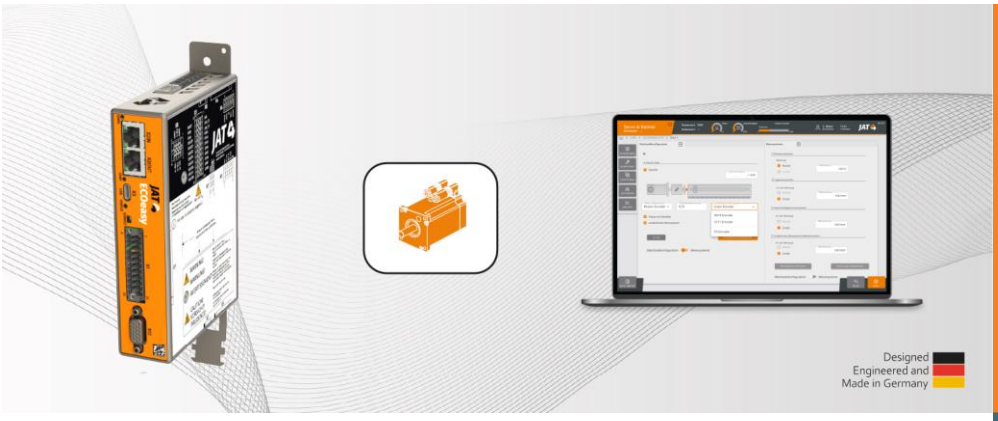
JAT JENAER ANTRIEBSTECHNIK

Servo Amplifier ECOeasy



EtherCAT

PROFINET

Minimum space requirements in the control cabinet

Dimensions 35,5 x 154 x 107 mm (H x W x D)

Integrated safety

Safety function STO (Safe Torque Off)
according to EN 61800-5-2

Cost-efficient solution

Implemented sequences replace smaller controllers

Easy commissioning

Intuitive parameterization and commissioning via
JAT engineering software ECOmotionSuite

Diverse drive applications

Numerous technology functions for application-specific drive solutions, no time-consuming programming



Appropriate JAT Switching Power Supply: SN60V/8A

Power supply:
20 ... 60 V_{DC}

Output current:
max. 10 A_{eff}

Control of:
2- and 3-phase synchronous servo motors, DC motors, stepper motors, linear motors

Safety integrated:
Safety function STO

Encoder:
Position feedback via incremental encoder or absolute value encoder (BISS®)

Fast current controller:
approx. 31 µs

I/O functionality:
8 digital inputs
8 digital outputs
1 analog input(12-bit)
1 analog output(12-bit)

USB-C parameterization interface

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→ Technical data

DC Supply		
Rated voltage supply	V_{DC}	20 ... 60
Overvoltage switch-off	V_{DC}	78,5
Max. input current (3-phase motor and 60 V_{DC})	A_{DC}	13
Max. power consumption at nominal load (3-phase motor and 60 V_{DC})	W	750

Data of Power Output Stage		
Peak output current	A_{eff}	15 (5 s)
Rated output current*	A_{eff}	10
Max. output power**	W	1000 (5 s)
Rated output power**	W	720
max. current of ballast resistor	A	5

*) For operation above 40°C, power derating is required, see Installation manual

**) for 3-phase motors and supply 60 V_{DC}

Encoder		
supply voltage	V	5

Dimensions and weight		
Dimensions (W x H x D)	mm	35,5 x 154 x 107
Weight	kg	0,5

Standards	
Ambient conditions according to EN 61800-2	
Applied standards for CE	EMC according to EN IEC 61800-3, ectrical safety acc. to EN 61800-5-1, RoHS gemäß EN IEC 63000 vices with the safety function STO: Functional safety according to EN 61800-5-2

Customs tariff number	
Customs tariff number	85371091

Logic Supply		
Logic Supply	V	24 (18 ... 30)
Max. input current at 24 V_{DC}	A	8

Digital Inputs and Outputs		
8 Digital Inputs	V	24 (18 ... 30)
8 Digital Outputs	A	0,5
1 Digital Output holding brake	A	max. 1 (0,5 s) permanent 0,5

Analog Inputs and Outputs		
1 Analog Input	V	0 ... 10
1 Analog Output	V	0 ... 10
load Analog Output	mA	2
resolution	Bit	12

Safety function STO
2 STO-inputs
1 STO-feedback signal (output)
SIL-3 (according to EN 61800-5-2); PL e (according to EN ISO 13849-1)

Ambient conditions		
Class	Operation: 3K3 according to EN 61800-2 Storage, transport: 1K4 according to EN 61800-2	
Storage temperature	°C	-25 ... +55
Ambient temperature during operation	°C	+5 ... +40
Degree of humidity, non-condensing	% rel. h.	85 (maximum)
Installation altitude above sea level	m	< 2000
Mounting position	The technical data refer to a vertical position.	
Protection class	IP20	
Pollution degree	2	
Cooling	Sufficient air circulation must be ensured in a closed control cabinet.	

Basic functions

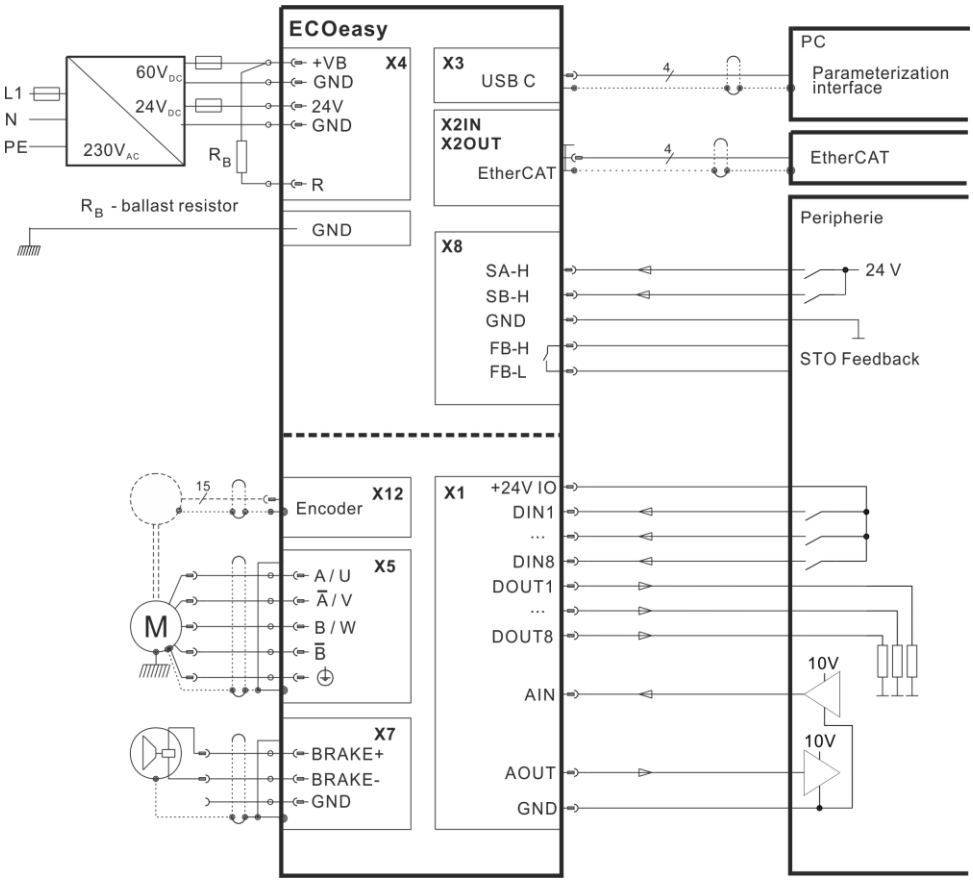
- ✓ Digital current, speed and position control
- ✓ Digital filtering functions to dampen vibrations in the overall system
- ✓ Parameterizable jerk filters optimize the motion profiles and improve the machine's longevity
- ✓ Short circuit, voltage, temperature, encoder, following error and i^2t monitoring
- ✓ Intelligent holding brake control with current reduction
- ✓ Evaluation of limit switches and reference sensor, multiple homing modes
- ✓ Motion Control, interpolation
- ✓ Two-colour LED status display, service button

ECOmotionSuite - The new JAT Engineering Software

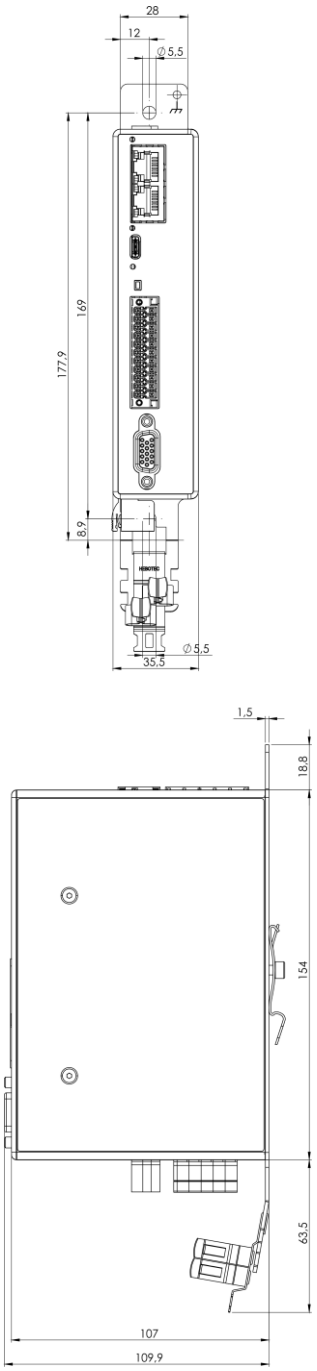
- ✓ Setting of all parameters via an intuitive web-based interface that can be run on all common devices
- ✓ Individually configurable dashboards, all required functionalities at a glance
- ✓ Wizard-supported commissioning
- ✓ Oscilloscope function to dynamically display selected operating values
- ✓ Firmware update

Servo Amplifier ECOeasy

→ Connection diagram

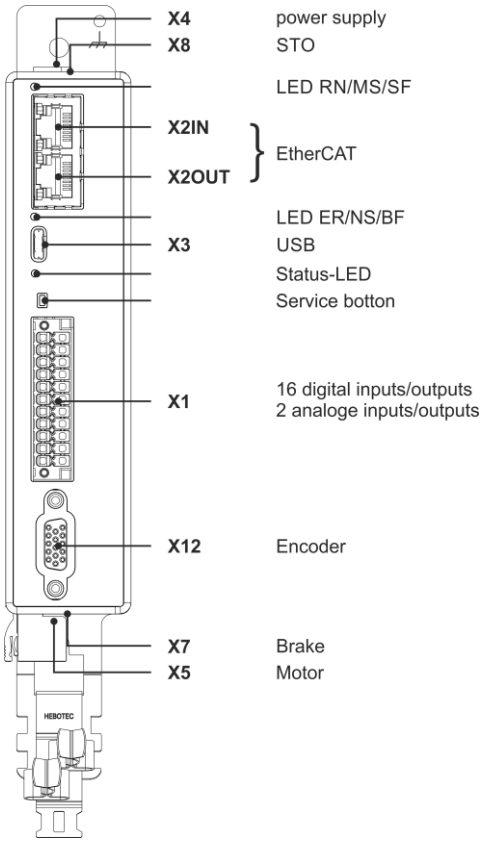


→ Dimensions



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→ Interfaces



→ Ordering key

ECOeasy 115uvw-yyy-zzz

uv		w		yyy-zzz
u: Options		**Approvals**		**yyy: Number of firmware (three digits)**
R	STO	A	CE, standard design	**zzz: Number of parameter set (three digits)**
v: Field bus		B-I	CE, standard design	
B	CAN (on request)	J	CE, UL, standard design	
Q	EtherCAT			

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→ Accessories

Accessories	
DEK10	Mating connector set ECOeasy
DEZ10	Shield clamp ECOeasy
DDK21	Encoder splitter 1x INK, 1x ABS an X11 / X12
DEZ20	adapter for top-hat rail

External ballast resistor	
DPR22-200	Ballast resistor 22 Ω/200 W (500 W cooled)

ECOeasy pre-assembled cables
Cable and motor variants can be found in our motor data sheets for frame sizes 17, 23, and 60, with further options for cables and connectors detailed in our accessory catalog..

If you need cables specially tailored to your application, please do not hesitate to contact us.