ACS550 Adjustable Speed AC Drive

ACS550-US-00 Rev. B

Product Notes

The NEW ACS550 Sensorless Vector AC Drive from ABB! For advanced speed control of 1 to 500 HP AC induction motors.

ACS550 Adjustable Speed AC Drives

The ABB ACS550 AC drive combines a sophisticated microprocessor with an advanced IGBT power switching technology to deliver V/Hz, Closed Loop Flux Vector, and Sensorless Vector control of AC motors. Its Intuitive Control Panel offers numerous benefits making it the most user-friendly panel in the drives industry.

The extensive library of pre-programmed application macros maximizes convenience and minimizes start-up time.

This drive can handle the most demanding industrial applications in an efficient, dependable and economic manner.

A new Control Panel, included as standard, provides a real-time clock and full graphic display as well as a dedicated "HELP" button.

Features Include:

- Control Panel with
  - Start-Up, Maintenance and Diagnostic Assistants
  - Support for 15 Languages
  - Full Graphic Display
  - "Help" Button
- Numerous internally mountable fieldbus adapters for serial communications
- Patent Pending Swinging Choke for Superior Harmonic Mitigation
- Internal Option Slots for additional I/O
- RS-485 Modbus RTU Included as Standard
- Extensive Library of Pre-Programmed Application Macros
- Integral EMC Filter for 1st Environment, Restricted Distribution (30 m motor cable)
- UL, cUL Listed and CE Approved
- Integral Braking Chopper up to 15 HP (480 VAC) and up to 7.5 HP (230 VAC)

Easily Integrated:

- Sinking or Sourcing Input Device Logic
- Galvanically Isolated Digital I/O

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ACS550 Technical Data

Input Connection

Voltage:	3-Phase 208 to 480 VAC +/- 10% permitted tolerance
Frequency:	48 ... 63 Hz +/- 2 Hz

Output Connection

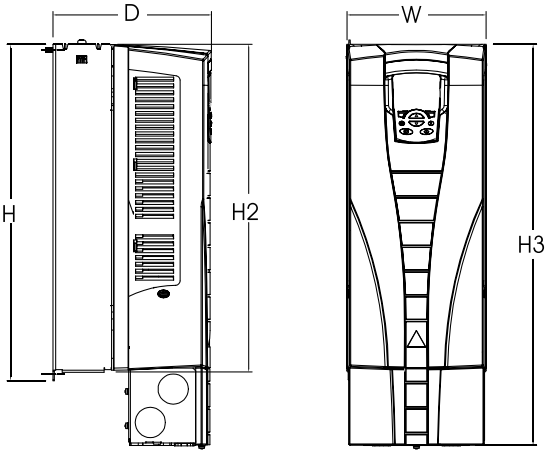
Voltage:	0 to max
Frequency:	0 to 500 Hz

Environmental Limits

Ambient Operating Temperature: 0°to 40°C

Enclosure

Type: NEMA 1, NEMA 12



Standard Control Connection

- 2 Programmable Analog Inputs (voltage or current)
- 6 Programmable Digital Inputs
- 2 Programmable Analog Outputs
- 3 Programmable Relay Outputs

Options

- External Braking Units (R3 - R8)
- DriveWindow Light Programming and Diagnostic Software
- Fieldbus Adapter Modules: DeviceNet, Profibus, ControlNet, CANopen
- 115/230V Digital Interface
- Encoder Feedback Module
- 3 Relay Extension Module

Protection

- Overcurrent
- Ground Fault
- Overtemperature
- Auxiliary Voltage Short Circuit Protection
- Electronic Motor Overload (UL508C - I^2t)
- Overvoltage
- Undervoltage
- Microprocessor Fault
- Motor Stall
- Underload

Frame Size	UL Type 1				UL Type 12				230V HP	480V HP
	Height in.	Width in.	Depth in.	Weight lbs.	Height in.	Width in.	Depth in.	Weight lbs.		
R1	13.0	4.9	8.3	13.4	17.4	8.9	9.3	18.6	1 - 5	1.5 - 7.5
R2	16.9	4.9	8.7	19.5	21.3	8.9	9.6	25.4	7.5 - 10	10 - 15
R3	19.3	8.0	9.1	32.4	23.8	10.5	10.9	40.0	15 - 20	20 - 25
R4	23.4	8.0	10.3	50.2	28.5	10.5	12.0	58.7	25 - 40	30 - 50
R5	23.7	10.4	11.3	82	30.5	14.5	12.2	93	Not Used	60 - 75
R6	27.6	11.8	15.8	176	36.4	16.1	16.6	190	50 - 100	100 - 150
R7	59.2	23.9	19.5	480						150 - 200
R8	83.9	31.5	23.0	827						250 - 550

Drawing is not for engineering purposes.

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