



ELEKTRA

SMALL FOOT PRINT SERIES

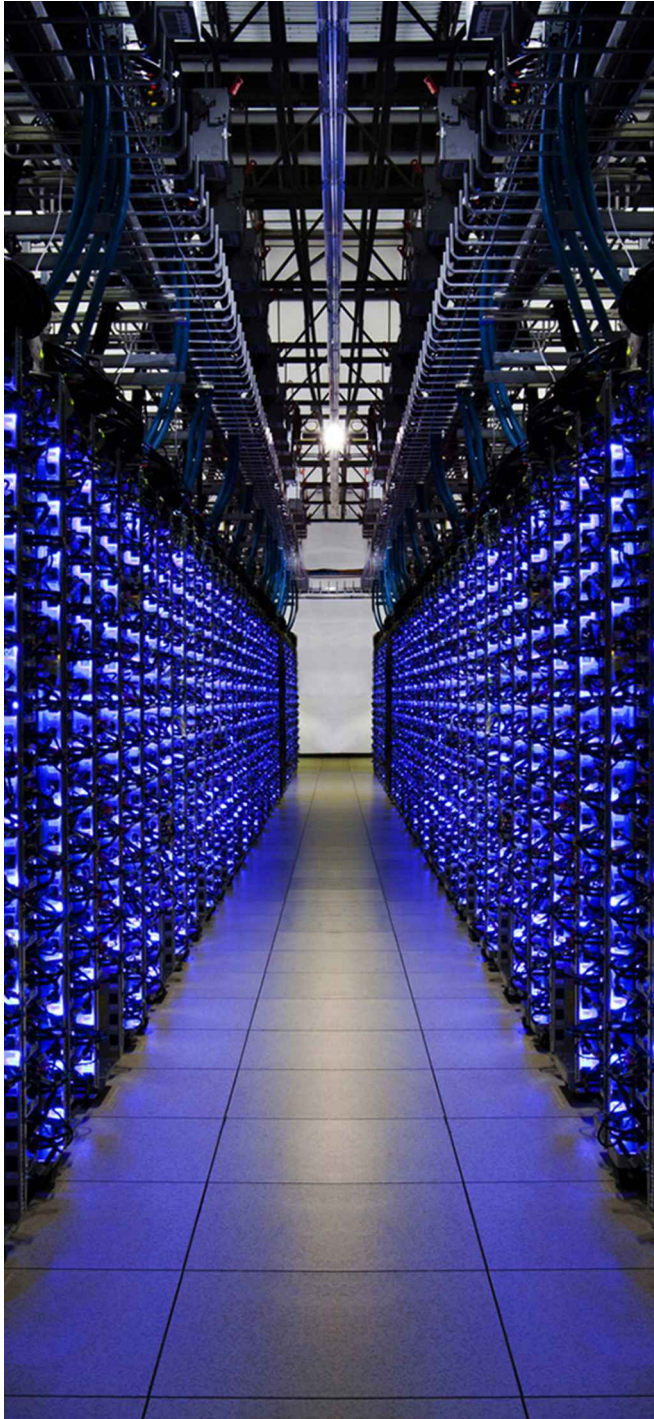
I.T GRADE ONLINE DOUBLE CONVERSION UPS

10KVA ~ 200KVA (3/3)

UNITY POWER FACTOR

 Mission Critical &
I.T Grade UPS

I.T GRADE ONLINE DOUBLE CONVERSION UPS (SMALL FOOT PRINT)



Elektra Series (3/3, H.F) (10KVA~200KVA)

Elektra Series I.T Grade On Line Double Conversion UPS represents the best solution that is both effective and environment friendly, it delivers an 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 adopts 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 complies with the products pollution control management measures, the product under normal use, will not harm the environment and persons using it.



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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 electric al 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 1

High adoptability for load as it can connect full inductive or capacitive load.

Deutsche Power ESHS Series has output power factor 1 and UPS supply power to 100% Unbalance load

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 2%.

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 208VAC to 478VAC, 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

ESHS Series 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.

VoIP 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

- Online-Double conversion
- Output transfer time is 0ms
- PFC technology
- Full digital control (DSP)
- Output power factor: 1
- Input current harmonic: 3%
- ECO function
- Charging/Rectifier/Inverter fully digital control technology
- Optimization battery group, the quantity of battery: 10- 30K (16/18/20 pes optional) 40-200K (32/34/36/38/40 pes optional)
- Wide input voltage range: 208-478Vac
- Wide input frequency range: 40-70Hz
- DC start
- Communication port: USB / RS232 / RS485 / Parallel port / Dry contact
- Options: SNMP card/Relay card
- LCD / LED double display
- Intelligent charging management
- EPO function
- Common battery group
- The output can meet 100% unbalanced load

Powerful Extensibility Features

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

Standards

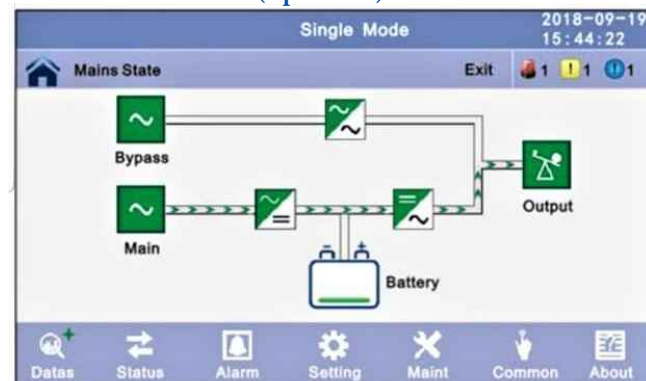
Safety:

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

Touch Screen LCD (optional)



I.T GRADE ONLINE DOUBLE CONVERSION UPS (SMALL FOOT PRINT)

TECHNICAL SPECIFICATION FOR THREE PHASE IN & THREE PHASE OUT

MODEL

	ESHS1033	ESHS1533	ESHS 2033	ESHS3033	ESHS4033
Rating	10KVA	15KVA	20KVA	30KVA	40KVA
INPUT					
Nominal voltage	380/400/415Vac, (3Ph+N+PE)				
Operating voltage range	138~485Vac for 40%load; 305~485Vac for full-load				
Operating frequency range	40~70Hz				
Power factor	≥1				
Bypass voltage range	380Vac Max. voltage: +25%(optional +1 0%,+15%,+20%) 400Vac Max. voltage: +20%(optional +1 0%,+15%) 415Vac Max.voltage: +15%(optional +10%) Min. voltage: -45% (optional -20%,-30%)				
Bypass frequency range	Frequency synchronize tracing range: ± 10%				
ECO range	Same as bypass				
Harmonic distortion (THDi)	≤3% (100%non-linear load)				
OUTPUT					
Output voltage	380/400/415Vac (3Ph+N+PE)				
Power factor	1				
Voltage regulation	±1%				
Frequency: line mode bat.mode	± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency(optional) 50/60(± 0.1)Hz				
Crest factor	3:1				
Harmonic distortion (THD)	2% with linear load 5% with non linear load				
Efficiency	94.5%				
BATTERY					
Battery Voltage	± 120Vdc (20pcs 12V9AH); Long run unit: ± 96V/ ± 1 08V/ ± 120Vdc (16/18/ 20pcs optional)	Standard unit: ± 120Vdc (2x20pcs 12V9AH); Long run unit Optional Voltage:± 96V± 108V± 120Vdc (16/18/20pcs optional)	± 120Vdc (3x20pcs12V9AH) Long run unit Optional Voltage:± 96V/ ± 108V/± 120Vdc (16/18/20pcs optional)	Optional Voltage:± 192V± 204V± 216V± 228V± ± 240Vdc(32/34/36/38/40pcs optional)	
Charge Current(A) (charge current can be set according to battery capacity installed)	Standard unit: 1.35A Long run unit: Max.current 10A	Standard unit: 2.7A Long run unit: Max.current 10A	Standard unit: 4.05A Long run unit: Max.current 15A	Max.current 15A	
SYSTEM FEATURES					
Transfer time	Utility to Battery: Oms; Utility to bypass: Oms				
Over Load	Load:≤; 110%: last 60min,≤; 125%: last 10min,≤; 150%: last 1min, ≥150% change to bypass.				
Short Circuit	Hold Whole Syetem				
Communication	USB,RS232, RS485, Parallel port, REPO port, Coupler dry contact, Intelligent slot, SNMP card (optional), Relay card (optionai).LBS port (only 60-80k)				
ENVIRONMENTAL					
Operating temperature	0-40"C				
Storage temperature	-25- 55"C(No battery)				
Humidity range	0-95% (Non condensing)				
Altitude	< 1500m.When>1500m,lower the rated power for use				
Noise level	<55dB	<58dB			
PHYSICAL					
Dimension D x W x H (mm)	828x250x868				
Net Weight (kg)	115/57	170/63	171/64	223/71	
PHYSICAL					
Saftey	IEC/EN62040-1 ,IEC/EN60950-1				
FMC	IEC/EN62040-2.1EC61 000-4-2.1EC61 000-4-3.1EC61 000-4-4.1EC61 000-4-5.1EC61 000-4-6.1EC61 000-4-8				

I.T GRADE ONLINE DOUBLE CONVERSION UPS (SMALL FOOT PRINT)

TECHNICAL SPECIFICATION FOR THREE PHASE IN & THREE PHASE OUT

MODEL

	ESHS5033	ESHS6033	ESHS10033	ESHS12033	ESHS16033	ESHS18033
Rating	50KVA	60KVA	100KVA	ESHS12033	160KVA	180KVA

INPUT

Nominal voltage	380/400/415Vac, (3Ph+N+PE)
Operating voltage range	138~485Vac for 40%load; 305~485Vac for full-load
Operating frequency range	40~70Hz
Power factor	≥1
Bypass voltage range	220Vac Max.voltage: +25%(optional +10%,+15%,+20%) 230Vac Max.voltage: +20%(optional +10%,+15%) 240Vac Max.voltage: +15%(optional +10%) Min. voltage: -45% (optional -20%,-30%) Frequency synchronize tracing range: ±10%
Generator input	Support
Harmonic distortion (THDi)	≤3% (100% linear load)

OUTPUT

Output voltage	380/400/415Vac (3Ph+N+PE)
Power factor	1
Voltage regulation	±1%
Frequency: line mode bat.mode	Synchronize with input; when input frequency >±10% (±1%/±2%/±4%/±5% optional), output (50/60±0.1)Hz. (50/60±0.1)Hz
Crest factor	3:1
Harmonic distortion (THD)	1% with linear load, 4% with non linear load
Efficiency	96%

BATTERY

Battery Voltage	Optional Voltage: ±180V/±192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50 pcs, 36 pcs default, 36 to 50 pcs output power factor1.0; 32~34 pcs output power factor 0.9		
Charge Current(A)	Max.current 20A	Max.current 40A	Max.current 60A

SYSTEM FEATURES

SYSTEM FEATURES		
Transfer time		Utility to Battery : 0ms; Utility to bypass: 0ms
Over Load	INV. Mode	110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min
	Bypass Mode	135% overload for long time; >1000% overload for 100 ms
Backfeed		Support
Alarm		Overload, utility abnormal, UPS fault, battery low, etc.
Protection		Short circuit, overload, over temperature, battery low, fan fault alarm.
Remote LCD		Support
Communication		USB, RS485, Parallel port, Coupler dry contact, Intelligent slot, SNMP card (optional), Relay card (optional)

ENVIRONMENTAL

Operating temperature	0 C ~ 40 C				
Storage temperature	25 C~55 C (no battery)				
Humidity range	0~95% (noncondensing)				
Altitude	< 1500m.When>1500m,lower the rated power for use				
Noise level	<55dB	<58dB	<60dB	<63dB	<65dB

ENVIRONMENTAL

Dimension D x W x H (mm)	828x250x868		850x450x1200		
Net Weight (kg)	68	72	115	120	

PHYSICAL

Safety	IEC/EN62040-1 ,IEC/EN60950-1				
EMC	IEC/EN62040-2,1EC61 000-4-2,1EC61 000-4-3,1EC61 000-4-4,1EC61 000-4-5,1EC61 000-4-6,1EC61 000-4-8				

I.T GRADE ONLINE DOUBLE CONVERSION UPS (SMALL FOOT PRINT)

TECHNICAL SPECIFICATION FOR SINGLE PHASE / THREE PHASE IN & SINGLE PHASE / THREE PHASE OUT

MODEL	ESHS1033RT*	ESHS1533RT*	ESHS2033RT*	ESHS2533RT	ESHS3033RT	ESHS4033RT	ESHS5033RT
Rating	10KVA	15KVA	20KVA	25KVA	30KVA	40KVA	50KVA
INPUT							
Nominal voltage	220/230/240Vac (L+N+PE)* & 380/400/415Vac, (3Ph+N+PE)						
Operating voltage range	208~478Vac						
Operating frequency range	40Hz~70Hz						
Power factor	0.99 & 1						
Bypass voltage range	220Vac Max.voltage: +25%(optional +10%,+15%,+20%) 230Vac Max.voltage: +20%(optional +10%,+15%) 240Vac Max.voltage: +15%(optional +10%) Min. voltage: -45% (optional -20%,-30%) Frequency synchronize tracing range: ±10%						
Generator input	Support						
Harmonic distortion (THDi)	<3% (100% linear load)						
OUTPUT							
Output voltage	220/230/240Vac (L+N+PE)* & 380/400/415Vac (3Ph+N+PE)						
Power factor	1						
Voltage regulation	±1%						
Frequency: line mode bat.mode	Synchronize with input; when input frequency >±10% (±1%/±2%/±4%/±5% optional), (50/60±0.1)Hz.						
Crest factor	3:1						
Harmonic distortion (THD)	2% with linear load, 4% with non linear load						
Efficiency	95.60%						
BATTERY							
Battery Voltage	Optional Voltage: ±180V/±192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50 pcs, 30 pcs define, 36~50 pcs no power derating; 32~34 pcs output power factor 0.9; 30 pcs output power factor 0.8;)						
Charge Current(A)	Max.current 18A				Max.current 20A		
SYSTEM FEATURES							
Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms						
Over Load	Load<110% last 60 min; <125% Last 10 min; 150% Last 1 min						
Backfeed	Support						
Alarm	Overload, utility abnormal, UPS fault, battery low, etc.						
Protection	Short circuit, overload, over temperature, battery low, fan fault alarm.						
Communication	10-30Kva 40-50Kva	USB, RS232, RS485, Parallel port, Dry contact port, REPO port, Backfeed port, Intelligent slot, SNMP (optional) USB, RS232, RS485, Parallel port, REPO port, LBS port, Backfeed port, Intelligent slot, SNMP card (optional), Relay card (optional)					
ENVIRONMENTAL							
Operating temperature	0 C ~ 40 C						
Storage temperature	25 C~55 C (no battery)						
Humidity range	0~95% (non condensing)						
Altitude	< 1500m.When>1500m,lower the rated power for use						
Noise level	<55dB				<56dB		<58dB
PHYSICAL							
Dimension D x W x H (mm)	443x580x131(3U)				800x440x175(4U)		
Net Weight (kg)	25	27-28			45	48	
STANDARDS							
Safety	IEC/EN62040-1 ,IEC/EN60950-1						
EMC	IEC/EN62040-2,1EC61 000-4-2,1EC61 000-4-3,1EC61 000-4-4,1EC61 000-4-5,1EC61 000-4-6,1EC61 000-4-8						

*1/1,3/1,3/3 Can be achieved in 10,15,20 Kva Ups by LCD interface

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.

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