

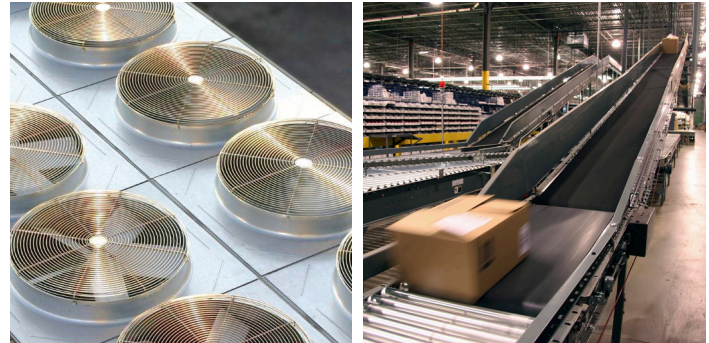
ACCU-Series™ AD700E

The smart choice for variable speed applications up to 30 HP



Voltage and Power Range:

- 1-Phase, 110-115V Input
3-Phase, 200-240V Output
0.5 - 1.5 HP
- 1-Phase, 200-240V
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

Nidec ACCU-Series™ AD700E is a cost-effective and easy to use general purpose drive, providing precise motor control and energy savings. With 14 basic parameters, the AD700 E 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 and Bluetooth PC interface



Compact, Reliable and Easy to Use

www.usmotors.com\ACCU-Series\Drives

Technical Data

Control Specification		Analogue:	
Control Method:	V/F Voltage Vector	0 to 10 Volts	
	Energy Optimised V/F	0 to 20mA	
	Sensorless Vector Speed Control	20 to 0mA	
	PM Vector Control	4 to 20mA	
	BLDC Control	20 to 4 mA	
Carrier Frequency:	Synchronous Reluctance	Digital:	
	4-32kHz Effective	Motorised Potentiometer (Keypad)	
		Modbus RTU	
Stopping Mode:	Ramp to stop: User Adjustable 0.1-600 secs Coast to stop	CANopen	
Braking:	Motor Flux Braking Built-in braking transistor (not frame size 1)	Ambient Conditions	
			Temperature:
Skip Frequency:	Single point, user adjustable	Storage: -40 to 60°C	
		Operating: -10 to 50°C	
		Altitude:	Up to 1000m ASL without derating
			Up to 2000m maximum UL approved
			Up to 4000m maximum (non UL)
		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	Model		Dimensions					
		Rated Power kW	Rated Power HP	Output Current A		With Filter	Without filter	Height in	Width in	Dept in	Weight lb		
V													
Frequency Inverter AD700E IP20, 200-240V, 1ph Input, 3ph Output													
110-115	1	0.37	0.5	2.3	No	N/A	AD07-E-1-1-023-1-0002	6.8	3.3	4.8	2.2		
110-115	1	0.75	1	4.3	No	N/A	AD07-E-1-1-043-1-0002	6.8	3.3	4.8	2.2		
110-115	1	1.1	1.5	5.8	Yes	N/A	AD07-E-2-1-058-1-0012	8.7	4.3	5.9	3.7		
200-240	1	0.37	0.5	2.3	No	AD07-E-1-2-023-1-0102	AD07-E-1-2-023-1-0002	6.8	3.3	4.8	2.2		
200-240	1	0.75	1	4.3	No	AD07-E-1-2-043-1-0102	AD07-E-1-2-043-1-0002	6.8	3.3	4.8	2.2		
200-240	1	1.5	2	7	No	AD07-E-1-2-070-1-0102	AD07-E-1-2-070-1-0002	6.8	3.3	4.8	2.2		
200-240	1	1.5	2	7	Yes	AD07-E-2-2-070-1-0112	AD07-E-2-2-070-1-0012	8.7	4.3	5.9	3.7		
200-240	1	2.2	3	10.5	Yes	AD07-E-2-2-105-1-0112	AD07-E-2-2-105-1-0012	8.7	4.3	5.9	3.7		
200-240	1	4	5	15.3	Yes	N/A	AD07-E-3-2-153-1-0012	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	N/A	AD07-E-1-2-023-3-0002	6.8	3.3	4.8	2.2		
200-240	3	0.75	1	4.3	No	N/A	AD07-E-1-2-043-3-0002	6.8	3.3	4.8	2.2		
200-240	3	1.5	2	7	Yes	AD07-E-2-2-070-3-0112	AD07-E-2-2-070-3-0012	8.7	4.3	5.9	3.7		
200-240	3	1.5	2	7	No	N/A	AD07-E-1-2-070-3-0002	6.8	3.3	4.8	2.2		
200-240	3	2.2	3	10.5	Yes	AD07-E-2-2-105-3-0112	AD07-E-2-2-105-3-0012	8.7	4.3	5.9	3.7		
200-240	3	4	5	18	Yes	AD07-E-3-2-180-3-0112	AD07-E-3-2-180-3-0012	10.3	5.2	6.9	7.1		
200-240	3	5.5	7.5	24	Yes	AD07-E-3-2-240-3-0112	AD07-E-3-2-240-3-0012	10.3	5.2	6.9	7.1		
200-240	3	7.5	10	30	Yes	AD07-E-4-2-300-3-0112	AD07-E-4-2-300-3-0012	16.9	6.7	8.3	20.1		
200-240	3	11	15	46	Yes	AD07-E-4-2-460-3-0112	AD07-E-4-2-460-3-0012	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	AD07-E-1-4-022-3-0102	AD07-E-1-4-022-3-0002	6.8	3.3	4.8	2.2		
380-480	3	1.5	2	4.1	No	AD07-E-1-4-041-3-0102	AD07-E-1-4-041-3-0002	6.8	3.3	4.8	2.2		
380-480	3	1.5	2	4.1	Yes	AD07-E-2-4-041-3-0112	AD07-E-2-4-041-3-0012	8.7	4.3	5.9	3.7		
380-480	3	2.2	3	5.8	Yes	AD07-E-2-4-058-3-0112	N/A	8.7	4.3	5.9	3.7		
380-480	3	2.2	3	5.8	Yes	N/A	AD07-E-2-4-058-3-0012	8.7	4.3	5.9	3.7		
380-480	3	4	5	9.5	Yes	AD07-E-2-4-095-3-0112	AD07-E-2-4-095-3-0012	8.7	4.3	5.9	3.7		
380-480	3	5.5	7.5	14	Yes	AD07-E-3-4-140-3-0112	AD07-E-3-4-140-3-0012	10.3	5.2	6.9	7.1		
380-480	3	7.5	10	18	Yes	AD07-E-3-4-180-3-0112	AD07-E-3-4-180-3-0012	10.3	5.2	6.9	7.1		
380-480	3	11	15	24	Yes	AD07-E-3-4-240-3-0112		10.3	5.2	6.9	7.1		
380-480	3	11	15	24	Yes		AD07-E-3-4-240-3-0012	10.3	5.2	6.9	7.1		
380-480	3	15	20	30	Yes	AD07-E-4-4-300-3-0112	AD07-E-4-4-300-3-0012	16.9	6.7	8.3	20.1		
380-480	3	18.5	25	39	Yes	AD07-E-4-4-390-3-0112	AD07-E-4-4-390-3-0012	16.9	6.7	8.3	20.1		
380-480	3	22	30	46	Yes	AD07-E-4-4-460-3-0112	AD07-E-4-4-460-3-0012	16.9	6.7	8.3	20.1		

ACCU-SERIES™ Drives and US Motors Brand Match Warranty	
Applies Only When Used with a New U.S. Motors brand motor®	
Product	Warranty - Installed/Manufactured
ACCU-Series 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>

www.usmotors.com/ACCU-Series/Drives

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