

The FLEXI PRO series features a high-performance digital servo drive offering advanced functionality, high power density and seamless commissioning in a superior package. The innovative hardware design and software algorithms boast outstanding performance in one of the smallest footprints in the market.

## FEATURES

- > **MULTIFEEDBACK**
- > **DIGITAL I/O: 11 DIGITAL INPUT AND 6 OUTPUT CUSTOMIZABLE WITH SEVERAL BUILT-IN FUNCTIONS AND INTERNAL SCRIPT**
- > **CONTROL: HD ADVANCED CONTROL LOOP WITH ADAPTIVE GAINS**
- > **SERVO MODES: TORQUE, VELOCITY AND POSITION WITH S-CURVE PROFILE**
- > **STO SIL 2**
- > **INTEGRATED SUPPORT FOR EXTERNAL BRAKING RESISTOR**
- > **COMPLETE MOTOR DATABASE**

## BENEFITS

- > **INTELLIGENT AUTO-TUNING - MINIMIZES POSITION ERROR AND SETTLING TIME TO ALMOST ZERO**

Engineering experience and expertise has been implemented in a sophisticated Auto-Tuning function that performs optimal configurations for a difference-making performance

- > **NEW CURRENT LOOP DESIGN - ACHIEVES AN INDUSTRY-LEADING FREQUENCY RESPONSE OF UP TO 3.0 KHZ**

Rapid control loop sample rates and flexible filtering options provide a faster response, and ensure maximum machine accuracy and throughput

- > **INNOVATIVE ANTI-VIBRATION ALGORITHM - ELIMINATES MECHANICAL RESONANCE**

An active-non-linear algorithm eliminates vibration in highly flexible resonant systems. Commissioning is easy since only few gain parameters are required



## INTERFACE

- > **USB WITH DAISY CHAIN CAPABILITY**
- > **PULSE & DIRECTION**
- > **ANALOG VELOCITY AND TORQUE COMMAND  $\pm 10V$**

CANopen

EtherCAT

PROFI  
NET

# FLEXIBLE AND COMPREHENSIVE

## PRODUCT DATA

| FEATURE                       | UNITS    | FPRO 1D5                        | FPRO 003 | FPRO 4D5 | FPRO 006                      | FPRO 008 | FPRO 010 | FPRO 013   | FPRO 020                | FPRO 024 | FPRO 003                | FPRO 006 | FPRO 012    | FPRO 024 | FPRO 030 |                      |  |
|-------------------------------|----------|---------------------------------|----------|----------|-------------------------------|----------|----------|------------|-------------------------|----------|-------------------------|----------|-------------|----------|----------|----------------------|--|
| Input Voltage                 | VAC      | 120/240 VAC Single Phase        |          |          | 240 VAC Single or Three Phase |          |          |            | 120/240 VAC Three Phase |          | 400/480 VAC Three Phase |          |             |          |          |                      |  |
| Max Continuous power output   | W        | 350                             | 700      | 1000     | 1400                          | 1800     | 2300     | 3000       | 4500                    | 5500     | 1100                    | 2200     | 4400        | 9000     | 11000    |                      |  |
| Efficiency at rated Power     | %        | > 90                            |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Auxiliary Supply Voltage      |          | 120 .. 240 Vac                  |          |          |                               |          |          |            |                         |          |                         | 24 Vdc   |             |          |          |                      |  |
| Continuous current rms        | A rms    | 1,5                             | 3        | 4,5      | 6                             | 8        | 10       | 13         | 20                      | 24       | 3                       | 6        | 12          | 24       | 30       |                      |  |
| Peak current                  | A rms    | 4,5                             | 9        | 18       | 18                            | 28       | 28       | 28         | 48                      | 48       | 9                       | 18       | 24          | 72       | 90       |                      |  |
| Ambient Operating Temperature | °C       | 0 to + 45                       |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Maximum Humidity              | %        | 90% not condensing              |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Vibration                     |          | 0.6G 10-60 Hz                   |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Shock                         |          | 1 G                             |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Mounting Method               |          | Wall Mount                      |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Dimensions                    | WxDxH mm | 43x144x150                      |          |          | 55x167x150                    |          |          | 62x182x170 |                         |          | 117x194x234             |          | 110x193x163 |          |          | FPRO 012 117x194x234 |  |
|                               |          | FPRO 024 - FPRO 030 147x209x353 |          |          |                               |          |          |            |                         |          |                         |          |             |          |          |                      |  |
| Weight                        | Kg       | 0,7                             | 0,75     | 0,97     | 0,97                          | 1,15     | 1,15     | 1,15       | 3,2                     | 3,2      | 2,1                     | 2,1      | 3,2         | 10,5     | 10,5     |                      |  |

## FLEXI PRO SUITE

### > SIMPLIFIES SETUP, TESTING AND TUNING

User-friendly FLEXI SUITE software provides step-by-step guidance through the setup and tuning process. Setup and testing are intuitive thanks to auto-tuning functions and graphic representations of control loops

