Ablerex

every moment counts

ESP

wall-mounting

30-2000 A

ESP

modular

40-2400 A

POWER QUALITY DEVICE

ESP

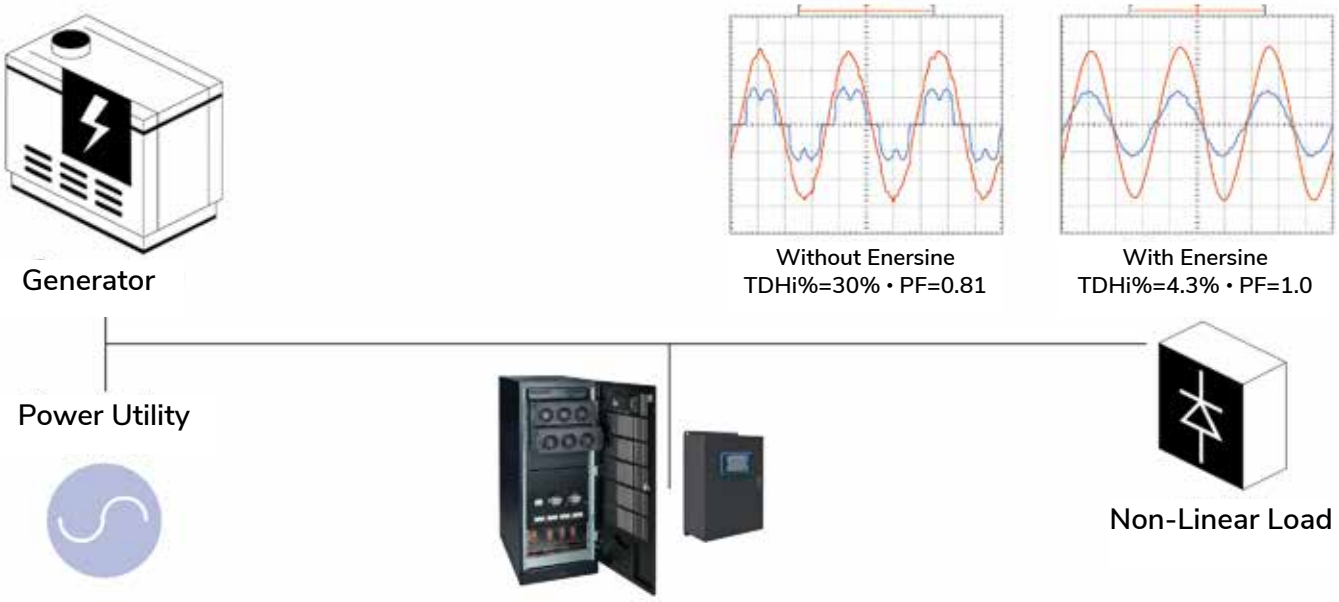
Ablerex Enersine active filters can correct any type of harmonic contamination to protect the system from faults (e.g. burnt-out transformers, damaged capacitors, etc.), while also improving the power factor.

ESP wall-mount 30-100 A

ESP modular 400-600 A

Applications

- Broadcasting
- Shopping centres
- Energy suppliers
- Transport infrastructure and control rooms
- Oil&Gas
- Healthcare sector



ESP

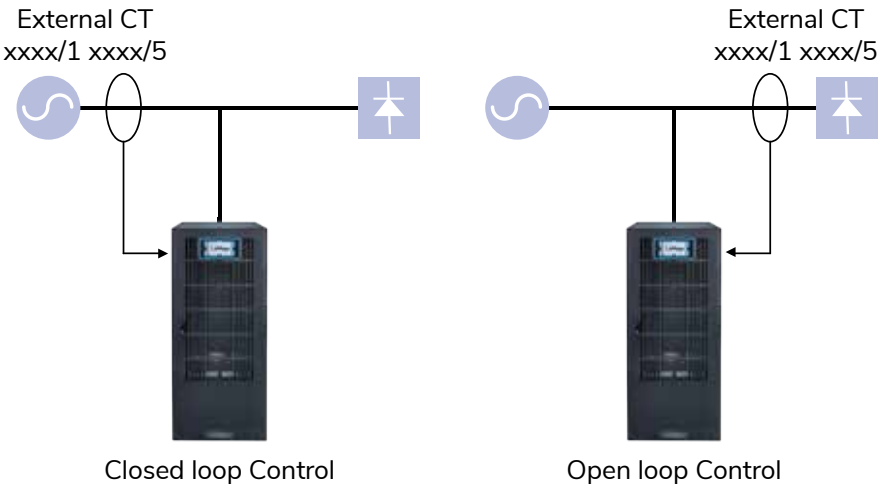
- Enersine active wall-mount filters offer the most economical and effective solution, while the scalability of the modular ones protects your investment over time.
- The power modules of the modular version are easy to install and are hot swappable: they can be replaced while the filter is operating.
- Versatile thanks to the modularity, high nominal current and possibility of parallel connection up to 400 A for the wall version, and up to 2400 A for the modular version.
- Enersine is available in two versions, 4 or 6 modules for 60 A, 80 A or 100 A, which can also be used in a mixed configuration within the same system.
- Maximum performance with 3-level DSP technology.
- Their compact, high-power-density design optimises space.
- Multi-purpose: one model covers all three-phase systems (3-wire or 4-wire).
- Correction of all harmonics up to the 51st (up to the 25th for 30 A) with a response time of less than 1 ms.
- No overload effect.
- Selective mode to select the harmonics to be corrected.
- Phase balancing of three-phase loads.
- Open loop or closed loop installation.
- A single control module manages up to 8 power modules.
- All parameters are under control via the 7” colour (2.7” LCD for 30 A model) touch screen display that shows: voltage and current waveforms, frequency spectrum, parameters and events.
- Events and parameters can be downloaded to a removable SD card.
- Advanced communication: dry contacts (3 in and 1 out), USB, RS485 Modbus, RJ45 Ethernet, programmable email alarm.

User-friendly user interface

The 7” colour touch screen display can be used to set all parameters, read the event log file and download data to a removable SD card (for 60 A, 80 A, 100 A wall-mounting model and all modular models).

It can also show the voltage and current waveforms, before and after enabling the Enersine, along with a frequency spectrum bar graph.

Open/closed loop control



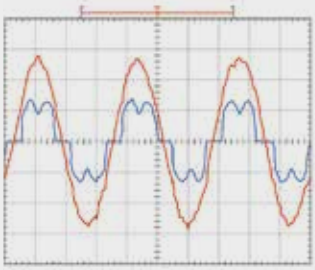
Closed loop Control

Open loop Control

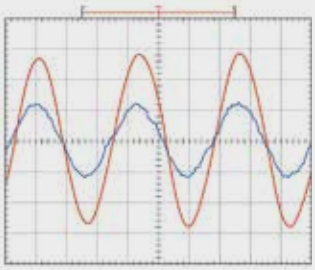
ESP

Harmonic and PF correction that can be verified on the display

Ablerex Enersine not only actively corrects harmonic currents up to the 51st order, but also improves the inductive or capacitive power factor with a response time of less than 1 ms. The benefits can be seen easily on the display.



Without Enersine
TDHi%=30% • PF=0.81



With Enersine
TDHi%=4.3% • PF=1.0

ESP MONOLITHIC TECHNICAL DATA SHEET

MODEL		ESP 30	ESP 60	ESP 80	ESP 100
SIZE (A)		30	60	80	100
ELECTRICAL SPECIFICATIONS	Rated voltage	400 V +15%, -20%; 480V +10%, -20%			
	Phases	Three-phase			
	Frequency	50/60 ±3 Hz			
	Harmonic correction	From the 2nd to the 25th	From the 2nd to the 51th		
	Power factor correction	Capacitive and inductive (selectable)			
	Load balancing	Between two phases and between phase and neutral			
	Response time	25 µs			
ENVIRONMENTAL PARAMETERS	Operating temperature	-10°C to +40°C without derating*			
	Relative humidity	<95%			
	Altitude (a.s.l.)	<1000 m without derating, >1000 m with 1% derating for every 100 m			
	Audible noise at 1 m.	<55 dBA	<63 dBA		
GENERAL	Dimensions (WxDxH) mm	348x164x598	500x286x775		
	Weight (kg)	16	51	58	60
	Protection class	IP30/IP31			
	Connections	4-wire/3-wire			
	Installation	Wall mounting			
	Type	Monolithic			
	Parallel connection up to (A)	120	240	320	400
	Max parallel modules	5			
	TA configuration	Source side TA: closed loop control - load side TA: open loop control			
CONNECTIVITY'	Built-in communication ports	USB, RS-485 ModBus RTU, EPO and Dry contact board (1 input – 3 output)	USB, RS-485 ModBus RTU, EPO, Ethernet and Dry contact board (1 input – 3 output)		
	User interface	Colour 2,7" LCD screen display	Colour 7" LCD touch screen display		
	Software	Data monitoring and storage software			
REGULATIONS	Standards	EN61000-6-4, EN55011, CISPR 11, IEC 61000-3-12, IEC 61000-3-11			
		IEC 61000-6-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4			
		IEC 61000-4-5, IEC 61000-4-6, IEC 62477-1, EN 61000-4-8, EN61000-4-34			
	Marking	CE, UKCA			

* Up to the 25th for 30 A ** Enersine 30 model: -10°C to +25°C without derating, above +25°C automatic derating to 20A

ESP

ESP MODULAR TECHNICAL DATA SHEET

MODEL		ESP 400	ESP 600
SIZE (A)		400	600
POWER MODULE (A)		60-80-100	
ELECTRICAL SPECIFICATIONS	Rated voltage	400 V +15%, -20%; 480V +10%, -20%	
	Phases	Three-phase	
	Frequency	50/60 ±3 Hz	
	Harmonic correction	From the 2nd to the 51st	
	Power factor correction	Capacitive and inductive (selectable)	
	Load balancing	Between two phases and between phase and neutral	
	Response time	25 µs	
ENVIRONMENTAL PARAMETERS	Operating temperature	-10°C to +40°C without derating	
	Relative humidity	<95%	
	Altitude (a.s.l.)	<1000 m without derating, >1000 m with 1% derating for every 100 m	
	Audible noise at 1 m.	<63 dBA	
GENERAL	Dimensions (WxDxH) mm	600x900x1500	600x900x1950
	Weight (kg)*	150	196
	Protection class	IP21	
	Connections	4-wire/3-wire	
	Installation	Floor standing	
	Type	Modular	
	Parallel connection up to (A)	2400	
	Max no. of modules per system (60, 80 or 100 A in a mixed configuration)	Up to 4	Up to 6
	Max parallel systems	6	4
	TA configuration	Source side TA: closed loop control - load side TA: open loop control	
CONNECTIVITY	Built-in communication ports	USB, RS485, Modbus RTU, EPO Ethernet port and dry relay contacts (1 in/3 out)	
	User interface	7'' colour LCD touch screen display	
	Software	Data monitoring and storage software	
REGULATIONS	Standards	EN61000-3-4, IEEE 519-1992, EN60146, EN50178; UL508, EN61000-6-4, EN55011, CISPR 11, IEC 61000-3-12, IEC 61000-3-11, IEC 61000-6-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 62477-1, IEC 61000-4-5, IEC 61000-4-6, EN 61000-4-8, EN61000-4-34	
	Marking	CE, UKCA	

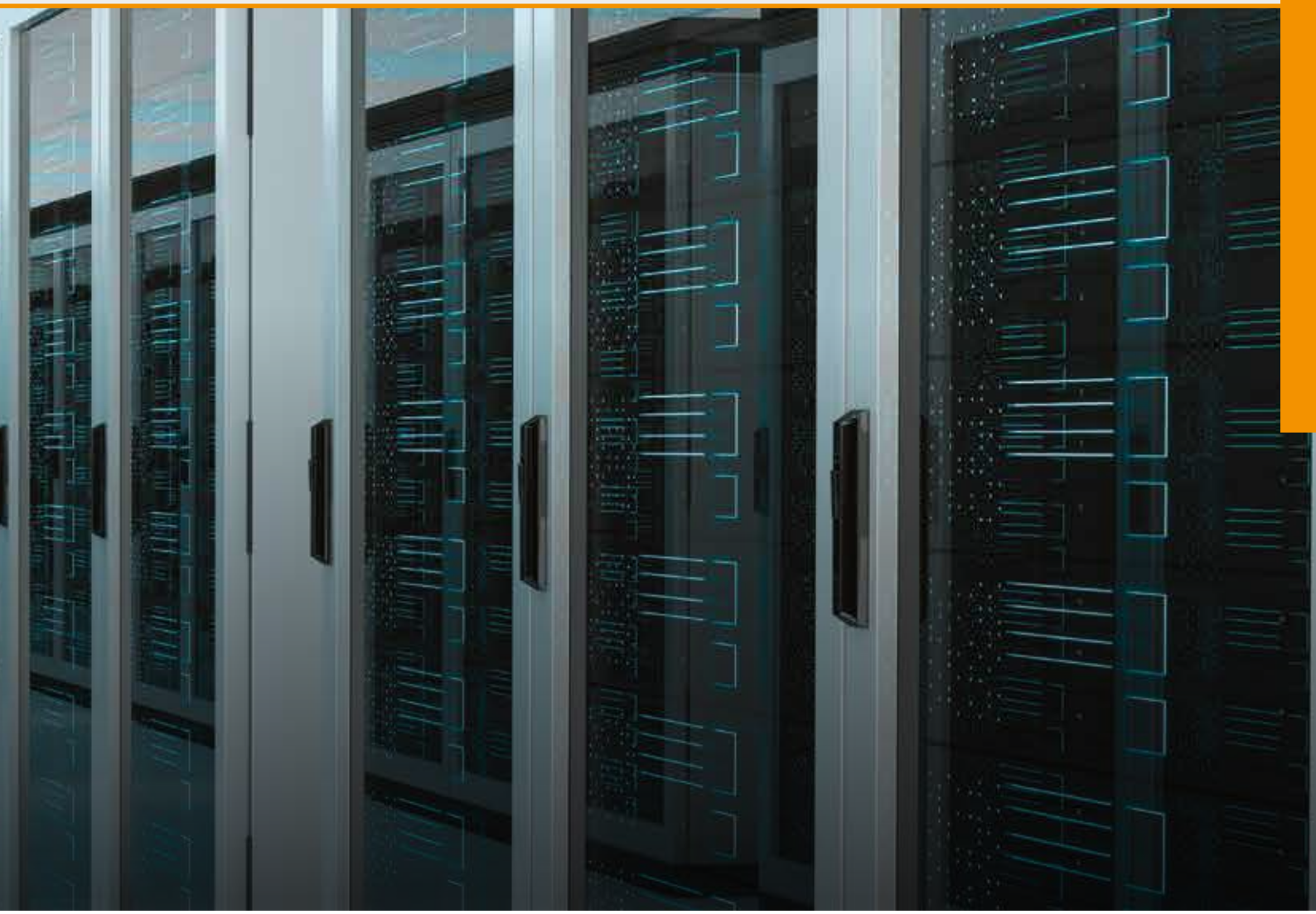
* Weight without the control module and power modules

Innovative solutions for maximum protection, control and unparalleled power quality

ESP
Active filters

STS

POWER QUALITY DEVICE



ATS
Active transfer switches

BMS
Battery monitoring system

Rev.2024/06 - Our commitment to continuous innovation means that catalogue data may be subject to change without notice

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