

smartServo Decentralized servo drives

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smartServo BL 4104-D





BL 4104-M

Servo drive mounted on the motor

Power supply (230 V)

Digital and analogue IOs STO and 24 V supply

> EtherCAT PROFINET Optional: CANopen

USB LED display





Servo drive as separate variant



Multi-encoder connection (decentralized)

Motor connection up to 16 A

smartServo – speedy, slim, smart Decentralized servo drive BL 4104-M/D

> Saving of control cabinet space

- > Usually no control cabinet required for the servo drive
- > No cabling between motor and servo drive if the servo drive is installed on the motor
- > USB and Ethernet as parameterization interface
- > Fieldbus on board EtherCAT, PROFINET, optional CANopen
- Universal encoder evaluation HIPERFACE®, HIPERFACE DSL®, EnDat 2.2, resolver, analogue and digital incremental encoders, BISS
- > Bluetooth integrated Query of the servo drive status via smartphone or tablet

Preliminary technical data			
Features	BL 4104-M (on the motor)	BL 4104-D (separated from the motor)	
Voltage supply	240 VAC [± 10 %], 5060 Hz		
Control voltage	24 VDC [± 20 %]		
DC link voltage	325 VDC		
Output power	800 VA		
Max. output power for 3 s	2 kVA		
Rated output current	4 Arms		
Max. output current for 2 s	12 Arms		
Internal brake resistor	45 Ω		
Continuous power / pulse power	8 W / 2 kW		
External brake resistor	-		
Holding brake	24 VDC, max. 1.5 A		
Dimensions (without flange) servo drive H x W x D	82 x 65 x 125 mm	82 x 115 x 125 mm	
Weight	1 kg	1.2 kg	
Encoder evaluation	EnDat 2.2, HIPERFACE®, HIPERFACE DSL®, resolver, analogue and digital incremental encoders with / without commutation signals, BISS (Type C)		
Interfaces	USB 2.0, Ethernet, EtherCAT, PROFINET, optional CANopen		
Inputs/outputs	8 x digital in (24 VDC), 1 x analogue in (±10 V), 1 x analogue out (±10 V), 2 x digital out (24 VDC)		

All information is provisional and without guarantee.



BL 4840-M

Servo drive mounted on the motor

Power supply (48 V)

Digital and analogue IOs

STO and 24 V supply

EtherCAT PROFINET Optional: CANopen

USB LED display



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smartServo BL 4840-D

WARNING! Hisk of Electric Sh

AVERTISSEMENT!

20 min 30 min D21] [X9] DX1



Servo drive as separate variant

High current motor connection

Multi-encoder connection (decentralized)

Motor connection up to 16 A

smartServo – speedy, slim, smart Decentralized servo drive BL 4840-M/D

> Saving of control cabinet space

- > Usually no control cabinet required for the servo drive
- > No cabling between motor and servo drive if the servo drive is installed on the motor
- > Supply with low voltage of 48 V via PELV power supplies or batteries
- > No high voltages at the motor and servo drive
- > USB and Ethernet as parameterization interface
- > Fieldbus on board EtherCAT, PROFINET, optional CANopen
- Universal encoder evaluation HIPERFACE[®], HIPERFACE DSL[®], EnDat 2.2, resolver, analogue and digital incremental encoders, BISS
- > Bluetooth integrated Query of the servo drive status via smartphone or tablet

Preliminary technical data			
Features	BL 4840-M (on the motor)	BL 4840-D (separated from the motor)	
Voltage supply	24 to 48 V		
Control voltage	24 VDC [± 20 %]		
DC link voltage	24 to 48 V		
Output power	1900 VA		
Max. output power for 3 s	5000 VA		
Rated output current	40 Arms		
Max. output current for 2 s	120 Arms		
Internal brake resistor	-		
Continuous power / pulse power	-		
External brake resistor	-		
Holding brake	-		
Dimensions (without flange) servo drive H x W x D	82 x 65 x 125 mm	82 x 115 x 125 mm	
Weight	1 kg	1.2 kg	
Encoder evaluation	EnDat 2.2, HIPERFACE®, HIPERFACE DSL®, resolver, analogue and digital incremental encoders with / without commutation signals, BISS (Type C)		
Interfaces	USB 2.0, Ethernet, EtherCAT, PROFINET, optional CANopen		
Inputs/outputs	8 x digital in (24 VDC), 1 x analogue in (±10 V), 1 x analogue out (±10 V), 2 x digital out (24 VDC)		

All information is provisional and without guarantee.

Protection class IP67 High protection class for long-lasting operation in rough environments

Thanks to their particularly robust design and excellent manufacturing, the decentralized smartServo drives comply with protection class IP67.

The IP67 protection class protects the servo drives against dust, contact and even submersion. This allows them to be used without a protective housing. They quickly and effectively meet even "large" requirements.

Safety functions for safe sequences



> STO - Safe Torque Off

Disconnection of the energy supply to the drive according to EN 61800- 5-2. This safety function ensures that the drive is unable to deliver energy.



> SS1 - Safe Stop 1

The drive is braked self-sufficiently to idle within a defined time using a defined slowdown ramp and then the energy supply is switched off safely. All three versions described in the standard are supported.



Decentralized construction Small servo drives with great power

Clear advantage - the decentralized design

- Saving of control cabinet space, since the servo drive including motor is located outside the control cabinet.
- > Simplified cabling leads to cost advantages and higher operational reliability of the machine.
- > Thanks to the high efficiency and low power loss, the naturally available room ventilation is sufficient.
- > Compact and robust design





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