

LBD & MMB SERIES

Stand alone brushless drive

LBD Drive is a stand alone brushless drive to install on cabinet for synchronous AC motors extremely compact, reliable and high-performance.

The wide range with 230 Vac single phase solutions and 400 three-phase 400 Vac solutions in combination with the brushless motors of the MMB series makes it suitable for all applications on machines with high kinematic performance. The CANopen and EtherCAT interface makes it particularly suitable for use with FCT controllers. Also available interfacing analog inputs and stepper motor simulation. The system is equipped with the standard safety function STO at SIL2 level.

LBD Drive è il tradizionale azionamento brushless stand alone da quadro per motori AC sincroni estremamente compatto, affidabile e di grandi prestazioni.

L'ampia gamma con soluzioni sia a 230 Vac monofase che 400 Vac trifase in abbinamento ai motori della serie MMB lo rende adatto a tutte le applicazioni su macchine con alte prestazioni cinematiche. L'interfaccia CANOpen e Ethercat lo rende particolarmente adatto all'uso con i controllori FCT. Disponibile anche l'interfacciamento analog input e Stepper motor simulation. Il sistema è dotato delle funzioni standard di sicurezza STO SIL2.



LBD 23

Brushless
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• BRUSHLESS DRIVE 230 VAC

with CANopen interface dedicated to the FCT series motion controller

Power supply

230Vac single phase

Logic supply

24Vdc

Rated current

230Vac: 5,5A - 8.5A

Peak current

230Vac: 11/17 A

Interface

CANopen DS402 (2 RJ45 connectors), etherCAT
± 10V, Pulse/direction

Feedback

Resolver, TTL incremental encoder, TTL incremental
encoder+HES, SinCos, Hiperface absolute encoder
single and multiturn

Encoder emulation

Incremental TTL (differential output)

2 Analog inputs

12bits +/-10V

1 Analog output

8 bits +/- 2,5V

5 Digital inputs

24Vdc optoisolated: general purpose or configurable
as Capture, Index, Limit switch +/-, Enable, STEP/DIR

3 Digital outputs

Parametrable 24Vdc max 300mA with dedicated
terminal connection for motor brake control
(external power device required)

Braking resistor

30W included. External connections available

STO function

2 channels, SIL2 compliant

Motor thermal sensor

PTC/NTC

EMC filter

Choke integrated

Certifications: CE



• OVERALL DIMENSIONS

Type	LBD23	
Peak current	11	17
Standard dimensions (mm)	H148XW70XD143	
Weight (Kg)	1,5	

LBD 40

Brushless
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Brushless motors
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• BRUSHLESS DRIVE 400 VAC

with CANopen interface dedicated to the FCT series motion controller

Power supply

400Vac three phase

Logic supply

24Vdc

Rated current

400Vac: 4/10/22,5/35 A

Peak current

400Vac: 8/20/45/100 A

Interface

CANopen DS402 (2 RJ45 connectors), etherCAT

± 10V, Pulse/direction

Feedback

Resolver, TTL incremental encoder, TTL incremental encoder+HES,

SinCos, Hiperface absolute encoder single and multturn

Encoder emulation

Incremental TTL (differential output)

2 Analog inputs

12bits +/-10V

1 Analog output

8 bits +/- 2,5V

5 Digital inputs

24Vdc optoisolated: general purpose or configurable as

Capture, Index, Limit switch +/-, Enable, STEP/DIR

3 Digital outputs

Parametrable 24Vdc max 300mA with dedicated terminal

connection for motor brake control (external power device required)

Braking resistor

35W included. External connections available

STO function

2 channels, SIL2 compliant

Motor thermal sensor

PTC/NTC

EMC filter

Choke integrated

Certifications: CE



• OVERALL DIMENSIONS

Type	LBD40			
Peak current	008	020	045	100
Standard dimensions (mm)	H220XW70XD182			220x80x206
Weight (Kg)	2,2	2,4	3,3	

* external power supply unit (code **MMGDPS - 400 / 16.000**
MMGDPS - 400 / 32.000)

LBD

Ordering Code

Brushless
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• LBD23 ORDERING CODE

LBD23CC/XXX.abc

Type	Power supply	Peak current (cc)	Interface (xxx)	Option (ab)	Option (c)
LBD	23(230V)	11 (11 A)	CAN or ETC	reserved=00	customiz.
LBD	23(230V)	17 (17 A)	CAN or ETC	reserved=00	customiz.

• LBD40 ORDERING CODE

LBD40CCC/XXX.abc

Type	Power supply	Peak current (ccc)	Interface (xxx)	Option (ab)	Option (c)
LBD	40(400V)	008 (8 A)	CAN or ETC	a=0 standard a=1 Push through ver b=reserved=00	customiz.
LBD	40(400V)	020 (20 A)	CAN or ETC	a=0 standard a=1 Push through ver b=reserved=00	customiz.
LBD	40(400V)	045 (45 A)*	CAN or ETC	a=0 standard a=1 Push through ver b=reserved=00	customiz.
LBD	40(400V)	100 (100 A)*	CAN or ETC	a=0 standard a=1 Push through ver b=reserved=00	customiz.

• MMGDPS ORDERING CODE

MMGDPS-400/pp.000

MMGDPS-400/16.000 Power supply 16 KW with kit external connector

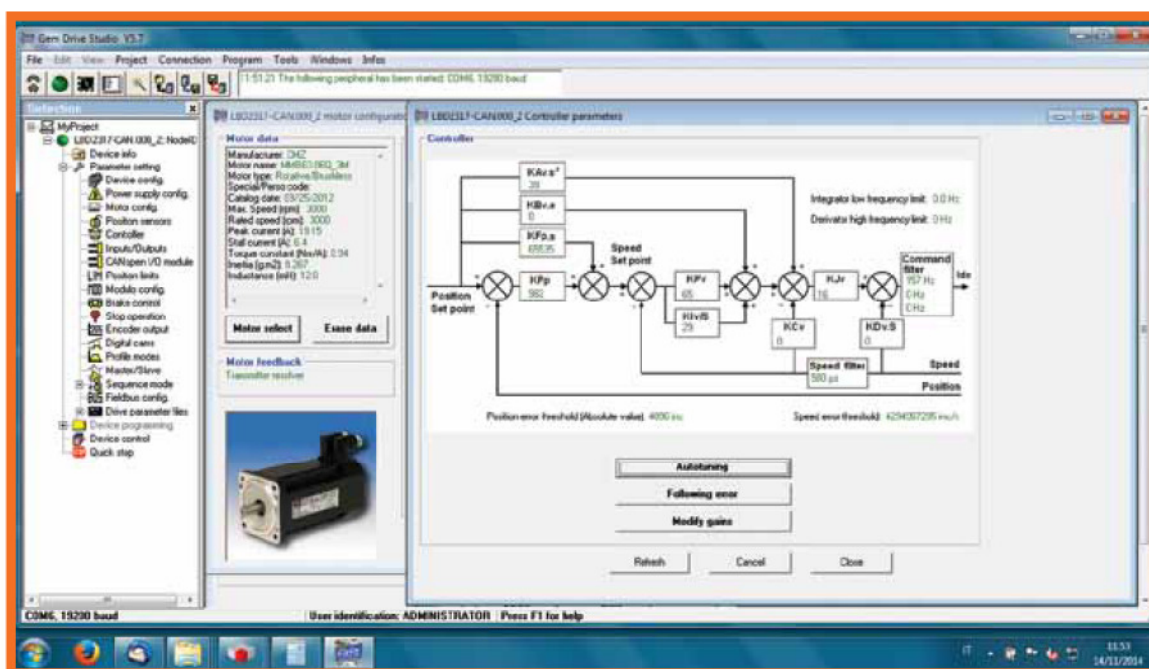
MMGDPS-400/32.000 Power supply 32 KW with kit external connector

• GEM DRIVE STUDIO FOR LBD DRIVE

Gem Drive Studio (GDS) is the development environment for configuration, parameterization and tuning of the LBD drives using RS232 or a centralized connection via fieldbus. The software can be configured into different levels depending on the experience of the user and provides many tools for the configuration, tuning and monitoring of the drive.

Gem Drive Studio (GDS) è l'ambiente di sviluppo per la configurazione, parametrizzazione e taratura degli azionamenti LBD utilizzando la seriale RS232 o un collegamento centralizzato tramite bus di campo.

Il software può essere configurato in diversi livelli a seconda dell'esperienza dell'utilizzatore e mette a disposizione molti strumenti per la configurazione, la taratura e il monitor dell'azionamento.



• CONTROL FEATURES

PWM: 8KHz

Digital current loop: 62,5 μ s

Digital speed loop: 500 μ s

Position loop: 500 μ s

Auto-phasing: motor phase and resolver

Auto-tuning: 3 bands, 2 filters

Motor cogging torque compensation