods
- Four Timers for Collecting Time Periods and Overrides
- Seven (7) Preset Speeds

Supervision Functions
Adjustable Current Limit
Electronic Reverse
Automatic Extended Power Loss Ride Through (Selectable)
Programmable Maximum Frequency to 500 Hz
PID Control
- Two (2) Integral Independent Programmable PID Setpoint Controllers (Process and External)
- External Selection between Two (2) Sets of Process PID Controller Parameters
- PID Sleep/Wake-Up

Standard Features (continued)

Motor Control Features
- Scalar (V/Hz) and Vector Modes of Motor Control
- V/Hz Shapes
- Linear
- Squared
- Energy Optimization
- IR Compensation
- Slip Compensation
- Three (3) Critical Frequency Lockout Bands

Preprogrammed Protection Circuits
- Overcurrent
- Short Circuit
- Ground Fault
- Overvoltage
- Undervoltage
- Input Phase Loss
- Output Device (IGBT) Overtemperature
- Adjustable Current Limit Regulator
- UL508C approved Electronic Motor Overload (I2T)

Programmable Fault Functions for Protection Include
- Loss of Analog Input
- Panel Loss
- External Fault
- Motor Thermal Protection
- Stall
- Underload
- Motor Phase Loss
- Ground Fault

5% Equivalent Impedance
- 5% Equivalent Impedance with Internal Reactor(s)
- Patented Swinging Choke Design for Superior Harmonic Mitigation in frame sizes (R1 to R6)
- 3% Equivalent Impedance for frame R8

Available Options

3 Relay Extension Module (OREL-01)
115/230 V Digital input Interface Card (OHDI-01)
Fieldbus Adapter Modules
- LonWorks
- Profibus
- DeviceNet
- Ethernet
- ControlNet
- BACnet IP to MS/TP router

DriveWindow Light Start-up, Operation, Programming and Diagnostic Tool

Specifications

Input Connection

Input Voltage (U1)	208/220/230/240 VAC 3-phase +/-10% 208/220/230/240 VAC 1-phase +/-10% 380/400/415/440/460/480 VAC 3-phase +/-10% 500/575/600 VAC 3-phase +/- 10%
Frequency:	48 - 63 Hz
Line Limitations:	Max +/-3% of nominal phase to phase input voltage
Fundamental Power Factor (cosj):	0.98 at nominal load
Connection:	U1, V1, W1 (U1, V1, 1-phase)

Output (Motor) Connection

Output Voltage:	0 to U1, 3-phase symmetrical, U2 at the field weakening point
Output Frequency:	-500 to 500 Hz
Frequency Resolution:	0.01 Hz
Continuous Output Current:	
Variable Torque:	1.0 * I2N (Nominal rated output current, Variable Torque)
Short Term Overload Capacity:	
Variable Torque:	1.1 * I2N, (1 min/10 min)
Peak Overload Capacity:	
Variable Torque:	1.35 * I2N, (2 sec/1 min)
Base Motor Frequency Range:	10 to 500 Hz
Switching Frequency:	1, 4, 8 or 12 kHz
Acceleration Time:	0.1 to 1800 s
Deceleration Time:	0.1 to 1800 s
Efficiency:	0.98 at nominal power level
Short Circuit Withstand Rating:	100,000 AIC (UL) w/o fuses
Connection:	U2, V2, W2
Enclosure Style:	UL (NEMA) Type 1, Type 12, or Type 3R
Agency Approval Listing and Compliance:	UL, cUL, CE, BTL (BACnet Testing Laboratory), IBC2000, 2003, 2006

Ambient Conditions, Operation

Air Temperature:	-15° to 40°C (5° to 104°F), above 40°C the maximum output current is de-rated 1% for every additional 1°C (up to 50°C (122°F) maximum limit.
Relative Humidity:	5 to 95%, no condensation allowed, maximum relative humidity is 60% in the presence of corrosive gasses
Contamination Levels:	
IEC:	60721-3-1, 60721-3-2 and 60721-3-3
Chemical Gasses:	3C1 and 3C2
Solid Particles:	3S2
Installation Site Altitude:	0 to 1000 m (3300 ft) above sea level. At sites over 1000 m (3300 ft) above sea level, the maximum power is de-rated 1% for every additional 100 m (330 ft). If the installation site is higher than 2000 m (6600 ft) above sea level, please contact your local ABB distributor or representative for further information
Vibration:	Max 3.0 mm (0.12 in) 2 to 9 Hz, Max 10 m/s2 (33 ft/s2) 9 to 200 Hz sinusoidal Seismic Certified referencing IBC 2000, 2003 and 2006

Ambient Conditions, Storage (in Protective Shipping Package)

Air Temperature:	-40° to 70°C (-40° to 158°F)
Relative Humidity:	Less than 95%, no condensation allowed
Vibration:	In accordance with ISTA 1A and 1B specifications
Shock (IEC 60086-2-29):	Max 100 m/s2 (330 ft/s2) 11 ms

Ambient Conditions, Transportation (in Protective Shipping Package)

Air Temperature:	-40° to 70°C (-40° to 158°F)
Relative Humidity:	Less than 95%, no condensation allowed
Atmospheric Pressure:	60 to 106 kPa (8.7 to 15.4 PSI)
Vibration:	Max 3.5 mm (0.14 in) 2 to 9 Hz, Max 15 m/s2 (49 ft/s2) 9 to 200 Hz sinusoidal
Shock (IEC 60086-2-29):	Max 100 m/s2 (330 ft/s2) 11 ms
Free Fall:	R1: 76 cm (30 in) R2: 61 cm (24 in) R3: 46 cm (18 in) R4 31 cm (12 in) R5 & 6: 25 cm (10 in)

Cooling Information

Cooling Method:	Integral fan(s)
Power Loss:	Approximately 3% of rated power

Specifications

Analog Inputs

Quantity	Two (2) programmable
Voltage Reference:	0 (2) to 10 V, 250kOhm, single ended
Current Reference:	0 (4) to 20 mA, 100Ohm, single ended
Potentiometer:	10 VDC, 10 mA (1K to 10KOhms)
Input Updating Time	8 ms
Terminal Block Size	2.3mm2 / 14AWG

Reference Power Supply

Reference Voltage	+10 VDC, 1% at 25°C (77°F)
Maximum Load	10 mA
Applicable Potentiometer	1 kOhm to 10 kOhm
Terminal Block Size	2.3mm2 / 14AWG

Analog Outputs

Quantity	Two (2) programmable current outputs
Signal Level	0 (4) to 20 mA
Accuracy	+/- 1% full scale range at 25°C (77°F)
Maximum Load Impedance	500 Ohms
Output Updating Time	2 ms
Terminal Block Size	2.3mm2 / 14AWG

Digital Inputs

Quantity	Six (6) programmable digital inputs
Isolation	Isolated as one group
Signal Level	24 VDC, (10V Logic 0)
Input Current	15 mA at 24 VDC
Input Updating Time:	4 ms
Terminal Block Size	2.3mm2 / 14AWG

Internal Power Supply

Primary Use	Internal supply for digital inputs
Voltage:	+24 VDC, max 250 mA
Maximum Current:	250 mA
Protection:	Short circuit protected

Relay Outputs

Quantity	Three (3) programmable relay (Form C) outputs
Switching Capacity:	8 A at 24 VDC or 250 VAC, 0.4 A at 120 VDC
Max Continuous Current:	2A RMS
Contact Material:	Silver Cadmium Oxide (AgCdO)
Isolation Test Voltage	4 kVAC, 1 minute
Output Updating Time	12 ms
Terminal Block Size	2.3mm2 / 14AWG

Protections

Single Phase	Protected (input & output)
Overcurrent Trip Limit:	3.5 x I2N instantaneous
Adjustable Current Regulation Limit:	1.3 x I2N (RMS) max.
Overvoltage Trip Limit:	1.30 x UN
Undervoltage Trip Limit:	0.65 x UN
Overtemperature (Heatsink):	+115°C (+239°F)
Auxiliary Voltage:	Short Circuit Protected
Ground Fault:	Protected
Short Circuit:	Protected
Microprocessor fault:	Protected
Motor Stall Protection:	Protected
Motor Overtemperature Protection (I2t):	Protected
Input Power Loss of Phase:	Protected
Loss of Reference:	Protected
Short Circuit Current Rating:	100,000 RMS symmetrical Amperes
Input Line Impedance:	5% Equivalent Input Impedance with internal reactor(s) Patented swinging choke design for superior harmonic mitigation in frame sizes R1-R6
Printed Circuit Boards	Conformal coated

Notes

U1 = Input Voltage
U2 = Output Voltage
UN = Nominal Motor Voltage
fN = Nominal Motor Frequency
PN = Power – Normal Duty (HP)
2N = Nominal Motor Current Normal Duty

Product Description

The ACH550 is available in several configurations. A brief description and illustration are provided to facilitate model selection and understanding of what is offered with each standard product.

ACH550-UH — Base Drive

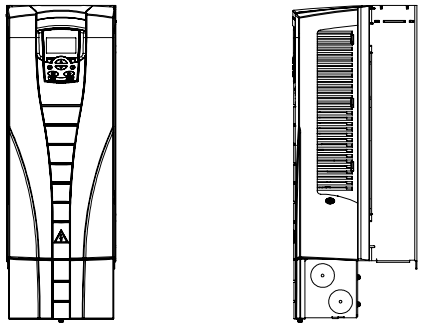
The ACH550 Drive is available from 1 to 100 HP in 208/230V, 1 to 550 HP in 480V, and 2 to 150 HP in 600V input voltages. The ACH550 Drive has eight frame sizes (R1 to R8). The ACH550 Drive is wall mounted from 1 to 200 HP (R1 to R6) and floor mounted from 250 to 550 HP (R8). The ACH550 Drive comes in a standard UL Type 1 (NEMA 1) or optional UL Type 12 (NEMA 12) enclosure and has a control panel for user interface, parameter adjustment and drive operation mounted on the front of the drive.

Wall mounted ACH550-UH

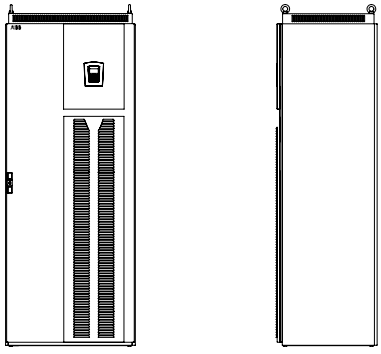
The front section of the wall mounted ACH550-UH contains the electronics, power and control wire terminals. The rear section forms a cooling channel. The two section construction allows the unit to be installed protruding through a wall, or through the rear wall of a customer supplied enclosure using additional hardware (R1 to R4), placing the rear section in a cooling air duct to minimize the heat inside the cabinet. In standard installations, the drive is mounted directly onto a wall and uses the provided conduit box. Conduit openings (knock-outs) are provided for bottom and side conduit entry. For mounting inside a customer-supplied cabinet, the conduit box may be removed.

Floor Mounted ACH550-UH

The floor mounted ACH550-UH contains all of the electronics, power and control wire terminals in a single enclosure with heatsink and cooling paths internal to the enclosure. In standard installations, the drive is mounted on the floor in a freestanding arrangement. A conduit entrance panel is provided at the top of the enclosure for conduit entry and exit.



Wall Mount (R1 - R6)



Floor Mount (R8)

ACH550-VCR & ACH550-VDR — ACH550 Drive w/ Vertical E-Clipse Bypass

The ACH550 with ABB E-Clipse Bypass is an ACH550 HVAC Drive with an advanced, communications capable, bypass motor starter.

The ACH550 with Vertical E-Clipse Bypass is the most eco¬nomical form of the ABB E-Clipse Bypass package. The ACH550 with Vertical E-Clipse Bypass is wall mountable in a vertically integrated UL Type 1 (NEMA 1) enclosure and is available from 1 to 25 HP in 208/230V, 1 to 60 HP in 480V and 2 to 60 HP in 600V input voltages.

The ACH550 ABB E-Clipse Bypass

The ACH550 with ABB E-Clipse Bypass provides a non-fused input disconnect switch or circuit breaker with door mounted and interlocked operator (padlockable in the OFF position), a bypass starter, electronic motor overload protection, a local programming and operator keypad with LCD display and indicating lights, and provisions for external control connections, and serial communications capability. Certain configurations (+F267) also provide a drive service switch.

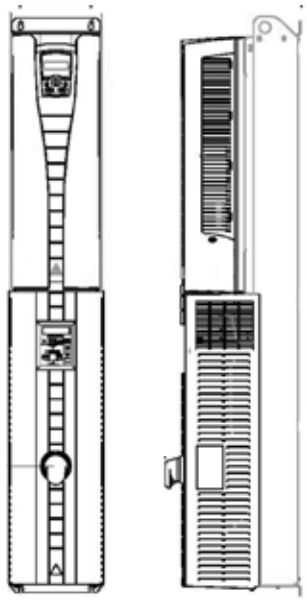
The ACH550 with E-Clipse Bypass includes two contactors. One contactor is the bypass contactor, used to connect the motor directly to the incoming power line in the event that the ACH550 is out of service. The other contactor is the ACH550 output contactor that disconnects the ACH550 from the input power and the motor when the motor is operating in the Bypass mode. The drive output contactor and the bypass contactor are interlocked to prevent “back feeding,” which occurs if line voltage is applied to the ACH550 output terminals.

The ACH550 with ABB E-Clipse bypass is a microprocessor-controlled “intelligent” system which features programmable Class 20 or 30 overload curves, programmable underload (broken belt) and overload trip or indication. Also included as standard features are single-phase protection in bypass mode, programmable manual or automatic transfer to bypass, fireman’s override, smoke control, damper control, no contactor chatter on brown-out power conditions and serial communications. Should a drive problem occur, fast acting fuses exclusive to the ACH550 drive path disconnect the drive from the line prior to clearing upstream branch circuit protection, maintaining bypass capability.

The damper control circuit closes a dry contact upon a start command to open a damper such as an outdoor air damper, fire damper, isolation damper, etc. before the motor is allowed to operate in drive mode or bypass mode regardless of the source of the run command. When the damper is fully open, a normally open dry contact from the damper end-switch closes and allows the motor to operate.

Up to four dedicated inputs are provided for safety interlocks such as firestats, smoke detectors, etc. The safety interlock inputs may also be linked to plain English keypad diagnostic indications to be displayed on the Control Panel LCD. The unit may be set-up to display any of the following diagnos-tics upon opening of a digital input: Vibration Switch; Firestat; Freezestat; Over Pressure; Vibration Trip; Smoke Alarm; Safety Open; Low Suction; Start Enable; Run Enable; Damper End Switch; Valve Open Proof; or Pre-Lube Cycle. When any of these contacts open, the motor stops (in drive or bypass mode) and the damper is commanded to close. Although it is not a recommend sequence of operation, this run permissive circuit may also be controlled via serial communications.

(*continued on next page*)



Vertical (R1-R4)

ACH550-BCR & ACH550-BDR — ACH550 Drive w/ E-Clipse Bypass

The ACH550 with ABB E-Clipse Bypass is an ACH550 HVAC Drive with an advanced, communications capable, bypass motor starter.

The ACH550 with E-Clipse Bypass is available from 1 to 100 HP in 208/230V, 1 to 400 HP in 480V, and 2 to 150 HP in 600V input voltages. The ACH550 with E-Clipse Bypass is wall mounted from 1 to 200 HP and floor mounted from 250 to 400 HP. The ACH550 with E-Clipse Bypass is housed in a standard UL Type 1 (NEMA 1) or optional UL Type 12 (NEMA 12) enclosure.

For outdoor applications, UL Type 3R (NEMA 3R) enclosed ACH550-BCR and -BDR Drive with Disconnect packages are available from 1 to 100 HP at 208/240V, 1 to 200 HP at 480V and 2 to 150 HP at 600V. Construction is sheet steel with a tough powder coat paint finish for corrosion resistance. A thermostatically controlled space heater and thermostatic control of the force ventilated cooling system are standard. The operator keypad is mounted on the enclosure and covered with a protective door.

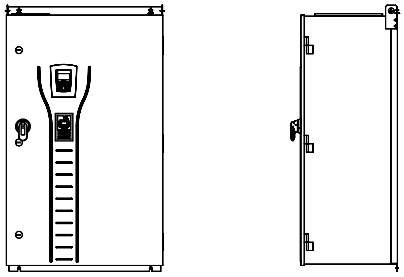
(*continued from previous page*)

The ACH550 with ABB E-Clipse bypass has two Override modes of operation for critical control situations. The Smoke Control Override accepts a normally open dry contact that forces the motor to run in bypass and ignores all keypad inputs. In Smoke Control Override mode, the system acknowledges high priority digital inputs such as overpressure safeties and damper end-switch run permissive proofs, and disregards other, low priority digital inputs. Smoke Control Override (Override 1) response is not field programmable. The unit will go into smoke Override mode whenever the Override 1 input is closed.

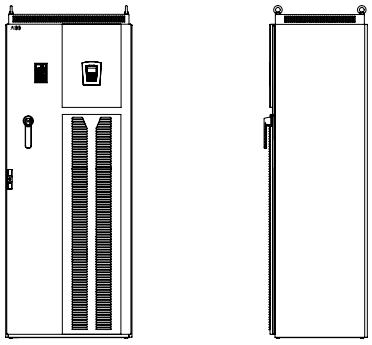
The second mode, Override 2, is fully programmable. Override 2 default programming is designed for “Run to Destruction” operation. However, the end user can program the unit to acknowledge some external inputs while ignoring others; ignore all external inputs; or acknowledge all external inputs. This mode is fully programmable to allow the user to program the response of the unit to match his local AHJ.

All ABB E-Clipse bypass units have the following Embedded Fieldbus (EFB) protocols included as standard: Modbus RTU; Johnson Controls N2; Siemens Building Technologies FLN (P1); and BACnet (MS/TP). The ABB E-Clipse bypass is BACnet Testing Labs (BTL) listed as an Applications Specific Controller (B-ASC).

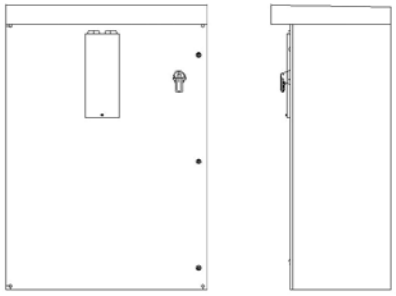
The ACH550 with ABB E-Clipse bypass allows control and monitoring of both Drive and Bypass over serial communications. Users can control and monitor over 45 points of bypass information via the communications protocols. Serial communication capabilities include; bypass run-stop control; the ability to force the unit to bypass; and the ability to control all relay outputs. The BAS system can monitor measured data such as current (in amps), kilowatt hours (resettable), operating hours (resettable), and bypass logic board temperature. The BAS is also capable of monitoring status data such as bypass relay output status, and digital input status. Bypass override, diagnostic, warning and fault information is also transmitted over serial communications with remote system (drive or bypass) fault reset possible as well. The BAS system is also capable of determining if the motor is running (or selected to run) from the drive or bypass; as well as the status of the Drive and Bypass H-O-A switches over serial communications.



Wall Mount (R1 - R6)



Floor Mount (R8)



Wall Mount BX3R (R5)

ACH550-CC & ACH550-CD

ACH550 Classic Bypass

The ACH550-CC and CD are complete Drive with Bypass Packages that include an ACH550 Variable Frequency Drive, a bypass function that allows the motor to be run at full voltage in the event the drive is shut down for service and a main disconnect means. Complete, pre-engineered packages reduce time, effort and the cost of installing the popular drive bypass option.

The bypass function is configured entirely of standard industrial control components. It includes two electrically interlocked contactors, a motor overload relay, a control power transformer with primary and secondary fusing, and cover mounted Drive-Off-Bypass selector switch, BYPASS pilot light and EXTERNAL/MOL FAULT pilot light.

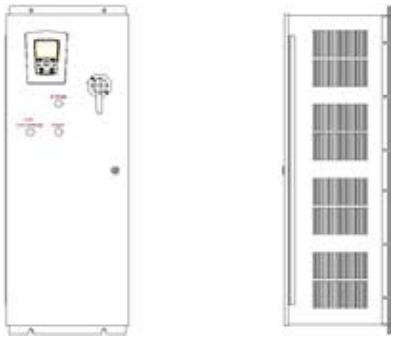
Bypass is accomplished by means of the two contactors. One is the bypass contactor used to connect the motor directly to the power line. The other is the output contactor that disconnects the motor from the drive output when operating in the bypass mode. This prevents the “back feeding” that would occur if line voltage were applied to the drive output terminals. The drive output contactor and the bypass contactor are electrically interlocked to prevent simultaneous operation.

Motor overload protection in the bypass mode is provided by a Class 20 motor overload relay.

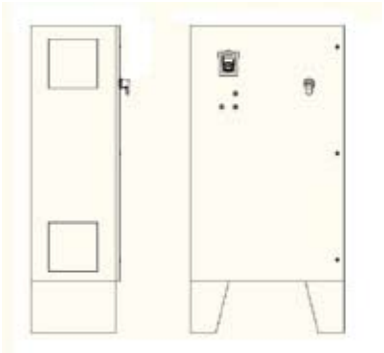
ACH550 Drive W/ Bypass Packages include either an input disconnect switch (ACH550-CD) or circuit breaker (ACH550-CC) with a door mounted external operating handle that is interlocked with the enclosure door and lockable in the OFF position with up to three padlocks. The multi-lingual, alphanumeric drive control panel is mounted on the enclosure door. An optional drive service switch (+F267) isolates the drive from the power source for service and provides superior functionality to a three-contactor arrangement.

Fast acting, current limiting drive input fuses are provided as standard. Faster than circuit breakers and most other fuses, the drive fuses are included to limit damage and allow for possible drive repair if a short circuit or ground fault should develop in the drive input bridge. For drives at the higher ratings, it is generally more economical to repair rather than replace the drive. Drive fuses are also intended to provide for immediate operation of the bypass function after such a fault.

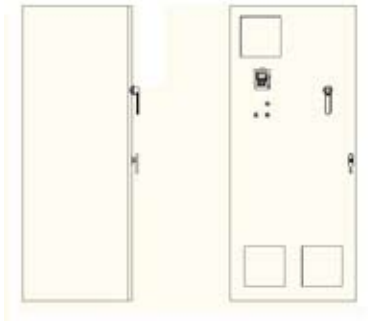
Drive W/ Bypass Packages are available in UL TYPE 1 and UL TYPE 12 enclosures through 100 HP at 208/240V, 200 HP at 480V and 150 HP at 600V. For outdoor applications, UL TYPE 3R enclosed packages are available through 100 HP at 208/240V, 200 HP at 480V, and 150 HP at 600V. UL TYPE 3R enclosures are sheet steel construction with a tough powder coat paint finish for corrosion resistance, and include a thermostatically controlled space heater and thermostatic control of the force ventilated cooling system as standard.



Wall Mount (R1 - R6)



Floor Mount (R6)

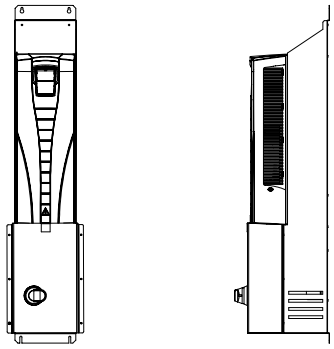


Floor Mount (R8)

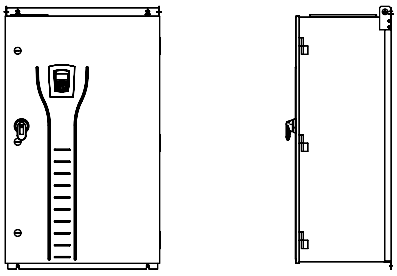
ACH550-PCR & ACH550-PDR — ACH550 Drive Pack

The ACH550 Drive Pack is an ACH550 Drive packaged with either an input disconnect switch and fast acting fuses (ACH550-PDR) or an input circuit breaker (ACH550-PCR). The ACH550 Drive Pack is available from 1 to 100 HP at 208/240V, 1 to 550 HP at 480V, and 2 to 150 HP at 600V. The ACH550 Drive Pack is wall mounted from 1 to 200 HP and floor mounted from 250 to 550 HP. The ACH550 Drive Pack comes in a standard UL Type 1 (NEMA 1) or optional UL Type 12 (NEMA 12) enclosure. The ACH550 Drive Pack provides a door-mounted operator (padlockable in the OFF position), electronic motor overload protection, local operator keypad with graphics display, and provisions for external control connections.

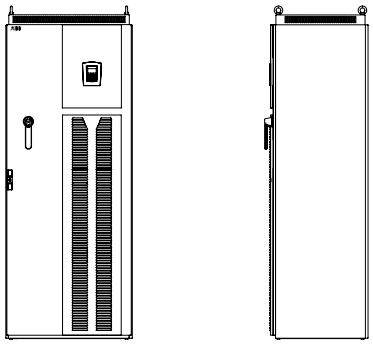
For outdoor applications, UL Type (NEMA) 3R enclosed ACH550-PCR and -PDR Drive with Disconnect packages are available from 1 to 100 HP at 208/240V, 1 to 200 HP at 480V and 2 to 150 HP at 600V. Construction is sheet steel with a tough powder coat paint finish for corrosion resistance. A thermostatically controlled space heater and thermostatic control of the force ventilated cooling system are standard. The operator keypad is mounted on the enclosure and covered with a protective door.



Wall Mount (R1 - R4)



Wall Mount (R5 - R6)



Floor Mount (R8)

Definition of NEMA and IEC environmental ratings

NEMA and IEC environmental ratings can be confusing at times. Below is a summary of the rating definitions and recommendations for application of each type supported by the ACS550 AC Drive product family.

NEMA 1, UL type 1

Indoor use primarily to provide a degree of protection against limited amounts of falling dirt.

IP 2 1
- (2) Protected against solid foreign objects of 12.5mm diameter and greater
- (1) Protected against vertically falling water drops

Recommendation

Installation in clean environment such as a clean room or in another enclosure with higher degree of protection

NEMA 12, UL type 12

Indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids

IP 5 4
- (5) Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety
- (4) Water splashed against the enclosure from any direction shall have no harmful effects

Recommendation

Installation in environments with moderate to significant dust and contaminant particles. Acceptable for most applications on factory floors where dust is present but spraying liquids are not. Regular preventative maintenance for filter changing or cleaning. Inspect drive for dust or particle build up that may limit cooling in the future, clean as needed.

NEMA 3R, UL type 3R

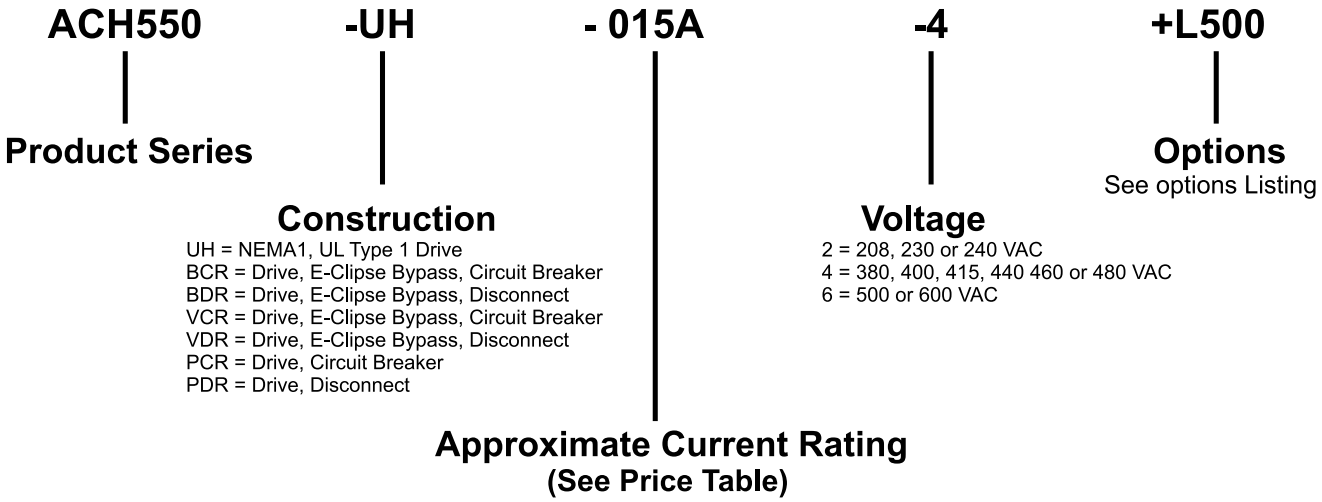
Either indoor or outdoor use to provide a degree of protection against falling dirt, rain, sleet, and snow; and that will be undamaged by the external formation of ice on the enclosure.

IP 2 4
- (2) Protected against solid foreign objects of 12.5mm diameter and greater
- (4) Water splashed against the enclosure from any direction shall have no harmful effects

Recommendation

Installation in outdoor environments where rain and other precipitates are commonly present. Also suitable for indoor installation where dripping or splashing water is present. Not recommended where significant dust and contaminant particles are present.

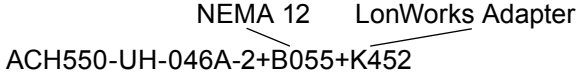
Basic Type Code Information



Ordering Information

To order an ACH550 drive, select the appropriate type code shown in the selection guide for your input voltage. This type code represents the basic drive product. For the ACH550-UH wall-mounted units, this includes the drive and the US conduit box. For the ACH550-UH floor-mounted units, this includes the free-standing drive with top entry / top exit for motor and power cables and a common mode filter for drives larger than 200 HP. To add options to these products, simply add a + at the end of the type code followed by the catalog code shown for that option.

Example: ACH550-UH-046A-2 plus a UL Type 12 (NEMA 12) enclosure and LonWorks adapter. The type code that should be indicated on the order would be:



For additional details and available options refer to the order format pages later in these price pages.

For items not listed in this price book contact the factory for engineered product quotes.

208/230V Ratings for Base Drive

3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 208V [1]

	HP[2]	Material Description	Amps[3,4]	Base Drive Frame	Dim. Ref. Page 40	Dim. Ref. Page 41
Base Drive[5]	1	ACH550-UH-04A6-2	4.6	R1	UH1-1	UH12-1
	1.5	ACH550-UH-06A6-2	6.6	R1	UH1-1	UH12-1
	2	ACH550-UH-07A5-2	7.5	R1	UH1-1	UH12-1
	3	ACH550-UH-012A-2	12	R1	UH1-1	UH12-1
	5	ACH550-UH-017A-2	17	R1	UH1-1	UH12-1
	7.5	ACH550-UH-024A-2	24	R2	UH1-2	UH12-2
	10	ACH550-UH-031A-2	31	R2	UH1-2	UH12-2
	15	ACH550-UH-046A-2	45	R3	UH1-3	UH12-3
	20	ACH550-UH-059A-2	59	R3	UH1-3	UH12-3
	25	ACH550-UH-075A-2	75	R4	UH1-4	UH12-4
	30	ACH550-UH-088A-2	88	R4	UH1-4	UH12-4
	40	ACH550-UH-114A-2	114	R4	UH1-4	UH12-4
	50	ACH550-UH-143A-2	143	R6	UH1-6	UH12-6
	60	ACH550-UH-178A-2	178	R6	UH1-6	UH12-6
	75	ACH550-UH-221A-2	221	R6	UH1-6	UH12-6
	230V Ratings for Base Drive 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V					
	100	ACH550-UH-248A-2	248	R6	UH1-6	UH12-6

NOTES

1 The rated current of the ACH550 must be greater than or equal to the rated motor current to achieve the rated motor power given in the table.

2 Horsepower is based on NEMA motor ratings for 4-pole motors (1800 rpm). Check motor nameplate current for compatibility.

3 Continuous base current with 110% overload for 1 minute / 10 minutes.
130% continuous base current available for 2 seconds / minute.
Current ratings do not change with different supply voltages.

4 For operation on single phase power, de-rate the output current by 50%.

5 All -UH models -04A6-2 through -248A-2 come with a conduit box as standard.

208/230V Ratings for Vertical E-Clipse Bypass

3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 208V [1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 42
Vertical Bypass with Non-Fused Disconnect Switch	1	ACH550-VDR-04A6-2	4.6	R1	VX1-1
	1.5	ACH550-VDR-06A6-2	6.6	R1	VX1-1
	2	ACH550-VDR-07A5-2	7.5	R1	VX1-1
	3	ACH550-VDR-012A-2	11.8	R1	VX1-1
	5	ACH550-VDR-017A-2	16.7	R1	VX1-1
	7.5	ACH550-VDR-024A-2	24.2	R2	VX1-2
	10	ACH550-VDR-031A-2	30.8	R2	VX1-3
	15	ACH550-VDR-046A-2	46.2	R3	VX1-3
	20	ACH550-VDR-059A-2	59.4	R3	VX1-3
	25	ACH550-VDR-075A-2	74.8	R4	VX1-4
Vertical Bypass with Circuit Breaker	1	ACH550-VCR-04A6-2	4.6	R1	VX1-1
	1.5	ACH550-VCR-06A6-2	6.6	R1	VX1-1
	2	ACH550-VCR-07A5-2	7.5	R1	VX1-1
	3	ACH550-VCR-012A-2	11.8	R1	VX1-1
	5	ACH550-VCR-017A-2	16.7	R1	VX1-1
	7.5	ACH550-VCR-024A-2	24.2	R2	VX1-2
	10	ACH550-VCR-031A-2	30.8	R2	VX1-3
	15	ACH550-VCR-046A-2	46.2	R3	VX1-3
	20	ACH550-VCR-059A-2	59.4	R3	VX1-3
	25	ACH550-VCR-075A-2	74.8	R4	VX1-4

208/230V Ratings for E-Clipse Bypass

3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 208V [1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 43	Dim. Ref. page 44	Dim. Ref. Page 45
E-Clipse Bypass with Non-Fused Disconnect Switch	1	ACH550-BDR-04A6-2	4.6	R1	BX1-1	BX12-1	BX3R-1
	1.5	ACH550-BDR-06A6-2	6.6	R1	BX1-1	BX12-1	BX3R-1
	2	ACH550-BDR-07A5-2	7.5	R1	BX1-1	BX12-1	BX3R-1
	3	ACH550-BDR-012A-2	11.8	R1	BX1-1	BX12-1	BX3R-1
	5	ACH550-BDR-017A-2	16.7	R1	BX1-1	BX12-1	BX3R-1
	7.5	ACH550-BDR-024A-2	24.2	R2	BX1-2	BX12-2	BX3R-2
	10	ACH550-BDR-031A-2	30.8	R2	BX1-3	BX12-3	BX3R-3
	15	ACH550-BDR-046A-2	46.2	R3	BX1-3	BX12-3	BX3R-3
	20	ACH550-BDR-059A-2	59.4	R3	BX1-3	BX12-3	BX3R-3
	25	ACH550-BDR-075A-2	74.8	R4	BX1-4	BX12-4	BX3R-4
	30	ACH550-BDR-088A-2	88	R4	BX1-5	BX12-5	BX3R-5*
	40	ACH550-BDR-114A-2	114	R4	BX1-5	BX12-5	BX3R-6
	50	ACH550-BDR-143A-2	143	R6	BX1-6	BX12-6	BX3R-6
	60	ACH550-BDR-178A-2	178	R6	BX1-6	BX12-6	BX3R-6
	75	ACH550-BDR-221A-2	221	R6	BX1-6	BX12-6	BX3R-7
	230V Ratings for E-Clipse Bypass with Disconnect 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V						
	100	ACH550-BDR-248A-2	248	R6	BX1-6	BX12-6	BX3R-7

E-Clipse Bypass with Circuit Breaker	1	ACH550-BCR-04A6-2	4.6	R1	BX1-1	BX12-1	BX3R-1
	1.5	ACH550-BCR-06A6-2	6.6	R1	BX1-1	BX12-1	BX3R-1
	2	ACH550-BCR-07A5-2	7.5	R1	BX1-1	BX12-1	BX3R-1
	3	ACH550-BCR-012A-2	11.8	R1	BX1-1	BX12-1	BX3R-1
	5	ACH550-BCR-017A-2	16.7	R1	BX1-1	BX12-1	BX3R-1
	7.5	ACH550-BCR-024A-2	24.2	R2	BX1-2	BX12-2	BX3R-2
	10	ACH550-BCR-031A-2	30.8	R2	BX1-3	BX12-3	BX3R-3
	15	ACH550-BCR-046A-2	46.2	R3	BX1-3	BX12-3	BX3R-3
	20	ACH550-BCR-059A-2	59.4	R3	BX1-3	BX12-3	BX3R-3
	25	ACH550-BCR-075A-2	74.8	R4	BX1-4	BX12-4	BX3R-4
	30	ACH550-BCR-088A-2	88	R4	BX1-5	BX12-5	BX3R-5*
	40	ACH550-BCR-114A-2	114	R4	BX1-5	BX12-5	BX3R-6
	50	ACH550-BCR-143A-2	143	R6	BX1-6	BX12-6	BX3R-6
	60	ACH550-BCR-178A-2	178	R6	BX1-6	BX12-6	BX3R-6
	75	ACH550-BCR-221A-2	221	R6	BX1-6	BX12-6	BX3R-7
	230V Ratings for E-Clipse Bypass with Circuit Breaker 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V						
	100	ACH550-BCR-248A-2	248	R6	BX1-6	BX12-6	BX3R-7

* Dimension references change from BX3R-5 to BX3R-6 with the addition of the AC Line Reactor (+E213) option.

208/230V Ratings for Classic Bypass

3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 208V [1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 46	Dim. Ref. Page 47	Dim. Ref. Page 48
Classic Bypass with Non-Fused Disconnect Switch	1	ACH550-CD-04A6-2	4.6	R1	CX1-1	CX12-1	CX3R-1
	1.5	ACH550-CD-06A6-2	6.6	R1	CX1-1	CX12-1	CX3R-1
	2	ACH550-CD-07A5-2	7.5	R1	CX1-1	CX12-1	CX3R-1
	3	ACH550-CD-012A-2	12	R1	CX1-1	CX12-1	CX3R-1
	5	ACH550-CD-017A-2	17	R1	CX1-1	CX12-1	CX3R-1
	7.5	ACH550-CD-024A-2	24	R2	CX1-3	CX12-3	CX3R-2
	10	ACH550-CD-031A-2	31	R2	CX1-3	CX12-3	CX3R-2
	15	ACH550-CD-046A-2	46	R3	CX1-4	CX12-5	CX3R-3
	20	ACH550-CD-059A-2	59	R3	CX1-4	CX12-5	CX3R-3
	25	ACH550-CD-075A-2	75	R4	CX1-6	CX12-6	CX3R-4
	30	ACH550-CD-088A-2	88	R4	CX1-9	CX12-7	CX3R-5
	40	ACH550-CD-114A-2	114	R4	CX1-9	CX12-7	CX3R-5
	50	ACH550-CD-143A-2	143	R6	CX1-10	CX12-10	CX3R-7
	60	ACH550-CD-178A-2	178	R6	CX1-10	CX12-10	CX3R-7
	75	ACH550-CD-221A-2	221	R6	CX1-11	CX12-10	CX3R-8
	230V Ratings for Classic Bypass 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V						
	100	ACH550-CD-248A-2	248	R6	CX1-11	CX12-10	CX3R-8

Classic Bypass with Circuit Breaker	1	ACH550-CC-04A6-2	4.6	R1	CX1-1	CX12-1	CX3R-1
	1.5	ACH550-CC-06A6-2	6.6	R1	CX1-1	CX12-1	CX3R-1
	2	ACH550-CC-07A5-2	7.5	R1	CX1-1	CX12-1	CX3R-1
	3	ACH550-CC-012A-2	12	R1	CX1-1	CX12-1	CX3R-1
	5	ACH550-CC-017A-2	17	R1	CX1-1	CX12-1	CX3R-1
	7.5	ACH550-CC-024A-2	24	R2	CX1-3	CX12-3	CX3R-2
	10	ACH550-CC-031A-2	31	R2	CX1-3	CX12-3	CX3R-2
	15	ACH550-CC-046A-2	46	R3	CX1-4	CX12-5	CX3R-3
	20	ACH550-CC-059A-2	59	R3	CX1-4	CX12-5	CX3R-3
	25	ACH550-CC-075A-2	75	R4	CX1-6	CX12-6	CX3R-4
	30	ACH550-CC-088A-2	88	R4	CX1-9	CX12-7	CX3R-5
	40	ACH550-CC-114A-2	114	R4	CX1-9	CX12-7	CX3R-5
	50	ACH550-CC-143A-2	143	R6	CX1-10	CX12-10	CX3R-7
	60	ACH550-CC-178A-2	178	R6	CX1-10	CX12-10	CX3R-7
	75	ACH550-CC-221A-2	221	R6	CX1-11	CX12-10	CX3R-8
	230V Ratings for Classic Bypass 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V						
	100	ACH550-CC-248A-2	248	R6	CX1-11	CX12-10	CX3R-8

208/230V Ratings for Drive with Input Disconnect

3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 208V [1]

	HP[2]	Material Description	Amps[3,4]	Base Drive Frame	Dim. Ref. Page 49	Dim. Ref. Page 50	Dim. Ref. Page 51
Drive with Disconnect Switch and Fuses	1	ACH550-PDR-04A6-2	4.6	R1	PX1-1	PX12-1	PX3R-1
	1.5	ACH550-PDR-06A6-2	6.6	R1	PX1-1	PX12-1	PX3R-1
	2	ACH550-PDR-07A5-2	7.5	R1	PX1-1	PX12-1	PX3R-1
	3	ACH550-PDR-012A-2	12	R1	PX1-1	PX12-1	PX3R-1
	5	ACH550-PDR-017A-2	17	R1	PX1-1	PX12-1	PX3R-1
	7.5	ACH550-PDR-024A-2	24	R2	PX1-2	PX12-2	PX3R-2
	10	ACH550-PDR-031A-2	31	R2	PX1-2	PX12-2	PX3R-3
	15	ACH550-PDR-046A-2	46	R3	PX1-3	PX12-3	PX3R-3
	20	ACH550-PDR-059A-2	59	R3	PX1-3	PX12-3	PX3R-3
	25	ACH550-PDR-075A-2	75	R4	PX1-4	PX12-4	PX3R-4
	30	ACH550-PDR-088A-2	88	R4	PX1-5	PX12-5	PX3R-5
	40	ACH550-PDR-114A-2	114	R4	PX1-5	PX12-5	PX3R-5
	50	ACH550-PDR-143A-2	143	R6	PX1-6	PX12-6	PX3R-6
	60	ACH550-PDR-178A-2	178	R6	PX1-6	PX12-6	PX3R-6
	75	ACH550-PDR-221A-2	221	R6	PX1-6	PX12-6	PX3R-6
	230V Ratings for Drive with Disconnect Switch and Fuses 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V						
	100	ACH550-PDR-248A-2	248	R6	PX1-6	PX12-6	PX3R-6

Drive with Circuit Breaker	1	ACH550-PCR-04A6-2	4.6	R1	PX1-1	PX12-1	PX3R-1
	1.5	ACH550-PCR-06A6-2	6.6	R1	PX1-1	PX12-1	PX3R-1
	2	ACH550-PCR-07A5-2	7.5	R1	PX1-1	PX12-1	PX3R-1
	3	ACH550-PCR-012A-2	12	R1	PX1-1	PX12-1	PX3R-1
	5	ACH550-PCR-017A-2	17	R1	PX1-1	PX12-1	PX3R-1
	7.5	ACH550-PCR-024A-2	24	R2	PX1-2	PX12-2	PX3R-2
	10	ACH550-PCR-031A-2	31	R2	PX1-2	PX12-2	PX3R-3
	15	ACH550-PCR-046A-2	46	R3	PX1-3	PX12-3	PX3R-3
	20	ACH550-PCR-059A-2	59	R3	PX1-3	PX12-3	PX3R-3
	25	ACH550-PCR-075A-2	75	R4	PX1-4	PX12-4	PX3R-4
	30	ACH550-PCR-088A-2	88	R4	PX1-5	PX12-5	PX3R-5
	40	ACH550-PCR-114A-2	114	R4	PX1-5	PX12-5	PX3R-5
	50	ACH550-PCR-143A-2	143	R6	PX1-6	PX12-6	PX3R-6
	60	ACH550-PCR-178A-2	178	R6	PX1-6	PX12-6	PX3R-6
	75	ACH550-PCR-221A-2	221	R6	PX1-6	PX12-6	PX3R-6
	230V Ratings for Drive with Circuit Breaker 3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 230V						
	100	ACH550-PCR-248A-2	248	R6	PX1-6	PX12-6	PX3R-6

480V Ratings for Base Drive

3-phase supply voltage 380, 400, 415, 440, 460 or 480V - Power ratings are valid at nominal voltage, 460V [1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 40	Dim. Ref. Page 41
Base Drive[6]	1	ACH550-UH-03A3-4	3.3	R1	UH1-1	UH12-1
	1.5	ACH550-UH-03A3-4	3.3	R1	UH1-1	UH12-1
	2	ACH550-UH-04A1-4	4.1	R1	UH1-1	UH12-1
	3	ACH550-UH-06A9-4	6.9	R1	UH1-1	UH12-1
	5	ACH550-UH-08A8-4	8.8	R1	UH1-1	UH12-1
	7.5	ACH550-UH-012A-4	12	R1	UH1-1	UH12-1
	10	ACH550-UH-015A-4	15	R2	UH1-2	UH12-2
	15	ACH550-UH-023A-4	23	R2	UH1-2	UH12-2
	20	ACH550-UH-031A-4	31	R3	UH1-3	UH12-3
	25	ACH550-UH-038A-4	38	R3	UH1-3	UH12-3
	30	ACH550-UH-045A-4	44	R3	UH1-3	UH12-3
	40	ACH550-UH-059A-4	59	R4	UH1-4	UH12-4
	50	ACH550-UH-072A-4	72	R4	UH1-4	UH12-4
	60	ACH550-UH-078A-4	77	R4	UH1-4	UH12-4
	75	ACH550-UH-097A-4	96	R4	UH1-4	UH12-4
	100	ACH550-UH-125A-4	124	R5	UH1-5	UH12-5
	125	ACH550-UH-157A-4	157	R6	UH1-6	UH12-6
	150	ACH550-UH-180A-4	180	R6	UH1-6	UH12-6
	200	ACH550-UH-246A-4	245	R6	UH1-6	UH12-6
	250	ACH550-UH-316A-4	316	R8	UH1-8	UH12-8
	300	ACH550-UH-368A-4	368	R8	UH1-8	UH12-8
	350	ACH550-UH-414A-4	414	R8	UH1-8	UH12-8
	400	ACH550-UH-486A-4	486	R8	UH1-8	UH12-8
	450	ACH550-UH-526A-4	826	R8	UH1-8	UH12-8
	500	ACH550-UH-602A-4	602	R8	UH1-8	UH12-8
	550	ACH550-UH-645A-4	645	R8	UH1-8	UH12-8

NOTES

1 The rated current of the ACH550 must be greater than or equal to the rated motor current to achieve the rated motor power given in the table.

2 Horsepower is based on NEMA motor ratings for most 4-pole motors (1800 rpm). Check motor nameplate current for compatibility.

3 Continuous base current with 110% overload for 1 minute / 10 minutes.
130% continuous base current available for 2 seconds / 1 minute.
Current ratings do not change with different supply voltages.

6 All -UH models -03A3-4 through -246A-4 come with a conduit box as standard.
All -UH models -316A-4 through -645A-4 come standard with US conduit openings, top entry / top exit, common mode filter for drives larger than 200 HP, and floor-standing enclosure.

480V Ratings for Vertical E-Clipse Bypass

3-phase supply voltage 380, 400, 415, 440, 460 or 480V - Power ratings are valid at nominal voltage, 460V [1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 42
Vertical Bypass with Non-Fused Disconnect Switch	1	ACH550-VDR-03A3-4	3.3	R1	VX1-1
	1.5	ACH550-VDR-03A3-4	3.3	R1	VX1-1
	2	ACH550-VDR-04A1-4	4.1	R1	VX1-1
	3	ACH550-VDR-06A9-4	6.9	R1	VX1-1
	5	ACH550-VDR-08A8-4	8.8	R1	VX1-1
	7.5	ACH550-VDR-012A-4	11.9	R1	VX1-1
	10	ACH550-VDR-015A-4	15.4	R2	VX1-2
	15	ACH550-VDR-023A-4	23	R2	VX1-2
	20	ACH550-VDR-031A-4	31	R3	VX1-3
	25	ACH550-VDR-038A-4	38	R3	VX1-3
	30	ACH550-VDR-045A-4	44	R3	VX1-3
	40	ACH550-VDR-059A-4	59	R4	VX1-4
	50	ACH550-VDR-072A-4	72	R4	VX1-4
	60	ACH550-VDR-078A-4	77	R4	VX1-4

Vertical Bypass with Circuit Breaker	1	ACH550-VCR-03A3-4	3.3	R1	VX1-1
	1.5	ACH550-VCR-03A3-4	3.3	R1	VX1-1
	2	ACH550-VCR-04A1-4	4.1	R1	VX1-1
	3	ACH550-VCR-06A9-4	6.9	R1	VX1-1
	5	ACH550-VCR-08A8-4	8.8	R1	VX1-1
	7.5	ACH550-VCR-012A-4	11.9	R1	VX1-1
	10	ACH550-VCR-015A-4	15.4	R2	VX1-2
	15	ACH550-VCR-023A-4	23	R2	VX1-2
	20	ACH550-VCR-031A-4	31	R3	VX1-3
	25	ACH550-VCR-038A-4	38	R3	VX1-3
	30	ACH550-VCR-045A-4	44	R3	VX1-3
	40	ACH550-VCR-059A-4	59	R4	VX1-4
	50	ACH550-VCR-072A-4	72	R4	VX1-4
	60	ACH550-VCR-078A-4	77	R4	VX1-4

480V Ratings for E-Clipse Bypass

3-phase supply voltage 380, 400, 415, 440, 460 or 480V - Power ratings are valid at nominal voltage, 460V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 43	Dim. Ref. Page 44	Dim. Ref. Page 45
E-Clipse Bypass with Non-Fused Disconnect Switch	1	ACH550-BDR-03A3-4	3.3	R1	BX1-1	BX12-1	BX3R-1
	1.5	ACH550-BDR-03A3-4	3.3	R1	BX1-1	BX12-1	BX3R-1
	2	ACH550-BDR-04A1-4	4.1	R1	BX1-1	BX12-1	BX3R-1
	3	ACH550-BDR-06A9-4	6.9	R1	BX1-1	BX12-1	BX3R-1
	5	ACH550-BDR-08A8-4	8.8	R1	BX1-1	BX12-1	BX3R-1
	7.5	ACH550-BDR-012A-4	11.9	R1	BX1-1	BX12-1	BX3R-1
	10	ACH550-BDR-015A-4	15.4	R2	BX1-2	BX12-2	BX3R-2
	15	ACH550-BDR-023A-4	23	R2	BX1-2	BX12-2	BX3R-2
	20	ACH550-BDR-031A-4	31	R3	BX1-3	BX12-3	BX3R-3
	25	ACH550-BDR-038A-4	38	R3	BX1-3	BX12-3	BX3R-3
	30	ACH550-BDR-045A-4	44	R3	BX1-3	BX12-3	BX3R-3
	40	ACH550-BDR-059A-4	59	R4	BX1-4	BX12-4	BX3R-4
	50	ACH550-BDR-072A-4	72	R4	BX1-4	BX12-4	BX3R-4
	60	ACH550-BDR-078A-4	77	R4	BX1-4	BX12-4	BX3R-4
	75	ACH550-BDR-097A-4	96	R4	BX1-5	BX12-5	BX3R-5*
	100	ACH550-BDR-125A-4	124	R5	BX1-5	BX12-5	BX3R-6
	125	ACH550-BDR-157A-4	157	R6	BX1-6	BX12-6	BX3R-6
	150	ACH550-BDR-180A-4	180	R6	BX1-6	BX12-6	BX3R-6
	200	ACH550-BDR-246A-4	245	R6	BX1-6	BX12-6	BX3R-7
	250	ACH550-BDR-316A-4	316	R8	BX1-8	BX12-8	Consult Factory
	300	ACH550-BDR-368A-4	368	R8	BX1-8	BX12-8	
	350	ACH550-BDR-414A-4	414	R8	BX1-8	BX12-8	
	400	ACH550-BDR-486A-4	486	R8	BX1-8	BX12-8	

E-Clipse Bypass with Circuit Breaker	1	ACH550-BCR-03A3-4	3.3	R1	BX1-1	BX12-1	BX3R-1
	1.5	ACH550-BCR-03A3-4	3.3	R1	BX1-1	BX12-1	BX3R-1
	2	ACH550-BCR-04A1-4	4.1	R1	BX1-1	BX12-1	BX3R-1
	3	ACH550-BCR-06A9-4	6.9	R1	BX1-1	BX12-1	BX3R-1
	5	ACH550-BCR-08A8-4	8.8	R1	BX1-1	BX12-1	BX3R-1
	7.5	ACH550-BCR-012A-4	11.9	R1	BX1-1	BX12-1	BX3R-1
	10	ACH550-BCR-015A-4	15.4	R2	BX1-2	BX12-2	BX3R-2
	15	ACH550-BCR-023A-4	23	R2	BX1-2	BX12-2	BX3R-2
	20	ACH550-BCR-031A-4	31	R3	BX1-3	BX12-3	BX3R-3
	25	ACH550-BCR-038A-4	38	R3	BX1-3	BX12-3	BX3R-3
	30	ACH550-BCR-045A-4	44	R3	BX1-3	BX12-3	BX3R-3
	40	ACH550-BCR-059A-4	59	R4	BX1-4	BX12-4	BX3R-4
	50	ACH550-BCR-072A-4	72	R4	BX1-4	BX12-4	BX3R-4
	60	ACH550-BCR-078A-4	77	R4	BX1-4	BX12-4	BX3R-4
	75	ACH550-BCR-097A-4	96	R4	BX1-5	BX12-5	BX3R-5*
	100	ACH550-BCR-125A-4	124	R5	BX1-5	BX12-5	BX3R-6
	125	ACH550-BCR-157A-4	157	R6	BX1-6	BX12-6	BX3R-6
	150	ACH550-BCR-180A-4	180	R6	BX1-6	BX12-6	BX3R-6
	200	ACH550-BCR-246A-4	245	R6	BX1-6	BX12-6	BX3R-7
	250	ACH550-BCR-316A-4	316	R8	BX1-8	BX12-8	Consult Factory
	300	ACH550-BCR-368A-4	368	R8	BX1-8	BX12-8	
	350	ACH550-BCR-414A-4	414	R8	BX1-8	BX12-8	
	400	ACH550-BCR-486A-4	486	R8	BX1-8	BX12-8	

* Dimension references change from BX3R-5 to BX3R-6 with the addition of the AC Line Reactor (+E213) option.

480V Ratings for Classic Bypass

3-phase supply voltage 380, 400, 415, 440, 460 or 480V - Power ratings are valid at nominal voltage, 460V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 46	Dim. Ref. Page 47	Dim. Ref. Page 48
Classic Bypass with Non-Fused Disconnect Switch	1	ACH550-CD-03A3-4	3.3	R1	CX1-1	CX12-1	CX3R-1
	1.5	ACH550-CD-03A3-4	3.3	R1	CX1-1	CX12-1	CX3R-1
	2	ACH550-CD-04A1-4	4.1	R1	CX1-1	CX12-1	CX3R-1
	3	ACH550-CD-06A9-4	6.9	R1	CX1-1	CX12-1	CX3R-1
	5	ACH550-CD-08A8-4	8.8	R1	CX1-1	CX12-1	CX3R-1
	7.5	ACH550-CD-012A-4	12	R1	CX1-1	CX12-1	CX3R-1
	10	ACH550-CD-015A-4	15	R2	CX1-2	CX12-2 *	CX3R-2
	15	ACH550-CD-023A-4	23	R2	CX1-2	CX12-2 *	CX3R-2
	20	ACH550-CD-031A-4	31	R3	CX1-4	CX12-4	CX3R-3
	25	ACH550-CD-038A-4	38	R3	CX1-4	CX12-4	CX3R-3
	30	ACH550-CD-045A-4	44	R3	CX1-4	CX12-5	CX3R-3
	40	ACH550-CD-059A-4	59	R4	CX1-5	CX12-6	CX3R-4
	50	ACH550-CD-072A-4	72	R4	CX1-5	CX12-6	CX3R-4
	60	ACH550-CD-078A-4	77	R4	CX1-5	CX12-6	CX3R-4
	75	ACH550-CD-097A-4	96	R4	CX1-6	CX12-7	CX3R-5
	100	ACH550-CD-125A-4	124	R5	CX1-7	CX12-8	CX3R-6
	125	ACH550-CD-157A-4	157	R6	CX1-10	CX12-9	CX3R-7
	150	ACH550-CD-180A-4	180	R6	CX1-10	CX12-9	CX3R-7
	200	ACH550-CD-246A-4	245	R6	CX1-11	CX12-10	CX3R-8
	250	ACH550-CD-316A-4	316	R8	CX1-12	CX12-11	Contact Factory
	300	ACH550-CD-368A-4	368	R8	CX1-13	CX12-12	
	350	ACH550-CD-414A-4	414	R8	CX1-13	CX12-12	
	400	ACH550-CD-486A-4	486	R8	CX1-13	CX12-12	

Classic Bypass with Circuit Breaker	1	ACH550-CC-03A3-4	3.3	R1	CX1-1	CX12-1	CX3R-1
	1.5	ACH550-CC-03A3-4	3.3	R1	CX1-1	CX12-1	CX3R-1
	2	ACH550-CC-04A1-4	4.1	R1	CX1-1	CX12-1	CX3R-1
	3	ACH550-CC-06A9-4	6.9	R1	CX1-1	CX12-1	CX3R-1
	5	ACH550-CC-08A8-4	8.8	R1	CX1-1	CX12-1	CX3R-1
	7.5	ACH550-CC-012A-4	12	R1	CX1-1	CX12-1	CX3R-1
	10	ACH550-CC-015A-4	15	R2	CX1-2	CX12-2*	CX3R-2
	15	ACH550-CC-023A-4	23	R2	CX1-2	CX12-2*	CX3R-2
	20	ACH550-CC-031A-4	31	R3	CX1-4	CX12-4	CX3R-3
	25	ACH550-CC-038A-4	38	R3	CX1-4	CX12-4	CX3R-3
	30	ACH550-CC-045A-4	44	R3	CX1-4	CX12-5	CX3R-3
	40	ACH550-CC-059A-4	59	R4	CX1-5	CX12-6	CX3R-4
	50	ACH550-CC-072A-4	72	R4	CX1-5	CX12-6	CX3R-4
	60	ACH550-CC-078A-4	77	R4	CX1-5	CX12-6	CX3R-4
	75	ACH550-CC-097A-4	96	R4	CX1-6	CX12-7	CX3R-5
	100	ACH550-CC-125A-4	124	R5	CX1-7	CX12-8	CX3R-6
	125	ACH550-CC-157A-4	157	R6	CX1-10	CX12-9	CX3R-7
	150	ACH550-CC-180A-4	180	R6	CX1-10	CX12-9	CX3R-7
	200	ACH550-CC-246A-4	245	R6	CX1-11	CX12-10	CX3R-8
	250	ACH550-CC-316A-4	316	R8	CX1-12	CX12-11	Contact Factory
	300	ACH550-CC-368A-4	368	R8	CX1-13	CX12-12	
	350	ACH550-CC-414A-4	414	R8	CX1-13	CX12-12	
	400	ACH550-CC-486A-4	486	R8	CX1-13	CX12-12	

* Dimension references change from CX12-2 to CX12-3 with the addition of the AC Line Reactor (+E213) option.

480V Ratings for Drive with Input Disconnect

3-phase supply voltage 380, 400, 415, 440, 460 or 480V - Power ratings are valid at nominal voltage, 460V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 49	Dim. Ref. Page 50	Dim. Ref. Page 51
Drive with Disconnect Switch and Fuses	1	ACH550-PDR-03A3-4	3.3	R1	PX1-1	PX12-1	PX3R-1
	1.5	ACH550-PDR-03A3-4	3.3	R1	PX1-1	PX12-1	PX3R-1
	2	ACH550-PDR-04A1-4	4.1	R1	PX1-1	PX12-1	PX3R-1
	3	ACH550-PDR-06A9-4	6.9	R1	PX1-1	PX12-1	PX3R-1
	5	ACH550-PDR-08A8-4	8.8	R1	PX1-1	PX12-1	PX3R-1
	7.5	ACH550-PDR-012A-4	11.9	R1	PX1-1	PX12-1	PX3R-1
	10	ACH550-PDR-015A-4	15.4	R2	PX1-2	PX12-2	PX3R-2
	15	ACH550-PDR-023A-4	23	R2	PX1-2	PX12-2	PX3R-2
	20	ACH550-PDR-031A-4	31	R3	PX1-3	PX12-3	PX3R-3
	25	ACH550-PDR-038A-4	38	R3	PX1-3	PX12-3	PX3R-3
	30	ACH550-PDR-045A-4	44	R3	PX1-3	PX12-3	PX3R-3
	40	ACH550-PDR-059A-4	59	R4	PX1-4	PX12-4	PX3R-4
	50	ACH550-PDR-072A-4	72	R4	PX1-4	PX12-4	PX3R-4
	60	ACH550-PDR-078A-4	77	R4	PX1-4	PX12-4	PX3R-4
	75	ACH550-PDR-097A-4	96	R4	PX1-5	PX12-5	PX3R-5
	100	ACH550-PDR-125A-4	124	R5	PX1-5	PX12-5	PX3R-6
	125	ACH550-PDR-157A-4	157	R6	PX1-6	PX12-6	PX3R-6
	150	ACH550-PDR-180A-4	180	R6	PX1-6	PX12-6	PX3R-6
	200	ACH550-PDR-246A-4	245	R6	PX1-6	PX12-6	PX3R-6
	250	ACH550-PDR-316A-4	316	R8	PX1-8	PX12-8	Contact Factory
	300	ACH550-PDR-368A-4	368	R8	PX1-8	PX12-8	
	350	ACH550-PDR-414A-4	414	R8	PX1-8	PX12-8	
	400	ACH550-PDR-486A-4	486	R8	PX1-8	PX12-8	
	450	ACH550-PDR-526A-4	526	R8	PX1-8	PX12-8	
	500	ACH550-PDR-602A-4	602	R8	PX1-8	PX12-8	
	550	ACH550-PDR-645A-4	645	R8	PX1-8	PX12-8	

Drive with Circuit Breakerr	1	ACH550-PCR-03A3-4	3.3	R1	PX1-1	PX12-1	PX3R-1
	1.5	ACH550-PCR-03A3-4	3.3	R1	PX1-1	PX12-1	PX3R-1
	2	ACH550-PCR-04A1-4	4.1	R1	PX1-1	PX12-1	PX3R-1
	3	ACH550-PCR-06A9-4	6.9	R1	PX1-1	PX12-1	PX3R-1
	5	ACH550-PCR-08A8-4	8.8	R1	PX1-1	PX12-1	PX3R-1
	7.5	ACH550-PCR-012A-4	11.9	R1	PX1-1	PX12-1	PX3R-1
	10	ACH550-PCR-015A-4	15.4	R2	PX1-2	PX12-2	PX3R-2
	15	ACH550-PCR-023A-4	23	R2	PX1-2	PX12-2	PX3R-2
	20	ACH550-PCR-031A-4	31	R3	PX1-3	PX12-3	PX3R-3
	25	ACH550-PCR-038A-4	38	R3	PX1-3	PX12-3	PX3R-3
	30	ACH550-PCR-045A-4	44	R3	PX1-3	PX12-3	PX3R-3
	40	ACH550-PCR-059A-4	59	R4	PX1-4	PX12-4	PX3R-4
	50	ACH550-PCR-072A-4	72	R4	PX1-4	PX12-4	PX3R-4
	60	ACH550-PCR-078A-4	77	R4	PX1-4	PX12-4	PX3R-4
	75	ACH550-PCR-097A-4	96	R4	PX1-5	PX12-5	PX3R-5
	100	ACH550-PCR-125A-4	124	R5	PX1-5	PX12-5	PX3R-6
	125	ACH550-PCR-157A-4	157	R6	PX1-6	PX12-6	PX3R-6
	150	ACH550-PCR-180A-4	180	R6	PX1-6	PX12-6	PX3R-6
	200	ACH550-PCR-246A-4	245	R6	PX1-6	PX12-6	PX3R-6
	250	ACH550-PCR-316A-4	316	R8	PX1-8	PX12-8	Contact Factory
	300	ACH550-PCR-368A-4	368	R8	PX1-8	PX12-8	
	350	ACH550-PCR-414A-4	414	R8	PX1-8	PX12-8	
	400	ACH550-PCR-486A-4	486	R8	PX1-8	PX12-8	
	450	ACH550-PCR-526A-4	526	R8	PX1-8	PX12-8	
	500	ACH550-PCR-602A-4	602	R8	PX1-8	PX12-8	
	550	ACH550-PCR-645A-4	645	R8	PX1-8	PX12-8	

600V Ratings for Base Drive

3-phase supply voltage 500, 575 or 600V - Power ratings are valid at nominal voltage, 600V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 40	Dim. Ref. Page 41
Base Drive[7]	2	ACH550-UH-02A7-6	2.7	R2	UH1-2	UH12-2
	3	ACH550-UH-03A9-6	3.9	R2	UH1-2	UH12-2
	5	ACH550-UH-06A1-6	6.1	R2	UH1-2	UH12-2
	7.5	ACH550-UH-09A0-6	9	R2	UH1-2	UH12-2
	10	ACH550-UH-011A-6	11	R2	UH1-2	UH12-2
	15	ACH550-UH-017A-6	17	R2	UH1-2	UH12-2
	20	ACH550-UH-022A-6	22	R3	UH1-3	UH12-3
	25	ACH550-UH-027A-6	27	R3	UH1-3	UH12-3
	30	ACH550-UH-032A-6	32	R4	UH1-4	UH12-4
	40	ACH550-UH-041A-6	41	R4	UH1-4	UH12-4
	50	ACH550-UH-052A-6	52	R4	UH1-4	UH12-4
	60	ACH550-UH-062A-6	62	R4	UH1-4	UH12-4
	75	ACH550-UH-077A-6	77	R6	UH1-6	UH12-6
	100	ACH550-UH-099A-6	99	R6	UH1-6	UH12-6
	125	ACH550-UH-125A-6	125	R6	UH1-6	UH12-6
	150	ACH550-UH-144A-6	144	R6	UH1-6	UH12-6

NOTES

1 The rated current of the ACH550 must be greater than or equal to the rated motor current to achieve the rated motor power given in the table.

2 Horsepower is based on NEMA motor ratings for most 4-pole motors (1800 rpm). Check motor nameplate current for compatibility.

3 Continuous base current with 110% overload for 1 minute / 10 minutes.
130% continuous base current available for 2 seconds / 1 minute.
Current ratings do not change with different supply voltages.

7 All -UH models -02A7-6 through -144A-6 come with a conduit box as standard.

600V Ratings for Vertical E-Clipse Bypass

3-phase supply voltage 500, 575 or 600V - Power ratings are valid at nominal voltage, 600V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 42
Vertical Bypass with Non-Fused Disconnect Switch	2	ACH550-VDR-02A7-6	2.7	R2	VX1-2
	3	ACH550-VDR-03A9-6	3.9	R2	VX1-2
	5	ACH550-VDR-06A1-6	6.4	R2	VX1-2
	7.5	ACH550-VDR-09A0-6	9	R2	VX1-2
	10	ACH550-VDR-011A-6	11	R2	VX1-2
	15	ACH550-VDR-017A-6	17	R2	VX1-2
	20	ACH550-VDR-022A-6	22	R3	VX1-3
	25	ACH550-VDR-027A-6	27	R3	VX1-3
	30	ACH550-VDR-032A-6	32	R4	VX1-4
	40	ACH550-VDR-041A-6	41	R4	VX1-4
	50	ACH550-VDR-052A-6	52	R4	VX1-4
	60	ACH550-VDR-062A-6	62	R4	VX1-4
Vertical Bypass with Circuit Breaker	2	ACH550-VCR-02A7-6	2.7	R2	VX1-2
	3	ACH550-VCR-03A9-6	3.9	R2	VX1-2
	5	ACH550-VCR-06A1-6	6.1	R2	VX1-2
	7.5	ACH550-VCR-09A0-6	9	R2	VX1-2
	10	ACH550-VCR-011A-6	11	R2	VX1-2
	15	ACH550-VCR-017A-6	17	R2	VX1-2
	20	ACH550-VCR-022A-6	22	R3	VX1-3
	25	ACH550-VCR-027A-6	27	R3	VX1-3
	30	ACH550-VCR-032A-6	32	R4	VX1-4
	40	ACH550-VCR-041A-6	41	R4	VX1-4
	50	ACH550-VCR-052A-6	52	R4	VX1-4
	60	ACH550-VCR-062A-6	62	R4	VX1-4

600V Ratings for E-Clipse Bypass

3-phase supply voltage 500, 575 or 600V - Power ratings are valid at nominal voltage, 600V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 43	Dim. Ref. Page 44	Dim. Ref. Page 45
E-Clipse Bypass with Non-Fused Disconnect Switch	2	ACH550-BDR-02A7-6	2.7	R2	BX1-2	BX12-2	BX3R-2
	3	ACH550-BDR-03A9-6	3.9	R2	BX1-2	BX12-2	BX3R-2
	5	ACH550-BDR-06A1-6	6.1	R2	BX1-2	BX12-2	BX3R-2
	7.5	ACH550-BDR-09A0-6	9	R2	BX1-2	BX12-2	BX3R-2
	10	ACH550-BDR-011A-6	11	R2	BX1-2	BX12-2	BX3R-2
	15	ACH550-BDR-017A-6	17	R2	BX1-2	BX12-2	BX3R-2
	20	ACH550-BDR-022A-6	22	R3	BX1-3	BX12-3	BX3R-3
	25	ACH550-BDR-027A-6	27	R3	BX1-3	BX12-3	BX3R-3
	30	ACH550-BDR-032A-6	32	R4	BX1-4	BX12-4	BX3R-4
	40	ACH550-BDR-041A-6	41	R4	BX1-4	BX12-4	BX3R-4
	50	ACH550-BDR-052A-6	51	R4	BX1-4	BX12-4	BX3R-4
	60	ACH550-BDR-062A-6	61	R4	BX1-4	BX12-4	BX3R-4
	75	ACH550-BDR-077A-6	77	R6	BX1-6	BX12-6	BX3R-6
	100	ACH550-BDR-099A-6	99	R6	BX1-6	BX12-6	BX3R-6
	125	ACH550-BDR-125A-6	125	R6	BX1-6	BX12-6	BX3R-6
	150	ACH550-BDR-144A-6	144	R6	BX1-6	BX12-6	BX3R-6

E-Clipse Bypass with Circuit Breaker	2	ACH550-BCR-02A7-6	2.7	R2	BX1-2	BX12-2	BX3R-2
	3	ACH550-BCR-03A9-6	3.9	R2	BX1-2	BX12-2	BX3R-2
	5	ACH550-BCR-06A1-6	6.1	R2	BX1-2	BX12-2	BX3R-2
	7.5	ACH550-BCR-09A0-6	9	R2	BX1-2	BX12-2	BX3R-2
	10	ACH550-BCR-011A-6	11	R2	BX1-2	BX12-2	BX3R-2
	15	ACH550-BCR-017A-6	17	R2	BX1-2	BX12-2	BX3R-2
	20	ACH550-BCR-022A-6	22	R3	BX1-3	BX12-3	BX3R-3
	25	ACH550-BCR-027A-6	27	R3	BX1-3	BX12-3	BX3R-3
	30	ACH550-BCR-032A-6	32	R4	BX1-4	BX12-4	BX3R-4
	40	ACH550-BCR-041A-6	41	R4	BX1-4	BX12-4	BX3R-4
	50	ACH550-BCR-052A-6	51	R4	BX1-4	BX12-4	BX3R-4
	60	ACH550-BCR-062A-6	61	R4	BX1-4	BX12-4	BX3R-4
	75	ACH550-BCR-077A-6	77	R6	BX1-6	BX12-6	BX3R-6
	100	ACH550-BCR-099A-6	99	R6	BX1-6	BX12-6	BX3R-6
	125	ACH550-BCR-125A-6	125	R6	BX1-6	BX12-6	BX3R-6
	150	ACH550-BCR-144A-6	144	R6	BX1-6	BX12-6	BX3R-6

600V Ratings for Classic Bypass

3-phase supply voltage 500, 575 or 600V - Power ratings are valid at nominal voltage, 600V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 46	Dim. Ref. Page 47	Dim. Ref. Page 48
Classic Bypass with Non-Fused Disconnect Switch	2	ACH550-CD-02A7-6	2.7	R2	CX1-2	CX12-2*	CX3R-2
	3	ACH550-CD-03A9-6	3.9	R2	CX1-2	CX12-2*	CX3R-2
	5	ACH550-CD-06A1-6	6.1	R2	CX1-2	CX12-2*	CX3R-2
	7.5	ACH550-CD-09A0-6	9	R2	CX1-2	CX12-2*	CX3R-2
	10	ACH550-CD-011A-6	11	R2	CX1-2	CX12-2*	CX3R-2
	15	ACH550-CD-017A-6	17	R2	CX1-2	CX12-2*	CX3R-2
	20	ACH550-CD-022A-6	22	R3	CX1-4	CX12-4	CX3R-3
	25	ACH550-CD-027A-6	27	R3	CX1-4	CX12-4	CX3R-3
	30	ACH550-CD-032A-6	32	R4	CX1-5	CX12-6	CX3R-4
	40	ACH550-CD-041A-6	41	R4	CX1-5	CX12-6	CX3R-4
	50	ACH550-CD-052A-6	52	R4	CX1-5	CX12-6	CX3R-4
	60	ACH550-CD-062A-6	62	R4	CX1-5	CX12-6	CX3R-4
	75	ACH550-CD-077A-6	77	R6	CX1-8	CX12-9	CX3R-7
	100	ACH550-CD-099A-6	99	R6	CX1-8	CX12-9	CX3R-7
	125	ACH550-CD-125A-6	125	R6	CX1-10	CX12-9	CX3R-7
	150	ACH550-CD-144A-6	144	R6	CX1-10	CX12-9	CX3R-7
Classic Bypass with Circuit Breaker	2	ACH550-CC-02A7-6	2.7	R2	CX1-2	CX12-2*	CX3R-2
	3	ACH550-CC-03A9-6	3.9	R2	CX1-2	CX12-2*	CX3R-2
	5	ACH550-CC-06A1-6	6.1	R2	CX1-2	CX12-2*	CX3R-2
	7.5	ACH550-CC-09A0-6	9	R2	CX1-2	CX12-2*	CX3R-2
	10	ACH550-CC-011A-6	11	R2	CX1-2	CX12-2*	CX3R-2
	15	ACH550-CC-017A-6	17	R2	CX1-2	CX12-2*	CX3R-2
	20	ACH550-CC-022A-6	22	R3	CX1-4	CX12-4	CX3R-3
	25	ACH550-CC-027A-6	27	R3	CX1-4	CX12-4	CX3R-3
	30	ACH550-CC-032A-6	32	R4	CX1-5	CX12-6	CX3R-4
	40	ACH550-CC-041A-6	41	R4	CX1-5	CX12-6	CX3R-4
	50	ACH550-CC-052A-6	52	R4	CX1-5	CX12-6	CX3R-4
	60	ACH550-CC-062A-6	62	R4	CX1-5	CX12-6	CX3R-4
	75	ACH550-CC-077A-6	77	R6	CX1-8	CX12-9	CX3R-7
	100	ACH550-CC-099A-6	99	R6	CX1-8	CX12-9	CX3R-7
	125	ACH550-CC-125A-6	125	R6	CX1-10	CX12-9	CX3R-7
	150	ACH550-CC-144A-6	144	R6	CX1-10	CX12-9	CX3R-7

* Dimension references change from CX12-2 to CX12-3 with the addition of the AC Line Reactor (+E213) option

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600V Ratings for Drive with Input Disconnect

3-phase supply voltage 500, 575 or 600V - Power ratings are valid at nominal voltage, 600V[1]

	HP[2]	Material Description	Amps[3]	Base Drive Frame	Dim. Ref. Page 49	Dim. Ref. Page 50	Dim. Ref. Page 51
Drive with Disconnect Switch and Fuses	2	ACH550-PDR-02A7-6	2.7	R2	PX1-2	PX12-2	PX3R-2
	3	ACH550-PDR-03A9-6	3.9	R2	PX1-2	PX12-2	PX3R-2
	5	ACH550-PDR-06A1-6	6.1	R2	PX1-2	PX12-2	PX3R-2
	7.5	ACH550-PDR-09A0-6	9	R2	PX1-2	PX12-2	PX3R-2
	10	ACH550-PDR-011A-6	11	R2	PX1-2	PX12-2	PX3R-2
	15	ACH550-PDR-017A-6	17	R2	PX1-2	PX12-2	PX3R-2
	20	ACH550-PDR-022A-6	22	R3	PX1-3	PX12-3	PX3R-3
	25	ACH550-PDR-027A-6	27	R3	PX1-3	PX12-3	PX3R-3
	30	ACH550-PDR-032A-6	32	R4	PX1-4	PX12-4	PX3R-4
	40	ACH550-PDR-041A-6	41	R4	PX1-4	PX12-4	PX3R-4
	50	ACH550-PDR-052A-6	52	R4	PX1-4	PX12-4	PX3R-4
	60	ACH550-PDR-062A-6	62	R4	PX1-4	PX12-4	PX3R-4
	75	ACH550-PDR-077A-6	77	R6	PX1-6	PX12-6	PX3R-6
	100	ACH550-PDR-099A-6	99	R6	PX1-6	PX12-6	PX3R-6
	125	ACH550-PDR-125A-6	125	R6	PX1-6	PX12-6	PX3R-6
	150	ACH550-PDR-144A-6	144	R6	PX1-6	PX12-6	PX3R-6

Drive with Circuit Breaker	2	ACH550-PCR-02A7-6	2.7	R2	PX1-2	PX12-2	PX3R-2
	3	ACH550-PCR-03A9-6	3.9	R2	PX1-2	PX12-2	PX3R-2
	5	ACH550-PCR-06A1-6	6.1	R2	PX1-2	PX12-2	PX3R-2
	7.5	ACH550-PCR-09A0-6	9	R2	PX1-2	PX12-2	PX3R-2
	10	ACH550-PCR-011A-6	11	R2	PX1-2	PX12-2	PX3R-2
	15	ACH550-PCR-017A-6	17	R2	PX1-2	PX12-2	PX3R-2
	20	ACH550-PCR-022A-6	22	R3	PX1-3	PX12-3	PX3R-3
	25	ACH550-PCR-027A-6	27	R3	PX1-3	PX12-3	PX3R-3
	30	ACH550-PCR-032A-6	32	R4	PX1-4	PX12-4	PX3R-4
	40	ACH550-PCR-041A-6	41	R4	PX1-4	PX12-4	PX3R-4
	50	ACH550-PCR-052A-6	52	R4	PX1-4	PX12-4	PX3R-4
	60	ACH550-PCR-062A-6	62	R4	PX1-4	PX12-4	PX3R-4
	75	ACH550-PCR-077A-6	77	R6	PX1-6	PX12-6	PX3R-6
	100	ACH550-PCR-099A-6	99	R6	PX1-6	PX12-6	PX3R-6
	125	ACH550-PCR-125A-6	125	R6	PX1-6	PX12-6	PX3R-6
	150	ACH550-PCR-144A-6	144	R6	PX1-6	PX12-6	PX3R-6

Options Quick Reference

Description		Field Kit Part No.	Installed Option Code
Input / Output Option Modules			
OREL-01	Relay Output Extension	OREL-01-KIT	+L511
OHDI-01	115/230 V Digital Input Interface	OHDI-01-KIT	+L512
Field Bus Adapters			
"R" type Field Bus Adapters for use with -UH and -PxR configurations			
RDNA-01	DeviceNet Adapter	RDNA-01-KIT	+K451
RCNA-01	ControlNet Adapter	RCNA-01-KIT	+K462
RETA-01	EtherNet Adapter	RETA-01-KIT	+K466
RLON-01	LonWorks Adapter	RLON-01-KIT	+K452
RPBA-01	Profibus DP Adapter	RPBA-01-KIT	+K454
"F" type Field Bus Adapters for use with -VxR and -BxR configurations			
FDNA-01	DeviceNet Adapter	FDNA-01-KIT	+K451
FENA-01	EtherNet Adapter	FENA-01-KIT	+K466
FLON-01	LonWorks Adapter	FLON-01-KIT	+K452
FPBA-01	Profibus DP Adapter	FPBA-01-KIT	+K454
SREA-01-KIT	Ethernet Adapter (Gateway)	SREA-01-KIT	N/A
RBIP-01-KIT	Bacnet Router	RBIP-01-KIT	N/A
Control Panel and Accessories			
ACH-CP-B	HVAC Advanced Control Panel	ACH-CP-B	N/A
OCAT-01	7 foot CAT 5 Panel Extension Cable	OCAT-01	N/A
ACS/H-CP-EXT	Control Panel Mounting Kit	ACS/H-CP-EXT	N/A
OPMP-01	Cabinet Panel Mounting Kit	OPMP-01	N/A
ACS/H-CP-EXT-IP66	INEMA 4X Cabinet Panel Mounting Kit	ACS/H-CP-EXT-IP66	N/A
Programming and Maintenance Tools			
DriveWindow Light 2.6 (Win98/2000/NT4/XP)		3AFE64532871	N/A
OPCA-01	RJ45 to DB9 Adapter	OPCA-01	N/A
ACH550 DEMO CASE	ACH550 Demo Case	ACH550 DEMO CASE	N/A
E-CLIPSE DEMO CASE	E-Clipse Bypass Demo Case	E-CLIPSE DEMO CASE	N/A
Flange Mounting Kit for NEMA 1 Drives			
FMK-A-R1	Flange Mounting Kit for NEMA 1 ACH550 (R1 Frame)	FMK-A-R1	N/A
FMK-A-R2	Flange Mounting Kit for NEMA 1 ACH550 (R2 Frame)	FMK-A-R2	N/A
FMK-A-R3	Flange Mounting Kit for NEMA 1 ACH550 (R3 Frame)	FMK-A-R3	N/A
FMK-A-R4	Flange Mounting Kit for NEMA 1 ACH550 (R4 Frame)	FMK-A-R4	N/A
AC8-FLNGMT-R5	Flange Mounting Kit for NEMA 1 ACH550 (R5 Frame)	AC8-FLNGMT-R5	N/A
AC8-FLNGMT-R6	Flange Mounting Kit for NEMA 1 ACH550 (R6 Frame)	AC8-FLNGMT-R6	N/A
Flange Mounting Gasket for NEMA 12 Drives			
FMK-B-R1	Flange Mounting Gasket for NEMA 12 ACH550 (R1 Frame)	FMK-B-R1	N/A
FMK-B-R2	Flange Mounting Gasket for NEMA 12 ACH550 (R2 Frame)	FMK-B-R2	N/A
FMK-B-R3	Flange Mounting Gasket for NEMA 12 ACH550 (R3 Frame)	FMK-B-R3	N/A
FMK-B-R4	Flange Mounting Gasket for NEMA 12 ACH550 (R4 Frame)	FMK-B-R4	N/A
Miscellaneous			
	Classic Bypass Damper Control	N/A	+G349

Description		Field Kit Part No.	Catalog Code
Input/Output Options			
Relay Output Extension	The Relay Output Extension module offers three (3) Form C relay outputs numbered RO 4, 5 and 6, rated 2 A maximum current. Switching capacity is 6 A (24 VDRC resistive), 1500 VA (250 VAC), Each relay is galvanically isolated from each other (2.5 kVAC, 1 minute). Each relay is programmable,	OREL-01-KIT	+L511
115/230V Digital Input Interface	The 115/230V Digital Input Interface module offers six (6) 115/230V rated relays mounted on a common board used to drive DI1 through DI6 of the ACH550. The 115/230V must be provided by the user. The module cannot be used in conjunction with any fieldbus module and is not compatible with E-Clipse Bypass Configurations.	OHDI-01-KIT	+L512
Fieldbus Adapters			
DeviceNet	The DeviceNet Adapter is used for connecting the ACH550 to DeviceNet networks. DeviceNet network uses a linear bus topology. Terminating resistors are required on each end of the trunk line. Drop lines as long as 6 meters (20 feet) each are permitted, allowing one or more nodes to be attached. DeviceNet allows branching structures only on drop lines. The drive is considered as a slave in the DeviceNet network. The RDNA-01 option card fits under the cover of the ACH550 in option slot #2. on -UH and -PxR configurations. The FDNA-01 option card fits under the cover of the E-Clipse Bypass on -VxR and -BxR configurations.	RDNA-01-KIT (use with -UH and -PxR configurations)	+K451
		FDNA-01- KIT (use with -VxR & -BxR configurations)	+K451

Description		Field Kit Part No.	Catalog Code
Fieldbus Adapters			
ControlNet Adapter	The ControlNet network uses a RG-6 quad shielded cable or fiber with support for media redundancy. The RCNA-01 Adapter module supports only RG-6 quad shielded cable (coax) for the bus connection. ControlNet is flexible in topology options (bus, tree, star) to meet various application needs. The fieldbus speed is 5 Mbits/s. The RCNA-01 ControlNet Adapter module can not originate connections on its own, but a scanner node can open a connection towards it. The ControlNet protocol is implemented according to the ControlNet international specification for a Communication adapter. The RCNA-01 option card fits under the cover of the ACH550 in option slot #2 on -UH and -PxR configurations. There is no available ControlNet option card for E-Clipse Bypass configurations.	RCNA-01-KIT (ControlNet not available for E-Clipse Bypass configurations)	+K462
Ethernet Adapter	The RETA-01 and FENA-01 Adapter modules supports the Modbus/TCP and EtherNet/IP network protocols. Modbus/TCP is a variant of the Modbus family of simple, vendor-neutral communication protocols intended for supervision and control of automation equipment. The implementation of the Modbus/TCP server in the RETA-01 and FENA-01 modules is done according to the Modbus/TCP Specification 1.0. The Modbus/TCP protocol allows the RETA-01 and FENA-01 modules to be used as an Ethernet bridge to control the drive. The RETA-01 and FENA-01 modules support eight simultaneous IP connections. Ethernet/IP is based on the Common Industrial Protocol (CIP), which is also the framework for both the ControlNet and DeviceNet networks. Ethernet/IP uses standard Ethernet and TCP/IP technology to transport CIP communication packets. The modules fulfills all requirements for certification as an Ethernet/IP device. The RETA-01 option card fits under the cover of the ACH550 in option slot #2 on -UH and -PxR configurations. The FENA-01 option card fits under the cover of the E-Clipse Bypass on -VxR and -BxR configurations.	RETA-01-KIT (use with -UH and -PxR configurations)	+K466
		FENA-01-KIT (use with -VxR & -BxR configurations)	+K466

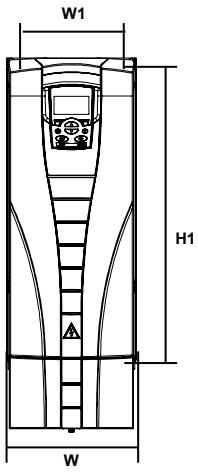
Description		Field Kit Part No.	Catalog Code
Fieldbus Adapters			
LonWorks	This adapter permits the ACH550 to communicate to a LonWorks network protocol. The LonWorks modulea use the FT-X1 Free Topology Transceiver (compatible with FTT-10A transceiver) from Echelon Corporation. This is the most commonly used twisted-pair media in building automation and this architecture supports star, bus, and loop wiring. The FT-X1 transceiver connects to a twisted pair cable with a baud rate of 78 kbit/s and appears as a high impedance to the network when unpowered, hence it does not interfere with the network communications when powered down. The drive object realizes the LONMARK® Functional Profile: 'Variable Speed Motor Drive Version', 1.1. The RLON-01 option card fits under the cover of the ACH550 in option slot #2.	RLON-01-KIT (use with -UH and -PxR configurations)	+K452
		FLON-01- KIT (use with -VxR & -BxR configurations)	+K452
Profibus-DP	The Profibus Adapter is used for connecting the ACH550 to Profibus networks. The Profibus adapters are compatible with the Profibus-FMS and Profibus-DP protocols. ACH550 acts as a slave on the Profibus link. The connection is a screw connector, with a selectable Baud rate of 9.6, 19.2, 93.75, 187, 300 and 1500 Kbps. Contact Applications Engineering for approved PLC connectivity. Profibus is an open serial communication standard that enables data exchange between all kinds of automation components. The physical transmission medium of the bus is a twisted pair cable (according to the RS-485 standard). The maximum length of the bus cable is 100 to 1200 meters, depending on the selected transmission rate. Up to 31 stations can be connected to the same PROFIBUS system without the use of repeaters. The RPBA-01 option card fits under the cover of the ACH550 in option slot #2 on -UH and -PxR configurations. The FPBA-01 option card fits under the cover of the E-Clipse Bypass on -VxR and -BxR configurations.	RPBA-01-KIT (use with -UH and -PxR configurations)	+K454
		FPBA-01-KIT (use with -VxR & -BxR configurations)	+K454
Ethernet Adapter (Gateway)	SREA-01 is an optional device for web browser based remote interface to the ACH550 drives via ethernet. This din rail mounted adapter enables remote data acquisition through a standard web browser, utilizing an internal web server for drive configuration and access. Multiple drives (up to 10) can be connected to the Modbus-RTU network through the drive's Modbus-RTU port. The ACH550 can also be connected through the control panel port, although an additional RS-485 converter is needed for each drive if several drives are connected by their panel port.	SREA-01-KIT	N/A

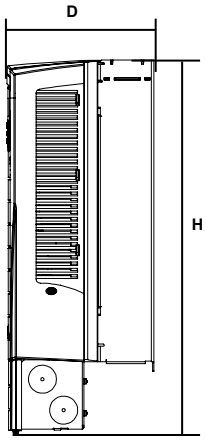
Description		Field Kit Part No.	Catalog Code
Fieldbus Adapters			
BACnet Router	The RBIP-01 BACnet Router is a BACnet/IP to MS/TP router. One (1) RBIP-01 router can connect up to 31 drives to a BACnet MS/TP (EIA-485) network.RBIP-01 supports BBMD (BACnet Broadcast Management Device) functionality. The router mounts inside the drive enclosure. The X1 port provides an Ethernet connection to a BACnet/Ethernet or BACnet/IP network. It can be powered from the drive's internal power supply or from an external power supply (24 V AC or 24 V DC). The routers X3 terminal provides connection to an BACnet MS/TP (EIA-485) network. The router is also equipped with bus termination resistors, network bias resistors and LED's for status indication.	RBIP-01-KIT	N/A
Control Panel and Accessories			
Advanced Control Panel (spare/additional)	The Advanced Control Panel is supplied with the ACH550 drive as standard. To obtain additional control panels, specify this option.	ACH-CP-B	N/A
Panel Extension Cable	7 foot CAT 5 patch cable allows remote operation of the standard panel or connection of the drive to a PC using the RJ45/DB9 Adapter which must be purchased separately.	OCAT-01	N/A
Control Panel Mounting	Control Panel Mounting Kit for ACH550 drives allows remote mounting of the ACH550 keypad on the door of an enclosure. The kit includes a 10 ft (3 m) CAT 5 patch cable, gasket for NEMA 12, mounting hardware and drilling template. With this arrangement the panel is fixed to the mounting surface.	ACS/H-CP-EXT	N/A
Cabinet Panel Mounting Kit	The Control Panel Mounting allows remote mounting of an ACH-CP-B operator Panel on a larger enclosure or remotely. The kit maintains UL Type 12 integrity of the mounting location. Adapters, 3m (10ft) cable and mounting hardware are included in this kit. With this mounting arrangement, the operator panel is removable indentical to a drive-mounted keypad.	OPMP-01	
NEMA 4X Cabinet Panel Mounting Kit	Allows remote mounting of the ACH-CP-B Operator Panels on a larger NEMA 4X (IP66) enclosure or remote panel. The kit maintains NEMA 4X integrity of the mounting location. All necessary hardware and a mounting template are provided in addition to a 3m panel cable. When mounted, the operator is not removable from the front of the enclosure. The operator must be purchased seperately.	ACS/H-CP-EXT-IP66	N/A

Description		Field Kit Part No.	Catalog Code
Programming and Maintenance Tools			
DriveWindow Light	DriveWindow Light is software designed for online drive commissioning and maintenance purposes. It is possible to adjust parameters, read the actual values and control the drive with DriveWindow Light instead of the drive control panel. It is also possible to follow trends and draw graphs. DriveWindow Light requires the use of a RJ45 to DB9 adapter and CAT 5 patch cable, which are provided.	3AFE645-32871	N/A
RJ45/DB9 Adapter	This adapter converts the drive's panel port RJ45 (CAT 5 cable connector) plug to a 9 pin RS-232 computer serial port connector for connecting the ACH550 to a PC when using DriveWindow Light 2.	OPCA-01	N/A
ACH550 Demo Case	Powered by 115VAC, the ACH550 DemoCase includes an ACH550 drive mounted on a panel. Included is a motor and I/O board with switches, pots, meters and LEDs permitting remote operation of the drive and motor.	ACH550 DEMO CASE	N/A
E-Clipse Bypass Demo Case	Powered by 115VAC, the E-Clipse Bypass Demo Case includes an E-Clipse bypass keypad and a control panel with I/O switches, LEDs and serial communication connections permitting operation of the bypass and connected ACH550 drive.	E-CLIPSE BYPASS DEMO CASE	N/A

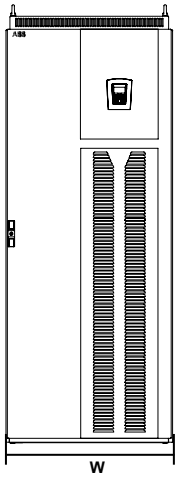
<table>
<tr><th>Description</th><th>Field Kit Part No.</th><th>Catalog Code</th></tr>
<tr><td colspan="3">Flange Mounting Kit for NEMA 1 Drives</td></tr>
<tr><td>Flange Mounting Kits</td><td>Flange Mounting Kit for the ACH550 drives allows mounting the drive with the heatsink external to a 3rd party enclosure. Use of the flange kit requires removal of the drive cover, reducing protection to IP00. The flange kit can be used with 3rd party UL type 1 & 12 (NEMA 1 & 12) enclosures.
<table>
<tr><th>Frame Size</th><th>Field Kit Code</th></tr>
<tr><td>R1 NEMA 1</td><td>FMK-A-R1</td></tr>
<tr><td>R2 NEMA 1</td><td>FMK-A-R2</td></tr>
<tr><td>R3 NEMA 1</td><td>FMK-A-R3</td></tr>
<tr><td>R4 NEMA 1</td><td>FMK-A-R4</td></tr>
<tr><td>R5 NEMA 1</td><td>AC8-FLNGMT-R5</td></tr>
<tr><td>R6 NEMA 1</td><td>AC8-FLNGMT-R6</td></tr>
</table></td><td>See Table</td><td>N/A</td></tr>
<tr><td colspan="3">Flange Mounting Gasket for NEMA 12 Drives</td></tr>
<tr><td>Flange Mounting Gasket</td><td>The flange gasket is for flange mounting NEMA 12 drives.
<table>
<tr><th>Frame Size</th><th>Field Kit Code</th></tr>
<tr><td>R1 NEMA 12</td><td>FMK-B-R1</td></tr>
<tr><td>R2 NEMA 12</td><td>FMK-B-R2</td></tr>
<tr><td>R3 NEMA 12</td><td>FMK-B-R3</td></tr>
<tr><td>R4 NEMA 12</td><td>FMK-B-R4</td></tr>
</table></td><td>See Table</td><td>N/A</td></tr>
<tr><td colspan="3">Miscellaneous</td></tr>
<tr><td>Classic Bypass Damper Control</td><td>Additional components and control wiring to provide damper control function in the Classic Bypass. This function is standard in the E-Clipse Bypass.</td><td>N/A</td><td>+G349</td></tr>
</table>

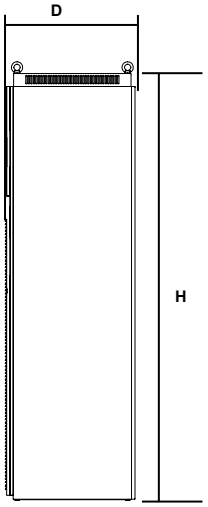
Dimensions: ACH550-UH UL Type 1 / NEMA 1 R1 through R8 Frame Size





Wall Mount (UH1-1 - UH1-6)





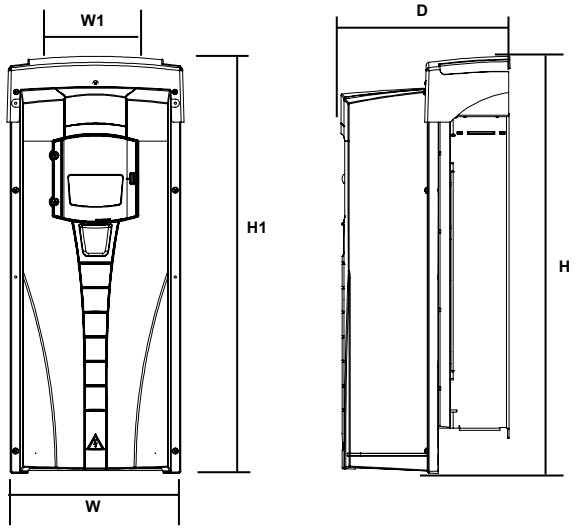
Floor Mount (UH1-8)

Dimension Reference	UL Type 1 / NEMA 1 Mounting Dimensions mm [inches]			UL Type 1 / NEMA 1 Dimensions and Weights mm kg [inches] [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
UH1-1	318 [12.5]	98 [3.9]	M5 [#10]	369 [14.5]	125 [4.9]	212 [8.3]	6.5 [14]	3AUA0000001559 Sheet 1
UH1-2	418 [16.4]	98 [3.9]	M5 [#10]	469 [18.5]	125 [4.9]	222 [8.7]	9 [20]	3AUA0000001560 Sheet 1
UH1-3	473 [18.6]	160 [6.3]	M5 [#10]	583 [23]	203 [8]	231 [9.1]	16 [35]	3AUA0000001571 Sheet 1
UH1-4	578 [22.8]	160 [6.3]	M5 [#10]	689 [27.1]	203 [8]	262 [10.3]	24 [53]	3AUA0000001572 Sheet 1
UH1-5	588 [23.1]	238 [9.4]	M6 [0.25]	736 [29]	267 [10.5]	286 [11.2]	34 [75]	3AUA0000004629 Sheet 1
UH1-6	675 [26.6]	263 [10.3]	M6 [0.25]	881 [34.7]	302 [11.9]	400 [15.7]	69 [152]	3AUA0000004633 Sheet 1
UH1-8	Free Standing		Ø16 [Ø0.63]	2125 [83.7]	806 [31.7]	639 [25.2]	354 [780]	3AUA0000021150 Sheet 1

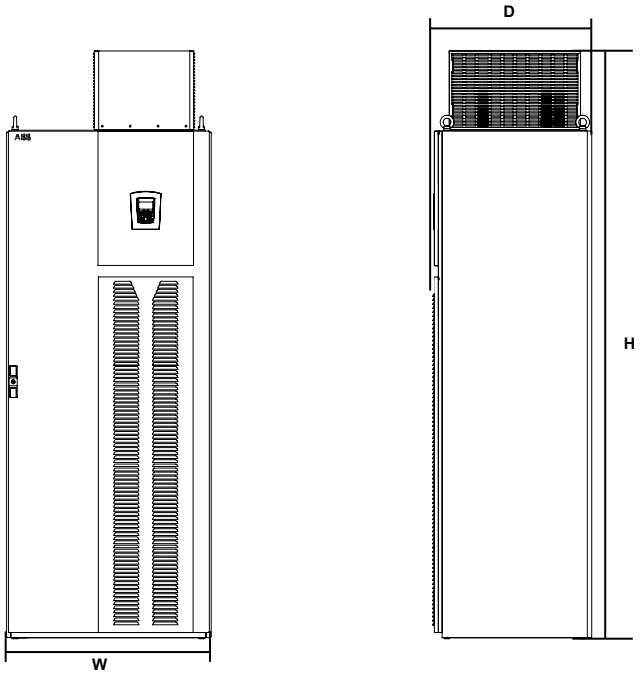
Drawing is not for engineering purposes.

A larger conduit box provided on units with ratings above 200 amps extends the Height (H) dimension an additional 107 mm [4.2 inches].

Dimensions: ACH550-UH UL Type 12 / NEMA 12 R1 through R8 Frame Size



Wall Mount (UH12-1 - UH12-6)

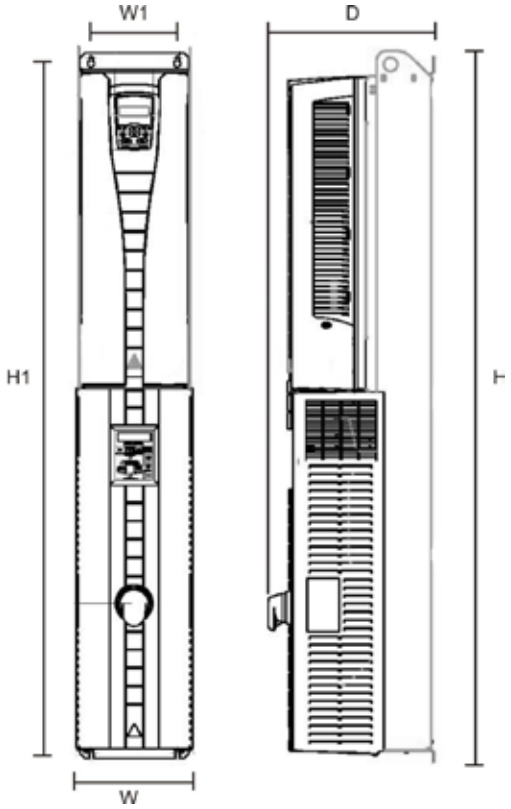


Floor Mount (UH12-8)

Dimension Reference	UL Type 12 / NEMA 12 Mounting Dimensions mm [inches]			UL Type 12 / NEMA 12 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
UH12-1	318 [12.5]	98 [3.9]	M5 [#10]	461 [18.1]	222 [8.7]	234 [9.2]	8.2 [18]	3AUA0000004031 Sheet 1
UH12-2	418 [16.4]	98 [3.9]	M5 [#10]	561 [22.1]	222 [8.7]	245 [9.6]	11.2 [25]	3AUA0000004032 Sheet 1
UH12-3	473 [18.6]	160 [6.3]	M5 [#10]	629 [24.8]	267 [10.5]	253 [10]	18.5 [41]	3AUA0000004029 Sheet 1
UH12-4	578 [22.8]	160 [6.3]	M5 [#10]	760 [29.9]	267 [10.5]	284 [11.2]	26.5 [58]	3AUA0000004043 Sheet 1
UH12-5	588 [23.1]	238 [9.4]	M6 [0.25]	816 [32.1]	369 [14.5]	309 [12.1]	38.5 [85]	3AUA0000004634 Sheet 1
UH12-6	675 [26.6]	263 [10.3]	M6 [0.25]	984 [38.7]	410 [16.1]	423 [16.6]	86 [190]	3AUA0000004635 Sheet 1
UH12-8	Free Standing		Ø16 [Ø0.63]	2377 [93.6]	806 [31.7]	639 [25.2]	375 [827]	3AUA0000021151 Sheet 1

Drawing is not for engineering purposes.

Dimensions: ACH550-Vx UL Type 1 / NEMA 1 R1 through R4 Frame Size

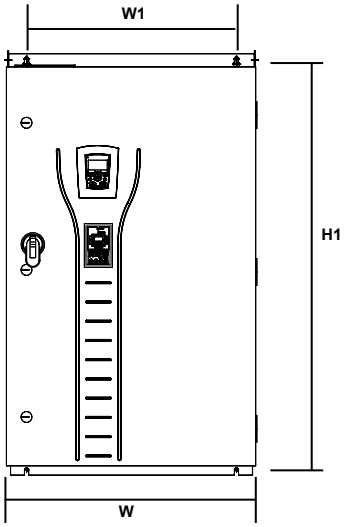


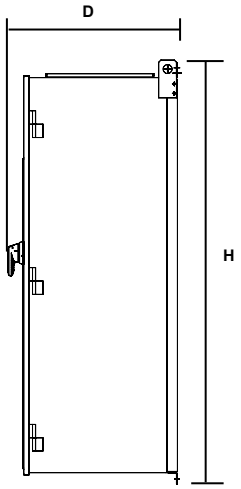
Wall Mount (VX1-1 - VX1-4)

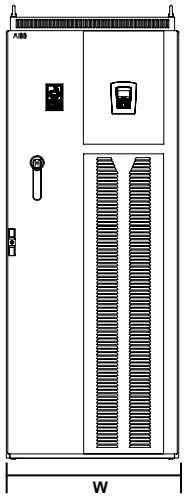
Dimension Reference	UL Type 1 / NEMA 1 MountingDimensions mm [inches]			UL Type 1 / NEMA 1 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
VX1-1	1004 [39.5]	98 [3.9]	M6 [0.25]	1021 [40.2]	136 [5.4]	256 [10.1]	15 [33]	3AUA0000016371 Sheet 1
VX1-2	1103 [43.4]	98 [3.9]	M6 [0.25]	1120 [44.1]	136 [5.4]	262 [10.3]	18 [40]	3AUA0000016372 Sheet 1
VX1-3	1180 [46.5]	160 [6.3]	M6 [0.25]	1211 [47.7]	214 [8.4]	278 [10.9]	32 [71]	3AUA0000016373 Sheet 1
VX1-4	1285 [50.6]	160 [6.3]	M6 [0.25]	1316 [51.8]	214 [8.4]	307 [12.1]	42 [93]	3AUA0000016374 Sheet 1

Drawing is not for engineering purposes.

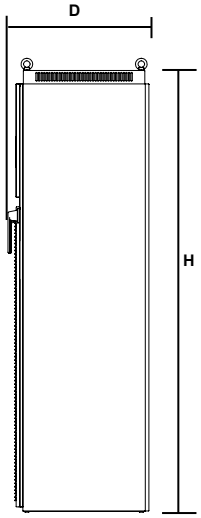
Dimensions: ACH550-BxR UL Type 1 / NEMA 1 R1 through R8 Frame Size







Wall Mount (BX1-1 - BX1-6)

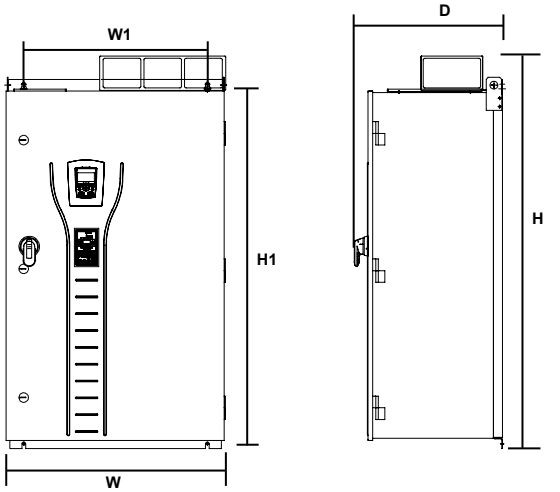


Floor Mount (BX1-8)

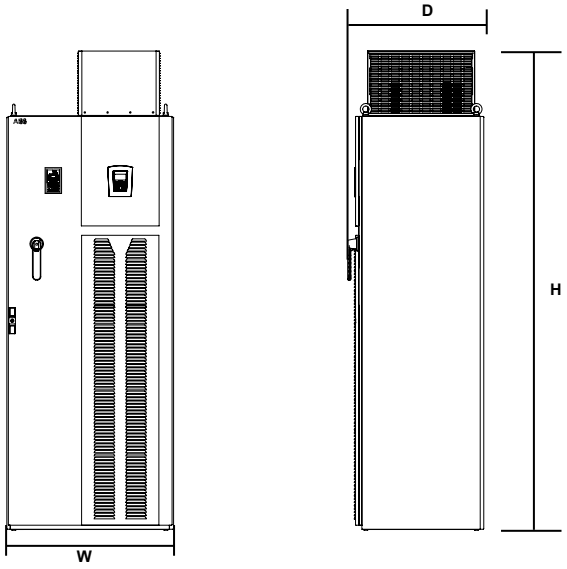
Dimension Reference	UL Type 1 / NEMA 1 Mounting Dimensions mm [inches]			UL Type 1 / NEMA 1 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
BX1-1	810 [31.9]	320 [12.6]	M10 [0.375]	842 [33.2]	443 [17.4]	343 [13.5]	35.4 [78]	3AUA0000016375 Sheet 1
BX1-2	810 [31.9]	320 [12.6]	M10 [0.375]	842 [33.2]	443 [17.4]	343 [13.5]	38.1 [84]	3AUA0000016375 Sheet 1
BX1-3	918 [36.1]	400 [15.7]	M10 [0.375]	950 [37.4]	521 [20.5]	389 [15.3]	54.4 [120]	3AUA0000016378 Sheet 1
BX1-4	918 [36.1]	400 [15.7]	M10 [0.375]	950 [37.4]	521 [20.5]	389 [15.3]	62.6 [138]	3AUA0000016378 Sheet 1
BX1-5	1175 [46.3]	600 [23.6]	M10 [0.375]	1212 [47.7]	713 [28.1]	483 [19]	121 [267]	3AUA0000016381 Sheet 1
BX1-6	1175 [46.3]	600 [23.6]	M10 [0.375]	1212 [47.7]	713 [28.1]	483 [19]	163 [359]	3AUA0000016381 Sheet 1
BX1-8	Free Standing		Ø16 [Ø0.63]	2125 [83.7]	806 [31.7]	659 [25.9]	474 [1045]	3AUA0000016384 Sheet 1

Drawing is not for engineering purposes.

Dimensions: ACH550-BxR UL Type 12 / NEMA 12 R1 through R8 Frame Size



Wall Mount (BX12-1 - BX12-6)

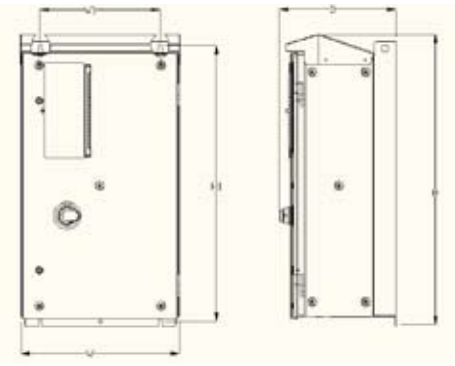


Floor Mount (BX12-8)

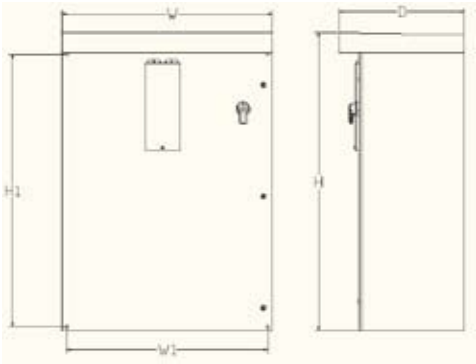
Dimension Reference	UL Type 12 / NEMA 12 Mounting Dimensions mm [inches]			UL Type 12 / NEMA 12 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
BX12-1	810 [31.9]	320 [12.6]	M10 [0.375]	842 [33.2]	443 [17.4]	343 [13.5]	35.4 [78]	3AUA0000016376 Sheet 1
BX12-2	810 [31.9]	320 [12.6]	M10 [0.375]	842 [33.2]	443 [17.4]	343 [13.5]	38.1 [84]	3AUA0000016376 Sheet 1
BX12-3	918 [36.1]	400 [15.7]	M10 [0.375]	950 [37.4]	521 [20.5]	389 [15.3]	54.4 [120]	3AUA0000016379 Sheet 1
BX12-4	918 [36.1]	400 [15.7]	M10 [0.375]	950 [37.4]	521 [20.5]	389 [15.3]	62.6 [138]	3AUA0000016379 Sheet 1
BX12-5	1175 [46.3]	600 [23.6]	M10 [0.375]	1380 [54.3]	713 [28.1]	483 [19]	121 [267]	3AUA0000016382 Sheet 1
BX12-6	1175 [46.3]	600 [23.6]	M10 [0.375]	1380 [54.3]	713 [28.1]	483 [19]	163 [359]	3AUA0000016382 Sheet 1
BX12-8	Free Standing		Ø16 [Ø0.63]	2377 [93.6]	806 [31.7]	659 [25.9]	474 [1045]	3AUA0000016385 Sheet 1

Drawing is not for engineering purposes.

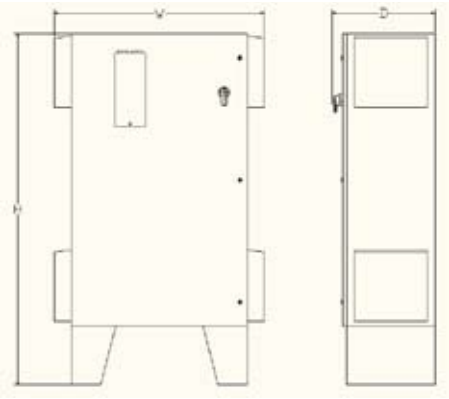
Dimensions: ACH550-BxR UL Type 3R/ NEMA 3R R1 through R8 Frame Size



Wall Mount (BX3R-1 - BX3R-4)



Wall Mount (BX3R-5 - BX3R-6)

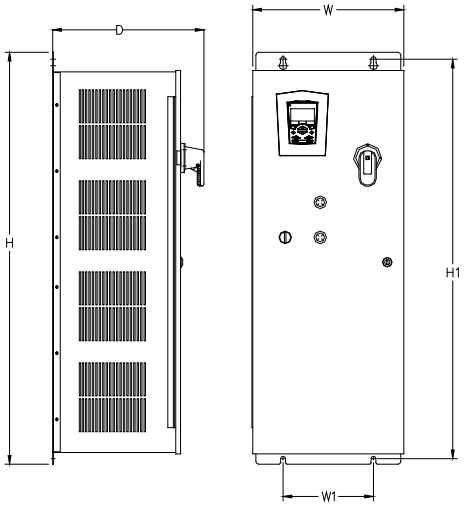


Floor Mount (BX3R-7)

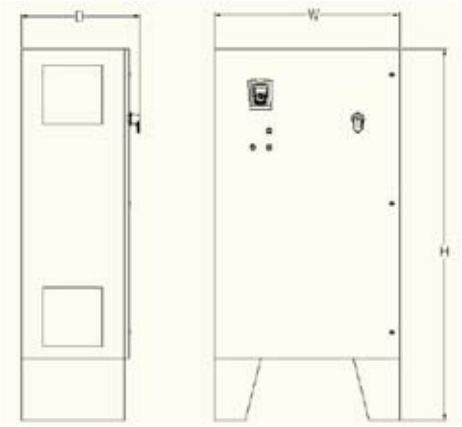
Dimension Reference	UL Type 3R / NEMA 3R Mounting Dimensions mm [inches]			UL Type 3R / NEMA 3R Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
BX3R-1	810 [31.9]	320 [12.6]	M10 [0.375]	865 [34]	452 [17.8]	343 [13.5]	58 [128]	3AUA0000016377 Sheet 1
BX3R-2	810 [31.9]	320 [12.6]	M10 [0.375]	865 [34]	452 [17.8]	343 [13.5]	61 [134]	3AUA0000016377 Sheet 1
BX3R-3	918 [36.1]	400 [15.7]	M10 [0.375]	968 [38.1]	530 [20.9]	389 [15.3]	80 [176]	3AUA0000016380 Sheet 1
BX3R-4	918 [36.1]	400 [15.7]	M10 [0.375]	968 [38.1]	530 [20.9]	389 [15.3]	88 [194]	3AUA0000016380 Sheet 1
BX3R-5	876 [34.5]	724 [28.5]	M10 [0.375]	991 [39]	762 [30]	394 [15.5]	96.8 [213]	3AUA0000060123 Sheet 2
BX3R-6	1181 [46.5]	876 [34.5]	M10 [0.375]	1295 [51]	914 [36]	546 [21.5]	185.5 [409]	3AUA0000060124 Sheet 2
BX3R-7	Free Standing		Ø14.2 [Ø0.56]	1829 [72]	1092 [43]	533 [21]	251.4 [554]	3AUA00000603R5 Sheet 2

Drawing is not for engineering purposes.

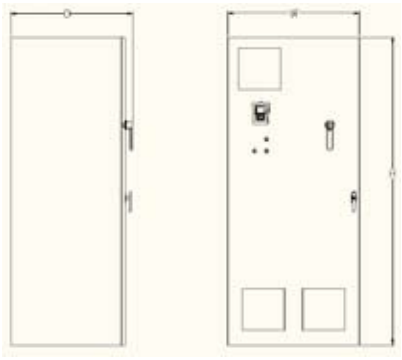
Dimensions: ACH550-Cx UL Type 1 / NEMA 1 R1 through R8 Frame Size



Wall Mount (CX1-1 - CX1-8)



Wall Mount (CX1-9 - CX1-11)

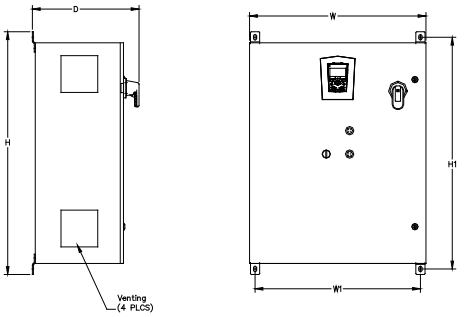


Floor Mount (CX1-12- CX1-13)

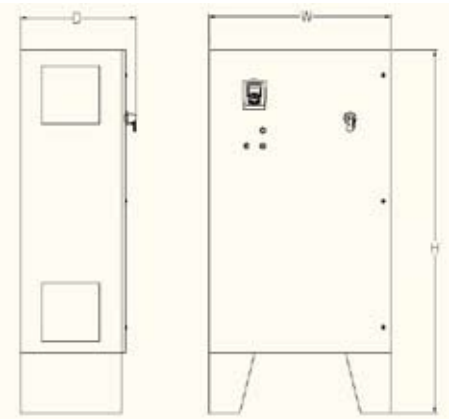
Dimension Reference	UL Type 1 / NEMA 1 Mounting Dimensions mm [inches]			UL Type 1 / NEMA 1 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
CX1-1	920 [36.2]	208 [8.2]	M10 [0.375]	948 [37.3]	348 [13.7]	349 [13.7]	35 [77]	3AUA0000012797 Sheet 3
CX1-2	920 [36.2]	208 [8.2]	M10 [0.375]	948 [37.3]	348 [13.7]	349 [13.7]	37 [82]	3AUA0000012797 Sheet 3
CX1-3	1352 [53.2]	254 [10]	M10 [0.375]	1380 [54.3]	414 [16.3]	371 [14.6]	49 [108]	3AUA0000012798 Sheet 3
CX1-4	1352 [53.2]	254 [10]	M10 [0.375]	1380 [54.3]	414 [16.3]	371 [14.6]	61 [134]	3AUA0000012798 Sheet 3
CX1-5	1352 [53.2]	254 [10]	M10 [0.375]	1380 [54.3]	414 [16.3]	371 [14.6]	76 [168]	3AUA0000012798 Sheet 3
CX1-6	1568 [61.7]	330 [13]	M10 [0.375]	1596 [62.8]	491 [19.3]	489 [19.2]	90 [198]	3AUA0000012799 Sheet 3
CX1-7	1568 [61.7]	330 [13]	M10 [0.375]	1596 [62.8]	491 [19.3]	489 [19.2]	119 [262]	3AUA0000012799 Sheet 3
CX1-8	1568 [61.7]	330 [13]	M10 [0.375]	1596 [62.8]	491 [19.3]	489 [19.2]	154 [340]	3AUA0000012799 Sheet 3
CX1-9	Free Standing		Ø14.2 [Ø0.56]	1883 [74.1]	889 [35]	527 [20.7]	126 [278]	3AUA0000012800 Sheet 3
CX1-10	Free Standing		Ø14.2 [Ø0.56]	1883 [74.1]	889 [35]	527 [20.7]	190 [419]	3AUA0000012800 Sheet 3
CX1-11	Free Standing		Ø14.2 [Ø0.56]	1829 [72]	914 [36]	584 [23]	247 [545]	3AUA0000024944 Sheet 3
CX1-12	Free Standing		N/A [N/A]	2134 [84]	914 [36]	848 [33.4]	579 [1276]	3AUA0000013236 Sheet 3
CX1-13	Free Standing		N/A [N/A]	2134 [84]	1524 [60]	848 [33.4]	662 [1459]	3AUA0000013223 Sheet 3

Drawing is not for engineering purposes.
CX1-9 and CX1-11 are wall mount configurations with 12 inch high mounting feet. Feet are removable.
CX1-13 enclosure is double door construction.

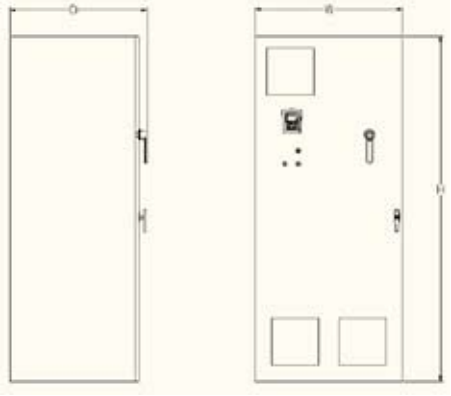
Dimensions: ACH550-Cx UL Type 12 / NEMA 12 R1 through R8 Frame



Wall Mount (CX12-1 - CX12-9)



Wall Mount (CX12-10)

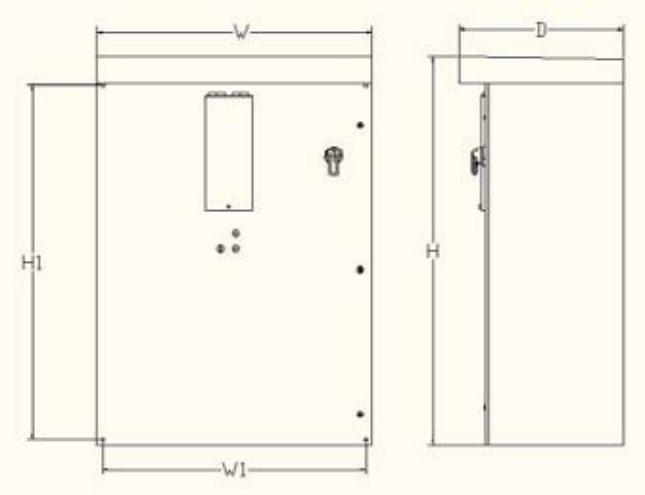


Floor Mount (CX12-11 - CX12-12)

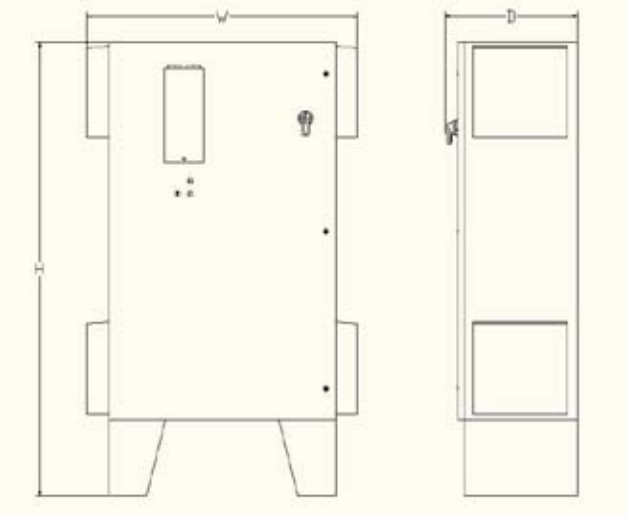
Dimension Reference	UL Type 12 / NEMA 12 Mounting Dimensions mm [inches]			UL Type 12 / NEMA 12 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
CX12-1	648 [25.5]	419 [16.5]	M10 [0.375]	686 [27]	457 [18]	369 [14.5]	36 [79]	3AUA0000012801 Sheet 3
CX12-2	648 [25.5]	419 [16.5]	M10 [0.375]	686 [27]	457 [18]	369 [14.5]	38 [84]	3AUA0000012801 Sheet 3
CX12-3	800 [31.5]	572 [22.5]	M10 [0.375]	838 [33]	610 [24]	369 [14.5]	51 [112]	3AUA0000012802 Sheet 3
CX12-4	800 [31.5]	572 [22.5]	M10 [0.375]	838 [33]	610 [24]	369 [14.5]	64 [141]	3AUA0000012802 Sheet 3
CX12-5	953 [37.5]	724 [28.5]	M10 [0.375]	991 [39]	762 [30]	369 [14.5]	78 [172]	3AUA0000012803 Sheet 3
CX12-6	953 [37.5]	724 [28.5]	M10 [0.375]	991 [39]	762 [30]	369 [14.5]	93 [205]	3AUA0000012803 Sheet 3
CX12-7	1257 [49.5]	876 [34.5]	M10 [0.375]	1304 [51.4]	914 [36]	572 [22.5]	118 [260]	3AUA0000012804 Sheet 3
CX12-8	1257 [49.5]	876 [34.5]	M10 [0.375]	1304 [51.4]	914 [36]	572 [22.5]	147 [324]	3AUA0000012804 Sheet 3
CX12-9	1257 [49.5]	876 [34.5]	M10 [0.375]	1304 [51.4]	914 [36]	572 [22.5]	182 [401]	3AUA0000012804 Sheet 3
CX12-10	Free Standing		Ø14.2 [Ø0.56]	1829 [72]	914 [36]	584 [23]	247 [545]	3AUA0000012805 Sheet 3
CX12-11	Free Standing		N/A [N/A]	2134 [84]	914 [36]	848 [33.4]	579 [1276]	3AUA0000013237 Sheet 3
CX12-12	Free Standing		N/A [N/A]	2134 [84]	1524 [60]	848 [33.4]	662 [1459]	3AUA0000013224 Sheet 3

Drawing is not for engineering purposes.
CX12-10 is a wall mount configurations with 12 inch high mounting feet. Feet are removable.
CX12-12 enclosure is double door construction.

Dimensions: ACH550-Cx UL Type 3R / NEMA 3R R1 through R6 Frame Size



Wall Mount (CX3R-1-CX3R-6)

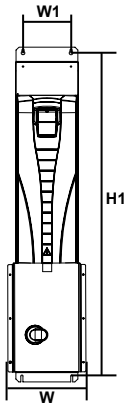


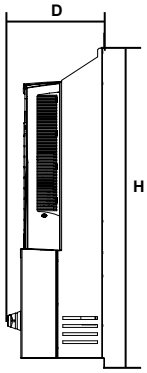
Floor Mount (CX3R-7)

Dimension Reference	UL Type 3R / NEMA 3R Mounting Dimensions mm [inches]			UL Type 3R / NEMA 3R Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
CX3R-1	571.5 22.5	419.1 16.5	M10 0.375	685.8 27	457.2 18	342.9 13.5	37.4 82	3AUA0000060121 Sheet 3
CX3R-2	571.5 22.5	419.1 16.5	M10 0.375	685.8 27	457.2 18	342.9 13.5	39.9 88	3AUA0000060121 Sheet 3
CX3R-3	723.9 28.5	571.5 22.5	M10 0.375	838.2 33	609.6 24	342.9 13.5	65.9 145	3AUA0000060122 Sheet 3
CX3R-4	876.3 34.5	723.9 28.5	M10 0.375	990.6 39	762 30	393.7 15.5	96.8 213	3AUA0000060123 Sheet 3
CX3R-5	1181.1 46.5	876.3 34.5	M10 0.375	1295.4 51	914.4 36	546.1 21.5	121.4 268	3AUA0000060124 Sheet 3
CX3R-6	1181.1 46.5	876.3 34.5	M10 0.375	1295.4 51	914.4 36	546.1 21.5	150.5 332	3AUA0000060124 Sheet 3
CX3R-7	1181.1 46.5	876.3 34.5	M10 0.375	1295.4 51	914.4 36	546.1 21.5	185.5 409	3AUA0000060124 Sheet 3
CX3R-8	Free Standing		M10 0.375	1828.8 72	1092.2 43	524.6 20.7	251.4 554	3AUA0000060125 Sheet 3

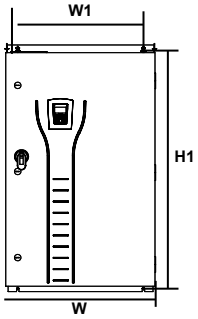
Drawing is not for engineering purposes.

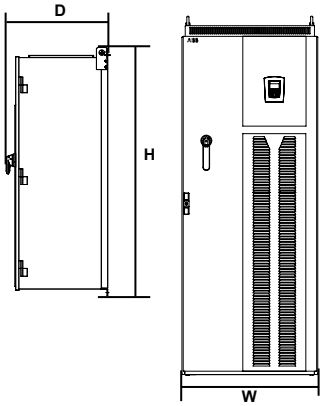
Dimensions: ACH550-PxR UL Type 1 / NEMA 1 R1 through R8 Frame Size



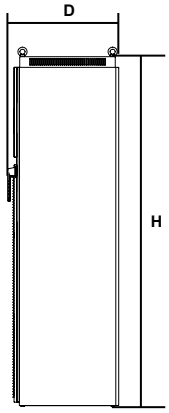


Wall Mount (PX1-1 - PX1-4)





Wall Mount (PX1-5 - PX1-6)

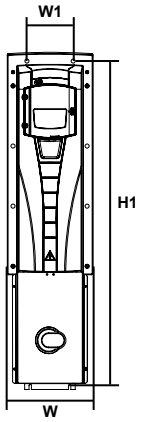


Floor Mount (PX1-8)

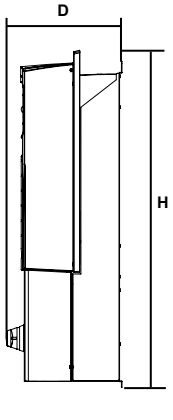
Dimension Reference	UL Type 1/ NEMA 1 Mounting Dimensions mm [inches]			UL Type 1 / NEMA 1 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
PX1-1	712 [28]	98 [3.9]	M6 [0.25]	729 [28.7]	198 [7.8]	283 [11.2]	15 [33]	3AUA0000008216 Sheet 1
PX1-2	812 [32]	98 [3.9]	M6 [0.25]	829 [32.6]	198 [7.8]	295 [11.6]	19 [42]	3AUA0000008218 Sheet 1
PX1-3	983 [38.7]	160 [6.3]	M6 [0.25]	1013 [39.9]	260 [10.2]	304 [11.9]	34 [75]	3AUA0000008220 Sheet 1
PX1-4	1117 [44]	160 [6.3]	M6 [0.25]	1147 [45.2]	260 [10.2]	332 [13.1]	43 [95]	3AUA0000008221 Sheet 1
PX1-5	1175 [46.3]	600 [23.6]	M10 [0.375]	1212 [47.7]	713 [28.1]	483 [19]	121 [267]	3AUA0000021148 Sheet 1
PX1-6	1175 [46.3]	600 [23.6]	M10 [0.375]	1212 [47.7]	713 [28.1]	483 [19]	163 [359]	3AUA0000021148 Sheet 1
PX1-8	Free Standing		Ø16 [Ø0.63]	2125 [83.7]	806 [31.7]	659 [25.9]	360 [794]	3AUA0000021152 Sheet 1

Drawing is not for engineering purposes.

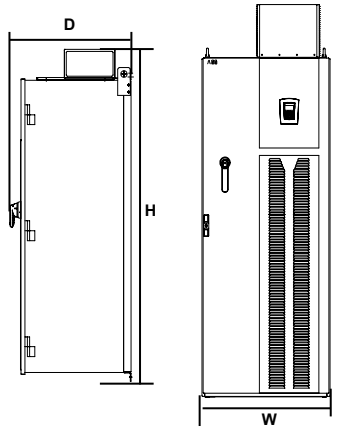
Dimensions: ACH550-PxR UL Type 12 / NEMA 12 R1 through R8 Frame Size



Wall Mount (PX12-1 - PX12-4)



Wall Mount (PX12-5 - PX12-6)

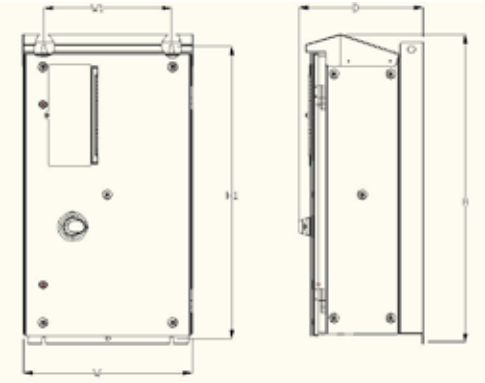


Floor Mount (PX12-8)

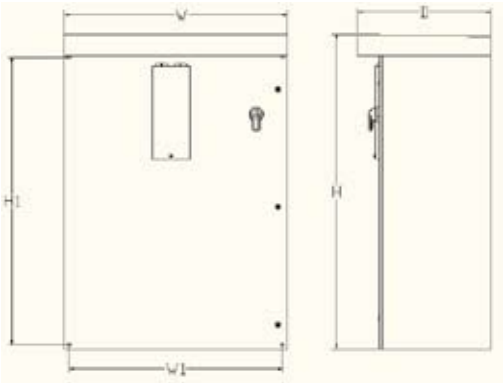
Dimension Reference	UL Type 12/ NEMA 12 Mounting Dimensions mm [inches]			UL Type 12 / NEMA 12 Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
PX12-1	712 [28]	98 [3.9]	M6 [0.25]	744 [29.3]	221 [8.7]	283 [11.2]	17 [37]	3AUA0000008216 Sheet 2
PX12-2	812 [32]	98 [3.9]	M6 [0.25]	844 [33.2]	221 [8.7]	295 [11.6]	21 [46]	3AUA0000008218 Sheet 2
PX12-3	983 [38.7]	160 [6.3]	M6 [0.25]	1030 [40.6]	267 [10.5]	304 [11.9]	36 [79]	3AUA0000008220 Sheet 2
PX12-4	1117 [44]	160 [6.3]	M6 [0.25]	1163 [45.8]	267 [10.5]	332 [13.1]	45 [99]	3AUA0000008221 Sheet 2
PX12-5	1175 [46.3]	600 [23.6]	M10 [0.375]	1380 [54.3]	713 [28.1]	483 [19]	121 [267]	3AUA0000021149 Sheet 1
PX12-6	1175 [46.3]	600 [23.6]	M10 [0.375]	1380 [54.3]	713 [28.1]	483 [19]	163 [359]	3AUA0000021149 Sheet 1
PX12-8	Free Standing		Ø16 [Ø0.63]	2377 [93.6]	806 [31.7]	659 [25.9]	380 [838]	3AUA0000021153 Sheet 1

Drawing is not for engineering purposes.

Dimensions: ACH550-PxR UL Type 3R / NEMA 3R R1 through R6 Frame Size



Wall Mount (PX3R-1 - PX3R-4)



Wall Mount (PX3R-5 - PX3R-6)

Dimension Reference	UL Type 3R / NEMA 3R Mounting Dimensions mm [inches]			UL Type 3R / NEMA 3R Dimensions and Weights mm [inches] kg [lbs]				
	H1	W1	Mounting Hardware	Height (H)	Width (W)	Depth (D)	Weight	Dimension Drawing
PX3R-1	810 [31.9]	320 [12.6]	M10 [0.375]	865 [34]	452 [17.8]	343 [13.5]	58 [128]	3AUA0000016377 Sheet 1
PX3R-2	810 [31.9]	320 [12.6]	M10 [0.375]	865 [34]	452 [17.8]	343 [13.5]	61 [134]	3AUA0000016377 Sheet 1
PX3R-3	918 [36.1]	400 [15.7]	M10 [0.375]	968 [38.1]	530 [20.9]	389 [15.3]	80 [176]	3AUA0000016380 Sheet 1
PX3R-4	918 [36.1]	400 [15.7]	M10 [0.375]	968 [38.1]	530 [20.9]	389 [15.3]	88 [194]	3AUA0000016380 Sheet 1
PX3R-5	876 [34.5]	724 [28.5]	M10 [0.375]	991 [39]	762 [30]	394 [15.5]	92.3 [203]	3AUA0000060123 Sheet 2
PX3R-6	1181 [46.5]	876 [34.5]	M10 [0.375]	1295 [51]	914 [36]	546 [21.5]	179.1 [395]	3AUA0000060124 Sheet 2

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