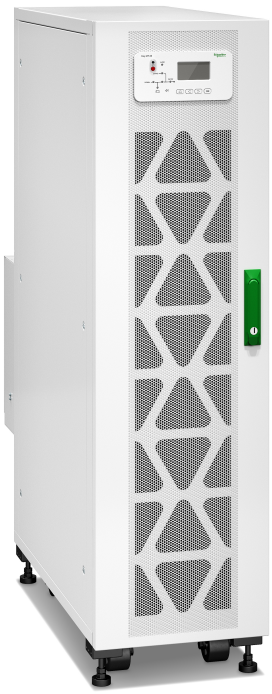
Easy UPS 3S for Internal Batteries

10-40 kVA 208 V

Technical Specifications

Latest updates are available on the Schneider Electric website
5/2024



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Encuentre los manuales aquí:

https://www.productinfo.schneider-electric.com/easyups3s_ul/

Table of Contents

Important Safety Instructions — SAVE THESE INSTRUCTIONS

Read these instructions carefully and look at the equipment to become familiar with it before trying to install, operate, service or maintain it. The following safety messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety message indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol shall not be used with this type of safety message.

Failure to follow these instructions can result in equipment damage.

Please Note

Electrical equipment should only be installed, operated, serviced, and maintained by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

FCC Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Safety Precautions

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

All safety instructions in this document must be read, understood and followed.

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Read all instructions in the Installation Manual before installing or working on this UPS system.

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not install the UPS system until all construction work has been completed and the installation room has been cleaned.

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- The product must be installed according to the specifications and requirements as defined by Schneider Electric. It concerns in particular the external and internal protections (upstream circuit breakers, battery circuit breakers, cabling, etc.) and environmental requirements. No responsibility is assumed by Schneider Electric if these requirements are not respected.
- After the UPS system has been electrically wired, do not start up the system. Start-up must only be performed by Schneider Electric.

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The UPS system must be installed according to local and national regulations. Install the UPS according to:

- IEC 60364 (including 60364–4–41- protection against electric shock, 60364–4–42 - protection against thermal effect, and 60364–4–43 - protection against overcurrent), **or**
- NEC NFPA 70, **or**
- Canadian Electrical Code (C22.1, Part 1)

depending on which one of the standards apply in your local area.

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Install the UPS system in a temperature controlled area free of conductive contaminants and humidity.
- Install the UPS system on a non-inflammable, level, and solid surface (e.g. concrete) that can support the weight of the system.

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The UPS is not designed for and must therefore not be installed in the following unusual operating environments:

- Damaging fumes
- Explosive mixtures of dust or gases, corrosive gases, or conductive or radiant heat from other sources
- Moisture, abrasive dust, steam or in an excessively damp environment
- Fungus, insects, vermin
- Salt-laden air or contaminated cooling refrigerant
- Pollution degree higher than 2 according to IEC 60664-1
- Exposure to abnormal vibrations, shocks, and tilting
- Exposure to direct sunlight, heat sources, or strong electromagnetic fields

Failure to follow these instructions will result in death or serious injury.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not drill or cut holes for cables or conduits with the gland plates installed and do not drill or cut holes in close proximity to the UPS.

Failure to follow these instructions will result in death or serious injury.

⚠WARNING

HAZARD OF ARC FLASH

Do not make mechanical changes to the product (including removal of cabinet parts or drilling/cutting of holes) that are not described in the Installation Manual.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE

RISK OF OVERHEATING

Respect the clearance requirements around the UPS system and do not cover the product's ventilation openings when the UPS system is in operation.

Failure to follow these instructions can result in equipment damage.

NOTICE

RISK OF EQUIPMENT DAMAGE

The UPS must use an external regenerative braking kit to dissipate energy when connected to regenerative loads including photovoltaic systems and speed drives.

Failure to follow these instructions can result in equipment damage.

System Overview

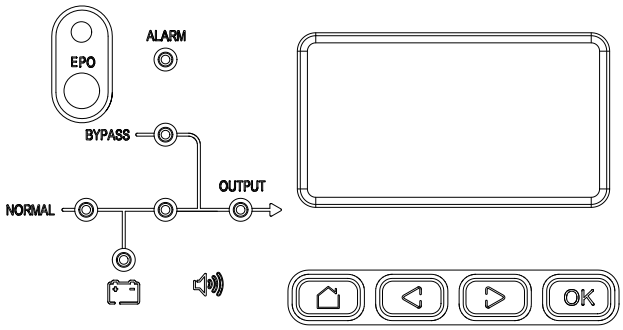
Model List

All models may not be available in all regions.

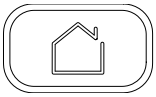
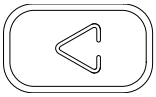
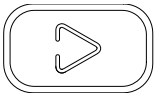
- E3SUPS10KFB: Easy UPS 3S 10 kVA 208 V 3:3 UPS for internal batteries
- E3SUPS10KFBS: Easy UPS 3S 10 kVA 208 V 3:3 UPS for internal batteries, start-up 5x8
- E3SUPS15KFB: Easy UPS 3S 15 kVA 208 V 3:3 UPS for internal batteries
- E3SUPS15KFBS: Easy UPS 3S 15 kVA 208 V 3:3 UPS for internal batteries, start-up 5x8
- E3SUPS20KFB: Easy UPS 3S 20 kVA 208 V 3:3 UPS for internal batteries
- E3SUPS20KFBS: Easy UPS 3S 20 kVA 208 V 3:3 UPS for internal batteries, start-up 5x8
- E3SUPS30KFB: Easy UPS 3S 30 kVA 208 V 3:3 UPS for internal batteries
- E3SUPS30KFBS: Easy UPS 3S 30 kVA 208 V 3:3 UPS for internal batteries, start-up 5x8
- E3SUPS40KFB: Easy UPS 3S 40 kVA 208 V 3:3 UPS for internal batteries
- E3SUPS40KFBS: Easy UPS 3S 40 kVA 208 V 3:3 UPS for internal batteries, start-up 5x8

NOTE: Batteries are sold separately.

User Interface



Keys

			
Home	Previous	Next	Confirm

EPO

Only use the EPO button in case of emergency.

It can be configured whether, when the EPO is activated, the UPS should:

- turn off the rectifier, inverter, charger, and static bypass and stop supplying the load immediately (default), or
- transfer to static bypass mode and continue supplying the load.

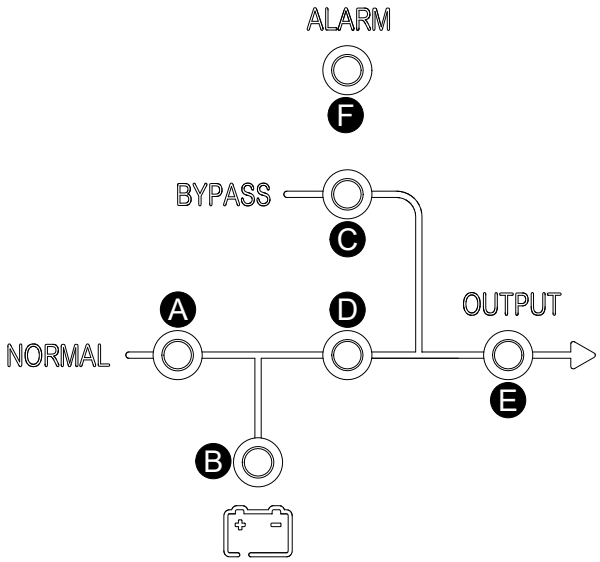
⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The UPS control circuit will remain active after the EPO has been pushed if utility/mains is available.

Failure to follow these instructions will result in death or serious injury.

Status LEDs

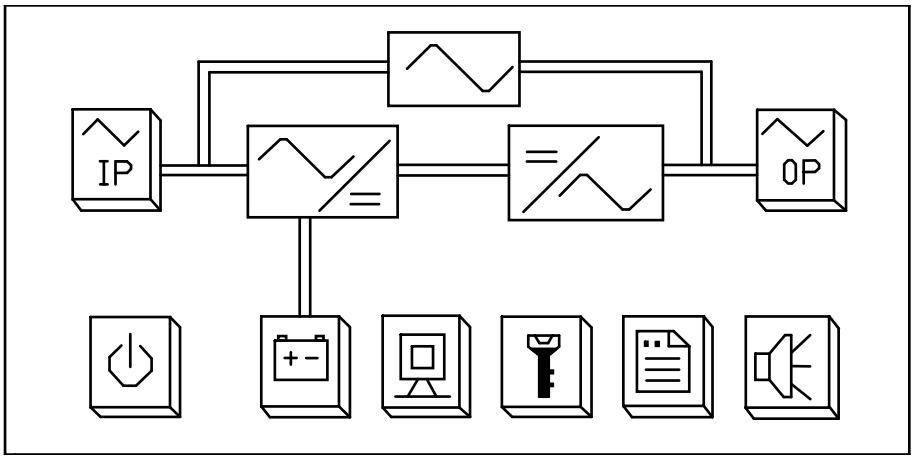


	LED	Status
A	Rectifier	Green: Rectifier is working correctly. Flashing green: Rectifier is starting up. Red: Rectifier is inoperable. Flashing red: Utility/mains is unavailable. OFF: Rectifier is off.
B	Battery	Green: Battery is charging. Flashing green: Battery is discharging. Red: Battery is inoperable. Flashing red: Battery low voltage. OFF: Battery and battery charger are OK, battery is not charging or discharging.
C	Bypass	Green: Load supplied by bypass source. Red: Bypass source is unavailable or static bypass switch is inoperable. Flashing red: Bypass voltage is out of tolerance. OFF: Bypass source is OK.
D	Inverter	Green: Load supplied by inverter. Flashing green: Inverter on, start, synchronization or standby (ECO mode). Red: Load not supplied by inverter, inverter is inoperable.

	LED	Status
		Flashing red: Load supplied by inverter, but an inverter alarm is present. OFF: Inverter is off.
E	Load	Green: UPS output is on. Red: Overload on UPS output for too long, or output has shorted, or no output power present. Flashing red: Overload on UPS output. OFF: UPS output is off.
F	Status	Green: UPS is OK. Red: Inoperable status.

Display Interface

Home Screen

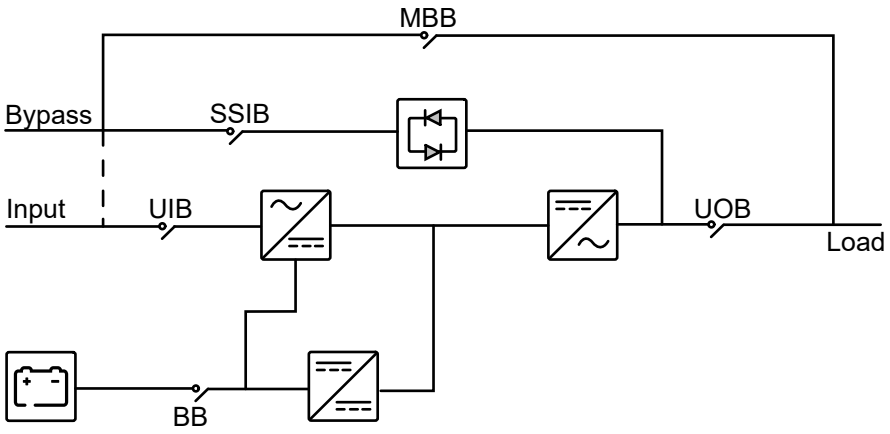


Buttons

Power On/ Off	Input and bypass status information	Output status information	Battery status information	UPS status	Function settings	Log	Mute

Overview of Single UPS

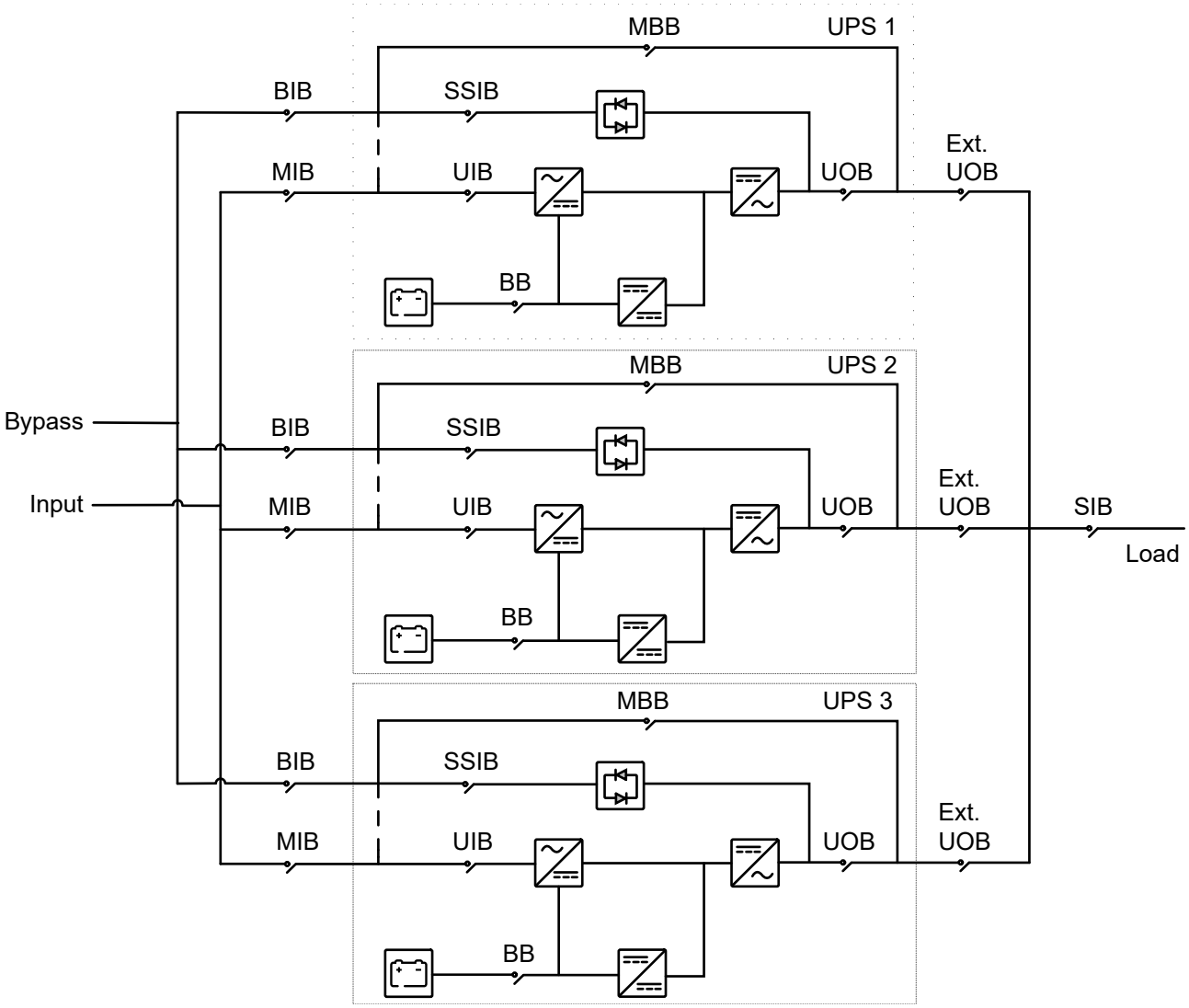
UIB	Unit input breaker
SSIB	Static switch input breaker
UOB	Unit output breaker
MBB	Maintenance bypass breaker
BB	Battery relay



Overview of Parallel System

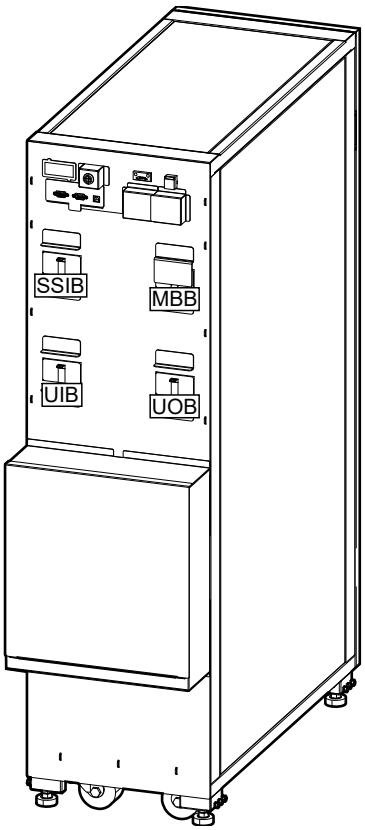
NOTE: In parallel systems with an external maintenance bypass breaker Ext. MBB, the maintenance bypass breakers MBB must be padlocked in the open position.

MIB	Mains input breaker
BIB	Bypass input breaker
UIB	Unit input breaker
SSIB	Static switch input breaker
UOB	Unit output breaker
Ext. UOB	External unit output breaker
MBB	Maintenance bypass breaker
Ext. MBB	External maintenance bypass breaker
SIB	System isolation breaker
BB	Battery relay

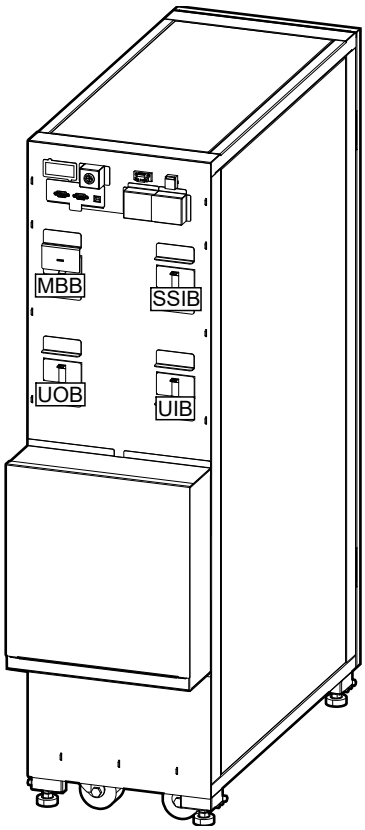


Location of Breakers

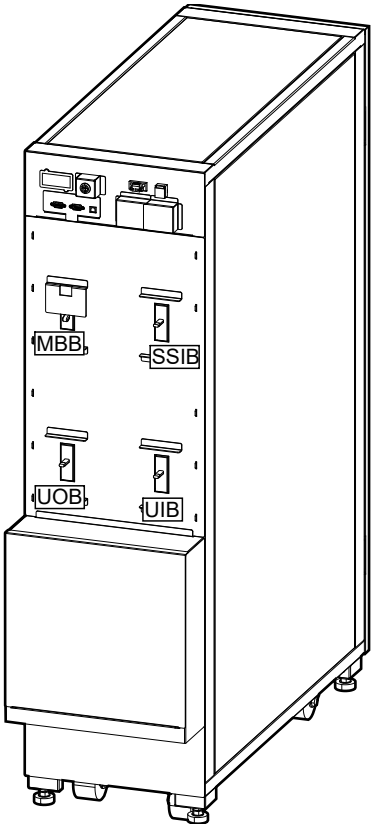
10 kVA UPS



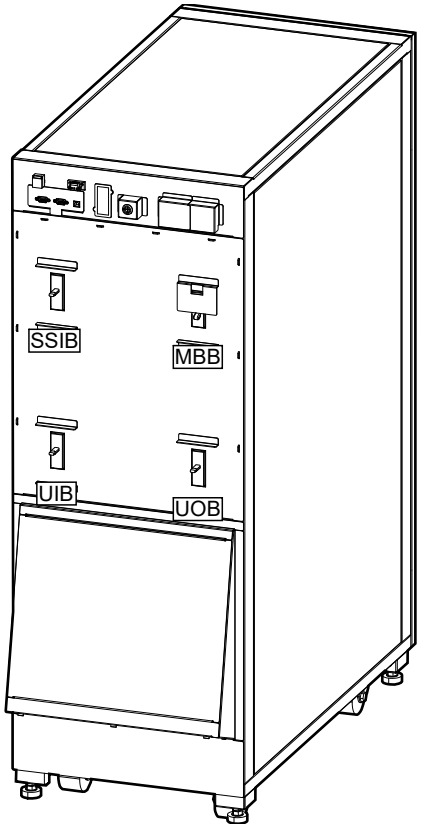
15-20 kVA UPS



30 kVA UPS



40 kVA UPS



Technical Data

Input Power Factor

UPS rating	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
25% load	0.9653	0.9538	0.9666	0.9732	0.9799
50% load	0.9924	0.9896	0.9944	0.9938	0.9966
75% load	0.9973	0.9966	0.9982	0.9978	0.9992
100% load	0.9989	0.9981	0.9994	0.9992	0.9996

Efficiency

Normal Mode

UPS rating	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
25% load	92.3	92.73	93.31	93.68	94.23
50% load	93.39	94.05	94.13	94.11	94.37
75% load	92.82	93.91	93.7	93.53	93.75
100% load	92.21	93.82	93.26	92.95	93.03

ECO mode

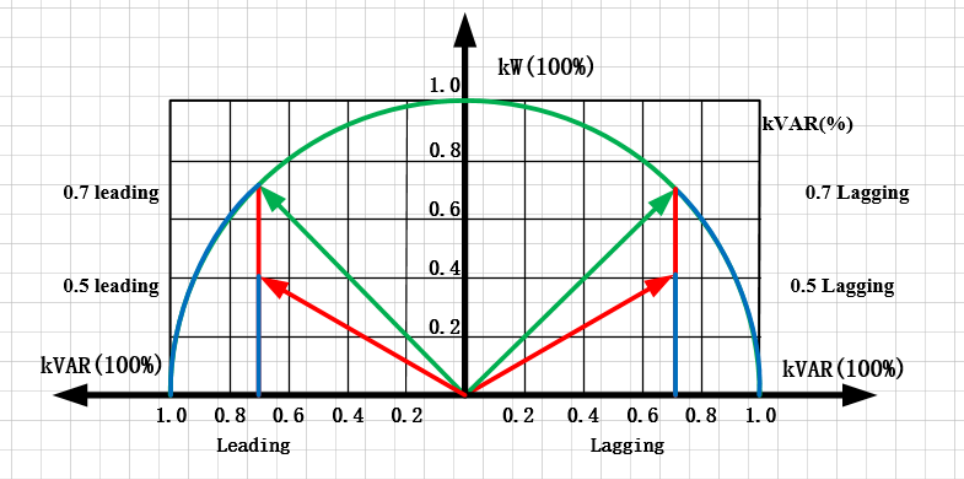
UPS rating	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
25% load	94.65	95.19	95.92	96.05	96.85
50% load	96.82	96.99	97.45	97.40	97.91
75% load	97.24	97.37	97.67	97.62	98.08
100% load	97.63	97.73	97.90	98.00	98.21

Battery operation

UPS rating	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
25% load	91.69	91.61	92.97	93.57	93.61
50% load	93.43	93.54	93.97	94.29	94.28
75% load	93.18	93.67	93.71	93.92	93.93
100% load	92.84	93.73	94.42	93.57	93.34

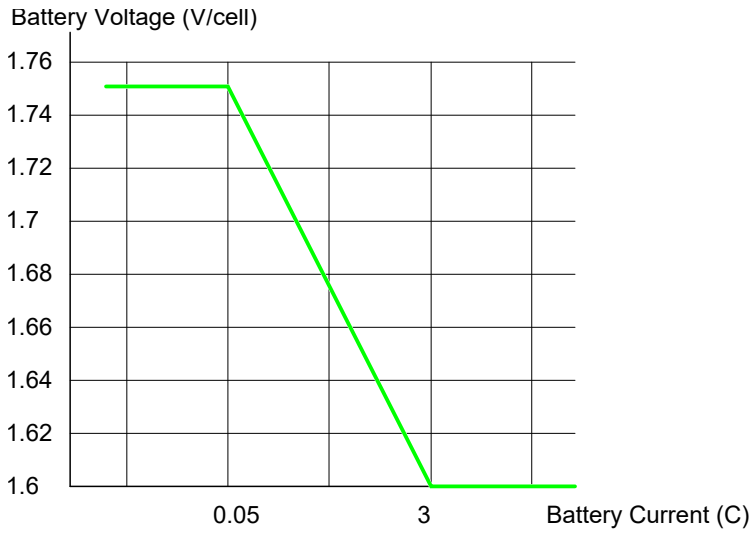
Derating Due to Load Power Factor

From 0.7 leading to 0.7 lagging without derating.
From 0.5 leading to 0.5 lagging with derating



Batteries

End of Discharge Voltage



Compliance

Safety	UL 1778:2014 5th Edition, Uninterruptible Power Systems. CSA C22.2 No. 107.3-14 + GI1, 3rd Edition, Uninterruptible Power Systems
EMC/EMI/RFI	IEC 62040-2: 2005-10, 2nd edition Uninterruptible Power Systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements FCC Part15 Subpart B / ANSI C63.4 2014
Performance	IEC 62040-3: 2011-03, 2nd edition Uninterruptible Power Systems (UPS) - Part 3: Method of specifying the performance and test requirements
Environmental	IEC 62040-4: 2013-04, 1st edition Uninterruptible Power Systems (UPS) - Part 4: Environmental aspects – Requirements and reporting
Markings	CTUVus
Transportation	ISTA 2B

Communication and Management

- User interface with status LEDs and display
- RS232
- RS485
- Network management card
- Dry contacts
- USB

Facility Planning

Input Specifications

	10 kVA		15 kVA		20 kVA		30 kVA		40 kVA	
Voltage (V)	**208**	**220**	**208**	**220**	**208**	**220**	**208**	**220**	**208**	**220**
Connections[1]	L1, L2, L3, N, G									
Input voltage range (V)	176–253									
Frequency range (Hz)	40–70									
Nominal input current (A)	31	30	46	44	61	58	92	86	120	113
Maximum input current (A)	37	35	54	51	72	69	107	102	143	136
Input current limitation (A)	58		85		114		169		225	
Total harmonic distortion (THDI)	≤4% at 100% linear load (symmetrical)									
Input power factor	≥0.99 at loads >75%									
Maximum short circuit rating	10 kA RMS symmetrical									
Protection	Built-in backfeed protection and fuses									
Ramp-in	30 seconds									

Bypass Specifications

	10 kVA		15 kVA		20 kVA		30 kVA		40 kVA	
Voltage (V)	**208**	**220**	**208**	**220**	**208**	**220**	**208**	**220**	**208**	**220**
Connections	L1, L2, L3, N, G									
Overload capacity	110% continuous 125% for 10 minutes 150% for 1 minute >150% for 300 milliseconds									
Minimum bypass voltage (V)	125	132	125	132	125	132	125	132	125	132
Maximum bypass voltage (V)	260	275	260	275	260	275	260	275	260	275
Frequency (Hz)	50 or 60									
Frequency range (Hz)	±1, ±3, ±5 (user selectable)									
Nominal bypass current (A)	29	28	43	41	57	54	86	81	113	107
Maximum short circuit rating	10 kA RMS symmetrical									
Protection	Built-in backfeed protection									

1. It is mandatory to have the neutral line for the main input and load. If the main input or load does not have a neutral line, a Δ-Y transformer for main input or a Y-Δ transformer for load needs to be installed. And the capacity of the transformer should be >1.2 times the rated capacity of the UPS.

Output Specifications

	10 kVA		15 kVA		20 kVA		30 kVA		40 kVA	
Voltage (V)	**208**	**220**	**208**	**220**	**208**	**220**	**208**	**220**	**208**	**220**
Connections[2]	L1, L2, L3, N, G									
Overload capacity	110% for 60 minutes 125% for 10 minutes 150% for 1 minute >150% for less than 200 milliseconds									
Output voltage regulation	± 1% at symmetrical load									
Dynamic load response	± 5% after 20 milliseconds									
Output power factor	1.0									
Nominal output current (A)	28	26	42	40	56	52	83	79	111	105
Total harmonic distortion (THDU)	<1.5% at 100% linear load <6% at 100% non-linear load									
Output frequency (Hz)	50/60 Hz bypass synchronized – 50/60 Hz ± 0.1% free-running									
Output performance classification (according to IEC62040–3)	VFI-SS-121									
Load power factor	From 0.7 leading to 0.7 lagging without derating									
Load crest factor	2.5:1									

Battery Specifications

	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
Charging power	Programmable from 1% to 15% of UPS capacity. Default is 10%.				
Maximum charging power (W)	1500	2250	3000	4500	6000
Nominal battery voltage (20 blocks) (VDC)	± 120				
Nominal float voltage (20 blocks) (VDC)	± 136				
End of discharge voltage (20 blocks) (≥ 3C) (VDC)	± 96				
End of discharge voltage (20 blocks) (≤ 0.05C) (VDC)	± 105				
Battery current at full load and nominal battery voltage (20 blocks) (A)	46	68	91	136	182
Battery current at full load and minimum battery voltage (20 blocks) (A)	57	85	114	170	227
Temperature compensation (per cell)	Programmable from 0 to 5 mV. Default is 3 mV if the battery temperature is above 25 °C (77 °F).				
Ripple current	< 5% C20				
Battery test	Manual/automatic (selectable)				

2. It is mandatory to have the neutral line for the main input and load. If the main input or load does not have a neutral line, a Δ-Y transformer for main input or a Y-Δ transformer for load needs to be installed. And the capacity of the transformer should be >1.2 times the rated capacity of the UPS.

Required Upstream Protection and Cable Sizes

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

All wiring must comply with all applicable national and/or electrical codes. The maximum allowable cable size is 4/0 AWG.

Failure to follow these instructions will result in death or serious injury.

NOTE: Overcurrent protection and cable lugs are to be provided by others.

Cable sizes in this manual are based on Table 310.15 (B)(16) of the National Electrical Code (NEC) with the following assertions:

- 90 °C (194 °F) conductors (75 °C (167 °F) termination)
- An ambient temperature of 30 °C (86 °F)
- Use of copper conductors
- Installation method C

If the ambient temperature is greater than 30 °C (86 °F), larger conductors are to be selected in accordance with the correction factors of the NEC.

Equipment grounding conductors (EGC) are sized in accordance with NEC Article 250.122 and Table 250.122.

NOTE: The battery cable sizes given here are recommendations. Always follow the specific instructions in the battery solution documentation for battery +/- and battery EGC cable sizes.

NOTE: Neutral conductor is sized to handle 1.73 times phase current in case of high harmonic content from non-linear loads. If few or no harmonic currents are expected, neutral conductor can be sized as phase conductor. In dual mains systems, the input neutral conductor can be sized as the input phase conductor.

UPS rating	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
Input phases (AWG/kcmil)	8	6	4	1	2/0
Input EGC (AWG/kcmil)	10	8	8	6	6
Bypass/output phases (AWG/kcmil)	8	6	4	1	2/0
Bypass EGC/output EGC (AWG/kcmil)	10	8	8	6	6
Neutral (AWG/kcmil)	4	3	1/0	2x1/0	2x2/0
Battery +/-/N (AWG/kcmil)	4/0	4/0	4/0	4/0	4/0
Battery EGC (AWG/kcmil)	10	8	8	6	6

Recommended Upstream Protection

⚠CAUTION

HAZARD OF FIRE

- Connect only to a circuit with the below specifications.
- Connect to a circuit provided with a 175 A branch circuit overcurrent protection maximum in accordance with the National Electric Code, ANSI/NFPA70, and the Candadian Electrical Code, Part I, C22.1.

Failure to follow these instructions can result in injury or equipment damage.

NOTE: Overcurrent protection is to be provided by others and marked with its function.

NOTE: For IT systems or resistance grounding systems, a 4-pole circuit breaker must be installed.

NOTE: For local directives which require 4-pole circuit breakers: If neutral conductor is expected to carry a high current, due to line-neutral non-linear load, the circuit breaker must be rated according to expected neutral current.

UPS rating	Source	Breaker rating (Ir)	Breaker type	Ii (x In) setting
10 kVA	Input	45 A	BDF36045	400 A fixed
	Bypass	35 A	BDF36035	400 A fixed
15 kVA	Input	70 A	BGF36070	640 A fixed
	Bypass	60 A	BGF36060	640 A fixed
20 kVA	Input	90 A	BGF36090	1000 A fixed
	Bypass	70 A	BGF36070	640 A fixed
30 kVA	Input	110 A	HGF36110C	1250
	Bypass	90 A	HGF36090C	1250
40 kVA	Input	150 A	HJF36150C	1250
	Bypass	125 A	HJF36125C	1250

Recommended Bolts and Cable Lugs

NOTICE

RISK OF EQUIPMENT DAMAGE

Use only UL approved compression cable lugs.

Failure to follow these instructions can result in equipment damage.

UPS rating		10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
Ground/EGC	Cable size (AWG/kcmil)	10	8	8	6	6
	Bolt size	M6	M6	M6	M8	M6
	Cable lug type	LCA10-14-L	LCA8-14-L	LCA8-14-L	LCA6-56-L	LCA6-56-L
Input/bypass/ output	Cable size (AWG/kcmil)	8	6	4	1	2/0
	Bolt size	M6	M8	M8	M8	M10
	Cable lug type	LCA8-14-L	LCA6-56-L	LCA4-56-L	LCA1-56-E	LCA2/0-38-X
Neutral	Cable size (AWG/kcmil)	4	3	1/0	2x1/0	2x2/0
	Bolt size	M6	M8	M8	M10	M10
	Cable lug type	LCAN4-14-L-01	LCA3-56-L	LCA1/0-56-X	LCA1/0-56-X	LCA2/0-38-X
Battery	Cable size (AWG/kcmil)	4/0	4/0	4/0	4/0	4/0
	Bolt size	M10	M10	M10	M10	M10
	Cable lug type	LCA4/0-38-X	LCA4/0-38-X	LCA4/0-38-X	LCA4/0-38-X	LCA4/0-38-X

Torque Specifications

UPS rating	Bolt Size	Torque
10 kVA	M6	5.59 Nm (4.12 lb-ft)
	M10	15 Nm (11.06 lb-ft)
15 kVA/20 kVA	M8	5.59 Nm (4.12 lb-ft)
	M10	15 Nm (11.06 lb-ft)
30 kVA	M8	12 Nm (8.85 lb-ft)
	M10	15 Nm (11.06 lb-ft)
40 kVA	M10	15 Nm (11.06 lb-ft)

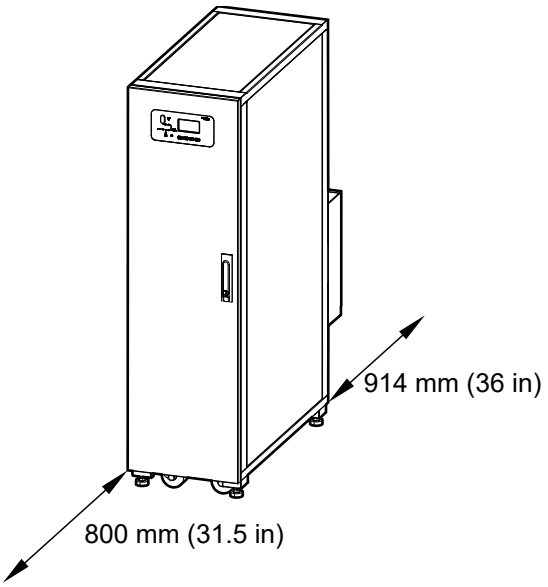
Clearance

NOTE: Clearance dimensions are published for airflow and service access only. Consult with the local safety codes and standards for additional requirements in your local area.

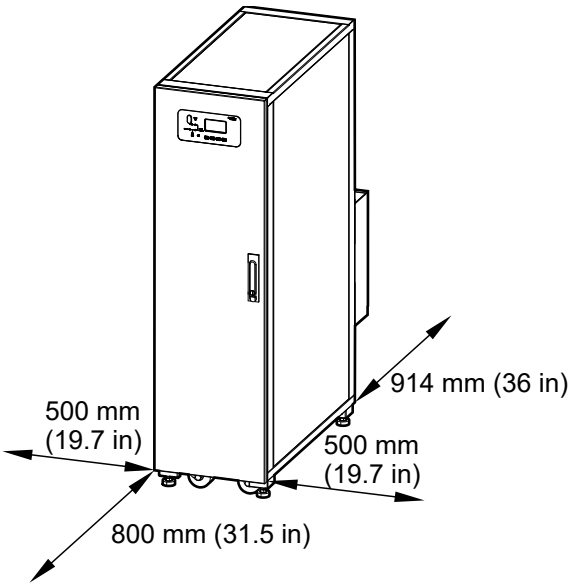
NOTE: If the UPS is installed without side access (Option A*), the length of the cables connected to the UPS must allow for rolling out the UPS.

For the United States

Option A*

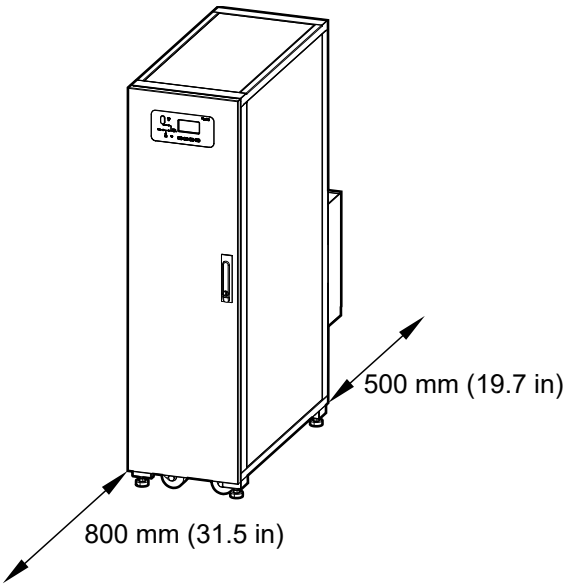


Option B

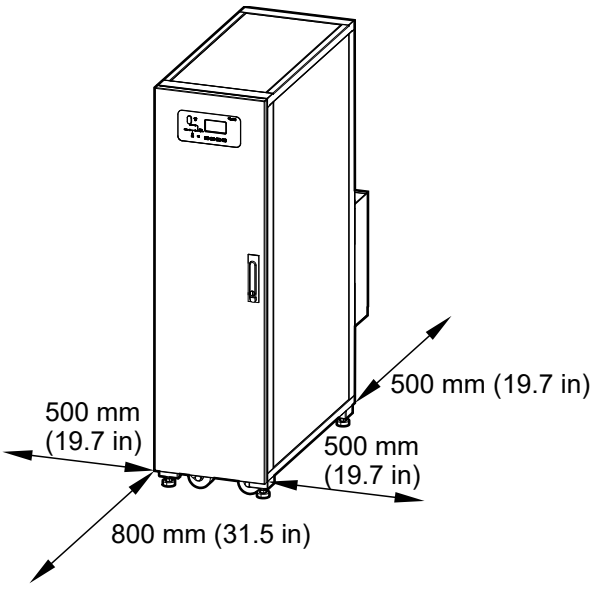


For Other Regions and Countries

Option A*



Option B



Environmental

	Operation	Storage
Temperature	0 °C to 40 °C (32 °F to 104 °F)[3]	-15 °C to 40 °C (5 °F to 104 °F) for systems with batteries -25 °C to 55 °C (-13 °F to 131 °F) for systems without batteries
Relative humidity	0–95% non-condensing	
Elevation derating according to IEC 62040–3	Designed for operation in 0-2000 m (0-6600 feet) elevation. Power derating required from 1000-2000 m: Up to 1000 m (3300 feet): 1.000 Up to 1500 m (5000 feet): 0.975 Up to 2000 m (6600 feet): 0.950	< 15000 m (50000 feet) above sea level (or in an environment with equivalent air pressure)
Audible noise	10 kVA: ≤65 dBA at full load 15-30 kVA: ≤68 dBA at full load 40 kVA: ≤70 dBA at full load	
Protection class	IP20 (dust filter as standard)	
Color	RAL 9003	

Heat Dissipation

	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
Normal mode (W)	700	1050	1400	2100	2800
Battery mode (W)	750	1125	1500	2250	3000
ECO mode (W)	200	300	400	600	800

3. The optimal operation temperature for batteries is 20 °C to 25 °C (68 °F to 77 °F)

Weights and Dimensions

UPS Weights and Dimensions

UPS rating	Weight kg (lbs)	Height mm (in)	Width mm (in)	Depth mm (in)
10 kVA	120 (265)[4]	1400 (55.12)	380 (14.97)	960 (37.80)
15 kVA	132 (291)[4]	1400 (55.12)	380 (14.97)	960 (37.80)
20 kVA	132 (291)[4]	1400 (55.12)	380 (14.97)	960 (37.80)
30 kVA	155 (342)[4]	1400 (55.12)	380 (14.97)	1050 (41.34)
40 kVA	187 (412)[4]	1400 (55.12)	500 (19.69)	1092 (43.00)

Modular Battery Cabinet Weights and Dimensions

Commercial reference	Weight kg (lbs)	Height mm (in)	Width mm (in)	Depth mm (in)
E3SXR7	160 (353)[4]	1400 (55.12)	500 (19.69)	940 (37.01)

Maintenance Bypass Panel Weights and Dimensions

Commercial reference	Weight kg (lbs)	Height mm (in)	Width mm (in)	Depth mm (in)
E3SBPSU10K20F	30 (66)	600 (23.62)	550 (21.65)	260 (10.24)
E3SBPSU30K40F	65 (143)	900 (35.43)	800 (31.50)	320 (12.60)

Parallel Maintenance Bypass Panel Weights and Dimensions

Commercial reference	Weight kg (lbs)	Height mm (in)	Width mm (in)	Depth mm (in)
E3SBPAR10K40F	70 (154)	1000 (39.37)	700 (27.56)	330 (12.99)

4. Weight without batteries. Each battery module weighs 27 kg (60 lbs).

Shipping Weights and Dimensions

UPS Shipping Weights and Dimensions

UPS rating	Weight kg (lbs)	Height mm (in)	Width mm (in)	Depth mm (in)
10 kVA	152 (335)	1595 (62.80)	800 (31.50)	1200 (47.24)
15 kVA	165 (364)	1595 (62.80)	800 (31.50)	1200 (47.24)
20 kVA	165 (364)	1595 (62.80)	800 (31.50)	1200 (47.24)
30 kVA	188 (414)	1595 (62.80)	800 (31.50)	1200 (47.24)
40 kVA	220 (485)	1595 (62.80)	800 (31.50)	1200 (47.24)

Modular Battery Cabinet Shipping Weights and Dimensions

Commercial reference	Weight kg (lbs)	Height mm (in)	Width mm (in)	Depth mm (in)
E3SXR7	172 (379)[5]	1595 (62.80)	800 (31.50)	1200 (47.24)

Maintenance Bypass Panel Shipping Weights and Dimensions

Commercial reference	Weight kg (lbs)	Height mm (in) [6]	Width mm (in)	Depth mm (in)
E3SBPSU10K20F	42 (92.59)	500 (19.69)	800 (31.5)	1200 (47.24)
E3SBPSU30K40F	86 (189.59)	556 (21.89)	1000 (39.37)	1200 (47.24)

Parallel Maintenance Bypass Panel Shipping Weights and Dimensions

Commercial reference	Weight kg (lbs)	Height mm (in) [6]	Width mm (in)	Depth mm (in)
E3SBPAR10K40F	92 (202.82)	566 (22.28)	800 (31.5)	1200 (47.24)

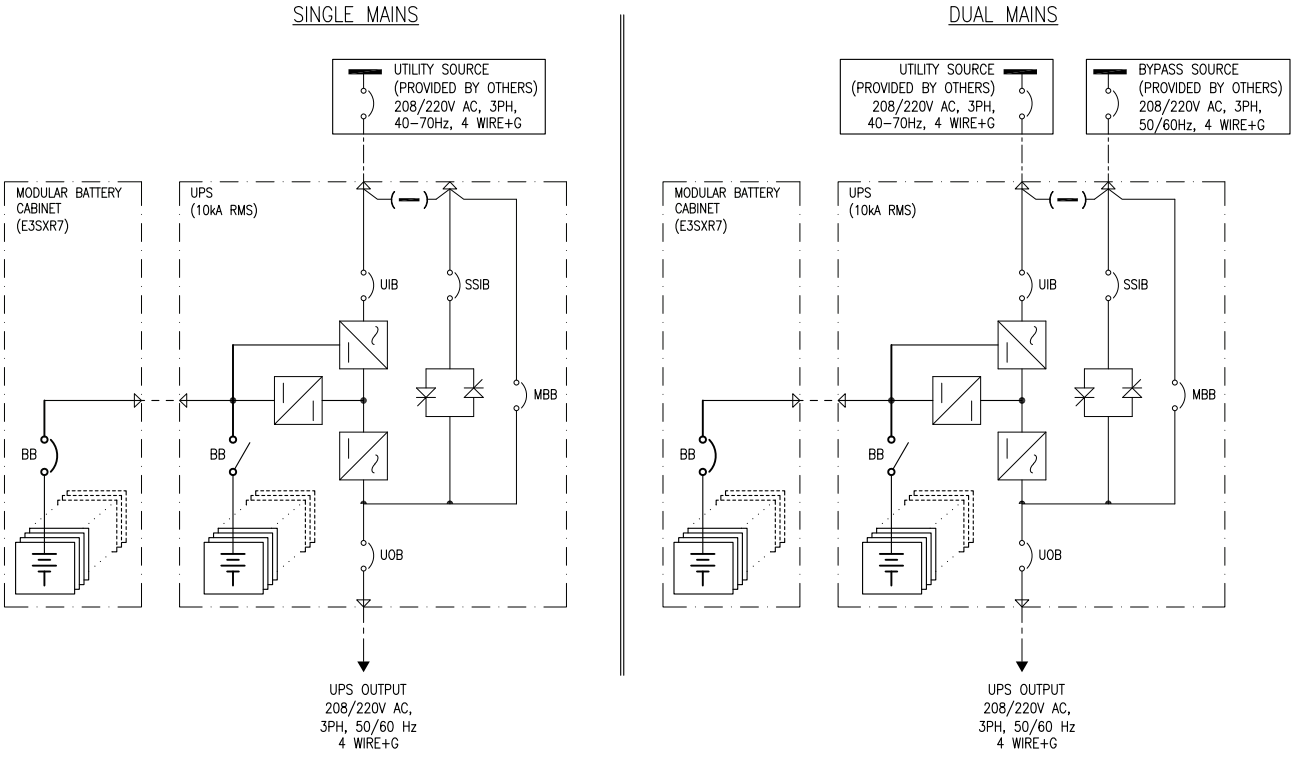
5. Weight without batteries. Each battery module weighs 27 kg (60 lbs).
6. The product is packaged in a horizontal position, so the shipping height and depth dimensions differ from the product itself.

Drawings

NOTE: A comprehensive set of drawings is available on www.se.com.

NOTE: These drawings are for reference ONLY – subject to change without notice.

Easy UPS 3S for Internal Batteries 10-40 kVA 208 V



Options

Configuration Options

- Single or dual mains
- Bottom cable entry
- Up to four UPSs in parallel
- ECO mode

Hardware Options

Battery Solutions

- E3SXR7: Easy UPS 3S Modular Battery Cabinet 208 V
- E3SFBTH2: Easy UPS 3S High Capacity Battery String 208 V
- E3SFBTHU: Easy UPS 3S High Capacity Battery Module 208 V

Maintenance Bypass Panels

- E3SBPSU10K20F: Easy UPS 3S Maintenance Bypass Panel, single unit, 10-20 kVA 208 V
- E3SBPSU30K40F: Easy UPS 3S Maintenance Bypass Panel, single unit, 30-40 kVA 208 V
- E3SBPAR10K40F: Easy UPS 3S Parallel Maintenance Bypass Panel for 3 UPSs, 10-40 kVA 208 V

Options

- E3SOPT010: Easy UPS 3S Dry Contact Card
- E3SOPT014: Easy UPS 3S Cold Start Kit 10-40 kVA 208 V[7]
- E3SOPT015: Easy UPS 3S Kirk Key Kit
- E3SOPT002: Easy UPS 3S Parallel Kit

Settings

Setting	Default Value	Available Settings
LCD contrast	60	0 to 100
Date and Time	05/07/2013 08:55:55	Year > 2000
Language	English	English, Spanish, Portuguese Brazilian, and French
Input voltage (LN)	120 V	120 V/127 V
Input frequency	60 Hz	50 Hz/60 Hz

7. **NOTE:** Cold start function must be used together with the MX trip coil, recommended Schneider Electric MX trip coil LV429390.

Setting	Default Value	Available Settings
Output voltage (LN)	120 V	120 V/127 V
Output frequency	60 Hz	50 Hz/60 Hz
EPO transfer to bypass	Enable	Disable
Auto boost	Disable	Enable
Auto maint	Disable	Enable
System mode	single	parallel/ECO/parallel ECO/self aging
United number	1	1 to 4
System ID	0	0 to 3
Adjusted output voltage	120	Output voltage ±5 V
Frequency slew rate	2 Hz/s	0.1 to 3.0 Hz/s
Frequency synchronization window	3 Hz	0.5 to 5.0 Hz
Monochrome LCD time (min)	10	1/3/5/10/20/30
Bypass voltage upper limit (%)	20	10/20/25
Bypass voltage lower limit (%)	-20	-10/-15/-30/-40
Bypass frequency limited (Hz)	±5	±1/±3/±5
System restart mode after end of discharge	Normal	Normal/Bypass only/No output
Fan maintenance period	34560 hours (48 months)	0 to 60000 hours
DC capacitor maintenance period	34560 hours (48 months)	0 to 60000 hours
Warranty period	9 months	1 to 36 months
AC capacitor maintenance period	120 months	60 to 120 months
APS maintenance period	84 months	36 to 120 months
Dust filter maintenance period	12 months	0/3/4/5/12 months
Battery maintenance reminding period	1440 days (48 months)	100 to 300 days
Battery number	20	20
Battery AH	9	1 to 30000
Float charge voltage/cell (V)	2.25	2.10 to 2.35
Boost charge voltage/cell (V)	2.25	2.20 to 2.45
End of discharge voltage/cell, at 3 C current (V)	1.6	1.60 to 1.85
End of discharge voltage/cell, at 0.05 C current (V)	1.75	1.65 to 1.90
Charge current percent limit (%)	10	1 to 15
Battery temperature compensation	0	0 to 5 mV/℃
Boost charge time limit	12 hours	1 to 48 hours
Auto boost period	2160 hours (3 months)	720 to 30000 hours, available when auto boost is enabled
Auto maintenance discharge period	6480 hours (9 months)	720 to 30000 hours, available when auto maintenance is enabled

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One-Year Factory Warranty

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