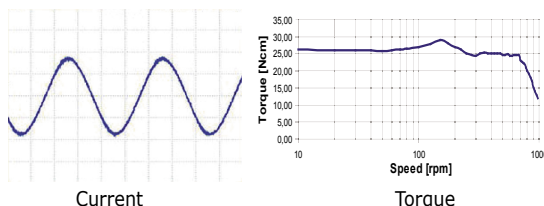


Main features

✓ Vectorial control

The sinusoidal phase current with "else" technology keep the motor torque constant allowing smooth and noiseless movements.



✓ Motor stall detection without encoder *1

✓ Smooth movement

✓ Compact size

✓ Noiseless rotation

✓ Reliability

✓ Low EM emissions

✓ Software resonance damping

✓ Auto tuning of motor control parameters

✓ High efficiency current set up

✓ Reduction of motor temperature

*1 only for LW3D30xx models

Specifications

MODELS

Code	Power supply	Current max	Motors type
LW3D2030	12 ÷ 36 Vdc	3.0 Arms	2 phases
LW3D3032	24 ÷ 80 Vdc	3.2 Arms	2 phases
LW3D3070	24 ÷ 80 Vdc	7.1 Arms	2 phases

OPTO ISOLATED INPUTS

4 Digital IN NPN, PNP or Line-Driver 2 MHz

OPTO ISOLATED OUTPUT

1 Digital OUT 24 Vdc - 100 mA for status monitoring

STEP RESOLUTION

From full step up to 1/256 (emulated)

SAFETY PROTECTIONS

Over/Under voltage, Over Current, Over Temperature, Short Circuit Phase/Phase and Phase/Ground

STATUS MONITORING

3 LED with guiding light (green and red/yellow)

TEMPERATURE

Working: from 0°C to 40°C. Storage: from -25°C to 55°C

HUMIDITY

5% ÷ 85%

PROTECTION CLASS

IP20

Vectorial drivers for 2 phases stepper motors

error
less
servo
efficient
else
technology
by Ever Elettronica



LW3D Titania drivers

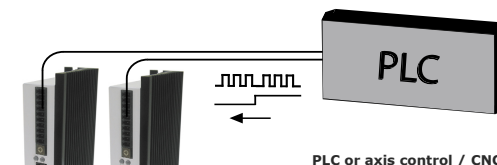
- Equipped with advanced safety features:
 - ✓ Sensorless motor stall detection
 - ✓ Integrated diagnostic
 - ✓ Protections against short circuit motor, open phases, over/under voltage and temperature

LW3D drivers of Titania series, based on Arm Core M4 technology, are the solution to control stepper motors in clock&direction mode with an accuracy, smoothness and noiseless never seen before for a stepper driver.

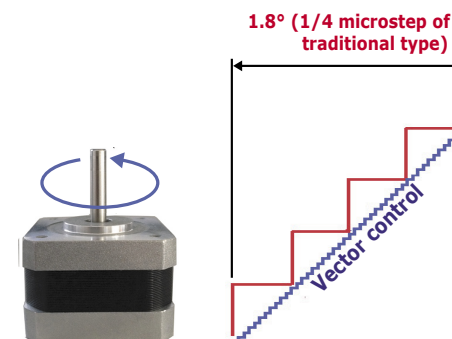


EVER Motion Solutions srl
Via del Commercio, 2/4 - 9/11
Loc. S. Grato - Z.I.
26900 - LODI (LO) - Italy
Tel. 0039 0371 412318 - Fax 0039 0371 412367
email infoever@everelettronica.it
www.everelettronica.it

STEP & DIRECTION

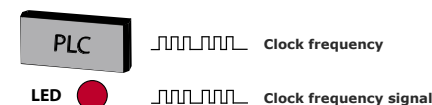


- Setting of the current value by means of dip-switches
- Selection of the step angle by means of roto-switches.
In order to maintain compatibility with traditional drivers, step angles have been emulated through software, the current regulation is always sinusoidal.

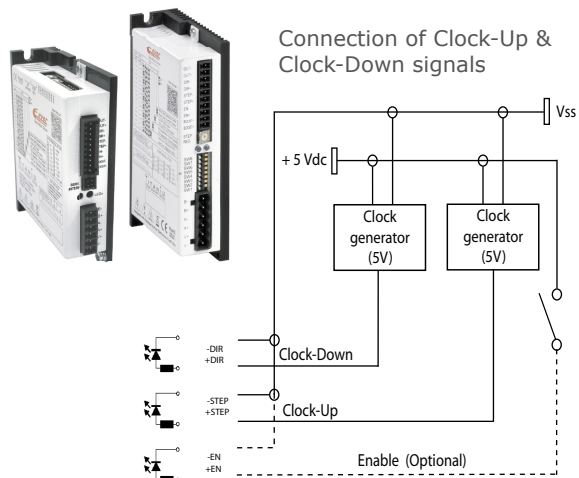
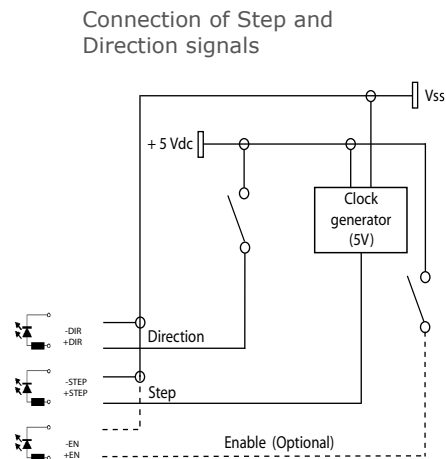


- Possibility to select five user functions:

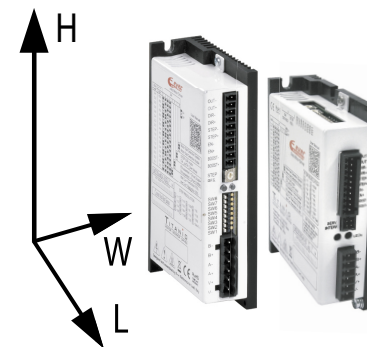
- 1 - enabling of motor stall detection.
Reading the motor BEMF, LW3 drivers detect without encoder the step loss, showing alarm status with the Fault digital OUT and a LED sequence.
- 2 - Step/Direction or Clock-Up / Clock-Down control mode.
- 3 - enable input management (safety control).
- 4 - 30% or 70% automatic current reduction (still motor).
- 5 - enabling of "Clock Test" function, useful during the driver's installation, which shows the right presence of the clock signal through status LED flashing.



Inputs Connection



Mechanical Data



Models	Dimensions (mm)			Weight (g.)
	H	L	W	
LW3D2030N2A1-00	95.0	73.0	23.0	290
LW3D30xxN0A1-00	128.0	74.0	30.0	290

Ordering Information for LW3D Drives

Ordering code	Power		System resources		
Versions	Power Supply	Current	Digital Inputs	Analog Inputs	Digital Outputs
LW3D Drive Series: Models 2030					
LW3D2030N2A1-00	12 ÷ 36 Vdc	0.10 ÷ 3.0 Arms (0.14 ÷ 4.2 Apeak)	4 opto isolated 5-24 Vdc NPN, PNP or Line Driver 2 MHz	---	1 opto isolated 24 Vdc 100 mA PNP for FAULT
LW3D Drive Series: Models 3032					
LW3D3032N0A1-00	24 ÷ 80 Vdc	0.21 ÷ 3.2 Arms (0.3 ÷ 4.5 Apeak)	4 opto isolated 2-24 Vdc NPN, PNP or Line Driver 2 MHz	---	1 opto isolated 24 Vdc 100 mA PNP for FAULT
LW3D Drive Series: Models 3070					
LW3D3070N0A1-00	24 ÷ 80 Vdc	1.70 ÷ 7.1 Arms (2.4 ÷ 10.0 Apeak)	4 opto isolated 2-24 Vdc NPN, PNP or Line Driver 2 MHz	---	1 opto isolated 24 Vdc 100 mA PNP for FAULT