



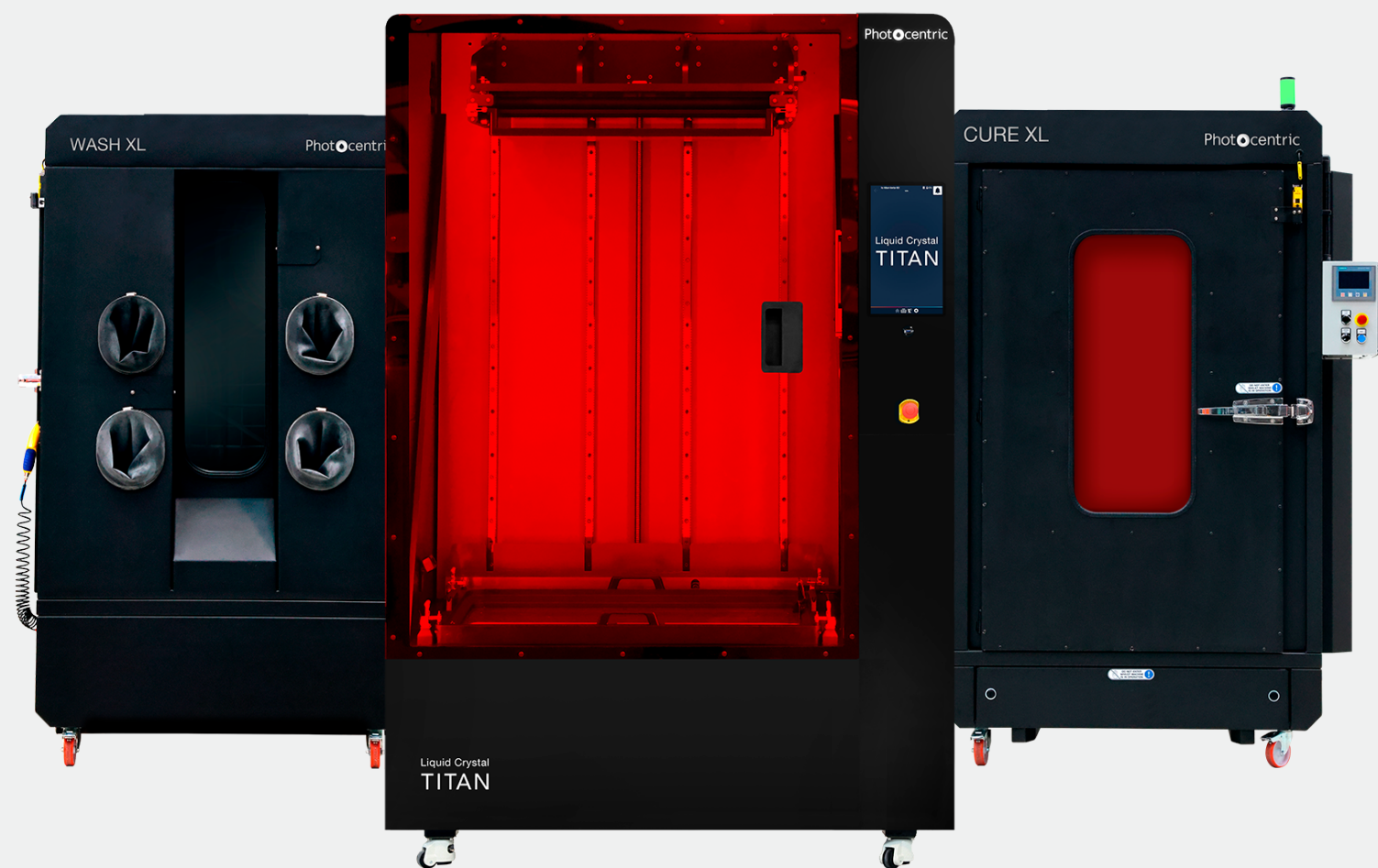
Liquid Crystal
TITAN



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Photo**centric**

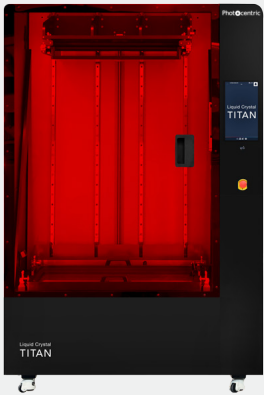
Prerequisite Installation



Photo**centric**

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LC Titan Workflow Installation/Commissioning Prerequisites

Workflow Installation:

- Forklift: Make sure you have access to a forklift which is capable of lifting 1000 kg:
Titan Printer - Crate: 135 x 175 x 245cm. Net: 800 kg Gross (Inc packaging & crate): 935 kg
Wash XL - Crate: 200 x 200 x 245cm Net: 865 kg Gross (Inc packaging & crate): 1000 kg
Cure XL - Crate: 200 x 200 x 245cm Net: 865 kg Gross (Inc packaging & crate): 1000 kg
- Unpacking: Required tools for removing the units from the crates: Drill, T25 & 4mm Allen key.
- Powering the LC Titan Workflow: To power the LC Titan complete workflow from a 208V 3-phase input with a Y (wye) output wired for single-phase 230V and 3-phase 400-415V, use the 30KVA step-up transformer. This transformer can supply power for all three units with an output power of 108A. [Link to transformer](#)
- Continuous air supply: A minimum 2 bar (29 psi) and a maximum 10 bar.
*Please source the 10mm OD tubing, lengthwise, depending on the set-up.
*A quick-fit connector attachment to the printer is supplied in the accessories box.
*Please confirm how the air supply is provided to the printer.
(Centralized Buildings Main Air System or through a stand-alone compressor)
If you don't have a Main compressor, the recommendation is added. [Link to air compressor](#)
- Operating temperatures should be between 20 - 25°C
- Extraction: Spigot ports should be either filtered or extracted externally. [Link to filtered extraction](#)
- More information regarding Titan, Wash and Cure XL. [Link to Resource Hub](#)

	Titan Workflow Power Consumption					Average Consumption	Idle
		L1	L2	L3	Total		
Cure XL	kW	2.40	2.95	3.37	8.72	8.7208	0.3
	A	5.79	7.11	8.12	21.01	N/A	N/A
	V	415.00	415.00	415.00		N/A	N/A
Titan	kW	3.38			3.38	1.04	0.2
	A	14.70			14.70		
	V	230.00	230.00	230.00			
Wash XL	kW		0.50		0.50	0.5	0.2
	A	.	2.17		2.17		
	V	230.00	230.00	230.00			
Total	kW	5.78	3.45	3.37	95		
	A	20.48	9.28	8.12	37.88		

*Contact Photocentric for more information



LC Titan

- Electrical supply: 230VAC/32A with 3-pin (L+N+E) socket conforming to IEC 309 and EN 60309- 1/2 /BS4343.
- Continuous air supply of a minimum 2 bar (29 psi) and maximum 6 bar (87psi)



Wash XL

- Wash unit with an IBC full of resin cleaner.
Empty IBC (1000 Kg) for wastewater/resin cleaner (lid diameter should be 150mm)
*Please source this locally before the Installation Visit gets scheduled.
- Electrical supply: 230VAC/32A with 3-pin (L+N+E) socket conforming to IEC 309 and EN 60309- 1/2 /BS4343.
- Continuous air supply of minimum 6 bar (87psi) and Max is 10 bar with a 10mm OD tubing.
- Continuous warm water supply (Warm <35°C with 1/2in ID hose) to be made available.



Cure XL

- Electrical supply: 400-415VAC/32A with 5-pin (3P+N+E) socket conforming to IEC 309 and EN 60309-1/2/BS4343.



Laptop/Computer Spec for Voxel Dance:

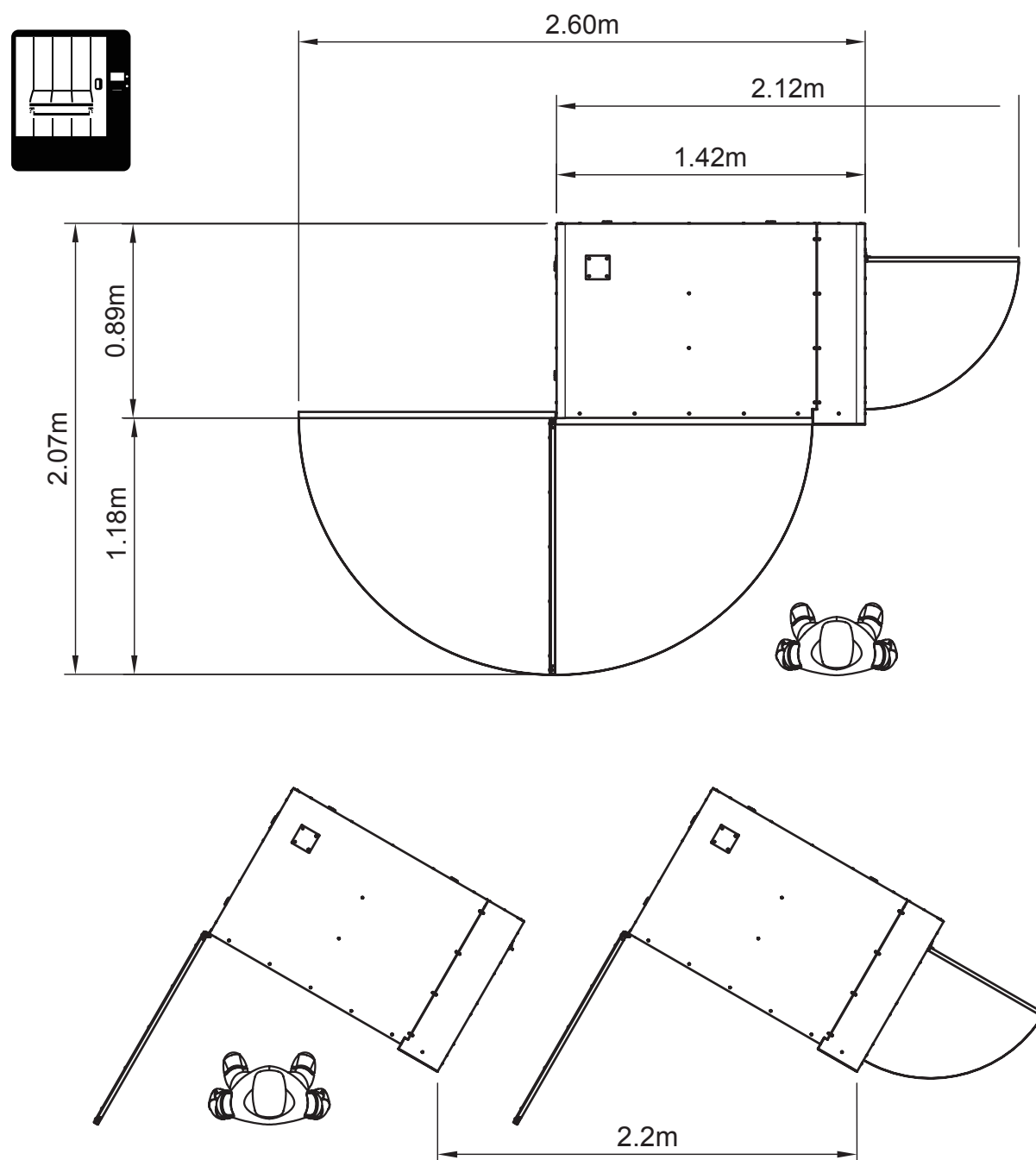
Please confirm if a system with the below Spec is available.

- 1.CPU:**
Intel: 12th Generation Intel Core processors i5/i7/i9 or higher
AMD: Ryzen7 5700 or higher
- 2. Memory:** 16GB DDR4 or higher (64GB is recommended)
- 3. Storage:** SSD, 10GB of free disk space or higher
- 4. Display Resolution:**
1920x1080 or higher, 2560 x1440 is recommended
- 5. Video Card**
NVIDIA: GeForce RTX 3060 6GB of memory or better
AMD: Radeon RX 5700 XT 8GB of memory or better

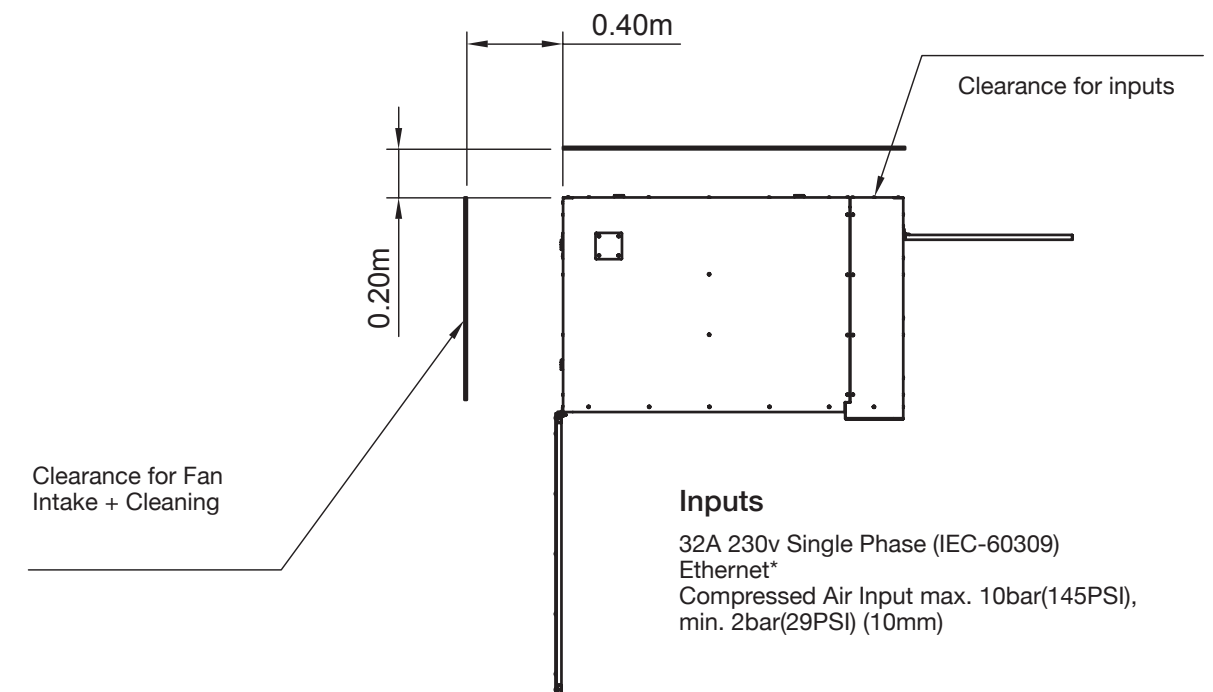
Note: Any Intel GPU chipsets is not supported.



LC Titan - Dimension and Layout Drawing



If positioning multiple Liquid Crystal Titan Machines, we recommend angling them at 30 degrees and spacing the machines at 2.2m intervals. This allows access to the print chamber, resin dosing system, and affords space for cooling air intake/exhaust with minimal use of floor space.



Extraction ports should be either filtered or externally extracted. Contact Photocentric for information on recommended BOFA fume extraction systems.

Liquid Crystal Titan should ideally be located in a low-light environment. Red or Orange lighting or filters that block light in the UV to 550nm range can be employed for visibility without risk of curing resin.

There should be space around the machine as detailed above for optimum performance and access to the print chamber, resin dosing system, and cooling fans.

The door should be able to open between 90 and 180 degrees to allow access for the platform handler.

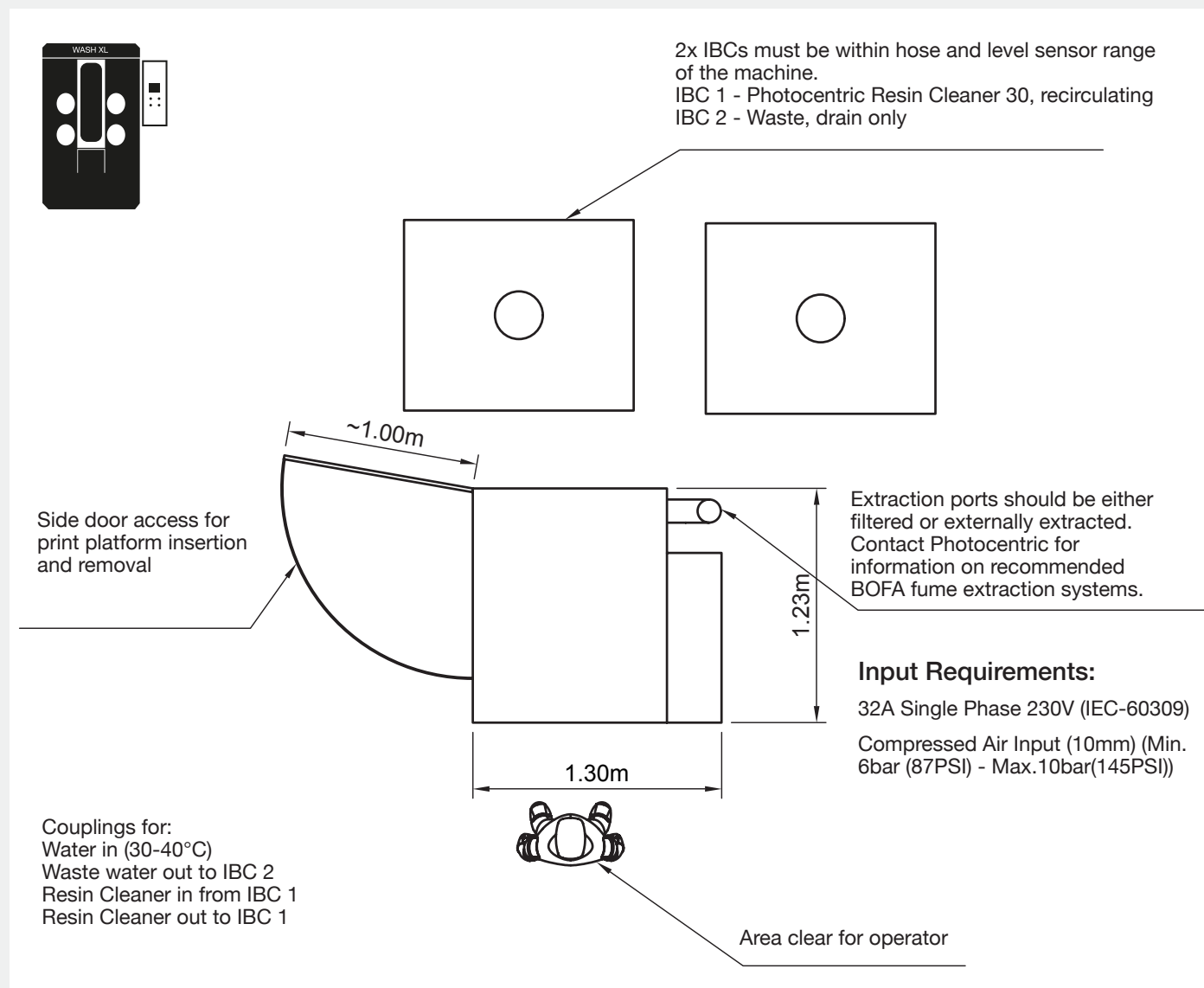
Wash and cure units should be positioned close to the printer(s).

Multiple machines can be positioned as detailed on the left to maximise use of available space.

**Option for either Wi-fi or Ethernet networking*



Photocentric Wash XL - Dimension and Layout Drawing

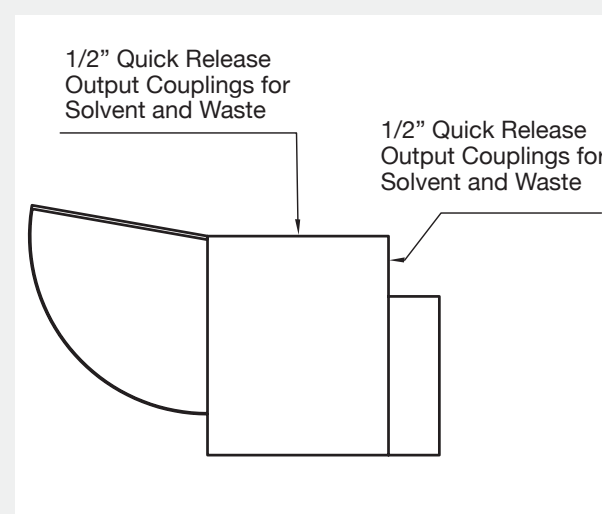


Photocentric Wash XL should ideally be located in a low-light environment. Red or Orange lighting or filters that block light in the UV - 550nm range can be employed for visibility without risk of curing resin.

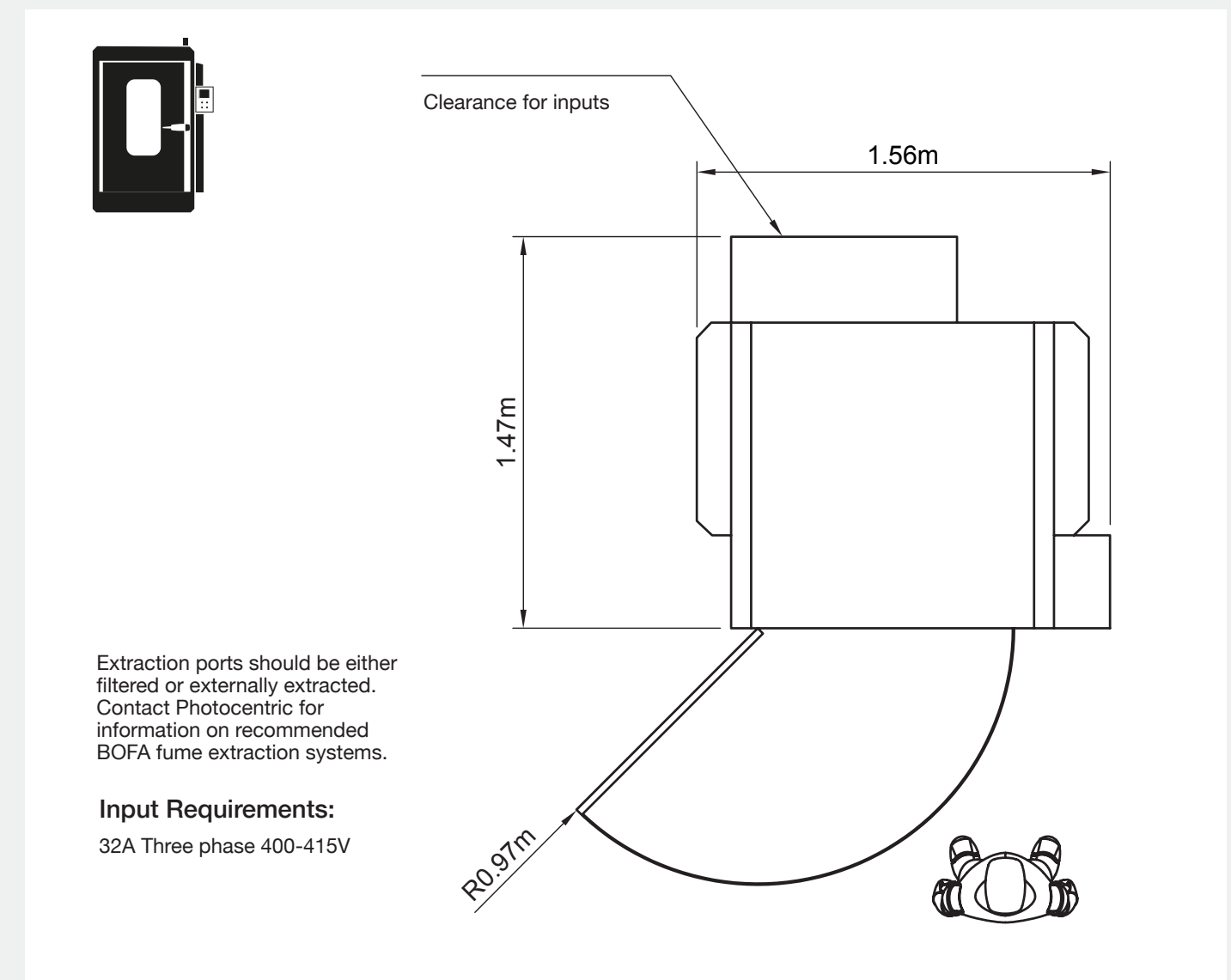
There should be space around the machine as detailed here for access to the washing chamber, user interface, operator window, and fluid connectors.

The door should be able to open between 90 and 180 degrees to allow access for the platform handler.

Wash XL should be positioned close to the printer it is servicing.



Photocentric Cure XL - Dimension and Layout Drawing



Photocentric Cure XL should ideally be located in a low-light environment. Red or Orange lighting or filters that block light in the UV - 550nm range can be employed for visibility without risk of curing resin.

There should be space around the machine as detailed here for access to the curing chamber, user interface, and maintenance hatches.

The door should be able to open between 90 and 180 degrees to allow access for the platform handler.

Cure XL should be positioned close to the wash unit(s) it is servicing.