

Answer Drives 700E



The smart choice for low power applications

Compact, Reliable and Easy to Use



Use the QR code to download the full datasheet

Product Overview

Nidec Answer Drives 700E is a cost-effective and easy to use general purpose drive, providing precise motor control and energy savings using the factory settings. With 14 basic parameters, the low voltage drive AD700E enables quick and easy setup and handling time. The 50 parameters in total, offer a very high degree of flexibility for a wide range of open loop applications in food & beverage, packaging, conveyors and plastic industries.

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-Stick (optional) allows fast and accurate multiple drive setup by copying parameters from one drive to another at the touch of a button.



Key Features

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 for IE2, IE3 & IE4 motors.

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

AD700-Stick

Rapid parameter cloning and Bluetooth PC interface

Technical Data

Control Specification	
Control Method:	V/F Voltage Vector Energy Optimised V/F Sensorless Vector Speed Control PM Vector Control BLDC Control Synchronous Reluctance
PWM Frequency:	4 – 32kHz Effective
Stopping Mode:	Ramp to stop: User Adjustable 0.1 – 600 secs Coast to stop
Braking:	Motor Flux Braking Built-in braking transistor (not frame size 1)
Skip Frequency:	Single point, user adjustable
Setpoint Control:	Analog: 0 to 10 Volts 0 to 20mA 20 to 0mA 4 to 20mA 20 to 4 mA
	Digital: Motorised Potentiometer (Keypad) Modbus RTU CANopen
Ambient Conditions	
Temperature:	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)
	95% Max, non condensing
Vibration:	Conforms to IEC 60068-2-6 Sinusoidal Vibration 10 – 57Hz @ 0.075mm Pk 57 – 150Hz @ 1g Pk

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 mm	Width mm	Dept mm	Weight Kg	
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	173	83	123	1	
110-115	1	0,75	1	4,3	No	N/A	AD07-E-1-1-043-1-0002	173	83	123	1	
110-115	1	1,1	1,5	5,8	Yes	N/A	AD07-E-2-1-058-1-0012	221	110	150	1,7	
200-240	1	0,37	0,5	2,3	No	AD07-E-1-2-023-1-0102	AD07-E-1-2-023-1-0002	173	83	123	1	
200-240	1	0,75	1	4,3	No	AD07-E-1-2-043-1-0102	AD07-E-1-2-043-1-0002	173	83	123	1	
200-240	1	1,5	2	7	No	AD07-E-1-2-070-1-0102	AD07-E-1-2-070-1-0002	173	83	123	1	
200-240	1	1,5	2	7	Yes	AD07-E-2-2-070-1-0112	AD07-E-2-2-070-1-0012	221	110	150	1,7	
200-240	1	2,2	3	10,5	Yes	AD07-E-2-2-105-1-0112	AD07-E-2-2-105-1-0012	221	110	150	1,7	
200-240	1	4	5	15,3	Yes	N/A	AD07-E-3-2-153-1-0012	261	131	175	3,2	
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	173	83	123	1	
200-240	3	0,75	1	4,3	No	N/A	AD07-E-1-2-043-3-0002	173	83	123	1	
200-240	3	1,5	2	7	Yes	AD07-E-2-2-070-3-0112	AD07-E-2-2-070-3-0012	221	110	150	1,7	
200-240	3	1,5	2	7	No	N/A	AD07-E-1-2-070-3-0002	173	83	123	1	
200-240	3	2,2	3	10,5	Yes	AD07-E-2-2-105-3-0112	AD07-E-2-2-105-3-0012	221	110	150	1,7	
200-240	3	4	5	18	Yes	AD07-E-3-2-180-3-0112	AD07-E-3-2-180-3-0012	261	131	175	3,2	
200-240	3	5,5	7,5	24	Yes	AD07-E-3-2-240-3-0112	AD07-E-3-2-240-3-0012	261	131	175	3,2	
200-240	3	7,5	10	30	Yes	AD07-E-4-2-300-3-0112	AD07-E-4-2-300-3-0012	428	171	212	9,1	
200-240	3	11	15	46	Yes	AD07-E-4-2-460-3-0112	AD07-E-4-2-460-3-0012	428	171	212	9,1	
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	173	83	123	1	
380-480	3	1,5	2	4,1	No	AD07-E-1-4-041-3-0102	AD07-E-1-4-041-3-0002	173	83	123	1	
380-480	3	1,5	2	4,1	Yes	AD07-E-2-4-041-3-0112	AD07-E-2-4-041-3-0012	221	110	150	1,7	
380-480	3	2,2	3	5,8	Yes	AD07-E-2-4-058-3-0112	N/A	221	110	150	1,7	
380-480	3	2,2	3	5,8	Yes	N/A	AD07-E-2-4-058-3-0012	221	110	150	1,7	
380-480	3	4	5	9,5	Yes	AD07-E-2-4-095-3-0112	AD07-E-2-4-095-3-0012	221	110	150	1,7	
380-480	3	5,5	7,5	14	Yes	AD07-E-3-4-140-3-0112	AD07-E-3-4-140-3-0012	261	131	175	3,2	
380-480	3	7,5	10	18	Yes	AD07-E-3-4-180-3-0112	AD07-E-3-4-180-3-0012	261	131	175	3,2	
380-480	3	11	15	24	Yes	AD07-E-3-4-240-3-0112		261	131	175	3,2	
380-480	3	11	15	24	Yes		AD07-E-3-4-240-3-0012	261	131	175	3,2	
380-480	3	15	20	30	Yes	AD07-E-4-4-300-3-0112	AD07-E-4-4-300-3-0012	428	171	212	9,1	
380-480	3	18,5	25	39	Yes	AD07-E-4-4-390-3-0112	AD07-E-4-4-390-3-0012	428	171	212	9,1	
380-480	3	22	30	46	Yes	AD07-E-4-4-460-3-0112	AD07-E-4-4-460-3-0012	428	171	212	9,1	