Product data sheet

DYNEO DD-1201F-BF Beer forcing test refrigerated / heating circulating bath

to determine the ‘best before’ date of beer

The beer force test is a method used to determine the shelf life and stability of beer. This test is performed to analyze a beer's shelf life and tendency to microbiological or chemical change. The objective of this test is to quickly predict the beer's behavior over long storage periods. This is done by bottling beer samples and simulating artificial, accelerated aging by means of temperature cycles. This is repeated until an initial turbidity is detected by a photometer. The force test is particularly useful for breweries optimizing their product quality assurance process, helping them identify potential problems before their beer is released to the market.

DYNEO DD-1201F-BF has all the temperature profiles necessary to perform the force test, for both stabilized and untreated beer, already installed. If specific changes to the program settings are needed, the user can make these changes at any time and in a simplified manner.

Product Features

- Automatic cycles of temperature ramps simulate aging
- Pre-programmed temperature profiles for forcing test
- Program modification possible at any time
- Large bath opening with insert for 20 bottles, 0.5 liters each (Racks for other bottle sizes on request)
- Removable Plexiglass® cover
- RS232 interface for online communication
- powerful and infinitely adjustable pressure pump
- Flow rate 27 l/min, pressure 0.7 bar

Performance values

230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)	
Heating capacity kW	2
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure bar	0.1 ... 0.7
Power consumption A	11
Voltage Tolerance %	230V | ±10

Order number including voltage version (230V/50Hz) 9021719.N1.33.D

Cooling capacity 1 (Ethanol)

°C	20	10	0	-10	-20	-30	-40
kW [1]	1.25	1.2	1.1	0.85	0.54	0.3	0.05

Note about natural refrigerants:
Temperature control units using natural refrigerants are often subject to regulatory requirements regarding the installation site, operation, transport or disposal of the units. If you have any questions, we will be happy to advise you.

Refrigerant stage 1	
Refrigerant	R1270
Filling weight g	90
Global Warming Potential for R1270	2
Carbon dioxide equivalent t	0.00018

[1] Performance specifications measured in accordance with DIN 12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.

Technical data

Available voltage versions	
Order No.	9021719
Available voltage versions:	
9021719.N1.04.D	200-230V 50/60Hz (UK Plug Type BS1363A) (R1270)
9021719.N1.05.D	200-230V 50/60Hz (CH Plug Type SEV 1011) (R1270)
9021719.N1.33.D	200-230V 50/60Hz (Schuko Plug - CEE 7/4 Plug Type F) (R1270)
9021719.N1.33.chn.D	200-230V 50/60Hz (CN Plug) (R1270)
9021719.N1.22.D	100-115V 50/60Hz (Nema N5-20 Plug) (R1270)

Cooling

Cooling of compressor	1-stage Air

Bath

Bath tank	Stainless steel
Bath cover	integrated
Usable bath opening cm (W x L / D)	35 x 40 / 30

Electronics

Interfaces	Alarm output optional, REG/EPROG optional, RS232 optional, Standby-Input optional, USB
External pt100 sensor connection	integrated
Integrated programmer	8x60 steps
Temperature control	PID3
Absolute temperature calibration	3 Point Calibration
Temperature display	3.5" TFT Display
Temperature setting	Shaft Encoder
Electronic Timer h:min	00:00 ... 99:59

Dimensions and volumes

Weight kg	68
Barbed fittings inner diameter mm	8/12 mm
Total dimensions cm (W × L × H)	45 x 64 x 95
Filling volume l	48 ... 56
Pump connections	M16x1 male

Temperature values

Setting the resolution of the temperature display °C	0.01
Working temperature range °C	-40 ... +100
Temperature stability °C	±0.01
Ambient temperature °C	+5 ... +40
Temperature display resolution °C	0.01

Other

Classification	Classification III (FL)
IP Code	IP 21
Pump function	Pressure Pump
Pump type	Immersion Pump
User Interface Language	Chinese, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish

Included in delivery

Stainless steel insert basket for 20 x 0.5 liter bottles Plexiglass bath cover.

All Benefits

Handle with ease.

Makes day-to-day work easy. Comfortably move your JULABO Circulator around by using the ergonomic handles (front and rear).

Highly precise

PID Temperature control with drift compensation and adjustable control parameters, temperature stability ±0.01...±0.02 °C

Wide range.

Refrigerated and heating circulator in various combinations, circulator in various sizes. Maximum flexibility through a large selection of accessories.

Turn. Push. Go.

Easy operation of all parameters using the central controller.

USB.

Remote control made easy using the integrated USB interface.

RS232.

Connection using the optional RS232 interface.

Analog I/O.

Analog interfaces for integration into process control systems (optional).

Process stability.

Early warning - visual and acoustic - of critical states increases process stability.

ATC3. Calibration.

'Absolute Temperature Calibration' for compensating a physically caused temperature difference, 3-point calibration.

Connection. Easy.

Inclined pump connections (M16×1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each.

100 % Cooling capacity

'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures

Brilliance. In color.

Large color display with vivid luminance is easy to read, even from a large distance.

Information. Everything clear.

Information in plain text on a large color screen.

Multi-lingual.

Operation in multiple languages.

Programmer. Integrated.

The integrated internal programmer makes it possible to automatically run temperature time profiles.

Powerful. Adjustable.

Strong pressure pump, continuously adjustable.

Temperature. Under control.

External Pt100 sensor connection for precise measurement and control directly in the external application.

Fill level. Monitored.

Fill level indicator on the display for heat-transfer liquid.

Process. Under control.

Full regulation of the dynamics control, access to all important control parameters for individual process optimization.

Stable. Mobile.

Rubber feet keep JULABO Circulators standing firm. Larger and more powerful units also have integrated rollers for easy handling.

Refer to www.julabo.com for more information regarding the entire JULABO product portfolio. Technical changes without prior notification. Images may deviate from the original. | Datasheet No.EN9021719/251218