

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



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 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 electric al network environment, saving energy and reducing system costs.

Compatible With Generators

Input voltage and fr equency range is wide so it c an effectively works on generator and thus pr ovide 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 po wer to 100% U nbalance load

High-efficient, Energy Saving, Green Environmental Protection

The efficiency of the machine is a shigh as 94% and reaches over 98% in the E CO 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 a slow 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 po wer provided by the Elektra, thanks to the robustness, precision and high efficiency provided.

Key Features

- Online-Double conversion
- Output transfer time is Oms
- 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 v oltage range: 208-478Vac
- Wide input fr equency range: 40-70Hz
- DC start
- Communication port: USB / R S232 / RS485 /
- Parallel port / Dry contact
- Options: SNMP card/Relay card
- LCD I 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

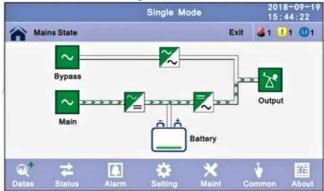
Safety

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)



TECHNICAL SPECIFICATION FOR THREE PHASE IN & THREE PHASE OUT

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D t	ESHS1033	ESHS1533	ESHS 2033	ESHS30		4033			
Rating	10KVA	15KVA	20KVA	30KV/	401	(VA			
INPUT	200/000/0151/cc /20h (N. DE)								
Nominal voltage		380	/400/415Vac, (3Ph+l	N+PE)					
Operating voltage range		138~485Vac fo	r 40%load; 305~48!	5Vac for full-load	1				
Operating frequency range			40~70Hz						
Power factor			≥1						
			age: +25%(optional		•				
Bypass voltage range	400Vac Max. voltage: +20%(optional +1 0%,+15%) 415Vac Max.voltage: +15%(optional +10%)								
	415Vac Max.voltage: +15%(optional +10%) Min_voltage: -45% (optional -20% -30%)								
	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			/400/44514 /051						
Output voltage		380/400/415Vac (3Ph+N+PE)							
Power factor			1						
Voltage regulation		± 10//± 20// ± 40// ± 5	±1%	ad fragues and -	ational\				
Frequency: line mode		± 1%/ ± 2%/ ± 4%/ ± 5		eu rrequency(or	otional)				
bat.mode			50/60(± 0.1)Hz 3:1						
Crest factor		20/	ar load 5% with no	un lineau land					
Harmonic distortion (THD)		2% WILH IIII	94.5%	on linear load					
Efficiency BATTERY			94.5%						
DATIENI			±120)\/dc					
	± 120Vdc (20pcs	Standard unit: ± 120\	/dc (3x20pcs:						
	12V9AH); Long run	(2x20pcs	Longru	'	Optional Voltage:±1	92VI±			
Battery Voltage	unit:	12V9AH);	Optio		204VI±216VI±22	8VI			
battery voltage	±96V/±108V/	Long run unit Optional Vo			±240Vdc(32/34/36/38	3/40pcs			
	±120Vdc (16/18/	96VI± 108VI± 120V	lc 108V/±: (16/18/		optional)				
	20pcs optional)	(16/18/20pcs option	al) (10/13/ optio						
Charge Current(A)	Standard unit:	Standard unit:	Standa	· ·					
(charge current can be set according	1.35A	2.7A	4.0	5A	Max.current				
to battery capacity installed)	Long run unit: Max.current 10A	Long run unit: Max.current 10A	Long ru Max.curi	rent 15A	15A				
SYSTEM FEATURES									
Transfer time		Utility to Batt	ery: Oms; Utility to	bypass: Oms					
Over Load	Load:≼; 1109	%: last 60min,:≼; 125%: I	ast 10min,:≼; 150%:	last 1min, ≥150	% change to bypas	s.			
Short Circuit			Hold Whole Syetem						
Communication	USB,RS232,	RS485, Parallel port, REP	O port, Coupler dry	contact, Intellig	ent slot, SNMP ca	rd			
		(optional), Relay o	ard (optionai).LBS p	ort (only 60-80k	:)				
ENVIRONMENTAL									
Operating temperature			0-40"C						
Storage temperature		-:	25- 55"C(No battery						
Humidity range		0-9	95% (Non condensin	ng)					
Altitude		< 1500m.When>1	500m,lower the rat	ed power for use	e				
Noise level	<55dB		<58dB						
PHYSICAL									
Dimension D x W x H (mm)			828x250x868						
Net Weight (kg)	115/57	170/63	17	1/64	223/71				
PHYSICAL									
Saftey			N62040-1 ,IEC/EN60						
EMC	IEC/EN62040-2,1E	C61 000-4-2,1EC61 000-4	I-3,1EC61 000-4-4,1	EC61 000-4-5,1E	C61 000-4-6,1EC6	1 000-4-8			

TECHNICAL SPECIFICATION FOR THREE PHASE IN & THREE PHASE OUT

MODEL

WIODEL											
	ESHS5033	ESHS6033	ESHS10033	ESHS12033	ESHS16033	ESHS18033					
Rating	50KVA	60KVA	100KVA	ESHS12033	160KVA	180KVA					
INPUT											
Nominal voltage			380/400/415	Vac, (3Ph+N+PE)							
Operating voltage range		138~	485Vac for 40%lo	ad; 305~485Vac fo	r full-load						
Operating frequency range			40	0~70Hz							
Power factor				≱ 1							
		220Vac	Max.voltage: +25	%(optional +10%,+	15%,+20%)						
Bypass voltage range	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) OUTPUT	<3% (100% linear load)										
			380/400/415	SVac (3Ph+N+PE)							
Output voltage Power factor			380/400/413	1							
Voltage regulation				±1%							
Frequency: line mode	Synchronize wit	n innut: when inn			/±5% optional), outp	out (50/60+0 1)Hz					
bat.mode	Syricini offize with	impac, when imp			-270 optionally, outp	, at (30,00 <u>2</u> 0.1). i.e.					
batimoac	(50/60±0.1)Hz										
Crest factor	3:1										
Crest factor Harmonic distortion (THD)		19	6 with linear load,	1% with linear load, 4% with non linear load							
Harmonic distortion (THD)		19		96%	ar load						
Harmonic distortion (THD) Efficiency BATTERY		19		96%	ar load						
Harmonic distortion (THD) Efficiency		¥V/±216V/±228V/±2	Option 240/±252/±264/±270	96% nal Voltage: 6/±288/±300Vdc(30/	ar load 32/34/36/38/40/42/44/4 vr1.0; 32~34 pcs outpu						
Harmonic distortion (THD) Efficiency BATTERY	360Vdc~600Vd	¥V/±216V/±228V/±2	Option 240/±252/±264/±270	96% nal Voltage: 6/±288/±300Vdc(30/ s output power facto	32/34/36/38/40/42/44/4	t power factor 0.9					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage	360Vdc~600Vd	4V/±216V/±228V/± c (30~50 pcs, 36 pcs	Option 240/±252/±264/±270 5 default, 36 to 50 pc	96% nal Voltage: 6/±288/±300Vdc(30/ s output power facto	32/34/36/38/40/42/44/4 vr1.0; 32~34 pcs outpu	t power factor 0.9					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti	Option 240/±252/±264/±27 5 default, 36 to 50 pc Max.curr ility to Battery : On	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: Oms	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode	360Vdc~600Vd Max.cu	1V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6	Option 240/±252/±264/±27/ default, 36 to 50 pc Max.curr dility to Battery : On 50 min; 125% over	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A ns; Utility to bypas rload for 10 min; 1	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load Bypass Mode	360Vdc~600Vd Max.cu	1V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6	Option 240/±252/±264/±270 5 default, 36 to 50 pc Max.curr Ility to Battery : On 50 min; 125% over erload for long tim	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overload	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode	360Vdc~600Vd Max.cu	1V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove	Option 240/±252/±264/±270 6 default, 36 to 50 pc Max.curr fility to Battery : On 50 min; 125% over erload for long tim	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overload upport	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load Bypass Mode Backfeed Alarm	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery: On 50 min; 125% over erload for long tim Su ad, utility abnorma	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypas: cload for 10 min; 1. e; >1000% overloaupport al, UPS fault, batte	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r od for 100 ms ry low, etc.	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±270 3 default, 36 to 50 pc Max.curr 3 lility to Battery: On 50 min; 125% over 3 erload for long tim Su ad, utility abnorma verload, over temp	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overloa upport al, UPS fault, batte perature, battery lo	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±270 3 default, 36 to 50 pc Max.curr 3 lility to Battery: On 50 min; 125% over 3 erload for long tim 5 cad, utility abnormativerload, over temp	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overloa upport al, UPS fault, batte perature, battery lo	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r id for 100 ms ry low, etc. ow, fan fault alarm.	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±270 3 default, 36 to 50 pc Max.curr 3 lility to Battery: On 50 min; 125% over 3 erload for long tim 5 cad, utility abnormativerload, over temp	96% nal Voltage: 6/±288/±300Vdc(30/ s output power factor ent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overloa upport al, UPS fault, batte perature, battery lo	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r od for 100 ms ry low, etc.	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery : On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp r dry contact, Inte	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overload poport al, UPS fault, batte perature, battery loapport	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r id for 100 ms ry low, etc. ow, fan fault alarm.	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery : On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp r dry contact, Inte	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overload poport al, UPS fault, batte perature, battery loapport Upport	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r id for 100 ms ry low, etc. ow, fan fault alarm.	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti L0% overload for 6 135% ove	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery : On 50 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp su r dry contact, Inte	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypas rload for 10 min; 1 e; >1000% overload poport al, UPS fault, batte perature, battery loapport lligent slot, SNMP - 40 C C (no battery)	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r id for 100 ms ry low, etc. ow, fan fault alarm.	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland for 6 callel port, Couple	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery: On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp cr dry contact, Inte	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypas: cload for 10 min; 1. e; >1000% overload poport al, UPS fault, batter poerature, battery load poport lligent slot, SNMP E ~ 40 C C (no battery) concondensing)	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r ord for 100 ms ry low, etc. ow, fan fault alarm. card (optional), Rela	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland the complete of the complet	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery: On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp cr dry contact, Inte 0 C 25 C~55 (0~95% (nc m.When>1500m,li	nal Voltage: 6/±288/±300Vdc(30/s output power factor ent 40A ns; Utility to bypas: cload for 10 min; 1 e; >1000% overload power fault, batter pow	32/34/36/38/40/42/44/4 vr1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r id for 100 ms ry low, etc. ow, fan fault alarm. card (optional), Rela	nt power factor 0.9					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level	360Vdc~600Vd Max.cu	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland for 6 callel port, Couple	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery: On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp cr dry contact, Inte 0 C 25 C~55 (0~95% (nc m.When>1500m,li	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypas: cload for 10 min; 1. e; >1000% overload poport al, UPS fault, batter poerature, battery load poport lligent slot, SNMP E ~ 40 C C (no battery) concondensing)	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r ord for 100 ms ry low, etc. ow, fan fault alarm. card (optional), Rela	t power factor 0.9 t 60A					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level ENVIRONMENTAL	360Vdc~600Vd Max.cu 1: USB, RS485, Par	AV/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland the complete of the complet	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery: On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp cr dry contact, Inte 0 C 25 C~55 (0~95% (nc m.When>1500m,li	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypast load for 10 min; 1 e; >1000% overload poport al, UPS fault, batte perature, battery load poport liigent slot, SNMP 40 C C (no battery) concondensing) cower the rated power the rated power battery power the rated power battery by the rated power by the rated po	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs output Max.current s: 0ms 50% overload for 1 related for 100 ms ry low, etc. bw, fan fault alarm. card (optional), Related for use <63dB	nt power factor 0.9					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level ENVIRONMENTAL Dimension D x W x H (mm)	360Vdc~600Vd Max.cu 1: USB, RS485, Par	4V/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland the complete of the complet	Option 240/±252/±264/±276 6 default, 36 to 50 pc Max.curr fility to Battery: On 60 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp cr dry contact, Inte 0 C 25 C~55 (0~95% (nc m.When>1500m,li	nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypast load for 10 min; 1 e; >1000% overload poport al, UPS fault, batte perature, battery load poport liigent slot, SNMP 40 C C (no battery) concondensing) cower the rated power the rated power battery power the rated power battery by the rated power by the rated po	32/34/36/38/40/42/44/4 vr1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r id for 100 ms ry low, etc. ow, fan fault alarm. card (optional), Rela	t power factor 0.9 160A nin					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level ENVIRONMENTAL Dimension D x W x H (mm) Net Weight (kg)	360Vdc~600Vd Max.cu	AV/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland for 6 c 135% overland for 6 135	Option 240/±252/±264/±27/ 5 default, 36 to 50 pc Max.curr fility to Battery: On 50 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp Su r dry contact, Inte 0 C 25 C~55 (0~95% (nc m.When>1500m,lo	96% nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypast load for 10 min; 1 e; >1000% overload upport al, UPS fault, batter power factorent slot, SNMP C ~ 40 C C (no battery) Doncondensing) Dower the rated power factorent slot.	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs output Max.current s: 0ms 50% overload for 1 related for 100 ms ry low, etc. bw, fan fault alarm. card (optional), Related for use <63dB	t power factor 0.9 160A nin					
Harmonic distortion (THD) Efficiency BATTERY Battery Voltage Charge Current(A) SYSTEM FEATURES Transfer time Over Load INV. Mode Bypass Mode Backfeed Alarm Protection Remote LCD Communication ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level ENVIRONMENTAL Dimension D x W x H (mm)	360Vdc~600Vd Max.cu	AV/±216V/±228V/±2 c (30~50 pcs, 36 pcs rrent 20A Uti 10% overload for 6 135% ove Overloa Short circuit, overland for 6 c 135% overland for 6 135	Option 240/±252/±264/±27/ 5 default, 36 to 50 pc Max.curr fility to Battery: On 50 min; 125% over erload for long tim Su ad, utility abnorma verload, over temp yerload, over temp T of the contact, Inte 0 C 25 C~55 (0~95% (no m.When>1500m,lo <60	96% nal Voltage: 6/±288/±300Vdc(30/s output power factorent 40A ns; Utility to bypast load for 10 min; 1 e; >1000% overload upport al, UPS fault, batter power factorent slot, SNMP C ~ 40 C C (no battery) Doncondensing) Dower the rated power factorent slot.	32/34/36/38/40/42/44/4 or1.0; 32~34 pcs outpu Max.current s: 0ms 50% overload for 1 r od for 100 ms ry low, etc. bw, fan fault alarm. card (optional), Rela wer for use <63dB	t power factor 0.9 160A nin					

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.

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		220/2	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				
		22	May voltag		ul +10% +15% +	20%)		
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%)							
	Min. voitage: -45% (optional -20%,-30%) Frequency synchronize tracing range: ±10%							
Generator input								
Harmonic distortion (THDi)	Support <3% (100% linear load)							
OUTPUT				70 (10070 IIIICai II	oau j			
Output voltage		220	/230/240Vac (L+I	N+PE)* & 380/40	00/415Vac (3Ph+	+N+PE)		
Power factor			, ,	1	, ,	,		
Voltage regulation				±1%				
Frequency: line mode	Sy	nchronize with	input; when inp	ut frequency >±:	10% (±1%/±2%/	±4%/±5% optic	nal),	
bat.mode	,			(50/60±0.1)Hz.		•		
Crest factor				3:1				
Harmonic distortion (THD)			2% with linea	r load, 4% with	non linear load			
Efficiency				95.60%				
BATTERY								
Battery Voltage		8/40/42/44/46/48/	±180V/±192V/±20 50pcs optional); 36 4 pcs output powe	60Vdc~600Vdc (30	~50 pcs, 30 pcs d	efine, 36~50 pcs	OVdc no power derating;	
Charge Current(A)			N	Max.current 18A		Max.current 2	0A	
SYSTEM FEATURES								
Transfer time			Utility to Batte	ery: 0ms; Utility	to bypass: 0ms			
	Utility to Battery : 0ms; Utility to bypass: 0ms Load<110% last 60 min; <125% Last 10 min; 150% Last 1 min							
Over Load		Load<	<110% last 60 mi	n; <125% Last 1	0 min; 150% Las	st 1 min		
Over Load Backfeed		Load<	<110% last 60 mi	n; <125% Last 1 Support	0 min; 150% Las	st 1 min		
			<110% last 60 mi verload, utility al	Support				
Backfeed		0		Support onormal, UPS fa	ult, battery low,	etc.		
Backfeed Alarm	USB, RS232, RS	O Short circ	verload, utility al uit, overload, ove	Support onormal, UPS fac er temperature,	ult, battery low, battery low, fan	etc. fault alarm.	SNMP (optional)	
Backfeed Alarm Protection	USB, RS232, RS	O [,] Short circi 5485, Parallel po	verload, utility al uit, overload, ove	Support onormal, UPS far er temperature, oort, REPO port,	ult, battery low, battery low, fan Backfeed port,	etc. fault alarm. Intelligent slot,	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva	USB, RS232, RS	O' Short circu 6485, Parallel po USB, RS23	verload, utility al uit, overload, ove ort, Dry contact p	Support onormal, UPS far er temperature, port, REPO port, el port, REPO po	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac	etc. fault alarm. Intelligent slot, ckfeed port,	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva	USB, RS232, RS	O' Short circu 6485, Parallel po USB, RS23	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall	Support onormal, UPS far er temperature, port, REPO port, el port, REPO po	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac	etc. fault alarm. Intelligent slot, ckfeed port,	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva	USB, RS232, RS	O' Short circu 6485, Parallel po USB, RS23	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall	Support onormal, UPS far er temperature, port, REPO port, el port, REPO po	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac	etc. fault alarm. Intelligent slot, ckfeed port,	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL	USB, RS232, RS	O' Short circu 6485, Parallel po USB, RS23	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNM	Support conormal, UPS facer temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op	etc. fault alarm. Intelligent slot, ckfeed port,	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature	USB, RS232, RS	O' Short circu 6485, Parallel po USB, RS23	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNM	Support conormal, UPS facer temperature, cort, REPO port, el port, REPO po P card (optional)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op	etc. fault alarm. Intelligent slot, ckfeed port,	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature	USB, RS232, RS	O' Short circi 6485, Parallel po USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNM	Support conormal, UPS far cer temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op ery)	etc. fault alarm. Intelligent slot, ckfeed port, tional)	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level	USB, RS232, RS	O' Short circi 6485, Parallel po USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNM 25 0~9	Support conormal, UPS far cer temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op ery) sing)	etc. fault alarm. Intelligent slot, ckfeed port, tional)	SNMP (optional)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude	USB, RS232, RS	O' Short circi 6485, Parallel po USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNMI 25 0~9 1500m.When>1	Support conormal, UPS far cer temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op ery) sing)	etc. fault alarm. Intelligent slot, skfeed port, tional)		
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level	USB, RS232, RS	O' Short circi 6485, Parallel pr USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNMI 25 0~9 1500m.When>1	Support conormal, UPS far cer temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op ery) sing)	etc. fault alarm. Intelligent slot, skfeed port, tional)	<58dB	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level PHYSICAL Dimension D x W x H (mm) Net Weight (kg)	USB, RS232, RS	O' Short circi 6485, Parallel pr USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNMI 25 0~9 1500m.When>1!	Support conormal, UPS far er temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt) 5% (non condent)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op ery) sing)	etc. fault alarm. Intelligent slot, ckfeed port, tional) use <56dB	<58dB	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level PHYSICAL Dimension D x W x H (mm)		O' Short circi 6485, Parallel pr USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Parall lligent slot, SNMI 25 0~9 1500m.When>1! <55dB	Support conormal, UPS far er temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt) 5% (non condent)	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac , Relay card (op ery) sing)	etc. fault alarm. Intelligent slot, ckfeed port, tional) use <56dB	<58dB 75(4U)	
Backfeed Alarm Protection Communication 10-30Kva 40-50Kva ENVIRONMENTAL Operating temperature Storage temperature Humidity range Altitude Noise level PHYSICAL Dimension D x W x H (mm) Net Weight (kg)	25	Short circu S485, Parallel po USB, RS2: Intel	verload, utility al uit, overload, ove ort, Dry contact p 32, RS485, Paralli lligent slot, SNMI 25 0~9 1500m.When>1! <55dB 3x580x131(3U)	Support conormal, UPS far cer temperature, cort, REPO port, el port, REPO po P card (optional) 0 C ~ 40 C C~55 C (no batt) 5% (non conden 500m,lower the	ult, battery low, battery low, fan Backfeed port, rt, LBS port, Bac, Relay card (opery) sing) rated power for	etc. fault alarm. Intelligent slot, ckfeed port, tional) use <56dB 800x440x1 45	<58dB 75(4U) 48	

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

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