

# ACS255, micro drive, UL Type 4X

## Data sheet



**0.5 - 1.5 HP (1~115 V In/ 3~230V Out)**

**0.5 - 5 HP (1~230 V In/ 3~230V Out)**

**0.5 - 5 HP (3~230 V In/Out)**

**1 - 10 HP (3~460 V In/Out)**

**1 - 15 HP (3~600 V In/Out)**

<b>Input ratings</b>	Input voltage range	115 VAC (99-126); 230 VAC (198-264); 460 VAC (342-528); 600 VAC (450-660)
	Input voltage tolerance	+/-10%
	Phase	1-phase 115/230 V, 3-phase 230/460/600 V
	Frequency	50-60 Hz ( $\pm 5\%$ )
	Short circuit rating (UL 508c)	100,000 rms symmetrical amperes up to 600 V when input cables protected by class T fuses or similar type fuse.
<b>Output ratings</b>	Horsepower	0.5 - 1.5 HP @ 120 V In/230 V Out 0.5 - 5 HP @ 1~230 V In/3~230 V Out 0.5 - 5 HP @ 3~230 V In/Out 0.5 - 10 HP @ 3~460 V In/Out 1 - 15 HP @ 3~600 V In/Out
	Overload capacity	150% for one minute and 175% for 2 seconds
	Frequency	0-500 Hz
	Voltage	0 to maximum input voltage
	Motor types	Asynchronous AC induction or permanent magnet synchronous motors
<b>Protective features</b>	Overcurrent	Over-current/short-circuit protection
	DC overvoltage	DC bus level trip
	Overtemp	Heat sink monitor
	Short circuit	Phase-to-phase or phase-to-earth on drive output
	Undervoltage	Level depends on voltage class
	Comm Loss	Communication loss with controller
	Motor overtemp	Protected (I <sub>2</sub> t)
	Loss of keypad	N/A
	Input Phase Loss	3-phase drive has lost phase
	Ground fault	Ground fault detected in motor or motor cables
<b>Environmental</b>	Motor phase fault	N/A
	Temperature	-10°C (14°F) to 40°C (104°F)
	Cooling	Convection
	Enclosure	IP66 (NEMA 4X)
	Altitude	1,000 m (3,300 ft.), derate by 1% per 100M up to 2,000 m maximum
<b>Keypad display</b>	Humidity	10% to 95%, non-condensing
	Display	7-segment display
	Keys	5 key keypad
	Functions	Output status monitoring, digital speed control, parameter setting and display, diagnostic and fault log display, motor run
	Remote mount	Optional Keypad can be remote mounted
<b>Control specifications</b>	Trip	Last four faults stored in fault history
	Switching frequency	4-32 kHz (8 kHz default)
	Accel/decel	0.00 to 600.0 Seconds
	Speed control accuracy (with open loop vector control)	Better than 0.5% speed holding accuracy
	Skip frequencies	One configurable bands 0 to maximum frequency
	PC setup software	N/A
	Maximum output frequency	500 Hz
	Primary command source modes	Terminal mode, keypad mode, fieldbus control, User PI mode
<b>Analog inputs</b>	Selectable operating modes	General, pump, or fan
	Two differential current or voltage	0-10 VDC, 4 to 20mA
	Resolution	11 bit + sign
<b>Analog outputs</b>	Analog output / digital output	0-10 VDC: one analog usable for meter (freq., current, voltage) or digital output
	Frequency range	N/A
	Resolution	N/A
<b>Digital inputs</b>	Four digital inputs	Two programmable digital inputs, two user selectable analog/digital inputs - pull up
	Input impedance	PNP, 12-24VDC, (10V logic 0), 2.4KΩ
	Filtering	N/A
<b>Digital outputs</b>	One relay outputs	Built-in form C relay
	Maximum switching voltage	250 V AC / 30 V DC
	Maximum continuous current	2 A rms