



200 V Single-Phase
0.1 kW to 4.0 kW

200 V Three-Phase
0.1 kW to 18.5 kW

400 V Three-Phase
0.2 kW to 18.5 kW

Inverter Series Compact Vector Control Inverter Drive

- ▶ **Excellent motor drive performance:**
V1000 is a compact size inverter drive running not only induction motors, but also permanent magnet motors (open loop).
- ▶ **Built-in functional safety features:**
The implemented Safe Torque Off (STO) function replaces output contactors and significantly improves machine safety and reliability and provides substantial cost reduction potentials.
- ▶ **Optimized machine efficiency:**
Advanced energy-saving control technology which improves efficiency and machine productivity in combination with induction and PM motor operation.
- ▶ **Easy integration of PLC functionality:**
DriveWorksEZ creates a custom drive functionality with just some mouse clicks and by fast and intuitive programming.
- ▶ **Easy and time-saving start-up:**
V1000 automatically sets parameters needed for major applications. The same easily understandable parameter structure like in other YASKAWA 1000 series drives allows hassle free setup in shortest time.
- ▶ **Space saving and compact set-up:**
Outstanding power to size ratio and gapless side-by-side installation reduce the mounting space to a minimum.
- ▶ **Small design - Big power:**
V1000 can handle 150% overload for 1 minute to satisfy heavy duty applications. In normal duty mode it runs a one size larger motor and contributes to small and cost effective machine design.
- ▶ **Reliable operation:**
Long life design for 10 years of maintenance-free operation.

Applications



Fan



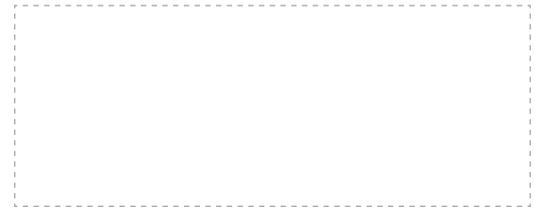
Pump



Compressor



Conveyor



Standard Specifications

CANopen

CC-Link

MECHATROLINK

EtherCAT

PROFINET
 PROCESS FIELD BUS
 BUS

DeviceNet



Inputs

Outputs

- ▶ **6 Multi functional digital inputs**
Sinking/Sourcing mode selectable
- ▶ **Multi functional pulse train input (up to 32 kHz)**
HIGH level: 3.5 to 24 VDC
LOW level: 0.0 to 0.8 VDC
Easy synchronizing with other drives
- ▶ **Functional safety**
2 Channel Safe Torque Off (EN ISO 13849-1, PLd)
- ▶ **2 Multi functional analog inputs**
A1: -10/0 ... 10 V
A2: -10/0 ... 10 V or 0/4 ... 20 mA selectable

MEMOBUS/Modbus, RS232, USB,
 RS422/RS485 up to 115.2 kbaud,
 Termination resistor (120 Ω) switchable

- ▶ **Fault output**
Relay / changeover contact programmable
30 VDC 10 mA ... 1A
250 VAC 10 mA ... 1A
- ▶ **2 Photo-coupler outputs**
programmable max. 48 VDC / 2 ... 50 mA
- ▶ **Multi functional pulse train output**
Up to 32 kHz
Easy synchronizing with other drives
- ▶ **1 Analog output**
programmable 0 ... +10 V / 2 mA, res. 1/1000

International Standards



Safety Standards



RoHS Directive

RoHS Directive stands for the EU directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment