STAND ALONE **DRIVE** STEPPER
SSD

CODESYS | CANopen | EtherCAT | PROFINET | Modbus

SSD IS A STEPPER DRIVE WITH VECTOR CONTROL CURRENT MODULATION

- Efficient motor control
- No step loss
- Low motor temperature
- Low noise and vibration
- High torque density
- Low power consumption
- Low torque ripple
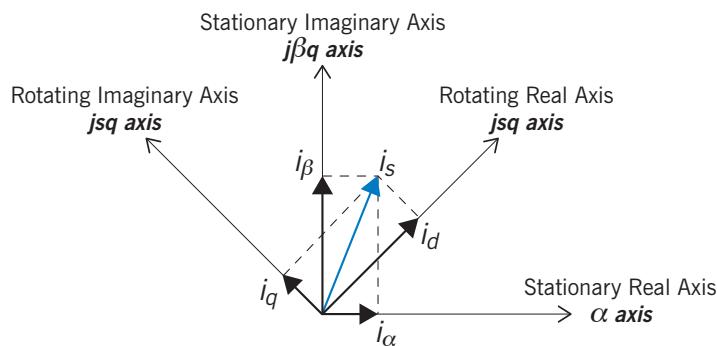
GENERAL FEATURES

- Main power supply 110-220 Vac single phase
- Nominal current 5 Arms
- Disable input
- Incremental encoder input for motor control
- Current loop control: 25 μs
- PWM 20 KHz
- External braking resistor – possible
- Logic supply 24 Vdc
- Nominal power 600 W (at 220 Vac)
- Digital and analog IO on bord
  (7xDI, 3xDO, 1xAI, 1xAO)
- Auxiliary incremental encoder input
- Velocity and position loop control: 100 μs
- Internal braking resistor (optional)
- External EMC filter

Stationary Imaginary Axis $j\beta q$ axis

Rotating Imaginary Axis jsq axis

Rotating Real Axis jsq axis

Stationary Real Axis α axis

CMZ

4 DIFFERENT CONTROL MODE

EtherCAT
- DS402 device profile, CoE protocol
- Velocity (pv), Position (pp) and Homing mode (hm)
- Cyclic synchronous profile position mode (csp)
- Cyclic synchronous profile velocity mode (csv)
- Cyclic synchronous profile torque mode (cst)
- Standard CODESYS device

PROFINET
- PROFIdrive profile
- AC3 for velocity and position movement RT
- PROFINET certification

CANopen
- DS402 device profile
- Velocity (pv), Position (pp) and Homing mode (hm)
- Cyclic synchronous profile position mode (csp)
- Cyclic synchronous profile velocity mode (csv)
- Cyclic synchronous profile torque mode (cst)
- Standard CODESYS device

Internal PLC
- Internal PLC with PLC and motion functionalities
- IEC61131 standard ST language
- Extended functionalities for routines executed on for synchronous events
- Customization of function and function block

DIFFERENT TYPE OF STEPPER MOTORS (WITH INCREMENTAL ENCODER)
- Nema 24 motors (60 mm) up to 3 Nm of stall torque
- Nema 34 motors (86 mm) up to 12 Nm of stall torque
- Nema 42 motor (110 mm) up to 21 Nm of stall torque

SDSetUp: THE GUI FOR A COMPLETE CONFIGURATION AND TUNING OF SSD
- SSD general monitoring
- 4 traces oscilloscope
- IO configuration
- Motor/load inertia estimator
- Editor, compiler and variables monitoring for internal PLC
- SSD parameters management (save, restore, save on file)
- Fault and warning monitoring
- Internal functions generation
- SSD functionalities setting
- Different tuning selection
- Communication bus setting and monitoring

soga energyteam

CMZ SISTEMI ELETTRONICI SRL

Via dell'Artigianato 21
31050 Vascon di Carbonera (TV)
Italy
+39 0422 447411
cmz@cmz.it

cmz.it
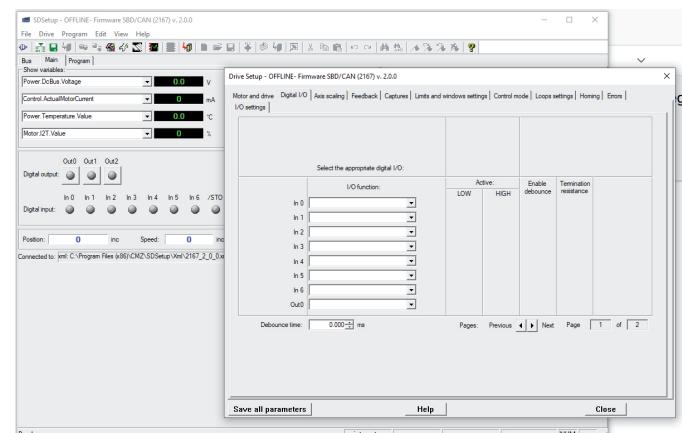
CMZ reserves the right to change the data in order to update or improve its products without prior notice

SSD - April 2024