



by Schneider Electric

# Addendum Hardwire Instructions Smart-UPS™ On-Line SRT8K/SRT10K Tower/Rack-Mount 6U

## Safety Messages

Read the instructions carefully to become familiar with the equipment before attempting to install, operate, service or maintain the UPS. The following special 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.

### CAUTION

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

### *Notice*

**NOTICE** addresses practices not related to physical injury including certain environmental hazards, potential damage or loss of data.

## Safety and General Information

- Adhere to all national and local electrical codes.
- All wiring must be performed by a qualified electrician.
- Changes and modifications to this unit not expressly approved by APC could void the warranty.
- This unit is intended only for indoor use in a controlled environment.
- Do not operate this unit in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Be sure the air vents on the unit are not blocked. Allow adequate space for proper ventilation.
- The equipment is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.
- Additional safety information can be found in the Safety Guide supplied with this unit.

### Deenergizing safety

The UPS contains internal batteries and may present a shock hazard even when disconnected from the branch circuit (mains). Before installing or servicing the equipment verify that the:

- Mains circuit breaker is in the **OFF** position.
- Internal UPS batteries are removed.
- XLBP battery modules are disconnected.

## Electrical safety

- For models with a hardwired input, the connection to the branch circuit (mains) must be performed by a qualified electrician.
- 230 V models only: In order to maintain compliance with the EMC directive for products sold in Europe, output cords attached to the UPS must not exceed 10 meters in length.
- The protective earth conductor for the UPS carries the leakage current from the load devices (computer equipment). An insulated ground conductor is to be installed as part of the branch circuit that supplies the UPS. The conductor must have the same size and insulation material as the grounded and ungrounded branch circuit supply conductors. The conductor will typically be green and with or without a yellow stripe.
- The UPS input ground conductor must be properly bonded to protective earth at the service panel.
- If the UPS input power is supplied by a separately derived system, the ground conductor must be properly bonded at the supply transformer or motor generator set.

## Hardwire safety

- Verify that all branch circuit (mains) and low voltage (control) circuits are deenergized, and locked out before installing cables or making connections, whether in the junction box or to the UPS.
- Wiring by a qualified electrician is required.
- Check national and local codes before wiring.
- Strain relief is required for all hardwiring (not supplied).
- All openings that allow access to UPS hardwire terminals must be covered. Failure to do so may result in personal injury or equipment damage.
- Select wire size and connectors according to national and local codes.

# Specifications

For additional specifications refer to the APC web site, [www.apc.com](http://www.apc.com).

## Electrical

Models	Rating
SRT8KXLT	8 kVA/8 kW
SRT8KRMXLT	
SRT8KXLT-IEC	
SRT8KRMXLT-IEC	
SRT8KXLI	
SRT8KRMXLI	
SRT10KXLT	10 kVA/10 kW
SRT10KRMXLT	
SRT10KXLT-IEC	
SRT10KRMXLT-IEC	
SRT10KXLI	
SRT10KRMXLI	

Output	
Output Frequency	50 Hz/60 Hz $\pm$ 3 Hz
Nominal Output Voltage	SRT8KXLI/SRT8KRMXLI/SRT10KXLI/SRT10KRMXLI: 220Vac/230Vac/240Vac SRT8KXLT/SRT8KRMXLT/SRT10KXLT/SRT10KRMXLT: 208Vac/240Vac SRT8KXLT-IEC/SRT8KRMXLT-IEC/SRT10KXLT-IEC/SRT10KRMXLT-IEC: 208Vac/240Vac
Input	
Input Frequency	40 Hz-70 Hz
Nominal Input Voltage	SRT8KXLI/SRT8KRMXLI/SRT10KXLI/SRT10KRMXLI: 220Vac/230Vac/240Vac SRT8KXLT/SRT8KRMXLT/SRT10KXLT/SRT10KRMXLT: 208Vac/240Vac SRT8KXLT-IEC/SRT8KRMXLT-IEC/SRT10KXLT-IEC/SRT10KRMXLT-IEC: 208Vac/240Vac

# Wiring Specifications

## ⚠ CAUTION

### DAMAGE TO EQUIPMENT OR PERSONNEL

- Adhere to all national and local electrical codes.
- Wiring should be performed by a qualified electrician.
- Strain reliefs are not supplied with the unit. 38.1 mm (1 1/2 in) snap in type strain reliefs are recommended.
- The UPS must be wired into a branch circuit, equipped with a circuit breaker rated as specified in the tables below.
- Actual wire size must comply with required ampacity and national and local electrical codes. Select wire size based on wire insulation, installation method, and environmental conditions.
- Recommended terminal screw torque:
  - 16 mm<sup>2</sup> or 6 AWG = 5.09 Nm (45 lbf-in)
  - 25 mm<sup>2</sup> or 4 AWG = 5.09 Nm (45 lbf-in)
  - 4 mm<sup>2</sup> or 12 AWG = 3.969 Nm (35 lbf-in)

**Failure to follow these instructions can result in equipment damage and minor or moderate injury**

Single Feed						
System	Wiring	Number of Phases	Voltage	Current Full Load (nominal)	External Input Circuit Breaker Mains (typical)	Wire Size Mains (typical)
SRT8KXLT	Input	1	208/240 Vac	47 A	60 A / 2-pole	16 mm <sup>2</sup> or 6 AWG
	Output	1	208/240 Vac	40 A		16 mm <sup>2</sup> or 6 AWG
SRT10KXLT	Input	1	208/240 Vac	56 A	70 A / 2-pole	25 mm <sup>2</sup> or 4 AWG
	Output	1	208/240 Vac	49 A		16 mm <sup>2</sup> or 6 AWG
SRT8KXLI	Input	1	220/230/240 Vac	44 A	63 A / 2-pole	16 mm <sup>2</sup> or 6 AWG
	Output	1	220/230/240 Vac	38 A		16 mm <sup>2</sup> or 6 AWG
	Input	3	380/400/415 Vac	15 A 44 A*	63 A / 4-pole	16 mm <sup>2</sup> or 6 AWG
	Output	1	220/230/240 Vac	38 A		16 mm <sup>2</sup> or 6 AWG
SRT10KXLI	Input	1	220/230/240 Vac	54 A	80 A / 2-pole	25 mm <sup>2</sup> or 4 AWG
	Output	1	220/230/240 Vac	47 A		16 mm <sup>2</sup> or 6 AWG
	Input	3	380/400/415 Vac	18 A 54 A*	80 A / 4-pole	25 mm <sup>2</sup> or 4 AWG
	Output	1	220/230/240 Vac	47 A		16 mm <sup>2</sup> or 6 AWG

\* Phase 1 (L1) current while in bypass mode

<b>Dual Feed</b>								
<b>System</b>	<b>Wiring</b>	<b>Number of Phases</b>	<b>Voltage</b>	<b>Current Full Load (nominal)</b>	<b>External Input Circuit Breaker Mains (typical)</b>	<b>External Input Circuit Bypass Mains (typical)</b>	<b>Wire Size Mains (typical)</b>	<b>Wire Size Bypass (typical)</b>
SRT8KXLI	Input	1	220/230/240 Vac	44 A	63 A / 2-pole	63 A / 2-pole	16 mm <sup>2</sup> or 6 AWG	16 mm <sup>2</sup> or 6 AWG
	Input	3	380/400/415 Vac	15 A	20 A / 4-pole	63 A / 2-pole	4 mm <sup>2</sup> or 12 AWG	16 mm <sup>2</sup> or 6 AWG
	Output	1	220/230/240 Vac	38 A			16 mm <sup>2</sup> or 6 AWG	16 mm <sup>2</sup> or 6 AWG
SRT10KXLI	Input	1	220/230/240 Vac	54 A	80 A / 2-pole	80 A / 2-pole	25 mm <sup>2</sup> or 4 AWG	25 mm <sup>2</sup> or 4 AWG
	Input	3	380/400/415 Vac	18 A	25 A / 4-pole	80 A / 2-pole	4 mm <sup>2</sup> or 12 AWG	25 mm <sup>2</sup> or 4 AWG
	Output	1	220/230/240 Vac	47 A			16 mm <sup>2</sup> or 6 AWG	16 mm <sup>2</sup> or 6 AWG

# Hardwire the UPS

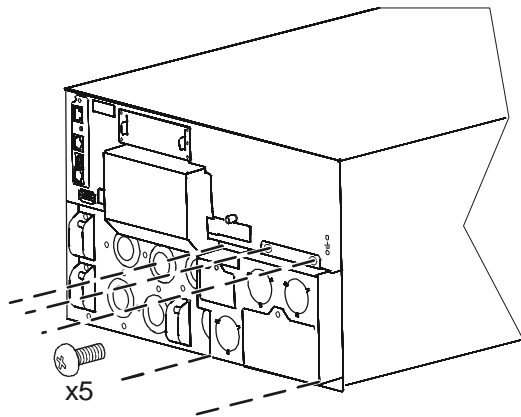
## ⚠ CAUTION

### DAMAGE TO EQUIPMENT OR PERSONNEL

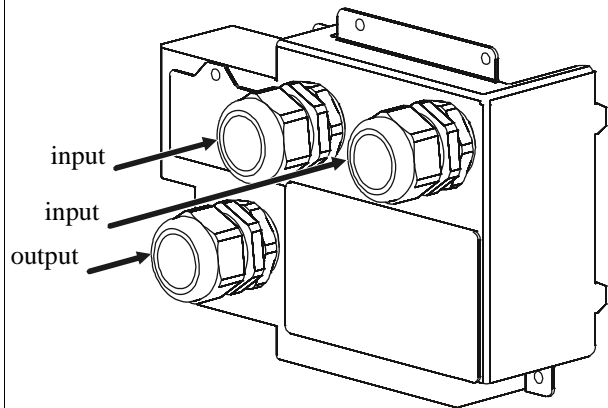
- Disconnect the mains input circuit breaker before installing or servicing the UPS or connected equipment.
- Disconnect internal and external batteries before installing or servicing the UPS or connected equipment.
- The UPS contains internal and external batteries that may present a shock hazard even when disconnected from the mains.
- UPS AC hardwired and pluggable outlets may be energized by remote or automatic control at any time.
- Disconnect equipment from the UPS before servicing any equipment.
- Do not use the UPS as a safety disconnect.
- Install appropriate strain reliefs (not supplied). Snap in type strain reliefs are recommended.
- Strip wire insulation 20 mm (.75 inches) to expose the wire. Secure the exposed wire with the lug.
- The jumpers use T25 Torx screws.
- The terminal blocks use 4 mm, (5/32 inch) Hex screws.

**Failure to follow these instructions can result in equipment damage and minor or moderate injury**

Remove the five #2 Phillips screws that secure the hardwire box to the UPS.  
Pull the hardwire box out of the UPS.



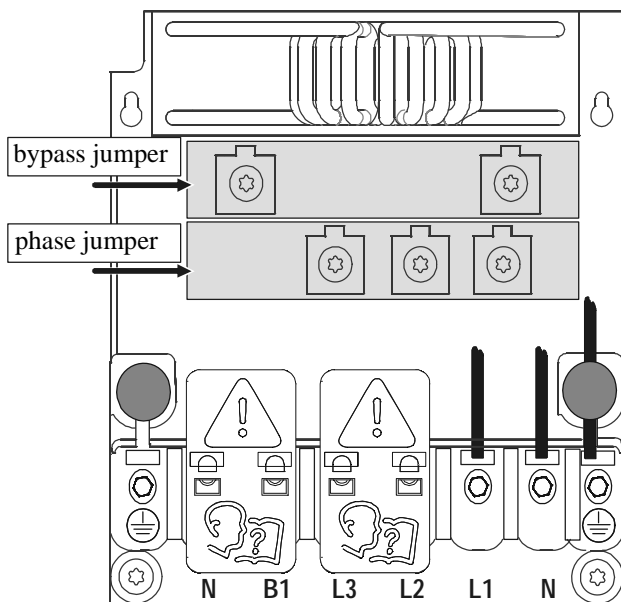
Install strain reliefs (not supplied), for the hardwire configuration that will be used.



## Input hardwire

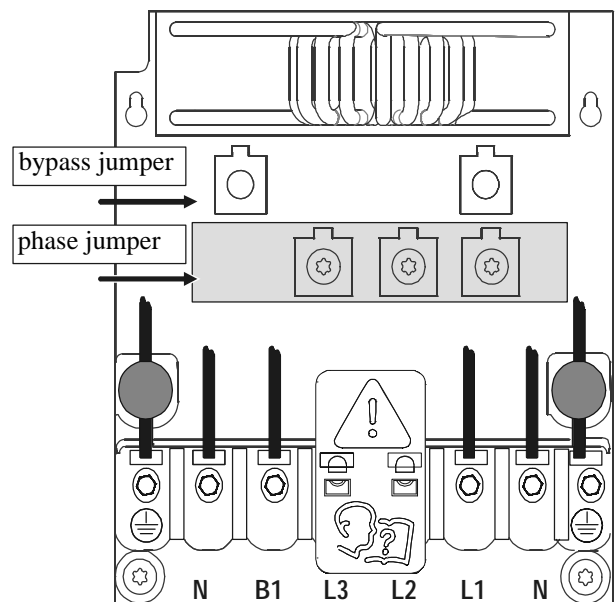
### XLI single phase, single feed

Leave bypass and phase jumpers in place.



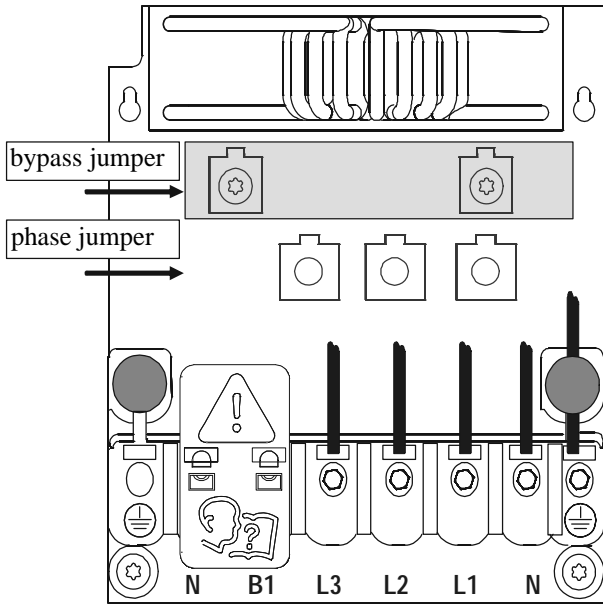
### XLI single phase, dual feed

Remove bypass jumper.



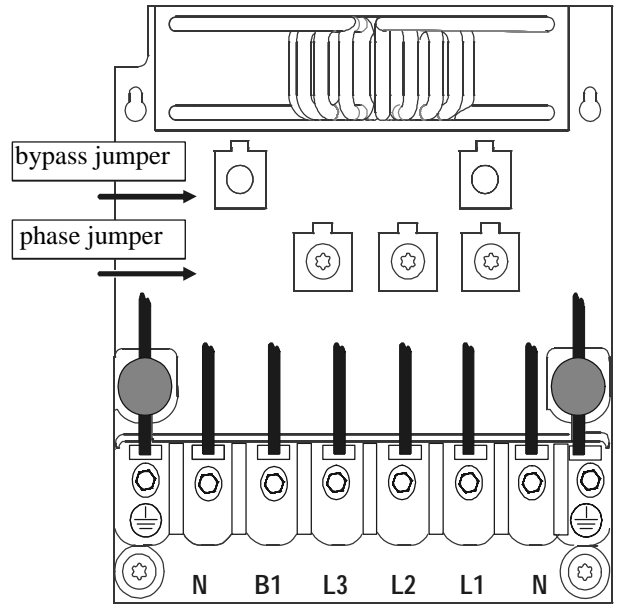
### XLI three phase, single feed

Remove phase jumper.

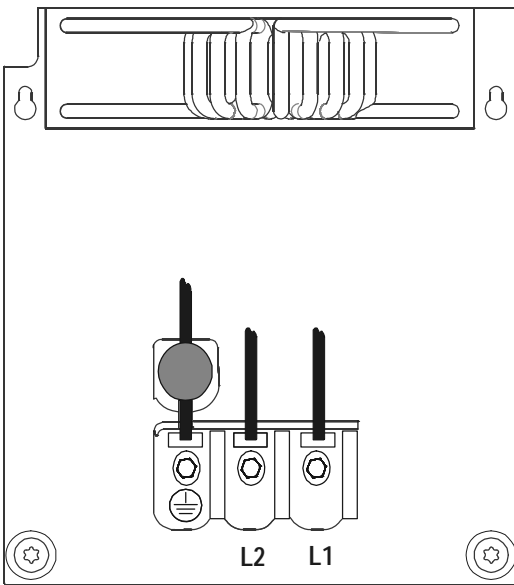


### XLI three phase, dual feed

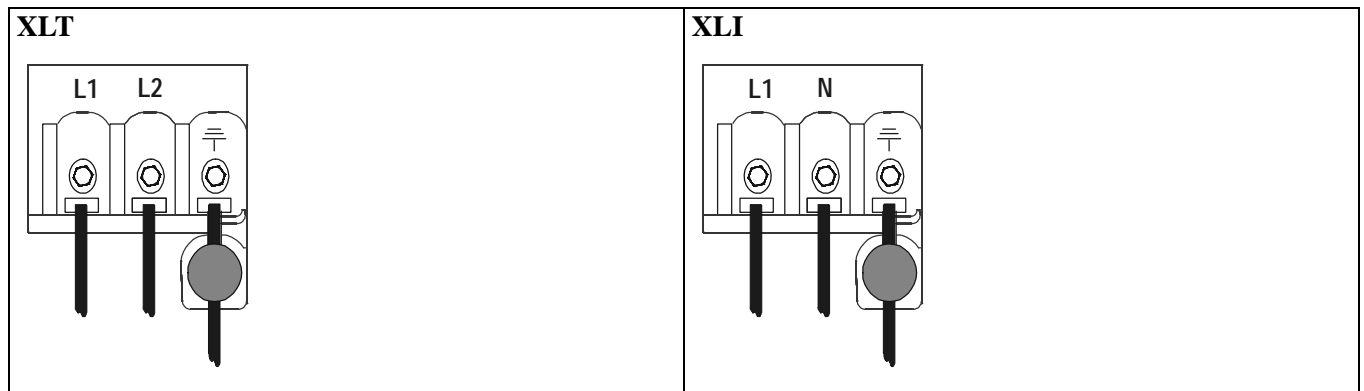
Remove bypass and phase jumpers.



### XLT



## Output hardware



Reinstall the hardware box in the UPS.  
Secure the hardware box with the five screws previously removed.

