

# INTEGRATED FIELD-ORIENTED CONTROL DRIVE

**SERIES DRVI** 



## SERIES DRVI A PRECISE, FAST AND VERSATILE DRIVE



The Series DRVI integrated motor drive is designed **to control various types of motors**, both stepper and brushless, using a closed-loop control (FOC) algorithm. This algorithm, also known as vector control (FOC), offers **better performance than traditional stepper motor control systems**, which allows the stepper motor to operate over the entire speed range, ensuring fast acceleration and deceleration, assuring more accurate motion control with no loss of steps.

It is also more energy efficient than traditional control methods, as it uses precise rotor position feedback and controls the phase current, optimising motor operation. Its **compact design** and integration with the main communication protocols make the Series DRVI the **ideal solution for various industrial applications** that require accurate control and fast response to load variations.



### **Integrated solution** Encoder, motor, and drive all in one



### Flexibility

Different operating modes: position, speed and torque



### **Energy efficient**

Compared to traditional stepper motors



#### **Precise Positioning**

With no loss of steps achieved through Field-Oriented Control



## Different communication protocols

CANopen - Profinet - EtherCAT - Ethernet IP

### Ideal for any application



### General Data

	DRVI-23ST012	DRVI-24ST022	DRVI-24EC125
Motor type	Stepper	Stepper	Brushless DC
Flange size	NEMA 23	NEMA 24	NEMA 24
Max speed [rpm]	3000 rpm	3000 rpm	3000 rpm
Torque [Nm]	1.2 Nm (holding torque)	2.2 Nm (holding torque)	0.5 Nm (nominal) - 1.5 Nm (peak)
Rated power [W]	-	-	125 W
Power supply	24 - 48 VDC	24 - 48 VDC	24 - 48 VDC (nominal 48 V)
GPIO	2 Digital inputs for sensors (homing and limit switches) 2 Configurable digital inputs 1 Configurable digital output	2 Digital inputs for sensors (homing and limit switches) 2 Configurable digital inputs 1 Configurable digital output	2 Digital inputs for sensors (homing and limit switches) 2 Configurable digital inputs 1 Configurable digital output
IP protection	IP65 (except motor shaft)	IP65 (except motor shaft)	IP65 (except motor shaft)
Control loop	Closed loop by field-oriented control	Closed loop by field-oriented control	Closed loop by field-oriented control
Operation mode	Position - Speed - Torque	Position - Speed - Torque	Position - Speed - Torque
Communication protocol	CANopen - Profinet - Ethercat - Ethernet/IP	CANopen - Profinet - Ethercat - Ethernet/IP	CANopen - Profinet - Ethercat - Ethernet/IP
Additional Function	STO (Safe Torque Off)*	STO (Safe Torque Off)*	STO (Safe Torque Off)*

### Contacts

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