

Compact Servo Drive ESK31



- Mains Operating 230 V_{AC}
- Continuous Power up to 2 kW
- Universal, can operate Rotary or Linear Motors
- Fieldbus Interfaces
- Fully Digital
- Flexible; can operate various Feedback Systems
- Small Size
- Compact or Rackmounted Unit

Digital Servo Drives ESK31 Series

With the servo drive series ESK31 BAUTZ provides you with a series belonging to the smallest one world wide in this performance class.

All necessary operational functions have already been integrated.

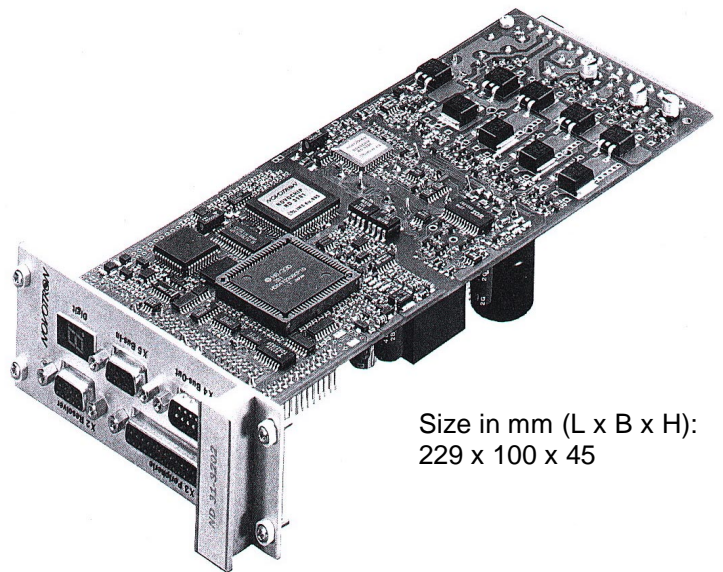
A separate power supply, smoothing reactor and transformer are superfluous, because all components are combined in one single module. Even a serial bus system has already been integrated and a single-axis position control is available as supplement.

Available in performance ranges of 0,5, 1 and 2 kW, the ESK31 offers the complete advantages of a fully digital servo drive. Furthermore the ESK31 offers a lot of additional opportunities. Additionally, you can utilize the CAN-Bus, PLC-function with 10 I/O's or inputs for different high resolution position feedbacks.

All ESK31 servo drives are available in 19" or compact version, the compact housing is available for 2 or 3 axes.

Features

- Servo Drive for power levels 0,5, 1 and 2 kW
- 19"-rack or compact unit
- All components integrated in one unit
- Integrated power supply
- Direct mains connection (230 V_{AC})
- Integrated serial interface
- Ideal for multiple axis control
- Suitable for linear motors
- Favourable solution for highly dynamic servo applications
- Digital and analog interfaces
 - Encoder interface
 - ± 10 V interface
 - Sine encoder
 - Hall sensors
- Novobus and CAN-Bus compatible
 - Multiple axes communication
 - Synchronization of several drives
 - Master-/slave applications
- CAN-Bus (optional)
 - CAN-Bus and Novobus are connected through one cable and can be active at the same time
 - Communication between components of different suppliers is possible
 - Modular parallel control, communication of all axes via CAN-Bus
 - Fast feedback co-ordination between axis and host (less than 1 ms for 6 axes) as basis for interpolation
 - Master-/slave applications
- Profibus, Interbus-S and SERCOS upon request



Size in mm (L x B x H):
229 x 100 x 45

Technical Data

Servo Drive ESK31...		- 3202	- 3204	- 3207
Rated Power	[kW]	0,5	1,0	2,0
Supply Voltage		150 – 230 V _{AC} 50 Hz		
Input Power	[kVA]	0,7	1,4	2,8
DC-Bus Voltage	[V _{DC}]	325 V _{DC}		
Rated Current	[A _{rms}]	2,0	4,0	7,0
Rated Current	[A _{o-p}]	2,8	5,6	10,0
Peak Current	[A]	4,0	8,0	14,0
Input, digital		0 – 500 Hz		
Input, analog		± 10 V		
Cycle Time Current Control	[μs]	100 (11bit resolution)		
Cycle Time Velocity Control	[μs]	500		
Cycle Time Position Loop	[μs]	500		
Size 19"-Version without SPS (H x B X T)	[mm]	100x45x229		
Size 19"-Version with SPS (H x B X T)	[mm]	100 x 60 x 229		
Weight 19"-Version	[g]	300	300	500
Size Compact Unit (H x B X T)	[mm]	327 x 86 x 180		
Weight Compact Unit	[g]	2.000	2.000	3.000
Programmable Pulse Output		up to 1024 pulses per revolution		
Interfaces		RS 232, RS 485 (standard) Novobus, CAN-Bus (optional) Profibus, Interbus-S, Sercos (upon request)		

Standard Features:

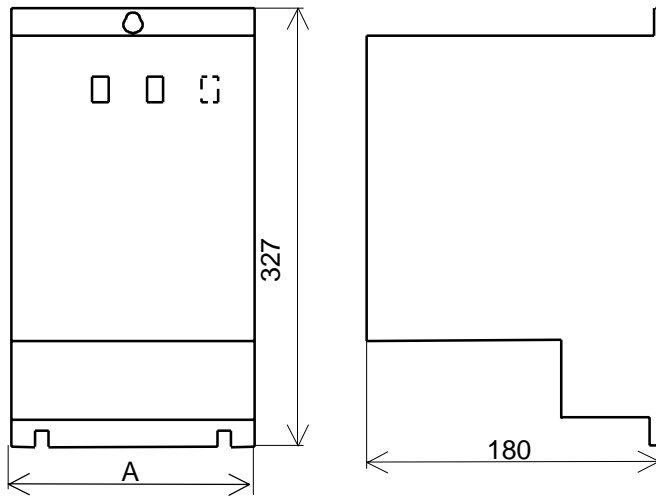
- All I/O signals and serial interface isolated from mains
- High voltage protection up to 750 V up to 10 ms
- Integrated oscilloscope function, for fast set-up and diagnosis
- Integrated counter for operation hours
- Various motor feedback signals, resolver, sine encoder
- Encoder input for additional position feedback system
- Fully programmable controller

Optional Features:

- Position control
- Integrated PLC functionality with up to 10 programmable I/O's
- CAN-Bus and CAM profiling

Compact Housing

Metal housing with integrated cooling and strain relief for 2 or 3 servo axis Type ESK31-32XX-XS01.



Compact Unit for 2 axes ESK31-KG2

Size A = 100 mm

Compact Unit for 3 axes ESK31-KG3

Size A = 140,5 mm

Order Code

ESK 31-32 XX XS - XXX

