

# Pre-installation Manual



CONCEPT 301 LF/401 LF/501 LF

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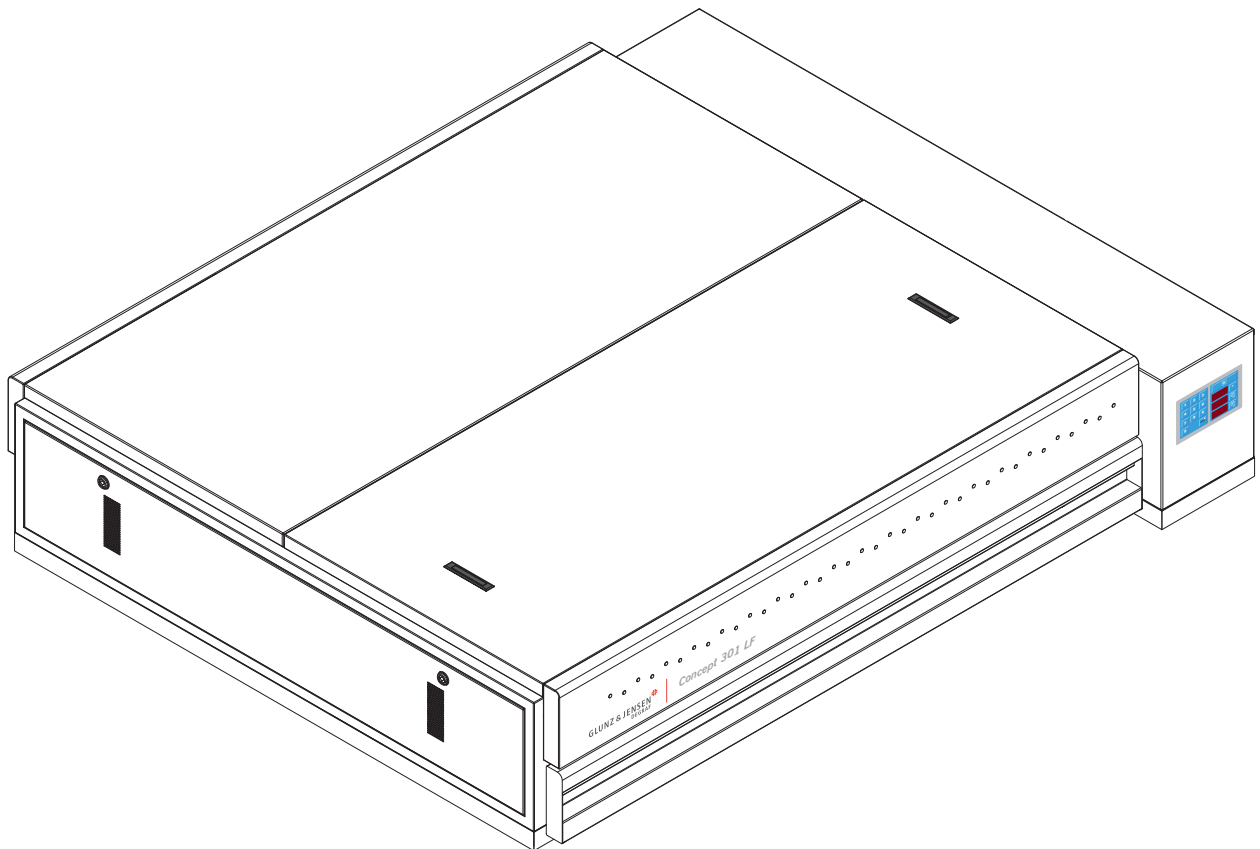
GLUNZ & JENSEN



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## CONCEPT 301 LF/401 LF/501 LF



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# Part 0: Introduction

## Reservations

- This manual was written and illustrated using the best possible information available at the time of publication.
- Any differences between this manual and the unit reflect improvements introduced after the publication of the manual.
- Changes, technical inaccuracies and typographic errors will be corrected in subsequent editions.
- As a part of our policy of continuous improvement, we reserve the right to alter design and specifications without further notice.

## Pre-installation instructions

The instructions in this Pre-installation Manual allow the customer and the Service Technician to prepare the installation site for the unit and for the installation itself.

- Never install the unit in explosive environments.
- It is the responsibility of the owner and operator/s of the unit that the installation is made in accordance with local regulations, and by engineers authorized to carry out plumbing and electrical installations.
- The manufacturer cannot be held responsible for any damage caused by incorrect installation of the unit.



**Only qualified Service Technicians are allowed to unpack and install the unit.**



**When preparing the installation site please take into consideration that this unit is for restricted access locations only!**

## Notes, cautions, and warnings !

Throughout the manual warnings, cautions, and notes are written in bold like the example below:



**Electrical installation must conform to local regulations and guidelines.**

Symbol	Meaning	Explanation
	Note	The operator should observe and/or act according to the information in order to obtain the best possible function of the unit.
	Caution	The operator must observe and/or act according to the information in order to avoid any mechanical or electrical damage to the unit.
	Warning	The operator must observe and/or act according to the information in order to avoid any personal injury.

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# Part 1: Transportation

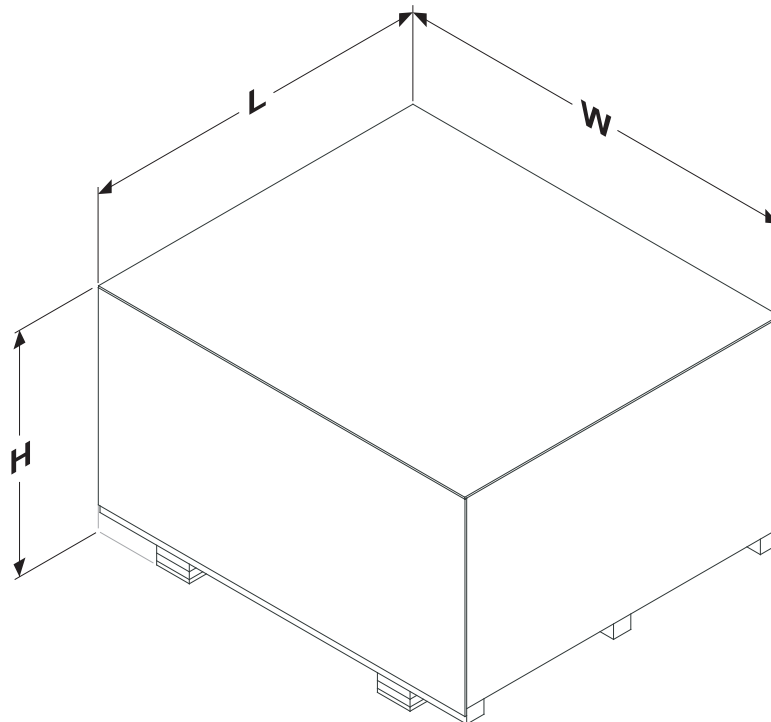
## When the unit arrives

### Storing the unit before installation

The crated unit will usually be delivered some time before the arrival of the Service Technician. In which case you should prepare an appropriate place indoors to store the crated unit.

## The crate

### Dimensions and weight



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	301	401	501
<b>Width (W)</b>	1910 mm (75.2")	2250 mm (88.6")	2670 mm (105.1")
<b>Length (L)</b>	1638 mm (64.5")		1938 mm (76.3")
<b>Height (H)</b>	1117 mm (44")		
<b>Weight, crated</b> (± 5%)	app. 391 kg (862 lb)	app. 650 kg (1433 lb)	app. 750 kg (1654 lb)
<b>Weight, unit</b>	app. 220 kg (485 lb)	app. 320 kg (706 lb)	app. 400 kg (882 lb)

## Checking the crate for damage

Check if the crate is damaged at the time of delivery. Take note of the damage before you allow the Service Technician to unpack the unit. Provide a detailed description or take a photograph of the damage.



Report any damage to the crate to the transport company.

## Handling the crate

The icons on the crate indicate how to handle the crate during transport and storage:



Ensure that the side indicated by the arrows is always up



Handle the crate with care.



Never expose the crate to water, or place it in a high-humidity area.



Do not stack the crates.



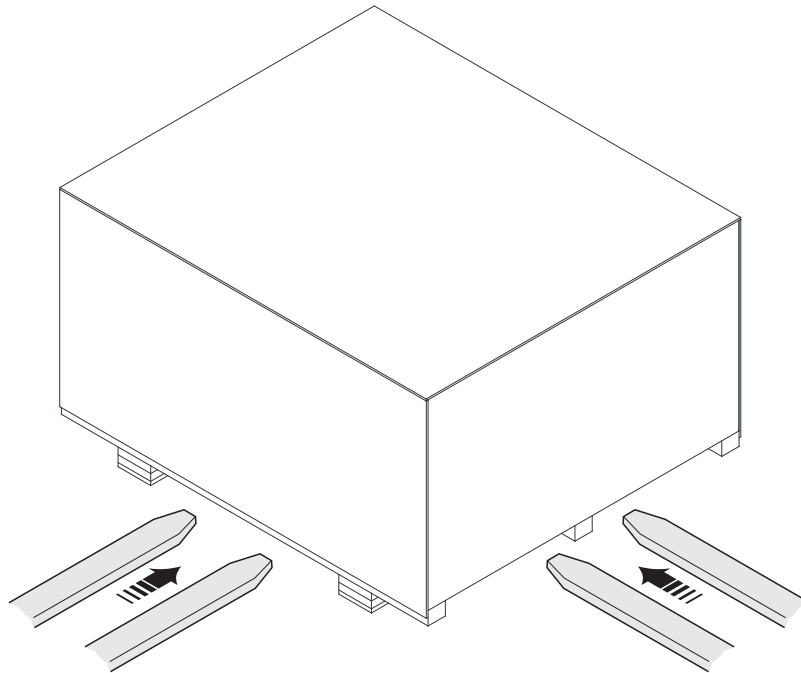
Do not tilt the crate.



## Transporting the unit

### Lifting the crate

The unit is supplied in a wooden crate. The unit is very heavy equipment. To lift the crate a fork-lift truck is required.



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### Available width for transport

Depending on the width of the door(s) through which the unit has to be transported to the installation site, the Service Technician may have to perform the actions described in the table below.

	If width of the door is...	Then...
301	> 1700 mm	No action is required as the crated unit can be transported immediately to the installation site.
	1700 - 1550 mm	The Service Technician has to unpack the unit.
401	> 2100 mm	No action is required as the crated unit can be transported immediately to the installation site.
	2100 - 1550 mm	The Service Technician has to unpack the unit.
501	> 2550 mm	No action is required as the crated unit can be transported immediately to the installation site.
	2550 - 1900 mm	The Service Technician has to unpack the unit.



## Part 2: Installation requirements



This unit must be installed in restricted access locations only.



Check the delivery route to the installation location for necessary clearance and remove all obstructions.

### Environmental requirements

Provide a heating and ventilating system capable of maintaining room temperature between 17 and 28°C (63 and 82°F) and relative humidity on max. 80%.  
For heat emission see "Power consumption" on the page 2-4.

### Accessories to be provided by customer for connections

Customer has to provide power cable according to the requirements on page 2-4.

Hoses for exhausts are delivered with the unit.

### Installation kit

Installation kit is included with the unit. It comprise the parts necessary to make the installation. See Service Manual for installation part list.

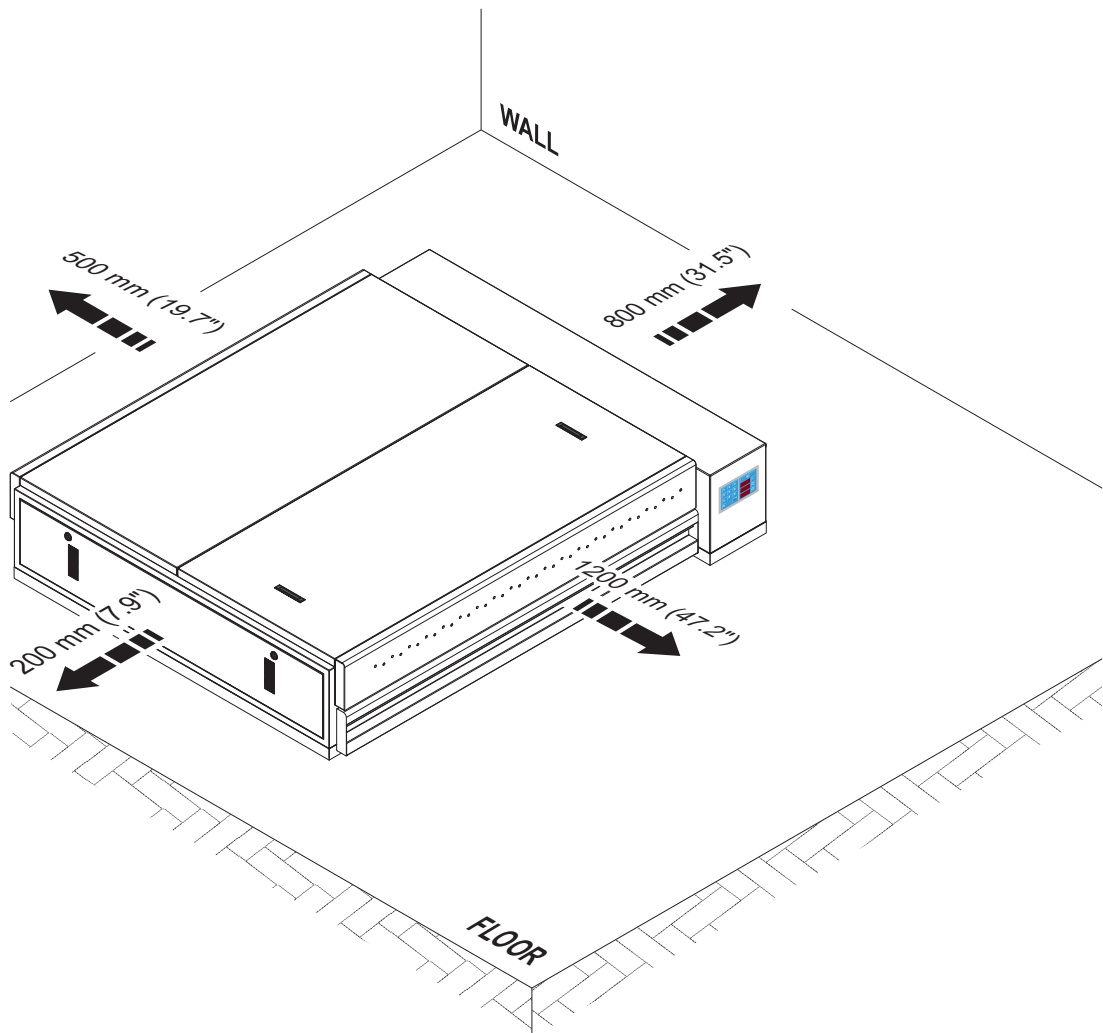
## Space requirements

### Free space around the unit

Decide where the unit shall be placed and make sure that the free space around the unit makes servicing and work possible.

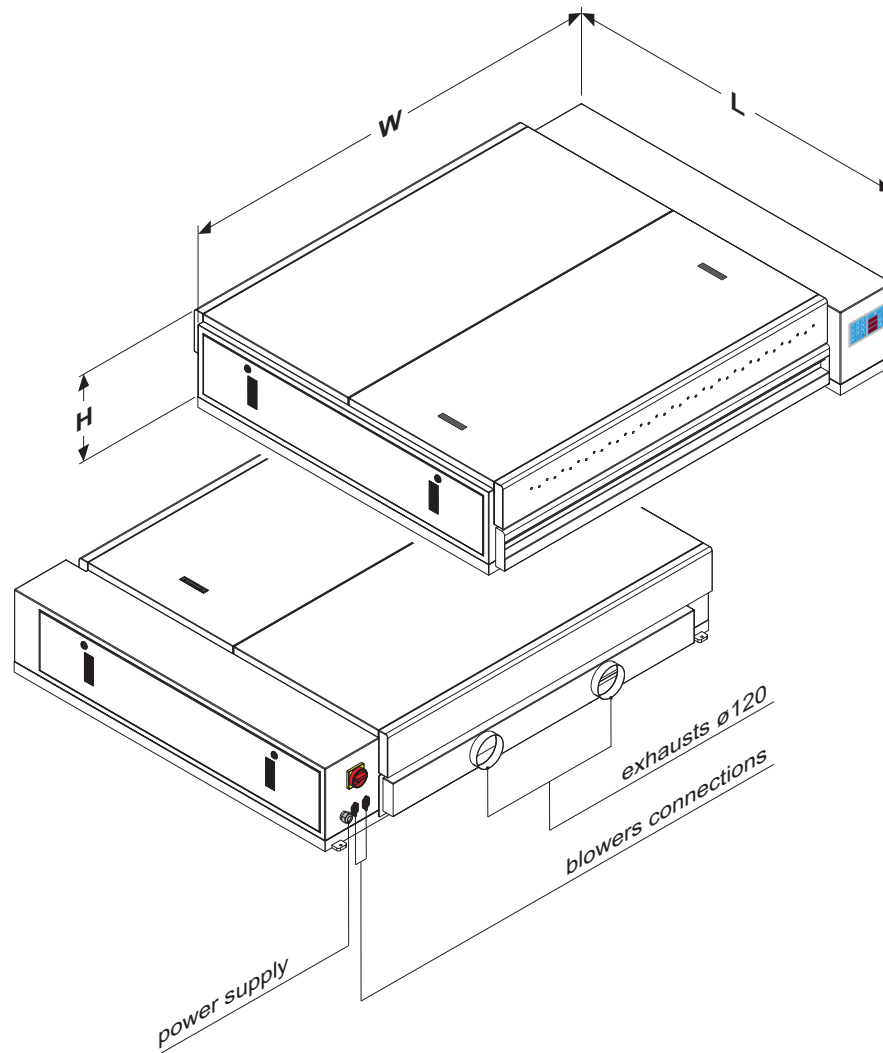
The recommended minimum free space around the unit is:

- 1200 mm (47.2") in front of the unit,
- 500 mm (19.7") at the back of the unit,
- 200 mm (7.9") on the left side of the unit,
- 800 mm (31.5") on the right side of the unit.



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## Unit dimensions and connection locations



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	301	401	501
<b>Width (W)</b>	1735 mm (68.3")	2080 mm (81.9")	2500 mm (98.4")
<b>Length (L)</b>	1470 mm (57.9")		1768 mm (69.6")
<b>Height (H)</b>	355 mm (14.0")		

### Exhaust

Exhausts must be connected to the appropriate location (directly to the outside or to the building exhaust installation).

Make sure that the airflow is correct and minimum exhaust capacity is:

301	401	501
2 × 400 m <sup>3</sup> /h	2 × 800 m <sup>3</sup> /h	2 × 1000 m <sup>3</sup> /h

## Electrical requirements



Electrical installation must conform to local regulations and guidelines.

### Main power connection

The main power connection must be made to the main connector located at the back of the unit.

### Main power outlet

Provide a main power outlet close to the installation site. The table below indicates the applicable power supply types.

### Power supply cable

The power supply table below shows recommended power supply cable for unit.



The conductors in the power supply cable must be of copper. When deciding what type of cable to use take into account the mechanical resistance (operator may step onto cable). Provide for additional cable protection, e.g. cable covers, if cable is exposed to heavier transport such as fork-lift trucks etc.



The unit is Class 1 equipment. Therefore, the unit must be connected to earth to avoid electrical shocks.

## Electrical specifications

### Installation requirements for power supply

	Supply/fuse	Recommended cable type
EUR	3W + N + PE, 400 VAC 301: 3 x 5 Amps, 50-60 Hz 401: 3 x 6 Amps, 50-60 Hz 501: 3 x 8.5 Amps, 50-60 Hz	Min. 5 x 2.5 mm <sup>2</sup> type H07RN-F
US	3W + PE, 230 VAC 301: 3 x 9 Amps, 50-60 Hz 401: 3 x 11 Amps, 50-60 Hz 501: 3 x 15 Amps, 50-60 Hz	Min. 4 x 10 AWG, UL62 listed type S, SJ, SJO or SJT
All	Voltage tolerance ± 10%	

## Fuses



The fuses must have a breaking capacity of min. 100kA.  
If using automatic circuit breakers make sure that they are Type D.

## Power consumption

Power consumption at 230/400 VAC operation:

301	401	501
3200 W	4000 W	5500 W





# Part 3: Pre-installation checklist

Please ask the customer to answer the following questions in order to ensure a trouble-free installation of the unit. Send this completed pre-installation checklist to your regional service coordinator.

<b>1. Delivery of the crate and transport to the installation site</b>	<b>YES</b>	<b>NO</b>
A. Is there a place indoor where the crated unit can be stored temporarily?	<input type="checkbox"/>	<input type="checkbox"/>
B. Is there a fork-lift truck or any other lifting device available?	<input type="checkbox"/>	<input type="checkbox"/>
C. Can the crate be transported directly to the installation site? <i>See minimum width specifications on page 1-3.</i>	<input type="checkbox"/>	<input type="checkbox"/>
D. Is it sufficient to unpack the unit before it is transported to the installation site? <i>See minimum width specifications on page 1-3.</i>	<input type="checkbox"/>	<input type="checkbox"/>
E. Are there other factors (stairs, elevators, corners, obstacles, etc.) which should be taken into account when transporting the crate or unit?	<input type="checkbox"/>	<input type="checkbox"/>
If so, explain: .....		
.....		
.....		
.....		

<b>2. Power supply</b>	<b>YES</b>	<b>NO</b>
A. Make a note of the present supply specifications: No. of Phases .....      Voltage ..... V      Fused by ..... Amps Neutral Wire? .....      Earth Wire? .....      Frequency ..... Hz		
B. Has a connection box been provided to connect the unit to the mains?	<input type="checkbox"/>	<input type="checkbox"/>
C. Is the customer aware that he/she should provide (or order) power cable necessary to connect the unit to the mains?	<input type="checkbox"/>	<input type="checkbox"/>
D. Is there a house electrician available?	<input type="checkbox"/>	<input type="checkbox"/>
E. Are there any known problems in the building where the unit will be installed?	<input type="checkbox"/>	<input type="checkbox"/>
If so, explain: .....		
.....		
.....		
.....		
.....		

**3. Connections****YES NO**

- |  |                          |                          |
|--|--------------------------|--------------------------|
| A. Capacity of air condition/ventilation adequate with regard to power consumption as specified on page 2-4? | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Is there an exhaust system available?   | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Can hoses (ø120) be connected to the exhaust system?  | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Availability of warm water for cleaning of the unit?  | <input type="checkbox"/> | <input type="checkbox"/> |

**4. Comments and questions**

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**5. Disposition of the various supplies and equipment on the installation site**