

ACS250 IP20

Data sheet



0.5 thru 1.5 HP (1~115 V In/ 3~230V Out) 1 thru 20 HP (3~600 V In/Out)

Performance features	Control modes	115 VAC: V/Hz 600 VAC: V/Hz and open loop vector
	Operator interface module	Integral drive mounted
	Display lines	6-character LED display
	Programmable preset speeds	Four
	Analog output: one	One (0-10 VDC)
	Auto restart	Yes – up to 5 attempts
	Frequency avoidance	One band
	Fault history	Last four faults
	Digital inputs: four	Two programmable digital inputs, two user selectable analog/digital inputs
	Digital inputs type	Pull-up
Drive specifications	Analog inputs: two	0-10 VDC, 4 to 20mA
	Relay output: one	Built-in form C relay
	Analog output / digital output	0-10 VDC: one analog usable for meter (freq., current, voltage) or digital output
	Overload capacity	Drive output 150% for one minute and 175% for 2 seconds
	Maximum load	1.5 HP @ 120 V In/230 V Out, 20 HP @ 600 V In/Out
	Input voltage ranges	115 VAC (99-126); 600 VAC (450-660)
	Rated input frequency	50-60 Hz (±5%)
	Carrier frequency	4-32 kHz (8 kHz default)
	Operating temperature	-10° to 50°C
	Snubber (dynamic braking)	Built-in transistor (frames 2 and 3)
	Dynamic braking external	Up to 150% dynamic braking with appropriately sized resistor
	DC injection braking	Included
	Volts/Hz	Linear V/Hz, user defined, energy optimizer & boost function
	Frequency control range	0-500 Hz
	Accel/decel:	Independently adjustable accel. & decel. ramps
	Time range	0.00 to 600.0 Seconds
	Keypad speed control	Yes
	Sink/source inputs	Source, 24 VDC logic
	Electronic overload trip	Electronic motor overload inverse 150% for 1 minute or 175% for 2 seconds
	Communications	Built-in Modbus-RTU (RS-485) communications
PI control	Built-in	
Protective features	Under voltage	Level depends on voltage class (\$408)
	Output short circuit	Phase-to-phase on drive output
	Over temperature	Heat sink monitor
	DC bus overvoltage	DC bus level trip
	Drive overload	Exceed drive rating of 150% for one minute or 175% for 2 seconds
	Over current	Over-current/short-circuit protection
	Output phase	Trips on open output phase
	Loss of reference	Trips on loss of speed command signal
	Communication error	Detects a communication error (fault)
Agency certifications		UL, cUL, CE, C-tick, gost
Service conditions	Altitude	1,000 m (3,300 ft.), derate by 1% per 100M up to 2,000 on maximum
	Ambient temperature	-10°C (14°F) to 50°C (102°F)
	Storage temperature:	-40°C (-40°F) to 60°C (140°F)
	Relative humidity	10% to 95%, non-condensing

ACS250 IP20

List prices

IP20 drive ratings

Type code	Braking chopper (included)	P _N HP	Output current I _{2N} A	Weight (lbs)	Frame size	List price
1-phase supply voltage 110 to 120 V, +/-10%, 3-phase output 200 to 240 V						
ACS250-01U-02A3-1	-	0,5	2,3	2,2	E1	\$408
ACS250-01U-04A3-1	-	1,0	4,3	2,2	E1	\$450
ACS250-01U-05A8-1	X	1,5	5,8	3,75	E2	\$552
3-phase supply voltage 500 to 600 V, +/-10%						
ACS250-03U-02A1-6	X	1,0	2,1	4,0	P2	\$602
ACS250-03U-03A1-6	X	2,0	3,1	4,0	P2	\$782
ACS250-03U-04A1-6	X	3,0	4,1	4,0	P2	\$869
ACS250-03U-06A5-6	X	5,0	6,5	4,0	P2	\$1,043
ACS250-03U-09A0-6	X	7,5	9,0	4,0	P2	\$1,459
ACS250-03U-12A0-6	X	10,0	12,0	7,7	P3	\$1,751
ACS250-03U-17A0-6	X	15,0	17,0	7,7	P3	\$2,291
ACS250-03U-22A0-6	X	20	22	7,7	P3	\$2,917

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Frame options



ACS250 IP20 - 120 V



ACS250 IP20 - 600 V

ACS250 IP20

Options

ACS250 IP20 options (these options will be shipped separately from drive shipping package)

Code	Variant	Description	Field kit	Voltage rating	
				120 V	600 V
N/A	RCCS-01 copying tool	Copy stick, which is used to upload and download the parameters through RJ45 connection Parameters can only be copied between drives of the same product range and power rating (size)	RCCS-01	\$234	\$234
N/A	RCRO-01 relay output card	The second relay output module can be used in applications where the analog output from the drive is converted to a relay output. Max relay switching voltage: 250 VAC/220 VDC Max relay switching current: 1A Max input voltage: +/- 50 VDC Environmental: -10°C ... +50°C Conformity: IP00, UL94V-0	RCRO-01	\$140	NA
N/A	RCRP-01 external LED keypad	Remote keypad that can be added through RJ45 connection. Signal interface: standard 6-way RJ45 connector Supply input: 10V ... 36 VDC, 30mA RS485 signal: industry standard 2-wire +5V differential Environmental: operational 0 ... 50 °C Storage: -40°C ... 60°C Relative humidity: < 95% (non condensing) Protection rating: IP54 Max cable length: 20m (unscreened, total length) 100m (screened, twisted pair, total length)	RCRP-01	\$106	\$106
N/A	RCRJ-01 RJ45 Y-cable splitter	The data cable splitter is a 3-way "Y" cable splitter suitable for a RS-485 network of drives. The option is compatible with standard CAT 5 or CAT 6 type cable and can be used for Modbus-RTU or an RS-485 remote keypad network.	RCRJ-01	\$59	\$59
N/A	RCNT-01 RJ45 Y-cable splitter w/ term.	The data cable splitter with terminal block is a 3-way "Y" cable splitter with one terminal block suitable for an RS-485 network of drives. Two of the three connections are compatible with standard CAT 5 or CAT 6 type cable and the third is a terminal block that can be used to connect a PLC or network terminating resistor.	RCNT-01	\$183	\$183
N/A	ACS250 democase	Powered by 115 VAC, the program case does includes an ACS250 drive and IO board with switches, speed potentiometer and LED. Ideal for demonstrating the programability of the ACS250. There is no motor included in this democase	ACS250-DEMOCASE	\$2,000	NA