

VAPORflow

VAPORFLOW DATASHEET



Vaporflow 275 / Vaporflow 480

With a Vaporflow machine you can solder prototypes and small batches of PCBs consistently. The used vapour phase process offers much better and more consistent results than comparable infrared or convection ovens.

The Vaporflow uses a PFPE vapour to transfer heat to the PCB. Solvay Galden LS230 is the most commonly used PFPE fluid for lead-free soldering.

- 3.5" touchscreen 480 x 320, resistive
- Runs an optimized heating and cooling profile ^[1]
- Additional profiles can be created and customized by the user
- Uses high power 120mm fans to cool the oven quickly
- The temperature in the container can be logged to an SD-Card
- The Vaporflow 480 contains an auxiliary thermocouple input within the oven, which can be used to measure and log the temperature on the PCB

Specifications

Characteristic	Vaporflow 275	Vaporflow 480
Width [mm]	295	560
Height [mm] (from the table surface to the top of the handle)	295	295
Depth [mm] (excluding the mains plug at the back)	415	415
Weight [kg]	9.6	14.8
Maximum PCB length [mm] ^[2]	235	440
Maximum PCB width [mm] ^[2]	170	235
Required amount of fluid [g]	290	750
Cycle PFPE fluid consumption [g] ^[5]	2	3
Cycle duration [min.] ^[3]	14	18
Auxiliary thermocouple input	No	Yes
Number of high power cooling fans	4	6
Soldering temperature range [°C] ^[4]	155 - 240	
Ambient temperature range [°C]	10 - 35	

Table 1. Specifications.

Solder Area

The image below shows the container sizes of the Vaporflow 275 and Vaporflow 480. The semicircle indicates the location of the temperature sensor. A margin of 30mm is recommended around the temperature sensor. A margin of 20mm is recommended between the side of the PCB and the wall of the container. The PCB support rack doesn't cover the whole area.

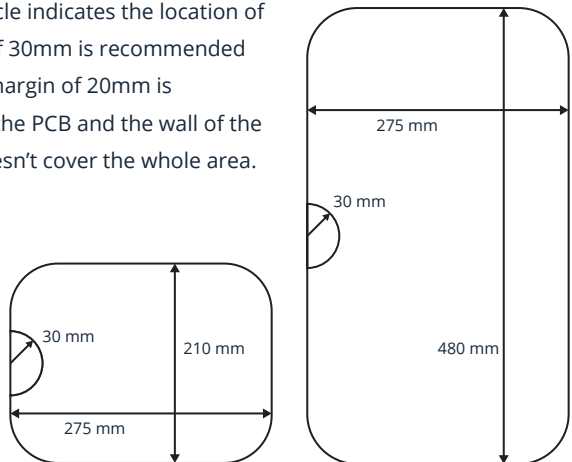


Figure 1. Solder area Vaporflow 275 and Vaporflow 480.

Models

Product number	Input voltage [V AC]	Heating power [W]	Fuse rating	Packaging size [cm]	Packaged weight [kg]
VPF-275-EU	230	750	10A	47 x 57 x 45	12.7
VPF-275-US	110	750	10A	47 x 57 x 45	12.7
VPF-480-EU	230	1500	10A	73 x 57 x 45	19.1
VPF-480-US	110	1500	20A	73 x 57 x 45	19.1

Table 2. Vaporflow models.

Tariff code: 85143910; Country of origin (COO): The Netherlands

Footnotes

- [1] The installed profile for Galden LS230 on the Vaporflow has been thoroughly tested with Galden LS230 and Chipquik TS3915NL soldering paste.
- [2] The maximum allowed size of the PCB is not max width times max length.
- [3] Cycle duration has been determined with Galden LS230 and an ambient temperature of 20°C.
- [4] Vaporflow models with an extended range are available, please ask for the possibilities.
- [5] The fluid consumption of one cycle has been determined by measuring the average consumption over 5 cycles. Galden LS230 was used and the cycles ended by cooling the Vaporflow back to 30°C.



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www.vaporflow.eu