Galaxy VXL

500-1250 kW UPS 380/400/415 V

Technical Specifications

Latest updates are available on the Schneider Electric website
7/2025

www.se.com

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In your web browser, type in https://www.go2se.com/ref= and the commercial reference for your product.

Example: *https://www.go2se.com/ref=**GVXL0K1250HS***

Find the UPS Manuals, Relevant Auxiliary Product Manuals, and Option Manuals Here:

Scan the code to go to the Galaxy VXL online manual portal:

IEC (380/400/415 V)

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

Here you can find your UPS installation manual, UPS operation manual, and UPS technical specifications, and you can also find installation manuals for your auxiliary products and options.

This online manual portal is available on all devices and offers digital pages, search functionality across the different documents in the portal, and PDF download for offline use.

Learn More About the Galaxy VXL Here:

Go to *https://www.se.com/ww/en/product-range/209756733* to learn more about this product.

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.

Per IEC 62040-1: "Uninterruptible power systems (UPS) -- Part 1: Safety Requirements," this equipment, including battery access, must be inspected, installed and maintained by a skilled person.

The skilled person is a person with relevant education and experience to enable him or her to perceive risks and to avoid hazards which the equipment can create (reference IEC 62040-1, section 3.102).

Electromagnetic Compatibility

NOTICE

RISK OF ELECTROMAGNETIC DISTURBANCE

This is a product Category C3 according to IEC 62040-2. This is a product for commercial and industrial applications in the second environment - installation restrictions or additional measures may be needed to prevent disturbances. The second environment includes all commercial, light industry, and industrial locations other than residential, commercial, and light industrial premises directly connected without intermediate transformer to a public low-voltage mains supply. The installation and cabling must follow the electromagnetic compatibility rules, e.g.:

- the segregation of cables,
- the use of shielded or special cables when relevant,
- the use of grounded metallic cable tray and supports.

Failure to follow these instructions can result in equipment damage.

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 disconnect devices, battery disconnect devices, 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 indoor environment free of conductive contaminants and humidity.
- Install the UPS system on a non-flammable, 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.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR 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 will result in death or serious injury.

NOTICE

RISK OF OVERHEATING

Respect the space 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

Do not connect the UPS output to regenerative load systems including photovoltaic systems and speed drives.

Failure to follow these instructions can result in equipment damage.

Model List

Scalable UPS Models

- Galaxy VXL UPS, 0 to 1250 kW, 400 V, start-up 5x8 (GVXL0K1250HS)(1)
- Galaxy VXL UPS 500 kW scalable to 1250 kW, 400 V, start-up 5x8 (GVXL500K1250HS)
- Galaxy VXL UPS 625 kW scalable to 1250 kW, 400 V, start-up 5x8 (GVXL625K1250HS)
- Galaxy VXL UPS 750 kW scalable to 1250 kW, 400 V, start-up 5x8 (GVXL750K1250HS)
- Galaxy VXL UPS 875 kW scalable to 1250 kW, 400 V, start-up 5x8 (GVXL875K1250HS)
- Galaxy VXL UPS 1000 kW scalable to 1250 kW, 400 V, start-up 5x8 (GVXL1000K1250HS)
- Galaxy VXL UPS 1125 kW scalable to 1250 kW, 400 V, start-up 5x8 (GVXL1125K1250HS)
- Galaxy VXL UPS 1250 kW, 400 V, start-up 5x8 (GVXL1250KHS)

Non-Scalable UPS Models

- Galaxy VXL UPS 600 kW, not scalable, 400 V, start-up 5x8 (GVXL600K600HS)

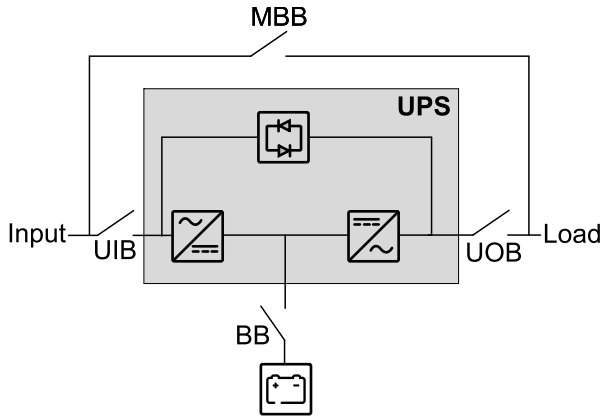
(1) 125 kW power modules (GVPM125KH) bought separately. A minimum of four power modules are required.

Single System Overview

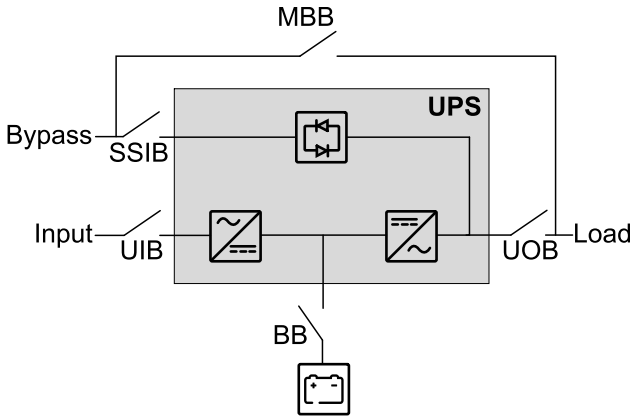
UIB	Unit input disconnect device
SSIB	Static switch input disconnect device
UOB	Unit output disconnect device
BB	Battery disconnect device
MBB	Maintenance bypass disconnect device

NOTE: In Schneider Electric literature, 'disconnect device' is used as a generic term covering circuit breakers or switches as their position may vary depending on configuration. Details about the individual configuration are found in the electrical diagram and/or by reading the symbol on the front of each disconnect device.

Single System – Single Mains



Single System – Dual Mains



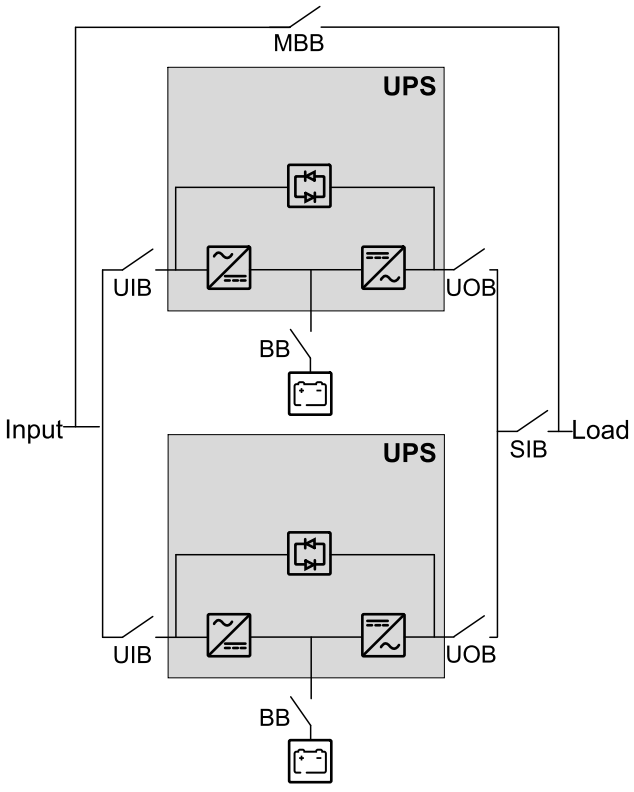
Parallel System Overview

UIB	Unit input disconnect device
SSIB	Static switch input disconnect device
UOB	Unit output disconnect device
SIB	System isolation disconnect device
BB	Battery disconnect device
MBB	Maintenance bypass disconnect device

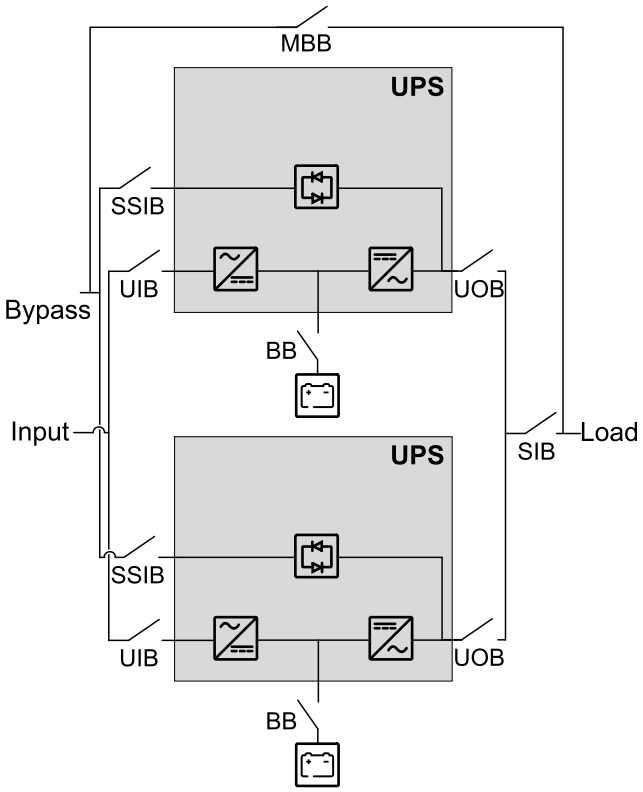
NOTE: In Schneider Electric literature, 'disconnect device' is used as a generic term covering circuit breakers or switches as their position may vary depending on configuration. Details about the individual configuration are found in the electrical diagram and/or by reading the symbol on the front of each disconnect device.

Galaxy VXL can support up to 4 UPSs in parallel for capacity and up to 4+1 UPSs in parallel for redundancy with individual UIB and SSIB.

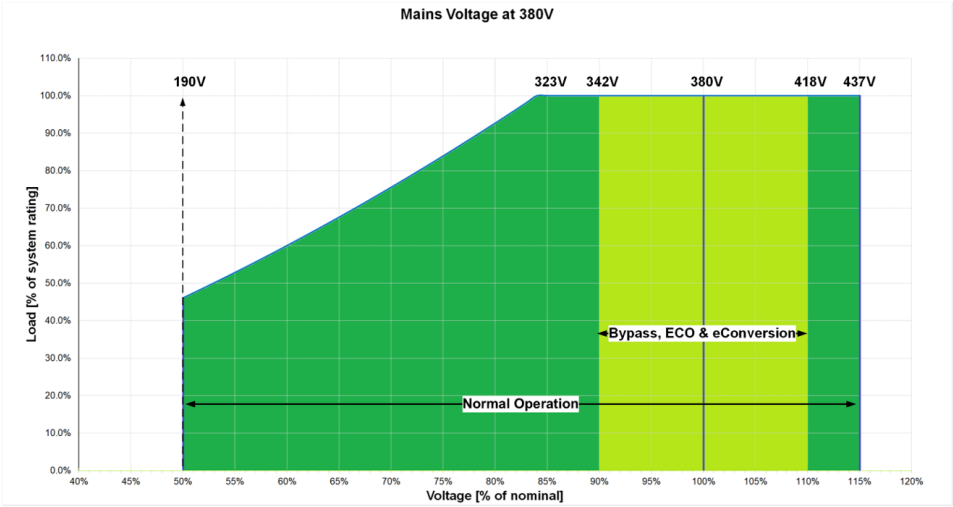
Parallel System – Single Mains

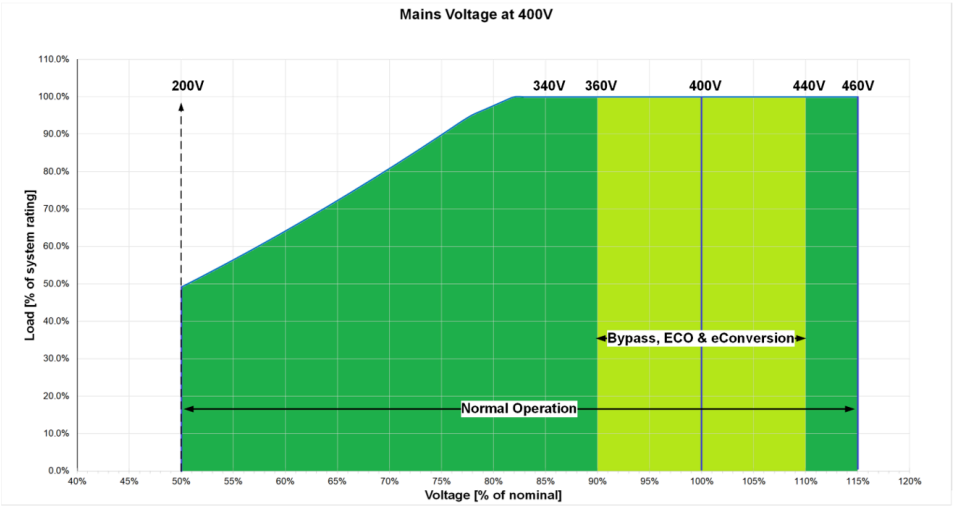


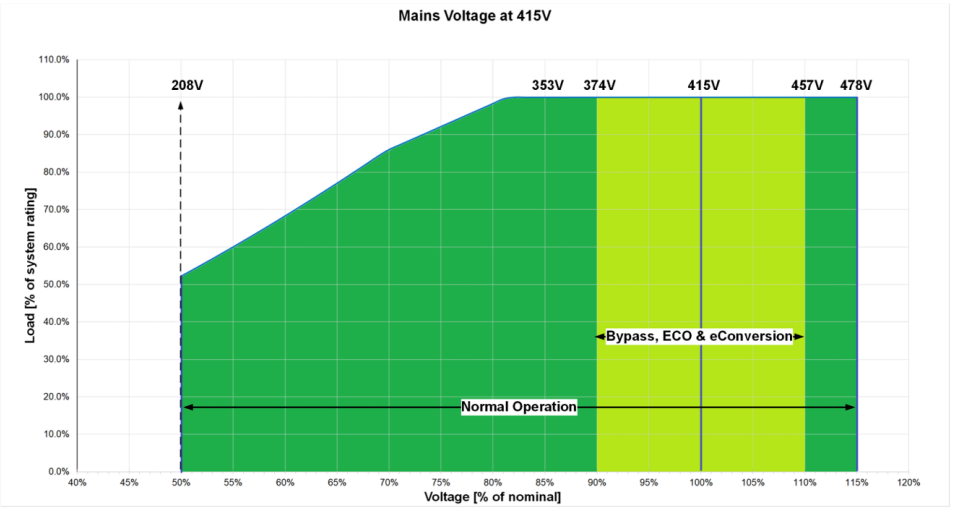
Parallel System – Dual Mains



Input Voltage Window

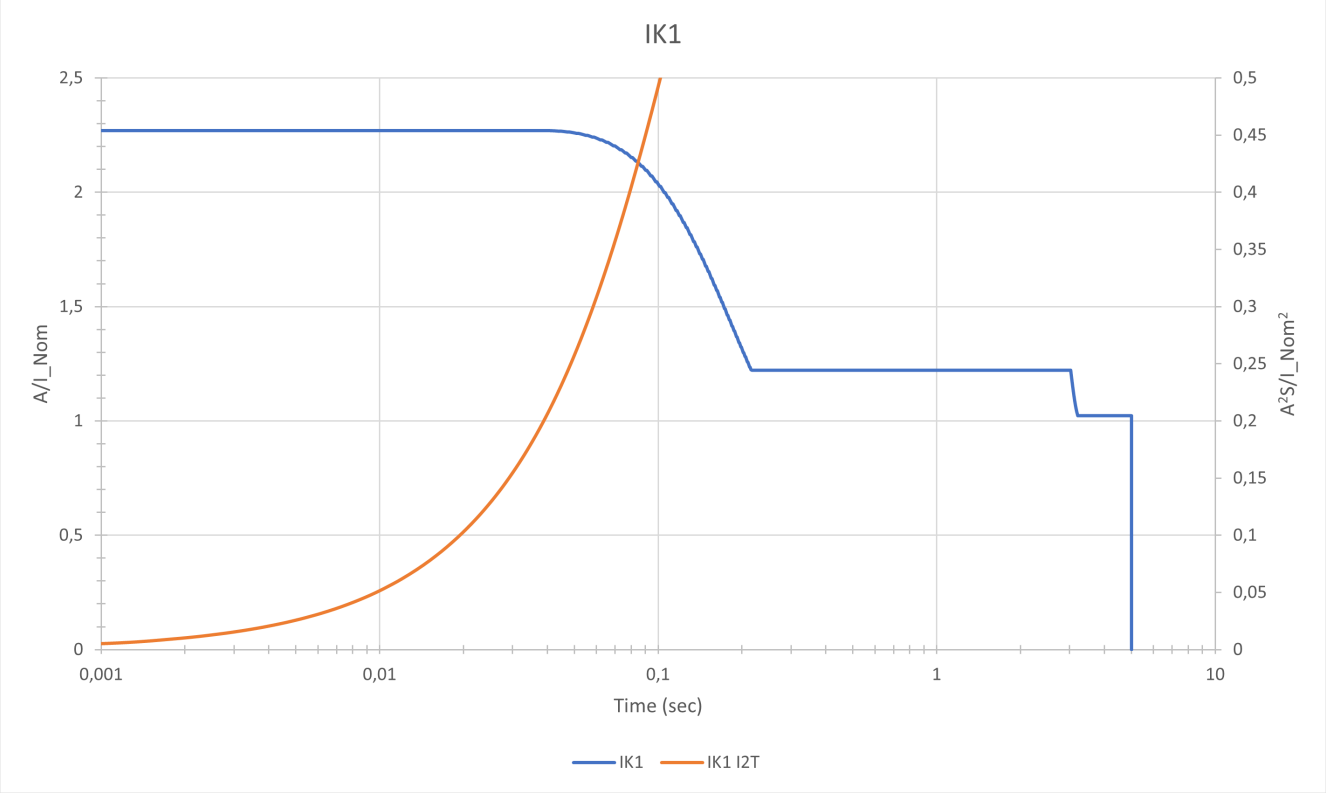






Inverter Short Circuit Capabilities (Bypass not Available)

IK1 – Short Circuit between a Phase and Neutral



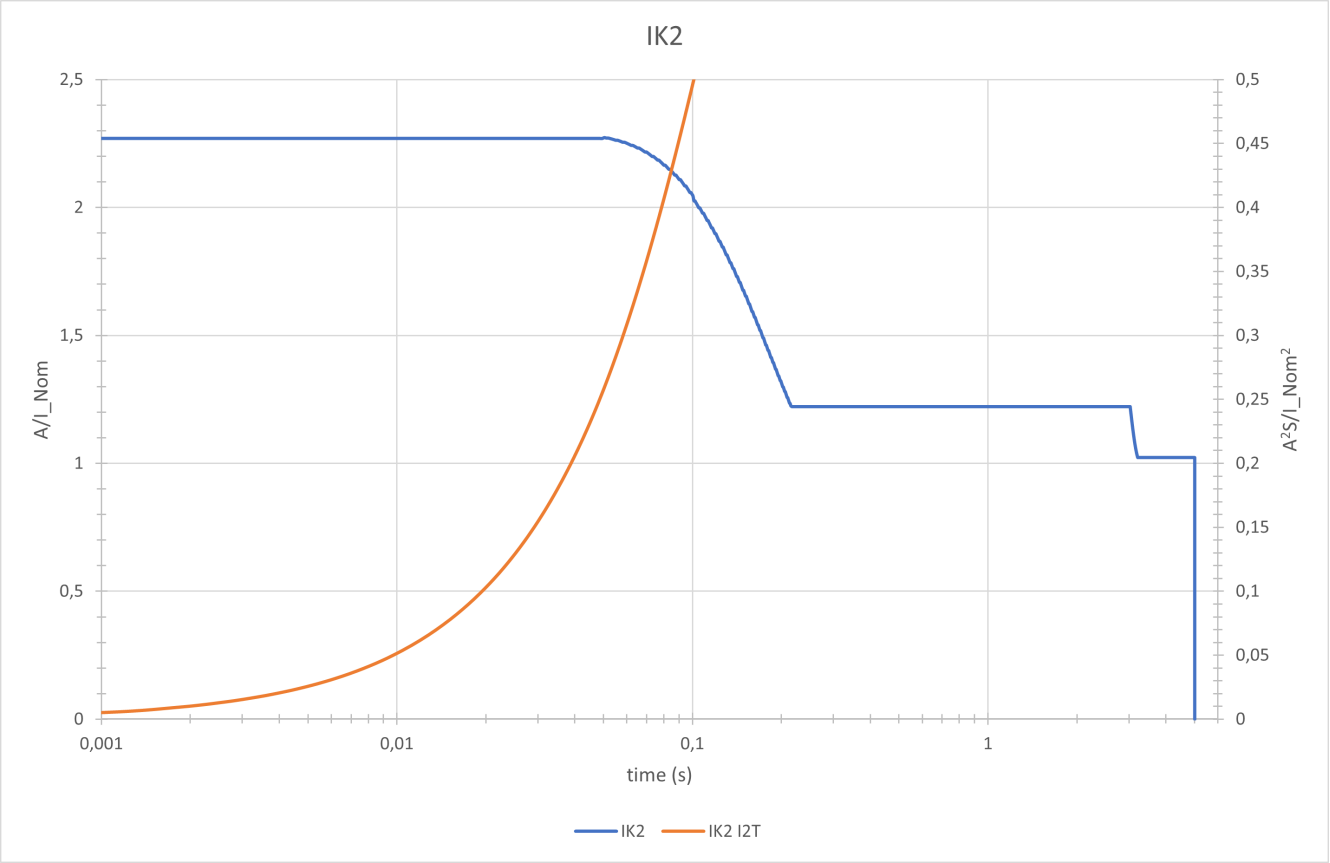
IK1 400 V

S [kVA]	10 ms		20 ms		30 ms		50 ms	
	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]
500	1650	27 020	1650	54 030	1650	81 040	1630	135 810
600/625	2060	42 210	2060	84 410	2060	126 620	2040	212 200
750	2470	60 780	2470	121 550	2470	182 320	2450	305 570
875	2880	82 720	2880	165 440	2880	248 160	2860	415 910
1000	3290	108 050	3290	216 090	3290	324 130	3260	543 230
1125	3700	136 740	3700	273 480	3700	410 220	3670	687 530
1250	4110	168 820	4110	337 630	4110	506 450	4080	848 800

IK1 400 V

S [kVA]	100 ms		1 s		5 s	
	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]
500	1480	256 940	890	1 032 660	750	3 719 150
600/625	1840	401 460	1110	1 613 530	930	5 811 170
750	2210	578 100	1330	2 323 470	1120	8 368 080
875	2580	786 850	1550	3 162 500	1300	11 389 890
1000	2950	1 027 730	1770	4 130 620	1490	14 876 590
1125	3320	1 300 710	1990	5 227 810	1670	18 828 180
1250	3680	1 605 820	2210	6 454 090	1860	23 244 660

IK2 – Short Circuit between Two Phases



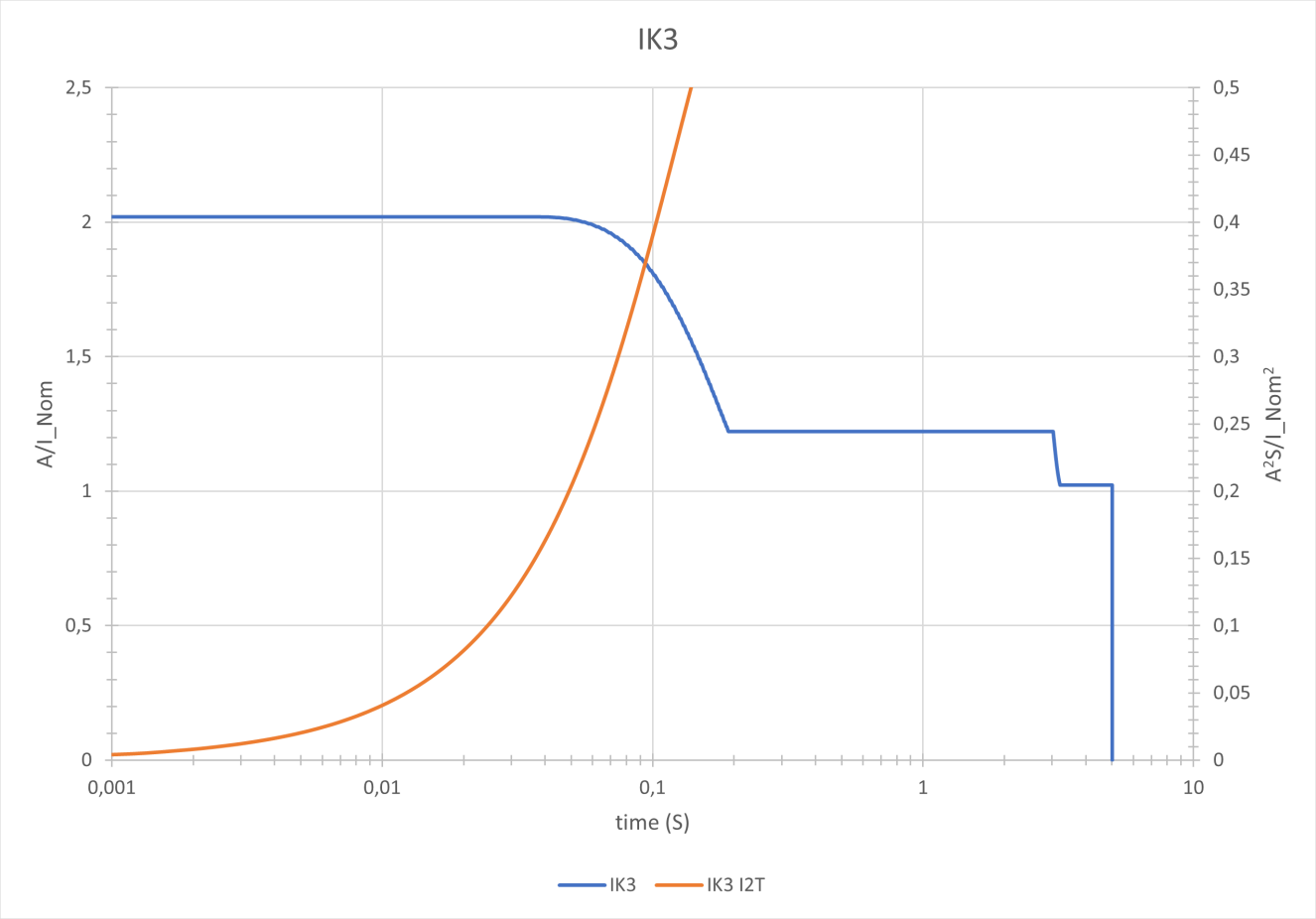
IK2 400 V

S [kVA]	10 ms		20 ms		30 ms		50 ms	
	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]
500	1650	27 020	1650	54 030	1650	81 040	1650	133 800
600/625	2060	42 210	2060	84 410	2060	126 620	2060	209 060
750	2470	60 780	2470	121 550	2470	182 320	2470	301 040
875	2880	82 720	2880	165 440	2880	248 160	2890	409 740
1000	3290	108 050	3290	216 090	3290	324 130	3300	535 170
1125	3700	136 740	3700	273 480	3700	410 220	3710	677 330
1250	4110	168 820	4110	337 630	4110	506 450	4120	836 210

IK2 400 V

S [kVA]	100 ms		1 s		5 s	
	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]
500	1490	260 620	890	1 034 590	750	3 720 410
600/625	1860	407 220	1110	1 616 540	930	5 813 140
750	2230	586 400	1330	2 327 820	1120	8 370 920
875	2600	798 150	1550	3 168 420	1300	11 393 750
1000	2970	1 042 480	1770	4 138 340	1490	14 881 630
1125	3340	1 319 380	1990	5 237 590	1670	18 834 560
1250	3710	1 628 870	2210	6 466 160	1860	23 252 540

IK3 – Short Circuit between Three Phases



IK3 400 V

S [kVA]	10 ms		20 ms		30 ms		50 ms	
	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]
500	1470	21 390	1470	42 780	1470	64 170	1460	105 880
600/625	1830	33 420	1830	66 840	1830	100 260	1820	165 430
750	2200	48 130	2200	96 250	2200	144 380	2190	238 220
875	2560	65 510	2560	131 010	2560	196 510	2550	324 240
1000	2930	85 560	2930	171 110	2930	256 670	2920	423 500
1125	3300	108 280	3300	216 560	3300	324 840	3280	535 990
1250	3660	133 680	3660	267 360	3660	401 040	3640	661 720

IK3 400 V

S [kVA]	100 ms		1 s		5 s	
	I[A]	I²t [A²t]	I[A]	I²t [A²t]	I[A]	I²t [A²t]
500	1310	205 060	890	947 860	750	3 633 680
600/625	1640	320 400	1110	1 481 020	930	5 677 620
750	1970	461 380	1330	2 132 670	1120	8 175 770
875	2300	627 980	1550	2 902 800	1300	11 128 130
1000	2620	820 220	1770	3 791 410	1490	14 534 700
1125	2950	1 038 090	1990	4 798 500	1670	18 395 470
1250	3280	1 281 600	2210	5 924 070	1860	22 710 460

Efficiency

500 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	97.0%	96.9%	96.8%	99.2%	99.3%	99.2%	98.6%	98.7%	98.5%	96.3%	96.3%	96.2%
50% load	97.4%	97.4%	97.4%	99.4%	99.5%	99.5%	99.1%	99.2%	99.2%	96.7%	96.7%	96.7%
75% load	97.3%	97.4%	97.4%	99.5%	99.6%	99.5%	99.3%	99.4%	99.3%	96.5%	96.5%	96.5%
100% load	97.0%	97.2%	97.2%	99.5%	99.6%	99.5%	99.4%	99.4%	99.4%	96.0%	96.1%	96.1%

600 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	96.9%	96.8%	96.7%	99.2%	99.2%	99.2%	98.6%	98.8%	98.1%	96.4%	96.4%	96.2%
50% load	97.5%	97.4%	97.4%	99.4%	99.4%	99.4%	99.1%	99.2%	99.0%	96.8%	96.9%	96.7%
75% load	97.4%	97.3%	97.4%	99.4%	99.5%	99.5%	99.3%	99.3%	99.2%	96.5%	96.7%	96.5%
100% load	97.1%	97.1%	97.2%	99.4%	99.5%	99.5%	99.3%	99.4%	99.3%	96.0%	96.2%	96.1%

625 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	97.0%	96.9%	96.8%	99.2%	99.3%	99.3%	98.7%	98.9%	98.4%	96.3%	96.3%	96.0%
50% load	97.5%	97.4%	97.5%	99.4%	99.4%	99.5%	99.1%	99.2%	99.1%	96.7%	96.7%	96.6%
75% load	97.3%	97.3%	97.5%	99.4%	99.5%	99.5%	99.3%	99.3%	99.3%	96.5%	96.5%	96.4%
100% load	97.0%	97.1%	97.2%	99.4%	99.5%	99.5%	99.3%	99.3%	99.3%	96.0%	96.0%	95.9%

750 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	97.0%	96.8%	96.9%	99.3%	99.3%	99.3%	98.7%	98.7%	98.7%	96.3%	96.3%	96.2%
50% load	97.5%	97.4%	97.4%	99.4%	99.4%	99.4%	99.1%	99.1%	99.0%	96.7%	96.7%	96.7%
75% load	97.3%	97.3%	97.4%	99.4%	99.5%	99.5%	99.3%	99.3%	99.3%	96.5%	96.4%	96.6%
100% load	96.9%	97.1%	97.2%	99.4%	99.5%	99.5%	99.3%	99.3%	99.3%	96.0%	96.0%	96.1%

875 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	97.0%	96.8%	96.9%	99.3%	99.3%	99.3%	98.7%	98.7%	98.7%	96.1%	96.3%	96.1%
50% load	97.4%	97.4%	97.4%	99.4%	99.4%	99.4%	99.1%	99.2%	99.1%	96.5%	96.7%	96.6%
75% load	97.3%	97.4%	97.4%	99.4%	99.5%	99.5%	99.3%	99.3%	99.3%	96.3%	96.5%	96.4%
100% load	96.9%	97.1%	97.2%	99.4%	99.5%	99.5%	99.3%	99.3%	99.3%	95.8%	96.1%	96.0%

1000 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	96.9%	96.8%	96.8%	99.3%	99.3%	99.3%	98.7%	98.9%	98.7%	96.4%	96.3%	96.2%
50% load	97.4%	97.4%	97.4%	99.4%	99.4%	99.4%	99.1%	99.3%	99.2%	96.7%	96.7%	96.7%
75% load	97.2%	97.3%	97.4%	99.4%	99.5%	99.4%	99.3%	99.3%	99.3%	96.5%	96.5%	96.5%
100% load	96.9%	97.0%	97.2%	99.4%	99.5%	99.4%	99.3%	99.3%	99.3%	96.0%	96.0%	96.1%

1125 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	96.9%	96.9%	96.8%	99.3%	99.3%	99.3%	98.7%	98.8%	98.8%	96.4%	96.4%	96.2%
50% load	97.3%	97.4%	97.4%	99.4%	99.4%	99.4%	99.1%	99.2%	99.2%	96.7%	96.8%	96.7%
75% load	97.2%	97.3%	97.3%	99.4%	99.4%	99.4%	99.3%	99.3%	99.3%	96.4%	96.6%	96.5%
100% load	96.8%	97.0%	97.1%	99.4%	99.4%	99.4%	99.2%	99.3%	99.3%	96.0%	96.1%	96.0%

1250 kW

	Normal operation			ECO mode			eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
25% load	96.9%	96.9%	96.8%	99.3%	99.4%	99.4%	98.9%	98.7%	98.8%	96.6%	96.3%	96.4%
50% load	97.3%	97.3%	97.4%	99.5%	99.5%	99.5%	99.3%	99.2%	99.2%	96.9%	96.7%	96.8%
75% load	97.2%	97.4%	97.4%	99.5%	99.5%	99.5%	99.3%	99.4%	99.4%	96.6%	96.5%	96.6%
100% load	96.8%	96.9%	97.1%	99.4%	99.5%	99.5%	99.3%	99.4%	99.4%	96.0%	96.0%	96.1%

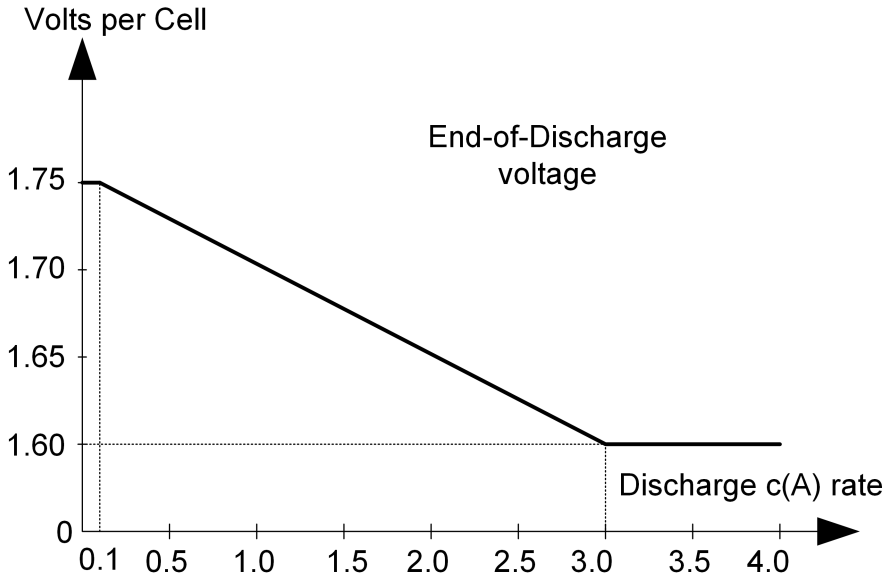
Derating Due to Load Power Factor

0.5 leading to 0.5 lagging without derating.

UPS rating	UPS output									
	Lagging					Leading				
PF=1	PF=0.5	PF=0.6	PF=0.7	PF=0.8	PF=0.9	PF=0.9	PF=0.8	PF=0.7	PF=0.6	PF=0.5
500 kVA/ kW	500 kVA / 250 kW	500 kVA / 300 kW	500 kVA / 350 kW	500 kVA / 400 kW	500 kVA / 450 kW	500 kVA / 450 kW	500 kVA / 400 kW	500 kVA / 350 kW	500 kVA / 300 kW	500 kVA / 250 kW
600 kVA/ kW	600 kVA / 300 kW	600 kVA / 360 kW	600 kVA / 420 kW	600 kVA / 480 kW	600 kVA / 540 kW	600 kVA / 540 kW	600 kVA / 480 kW	600 kVA / 420 kW	600 kVA / 360 kW	600 kVA / 300 kW
625 kVA/ kW	625 kVA / 312.5 kW	625 kVA / 375 kW	625 kVA / 437.5 kW	625 kVA / 500 kW	625 kVA / 562.5 kW	625 kVA / 562.5 kW	625 kVA / 500 kW	625 kVA / 437.5 kW	625 kVA / 375 kW	625 kVA / 312.5 kW
750 kVA/ kW	750 kVA / 375 kW	750 kVA / 450 kW	750 kVA / 525 kW	750 kVA / 600 kW	750 kVA / 675 kW	750 kVA / 675 kW	750 kVA / 600 kW	750 kVA / 525 kW	750 kVA / 450 kW	750 kVA / 375 kW
875 kVA/ kW	875 kVA / 437.5 kW	875 kVA / 525 kW	875 kVA / 612.5 kW	875 kVA / 700 kW	875 kVA / 787.5 kW	875 kVA / 787.5 kW	875 kVA / 700 kW	875 kVA / 612.5 kW	875 kVA / 525 kW	875 kVA / 437.5 kW
1000 kVA/kW	1000 kVA / 500 kW	1000 kVA / 600 kW	1000 kVA / 700 kW	1000 kVA / 800 kW	1000 kVA / 900 kW	1000 kVA / 900 kW	1000 kVA / 800 kW	1000 kVA / 700 kW	1000 kVA / 600 kW	1000 kVA / 500 kW
1125 kVA/kW	1125 kVA / 562.5 kW	1125 kVA / 675 kW	1125 kVA / 787.5 kW	1125 kVA / 900 kW	1125 kVA / 1012.5 kW	1125 kVA / 1012.5 kW	1125 kVA / 900 kW	1125 kVA / 787.5 kW	1125 kVA / 675 kW	1125 kVA / 562.5 kW
1250 kVA/kW	1250 kVA / 625 kW	1250 kVA / 750 kW	1250 kVA / 875 kW	1250 kVA / 1000 kW	1250 kVA / 1125 kW	1250 kVA / 1125 kW	1250 kVA / 1000 kW	1250 kVA / 875 kW	1250 kVA / 750 kW	1250 kVA / 625 kW

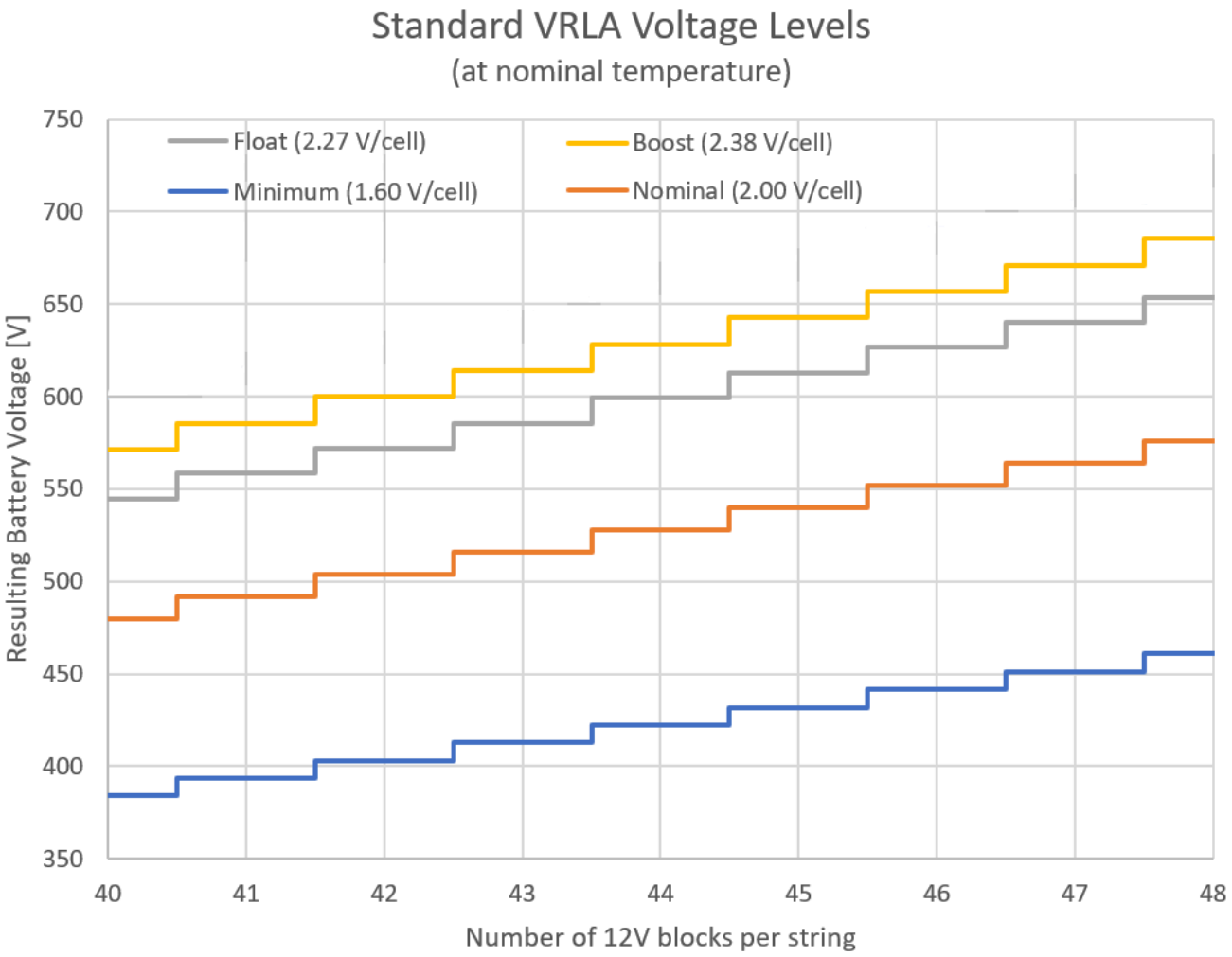
Batteries

End of Discharge Voltage



This diagram is applicable for end of discharge (EOD) set as 1.6 V/cell at 3C – for VRLA only.

Standard VRLA Voltage Levels



NOTE: Specific configurations may differ from the general constraint shown above.

Maximum Battery Current

UPS rating	500 kW	600 kW	625 kW	750 kW	875 kW	1000 kW	1125 kW	1250 kW
Number of power modules present in the UPS	4	5	5	6	7	8	9	10
Maximum continuous battery current (A)	1200	1500	1500	1800	2100	2400	2700	3000
Maximum battery current (A) for 10 minutes	1272	1590	1590	1908	2226	2544	2862	3180
Maximum battery current for 3 minutes	1336	1670	1670	2004	2338	2672	3006	3340
Maximum battery current for 1 minute	1440	1800	1800	2160	2520	2880	3240	3600

Compliance

Safety	IEC 62040-1: 2017, Edition 2.0, Uninterruptible Power Systems (UPS) - Part 1: Safety requirements
EMC/EMI/RFI	IEC 62040-2: 2016, 3rd edition Uninterruptible Power Systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements C3 IEC 62040-2: 2005, 2nd edition Uninterruptible Power Systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements C3
Performance	Performance in accordance with: IEC 62040-3: 2021-04, 3rd edition Uninterruptible Power Systems (UPS) - Part 3: Method of specifying the performance and test requirements. Output performance classification (according to IEC 62040-3, Clause 5.3.4): VFI SS 11
Transportation	IEC 60721-4-2 Level 2M2
Earthing system	TN, TNC, TN-S, TNC-S, TT(2)
Overvoltage category	OVC III
Protective class	I
Pollution degree	2

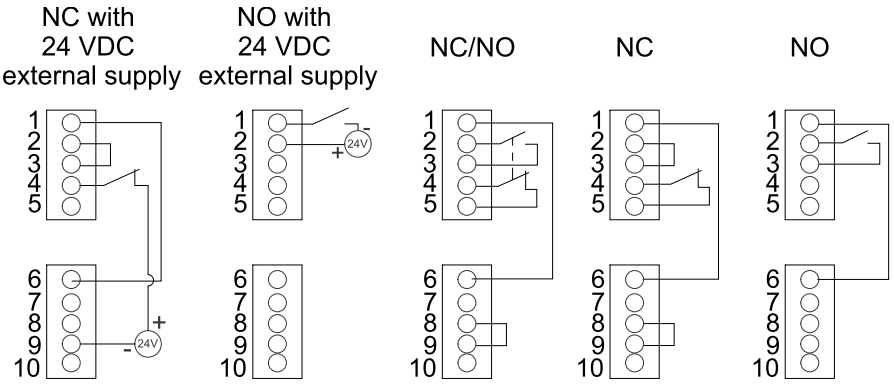
(2) Neutral connection is mandatory for supported TT earthing system.

Communication and Management

Local area network	1 Gbps – 1 port as default
Modbus	Modbus (SCADA)
Output relays	4 x SELV configurable
Input contacts	4 x SELV configurable
Standard control panel	10 inch touchscreen display
Audible alarm	Yes
Emergency power off (EPO)	Options: • Normally Open (NO) • Normally Closed (NC) • External 24 VDC SELV
External switchgear	UIB UOB SSIB MBB SIB
External synchronization	Yes
Battery monitoring	Available for external battery solutions

EPO

EPO Configurations (Terminal J6609, 1-10)



The EPO input supports 24 VDC.

NOTE: The default setting for the EPO activation is to turn off the inverter.

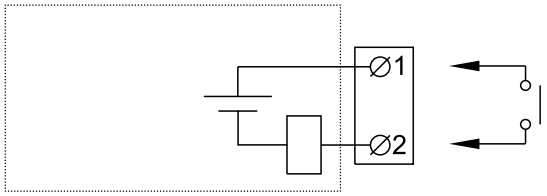
If you want the EPO activation to transfer the UPS into forced static bypass operation instead, please contact Schneider Electric.

Configurable Input Contacts and Output Relays

Input Contacts

Four input contacts are available and can be configured to indicate a given event via the display.

The input contacts support 24 VDC 10 mA. All circuits connected must have the same 0 V reference.

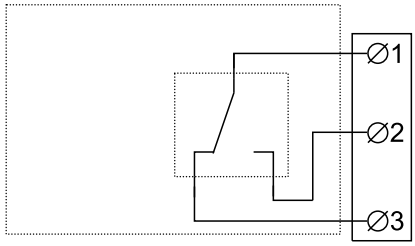


Name	Description	Location
IN _1 (input contact 1)	Configurable input contact	Terminal J6607: 1-2
IN _2 (input contact 2)		Terminal J6607: 3-4
IN _3 (input contact 3)		Terminal J6607: 5-6
IN _4 (input contact 4)		Terminal J6607: 7-8

Output Relays

Four output relays are available and can be configured to activate on one or more events via the display.

The output relays support 24 VAC/VDC 1 A. All external circuitry must be fused with maximum 1 A fast acting fuses.



Name	Description	Location
OUT _1 (output relay 1)	Configurable output relay	Terminal J6608: 1-3 for normally closed (NC), 1-2 for normally open (NO)
OUT _2 (output relay 2)		Terminal J6608: 4-6 for normally closed (NC), 4-5 for normally open (NO)
OUT _3 (output relay 3)		Terminal J6608: 7-9 for normally closed (NC), 7-8 for normally open (NO)
OUT _4 (output relay 4)		Terminal J6608: 10-12 for normally closed (NC), 10-11 for normally open (NO)

When **Energized check mode** is enabled, the output relay is activated, and will deactivate when the events assigned to the output relay occurs (normally activated).

When **Energized check mode** is disabled, the output relay is deactivated, and will activate when the events assigned to the output relay occurs (normally deactivated).

Energized check mode must be individually enabled for each output relay and makes it possible to detect if the output relay is inoperable:

- If the power supply to the output relays is lost, the events assigned to all the output relays will be indicated as present.
- If a single output relay has become inoperable, the events assigned to the single output relay will be indicated as present.

Requirements for a Third Party Battery Solution

Battery breaker boxes from Schneider Electric are recommended for the battery interface. Please contact Schneider Electric for more information.

Third Party Battery Circuit Breaker Requirements

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- All selected battery breakers must be equipped with instantaneous trip functionality with an undervoltage release coil or a shunt trip release coil.
- Trip delay must be set to zero on all battery breakers.

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

NOTE: There are more factors to consider when selecting a battery circuit breaker than the requirements listed below. Please contact Schneider Electric for more information.

Design Requirements for a Battery Circuit Breaker

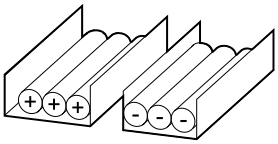
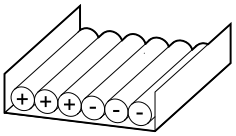
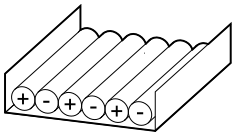
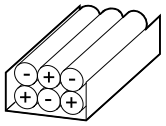
Battery circuit breaker rated DC voltage > Normal battery voltage	The normal voltage of the battery configuration is defined as the highest nominal occurring battery voltage. This can be equivalent to the float voltage which may be defined as **number of battery blocks x number of cells x cell float voltage**.
Battery circuit breaker rated DC current > Rated discharge battery current	This current is controlled by the UPS and must include maximum discharge current. This will typically be the current at the end of discharge (minimum operation DC voltage or in overload condition or a combination).
DC landings	Two DC landings for DC cables (DC+ and DC-) are required.
AUX switches for monitoring	One AUX switch must be installed in each battery circuit breaker and connected to the UPS. The UPS can monitor up to four battery circuit breakers.
Short-circuit breaking capability	The short-circuit breaking capability must be higher than the short-circuit DC current of the (largest) battery configuration.
Minimum trip current	The minimum short-circuit current to trip the battery circuit breaker must match the (smallest) battery configuration, to make the breaker trip in case of a short circuit, up to the end of its life time.
Common battery solution	Individual battery circuit breaker for each UPS in the parallel system.

Guidance for Organizing Battery Cables

NOTE: For 3rd party batteries, use only high rate batteries for UPS applications.

NOTE: When the battery bank is placed remotely, the organizing of the cables is important to reduce voltage drop and inductance. The distance between the battery bank and the UPS must not exceed 200 m (656 ft). Contact Schneider Electric for installations with a longer distance.

NOTE: To minimize the risk of electromagnetic radiation, it is highly recommended to follow the below guidance and to use grounded metallic tray supports.

Cable Length				
<30 m	Not recommended	Acceptable	Recommended	Recommended
31–75 m	Not recommended	Not recommended	Acceptable	Recommended
76–150 m	Not recommended	Not recommended	Acceptable	Recommended
151–200 m	Not recommended	Not recommended	Not recommended	Recommended

Specifications

Specifications for 500 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(3)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	785	746	719
	Maximum input current (A)	951	931	898
	Input current limitation (A)	951	931	898
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	768	729	703
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(3) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[4]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[5]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[6]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	760	722	696
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[7]	1730	1650	1580
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Output performance classification (according to IEC/ EN62040-3)	VFI SS 11		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(4) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(5) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(6) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °C ambient temperature. Contact Schneider Electric to enable this function.
(7) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	75	100	100
	Maximum charging power (kW) (at 0% load)	200	200	200
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	420		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	1083		
	Battery current at full load and minimum battery voltage (A)	1354		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 600 kW UPS

NOTE: 600 kW rating is only available for GVXL600K600HS.

	Voltage (V)	**380**	**400**	**415**
Input	Connections	4-wire (L1, L2, L3, N, PE)(8)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	942	895	863
	Maximum input current (A)	1189	1163	1122
	Input current limitation (A)	1189	1163	1122
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	921	875	844
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(8) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections(9)	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation(10): 150% for 1 minute, 125% for 10 minutes, (112% continuous(11)) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	912	867	835
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)(12)	2160	2060	1970
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Output performance classification (according to IEC/ EN62040-3)	VFI SS 11		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(9) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(10) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(11) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(12) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	90	120	120
	Maximum charging power (kW) (at 0% load)	240	240	240
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	525		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	1300		
	Battery current at full load and minimum battery voltage (A)	1625		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 625 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(13)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	981	932	899
	Maximum input current (A)	1189	1163	1122
	Input current limitation (A)	1189	1163	1122
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	960	912	879
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(13) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[14]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[15]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[16]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	950	903	870
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[17]	2160	2060	1970
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Output performance classification (according to IEC/ EN62040-3)	VFI SS 11		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(14) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(15) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(16) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(17) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	94	125	125
	Maximum charging power (kW) (at 0% load)	250	250	250
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	525		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	1354		
	Battery current at full load and minimum battery voltage (A)	1692		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 750 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(18)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	1178	1119	1078
	Maximum input current (A)	1426	1396	1347
	Input current limitation (A)	1426	1396	1347
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	1152	1094	1054
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(18) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[19]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[20]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[21]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	1140	1083	1044
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[22]	2590	2470	2360
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(19) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(20) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(21) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(22) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	113	150	150
	Maximum charging power (kW) (at 0% load)	300	300	300
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	630		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	1625		
	Battery current at full load and minimum battery voltage (A)	2031		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 875 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(23)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	1374	1305	1258
	Maximum input current (A)	1664	1628	1571
	Input current limitation (A)	1664	1628	1571
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	1343	1276	1230
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(23) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[24]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[25]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[26]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	1330	1263	1218
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[27]	3020	2880	2750
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(24) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(25) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(26) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(27) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	131	175	175
	Maximum charging power (kW) (at 0% load)	350	350	350
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	735		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	1895		
	Battery current at full load and minimum battery voltage (A)	2369		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 1000 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(28)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	1570	1492	1438
	Maximum input current (A)	1902	1861	1796
	Input current limitation (A)	1902	1861	1796
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	1535	1458	1406
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(28) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[29]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[30]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[31]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	1520	1444	1392
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[32]	3460	3290	3150
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(29) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(30) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(31) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(32) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	150	200	200
	Maximum charging power (kW) (at 0% load)	400	400	400
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	840		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	2166		
	Battery current at full load and minimum battery voltage (A)	2708		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 1125 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(33)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	1766	1678	1617
	Maximum input current (A)	2139	2094	2020
	Input current limitation (A)	2139	2094	2020
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	1727	1641	1581
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(33) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[34]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[35]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[36]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	1710	1624	1566
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[37]	3890	3700	3540
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(34) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(35) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(36) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(37) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	169	225	225
	Maximum charging power (kW) (at 0% load)	450	450	450
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	945		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	2437		
	Battery current at full load and minimum battery voltage (A)	3046		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Specifications for 1250 kW UPS

	Voltage (V)	380	400	415
Input	Connections	4-wire (L1, L2, L3, N, PE)(38)		
	Input voltage range (V)	At 100% load: 323-437	At 100% load: 340-460	At 100% load: 353-478
	Frequency range (Hz)	40-70		
	Nominal input current (A)	1962	1864	1797
	Maximum input current (A)	2377	2326	2244
	Input current limitation (A)	2377	2326	2244
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icc = 100 kA		
	Total harmonic distortion (THDI)	<3% at full linear load (symmetrical)		
	Input power factor	>0.99 at load >25% >0.95 at load >15%		
	Protection	Built-in backfeed relay and fuses		
	Ramp-in	Programmable and adaptive: 1-300 seconds		
Bypass	Connections	4-wire (L1, L2, L3, N, PE)		
	Bypass voltage range (V)	342-418	360-440	374-457
	Frequency (Hz)	50 or 60		
	Frequency range (Hz)	±1, ±3, ±10 (user selectable)		
	Nominal bypass current (A)	1919	1823	1757
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	I^2t thyristor value (A^2s)	14.6 x 10^6		
	Input fuse (A^2s)	No		
	Backfeed protection	Upstream installation of disconnect device with shunt trip connected to the UPS		

(38) Note: Refer to the earthing diagrams for your specific earthing system requirements concerning the N connection.

	Voltage (V)	380	400	415
Output	Connections[39]	4-wire (L1, L2, L3, N, PE)		
	Output voltage regulation	Symmetrical load ± 1% Asymmetrical load ± 3%		
	Overload capacity	Normal operation[40]: 150% for 1 minute, 125% for 10 minutes, (112% continuous[41]) Battery operation: 110% for 1 minute Bypass operation: 150% for 1 minute, 125% for 10 minutes, 110% continuous (in forced bypass operation or requested bypass operation)		
	Output power factor	1		
	Nominal output current (A)	1900	1805	1740
	Minimum short circuit rating	Dependent on upstream protection. See Upstream and Downstream Protection for 380/400/415 V (IEC), page 53 for details.		
	Maximum short circuit rating	Icw = 100 kA		
	Inverter output short circuit capabilities	Varies with time. See graph and table values in Inverter Short Circuit Capabilities (Bypass not Available), page 15.		
	Output short circuit current (inverter) (A)[42]	4320	4110	3930
	Output frequency (Hz)	50/60 Hz bypass synchronized; 50/60 Hz ±0.1% free running		
	Synchronized slew rate (Hz/sec)	Programmable to 0.25, 0.5, 1, 2, 4, 6		
	Total harmonic distortion (THDU)	<1% for 100% resistive load <5% for non-linear load		
	Output voltage compensation	Programmable to 0%, ±1%, ±2%, ±3%		
	Output performance classification (according to IEC/ EN62040-3)	VFI SS 11		
	Load crest factor	3		
	Load power factor	From 0.5 leading to 0.5 lagging without any derating		

(39) The number of output connections must match the number of input connections in a single mains system. The number of output connections must match the number of bypass connections in a dual mains system.
(40) At 50 °C ambient temperature, the UPS can support 75% continuous load in normal operation at nominal mains voltage. All other overload scenarios here are at maximum 40 °C ambient temperature.
(41) 112% continuous overload in normal operation at nominal mains voltage and at maximum 40 °Cambient temperature. Contact Schneider Electric to enable this function.
(42) The output short circuit current (inverter) is based on IK1 and IK2 at 10 ms.

	Voltage (V)	380	400	415
Battery	Charging power in % of output power	0-75% load: 40% 75-100% load: 40% to 15% 100% load: 15%	At 0-80% load: 40% At 80-100% load: 40% to 20% At 100% load: 20%	
	Maximum charging power (kW) (at 100% load)	188	250	250
	Maximum charging power (kW) (at 0% load)	500	500	500
	Number of battery blocks	40-48		
	Nominal battery voltage (VDC)	480 for 40 battery blocks 576 for 48 battery blocks		
	Nominal float voltage (VDC)	545 for 40 battery blocks 654 for 48 battery blocks		
	Maximum boost voltage (VDC)	571 for 40 battery blocks 685 for 48 battery blocks		
	Maximum charge current (A)	1050		
	Temperature compensation (per cell)	-3.3mV/°C/cell for T ≥ 25 °C, 0mV/°C/cell for T < 25 °C		
	End of discharge voltage (full load) (VDC)	384-461		
	End of discharge voltage (no load) (VDC)	420-504		
	Battery current at full load and nominal battery voltage (A)	2708		
	Battery current at full load and minimum battery voltage (A)	3384		
	Ripple current	< 5% C20 (5 min backup time)		
	Battery test	Manual/automatic (selectable)		
	Maximum short circuit rating	100 kA		

NOTE: Battery specifications are based on VRLA batteries.

Upstream and Downstream Protection for 380/400/415 V (IEC)

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Circuit breakers must have instantaneous trip time of maximum 60 ms.
- Circuit breakers must have instantaneous override values set according to the table below.
- Circuit breakers must be installed for input (unit input disconnect device UIB) and bypass (static switch input disconnect device SSIB).
- For parallel system with three or more UPSs: Circuit breakers must be installed for the output (unit output disconnect device UOB) of each UPS. The unit output disconnect device (UOB) is sized as the static switch input disconnect device (SSIB).
- Live Swap is not supported for >100kA$_{bf}$ installations where current limiting disconnect devices are used to protect the UPS.

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

Schneider Electric reserves the right to remove the Live Swap label from the product front if the conditions are not met.

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.

NOTE: For local directives which require 4-pole circuit breakers: Refer to the earthing diagrams for details about neutral connection.

The bypass/output breakers are sized based on the nominal current +10%. This is to accommodate either low grid voltage or deviation in length between parallel UPSs. The battery breakers are sized based on end-of-discharge voltage which has been defined as 384 VDC.

Upstream Protection for 380/400/415 V (IEC) and Minimum Prospective Phase-To-Earth Short Circuit at the UPS Input/ Bypass Terminals

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The upstream overcurrent protective device (and its settings) must be sized to ensure a disconnecting time within 0.07 seconds in case of a short circuit between the input/bypass phase and the UPS enclosure.

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

Compliance is assured with the recommended breaker (and its settings) from the table below.

Recommended Upstream Protection for 380/400/415 V (IEC)

NOTE: Isd, Tr, I2t, and Ii must be set on the breakers during start-up.

NOTE: For 112% continuous overload in normal operation: Contact Schneider Electric to enable this function and for specific circuit breaker settings.

UPS rating	500 kW						
	Input			Bypass/Output			Battery
Voltage (V)	380	400	415	380	400	415	380-415
Disconnect device type	MTZ2 10 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 10 H2 3P or 4P D/O or F +MIC 5.0X+_+			MasterPacT NW20HDC-D MicroLogic 1.0 DC (48652+65273)
In	1000	1000	1000	1000	1000	1000	2000
Ir	951	931	898	845	802	774	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr at 6 Ir	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	2500

UPS rating	600 kW						
	Input			Bypass/Output			Battery
Voltage (V)	380	400	415	380	400	415	380-415
Disconnect device type	MTZ2 12 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 12 H2 3P or 4P D/O or F +MIC 5.0X+_+	MTZ2 10 H2 3P or 4P D/O or F +MIC 5.0X+_+		MasterPacT NW20HDC-D MicroLogic 1.0 DC (48652+65273)
In	1250	1250	1250	1250	1000	1000	2000
Ir	1189	1163	1122	1014	963	929	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr at 6 Ir	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	2500

UPS rating	625 kW						
	Input			Bypass/Output			Battery
Voltage (V)	380	400	415	380	400	415	380-415
Disconnect device type	MTZ2 12 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 12 H2 3P or 4P D/O or F +MIC 5.0X+_+	MTZ2 10 H2 3P or 4P D/O or F +MIC 5.0X+_+		MasterPacT NW20HDC-D MicroLogic 1.0 DC (48652+65273)
In	1250	1250	1250	1250	1000	1000	2000
Ir	1189	1163	1122	1056	1000	967	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr at 6 Ir	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	2500

UPS rating	750 kW						
	Input			Bypass/Output			Battery
Voltage (V)	380	400	415	380	400	415	380-415
Disconnect device type	MTZ2 16 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 12 H2 3P or 4P D/O or F +MIC 5.0X+_+			MasterPacT NW20HDC-D MicroLogic 1.0 DC (48652+65273)
In	1600	1600	1600	1250	1250	1250	2000
Ir	1426	1396	1347	1250	1204	1160	–

UPS rating	**750 kW**						
	Input			**Bypass/Output**			**Battery**
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380-415**
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	2500

UPS rating	**875 kW**						
	Input			**Bypass/Output**			**Battery**
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380-415**
Disconnect device type	MTZ2 16 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 16 H2 3P or 4P D/O or F +MIC 5.0X+_+			MasterPacT NW40HDC-D MicroLogic 1.0 DC (48655+65274)
In	1600	1600	1600	1600	1600	1600	4000
Ir	1600	1600	1571	1478	1404	1353	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	5000

UPS rating	**1000 kW**						
	Input			**Bypass/Output**			**Battery**
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380-415**
Disconnect device type	MTZ2 20 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 20 H2 3P or 4P D/O or F +MIC 5.0X+_+	MTZ2 16 H2 3P or 4P D/O or F +MIC 5.0X+_+		MasterPacT NW40HDC-D MicroLogic 1.0 DC (48655+65274)
In	2000	2000	2000	2000	1600	1600	4000
Ir	1902	1861	1796	1689	1600	1547	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	5000

UPS rating	**1125 kW**						
	Input			**Bypass/Output**			**Battery**
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380-415**
Disconnect device type	MTZ2 25 H2 3P or 4P D/O or F +MIC 5.0X+_+		MTZ2 20 H2 3P or 4P D/O or F +MIC 5.0X+_+	MTZ2 20 H2 3P or 4P D/O or F +MIC 5.0X+_+			MasterPacT NW40HDC-D MicroLogic 1.0 DC (48655+65274)
In	2500	2500	2000	2000	2000	2000	4000
Ir	2139	2094	2000	1900	1806	1740	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	5000

UPS rating	1250 kW						
	Input			Bypass/Output			Battery
Voltage (V)	380	400	415	380	400	415	380-415
Disconnect device type	MTZ2 25 H2 3P or 4P D/O or F +MIC 5.0X+_+			MTZ2 25 H2 3P or 4P D/O or F +MIC 5.0X+_+	MTZ2 20 H2 3P or 4P D/O or F +MIC 5.0X+_+		MasterPacT NW40HDC-D MicroLogic 1.0 DC (48655+65274)
In	2500	2500	2500	2500	2000	2000	4000
Ir	2377	2326	2244	2111	2000	1933	–
Isd	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	1.5-10	–
Tr	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	0.5-24	–
I2t	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	ON or OFF	–
Ii (In)	2-15	2-15	2-15	2-15	2-15	2-15	5000

Recommended Downstream Protection for Distribution Breakers for 400 V (IEC)

NOTE: The recommended downstream protection for distribution circuit breakers is sized for protection of the SCRs in the static bypass switch and for coordination with the unit input disconnect device (UIB)/static switch input disconnect device (SSIB) when external backfeed protection is used.

UPS rating	500 kW	600 kW	625 kW	750 kW	875 kW	1000 kW	1125 kW	1250 kW
Voltage (V)	400	400	400	400	400	400	400	400
Disconnect device type	MTZ1 06 L1 or ComPact NS630bL/LB MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT06 L1	MTZ1 06 L1 or ComPact NS630bL/LB MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT06 L1	MTZ1 06 L1 or ComPact NS630bL/LB MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT06 L1	MTZ1 08 L1 or ComPact NS800bL/LB MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT08 L1	MTZ1 10 L1 or ComPact NS1000L MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT10 L1	MTZ1 10 L1 or ComPact NS1000L MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT10 L1	MTZ1 10 L1 or ComPact NS1000L MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT10 L1	MTZ1 10 L1 or ComPact NS1000L MicroLogic or ComPact NSX630 S/L/R MicroLogic or Masterpact NT10 L1

Recommended Cable Sizes for 380/400/415 V (IEC)

⚠⚠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 300 mm^2.
- Shrink sleeves must be fitted over the cable lug crimped zone and must overlap with the cable insulation on all power cables.

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

The maximum number of cable connections per busbar:

- 6 on input/output/bypass busbars
- 8 on DC+/DC- busbars
- 12 on N busbars
- 18 on PE busbars

NOTE: Overcurrent protection is to be provided by others.

Cable sizes in this manual are based on the minimum requirements in table B.52.3 and table B.52.5 of IEC 60364-5-52 with the following assertions:

- 90 °C conductors
- An ambient temperature of 30 °C
- Use of copper or aluminum conductors
- Installation method F
- For input/bypass/output cables: Single layer on a perforated cable tray; For DC cables, see Guidance for Organizing Battery Cables, page 28.

PE cable size is based on table 54.2 of IEC 60364-5-54.

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

The DC cables are sized for the kW rating at end of discharge voltage and not the upstream breaker in accordance with IEC 60364 433.3 Omission of devices for protection against overload.

NOTE: Recommended cable sizes and maximum allowable cable size may vary for the auxiliary products. Not all auxiliary products support aluminum cables. Refer to the installation manual provided with the auxiliary product.

NOTE: The DC cable sizes given here are recommendations – Always follow the specific instructions in the battery solution documentation for DC cable sizes and DC PE cable sizes and ensure that the DC cable sizes match the battery breaker rating.

Copper

UPS rating	**500 kW**			**600 kW**			**625 kW**			**750 kW**		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
Input phases (mm^2)	2x240	2x240	2x185	3x185/ 2x300	3x185/ 2x300	3x185/ 2x300	3x185/ 2x300	3x185/ 2x300	3x185/ 2x300	3x240	3x240	3x240
Input PE (mm^2)	1x240	1x240	1x185	2x185/ 1x300	2x185/ 1x300	2x185/ 1x300	2x185/ 1x300	2x185/ 1x300	2x185/ 1x300	2x240	2x240	2x240
Bypass/ output phases (mm^2)	2x240	2x185	2x185	2x300	2x240	2x240	3x185/ 2x300	2x300	2x240	3x240	3x240	3x185
Bypass PE/ output PE (mm^2)	1x240	1x185	1x185	1x300	1x240	1x240	2x185/ 1x300	1x300	1x240	2x240	2x240	2x185

Copper (Continued)

UPS rating	500 kW			600 kW			625 kW			750 kW		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
Neutral (mm^2)	2x240	2x185	2x185	2x300	2x240	2x240	3x185/ 2x300	2x300	2x240	3x240	3x240	3x185
DC+/DC- (mm^2)	3x150	3x150	3x150	3x240	3x240	3x240	3x240	3x240	3x240	4x240	4x240	4x240
DC PE (mm^2)	2x150	2x150	2x150	2x240	2x240	2x240	2x240	2x240	2x240	2x240	2x240	2x240

Copper

UPS rating	875 kW			1000 kW			1125 kW			1250 kW		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
Input phases (mm^2)	4x240/ 3x300	4x240/ 3x300	4x185/ 3x300	5x185/ 4x300	5x185/ 4x240	4x240	5x240/ 4x300	5x240/ 4x300	5x240/ 4x300	6x240/ 5x300	6x240/ 5x300	5x240
Input PE (mm^2)	2x240/ 2x300	2x240/ 2x300	2x185/ 2x300	3x185/ 2x300	3x185/ 2x240	2x240	3x240/ 2x300	3x240/ 2x300	3x240/ 2x300	3x240/ 3x300	3x240/ 3x300	3x240
Bypass/ output phases (mm^2)	4x185/ 3x300	4x185/ 3x300	4x185/ 3x300	4x240	4x240/ 3x300	4x240/ 3x300	4x300	4x300	4x240	4x300	4x300	4x300
Bypass PE/ output PE (mm^2)	2x185/ 2x300	2x185/ 2x300	2x185/ 2x300	2x240	2x240/ 2x300	2x240/ 2x300	2x300	2x300	2x240	2x300	2x300	2x300
Neutral (mm^2)	4x185/ 3x300	4x185/ 3x300	4x185/ 3x300	4x240	4x240/ 3x300	4x240/ 3x300	4x300	4x300	4x240	4x300	4x300	4x300
DC+/DC- (mm^2)	5x240/ 4x300	5x240/ 4x300	5x240/ 4x300	5x240	5x240	5x240	6x240/ 5x300	6x240/ 5x300	6x240/ 5x300	7x240/ 6x300	7x240/ 6x300	7x240/ 6x300
DC PE (mm^2)	2x240/ 2x300	2x240/ 2x300	2x240/ 2x300	3x240	3x240	3x240	3x240/ 3x300	3x240/ 3x300	3x240/ 3x300	4x240/ 3x300	4x240/ 3x300	4x240/ 3x300

Aluminum

UPS rating	500 kW			600 kW			625 kW		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
Input phases (mm^2)	3x240/ 2x300	3x240/ 2x300	3x240	4x185/ 3x240	4x185/ 3x300	3x240	4x185/ 3x240	4x185/ 3x300	3x240
Input PE (mm^2)	2x240/ 1x300	2x240/ 1x300	2x240	2x185/ 2x240	2x185/ 2x300	2x240	2x185/ 2x240	2x185/ 2x300	2x240
Bypass/ output phases (mm^2)	3x185	3x185/ 2x300	3x150/ 2x300	3x240	3x240	3x240	4x185	3x240	3x240
Bypass PE/ output PE (mm^2)	2x185	2x185/ 1x300	2x150/ 1x300	2x240	2x240	2x240	2x185	2x240	2x240
Neutral (mm^2)	3x185	3x185/ 2x300	3x150/ 2x300	3x240	3x240	3x240	4x185	3x240	3x240
DC+/DC- (mm^2)	3x240	3x240	3x240	4x240	4x240	4x240	4x240	2x240	4x240
DC PE (mm^2)	2x240	2x240	2x240	2x240	2x240	2x240	2x240	2x240	2x240

Aluminum

UPS rating	750 kW			875 kW			1000 kW		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**	**380**	**400**	**415**
Input phases (mm^2)	4x240	4x240	4x240	5x240/ 4x300	5x240/ 4x300	5x240/ 4x300	6x240/ 5x300	6x240/ 5x300	5x240
Input PE (mm^2)	2x240	2x240	2x240	3x240/ 2x300	3x240/ 2x300	3x240/ 2x300	3x240/ 3x300	3x240/ 3x300	3x240
Bypass/ output phases (mm^2)	4x240	4x240	4x240/ 3x300	4x300	4x300	4x240	4x300	4x300	4x300
Bypass PE/ output PE (mm^2)	2x240	2x240	2x240/ 2x300	2x300	2x300	2x240	2x300	2x300	2x300
Neutral (mm^2)	4x240	4x240	4x240/ 3x300	4x300	4x300	4x240	4x300	4x300	4x300
DC+/DC- (mm^2)	5x240/ 4x300	5x240/ 4x300	5x240/ 4x300	6x240/ 5x300	6x240/ 5x300	6x240/ 5x300	7x240/ 6x300	7x240/ 6x300	7x240/ 6x300
DC PE (mm^2)	3x240/ 2x300	3x240/ 2x300	3x240/ 2x300	3x240/ 3x300	3x240/ 3x300	3x240/ 3x300	4x240/ 3x300	4x240/ 3x300	4x240/ 3x300

NOTE: Aluminum cables are not supported for 1125 kW and 1250 kW.

Load Sharing in a Parallel System

NOTICE

RISK OF EQUIPMENT DAMAGE

To ensure correct load sharing in all operation modes in a parallel system, the following recommendations apply:

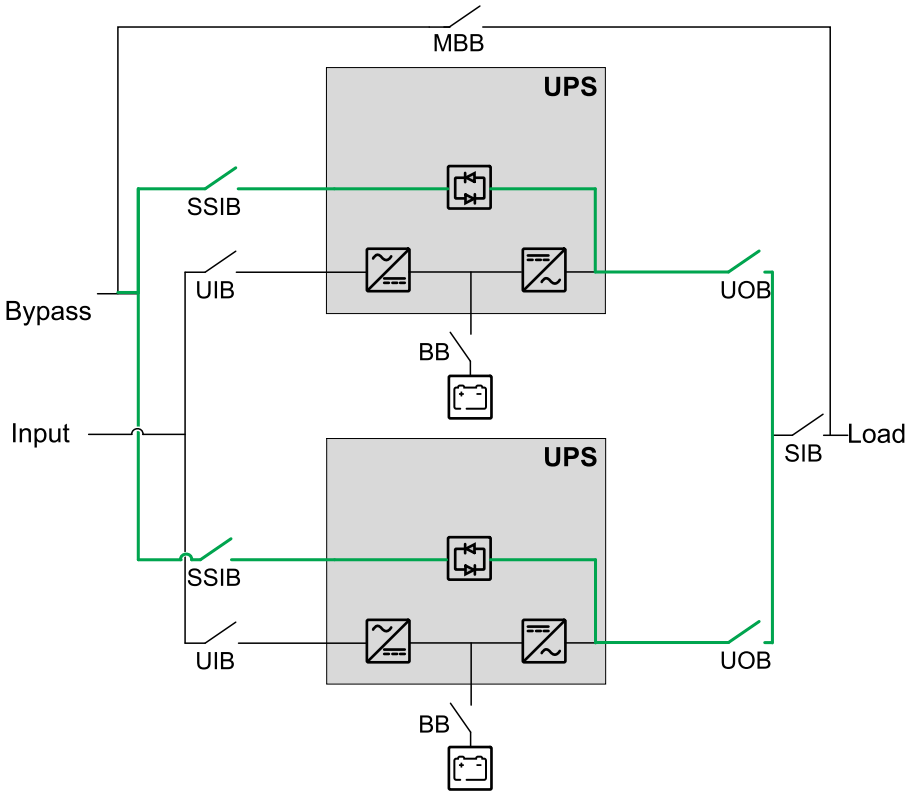
- The bypass cables must be the same length for all UPSs.
- The output cables must be the same length for all UPSs.
- The input cables must be the same length for all UPSs in a single mains system.
- Cable formation recommendations must be followed.
- The reactance of busbar layout in the bypass/input and output switchgear must be the same for all UPSs.

If the above recommendations are not followed the result can be uneven load sharing in eConversion, ECO mode, or bypass operation and overload of individual UPSs.

Failure to follow these instructions can result in equipment damage.

The impedance of the bypass paths need to be controlled in a parallel UPS system. When operating in eConversion, ECO mode, or bypass operation, the parallel load sharing is determined by the total impedance of the bypass path comprising cables, switchgear, static bypass switch, and cable formation.

Parallel System – Dual Mains



Recommended Bolt and Lug Sizes for 380/400/415 V (IEC)

Cable size mm²	Bolt size	Cable lug type
16	M10 x 40 mm	TLK 16-10
25	M10 x 40 mm	TLK 25-10
35	M10 x 40 mm	TLK 35-10
50	M10 x 40 mm	TLK 50-10
70	M10 x 40 mm	TLK 70-10
95	M10 x 40 mm	TLK 95-10
120	M10 x 40 mm	TLK 120-10
150	M10 x 40 mm	TLK 150-10
185	M10 x 40 mm	TLK 185-10
240	M10 x 40 mm	TLK 240-10
300	M10 x 40 mm	TLK 300-12

Torque Specifications

Bolt size	Torque
M6	5 Nm
M8	17.5 Nm
M10	30 Nm
M12	50 Nm

Leakage Current

The earth leakage current is the leakage current which flows through the protective earth conductor to ground. The earth leakage current is measured in the earth/ground cable and is always present.

The leakage current at start-up is higher than the continuous leakage current during operation.

For a 380/400/415 V 1250 kW UPS system 4-wire installation at 100% load:

- The start-up leakage current can be up to 3 A.
- The continuous maximum leakage current is 350 mA with 200 Hz filter on.

Physical

UPS Shipping Weights and Dimensions

Scalable UPS Models

Commercial reference	Weight kg	Height mm	Width mm	Depth mm	Number of power modules preinstalled in the UPS	Number of power modules shipped separately. To be installed onsite to reach the ordered UPS rating[43]	Number of extra power modules that can be installed to increase the UPS rating to 1250 kW (maximum)[43]
GVXL0K1250HS	714	2150	1410	1160	0	0[44]	10[44]
GVXL500K1250HS	926	2150	1410	1160	4	0	6
GVXL625K1250HS	926	2150	1410	1160	4	1	5
GVXL750K1250HS	926	2150	1410	1160	4	2	4
GVXL875K1250HS	926	2150	1410	1160	4	3	3
GVXL1000K1250HS	926	2150	1410	1160	4	4	2
GVXL1125K1250HS	926	2150	1410	1160	4	5	1
GVXL1250KHS	926	2150	1410	1160	4	6	0

Non-Scalable UPS Models

Commercial reference	Weight kg	Height mm	Width mm	Depth mm	Number of power modules preinstalled in the UPS	Number of power modules shipped separately. To be installed onsite to reach the ordered UPS rating[43]	Number of extra power modules that can be installed to increase the UPS rating to 1250 kW (maximum)[43]
GVXL600K600HS	926	2150	1410	1160	4	1	0[45]

Power Module Shipping Weights and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
1xGVPM125KH	74	310	660	850
6xGVPM125KH on common pallet[46]	485	1090	1360	870

(43) See Power Module Shipping Weights and Dimensions, page 62 for shipping weight and dimensions for the separately shipped power module.
(44) A minimum of four power modules must be ordered separately for GVXL0K1250HS.
(45) GVXL600K600HS is limited to 600 kW rating with a minimum of five power modules installed.
(46) For an order of six power modules, the six power modules will be shipped together on one large pallet.

UPS Weights and Dimensions

Scalable UPS Models

UPS rating	Weight kg	Height mm	Width mm	Depth mm
500 kW	851	1970	1200	1000
625 kW	904	1970	1200	1000
750 kW	957	1970	1200	1000
875 kW	1010	1970	1200	1000
1000 kW	1063	1970	1200	1000
1125 kW	1116	1970	1200	1000
1250 kW	1169	1970	1200	1000

Non-Scalable UPS Models

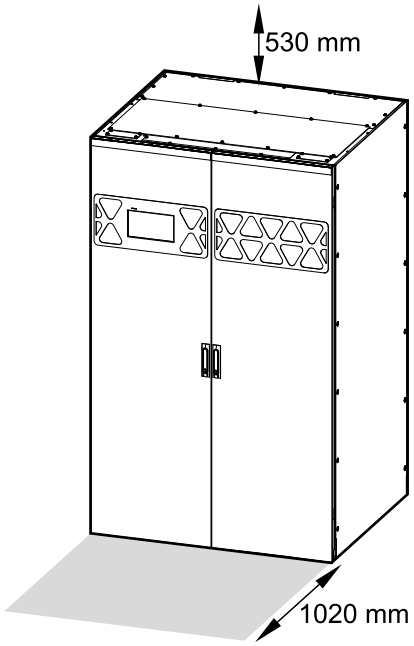
UPS rating	Weight kg	Height mm	Width mm	Depth mm
600 kW	904	1970	1200	1000

Power Module Weights and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
GVPM125KH	54	130	560	740

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.



Environment

	Operating	Storage
Temperature	0 °C to 40 °C without load derating. 40 °C to 50 °C when derated to 75% power.	-25 °C to 55 °C for systems without batteries.
Relative humidity	5-90% non-condensing	0-95% non-condensing
Elevation	Designed for operation in 0-3000 m elevation. Derating required from 1000-3000 m with forced air cooling: 0 to 1000 m: 1.000 1000 to 1500 m: 0.975 1500 to 2000 m: 0.950 2000 to 2500 m: 0.925 2500 to 3000 m: 0.900	
Audible noise one meter from unit	69 dB at 70% load 78 dB at 100% load **NOTE:** The noise level can be higher during charging/battery operation. Use appropriate hearing protection per local regulations.	
Protection class	IP20	
Color	RAL 9003, gloss level 85%	

Heat Dissipation in BTU/hr

500 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	12 799	13 225	13 652	3 413	2 986	3 413
50% load	22 184	22 184	22 184	5 119	4 266	4 266
75% load	34 556	33 276	33 276	6 399	5 119	6 399
100% load	51 195	47 782	47 782	8 532	6 826	8 532

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	5 973	5 546	6 399	15 785	15 785	16 212
50% load	7 679	6 826	6 826	28 157	28 157	28 157
75% load	8 959	7 679	8 959	44 795	44 795	44 795
100% load	10 239	10 239	10 239	68 259	66 553	66 553

600 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	15 870	16 382	16 894	4 096	4 096	4 096
50% load	25 597	26 621	26 621	6 143	6 143	6 143
75% load	39 932	41 468	39 932	9 215	7 679	7 679
100% load	59 386	59 386	57 338	12 287	10 239	10 239

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	7 167	6 143	9 727	18 430	18 430	19 454
50% load	9 215	8 191	10 239	32 765	31 741	33 788
75% load	10 751	10 751	12 287	53 754	50 683	53 754
100% load	14 334	12 287	14 334	81 911	77 816	79 863

625 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	15 998	16 532	17 065	4 266	3 733	3 733
50% load	26 664	27 730	26 664	6 399	6 399	5 333
75% load	43 195	43 195	39 996	9 599	7 999	7 999
100% load	63 993	61 860	59 727	12 799	10 666	10 666

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	6 933	5 866	8 532	19 731	19 731	21 331
50% load	9 599	8 532	9 599	35 196	35 196	36 263
75% load	11 199	11 199	11 199	55 994	55 994	57 594
100% load	14 932	14 932	14 932	85 324	85 324	87 457

750 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	19 198	20 478	19 838	4 480	4 480	4 480
50% load	31 997	33 276	33 276	7 679	7 679	7 679
75% load	51 834	51 834	49 915	11 519	9 599	9 599
100% load	79 352	74 232	71 672	15 358	12 799	12 799

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	8 319	8 319	8 319	23 677	23 677	24 317
50% load	11 519	11 519	12 799	42 235	42 235	42 235
75% load	13 439	13 439	13 439	67 193	69 113	65 273
100% load	17 918	17 918	17 918	102 389	102 389	99 829

875 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	22 398	23 891	23 144	5 226	5 226	5 226
50% load	38 823	38 823	38 823	8 959	8 959	8 959
75% load	60 474	58 234	58 234	13 439	11 199	11 199
100% load	92 577	86 604	83 618	17 918	14 932	14 932

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	9 706	9 706	9 706	29 117	27 624	29 117
50% load	13 439	11 945	13 439	52 261	49 275	50 768
75% load	15 678	15 678	15 678	82 871	78 392	80 631
100% load	20 904	20 904	20 904	125 427	116 468	119 454

1000 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	26 451	27 304	27 304	5 973	5 973	5 973
50% load	44 369	44 369	44 369	10 239	10 239	10 239
75% load	71 672	69 113	66 553	15 358	12 799	15 358
100% load	105 802	102 389	95 563	20 478	17 065	20 478

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	11 092	9 386	11 092	30 717	31 570	32 423
50% load	15 358	11 945	13 652	56 314	56 314	56 314
75% load	17 918	17 918	17 918	89 590	89 590	89 590
100% load	23 891	23 891	23 891	136 519	136 519	133 106

1125 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	29 757	29 757	30 717	6 719	6 719	6 719
50% load	51 834	49 915	49 915	11 519	11 519	11 519
75% load	80 631	77 752	77 752	17 278	17 278	17 278
100% load	122 867	115 188	111 348	23 038	23 038	23 038

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	12 479	11 519	11 519	34 556	34 556	36 476
50% load	17 278	15 358	15 358	63 353	61 433	63 353

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
75% load	20 158	20 158	20 158	103 669	97 910	100 789
100% load	30 717	26 877	26 877	153 584	149 744	153 584

1250 kW

	Normal operation			ECO mode		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	33 063	33 063	34 130	7 466	6 399	6 399
50% load	57 594	57 594	55 461	10 666	10 666	10 666
75% load	89 590	83 191	83 191	15 998	15 998	15 998
100% load	136 519	132 253	123 720	25 597	21 331	21 331

	eConversion			Battery operation		
Voltage (V)	**380**	**400**	**415**	**380**	**400**	**415**
25% load	11 732	13 865	12 799	36 263	39 462	38 396
50% load	14 932	17 065	17 065	66 126	70 392	68 259
75% load	22 398	19 198	19 198	108 788	111 988	108 788
100% load	29 863	25 597	25 597	170 648	170 648	166 382

Airflow Values

Indicative Airflow Values in m³/Hour Based on a 30 °C Environment in Double Conversion Mode

UPS rating	500 kW	600 kW	625 kW	750 kW	875 kW	1000 kW	1125 kW	1250 kW
50% load	3249	3693	3774	4300	4826	5352	5877	6403
75% load	4196	4800	4959	5722	6484	7247	8010	8772
90% load	4888	5605	5823	6758	7694	8629	9565	10 500
100% load	5400	6201	6463	7526	8590	9653	10 717	11 780

Indicative Airflow Values in m³/Hour Based on a 40 °C Environment in Double Conversion Mode

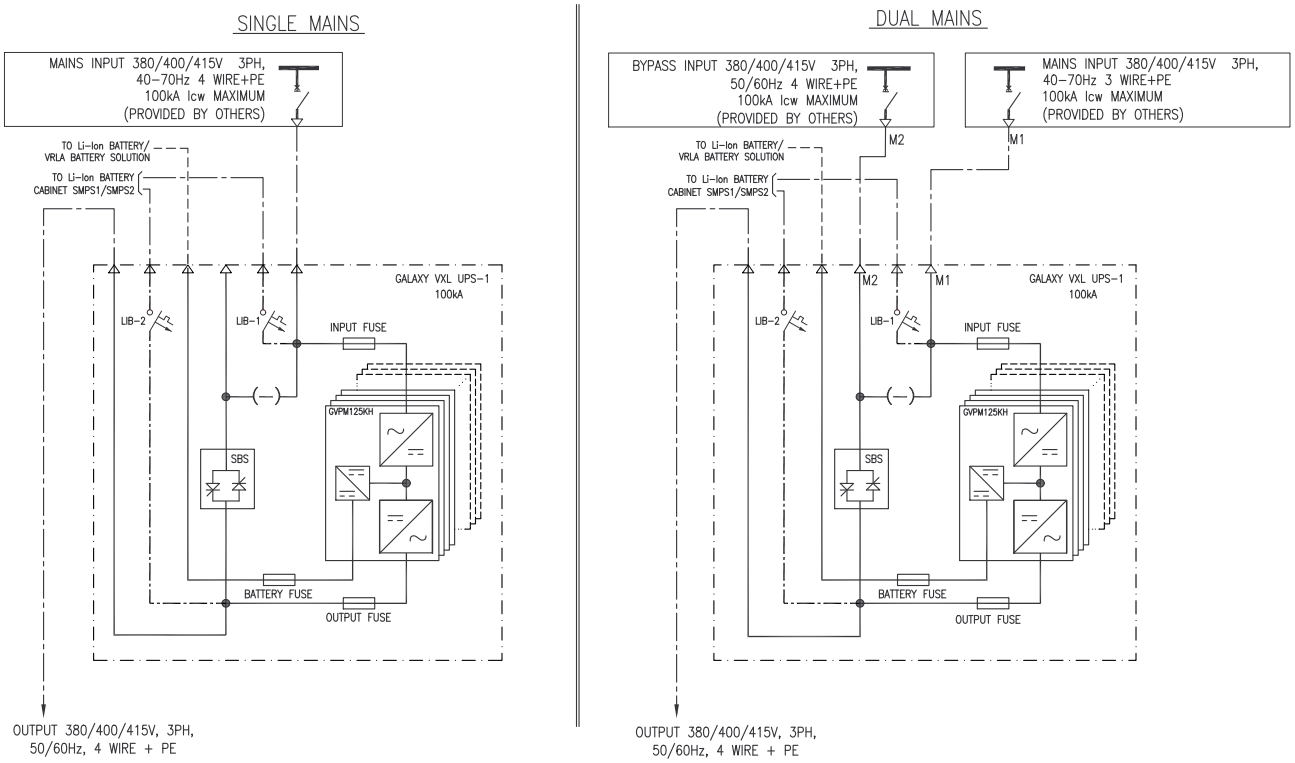
UPS rating	500 kW	600 kW	625 kW	750 kW	875 kW	1000 kW	1125 kW	1250 kW
50% load	3587	4037	4202	4817	5432	6047	6662	7277
75% load	4691	5244	5582	6473	7364	8255	9146	10 037
90% load	5483	6109	6572	7661	8750	9839	10 928	12 017
100% load	6071	6745	7307	8543	9779	11 015	12 251	13 487

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.

Galaxy VXL 500-1250 kW UPS



Options

Configuration Options

- AI load tolerant UPS – tested and validated(47)
- eConversion mode
- Compact design, high density technology, and modular architecture
- Replacement of power module in any operation mode (Live Swap)(48)
- Single or dual mains
- Up to 4+0 UPSs in parallel for capacity
- Up to 4+1 UPSs in parallel for redundancy
- Default top cable entry
- EcoStruxure IT compatible
- Generator compatible
- Touchscreen LCD
- ECO mode

(47) See more details here: https://www.se.com/ww/en/download/document/GALAXY_AILOADTOLERNT_APPN_EN.
(48) In all systems that live up to the prerequisites for Live Swap.

Hardware Options

NOTE: All hardware options listed here may not be available in all regions.

Power Module

- Galaxy VXL UPS 125 kW power module, 400 V (GVPM125KH)

Lithium-ion Battery Cabinet

Battery cabinet including Lithium-ion batteries and battery breaker.

- Galaxy Lithium-ion battery cabinet IEC with 16 x 2.04 kWh battery modules (LIBSESMG16IEC)
- Galaxy Lithium-ion battery cabinet IEC with 17 x 2.04 kWh battery modules (LIBSESMG17IEC)
- Galaxy Lithium-ion battery communication cable, 25 m (LIBSEOPT001)

Empty Battery Cabinets

Empty battery cabinet for use with third party batteries. Battery breaker kit is required (sold separately).

- Empty battery cabinet, 1100 mm wide for Galaxy ranges (GVEBC11)
- Empty battery cabinet, 1500 mm wide for Galaxy ranges (GVEBC15)

Battery Breaker Kit

Battery breaker kit for use with empty battery cabinets or third party battery solutions.

- Battery breaker kit 630 A, EL (GVBBK630EL)

Battery Breaker Box

Wall mounted battery breaker box for use with third party battery solutions.

- Battery breaker box with one 630 A DC breaker (GVBBB630EL-1CB)
- Battery breaker box with two 630 A DC breakers (GVBBB630EL-2CB)
- Battery breaker box with three 630 A DC breakers (GVBBB630EL-3CB)

Remote Centralized Display

- Remote Centralized Display (GVLOPT007)

Optional Installation Kits

- Galaxy VXL seismic kit for UPS (GVXLOPT002)
- Galaxy VXL breaker kit for AC power supply of external Lithium-ion BMS (GVXLOPT004)

- Parallel communications kit for Galaxy VL/VXL (GVLOPT006)

Optional Network Management Card

- Network management card LCES2 with Modbus, Ethernet and AUX sensors (AP9644)

Air Filter

- Galaxy VXL air filter kit, 4 pieces (GVXLOPT007)

Temperature Sensors

- Temperature sensor for network management card (AP9335T)
- Temperature/humidity sensor for network management card (AP9335TH)

Weights and Dimensions for Options

NOTE: Not all options listed here are available for all UPS models. Refer to the hardware options list for the relevant UPS model.

Battery Breaker Box Shipping Weights and Dimensions

Commercial reference	Weight kg	Height mm[(49)]	Width mm	Depth mm
GVBBB630EL-1CB	40	560	800	1200
GVBBB630EL-2CB	72	560	1000	1200
GVBBB630EL-3CB	82	560	1000	1200

Battery Breaker Box Weights and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
GVBBB630EL-1CB	35	800	500	280
GVBBB630EL-2CB	66	1000	750	280
GVBBB630EL-3CB	76	1000	750	280

Empty Battery Cabinet Shipping Weight and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
GVEBC7	205	2100	930	970
GVEBC11	250	2100	1330	970
GVEBC15	405	2120	1700	1000

Empty Battery Cabinet Weight and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
GVEBC7	190	1970	700	850
GVEBC11	230	1970	1100	850
GVEBC15	390	1970	1500	854

Battery Breaker Kit Shipping Weights and Dimensions

Commercial reference	Weight kg	Height mm[(49)]	Width mm	Depth mm
GVBBK630EL	15	560	500	800

(49) The product is packaged in a horizontal position, so the shipping height and depth dimensions differ from the product itself.

Battery Breaker Kit Weights and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
GVBBK630EL	12	520	290	240

Galaxy Lithium-ion Battery Cabinet Shipping Weights and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
LIBSESMG10IEC	211	2150	1200	800
LIBSESMG13IEC	211	2150	1200	800
LIBSESMG16IEC	211	2150	1200	800
LIBSESMG17IEC	211	2150	1200	800
LIBSMG95MODA LIBSMG95MODB	17	215	485	297

NOTE: The battery cabinets are shipped without batteries. The battery modules are shipped separately per the chosen configuration with 10, 13, 16, or 17 battery modules.

Galaxy Lithium-ion Battery Cabinet Weights and Dimensions

Commercial reference	Weight kg	Height mm	Width mm	Depth mm
LIBSESMG10IEC	355	1970	650	587
LIBSESMG13IEC	415	1970	650	587
LIBSESMG16IEC	470	1970	650	587
LIBSESMG17IEC	490	1970	650	587

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One-Year Factory Warranty

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