### Specifications

#### **MODELS**

|   | Code     | Power supply  | Current<br>max | Motors<br>type |
|---|----------|---------------|----------------|----------------|
| I | LW3A9030 | 100 ÷ 240 Vac | 3.0 Arms       | 2 phases       |

#### **OPTO ISOLATED INPUTS**

4 Digital IN 5 ÷ 24 Vdc NPN, PNP or Line-Driver

#### **OPTO ISOLATED OUTPUT**

1 Digital OUT 24 Vdc - 400 mA PNP/NPN for status monitoring

#### STEP RESOLUTION

Full Step, ½, ¼, 1/8, 1/2.5, 1/5, 1/10 configurable by means of Dip-Switches and other step angle could be defined by software

#### SCI INTERFACE

Serial interface for parameters configuration and debug in real time

#### 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

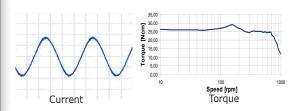
5% ÷ 85%

#### PROTECTION CLASS

IP20

## Vectorial control

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



- √ Smooth movement
- √ Noiseless rotation
- √ Low EM emissions
- √ Software resonance damping
- √ Reduction of motor's temperature

# Vectorial drivers for 2 phases stepper motors









# LW3A

# **Titanio drivers**

- $\sqrt{\text{Mains 230 Vac power supply}}$
- √ Sensorless motor stall detection
- √ Built-in Service Serial Interface for parameters configuration and debugging via software
- √ Protections against short circuit motor, open phases, over/under voltage and temperature



#### **ELETTRONICA PER AUTOMAZIONE INDUSTRIALE**

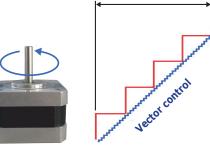
Via del Commercio, 2/4 -9/11 Loc. S. Grato - Z.I. 26900 - LODI (LO) - Italy Tel. 0039 0371 412318 - Fax 0039 0371 412367 email infoever@everelettronica.it www.everelettronica.it

### STEP & DIRECTION



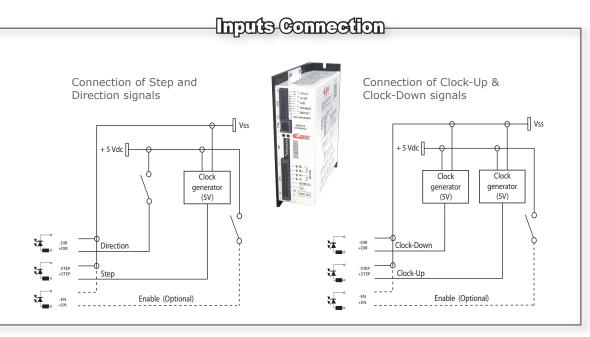
- Setting of the current value by means of dip-switches
- Selection of the step angle by means of dip-switches.
  In order to maintain compatibility with traditional drivers, step angles have been emulated through software, the current regulation is always sinusoidal.

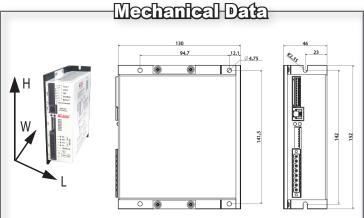
## 1.8° (1/4 microstep of traditional type)



- 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 automatic current reduction via software (still motor).

Weight (g.)





Dimensions (mm)

46.0

130.0

152.0

Models

LW3A9030N2A1-00

## -Ordering-Information-for LVXX-Drives

| Ordering code                  | Ordering code Power |                                     | System resources                                    |   |                 |  |  |
|--------------------------------|---------------------|-------------------------------------|---|---|-----------------|--|--|
| Versions                       | Power Supply        | Current                             | Digital Inputs                                      | Digital Outputs                                       | Kit Software    |  |  |
| LW3A Drive Series: Models 9030 |                     |                                     |   |   |                 |  |  |
| LW3A9030N2A1-00                | 100 ÷ 240 Vdc       | 0.0 ÷ 3.0 Arms<br>(0.0 ÷ 4.2 Apeak) | 4 opto isolated 5-24 Vdc<br>NPN, PNP or Line Driver | 1 opto isolated 24 Vdc 400 mA<br>PNP or NPN for FAULT | LW3A9_SERV10-SL |  |  |