



CANopen®



The **DDS6** series drives are realized in full digital technology and are suitable for the driving of two phase stepper motors.

They are equipped with the **CANopen fieldbus** and can control the motor in **torque, velocity** and **position** with high accuracy.

In addition to the digital and analog I/O they provide with inputs for **incremental and absolute encoders**.

The integrated protections and the isolation of the fieldbus and I/O ensure high reliability. The detailed diagnostics information and the permanent storage of the errors facilitate the detection and resolution of problems.

The family comprises 30 different models with differing functionality and power.

Family Development

Power Supply / Motor Current	CANopen DS301 Rev. 3.0 and IEC 61800-7-201/301(DSP402)		
	Digital I/O	Digital and Analog I/O ABZ Encoder	Digital and Analog I/O ABZ Encoder Absolute Encoder
24Vdc Auxiliary Power Supply			
20..50Vdc (16..36Vac) / 0.2..1.4Arms	DDS6041(A)	DDS6241(A)	DDS6441(A)
20..50Vdc (16..36Vac) / 1.0..4.5Arms	DDS6044(A)	DDS6244(A)	DDS6444(A)
20..50Vdc (16..36Vac) / 2.0..10.0Arms	DDS6048(A)	DDS6248(A)	DDS6448(A)
24..90Vdc (20..65Vac) / 1.0..4.5Arms	DDS6074(A)	DDS6274(A)	DDS6474(A)
24..90Vdc (20..65Vac) / 2.0..10.0Arms	DDS6078(A)	DDS6278(A)	DDS6478(A)

The A suffix (for ex. DDS6278A) identifies the AC versions

The DDS6 series drives state of the art technology that is the result of more than 28 years of experience. The motor is **vector controlled** that makes the concept of step division obsolete. The **STEPLESS operation** mode ensures high speed and maximum torque use. With a motor with integrated encoder it is possible to use the stepper technology also in applications that require **torque control**. Ultimately, the fieldbus in standard CANopen ensures an efficient and quick integration into modern automation systems.

The compact size and the quick **DIN rail mounting** give additional advantages that, together with the competitive cost, make the DD6 series drives the best choice for any modern application.

The drive setting and diagnostics are possible with the use of the free **Omni Automation IDE** software.



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Main technical Data:

Moels	Description	Value			Units	
		Min	Typ	Max		
DDS5x41(A)	Power supply voltage (for DC models)	20		50	Vdc	
	Power supply voltage (for AC models)	16		36	Vac	
	Motor phase current	0.2		1.4	Arms	
DDS6x44(A)	Power supply voltage (for DC models)	20		50	Vdc	
	Power supply voltage (for AC models)	16		36	Vac	
	Motor phase current	1		4.5	Arms	
DDS6x48(A)	Power supply voltage (for DC models)	20		50	Vdc	
	Power supply voltage (for AC models)	16		36	Vac	
	Motor phase current	2		10	Arms	
DDS6x74(A)	Power supply voltage (for DC models)	24		90	Vdc	
	Power supply voltage (for AC models)	20		65	Vac	
	Motor phase current	1		4.5	Arms	
DDS6x78(A)	Power supply voltage (for DC models)	24		90	Vdc	
	Power supply voltage (for AC models)	20		65	Vac	
	Motor phase current	2		10	Arms	
All models	Auxiliary Power Supply Voltage	20	24	35	Vdc	
	Digital Input Voltage Range	3		28	Vdc	
	Digital Input Supply Current	3	4	8	mA	
	Digital Output Voltage Range	1		30	Vdc	
	Digital Output Current Range			80	mA	
	Analog input operating voltage	-10		+10	Vdc	
	Analog inputs impedance		47		KΩ	
	Supply voltage for Encoder	5.0	5.2	5.4	Vdc	
	Supply current for Encoder			100	mA	
	Encoder Input Compatibility	Line Driver, TTL/CMOS, Open Collector				
	PWM frequency		20		KHz	
	Mechanical Specifications					
		Height		100		mm
	Depth		122		mm	
DDS6x41, DDS6xx4	Width		23		mm	
	Weight		130		g	
DDS6xx8	Width		35		mm	
	Weight		220		g	
DDS6x41A, DDS6xx4A	Width		35		mm	
	Weight		190		g	
DDS6xx8A	Width		35		mm	
	Weight		270		g	

x = any character, also nothing

The A suffix (for ex. DDS6278A) identifies the AC versions.

Connectors AC version, CN4 and CN5 only available on DDS62xx(A) series.

