



ACS140-US-00 Rev. E

ACS140 Adjustable Speed AC Drive

Product Notes



The ACS140 family of adjustable speed AC motor drives provides flawless speed control of 1/6 to 3Hp induction motors.

ACS140 Adjustable Speed AC Drives

The ABB ACS140 family of drives combines a sophisticated microprocessor with an advanced IGBT power switching technology to deliver the highest performance of AC motors. Its extensive library of pre-programmed application macros maximizes convenience and minimizes start-up time. These drives can handle the most demanding applications in an efficient, dependable and economic manner.

Features Include:

- Standard, versatile software
- Slip compensation
- Virtually silent operation with 16 kHz carrier frequency
- Maximum frequency is 300 Hz
- Operator panel capable of upload, download and remote mounting
- An extensive library of pre-programmed application macros
- UL, CUL and CE pproved
- Standard 'out of box' mounting configurations: wall mount, flange mount, DIN rail
- Triplex configurable
- Complete Motor Protection
- Rugged design: up to 350% instantaneous over-current trip limit

Easily Integrated:

- Standard, 2-wire and alternative control connections
- On-board PID setpoint controller
- On-board power supply capable of loop powering transducers
- Sleep and wake functions
- RS232 modbus serial communications
- Space-saving bookshelf design





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ACS140 Technical Data

Input Connection

Voltage: 1 and 3-Phase
200 to 480 VAC
+/- 10% permitted tolerance

Frequency: 48 ... 63 Hz +/- 2 Hz

Output Connection

Voltage: 0 to max

Frequency: 0 to 300 Hz
(60 Hz default)

Environmental Limits

Ambient Operating Temperature: 0° to 40°C
50°C w de-rate

Enclosure

Type: Protected Chassis IP20,
NEMA 1 Optional

Standard Control Connection

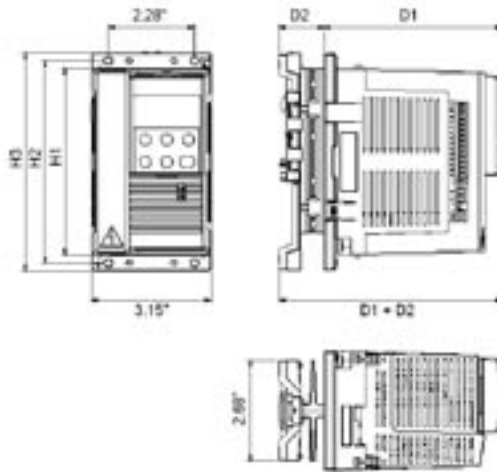
- 2 Programmable Analog Inputs (voltage or current)
- 5 Programmable Digital Inputs
- 1 Programmable Analog Output
- 2 Programmable Relay Outputs
- RS485 port (default = Modbus Protocol)

Options

- RFI Filters
- DriveWindow Software
- 115V Control Interface Card

Protection

- Overcurrent
- Ground Fault
- Input Phase Loss
- Overtemperature (heatsink)
- Auxiliary Voltage Short Circuit Protection
- Electronic Motor Overload (UL508C - I²t)
- Overvoltage
- Undervoltage
- Microprocessor Fault
- Motor Stall
- Serial Communications Fault
- Power Loss Ride-Through
- Stall Prevention



Frame Size	Dimensions (in.)						Weight (lbs.)	
	H1	H2	H3	D1	D2	D1 + D2	1-Phase	3-Phase
A	4.96	5.35	5.75	4.60	1.25	5.87	1.98	1.76
B	4.96	5.35	5.75	4.60	1.72	6.32	2.65	2.43
C	7.80	8.19	8.58	4.60	2.05	6.65	3.53	3.31
D	8.86	9.25	9.65	4.88	2.05	6.93	4.19	3.97

Drawing is not for engineering purposes.



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Automation Technologies
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