

# ELEKTRA SERIES

I.T GRADE ONLINE DOUBLE CONVERSION UPS 10KVA ~ 500KVA (3/3)

Mission Critical & I.T Grade UPS



#### Elektra Series (3/3, H.F) (10KVA~500KVA)

Elektra Series I.T Grade On Line Double Conversion UPS represents the best solution that is both effective and environment friendly, it delivers and excellent integrated autonomy, reduced footprint and optimum input and output performances, guaranteeing reliable and flexible power.

Elektra Double conversion pure on-line three phase input and output UPS adopt double conversion technology, able to provide solutions to conditions like voltage instantaneous drop-off or damping concussion, high-voltage plus, voltage pulsation, surge voltage, harmonic distortion, and frequency fluctuation, guarantees a safe and reliable power.

UPS status can be monitored at a glance on an intuitive LCD screen.

Elektra Series offer redundant and capacity parallel Ups, the right solution for all applications requiring a perfect and uninterrupted power supply.



This is a green product that comply with the products pollution control management measures, the product under normal use, will not harm the environment and personals using it.





#### **Active Input Power Factor Correction (Pfc)**

With digital control of active power factor correction technology, enables high input power factor 0.99 above as to avoid contamination of electrical network environment, saving energy and reducing system costs.

#### **Compatible With Generators**

Input voltage and frequency range is wide so it can effectively works on generator and thus provide pure, safe and stable power.

#### Power Factor 0.9 / 1

The 0.9 & 1 Output Power Factor reaffirms your original Deutsche Power Elektra Series purchase by fully leveraging your existing UPS investment to accommodate today's and tomorrow's high power factor load requirements.

#### High-efficient, Energy Saving, Green Environmental Protection

The efficiency of the machine is as high as 94% and reaches over 98% in the ECO mode which can help to reduce the power loss of the UPS's IGBT, FM, intelligent rectifier and inverter technology, input power factor 0.99, & input current harmonic wave (THDi) is as low as 3%.

#### **Excellent Overload Capacity**

When higher protection required, the optional dust-proof accessories can help to increase the protection level in harsh environment and safeguard the UPS's security. Elektra series UPS provide a broader range of input voltage from 210VAC to 475VAC, which ensures to be applicable in the unpleasant grid environment of different power supply equipment like generator, with its extraordinary input frequency.

#### Zero Switching

Transfer time when UPS transferred to the battery or vice versa is zero, effectively guarantee the load operation security and reliability.

#### **Application**

Elektra range provide a combination of outstanding protection features and flexibility, making it the right choice for applications demanding optimum reliability and energy efficiency.

Systems such as servers, networking devices, workstations, storage systems and various IT equipment find the right protection element in Elektra Series, especially, when combined with Elektra Powerful Connectivity suite.

VolP equipment, railway control systems, medical laboratory instrumentation, and many other industrial applications may also benefit from the consistent and high quality power provided by the Elektra, thanks to the robustness, precision and high efficiency provided.

#### **Key Features**

- Advance IGBT Rectifier technology, input power factor: 0/99
- Input THDi <3%
- The efficiency of the machines is as high as 94%.
- Connect parallel for maximum flexiblity and compatible to battery share in the parallel mode, which helps the customers to extend the system capacity with low cost.
- Intelligent management of battery charging and
- discharging.

Lightning and surge protection, short circuit and overload protection.

#### **Powerful Extensibility Features**

Smart slot provides rich scalable features, USB can be selected, AS400 card, SNMP card, RS485 card and environmental monitoring card.

#### **Standards**

Safety:

IEC/EN62040-1, IEC/EN60950-1. EMC IEC/ EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6. IEC61000-4-8

Noise Suppression Complies with EN62040~2

TEC	HNICAL SP	ECIFICATION	I FOR THREE	PHASE IN 8	& THREE PHA	ASE OUT				
MODEL										
	ESH1033	ESH1533	ESH 2033	ESH3033	ESH4033	ESH6033	ESH8033			
RANGE										
	10KVA	15KVA	20KVA	30KVA	40KVA	60KVA	80KVA			
INPUT										
Principal of working	True On-line, Double Conversion, Static Bypass Switch									
Phase				Three phase +	N + PE					
Voltage	208~478V									
Power Factor	>0.99									
Frequency	40/70Hz									
Harmonic Distortion (THDi)	2% (100% non-linear load)									
	Max.Volt.: 220V+25%(optional + 10%,+15%,+20%) 230V 20% (optional +10%, +15%) 240V 15%									
Bypass Voltage	Minimum volt.: -45% (optional -20%, _30%)  Frequency Protection Range: ± 10%						,			
, , , , , , , , , , , , , , , , , , ,										
OUTPUT			1	J						
Voltage / Regulation	380/400/415V (Adjustable), Three Phase + N + PE , ±2%									
Power Factor	0.9 & 1 (as required)									
Frequency	1.Line Mode: $\pm 1\%$ / $\pm 2\%$ / $\pm 4\%$ / $\pm 5\%$ / $\pm 10\%$ of the rated frequency (optional)									
Trequency		2.Battery Mode: (50/60±0.2%)Hz								
Crest Factor			μ.Dut	3:1	00±0.2/0/112					
Harmonic Distortion (THDi)					ır load					
namone distortion (mb)										
Efficiency	<5% with non linear load 94.5%									
BATTERY	34.370									
Voltage	Standrad unit: ± 216Vdc; Long run unit Optional: ± 192V\ ± 240V\ ± 216V\ ± 228V\ ± 240V									
Charge Current (A)	St	andiau unit. ± 2	Tovac, Long Ful	i unit Optionai.	± 132 V \ ± 240 V	X ± 210V \± 226V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
(It can be set according to	5.7A (Max./standard unit)						19A (May )			
battery capacity installed)	6.0A (Max./Standard unit) 12A (Max.) 18A (Max.)									
Battery	Advance Battery Management									
· · · · · · · · · · · · · · · · · · ·			Adv	апсе ваттегу м	anagement					
SYSTEM FEATURES Transfer time										
Overload: Line Mode	Utility to battery: 0ms; Utility to bypass:0ms									
Bat. Mode	Load<110%:last 60min, <125%: Last 10min, < 150%: Last 5min,>150% shutdown UPS Immediately									
	Load<110%:last 10min, <125%: Last 1min, < 150%: Last 5S,>150% shutdown UPS Immediately									
LCD Display	Input Voltage & Frequency, Output Voltage & Frequency Load Percentage, Battery Voltage & inner Temp RS232, RS485, Parallel, Intelligent slot, Relay Card (Optional, SNMP) Card (optional)									
Communication Interface	RS	232, RS485,Pa	rallel,Intellige	nt slot, Relay C	ard (Optional,	SNMP) Card (d	ptional)			
ENVOIRMENTAL										
Oprating Temperature	0 ~ 40C									
Stroage Temperature	-25~55C									
Humidity Range	0~95% (non condensing)									
Altitude	<1500m									
Noice Level				<55db						
PHYSICAL										
Dimension D x W x H (mm)	780 x 600 x 1200									
Net Weight (kg)	S:591	S:594	S:595	S:595						
	H;123	H;126	Н;127	H;127	158	158	195			
STANDRADS										
Safety	Safety: IEC/EN62040-1, IEC/EN60950-1. EMC IEC/ EN62040-2, IEC61000-4-2, IEC61000-4-3,									
	IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8									
Noise Suppression	Complies with EN62040~2									

DP Electronics(Deutsche Power Co. Limited) has a policy of continuous product development and improvement and therefore reserve the right to vary any information without prior notes.

TECH	INICAL SP	ECIFICATION	N FOR THREI	E PHASE IN 8	& THREE PHA	SE OUT				
MODEL										
WODEL	ESH10033	ESH12033	ESH16033	ESH20033	ESH30033	ESH40033	ESH50033			
RANGE	LDITTOOO	Loningood	EBITTOOO	LDII20000	LBITOUUU	EBIT 10000	EDITOGOGO			
MINGE	100KVA	120KVA	160KVA	200KVA	300KVA	400KVA	500KVA			
INPUT	1001111	12011111	10011111	2001111	00011711	10011111	0001111			
Principal of working	True On-line, Double Conversion, Static Bypass Switch									
Phase				Three phase +						
Voltage	208~478V									
Power Factor	>0.99~1									
Frequency	40/70Hz									
Harmonic Distortion (THDi)	2% (100% non-linear load)									
114111101110 21200101011 (11121)	Max.Voltage: 220V+25%(optional + 10%,+15%,+20%) 230V 20% (optional +10%, +15%) 240V 15%									
Bypass Voltage							,			
	(optional +10%) Minimum voltage: -45% (optional -20%, _30%) Frequency Protection Range: ± 10%									
OUTPUT			1							
Voltage / Regulation	380/400/415V (Adjustable), Three Phase + N + PE , ±1%									
Power Factor	0.9/1  (as required)									
Frequency	1.Line Mode: $\pm 1\% / \pm 2\% / \pm 4\% / \pm 5\% / \pm 10\%$ of the rated frequency (optional)									
Trequency		Tiblic Wode				requency (optio	iidi)			
Crest Factor	2.Battery Mode: (50/60±0.2%)Hz 3:1									
Harmonic Distortion (THDi)				<2% with line	ar load					
narmonic distortion (mbi)	<5% with non linear load									
Efficiency										
BATTERY	94.5% / 96% Customized									
Voltage	Standrad unit: ± 216Vdc; Long run unit Optional: ± 192V\ ± 240V\ ± 216V\± 228V\ ± 240V									
Charge Current (A)	Sta	iraraa uiirt z	To vac, Long ra	ir unic optional	102 ( \ _ 2 10 (	(12210) (12220	* ( = 2 10 )			
(It can be set according to	24A	24A	36A	50A	80A	100A	130A			
battery capacity installed)	(Max.)	(Max.)	(Max.)	(Max.)	(Max.)	(Max.)	(Max.)			
Battery	. ,			ance Battery M		( , , , , ,				
SYSTEM FEATURES			- Tu	unce buttery iv	unugement					
Transfer time	Utility to battery: 0ms; Utility to bypass:0ms									
Overload: Line Mode	Load<110%:last 60min, <125%: Last 10min, < 150%: Last 5min,>150% shutdown UPS Immediately									
Bat. Mode	Ÿ									
LCD Display	Load<110%:last 10min, <125%: Last 1min, < 150%: Last 5S,>150% shutdown UPS Immediately  Input Voltage & Frequency Output Voltage & Frequency Lead Percentage Pattery Voltage & input Tom									
Communication Interface	Input Voltage & Frequency, Output Voltage & Frequency Load Percentage, Battery Voltage & inner Temporal RS232, RS485, Parallel, Intelligent slot, Relay Card (Optional, SNMP) Card (optional)									
ENVOIRMENTAL	-	13232, 1340J,I	aranei,iiiteilige	ent siot, keiay C	aru (Optionai, 51	vivii) Card (opti	Oliai)			
Oprating Temperature				0 ~ 40C						
Stroage Temperature	-25~55C									
Humidity Range	0~95% (non condensing)									
Altitude										
Noice Level	<1500m 70db 73db									
PHYSICAL			10ub			7300				
Dimension D x W x H (mm)	,	790 v 600 v 190	10	800x600x1600	950v600v1600	0E0	1200 v 2000			
		780 x 600 x 120					1200 x 2000			
Net Weight (kg)	286	288	348	380	600	815	860			
STANDRADS	C-C-t- TEC/	ENGODAO 1 EG	C/ENICOCEO 1	EMC IEC / EMCO	040.0 1001.00	1 4 0 IEC01000	4.0 IEC01000			
Safety	safety: IEC/	EN6ZU4U-1, IEC			040-2, IEC61000		4-3, IEC61000-4			
Noise Suppression	4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8									
Moise authliessinii	Complies with EN62040~2									

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