



# HyperCLEAN III

## Technical Data Sheet

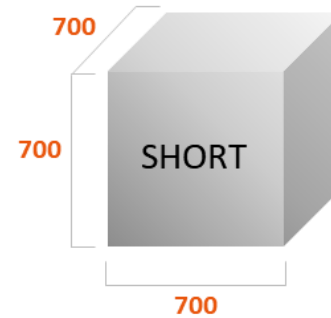
August 2024



## COMBO I SHORT

*with oscillation*

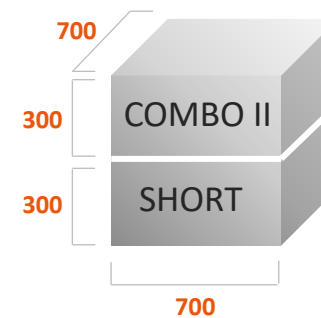
Usable space of basket:  
700 × 700 × 700 mm  
(W × D × H)



## COMBO II SHORT

*with oscillation*

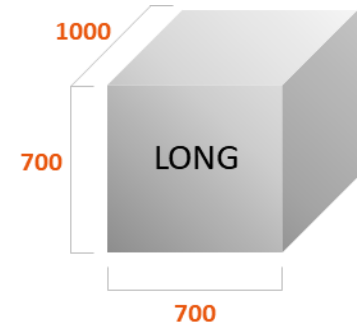
Usable space of basket:  
700 × 700 × 2×300 mm  
(W × D × H)



## COMBO I LONG

*no oscillation*

Usable space of basket:  
700 × 1000 × 700 mm  
(W × D × H)



HyperCLEAN III Wash + Rinse (Tap/DI Water) + Rinse (DI water) + Drying

PROCESS DATA	
<b>Machine dimensions (W × L × H)</b>	1,650 × 2,500 × 2,300 mm (2,500 mm with open door)
· Including SHORT pushcart	1,650 × 3,200 × 2,300 mm
· Including LONG pushcart	1,650 × 3,550 × 2,300 mm
· Including transfer pump	2,250 × 2,500 × 2,300 mm
<b>Weight (without liquid, accessories)</b>	1,500 kg
<b>Machine noisiness</b>	L <sub>Aeq</sub> <70 dB
<b>Power supply voltage</b>	3/N/PE AC 400/230 V 50 Hz 3/N/PE AC 400/230 V 60 Hz
<b>Power input</b>	36 kW
<b>Average power consumption per cycle</b> using predefined program "PCBA cleaning"	
<b>Wash:</b> 22:00; Temperature 60 °C	
<b>1<sup>st</sup> Rinse:</b> 8:42; Temperature 40 °	7.2 kW
<b>2<sup>nd</sup> Rinse:</b> 7:30; Temperature 40 °	
<b>Drying:</b> 20:00; Temperature 110 °C	
<b>Total cycle time:</b> 58:12	
<b>Water consumption per cycle with partial rinse water exchange (Chemical Stop)</b>	approx. 12–15 L (for 50Hz pump; for 60Hz pump will be higher) (can be adjusted via program configuration)
<b>Maximum authorized load COMBO SHORT</b>	50 kg per basket (incl. basket and clamping)
<b>Maximum authorized load COMBO LONG</b>	100 kg per basket (incl. basket and clamping)

ADJUSTABLE PARAMETERS	
<b>Wash, Rinse and Drying time</b>	Not limited
<b>Cleaning medium temperature</b>	up to 60 °C *
<b>Rinse water temperature</b>	up to 55 °C *
<b>Drying temperature</b>	up to 110 °C *
<b>Number of recipes (programs)</b>	Not limited

\* Minimal operating temperature depends on operating environment and other factors.

TECHNOLOGICAL PARAMETERS	
Volume of the storage tanks	114 L
<b>COMBO 1 SHORT (50 Hz) Pressure on Nozzles</b>	
Wash	2.2–3.2 bar
1 <sup>st</sup> Rinse	2.2–3.2 bar / 1.5–2.5 bar (without / with chemical filtration)
2 <sup>nd</sup> Rinse	1.5–2.5 bar
<b>COMBO 1 LONG (50 Hz) Pressure on Nozzles</b>	
Wash	1.8–2.8 bar
1 <sup>st</sup> Rinse	1.8–2.8 bar / 1.2–2.2 bar (without / with chemical filtration)
2 <sup>nd</sup> Rinse	1.2–2.2 bar
<b>COMBO 2 SHORT (50 Hz) Pressure on Nozzles</b>	
Wash	2.4–3.4 bar
1 <sup>st</sup> Rinse	2.4–3.4 bar / 1.6–2.6 bar (without / with chemical filtration)
2 <sup>nd</sup> Rinse	1.6–2.6 bar
<b>COMBO 2 LONG (50 Hz) Pressure on Nozzles</b>	
Wash	2.3–3.3 bar
1 <sup>st</sup> Rinse	2.4–3.4 bar / 1.6–2.6 bar (without / with chemical filtration)
2 <sup>nd</sup> Rinse	1.6–2.6 bar

## CONNECTION

	<p>Voltage: 3/N/PE AC 400/230 V 50 Hz</p> <p>Voltage: 3/N/PE AC 400/230 V 60 Hz</p> <p>Protection: 63 A circuit breaker with “B” tripping characteristic</p> <p>Connection: H07RN-F 5Gx16 CGSG (5-wires, cross-section 16 mm<sup>2</sup>, 63 A); max. 10</p> <p>Type: TN-S (L1-L2-L3-N-PE outputs)</p>
<b>Mains electricity</b>	<p>Power: 36 kW</p>
<b>Isolation transformer (Needed only for operations with power supply other than 400/230 V)</b>	<p>Voltage: 400/230 V</p> <p>Frequency: 50/60 Hz</p> <p>Short-circuit protection: as per transformer manufacturer specifications</p>
<b>Compressed air</b>	<p>Pressure: 0.5–0.8 MPa</p> <p>Air purity class: ISO 8573-1:2010 [3:4:3] (microfilter)</p> <p>Connection: ø8 mm SMC hose</p>
<b>Water inlet</b>	<p>Pressure: 1–5 bar</p> <p>Flowrate: max. 30 L/min</p> <p>Connection: 1” hose</p>
<b>Wash tank discharge</b>	<p>Connection: 1” hose + control valve</p>
<b>Rinse tank discharge</b>	<p>Connection: 1” hose + control valve</p>
<b>Air exhaust</b>	<p>Capacity: 1,300 m<sup>3</sup>/h</p> <p>Connection: ø225 mm hose</p>

## REQUIRED SPACE AND MAINTENANCE AREA

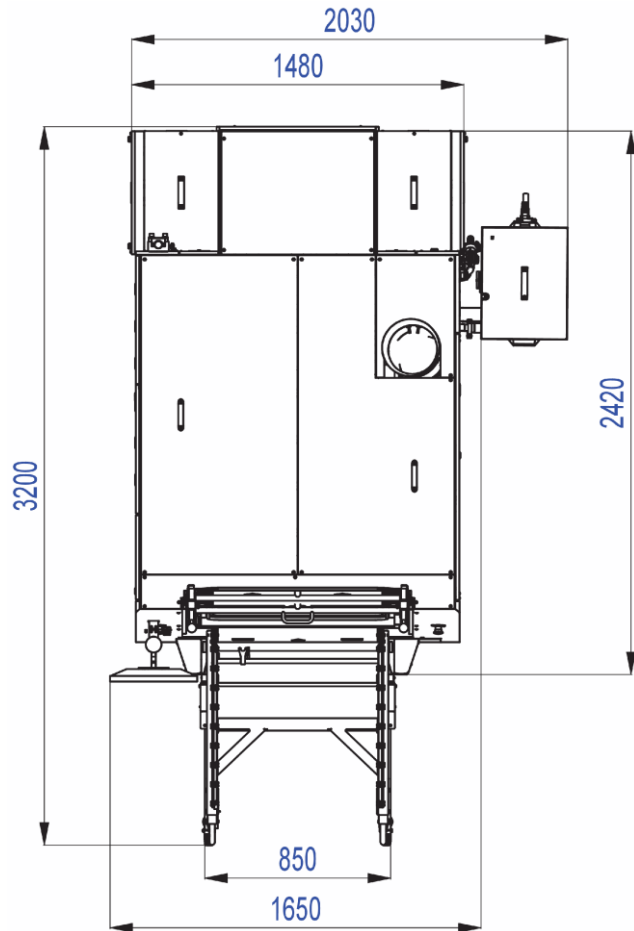
From the front min. 1,400 mm	Space for machine operation and maintenance (access to tanks with liquids)
From the right min. 700 mm	Access to door for maintenance
From the left min. 1,000 mm	Access area into switchboard (in accordance with IEC 60364-1:2005), main switch
From the rear min. 600 mm	Space for manipulation with filtration carts, machine maintenance (filter cartridges replacement, etc.)
From the above min. 700 mm	Space for opening the door – ceiling height 2,500 mm

## PUSHCART DIMENSIONS

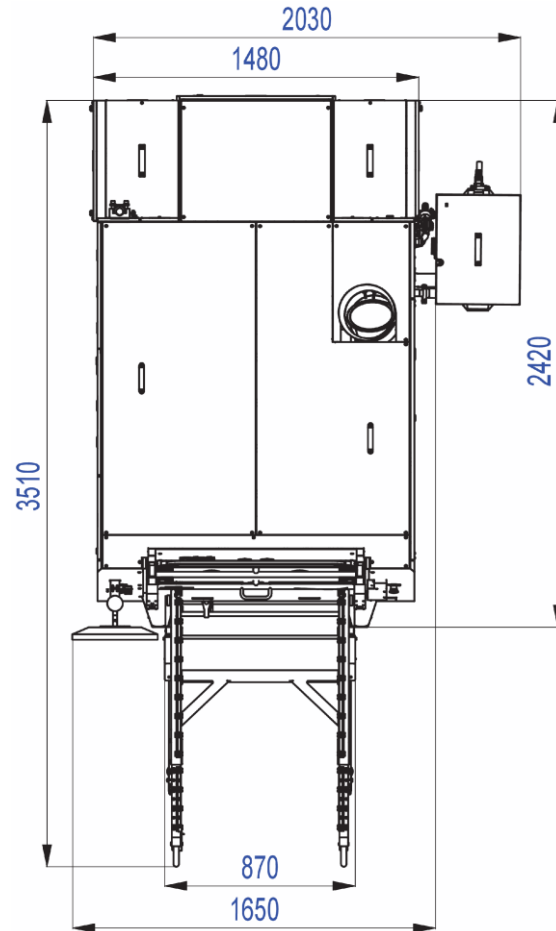
Pushcart SHORT – mechanical docking	837 × 948 × 1,033 (W × L × H)
Pushcart SHORT – pneumatic docking	855 × 968 × 1,033 (W × L × H)
Pushcart LONG – mechanical docking	837 × 1298 × 1,033 (W × L × H)

## DIMENSIONS

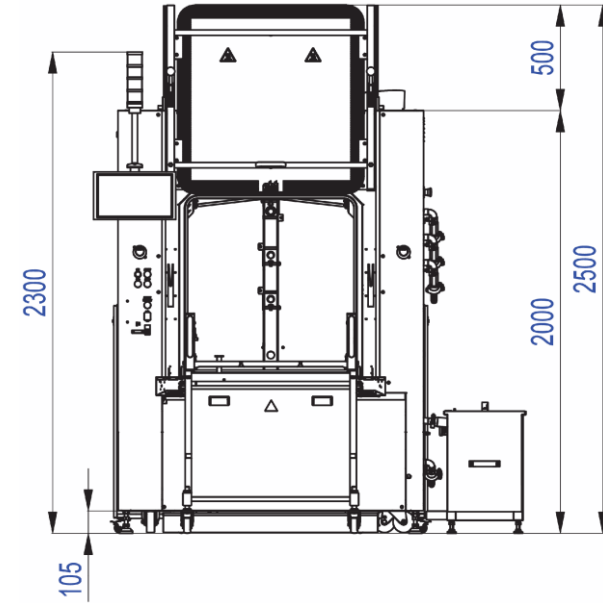
HyperCLEAN III SHORT



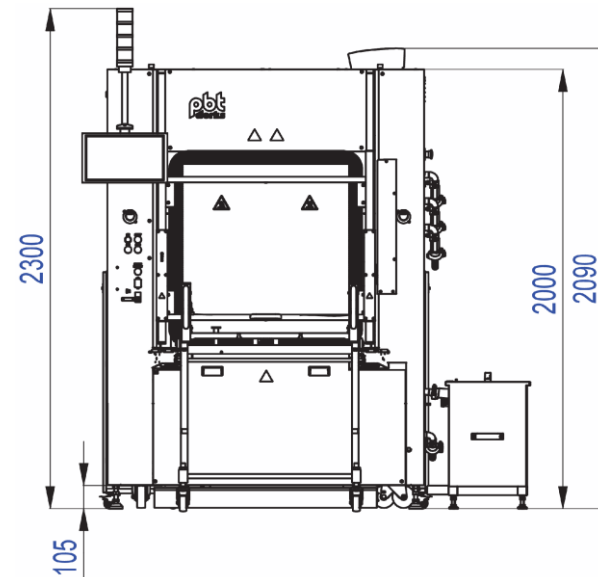
HyperCLEAN III LONG



Open Door



Closed Door



REQUIRED SPACE

