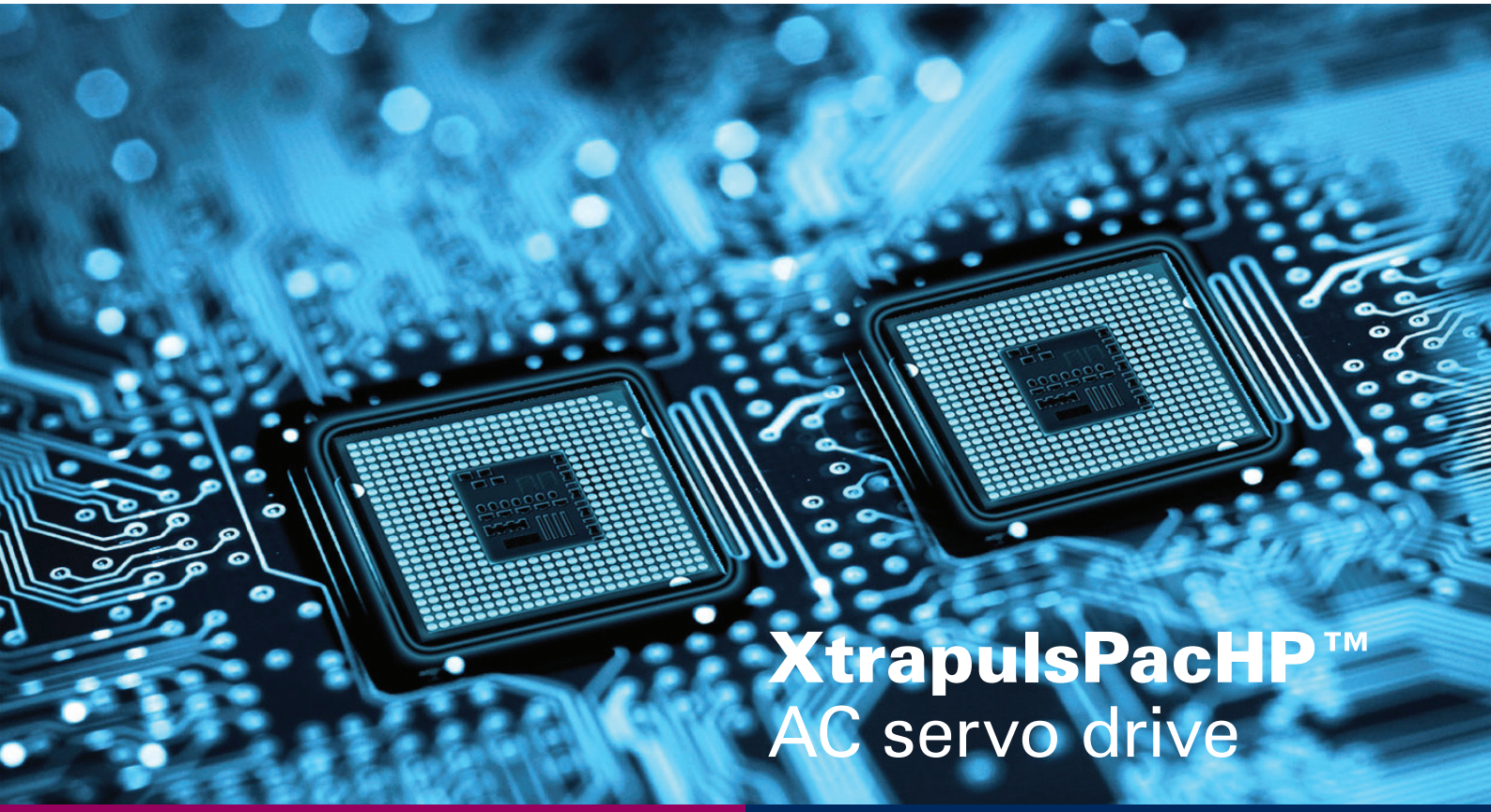
INFRANOR®



XtrapulsPacHP™
AC servo drive

Really outstanding servo performances!

Power range

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

Interfaces

Fieldbuses: CANopen®, EtherCAT®, PROFINET®
RS-232 USB port
Digital and analog Inputs/Outputs

Sensors

Resolver
Encoders: incremental, absolute, Hall effect sensor
Digital encoders: Hiperface DSL®, EnDat 2.2®, BiSS C

Safety

Integrated Safe Torque Off function STO SIL 3 (standard)
Motion safety functions (optional)

Functions

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

XtrapulsPacHP™, servo drive for brushless AC motors

The XtrapulsPacHP™ servo drive is a particularly compact and flexible device with outstanding capabilities. It provides many 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. It is fully compatible with the former XtrapulsPac™ version.

Electrical specifications

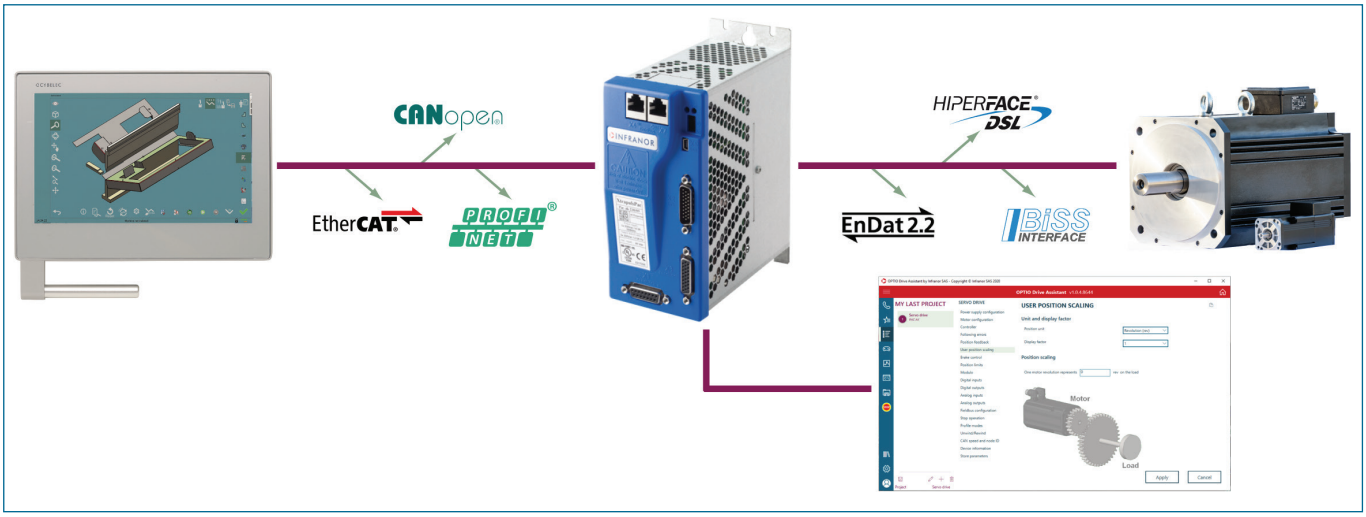
Drive type	PacHP-230			PacHP-400		PacHP-400		
	/ 05	/ 11	/ 17	/ 08	/ 20	/ 45[3]	/ 100[3]	/ 200[3]
Peak current [Arms]	5	11	17	8	20	45	100	200
Cont. current [Arms]	2.5	5.5	8.5	4	10	22.5	35	75
Voltage	1x230VAC[1] / 320VDC[2]			3x480VAC[1] / 680VDC[2]		680VDC[2]		

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

[3] Pending versions

Power supply type	GDPS-400[4]		
	/ 16	/ 32	/ 64
Rated power	16kW	32kW	64kW
Voltage	3x230VAC / 3x480VAC		

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



Control loops

- Digital drive for synchronous AC motors
- Current loop sampling: 31,25µs (PWM 16kHz), 62,5µs (PWM 8kHz)
- Speed and position loop sampling: 125µs, 250µs, 500µs (selectable)
- Max. speed up to 25'000rpm
- Cogging torque compensation

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®, BiSS C

Communication interfaces

- USB service port or RS-232
- CANopen®, EtherCAT® or PROFINET® fieldbuses
- DIP switches for node addressing

I/O interfaces

- User configurable digital I/Os
- Analog inputs ± 10V / 16 bit
- Analog output 0 - 5V / 12 bit
- "AOK" relay output
- Motor brake control

Operation modes

DS402 standard modes

- Cyclic synchronous position
- Cyclic synchronous velocity
- Cyclic synchronous torque
- Interpolated position
- Profile position
- Profile velocity
- Profile torque
- Homing

Extended modes

- Analog speed
- Stepper emulation
- Sequences
- Master-slave gearing
- Master-slave camming
- Electronic gearing

Safety features

- STO SIL 3
- SS1 / SS2 / SOS / SLS / SDI / SBC

Multi-axis toolbox

Configuration tools

- Motor and drive configuration
- Application configuration
- Interface configuration
- Auto-tuning, auto-phasing
- Sequencer programming
- Motor libraries
- Multilingual software

Diagnostic tools

- Multi-axis oscilloscope
- Device control
- Device monitoring
- Object dialog window

Certifications

CE c UL us LISTED * Made in France

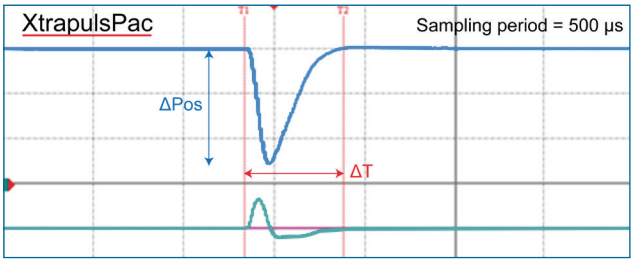
*UL listing pending

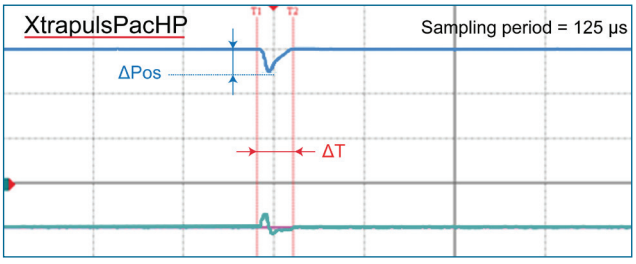
XtrapulsPacHP™ can easily be configured as a stand-alone drive in various operation modes. It can also be integrated into an automation system with PLC, CNC or motion controller via the fieldbus and uses well-known standard functions available in libraries. This flexibility makes it suitable for use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

Dynamic servo performances

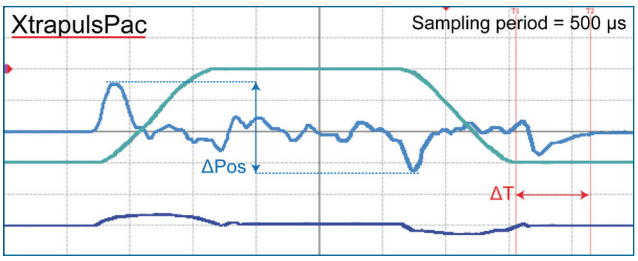
With regard to the former version XtrapulsPac™, dynamic servo performances are increased by a factor of 3. The position error as well as the response time are divided by 3.

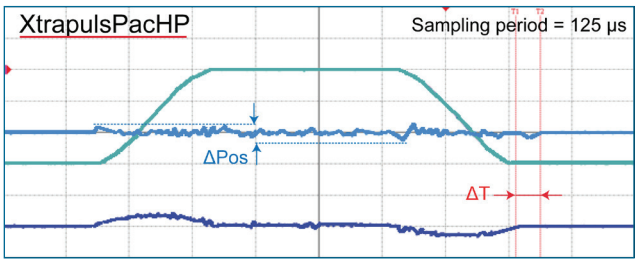
The position deviation for a step-like torque disturbance applied to the motor shaft is evaluated (stiffness test).





The position following error in profile position mode with an S-curve trajectory shape is evaluated (accuracy test).

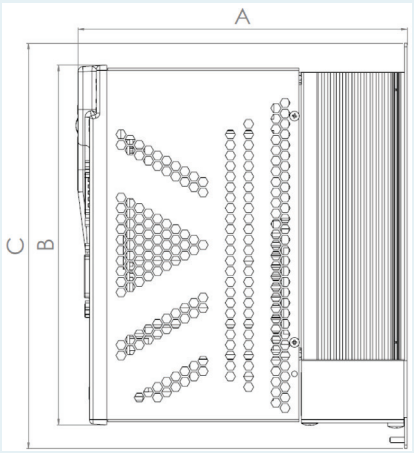




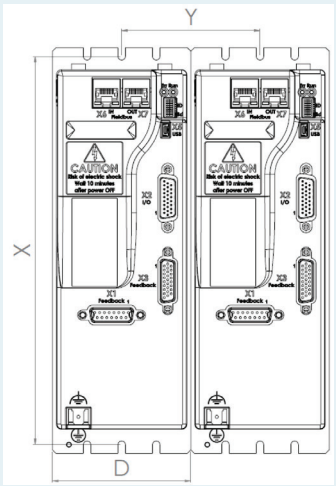
Position Speed Current

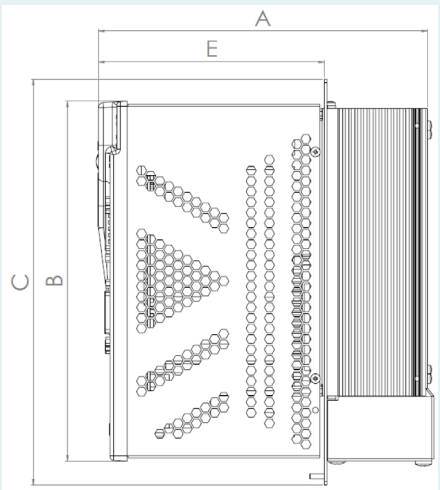
Tests were made with BLS 72A servo motor and 230V / 17A servo drives.

Mechanical dimensions [mm]



Wall mounting





Push-through mounting *

Dimensions [mm]	A	B	C	D	E*	X	Y
PacHP-230 V / 5 - 17 A	148	153	178	70	-	169	80
PacHP-400 V / 8 - 45 A	191	208	235	70 (80*)	131	225	80
PacHP-400 V / 100 A	214	208	235	80 (80*)	128	225	80
PacHP-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

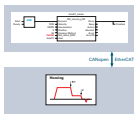
Customized motors

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.

Infranor worldwide

Benelux
China
France
Germany
Italy
Spain
Switzerland
UK
USA

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

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