# VARIABLE SPEED DRIVE

EPIC is a single-phase variable speed drive for horizontal and vertical three-phase pumps, designed to maintain the set pressure and protect a pumping system against dry running, over/under voltage and overcurrent.
It is possible to realize a booster set up to 2 pumps in parallel, using 2 EPIC connected together.

- Constant pressure control
- Easy initial configuration
- Installed directly on motor terminal box of horizontal or vertical pumps
- Soft start and soft stop
- Alternance for uniform pump wearing when connected to another EPIC
- Protection against dry running (adjustable power factor cosφ), overload, overcurrent
- Automatic restart in case of stop for dry running
- Fuse for input protection of the device
- Led indicator for standby, run and alarm conditions
- Compatibility for residential environment thanks to an integrated electronic power factor corrector in compliance to EN61000-3-2
- 2 digital inputs (N.O. or N.C.) for motor run/stop
- 2 analog inputs: 4-20 mA and 0-10 VDC
- 1 digital output (N.O. or N.C.) for alarm signal

115 mm
210 mm
150 mm

EPIC

Input rated voltage	Output rated voltage	Output rated current	Max electric pump current	Weight
1 × 230 V	3 × 230 V	7,5 A	6,8 A	2,5 Kg
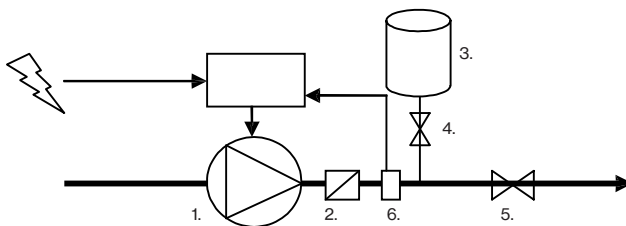
1. Pump
2. Non return valve
3. Pressure tank *(Volume suggested: 10% of the pump flow rate)*
4. Valve-Tap
5. Valve
6. Pressure sensor

| VSD	3~ PUMP TYPE	max nominal power P2	
		HP	kW
EPIC (1~ V-in 3~ V-out)	MPX	1,2	0,88
	INOX, CH, U 3, U 3S	1,5	1,1
	U 18S, U 18V, U 18SV, U 18L, U 18SL	1,8	1,3
	CAM, CAB, CM, MB, CB, CS 2", U 5, U 5S, U 9, U 9S, U 9V, U 9SV, U 9L, U 9SL, U 18S	2	1,5
	U 3V, U 3SV, U 3L, U 3SL, U 5V, U 5SV, U 5L, U 5SL, U7, U7 S, U 7V, U 7SV, U 7L, U 7SL	2,5	1,85

VARIABLE SPEED DRIVE

EPIC-A 304-309

EPIC-A 314-344

EPIC-A (Advanced) is a three-phase variable speed drive for horizontal and vertical three-phase pumps designed to maintain the set pressure and protect pumping systems up to 8 pumps connected in parallel.

- Constant pressure control
- Easy initial configuration
- Simplified installation on motor terminal box of horizontal or vertical pumps
- Soft start and soft stop
- Alternance for uniform pump wearing when connected to others EPIC-A
- Built-in protections against overvoltage and undervoltage, overcurrent and no load, dry running, overtemperature
- Led indicator for standby, run and alarm conditions
- Compatibility for residential environment thanks to an integrated electronic power factor corrector in compliance to EN61000-3-2
- Integrated input filter for category C2 (EN61800-3), class A (EN55011)
- 4 digital inputs (N.O. or N.C.) for motor run/stop
- 4 analog inputs: two 4-20 mA and two 0-10 VDC
- 2 digital outputs (N.O. or N.C.) for alarm signal

EPIC-A	304	306	309	314	318	325	330	338	344
Input rated voltage	3 × 400 V ± 15%								
Output rated voltage	3 × 400 V								
Output rated current	4 A	6 A	9 A	14 A	18 A	25 A	30 A	38 A	44 A
Max electric pump current	3,6 A	5,4 A	8,1 A	12,6 A	16,2 A	22,5 A	27 A	34,2 A	39,6 A
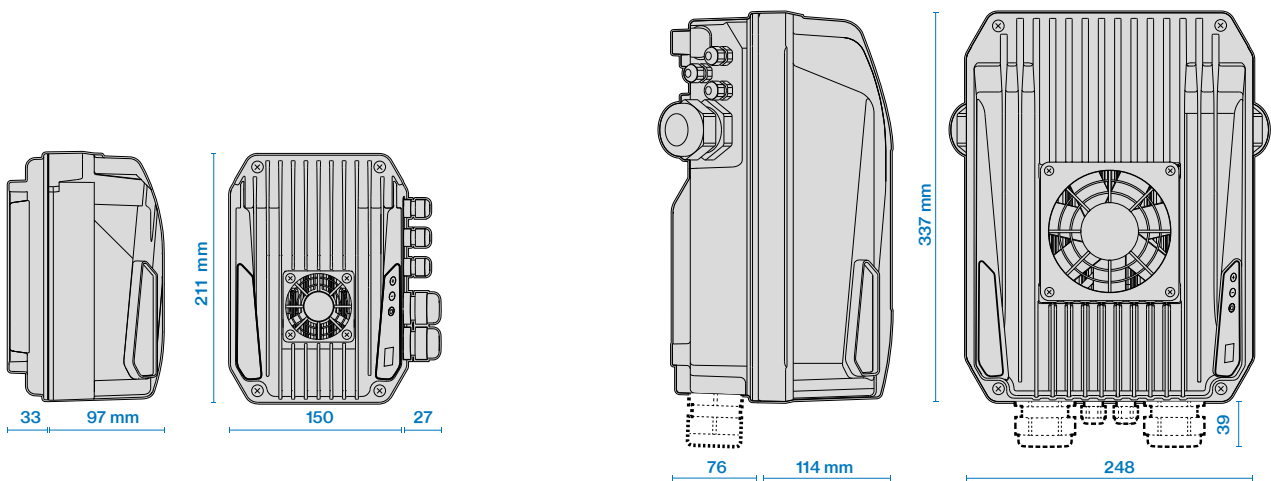
EPIC-A 304 - 306 - 309
max weight 2,5 kg

EPIC-A 314 - 318 - 325 - 330 - 338 - 344
max weight 10 kg

VARIABLE SPEED DRIVE

IPFC is a variable speed drive for vertical pumps designed to control and protect pumping systems up to 8 pumps connected in parallel.
IPFC maintains the set pressure ensuring energy savings and extended lifespan of the system.

- Constant pressure control
- Energy and cost saving
- Protection against overload and dry running
- Greater reliability and longevity of pumping system
- Installed directly on the motor fan cover of vertical pumps
- Indication of input current and supply voltage
- Soft start and soft stop
- Recording running hours and loggings errors and alarms reported by the system
- Connect to other devices to get combined operation with cascade control and pump alteration
- OLED display
- Settable digital outputs, N.O. or N.C.
- Protection and analog/digital inputs

IPFC 109-311 **IPFC 314-330** **IPFC 338-385**

IPFC	109	114	306	309	311	314	318	325	330	338	348	365	375	385
Input rated voltage (V)	1 × 230 ± 15%		3 x 400 ± 15%											
Output rated voltage (V)	1 × 230 3 × 230		3 x 400											
Output rated current (A)	(1-) 9 (3-) 7	(1-) 9 (3-) 11	(3-) 6	(3-) 9	(3-) 11	(3-) 14	(3-) 18	(3-) 25	(3-) 30	(3-) 38	(3-) 48	(3-) 65	(3-) 75	(3-) 85
Output rated power (kW)	(1-) 1,1 (3-) 1,5	(1-) 1,1 (3-) 3	(3-) 2,2	(3-) 4	(3-) 4	(3-) 5,5	(3-) 7,5	(3-) 11	(3-) 15	(3-) 18,5	(3-) 22	(3-) 30	(3-) 37	(3-) 45
Max electric pump current (A)	(1-) 7,2 (3-) 6,3	(1-) 7,2 (3-) 9,9	(3-) 5,4	(3-) 8,1	(3-) 9,9	(3-) 12,6	(3-) 16,2	(3-) 22,5	(3-) 27	(3-) 34,2	(3-) 43,2	(3-) 58,5	(3-) 67,5	(3-) 76,5
Input frequency (Hz)	50 - 60													
PWM frequency (kHz)	2,5 - 4 - 6 - 8 - 10 - 12													
Control panel	backlight LCD with 2 x 16 characters and buzer / Bluetooth ® SMART 4,0													
Input analogical signals (mA)	no.4 4-20													
Input digital signals	no.2													
Comunication	RS485 / Bluetooth SMART 4,0													
2 DOL auxiliary pump contacts	clean, N.O., 230 V, Imax, 6 A													
Cooling	auxiliar built-in cooling fan /mot fan													
Protection degree	IP55 (IP54 for IPFC 338 < > IPFC 385)													
Assembly	on motor fan cover with kit / hanged on wall with kit									on motor feet / hanged on wall with kit				
Max ambient temperature (C)	40° C													
Max ambient altitude	1000 m slm / de-rate 2% each 100 m													
Input / Output feeding cable	2 × PG 13,5 + 3 × PG 9													
Dimension (mm)	205 × 205 × h180		260 × 260 × h180						410 × 260 × h680					

SPD pressure transducer

TYPE	Output signal	Input voltage	Working pressure	Maximum pressure
SPD	4... 20 mA	9... 28 V	0 - 16 bar 0 - 25 bar	32 bar

UNYCONNECT

Dedicated APP for control and programming of Aquadomus and variable speed drives EPIC-A and IPFC

APP FUNCTIONALITY

- **Monitor**: monitoring several operative parameters. Obtaining energy consumption statistics and check alarm history

- **Program**: create programs, save them in the archive, copy them to other devices and share them among multiple users

- **Archive**: create reports with the ability to insert notes, images and send them by e-mail or keep them in the digital archive

- **Remote**: remotely control an Aquadomus via wi-fi or GSM by using a nearby smartphone as a modem

- **Manuals**: access manuals and supplementary technical documentation

- **Guide**: receive online assitance on parameters and alarms

Available on the
Google Play

Download on the
App Store