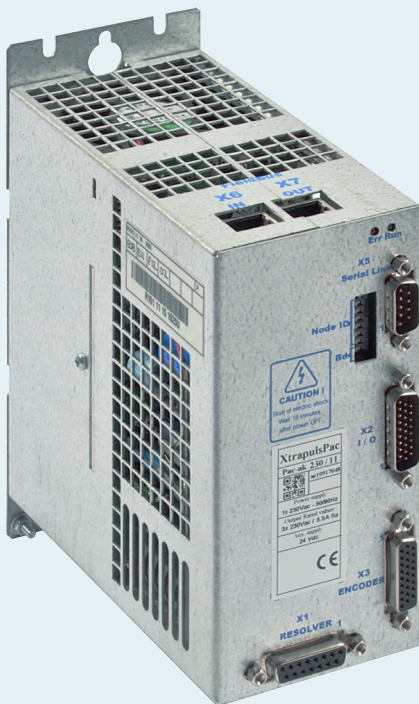# ◗INFRANOR®

XtrapulsPac™
AC servo-drive

Functions

DS402 standard modes
Electronic gearing, camming, stepper emulation
Analog speed drive, stand-alone positioner

Power range

230 VAC : 5 ... 17 Arms max.
480 VAC : 8 ... 200 Arms max.

Interfaces

RS-232, CANopen®, EtherCAT®
Digital and analog I/Os

Sensors

Resolver
Encoders: incremental, absolute, HES
Digital encoders: Hiperface DSL®, EnDat 2.2®, Tamagawa®

Safety

Integrated Safe Torque Off SIL 2 function

Tools

Project manager
Setup wizard
Multi-axis configuration and diagnostic
Application templates for quick configuration

XtrapulsPac™, AC servo-drive

The XtrapulsPac™ Drive is a compact and flexible 230 and 480V AC servo-drive with outstanding capabilities. It provides functions and interfaces to cover a wide range of single- and multi-axis applications. This drive is available for push-through, coldplate and wall mounting.

Electrical specifications

Drive type	PAC-230			PAC-400		PAC-400			Power supply type	GDPS-400[3]		
	/ 05	/ 11	/ 17	/ 08	/ 20	/ 45	/ 100	/ 200		/ 16	/ 32	/ 64
Peak current [Arms]	5	11	17	8	20	45	100	200	Nominal power	16 kW	32 kW	64 kW
Cont. current [Arms]	2.5	5.5	8.5	4	10	22.5	35	75	Voltage	3x230 VAC / 3x480 VAC		
Voltage	1x230 VAC[1] / 320 VDC[2]			3x480 VAC[1] / 680 VDC[2]		680 VDC[2]						

[1] Integrated power supply   [2] External power supply

[3] Integrated mains filter, DC bus output for parallel connection of several drives, external braking resistor

Control loops

– Digital drive for AC synchronous motors
– Current loop 62.5 μs
– Speed and position loop 500 μs
– Closed loop control of position, speed or torque
– Max. speed up to 25'000 rpm

Feedbacks

– Resolver
– Incremental encoder
– Hall effect sensor
– SinCos encoder
– Single and multi-turn Hiperface® encoder
– Digital encoders: Hiperface DSL® (one single motor cable), EnDat 2.2®, Tamagawa®

Communication interfaces

– RS-232 up to 115.2 kbit/s baud rate
– CANopen® or EtherCAT® fieldbus
– DIP switches for node addressing

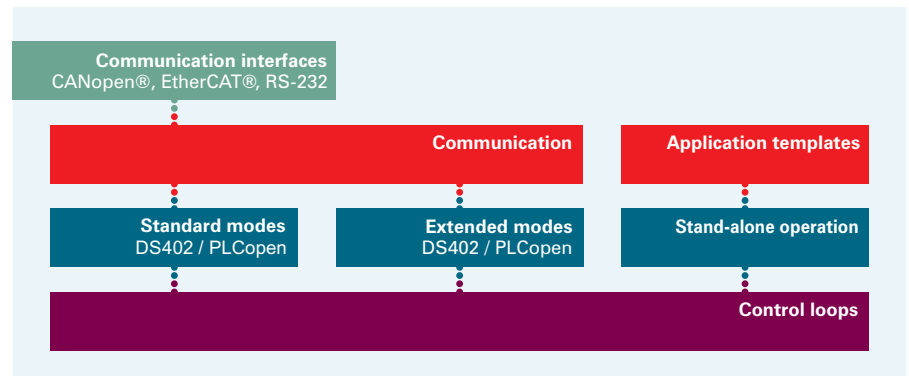## Safety features

– Safe Torque Off SIL 2

I/O interfaces

– User configurable digital I/Os
– All-digital opto-isolated inputs
– Analog inputs ± 10 V / 12 bit
– Analog output 0 - 5 V / 8 bit
– "AOK" output
– Motor brake control
– Two channel STO function

Certifications

Functional architecture

Operation modes

DS402 standard modes
– Cyclic synchronous position
– Cyclic synchronous velocity
– Cyclic synchronous torque
– Interpolated position
– Profile position
– Profile velocity
– Profile torque
– Homing

DS402 extended modes
– Analog speed
– Stepper emulation
– Sequences
– Master-slave gearing
– Master-slave camming

Stand-alone operation
– Analog speed drive
– Positioner
– Stepper emulation
– Electronic gearing

Multi-axis toolbox

Configuration tools
– Motor and drive configuration
– Application configuration
– Interface configuration
– Auto-tuning, auto-phasing
– Sequencer programming

Project tools
– Project creation
– Project management
– File handling services
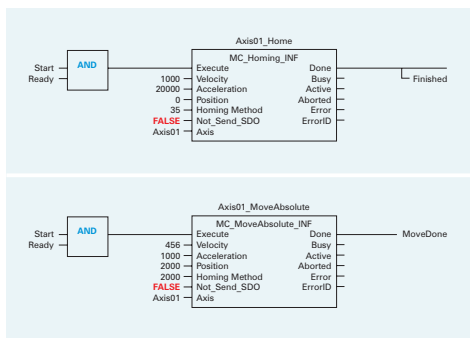– Motor libraries
– Multilingual software

Diagnostic tools
– Device control
– Device monitoring
– Object dialog window
– Multi-axis oscilloscope

XtrapulsPac™ can easily be configured as a stand-alone drive in various operation modes. It can also be integrated into an automation system with PLC, CNC or motion controller via the fieldbus and uses well-known standard functions available in libraries. This flexibility makes it suitable for use in a wide field of machines and applications.
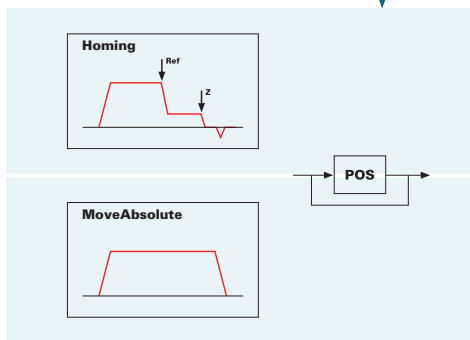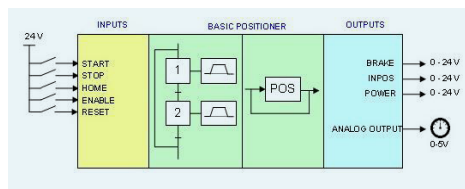
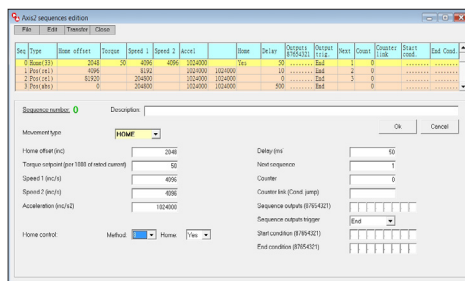## DS402 / PLCopen example

PLC

Drive

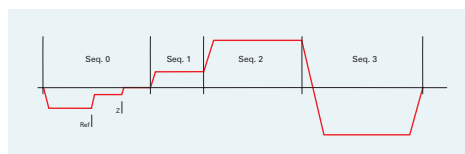CANopen® | EtherCAT®

Stand-alone positioner example
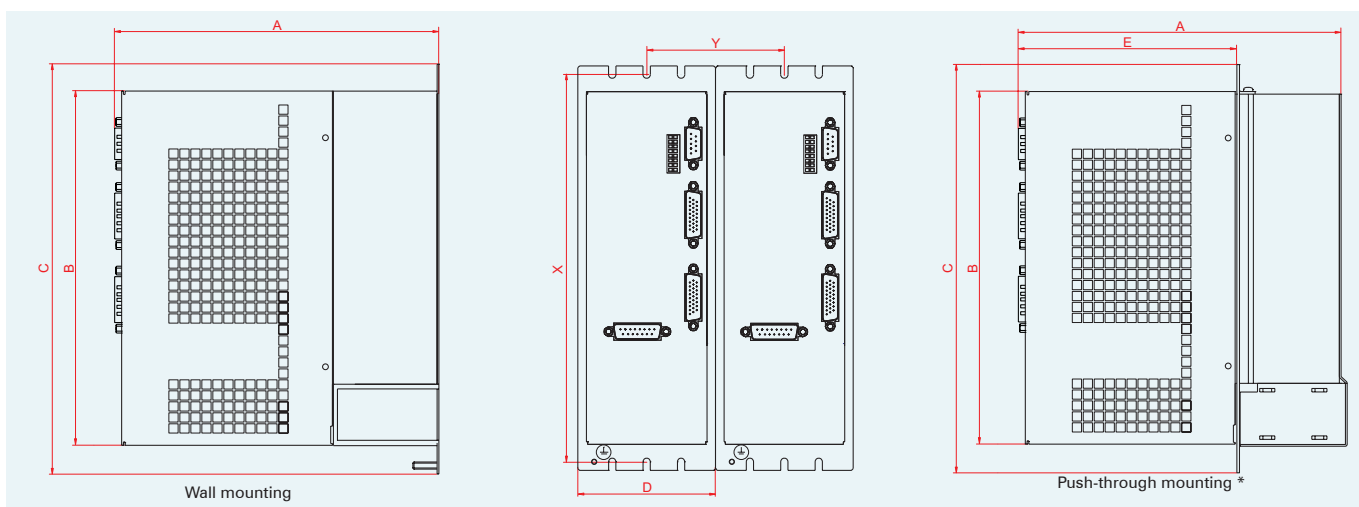
Step 1: Select template

Step 2: Parametrize sequences

Step 3: Start execution

Mechanical dimensions [mm]

Wall mounting

Push-through mounting *

Dimensions [mm]	A	B	C	D	E*	X	Y
Pac-230 V / 5 - 17 A	143	148	178	70	-	169	80
Pac-400 V / 8 - 45 A	186	203	235	70 (80*)	125	225	80
Pac-400 V / 100 A	210	203	235	80 (80*)	125	225	80
Pac-400 V / 200 A	215	265	295	166.6	-	285	100
GDPS-400 V / 16/32 kW	158	203	235	70	-	225	80
GDPS-400 V / 64 kW	207	262.5	295	71.5	-	285	80

Infranor® product range

Drives

Standard drives

Customized drives

Drive applications

Motors

Standard motors

Customized motors

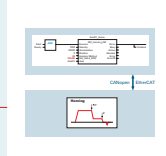### Motor applications

Services

Standard services

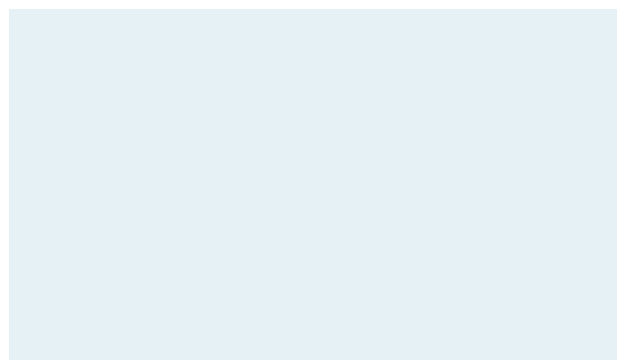### User-specific services

Global solutions

Infranor Group

Infranor creates added value for its customers by providing tailor-made motion solutions.

Based on strong working relationships, Infranor offers extensive market know-how, comprehensive engineering skills and a wide range of high-quality products leading to productivity gains and therefore to comparative advantages for its customers in their respective markets.

Contact

Infranor worldwide

Benelux
China
France
Germany
Italy
Spain
Switzerland
UK
USA

Other representations:
Austria, Denmark, India, Israel, Poland, Slovenia, Turkey.

www.infranor.com