

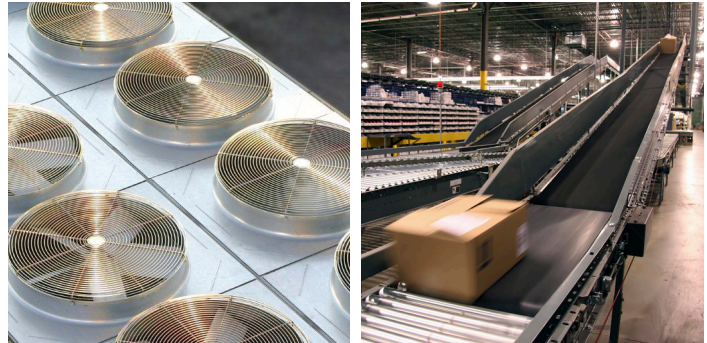
# AD700E

Low voltage drives for variable speed applications up to 30HP



## Voltage and Power Range:

- 1-Phase, 110-115V Input  
3-Phase, 200-240V Output  
0.5 - 1.5 HP
- 1-Phase, 200-240V Input  
3-Phase, 200-240V Output  
0.5 - 5.0 HP
- 3-Phase, 200-240V  
0.5 - 15 HP
- 3-Phase, 380-480V  
1.0 - 30 HP



## Product Overview and Features

The AD700E, a member of the ACCU-Series™ family of variable speed products, is a cost-effective and easy to use general purpose drive, providing precise motor control and energy savings. With 14 basic parameters, the AD700E low voltage drive offers quick and easy setup. The 50 parameters in total, offer a high degree of flexibility for a wide range of open and closed loop applications in food & beverage, packaging, conveyors, pumps, fans and many more.

The compact form factor of AD700E makes it the ideal choice where you have limited space available. The integrated I/O, Ethernet and fieldbus communications options allow you to easily connect with control and monitoring system. Furthermore the AD700-Optistick (optional) allows fast and accurate multiple drive setup by copying parameters from one drive to another at the touch of a button.

## Simple Installation

Din rail and keyhole mounting options.

## Simple Commissioning

14 parameter basic setup. Default settings suitable for most applications.

## On-board connectivity

Modbus RTU and CANOpen on-board as standard.  
Easy integration with your control & monitoring systems.

## Industrial Ambient Ratings

Up to 50°C operation

## Sensorless Vector Control for all Motor Types

Precise and reliable control

- Induction Motors (IM)
- Permanent Magnet Motors (PM)
- Brushless DC Motors (BLDC)
- Synchronous Reluctance Motors (SynRM)

## AD700-Optistick

Rapid parameter cloning



**Compact, Reliable and Easy to Use**

[www.usmotors.com\ACCU-Series\Drives](http://www.usmotors.com\ACCU-Series\Drives)

**Technical Data**

Control Specification		Analog:	0 to 10 Volts
Control Method:	V/F Voltage Vector		Setpoint Control:
	Energy Optimised V/F	20 to 0mA	
	Sensorless Vector Speed Control	4 to 20mA	
	PM Vector Control	20 to 4 mA	
	BLDC Control	Motorised Potentiometer (Keypad)	
Carrier Frequency:	Synchronous Reluctance	Digital:	Modbus RTU
	4–32kHz Effective		CANopen
Stopping Mode:	Ramp to stop: User Adjustable 0.1–600 secs Coast to stop	Ambient Conditions	
		Temperature:	Storage: –40 to 60°C Operating: –10 to 50°C
Braking:	Motor Flux Braking Built-in braking transistor (not frame size 1)	Altitude:	Up to 1000m ASL without derating
			Up to 2000m maximum UL approved Up to 4000m maximum (non UL)
Skip Frequency:	Single point, user adjustable	Vibration:	95% Max, non condensing
			Conforms to IEC 60068-2-6

**Ratings and Dimensions**

Input Voltage	Input Phases	Overload:150% for 1 min, every 1 min			Internal Brake	EMC Filter	Model	Dimensions			
		Rated Power (kW)	Rated Power (HP)	Output Current				Height	Width	Dept	Weight
Frequency Inverter AD700E IP20, 200-240V, 1ph Input, 3ph Output											
110-115	1	0.37	0.5	2.3	No	No	AD07E1102310002	6.8	3.3	4.8	2.2
110-115	1	0.75	1	4.3	No	No	AD07E1104310002	6.8	3.3	4.8	2.2
110-115	1	1.1	1.5	5.8	Yes	No	AD07E2105810012	8.7	4.3	5.9	3.7
200-240	1	0.37	0.5	2.3	No	Yes	AD07E1202310102	6.8	3.3	4.8	2.2
200-240	1	0.75	1	4.3	No	Yes	AD07E1204310102	6.8	3.3	4.8	2.2
200-240	1	1.5	2	7	No	Yes	AD07E1207010102	6.8	3.3	4.8	2.2
200-240	1	1.5	2	7	Yes	Yes	AD07E2207010112	8.7	4.3	5.9	3.7
200-240	1	2.2	3	10.5	Yes	Yes	AD07E2210510112	8.7	4.3	5.9	3.7
200-240	1	4	5	15.3	Yes	No	AD07E3215310012	10.3	5.2	6.9	7.1
Frequency Inverter AD700E IP20, 200-240V, 3ph Input, 3ph Output											
200-240	3	0.37	0.5	2.3	No	No	AD07E1202330002	6.8	3.3	4.8	2.2
200-240	3	0.75	1	4.3	No	No	AD07E1204330002	6.8	3.3	4.8	2.2
200-240	3	1.5	2	7	Yes	Yes	AD07E2207030112	8.7	4.3	5.9	3.7
200-240	3	1.5	2	7	No	No	AD07E1207030002	6.8	3.3	4.8	2.2
200-240	3	2.2	3	10.5	Yes	Yes	AD07E2210530112	8.7	4.3	5.9	3.7
200-240	3	4	5	18	Yes	Yes	AD07E3218030112	10.3	5.2	6.9	7.1
200-240	3	5.5	7.5	24	Yes	Yes	AD07E3224030112	10.3	5.2	6.9	7.1
200-240	3	7.5	10	30	Yes	Yes	AD07E4230030112	16.9	6.7	8.3	20.1
200-240	3	11	15	46	Yes	Yes	AD07E4246030112	16.9	6.7	8.3	20.1
Frequency Inverter AD700E IP20, 380-480V, 3ph Input, 3ph Output											
380-480	3	0.75	1	2.2	No	Yes	AD07E1402230102	6.8	3.3	4.8	2.2
380-480	3	1.5	2	4.1	No	Yes	AD07E1404130102	6.8	3.3	4.8	2.2
380-480	3	1.5	2	4.1	Yes	Yes	AD07E2404130112	8.7	4.3	5.9	3.7
380-480	3	2.2	3	5.8	Yes	Yes	AD07E2405830112	8.7	4.3	5.9	3.7
380-480	3	4	5	9.5	Yes	Yes	AD07E2409530112	8.7	4.3	5.9	3.7
380-480	3	5.5	7.5	14	Yes	Yes	AD07E3414030112	10.3	5.2	6.9	7.1
380-480	3	7.5	10	18	Yes	Yes	AD07E3418030112	10.3	5.2	6.9	7.1
380-480	3	11	15	24	Yes	Yes	AD07E3424030112	10.3	5.2	6.9	7.1
380-480	3	15	20	30	Yes	Yes	AD07E4430030112	16.9	6.7	8.3	20.1
380-480	3	18.5	25	39	Yes	Yes	AD07E4439030112	16.9	6.7	8.3	20.1
380-480	3	22	30	46	Yes	Yes	AD07E4446030112	16.9	6.7	8.3	20.1

Motor Match Warranty	
Applies Only When Used with a New U.S. MOTORS brand motor®	
Product	Warranty - Installed/Manufactured
AD700 VFD	Up to 36 / 42 Months from the date installed/Manufactures Matches Installed/Manufactured Motor Warranty Refer to FL600 Limited Warranty Page

Drive must be installed and operated in accordance with all manufactured recommendations or warranty is considered void for motor and drive capability refer to page ix of the FL600 or click on the following link <http://www.us-motors.com/~media/USMotors/Documents/Catalogs/FL600/MotorInverter-Compatibility.ashx>

**About ACCU-SERIES™**

The ACCU- SERIES™ family of variable speed products offers product compatibility for a true system solution. Customers can easily match a U.S. MOTORS brand inverter duty motor with a drive or panel and enjoy the benefits of a motor match warranty on the drive.

[www.usmotors.com/ACCU-Series/Drives](http://www.usmotors.com/ACCU-Series/Drives)

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