











## **Solutio**

3 Phase In - 3 Phase Out / 300kVA - 400kVA

- Interleaved 3 Level IGBT Technology
- Real digital signal Processor (DSP) controlled transformerless design
- High output power factor (PF:1, kVA=kW)
- Increased AC-AC Efficiency (up to 96,5 %)
- Unity Input power factor (p.f. > 0,99)
- Low input current THD (<3%)
- Low output voltage THD (<2%)
- Wide input voltage range
- Graphical Multi-Functional touch screen LCD panel (7" TFT)
- Built-in static & manual Bypass
- On-site parallel connection availability up to 8 units
- Intelligent battery management system & expandable battery autonomy time
- Event log display up to 1024 Events
- Advanced communication features; RS232, RS485, ESD, EPO ( NO or NC adjustable),
- Genset and USB ports as standard, modbus & SNMP as optional
- Generator compatible operation mode
- 50/60Hz Frequency converter operation mode (Adjustable from LCD Panel)
- Back feed protection (Optional)
- Cold start (Optional)
- Installation friendly input & output connection terminals
- High reliance & performance, thanks to artificial intelligence algorithms

















## **Complementary Features**

- Splitt Bypass as default
- Temperature controlled battery charging
- Availability to adjust the output voltage as 220/380, 230/400 or 240/415V from LCD Panel
- Availability to adjust the output frequency as 50Hz or 60Hz from LCD Panel
- Programmable 4pcs Alarm Relay (adjustable from LCD panel )
- Smart structure enabling easy service
- Fan speed control according to temperature
- Special voltage application & galvanic isolation options
- Ability to operate from mains without battery enables to maintain on-line operation during battery failures or at recovery of mains blackout
- Availability to use as frequency converter ( 50/60Hz ) without battery (optional)
- Availability to disable bypass and inverter from LCD panel
- Availability to make battery test via LCD panel or SNMP
- Trouble free operation with Dynamic Loads
- Low noise level, thanks to reduced switching frequency level due to interleaved 3L IGBT topology
- Advanced on-system diagnosis

- Bypass Line temperature protection with temperature control on Bypass thyristor
- High Reliability, Rigid structure







## **Solutio**

## **TECHNICIAL SPECIFICATIONS**

MODEL	SOLUTIO 300	SOLUTIO 400
Power (kVA)	300	400
Active Power (kW)	300	400
INPUT		
Phase	3PH+N+PE	
Nominal Voltage	380V / 400V / 415V	
Voltage Range (VAC) (%100 Load)	[-15%] (+20%)	
Voltage Range (VAC) (%50 Load)	[-45%] (+20%)	
<u> </u>	50 / 60 Hz	
Nominal Frequency (Hz)	45 - 65 Hz	
Frequency Range (Online Mode)	45 - 65 HZ <3%	
Input Current Harmonics (THDi)*		
Input Power Factor		≥ 0.99
OUTPUT		
Phase	3F+N+PE	
Nominal Voltage	380V / 400V / 415V (adjustable from LCD panel)	
Output Power Factor	1	
Static Voltage Regulation @%100 Linear Load	±1%	
Output Voltage Harmonics (THDv)*	< 2% (Linear Load), < 4% (Non-Linear Load)	
Crest Factor	3:1	
Frequency (Hz)	50 Hz or 60 Hz (Adjustable)	
Frequency Range ( Battery Operation Mode )	50/60 ±0,01%	
Overload	Online – Battery Mode: <%125 Load 10 min, <%150 Load 1 min BypassMode: <%175 continous	
Efficiency*	up to 96,5% (Online), >98,5% (Ecomode)	
STATIC BYPASS LINE		
Phase		3F+N+PE
Bypass Voltage Range	380V / 400V / 415V [ -%	15 +%10 adjustable from LCD panel)
Bypass Frequency Range	47-53 Hz (Adjustable), 57-63 Hz (Adjustable)	
Transfer Time	0 msec	
BATTERY		o mace
	Maintananaa	-Free Lead Acid Batteries
Battery Type		
Charge Current (A)	Nominal Charge Current x 0,1 (adjustable via display)  60	
Battery Qty (pcs)	_ ==	
Battery Protection	Deep Decharge Protection, Temperature-compensated Battery Charging	
Battery Test	Standard (Automatic & Manual)	
FRONT DISPLAY PANEL		
LCD Display	7" TFT Colorful G	Graphical Touch Screen Panel
LCD Display Panel Measurements	Load%, Input/Output/Bypass Voltage, Input/Output Current, Input/Output/Bypass Frequency, Power (W & VA), Output Power Factor, Battery ± Voltage, DC Bus ± Voltage, Back-up Time, Internal Temperature, Charge-Discharge Current	
Event Log		1024pcs
COMMUNICATION		
Interface (Communication Port)	RS232, RS485, ESD, EPO ( NO or NC adjustable), G	Senset and USB ports as standard, Modbus & SNMP as optional
Dry Contact Signals	-	elays (configurable)
PROTECTION		
	Overload, High Temperature, High Voltage & High Current Protections, Back-Feed Protection(Optional), Deep Decharge Protection, Short Circuit Protection	
ENVIRONMENTAL		
Operating Temperature (°C)	N _ KN %C (20	omended for longer battery life time)
Storage Temperature (°C)		-25 ~ +55 °C
Max. Operating Altitude	2.25%	1000m
Relative Humidity	0-95% (non-condensing)	
Audible Noise Level (from 1m distance)		< 70 dBA
PHYSICAL SPECIFICATIONS		
Dimension (WxDxH) (mm)		60 x 750 x 1910
		825
,	715	020
,	715	020
,		EN 60950,62040-1
Weight (w/o battery)  STANDARDS  Safety  EMC	IEC/E	
STANDARDS Safety	IEC/E	EN 60950,62040-1



<sup>\*</sup>May vary depending on UPS power & Load & Environental Conditions \*\*INFORM keeps the right to change the specifications without any notice