ON LINE

EVO DSP PLUS MODULAR 400 VAC PF 1
20-300

Together on

EASY HOT SWAP DESIGN
The innovative Design Hot Swap and the complete independence of each module allow a simple and quick maintenance and possible expansions of power and autonomy.

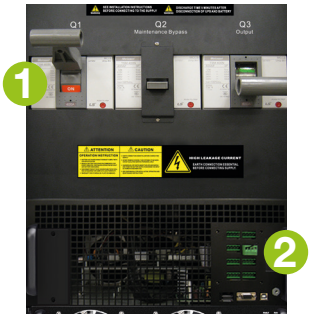
FLEXIBLE MODULAR DESIGN
Scalable architecture allow to easly increase power (from 20KVA to 300KVA), redundancy level (N+1 or N+X) and Back-Up time by simply additional UPS and Battery modules. All this allows to optimize the investment.

NO-DOWNTIME SYSTEM
The Redundance configuration and Hot Swap Design ensure always full power also in case of failure and replacement of module or scheduled maintenance. All this features guarantee low MTTR (Mean Time To Repair).

N+1 OR N+X REDUNDANCE PARALLELABLE SYSTEM
The **redundant modular design** of the EVO DSP PLUS MODULAR HE UPS allows getting high levels of reliability without the need to buy other 2 or more products for the redundancy, as it is the case with a standard UPS. This also results in significant savings.

The EVO DSP PLUS MODULAR HE UPS also makes it possible to configure the level of redundancy desired via a front interface, a 10" touch LCD display, so that the protection degree necessary for the device the UPS protects is always attained. This **redundant modular design** helps decide whether one (N+1) or several (N+X) Power Modules need to be set up as a reserve for the main modules.

EASE OF INSTALLATION AND MAINTENANCE



1 Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance.

2 Easy installation and maintenance, panel control and connectors with frontal accessibility.

FULL ADVANCED COMMUNICATION SYSTEM
All the cabinets for the EVO DSP PLUS MODULAR HE UPS come equipped with a full communication interface system: USB, RS232, EPO (emergency power off) and a smart slot to integrate optional interface boards such as RS485, SNMP
or Dry Contact.

An Extra Communication Slot may be added with programmable input/output contacts, connections for temperature detecting sensors for any external Battery Cabinets, and another smart slot to install any additional RS485, SNMP or Dry Contact interface boards.

FLEXIBLE BACK-UP TIME CONFIGURATION
Battery box with scalable architecture and Hot Sìwap design to increase Back-Up time and for easy battery maintenance.

Battery module

High Italian Quality

TECNOManager UPS Management Software

TECNOWARE®

RoHS COMPLIANT CE

ON LINE

EVO DSP PLUS MODULAR 400 VAC PF 1
20-300

Together on

1. 10” touch LCD display
2. Input/Output Switches and Maintenance Bypass
3. STS Module and Communication Ports
4. Power Module
5. Battery Module

POWER FACTOR 1

Display touch LCD 10”

REDUNDANT POWER SUPPLY IN STS

NO RISK OF SHUTDOWN

Main Specifications

- For Data Centers, Local Area Network (LAN), Industrial equipment, Electromedical equipment
- 10” touch LCD display
- Compatible with Generators
- Power Factor 1
- Frequency converter
- Shared Battery Modules
- Battery module up to 120 KVa contained in the same cabinet
- High MTBF and low MTTR
- UPS Management Software compatible with Windows, Mac OS X, Unix, Linux, etc.

HIGH EFFICENCY 96,5%

Power Module

UPS 20KVA Module

UPS 30KVA Module

	MODULE for UPS EVO DSP PLUS MODULAR HE	
Code	**FGCEVDPM20TT**	**FGCEVDPM30TT**
Nominal power	20KVA	30KVA
Active power	20KW	30KW
Dimension WxHxD	44x13,2x65 cm (3U)	
Input		
Nominal voltage	360Vac/380Vac/400Vac/415Vac (3Ph+N)	
Output		
Nominal voltage	360Vac/380Vac/400Vac/415Vac (3Ph+N)	
Battery		
Nominal voltage	+/- 240Vdc (12Vdc x 40 pz)	
Maximum Charging Current	6A	8A

High Italian Quality

TECNOWARE®

RoHS COMPLIANT CE

EVO DSP PLUS MODULAR 400 VAC PF 1
20-300

Together on

Module 20/30 KW Cabinet

	UPS EVO DSP PLUS MODULAR HE CABINET (20/30 KVA Module)					
Code	FGCEVDPM30B90K	FGCEVDPM30B120K	FGCEVDPM30B180K	FGCEVDPM42B120K	FGCEVDPM42B210K	FGCEVDPM42B300K
Height	30U	30U	30U	42U	42U	42U
STS Power	90KW	120KW	180KW	120KW	210KW	300KW
Type of installable UPS Module	30KW or 20KW					
Max. number of installable UPS Module	3	4	6	4	8	10
Battery Modules layers (4 Battery Modules each layer)	3 (12 Modules)	-	-	5 (20 Modules)	-	-
Max. capacity of installing 20KVA Module	20-60KW	20-80KW	20-120KW	20-80KW	20-160KW	20-200KW
Max. capacity of installing 30KVA Module	30-90KW	30-120KW	30-180KW	30-120KW	30-210KW (if 8 pcs are installed, 1 is ridondant)	30-300KW
Power factor	1					
Technology	On-Line Double Conversion transformerless (VFI-SS-111)					
Dimension (UPS) WxHxD	60x147,5x110			60x201x110		
Weight	260Kg	200Kg	230Kg	274Kg	273Kg	275Kg
Input						
Number of phases	3Ph+N					
Nominal power	380 / 400 / 415 Vac (220 / 230 / 240 Vac Ph-N) (selectable)					
Input voltage range	305V - 478V (176V - 276V Ph-N) at 100% load - 208V - 478V (120V - 276V Ph-N) at 70% load					
Nominal frequency	50/60 Hz (automatic selection)					
Input frequency range	40Hz - 70Hz					
Frequency Sync range	± 1Hz, ± 2Hz, ± 4Hz (selectable)					
Input current harmonic distortion (THDi)	< 3% at 100% load					
Input power factor	≥ 0.99 at 100% load					
Output						
Number of phases	3Ph+N					
Nominal voltage	380 / 400 / 415 Vac (220 / 230 / 240 Vac F-N) (selectable)					
Voltage Regulation (On-Line and Battery mode)	≤ 1% Tipical (linear load); ≤ 2% Tipical (distorting load)					
Inverter waveform	Sinewave					
Nominal frequency	50/60 Hz (selectable)					
Frequency stability	50 Hz ± 0.1% - 60 Hz ± 0.1%					
Voltage Harmonic Distortion (THD)	≤ 2% (100% linear load); ≤ 4% (distorting load)					
Crest factor	3:1 max					
Overload capability (On-line mode)	105 ~110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms					
Overload capability (Battery mode)	105 ~110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms					
Transfer time	0 ms (Line <--> Batteria) 0 ms (Batteria <--> Bypass)					
Efficiency	96,5% calculated in double conversion mode at 100% load according to standard 62040-3					
Bypass input						
Number of phases	3Ph+N					
Nominal power	380 / 400 / 415 Vac (220 / 230 / 240 Vac Ph-N) (selectable)					
Maximum voltage threshold	+10% / +15% / +20%					
Manimum voltage threshold	-10% / -20% / -30%					
Nominal frequency	50/60 Hz (automatic selection)					
Frequency Sync range	± 1Hz, ± 2Hz, ± 4Hz (selectable)					
Overload capability	105 ~110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms					
Transfer time	≤ 20ms (Bypass <--> Inverter)					
Batteries						
Type	Lead acid, sealed, maintenance free					
Elements number	40 elements					
Nominal battery voltage	± 240 Vdc					
Charging time	6-8 hours (tipical)					
Maximum charging current	8A each 30KVA module; 6A each 20KVA module					
Environmental specification						
Working temperature	From 0 to 55°C (recommended from 20 to 25 °C, for longer battery life)					
Humidity	< 95% without condensation					
Maximum altitude	3000 m					
IP protection	IP20					
Noise	< 73 dBA (to 1 meter)					
Certifications	CE (Standards: Low Voltage Directive IEC EN 62040-1; EMC Directive IEC EN 62040-2; classification IEC EN 62040-3)					
Interfaces						
Communication ports	1 RS232 port and 1 USB port					
Software	Tecnomanager UPS Management Software, compatibile con Windows, Linux, Unix, etc.					
SNMP Interface	Optional					
EPO (Emergency Power OFF)	Included					
Dry Contact Interface	Optional					
Parallel mode	Optional (2 UPS)					

High Italian Quality

TECNOManager UPS Management Software

TECNOWARE®

RoHS COMPLIANT CE

EVO DSP PLUS MODULAR 400 VAC PF 1
20-300

Together on

Module 20 KW Cabinet



	CABINET UPS EVO DSP PLUS MODULAR HE (Modulo 20 KVA)		
Code	**FGCEVDPM30A80K**	**FGCEVDPM30A120K**	**FGCEVDPM42A200K**
Height	30U	30U	42U
STS Power	80KW	120KW	200KW
Type of installable UPS Module		20KW	
Max. number of installable UPS Module	4	6	10
Battery Modules layers (4 Battery Modules each layer)		-	
Max. capacity of installing 20KVA Module	20-80KW	20-120KW	20-200KW
Power factor		1	
Technology		On-Line Double Conversion transformerless (VFI-SS-111)	
Dimension (UPS) WxHxD		60x147,5x110	
Weight	197Kg	230,5Kg	270Kg
Input			
Number of phases		3Ph+N	
Nominal power		380 / 400 / 415 Vac (220 / 230 / 240 Vac Ph-N) (selectable)	
Input voltage range		305V - 478V (176V - 276V Ph-N) at 100% load - 208V - 478V (120V - 276V Ph-N) at 70% load	
Nominal frequency		50/60 Hz (automatic selection)	
Input frequency range		40Hz - 70Hz	
Frequency Sync range		± 1Hz, ± 2Hz, ± 4Hz (selectable)	
Input current harmonic distortion (THDi)		< 3% at 100% load	
Input power factor		≥ 0.99 at 100% load	
Output			
Number of phases		3Ph+N	
Nominal voltage		380 / 400 / 415 Vac (220 / 230 / 240 Vac Ph-N) (selectable)	
Voltage Regulation (On-Line and Battery mode)		≤ 1% Tipical (linear load); ≤ 2% Tipico (distorting load))	
Inverter waveform		Sinewave	
Nominal frequency		50/60 Hz (selectable)	
Frequency stability		50 Hz ± 0.1% - 60 Hz ± 0.1%	
Voltage Harmonic Distortion (THD)		≤ 2% (100% linear load); ≤ 4% (100% distorting load)	
Crest factor		3:1 max	
Overload capability (On-line mode)		105 ~110% for 1 hour 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms	
Overload capability (Battery mode)		105 ~110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms	
Transfer time		0 ms (Line <--> Battery) 0 ms (Battery <--> Bypass)	
Efficiency		96,5% calculated in double conversion mode at 100% load according to standard 62040-3	
Bypass input			
Number of phases		3Ph+N	
Nominal power		380 / 400 / 415 Vac (220 / 230 / 240 Vac Ph-N) (selectable)	
Maximum voltage threshold		+10% / +15% / +20%	
Minimum voltage threshold		-10% / -20% / -30%	
Nominal frequency		50/60 Hz (automatic selection)	
Frequency Sync range		± 1Hz, ± 2Hz, ± 4Hz (selectable)	
Overload capability		105 ~110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms	
Transfer time		≤ 20ms (Bypass <--> Inverter)	
Batteries			
Type		Lead acid, sealed, maintenance free	
Elements number		40 elements	
Nominal battery voltage		± 240 Vdc	
Charging time		6-8 hours (tipical)	
Maximum charging current		6A each 20KVA module	
Environmental specification			
Working temperature		From 0 to 55°C (recommended from 20 to 25 °C, for longer battery life)	
Humidity		< 95% without condensation	
Maximum altitude		3000 m	
IP protection		IP20	
Noise		< 73 dBA (to 1 meter)	
Certifications		CE (Standards: Low Voltage Directive IEC EN 62040-1; EMC Directive IEC EN 62040-2; classification IEC EN 62040-3)	
Interfaces			
Communication ports		1 RS232 port and 1 USB port	
Software		Tecnomanager UPS Management Software, compatibile con Windows, Linux, Unix, etc.	
SNMP Interface		Optional	
EPO (Emergency Power OFF)		Included	
Dry Contact Interface		Optional	
Parallel mode		Optional (2 UPS)	

Battery Cabinet

Code	FBBEVDPM30U480A	FBBEVDPM42U480A	FBBEVDPM42U480B
Height	30U	42U	42U
Max. number of installable Battery Module	28 (to order separately)	40 (to order separately)	-
Battery type and number	-	-	40 x 12V 100Ah (to order separately)
Dimensions WxHxD	60x147,5x110 cm	60x201x110 cm	64,7x201x110 cm
Weight	135 Kg (without battery module)	200 Kg (without battery module)	221 Kg (without battery)

Battery module

Battery module

Code	FBBEVDPM120/07	FBBEVDPM120/09	FBBEVDPM120/11
Battery number		10 pz	
Battery type	12V 7,2Ah	12V 9Ah	12V 11Ah
Dimensions WxHxD		10,7x15,5x73,5 cm	
Weight	22 Kg	26 Kg	31 Kg

ON LINE

EVO DSP PLUS MODULAR 208 VAC PF 1
20-140

Together on

EASY HOT SWAP DESIGN
The innovative Design Hot Swap and the complete independence of each module allow a simple and quick maintenance and possible expansions of power and autonomy.

FLEXIBLE MODULAR DESIGN
Scalable architecture allow to easly increase power (from 20KVA to 140KVA), redundancy level (N+1 or N+X) and Back-Up time by simply additional UPS and Battery modules. All this allows to optimize the investment.

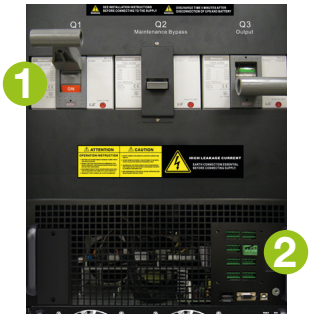
NO-DOWNTIME SYSTEM
The Redundance configuration and Hot Swap Design ensure always full power also in case of failure and replacement of module or scheduled maintenance. All this features guarantee low MTTR (Mean Time To Repair).

N+1 OR N+X REDUNDANCE PARALLELABLE SYSTEM
The **redundant modular design** of the EVO DSP PLUS MODULAR HE UPS allows getting high levels of reliability without the need to buy other 2 or more products for the redundancy, as it is the case with a standard UPS. This also results in significant savings.

The EVO DSP PLUS MODULAR HE UPS also makes it possible to configure the level of redundancy desired via a front interface, a 10" touch LCD display, so that the protection degree necessary for the device the UPS protects is always attained. This **redundant modular design** helps decide whether one (N+1) or several (N+X) Power Modules need to be set up as a reserve for the main modules.

EASE OF INSTALLATION AND MAINTENANCE
1 Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance.

2 Easy installation and maintenance, panel control and connectors with frontal accessibility.



FULL ADVANCED COMMUNICATION SYSTEM
All the cabinets for the EVO DSP PLUS MODULAR HE UPS come equipped with a full communication interface system: USB, RS232, EPO (emergency power off) and a smart slot to integrate optional interface boards such as RS485, SNMP or Dry Contact.

An Extra Communication Slot may be added with programmable input/output contacts, connections for temperature detecting sensors for any external Battery Cabinets, and another smart slot to install any additional RS485, SNMP or Dry Contact interface boards.

ON LINE

EVO DSP PLUS MODULAR 208 VAC PF 1
20-140

Together on

1. 10" touch LCD display
2. Input/Output Switches and Maintenance Bypass
3. STS Module and Communication Ports
4. Power Module

POWER FACTOR 1

Display touch LCD 10"

REDUNDANT POWER SUPPLY IN STS
NO RISK OF SHUTDOWN

Main Specifications

- For Data Centers, Local Area Network (LAN), Industrial equipment, Electromedical equipment
- 10" touch LCD display
- Compatible with Generators
- Power Factor 1
- Frequency converter
- Shared Battery Modules
- High MTBF and low MTTR
- UPS Management Software compatible with Windows, Mac OS X, Unix, Linux, etc.

HIGH EFFICENCY 96,5%

Power Module

20KVA UPS Module

	MODULE for UPS EVO DSP PLUS MODULAR HE
Code	**FGCEDPM20TT208**
Nominal power	20KVA
Active power	20KW
Dimension WxHxD	73,65x13,3x49 cm (3U)
Input	
Nominal voltage	3 x 208Vac/220Vac (3Ph+N)
Output	
Nominal voltage	3 x 208Vac/220Vac (3Ph+N)
Battery	
Nominal voltage	+/- 120Vdc (12Vdc x 20 pz)
Maximum Charging Current	8A

High Italian Quality

TECNOWARE®

RoHS COMPLIANT CE

EVO DSP PLUS MODULAR 208 VAC PF 1
20-140

Together on

Module 20 KW Cabinet



	UPS EVO DSP PLUS MODULAR HE CABINET (20 KVA Module)		
Code	**FGCEDPM30A80K208**	**FGCEDPM30A120K208**	**FGCEDPM42A140K208**
Height	30U	30U	42U
STS Power	80KW	120KW	140KW
Type of installable UPS Module		20KW	
Max. number of installable UPS Module	4	6	7+1
Max. capacity of installing 20KVA Module	20-80KW	20-120KW	20-140KW
Power factor		1	
Technology		On-Line Double Conversion transformerless (VFI-SS-111)	
Dimension (UPS) WxHxD		60x147,5x110	
Weight	329Kg	428.5Kg	504Kg
Input			
Number of phases		3Ph+N	
Nominal power		3 x 208/220 Vac	
Input voltage range		182V ~ 253V to 90% ~ 100% load, 156V ~ 253V to 63% ~ 90% load, 121V ~ 253V to <63% load	
Power Factor		50/60 Hz (Automatic selection)	
Input frequency range		40Hz - 70Hz	
Input current harmonic distortion (THDi)		< 3% at 100% load	
Input power factor		≥ 0.99 to 100% load, ≥ 0.98 at 50% load	
Output			
Number of phases		3Ph+N	
Nominal voltage		3 x 208 Vac / 220 Vac	
Voltage Regulation (On-Line and Battery mode)		≤ 1% Tipical (linear load); ≤ 2% Tipical (distorting load)	
Inverter waveform		Sinewave	
Nominal frequency		50/60 Hz (selectable)	
Voltage Harmonic Distortion (THD)		≤ 2% (100% (linear load)); ≤ 4% (100% distorting load)	
Overload capability (On-line mode)		110% for 1 hour, 125% for 10 minutes, 150% for 1 minute, >150% for 200ms	
Overload capability (Battery mode)		105 ~110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms	
Transfer time		0 ms (Line <--> Battery) 0 ms (Battery <--> Bypass)	
Efficiency		96,5%, calculated in double conversion mode at 100% load according to standard 62040-3	
Batteries			
Type Lead acid, sealed, maintenance free			
Elements number		20 elements	
Nominal battery voltage		± 120 Vdc	
Charging time		6-8 hours (tipical)	
Maximum charging current		8A each 20KVA module	
Environmental specification			
Working temperature		From 0 to 40°C (recommended from 20 to 25 °C, for longer battery life)	
Humidity		< 95% without condensation	
Maximum altitude		3000 m	
IP protection		IP20	
Noise		< 73 dBA (to 1 meter)	
Certifications		CE (Standards: Low Voltage Directive IEC EN 62040-1; EMC Directive IEC EN 62040-2; classification IEC EN 62040-3)	
Interfaces			
Communication ports		1 RS232 port and 1 USB port	
Software		Tecnomanager UPS Management Software, compatibile con Windows, Linux, Unix, etc.	
SNMP Interface		Optional	
EPO (Emergency Power OFF)		Included	
Dry Contact Interface		Optional	

ON LINE

EVO DSP PLUS MODULAR 480 VAC PF 1
70-700

Together on

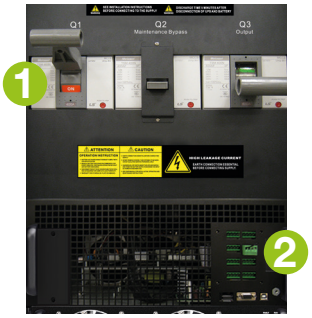
EASY HOT SWAP DESIGN
The innovative Design Hot Swap and the complete independence of each module allow a simple and quick maintenance and possible expansions of power and autonomy.

FLEXIBLE MODULAR DESIGN
Scalable architecture allow to easly increase power (from 70KVA to 700KVA), redundancy level (N+1 or N+X) and Back-Up time by simply additional UPS and Battery modules. All this allows to optimize the investment.

NO-DOWNTIME SYSTEM
The Redundance configuration and Hot Swap Design ensure always full power also in case of failure and replacement of module or scheduled maintenance. All this features guarantee low MTTR (Mean Time To Repair).

N+1 OR N+X REDUNDANCE PARALLELABLE SYSTEM
The **redundant modular design** of the EVO DSP PLUS MODULAR HE UPS allows getting high levels of reliability without the need to buy other 2 or more products for the redundancy, as it is the case with a standard UPS. This also results in significant savings.

The EVO DSP PLUS MODULAR HE UPS also makes it possible to configure the level of redundancy desired via a front interface, a 10" touch LCD display, so that the protection degree necessary for the device the UPS protects is always attained. This **redundant modular design** helps decide whether one (N+1) or several (N+X) Power Modules need to be set up as a reserve for the main modules.

EASE OF INSTALLATION AND MAINTENANCE


1 Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance.

2 Easy installation and maintenance, panel control and connectors with frontal accessibility.

FULL ADVANCED COMMUNICATION SYSTEM
All the cabinets for the EVO DSP PLUS MODULAR HE UPS come equipped with a full communication interface system: USB, RS232, EPO (emergency power off) and a smart slot to integrate optional interface boards such as RS485, SNMP or Dry Contact.

An Extra Communication Slot may be added with programmable input/output contacts, connections for temperature detecting sensors for any external Battery Cabinets, and another smart slot to install any additional RS485, SNMP or Dry Contact interface boards.

FLEXIBLE BACK-UP TIME CONFIGURATION
Battery box with scalable architecture and Hot Sìwap design to increase Back-Up time and for easy battery maintenance.

Battery module

High Italian Quality

TECNOManager UPS Management Software

TECNOWARE®

RoHS COMPLIANT CE

ON LINE

EVO DSP PLUS MODULAR 480 VAC PF1
70-700

Together on

Evo Dsp Plus Modular 480 Vac PF1
350 KW

Evo Dsp Plus Modular 480 Vac PF1
700 KW

POWER FACTOR 1

Display touch LCD 10”

REDUNDANT POWER SUPPLY IN STS
NO RISK OF SHUTDOWN

1 10” touch LCD display 2 Input/Output Switches and Maintenance Bypass 3 STS Module and Communication Ports 4 Power Module

Main Specifications

- For Data Centers, Local Area Network (LAN), Industrial equipment, Electromedical equipment
- 10” touch LCD display
- Compatible with Generators
- Power Factor 1
- Frequency converter
- Shared Battery Modules
- High MTBF and low MTTR
- UPS Management Software compatible with Windows, Mac OS X, Unix, Linux, etc.

HIGH EFFICENCY 96,5%

Power Module

UPS 70KVA Module

	MODULO per UPS EVO DSP PLUS MODULAR HE
Code	**FGCEDPM70TT480**
Nominal power	70KVA
Active power	70KW
Dimension WxHxD	75x13x43,8cm (3U)
Input	
Nominal voltage	3 x 480Vac (3Ph without N)
Output	
Nominal voltage	3 x 480Vac (3Ph without N)
Battery	
Nominal voltage	+/- 240Vdc (12Vdc x 40 pz)
Maximum Charging Current	18A

High Italian Quality

TECNOWARE®

RoHS COMPLIANT CE

ON LINE

EVO DSP PLUS MODULAR 480 VAC PF 1
70-700

Together on

Module 70 KW Cabinet

	UPS EVO DSP PLUS MODULAR HE CABINET (70 KVA Module)	
Code	**FGCEDPM42A350K480**	**FGCEDPM42A700K480**
Height	42U	
STS Power	350KW	700KW
Type of installable UPS Module	70KW	
Max. number of installable UPS Module	5	10
Max. capacity of installing 70KVA Module	70-350KW	70-700KW
Power factor	1	
Technology	On-Line Double Conversion transformerless (VFI-SS-111)	
Dimension (UPS) WxHxD	60x210x110 cm	135x200x110 cm (with Switch cabinet) 90x200x110 cm (without Switch cabinet)
Weight	516Kg	1.290Kg (with Switch cabinet) 984Kg (without Switch cabinet)
Input		
Number of phases	3Ph	
Nominal power	480 Vac	
Input voltage range	330V - 528V	
Nominal frequency	50/60 Hz (automatic selection)	
Input frequency range	40Hz - 70Hz	
Frequency Sync range	46Hz-54Hz or 56Hz-64Hz	
Input current harmonic distortion (THDi)	< 4% at 100% load	
Input power factor	≥ 0.99 at 100% load	
Output		
Number of phases	3Ph	
Nominal voltage	480 Vac	
Voltage Regulation (On-Line and Battery mode)	≤ 1%	
Inverter waveform	Sinewave	
Nominal frequency	50/60 Hz (selectable)	
Frequency stability	50 Hz ± 0.1% - 60 Hz ± 0.1%	
Voltage Harmonic Distortion (THD)	≤ 2% (100% linear load); ≤ 4% (100% distorting load)	
Crest factor	3:1 max	
Overload capability (On-line mode)	≤110% for 1 hour, 111~125% for 10 minutes, 126~150% per 1 minute, >150% for 200ms	
Overload capability (Battery mode)	≤110% for 1 hour, 111~125% for 10 minutes, 126~150% per 1 minute, >150% for 200ms	
Transfer time	0 ms (Line <--> Battery) 0 ms (Battery <--> Bypass)	
Efficiency	96,5% calculated in double conversion mode at 100% load according to standard 62040-3	
Bypass input		
Number of phases	3Ph	
Nominal power	480 Vac	
Maximum voltage threshold	+10% / +15% / +20%	
Minimum voltage threshold	-10% / -20% / -30%	
Nominal frequency	50/60 Hz (automatic selection)	
Frequency Sync range	± 1Hz, ± 2Hz, ± 4Hz (selectable)	
Overload capability	≤110% for 1 hour, 111~125% for 10 minutes, 126~150% for 1 minute, >150% for 200ms	
Transfer time	≤ 20ms (Bypass <--> Inverter)	
Batteries		
Type	Lead acid, sealed, maintenance free	
Elements number	40 elements	
Nominal battery voltage	± 240 Vdc	
Charging time	6-8 hours (tipical)	
Maximum charging current	18A each 70KVA module	
Environmental specification		
Working temperature	From 0 to 55°C (recommended from 20 to 25 °C, for longer battery life)	
Humidity	< 95% without condensation	
Maximum altitude	3000 m	
IP protection	IP20	
Noise	< 79 dBA (to 1 meter)	
Certifications	CE (Standards: Low Voltage Directive IEC EN 62040-1; EMC Directive IEC EN 62040-2; classification IEC EN 62040-3)	
Interfaces		
Communication ports	1 RS232 port and 1 USB port	
Software	Tecnomanager UPS Management Software, compatibile con Windows, Linux, Unix, etc.	
SNMP Interface	Optional	
EPO (Emergency Power OFF)	Included	
Dry Contact Interface	Optional	
Parallel mode	Optional (2 UPS)	

High Italian Quality

TECNOManager UPS Management Software

TECNOWARE®

RoHS COMPLIANT CE

Battery Cabinet

Code	FBBEVDPM30U480A	FBBEVDPM42U480A	FBBEVDPM42U480B
Height	30U	42U	42U
Max. number of installable Battery Module	28 (to order separately)	40 (to order separately)	-
Battery type and number	-	-	40 x 12V 100Ah (to order separately)
Dimensions WxHxD	60x147,5x110 cm	60x201x110 cm	64,7x201x110 cm
Weight	135 Kg (without battery module)	200 Kg (without battery module)	221 Kg (without battery)

Battery module

Battery module

Code	FBBEVDPM120/07	FBBEVDPM120/09	FBBEVDPM120/11
Battery number		10 pz	
Battery type	12V 7,2Ah	12V 9Ah	12V 11Ah
Dimensions WxHxD		10,7x15,5x73,5 cm	
Weight	22 Kg	26 Kg	31 Kg