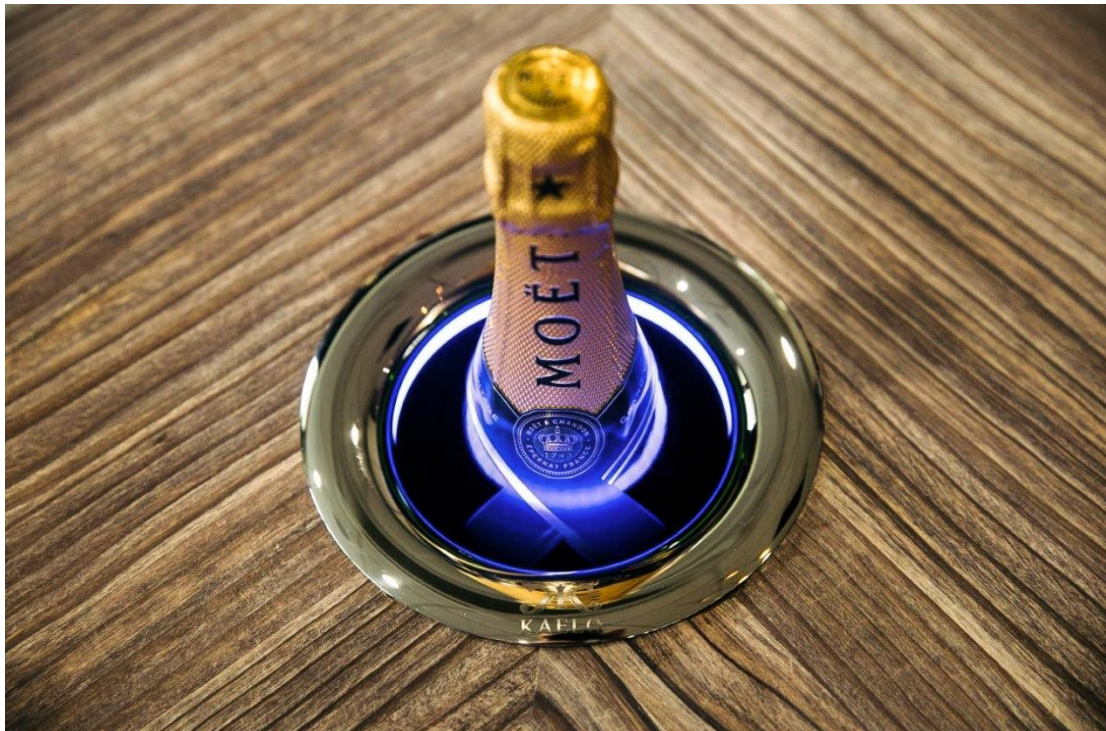


KAELO

Product Technical Document

01/10/16



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1.0 Overall Drawings & Diagrams

1.1 General Description of Machinery

Kaelo is a luxury bottle cooler, providing the ultimate experience when consuming champagne, fine wines and premium spirits. Kaelo creates a consistently cold and dry environment to maintain a chilled bottle at its perfect serving temperature. The Kaelo's entire bezel is touch sensitive and is turned on with one touch. Once on; it will cool within minutes, with a halo of light around the bezel to show that the Kaelo is switched on. Kaelo's 360° illumination can be personalised through a spectrum of colours to compliment the desired ambience of your space. To do this touch the bezel 3 times, then scroll through the colours by touching the bezel repeatedly. Touching the bezel 4 times will make the halo gently fade through the full colour spectrum. The Kaelo will enter standby mode after 2 hours unless it is reactivated by touching the bezel.

Overall Dimensions

Main Body Diameter: 152mm

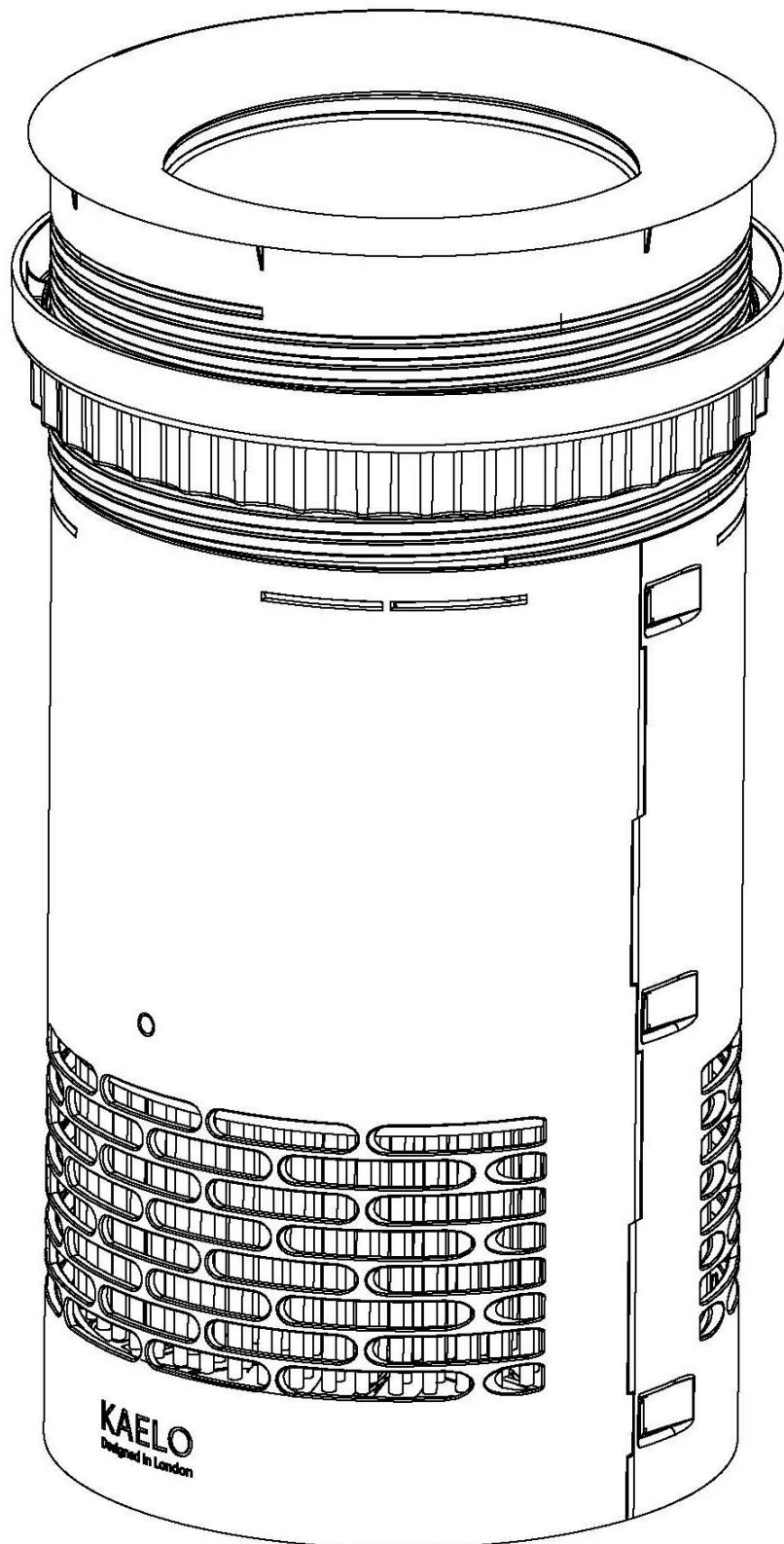
Hole in Counter: 154mm

Bezel Diameter: 162mm

Product Height: 301mm

Product Weight: 1.8kg

1.2 Overall Drawing of Machine



2.0 Detailed Design Information

2.1 Mechanical Parts List

1. Fan

Voltage Rating: 12V

Speed: 1000rpm

Static Pressure: 0.76mm/H2O

Noise Level: 18.8Db

2.2 Electrical Parts List

1. Kaelo

Model: K1.B01

2. Power Supply

SW4333-B

Supplied by Power Pax

2.3 Component Data Sheets

Power Pack Data Sheet (available from www.powerpax.co.uk)

90W Desktop Power Supplies



PowerPax

Features:

- Universal / Full range AC input
- Class I power (Choice of C5 or C14 3 pin input)
- Fully enclosed attractive plastic case
- Small & Compact design
- Cost effective and high reliability
- Protections Over Voltage, Short circuit & Over Current
- Comprehensive safety approvals for world use
- Level V ErP/EuP efficiency compliant
- MTBF >50,000 hours

This range is supplied with a choice of either C6 (Left hand image) or C14 input connector (Right hand image) Please refer to table below for details



Input current	1.4A max 65W / 1.6A max 72W	Weight	460g
Load Regulation	+/- 5 % Typical	Hi-Pot Spec	3000Vac 10mA 1 min. (I.P. to O.P.)
Case Size	C6 139 x 61 x 36mm C14 151 x 64 x 36mm	No load power consumption	0.5W max
DC Cord	1.5 Metres (1.2M for Part SW4333)		
Output Connector Polarity	+Ve Centre		
Rated Input Voltage	100-240Vac (90-264vac max)		
Rated Frequency	50-60Hz (47/63Hz max)		
Efficiency	Meets ErP stage 2		
Operating Temperature	0 to 40 degrees C		
Storage Temperature	-20 to 80 degrees C		
Operating Humidity	10% to 90%		
Ripple & Noise	1—2% Vp-p Max of O/P V at Full load		

Full specification documents on each part included in this data sheet are available on request from PowerPax UK Ltd. PowerPax accepts no responsibility for typographical errors in the production of this datasheet. Product specifications are subject to change without notice. The product image shown is representative of entire range.

The dimensions of the 12vdc 7.5 amp part number SW4333 differ from the rest of the products in this range and are 137 x 59 x 34mm

The dimensions of the 24vdc 3.75 amp part number SW3470B differ from the rest of the products in this range and are 129 x 54 x 32mm

Other DC output connectors and negative centre polarity can be provided on request

Part number	Output	Power	Input connector	Output connector
SW3394-B	12vdc 7 Amp	84 Watts	C6 3 pin (Clover leaf)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4333	12vdc 7.5 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4579	15vdc 6 Amp	90 Watts	C14 3 pin (IEC)	2.5 x 5.5 x 12mm straight Polarity +ve centre
SW4580	16vdc 5.63 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4581	18vdc 5 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4582	19vdc 4.74 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 9.5mm straight Polarity +ve centre
SW4583	20vdc 4.5 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW3470B	24vdc 3.75 Amp	90 Watts	C6 3 pin (Clover leaf)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4527	24vdc 3.5 Amp	84 Watts	C8 2 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4610	24vdc 3.75 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4584	30vdc 3 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre
SW4585	48vdc 1.88 Amp	90 Watts	C14 3 pin (IEC)	2.1 x 5.5 x 12mm straight Polarity +ve centre

Safety & Emissions: Refer to individual spec for latest

CB, UL, CUL, FCC, GS, CE, PSE, BSMI, CCC

EMI Conduction & Radiation Compliance to EN55022 Class B

Harmonic current: Compliance to EN61000-3-2, 3

EMS Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11

Topology: Switching Flyback

Efficiency: Energy Star level V, Erp Stage 2, gems & NRCAN certified, CEC V

PowerPax, Unit 5 Kennet Weir Business Park, Arrowhead Road, Reading, RG7 4AD, T: +44 (0) 118 903 3290 W: www.powerpax.co.uk



2.4 RoHS Compliance Information

The object of the declaration described is in conformity with the relevant Union harmonisation legislation:

2011/65/EU	The Restriction of Hazardous Substances Directive
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Conformity is shown by compliance with the applicable requirements of the following documents:

Article 3.1(a)	Electrical Safety
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<i>EN 60335-1:2012 + A11:2014</i>	<i>Household and similar electrical appliances. Safety. General requirements</i>
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<i>CISPR 22, EN 55022 Class B + EN 60950</i>	<i>Information technology equipment. Radio disturbance characteristics. Limits and methods of measurement. IT safety general requirements</i>
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3.0 Inspection Reports

3.1 Conformance Reports

EU Declaration of Conformity (No. 001)

In accordance with EN ISO 17050-1:2010

Object of the declaration:

Product	Wine Cooler
Model/type	Kaelo - Model K1.B01
Batch/serial no.	KB#####



Manufacturer	Kaelo Manufacturing Ltd.
Address	Coppergate House, London E1 7NJ


This declaration is issued under the sole responsibility of the manufacturer

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

2011/65/EU	The Restriction of Hazardous Substances Directive
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Conformity is shown by compliance with the applicable requirements of the following documents:

Reference & Date	Title
Article 3.1(a) – Electrical Safety	
EN 60335-1:2012 + A11:2014	Household and similar electrical appliances. Safety. General requirements
CISPR 22, EN 55022 Class B + EN 60950	Information technology equipment. Radio disturbance characteristics. Limits and methods of measurement. IT safety general requirements

Place of issue:	Kaelo Manufacturing Ltd. The above address
Date of issue:	01/08/16
Name:	Kevin Jabou
Position:	Director
Signature:	

4.0 Quality Control

4.1 Functional/Operational Test Procedure

Upon assembly, each Kaelo is tested for thermal performance for a period of 20 minutes. Accurate temperature measuring devices are used in this testing process.

This amount of testing time is ample to ensure that the product reaches and maintains the desired temperature.

5.0 Instructions

5.1 Specifications & Ratings

Kaelo Device

12V maximum

86W power

Power Pack

12Vdc

7.5A

90W

5.2 Noise Declaration

The only noise produced by the Kaelo is the fan. The fan has a noise level of 18.1 which is virtually silent as it is housed within the product. Any noise is reduced further due to the fact that the underside of the Kaelo is stored within a counter or beneath a surface.

5.3 Safety Instructions

The Kaelo is designed for use indoors and may become damaged or suffer a loss of function if used/stored outside.

5.4 Installation

The Kaelo is installed by lowering it into a pre-cut hole of 154mm diameter. The clamp is then screwed onto the underside of the Kaelo to secure it to the counter/surface it has been put into.

The underside of the installation counter/surface needs to have a plentiful supply of ambient air to ensure correct function of the Kaelo. Enclosed spaces can accept a Kaelo with the use of the ducting equipment provided with each Kaelo.

5.5 Operation

To activate the Kaelo, simply touch any part of the bezel with your finger. The Kaelo features a smart-touch bezel to customise its illumination.

To change the illumination colour, tap the bezel three times then scroll through the colours by touching the bezel repeatedly. To lock in a colour, do not touch the bezel for 5 seconds. Touching the bezel 4 times will gently fade the halo colour through the full spectrum.

Once activated, a Kaelo will remain on for 2 hours, then go into standby mode. Touching the bezel at any point during the 2-hour cycle will reset it.

5.6 Maintenance

Once a Kaelo is fitted and in use it requires no regular maintenance. The only maintenance required is the cleaning of the product, this is purely for aesthetic reasons and is to the user's discretion.

6.0 Miscellaneous

6.1 EC Declaration of Conformity

EU Declaration of Conformity (No. 001)

In accordance with EN ISO 17050-1:2010

Object of the declaration:

Product Wine Cooler
Model/type Kaelo - Model K1.B01
Batch/serial no. KB#####



Manufacturer Kaelo Manufacturing Ltd.
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Place of issue: Kaelo Manufacturing Ltd.
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Date of issue: 01/08/16
Name: Kevin Jabou
Position: Director
Signature:

