

CT / CTM / CTS / CTMS / CBT / B / CBTM / CTMC / TS / CH

OVERVIEW



Document: Overview

Modification journal

Revision:	Date:	Modification	Visum:
0	2009-04-24	Basic document, first edition	FC
1	2009-08-18	Supplement: Coffee spout height	MB
2	2009-11-17	Cut sheet Tea-Steam Standalone and Cup Heater added	RZ
3	2010-05-28	Models CBT, CBTM, TS, CH added	MB
4	2010-10-21	Models CTMS added	MB
5	2010-12-16	Pictures changed	MB
6	2011-03-31	Various changes	SO
7	2012-07-30	Various changes	MB
8	2013-01-04	CTMC added, adjusted connection details	SO
9	2015-03-01	CTM-RU, B added, layout changes	MST
10			

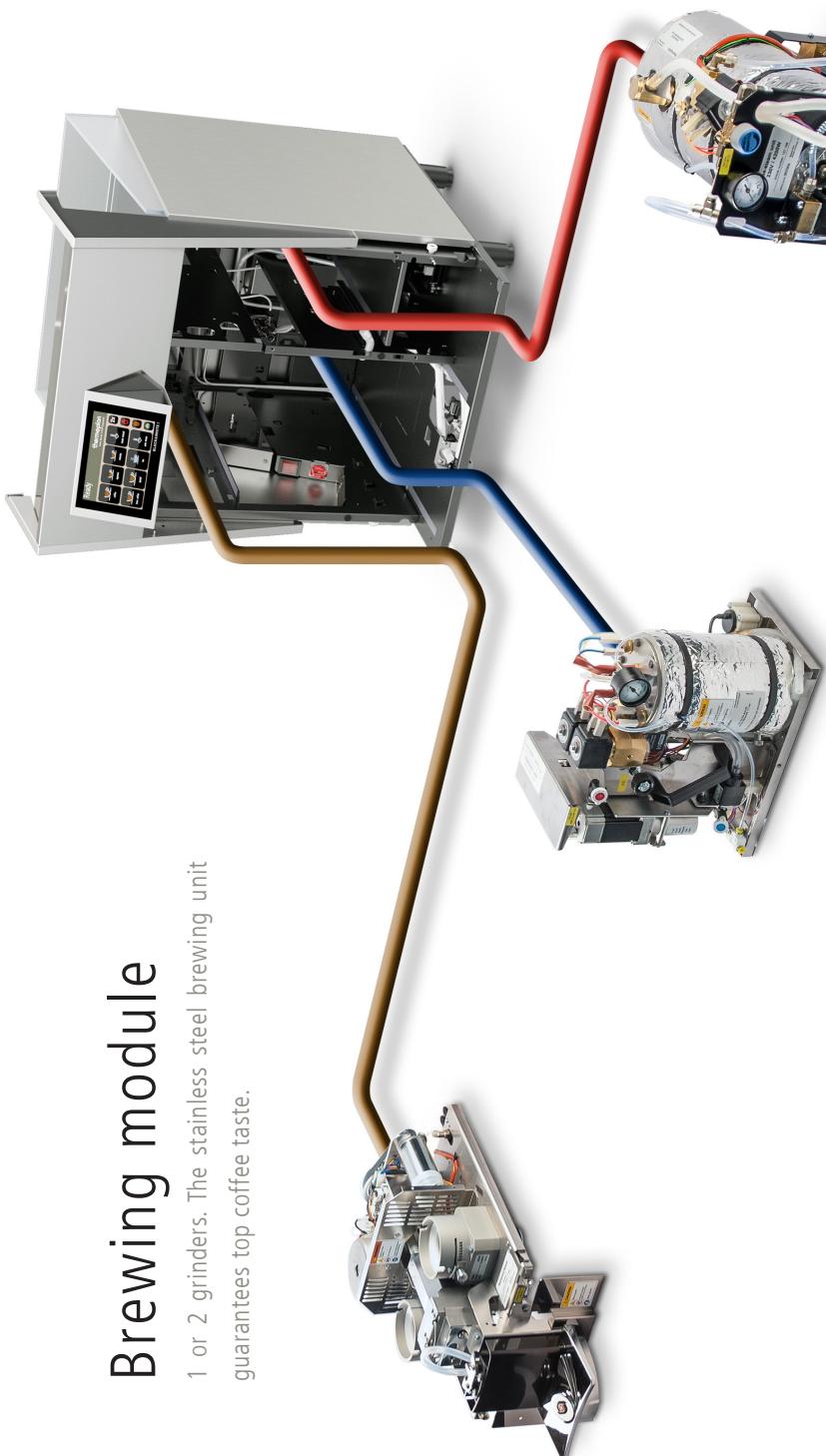
Index

Modul-System	1.4	
Models	CT / CTM / CTS / CTMS / CBT / CBTM / CTMC / TS / CH	1.5 - 1.8
Cut sheets	CT	1.9
CT (USA / CAN)	1.10	
CTM without refrigerator	1.11	
CTM without refrigerator (usa / CAN)	1.12	
CTM (-RF)	1.13	
CTM (-RF) (USA / CAN)	1.14	
CTM-RU	1.15	
CTS	1.16	
CTS (USA / CAN)	1.17	
CTMS (-RF)	1.18	
CTMS (-RF) (USA / CAN)	1.19	
B	1.20	
B (USA / CAN)	1.21	
CBT	1.22	
CBT (USA / CAN)	1.23	
CBTM (-RF)	1.24	
CBTM (-RF) (USA / CAN)	1.25	
CTMC-RF	1.26	
CTMC-RF (USA / CAN)	1.27	
CTMC without refrigerator	1.28	
CTMC without refrigerator (USA / CAN)	1.29	
Tea-Steam Standalone	1.30	
Cup heater	1.31	
Refrigerator	1.32	
General view	CT	1.33
CTM	1.34	
CTM-RU	1.35	
CTS	1.36	
CTMS	1.37	
B	1.38	
CBT	1.39	
CBTM	1.40	
CTMC	1.41	
TS	1.42	
CH	1.43	
Touchscreen	CT / CTM / CTS / CTMS / CTMC	1.44
B / CBT / CBTM	1.45	

Module system

Brewing module

1 or 2 grinders. The stainless steel brewing unit guarantees top coffee taste.



Hydraulic module

Hot water preparation, water distribution, coffee boiler, pump, valve block.

Steam module

High capacity 4-litre boiler for continuous unlimited steam and hot water supply.

The module system

BLACK&WHITE3 is a modular assembly. Maintenance can thereby be carried out quickly and cost-effectively. All three modules are exchanged in an instant - that is unique for coffee machines.

Models and electric connections

CT



The CT (Coffee Tea):

- Coffee, hot water
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

The CT prepares coffee and hot water and its mere 350 mm in width allows to fit on any countertop.

Electric connections:

Connection coffee machine	220-240 V / 12 A / 50/60 Hz / 2'400-2'900 W
---------------------------	---

CTM (-RF)



The CTM (Coffee Tea Milk):

- Coffe, hot water, milk, foam
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

Whether hot or cold, the CTM makes preparing coffee or milk specialties a success.

Electric connections:

Connection coffee machine	220-240 VAC / 12 A / 50/60 Hz / 2'600-3'100 W
	220-240 VAC / 16 A / 50/60 Hz / 3'200-3'800 W
Connection refrigerator	220-240 VAC / 0.3 A / 50/60 Hz / 72 W

CTM-RU



The CTM-RU (Coffee Tea Milk):

- Coffe, hot water, milk, foam
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

With a width of 350 cm, the CTM-RU is very space-saving and prepares coffee or specialties - with or without coffee, hot or cold.

Electric connections:

Connection coffee machine	220-240 VAC / 12 A / 50/60 Hz / 2'600-3'100 W
	220-240 VAC / 16 A / 50/60 Hz / 3'200-3'800 W
Connection refrigerator	220-240 VAC / 0.3 A / 50/60 Hz / 72 W

Models and electric connections

CTS



The CTS (Coffee Tea Steam):

- Coffee, tea, steam
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

The CTS model is the right choice for traditional milk preparation with steam.

Electric connections:

Connection coffee machine	220-240 V / 32 A / 50/60 Hz / 6'300-7'500 W 380-415 V / 3x16 A / 50/60 Hz / 6'300-7'500 W
---------------------------	--

CTMS



The CTMS (Coffee Tea Milk Steam):

- Coffee, hot water, steam, milk, foam
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

Whether hot or cold, the CTMS makes preparing coffee or milk specialties a success.

Electric connections:

Connection coffee machine	220-240 V / 32 A / 50/60 Hz / 6'300-7'500 W 380-415 V / 3x16 A / 50/60 Hz / 6'900-8'300 W
Connection refrigerator	220-240 VAC / 0.3 A / 50/60 Hz / 72 W

B



B (Brew):

- Brew coffee, hot water
- 1 grinder
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

The B makes it possible to brew large quantities of high quality brew coffee - even during peak time.

Electric connections

Connection coffee machine	220-240 V / 16 A / 50/60 Hz / 3'200-3'900 W
---------------------------	---

Models and electric connections

CBT



The CBT (Coffee Brew Tea):

- Coffee, brew coffee, hot water
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

The CBT makes it possible to brew large quantities of high quality brew coffee or single coffees.

Electric connections:

Connection coffee machine	220-240 V / 16 A / 50/60 Hz / 3'200-3'900 W
---------------------------	---

CBTM (-RF)



The CBTM (Coffee Brew Tea Milk):

- Coffee, brew coffee, milk, foam
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

The CBTM is the allrounder among the automatic coffee machines. The combination of a CTM and CBT guarantees a variety of products which leaves nothing to be desired.

Electric connections:

Connection coffee machine	220-240 V / 16 A / 50/60 Hz / 3'200-3'800 W
Connection refrigerator	220-240 VAC / 0.3 A / 50/60 Hz / 72 W

CTMC



The CTMC (Coffee Tea Milk Chocolate):

- Coffee, hot water, milk, foam, chocolate
- Grinder 1 integrated, grinder 2 optional
- Touch Screen operation
- Free programmable product selection buttons
- Fully automatic cleaning system

The machine with the chocolate module is the first choice for chocolate lover. Next to the chocolate products, the CTMC also dispenses high-quality coffee and milk specialities, whether hot or cold.

Electric connections:

Connection coffee machine	220-240 VAC / 16 A / 50/60 Hz / 3'200-3'800 W
Connection refrigerator	220-240 VAC / 0.3 A / 50/60 Hz / 72 W

Models and electric connections

TS



The TS (Tea Steam):

- Hot water, steam

The TS offers hot water and an endless steam supply - easy to handle.

Electric connections:

Connection TS	220-240 VAC / 20 A / 50/60 Hz / 4'000-4'800 W
	380-415 VAC / 3x11 A / 50/60 Hz / 4'000-4'800 W

CH



The CH (Cup heater):

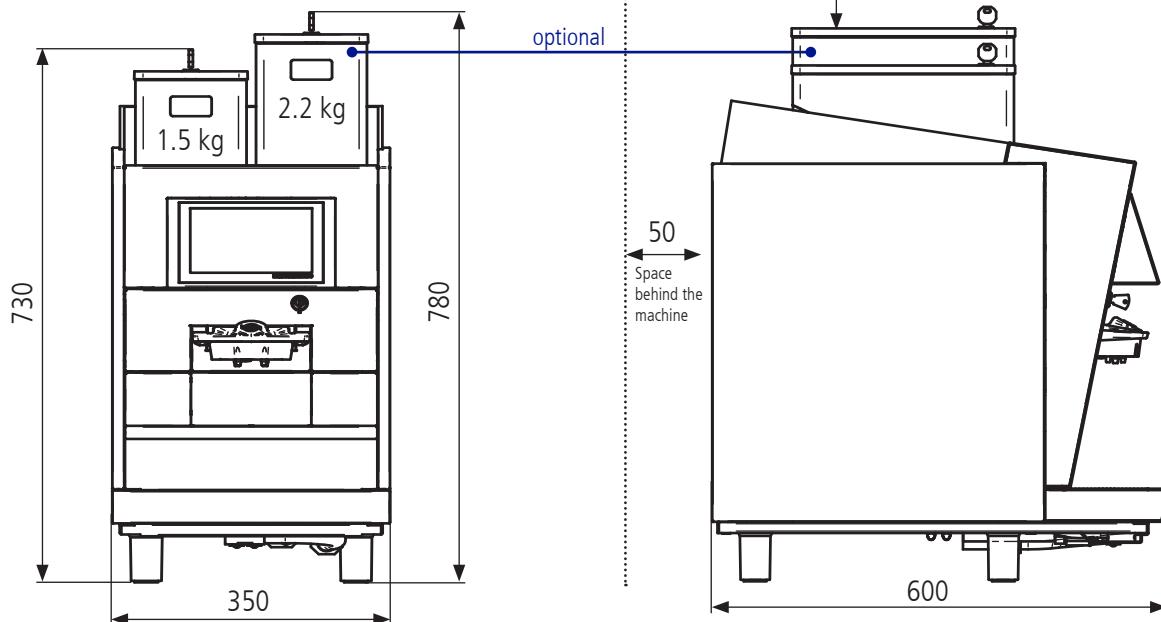
- Storage of 100 to 150 cups

Use the CH to preheat the coffee cups to get ready for an extraordinary coffee enjoyment.

Electric connections:

Connection CH	220-240 VAC / 0.5 A / 50/60 Hz / 90-110 W
	100-120 VAC / 0.7 A / 50/60 Hz / 85 W

Cut sheet CT



Automatic coffee machine Black&White 3 CT	
Connections	220-240 VAC 12 A 50/60 Hz
Output	2400-2900 W
Dimensions	350 x 600 x 730 (780) mm (W / D / H)
Coffee spout height standard	80-173 mm
Coffee spout height with POD	80-163 mm
Weight	55 kg

Water connections	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 ° dH (8-14° fH)
pH	6.8 to 7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

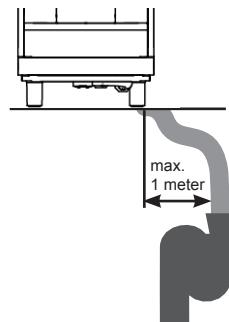
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

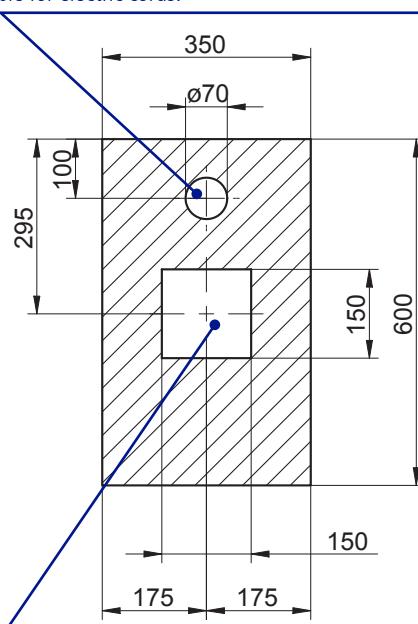
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

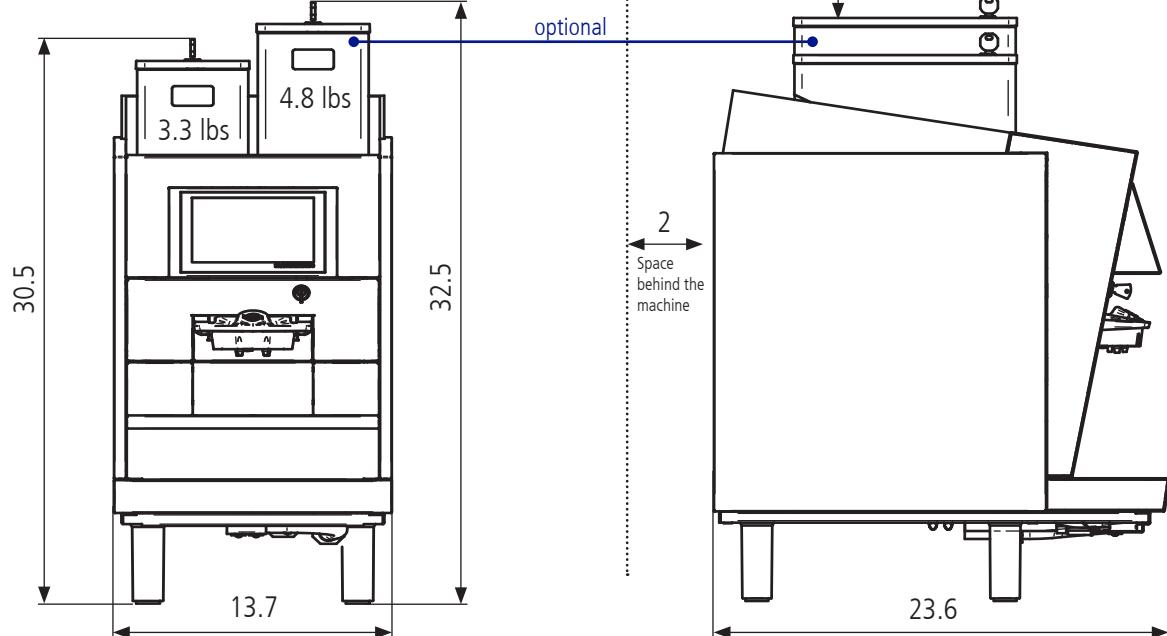


Hole diameter 70mm for water inlet and outlet. Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CT (USA / CAN)

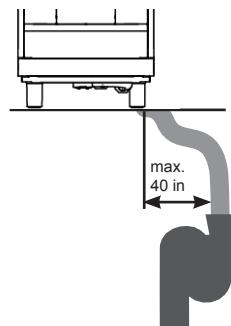


Automatic coffee machine Black&White 3 CT

Connections	208 VAC 11 A 60 Hz
Output	2800 W
Dimensions	13.7 x 23.6 x 30.5 (32.5) in (W / D / H)
Coffee spout height standard	3.14-6.8 in
Weight	212 lbs

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



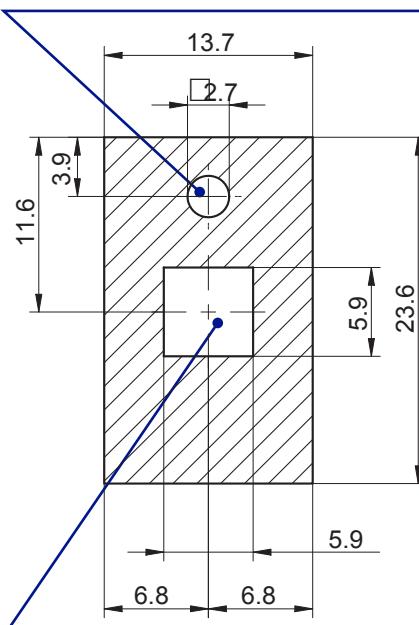
Water connection	3/8"
Water pressure	2-4 bar / 30 -60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

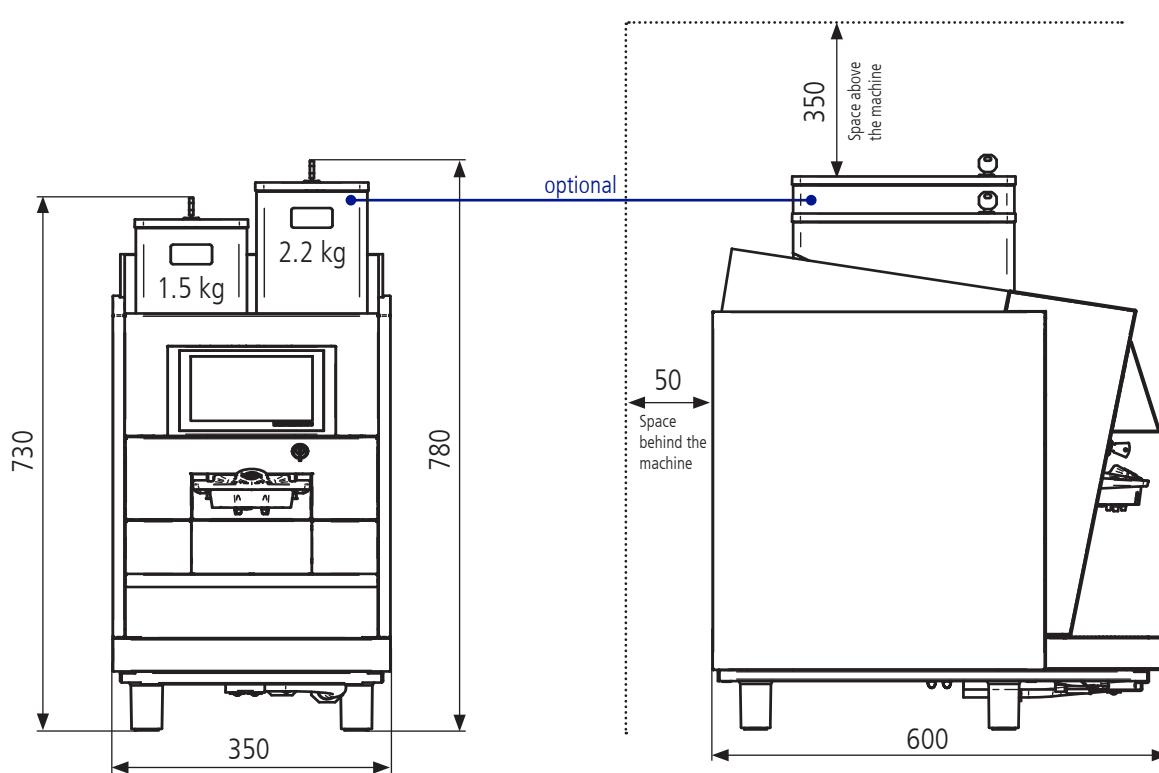
For more information see Technical Manual.

Hole diameter 70mm for water inlet and outlet. Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

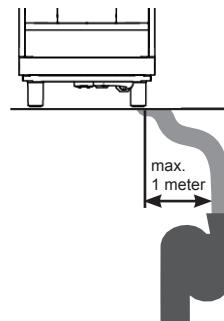
Cut sheet CTM without refrigerator



Automatic coffee machine Black&White 3 CTM	
Connections	220-240 VAC 12 A 50/60 Hz 220-240 VAC 16 A 50/60 Hz
Output	2400-2900 W 3200-3800 W
Dimensions	350 x 600 x 730 (780) mm (W / D / H)
Coffee spout height standard	80-173 mm
Coffee spout height with POD	80-163 mm
Weight	55 kg

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

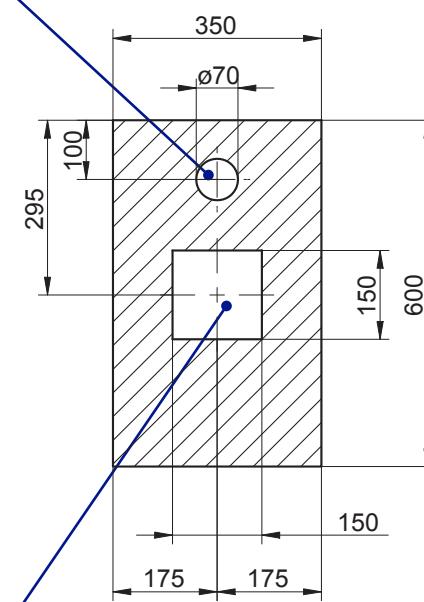


Hole diameter 70mm for water inlet and outlet. Also possible for electric cords.

Water connection	3/8"
Water pressure	2-4 bar / 30 -60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

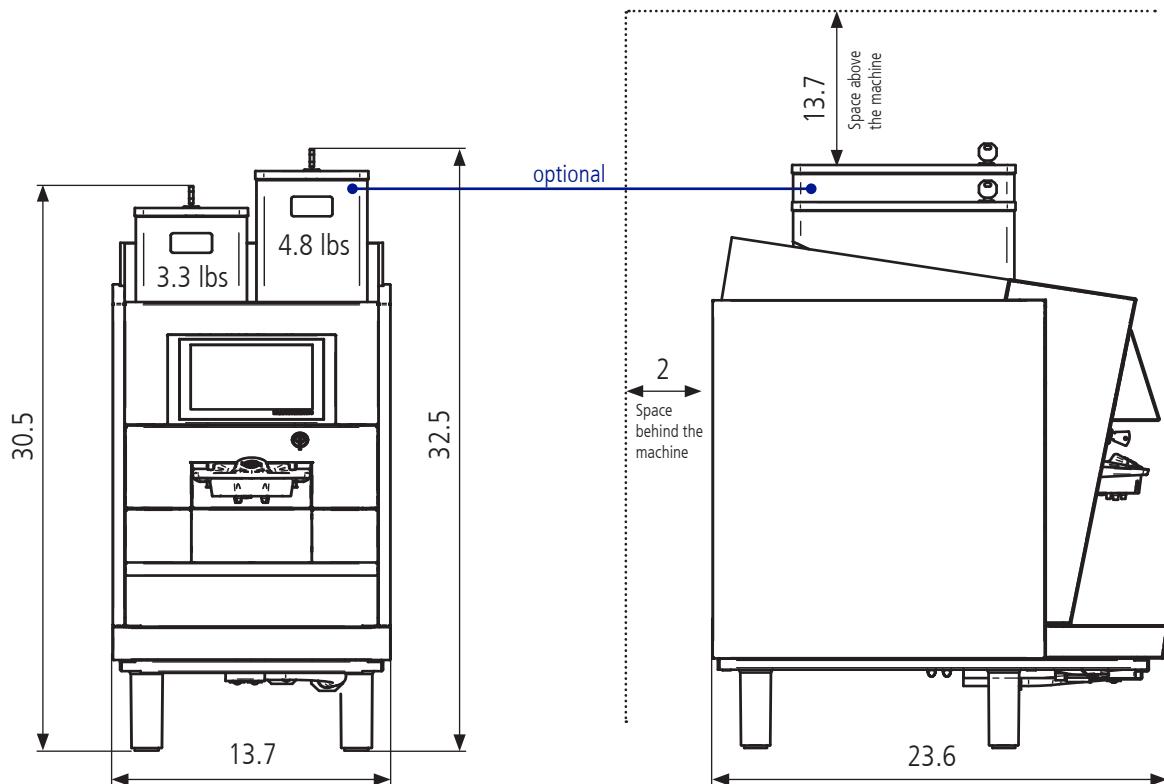
Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

For more information see Technical Manual.

Cut sheet CTM without refrigerator (USA / CAN)



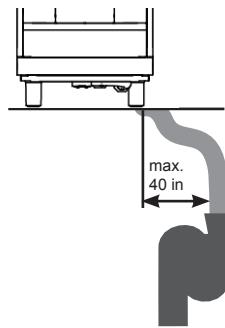
cUL[®] US
LISTED^{14KA}

NSF

Automatic coffee machine Black&White 3 CTM without RF	
Connections	208 VAC 13.5 A 60 Hz
Output	2800 W
Dimensions	13.7 x 23.6 x 30.5 (32.5) mm (W / D / H)
Coffee spout height standard	3.14-6.8 in
Weight	212 lbs

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



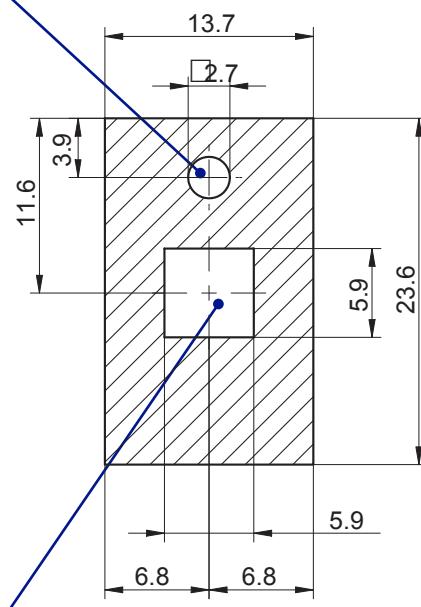
Water connection	3/8"
Water pressure	2-4 bar / 30 -60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

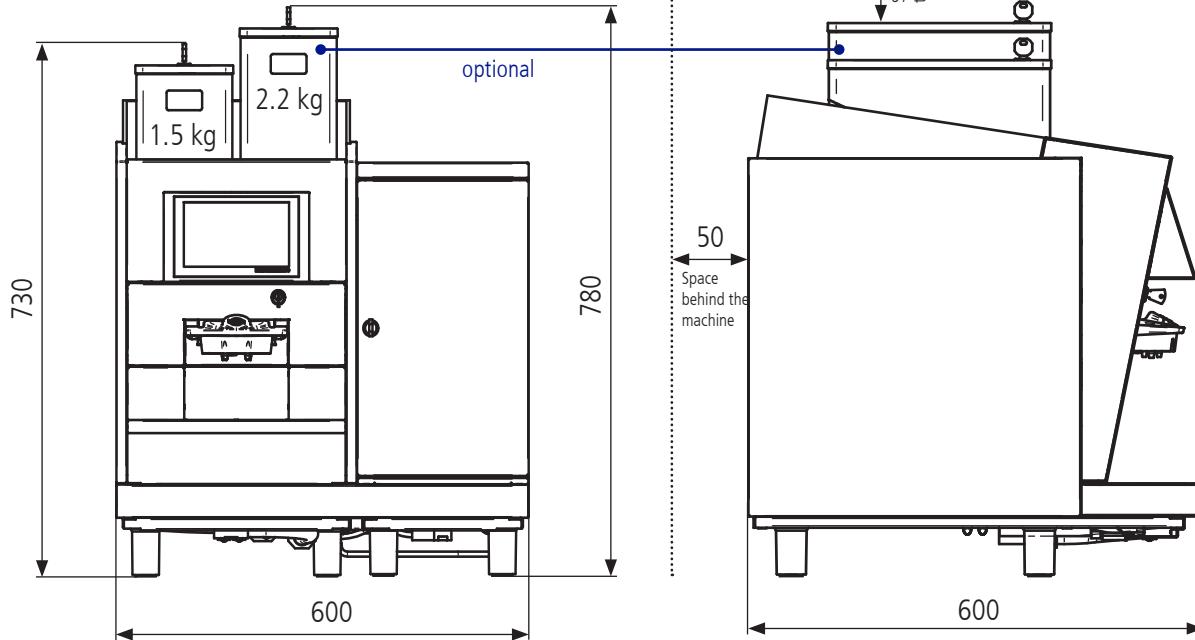
For more information see Technical Manual.

Hole diameter 70mm for water inlet and outlet. Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTM-RF



Automatic coffee machine Black&White 3 CTM-RF

Connections	220-240 VAC 12 A 50/60 Hz 220-240 VAC 16 A 50/60 Hz Refrigerator: 220-240 VAC 0.3 A 50/60 Hz
Output	2400-2900 W 3200-3800 W Refrigerator: 72 W
Dimensions	600 x 600 x 730 (780) mm (W / D / H)
Coffee spout height standard	80-173 mm
Coffee spout height with POD	80-163 mm
Weight	77.5 kg

Water connection	3/8"
Water pressure	2-4 bar / 30 -60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

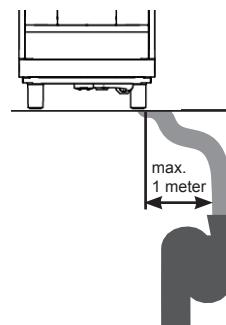
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

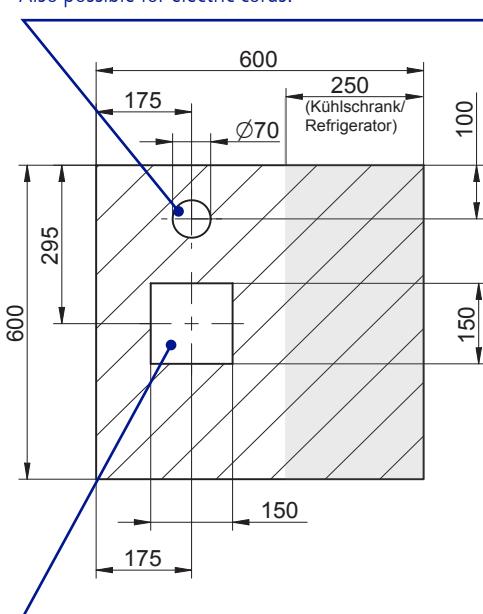
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

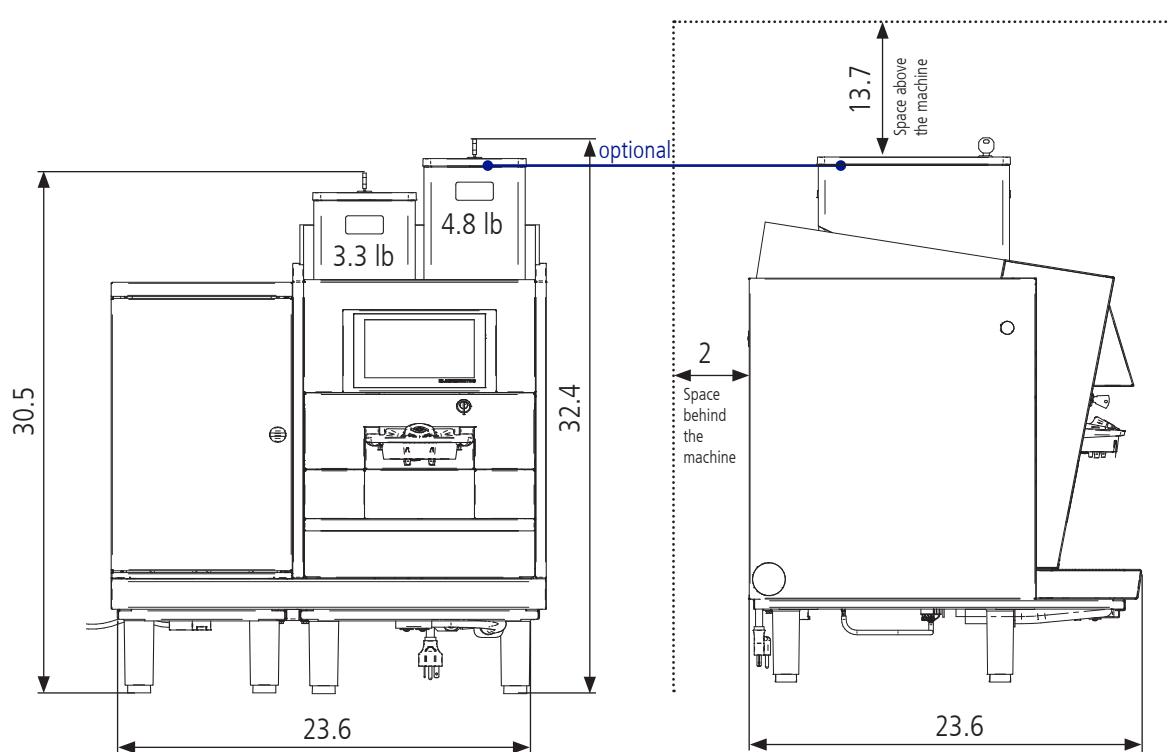


Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTM-RF (USA / CAN)

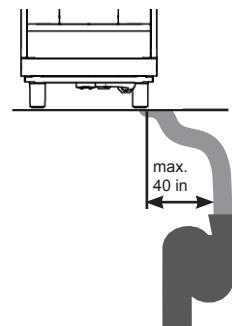


Automatic coffee machine Black&White 3 CTM-RF

Connections	208 VAC 13.5 A 60 Hz Refrigerator: 100-120 VAC 0.7 A 50/60 Hz
Output	2800 W Refrigerator: 78 W
Dimensions	23.6 x 23.6 x 30.5 (32.4) in (W / D / H)
Coffee spout height standard	3.14-6.8 in
Weight	170 lb

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



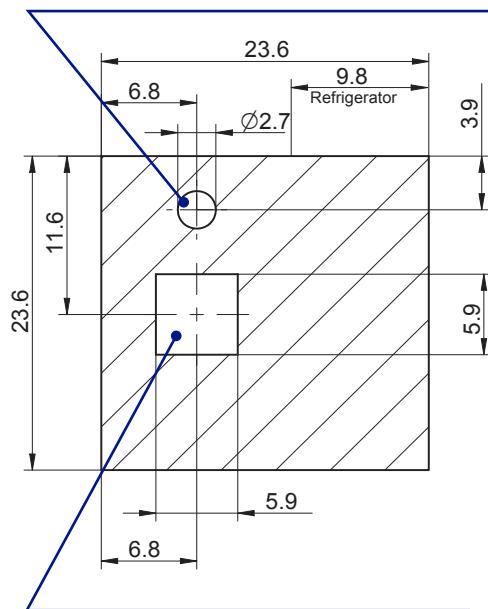
Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

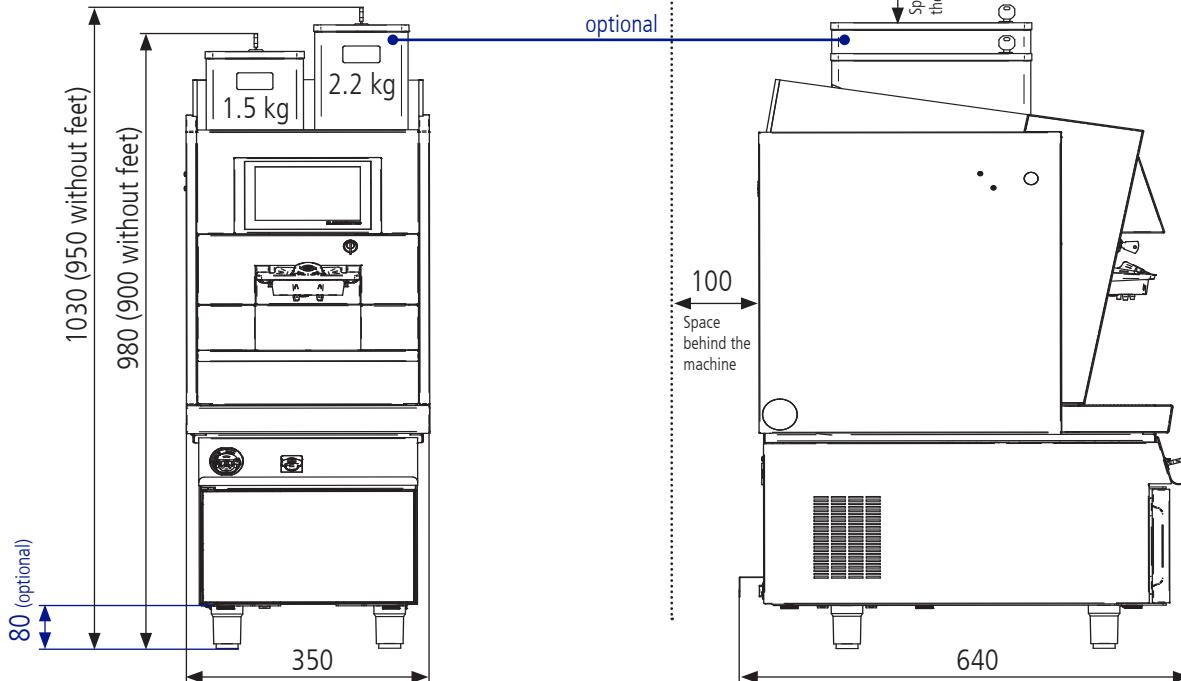
For more information see Technical Manual.

Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTM-RU



Automatic coffee machine Black&White 3 CTM-RU	
Connection	220-240 VAC 12 A 50/60 Hz 220-240 VAC 16 A 50/60 Hz Refrigerator: 220-240 VAC 0.3 A 50/60 Hz
Output	2400-2900 W 3200-3800 W Refrigerator: 72 W
Dimensions	350 x 640 x 980 (1030) mm (W / D / H)
Coffee spout height standard	80-173 mm
Weight	77.5 kg

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

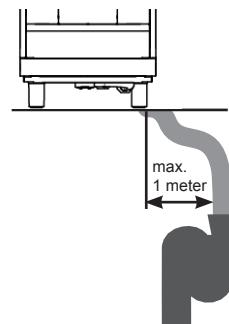
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

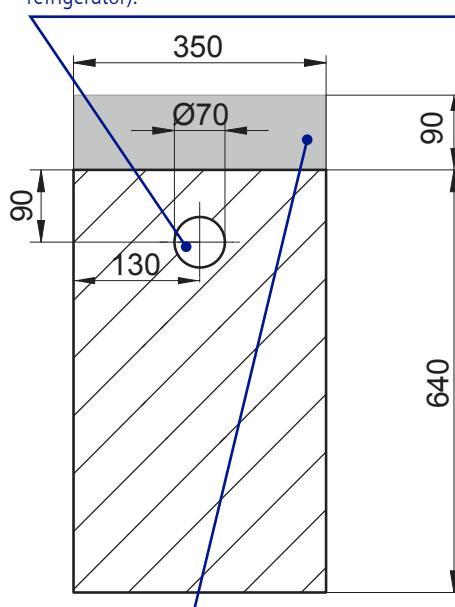
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

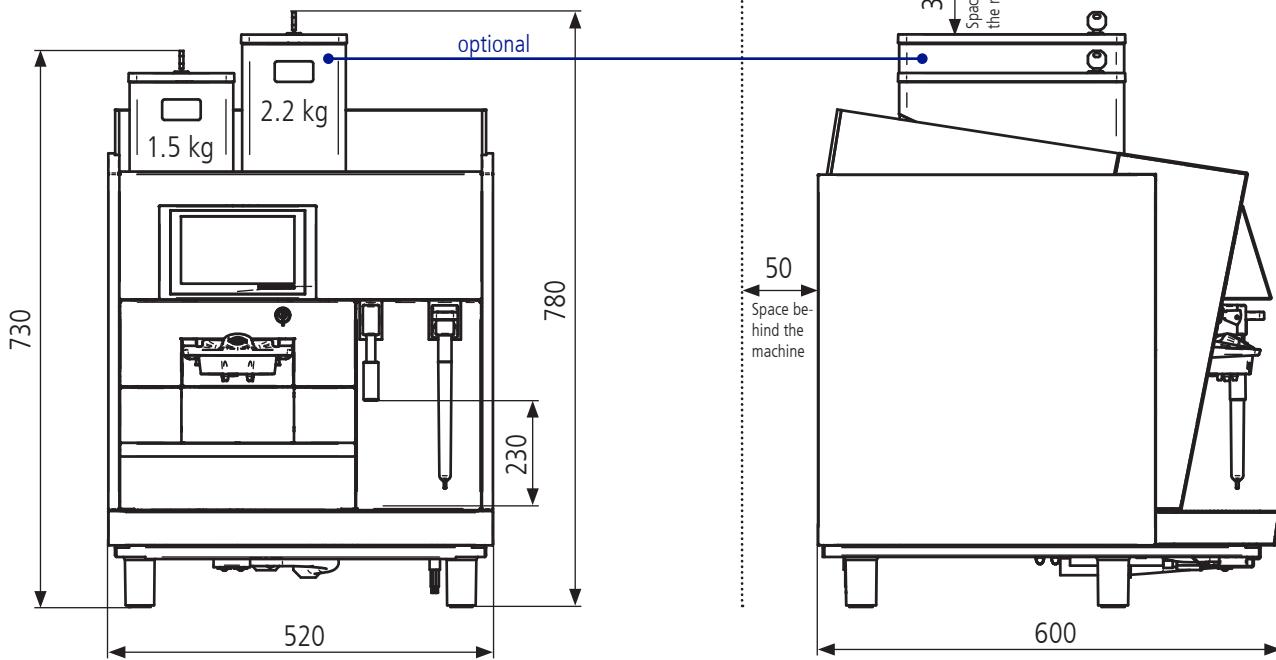


Hole diameter 70 mm for water inlet / outlet and electric cords (if going through the bottom of the refrigerator).



Hole diameter 70 mm for water inlet / outlet and electric cords (if going through the back of the machine).

Cut sheet CTS



Automatic coffee machine Black&White 3 CTS

Connections	220-240 VAC 32 A 50/60 Hz 380-415 VAC 3x16 A 50/60 Hz
Output	6300-7500 W
Dimensions	520 x 600 x 730 (780) mm (W / D / H)
Coffee spout height standard	80-173 mm
Coffee spout height with POD	80-163 mm
Weight	78 kg

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

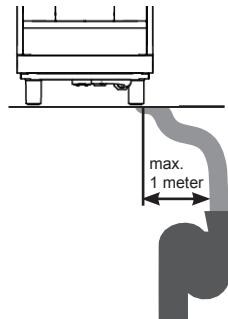
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

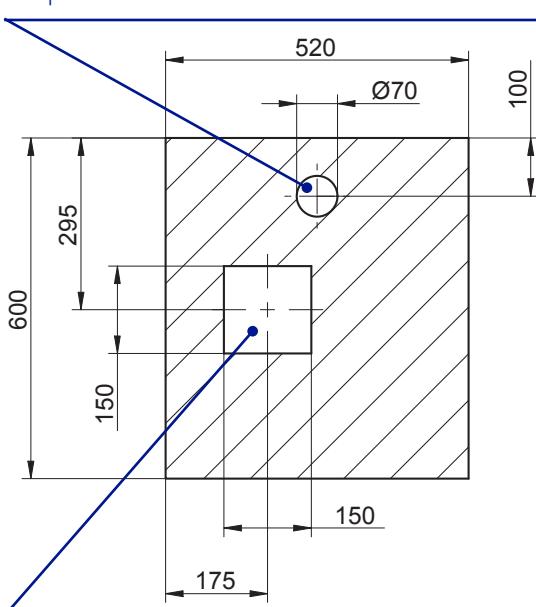
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

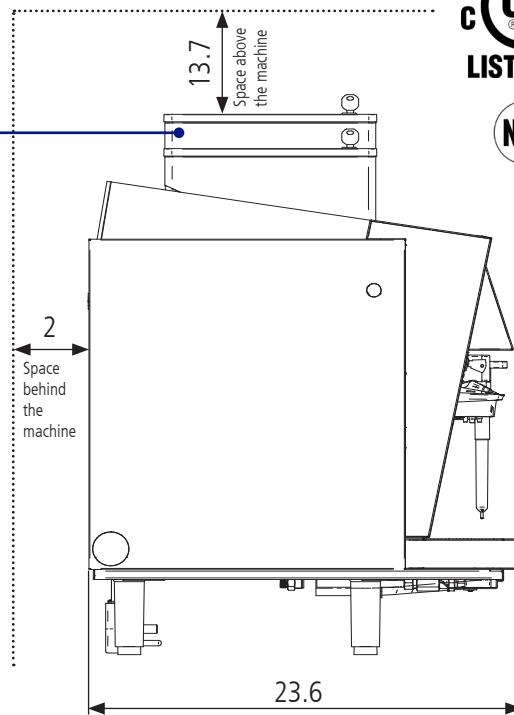
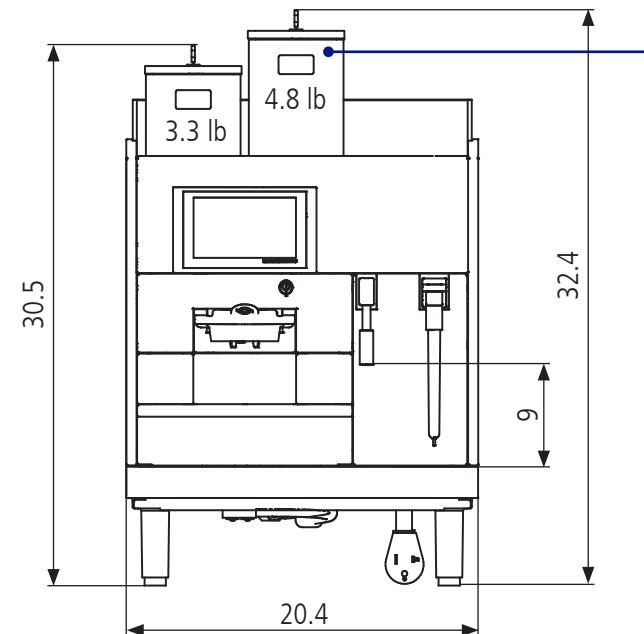


Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTS (USA / CAN)



LISTED^{14KA}

Automatic coffee machine Black&White 3 CTS

Connection	208 VAC 30 A 60 Hz
Output	6200 W
Dimensions	20.4 x 23.6 x 30.5 (32.4) in (W / D / H)
Coffee spout height standard	3.14-6.8 in
Weight	172 lb

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

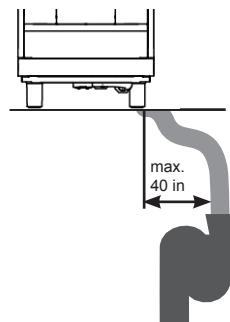
Conversion table water hardness

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

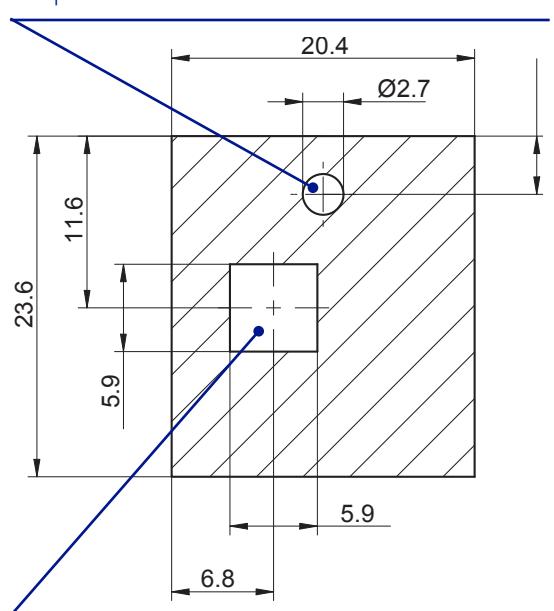
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

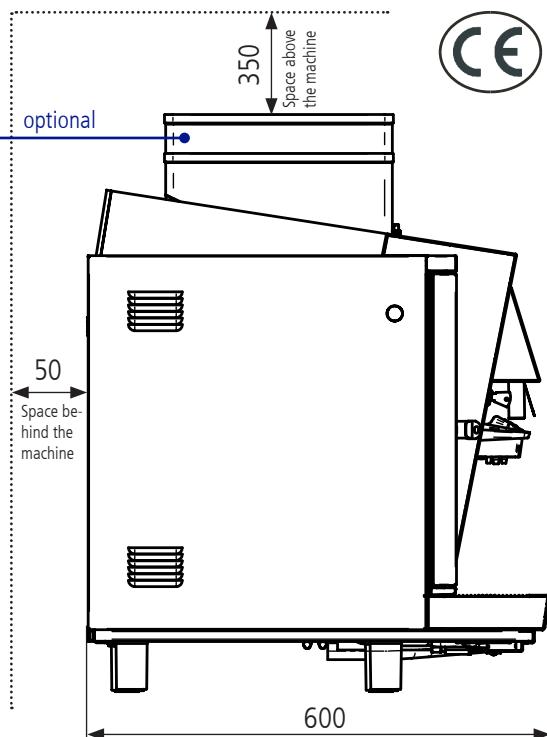
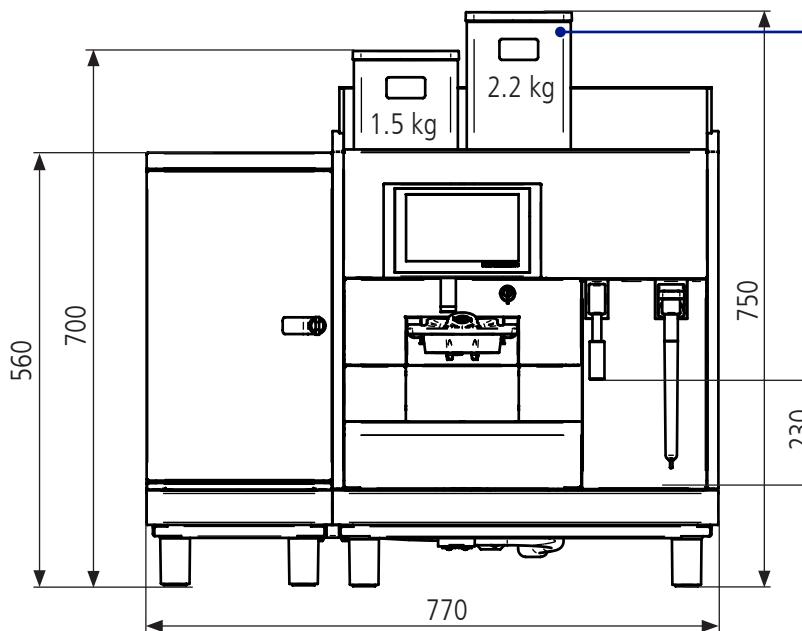


Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTMS



Automatic coffee machine Black&White 3 CTMS

Connection	220-240 VAC 32 A 50/60 Hz 380-415 VAC 3x16 A 50/60 Hz Refrigerator: 220-240 VAC 0.3 A 50/60 Hz
Output	6300-7500 W 6900-8300 W Refrigerator: 72 W
Dimensions	770 x 600 x 700 (750) mm (W / D / H)
Coffee spout height standard	80-173 mm
Coffee spout height POD	80-163 mm
Weight	100 kg

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

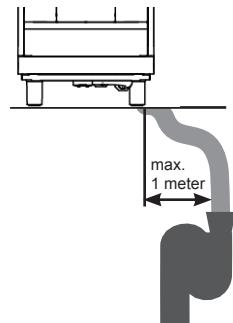
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

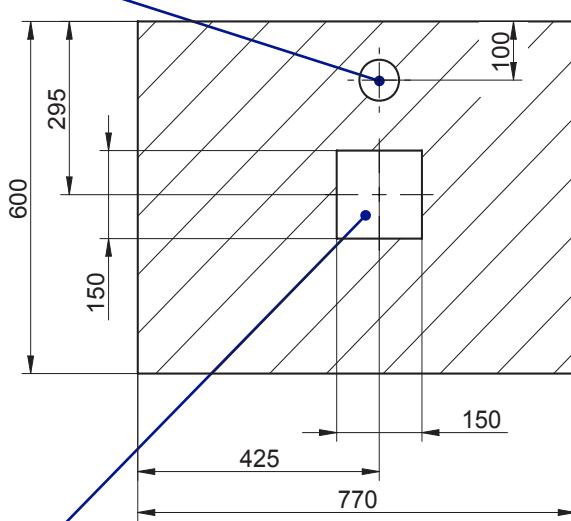
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

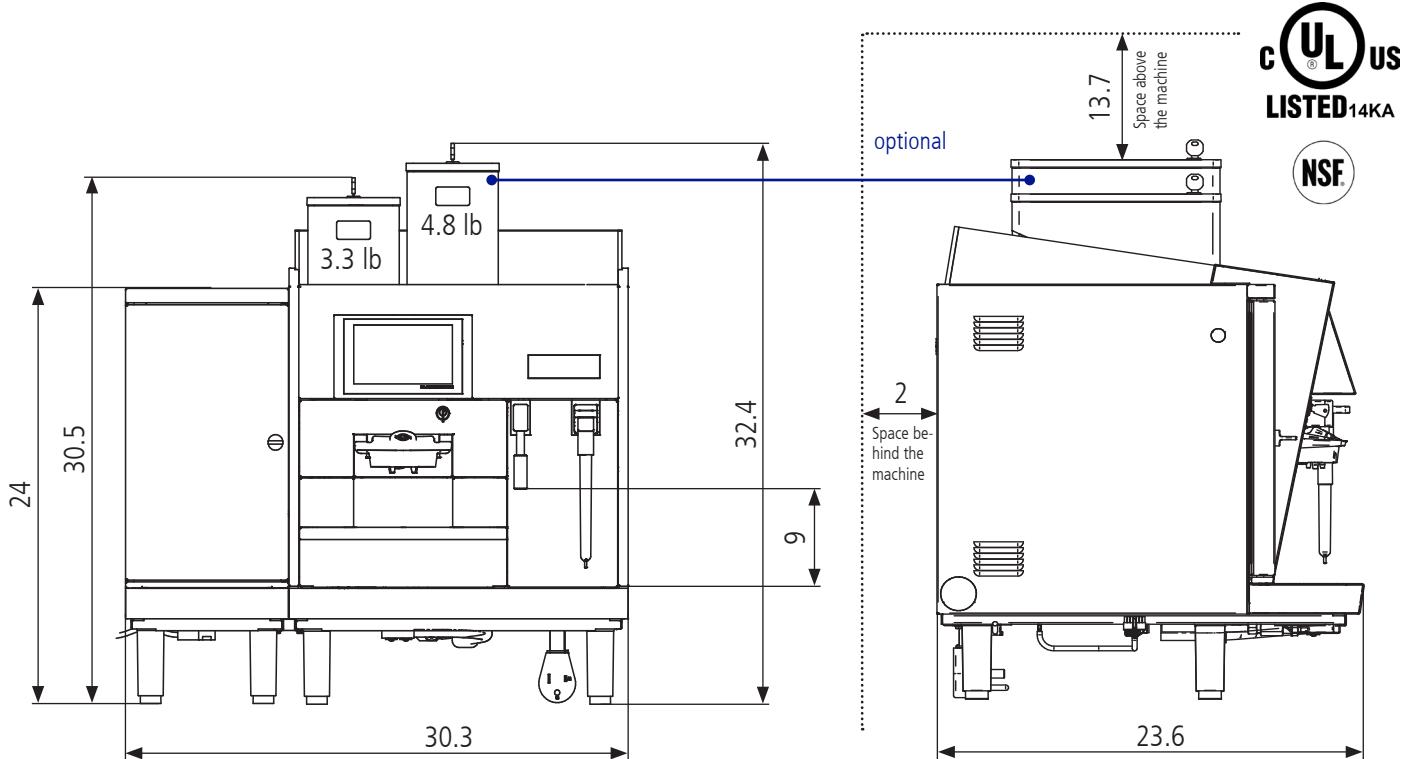


Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTMS (USA / CAN)



Automatic coffee machine Black&White 3 CTMS

Connections	208 VAC 30 A 60 Hz Refrigerator: 100-120 VAC 0.7 A 50/60 Hz
Output	6200 W Refrigerator: 78 W
Dimensions	30.3 x 23.6 x 30.5 (32.4) in (W / D / H)
Coffee spout height standard	3.14-6.8 in
Weight	220.5 lb

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

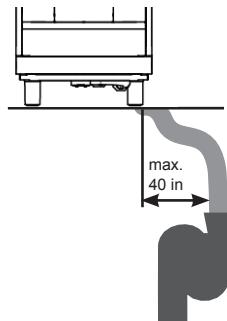
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

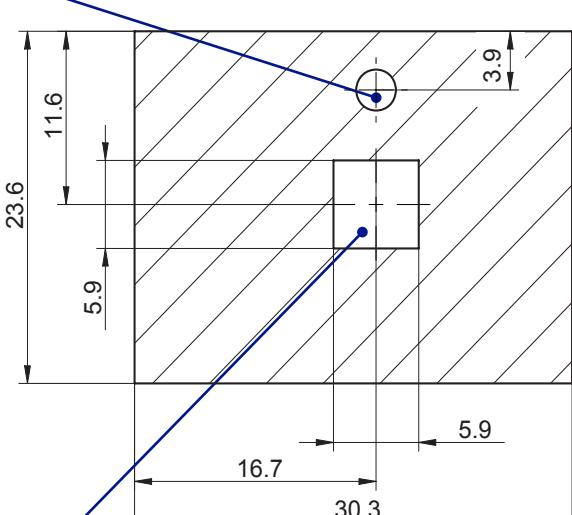
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

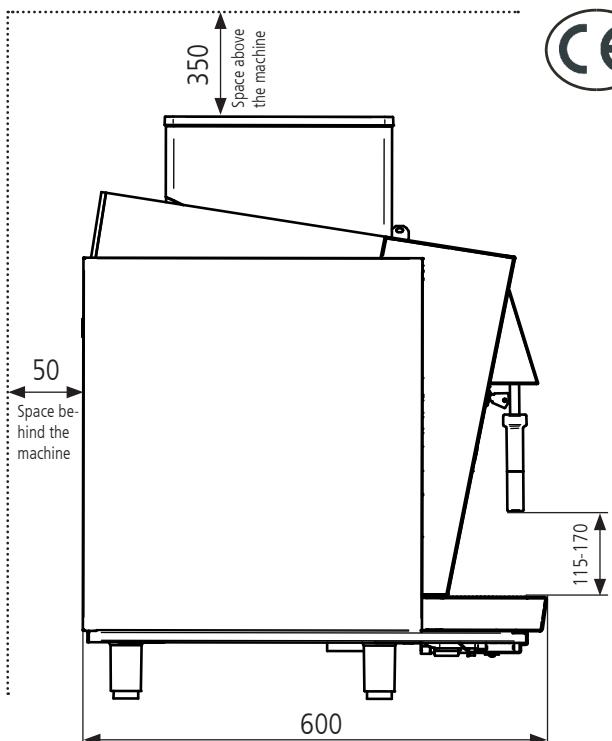
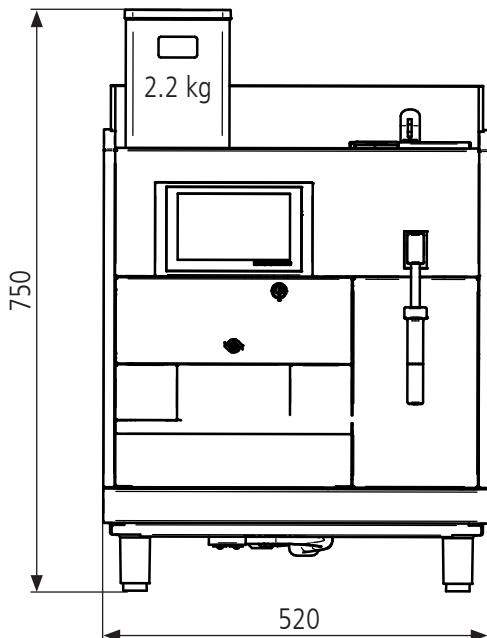


Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet B

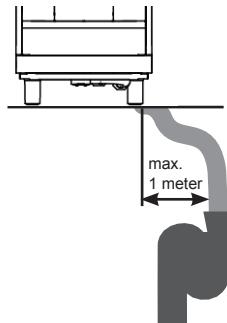


Automatic coffee machin Black&White 3 B

Connection	220-240 VAC 16 A 50/60 Hz
Output	3200-3900 W
Dimensions	520 x 600 x 750 mm (W / D / H)
Coffee spout height standard	80-173 mm
Weight	62.5 kg

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



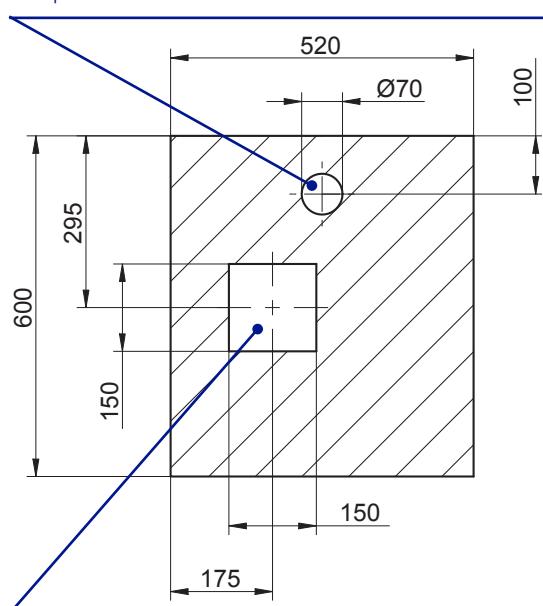
Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

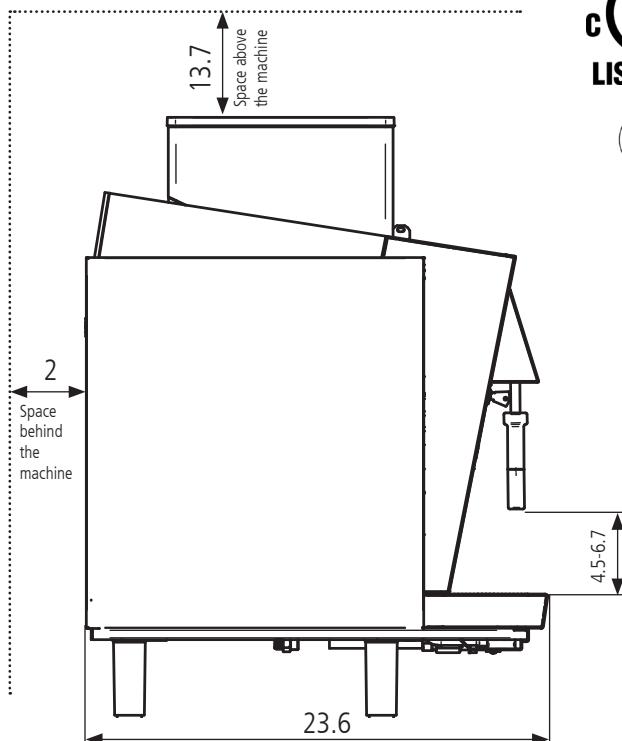
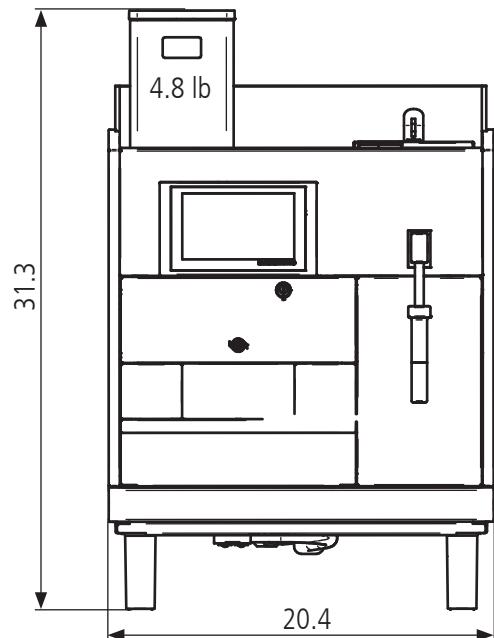
For more information see Technical Manual.

Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Datenblatt B (USA / CAN)



Automatic coffee machine Black&White 3 B	
Connections	208 VAC 15 A 60 Hz
Output	3150 W
Dimensions	20.4 x 23.6 x 31.3 in (W / D / H)
Coffee spout height standard	3.14-6.8 in
Weight	137.8 lb

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14° H)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

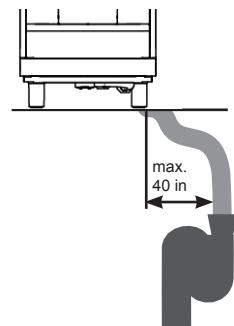
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

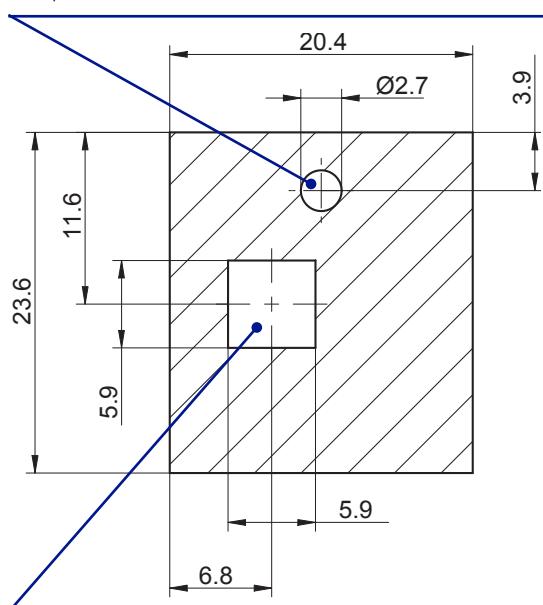
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

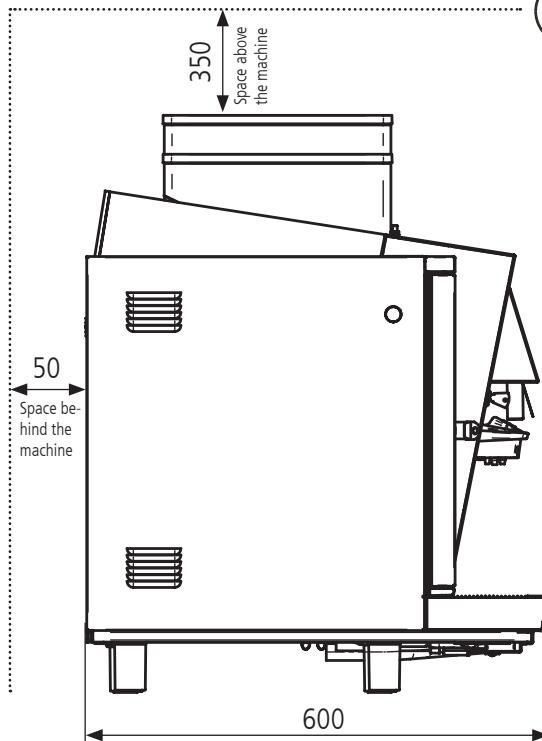
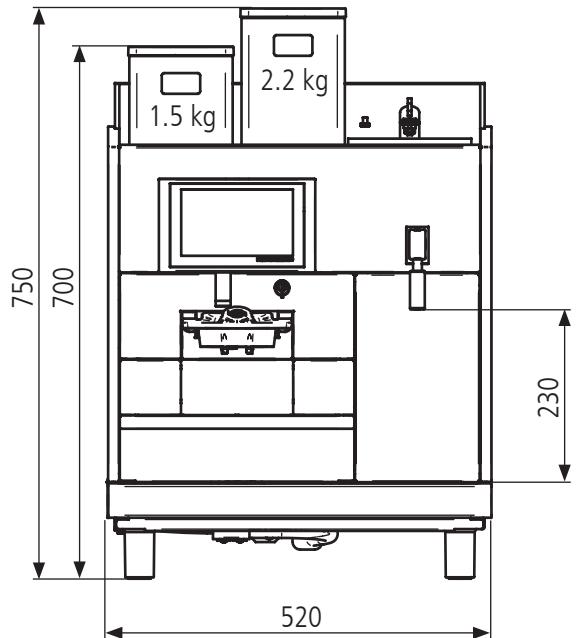


Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CBT

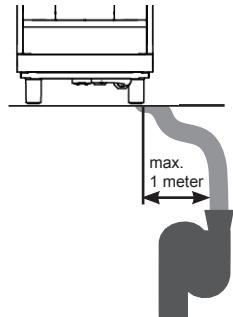


Automatic coffee machine Black&White 3 CBT

Connections	220-240 VAC 16 A 50/60 Hz
Output	3200-3900 W
Dimensions	520 x 600 x 700 (750) mm (W / D / H)
Coffee spout height standard	80-173 mm
Coffee spout height with POD	80-163 mm
Weight	67 kg

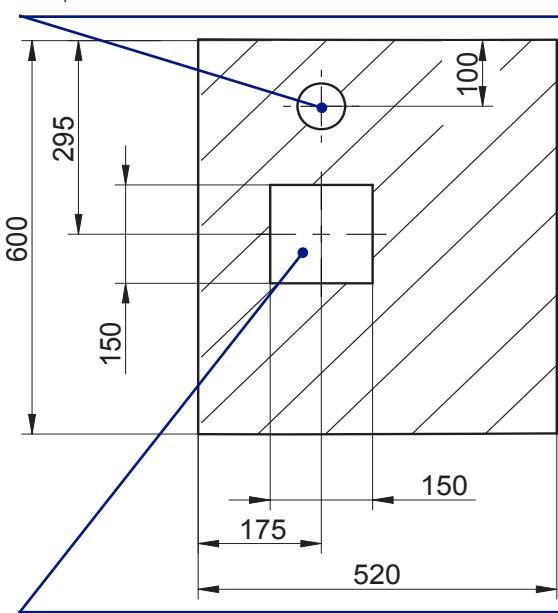
Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

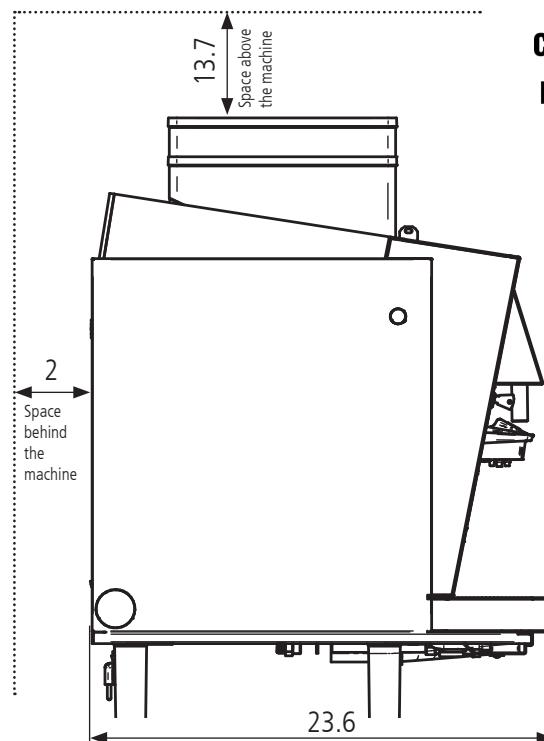
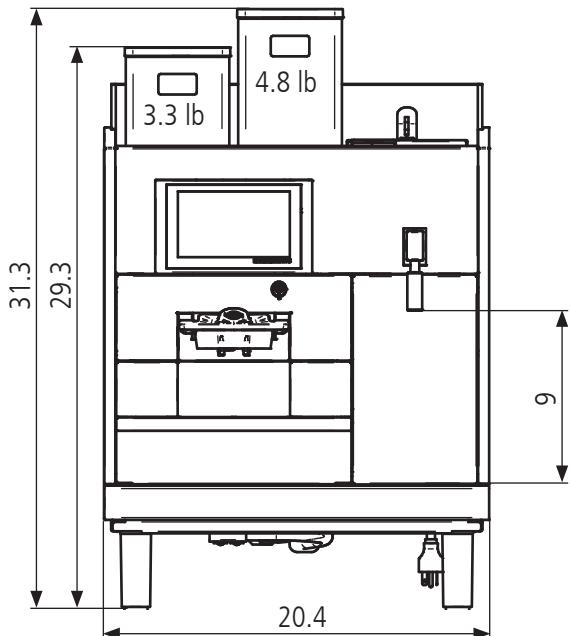
Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

For more information see Technical Manual.

Cut sheet CBT (USA / CAN)



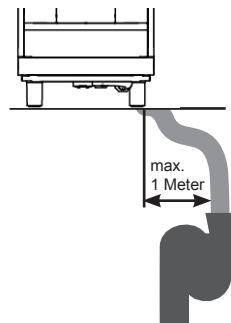
CUL US
LISTED^{14KA}

NSF

Automatic coffee machine Black&White 3 CBT	
Connections	208 VAC 15 A 60 Hz
Output	3150 W
Dimensions	20.4 x 23.6 x 29.3 (31.3) in (W / D / H)
Coffee spout height standard	3.1-6.8 in
Coffee spout height with POD	3.1-6.4 in
Weight	147.7 lb

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



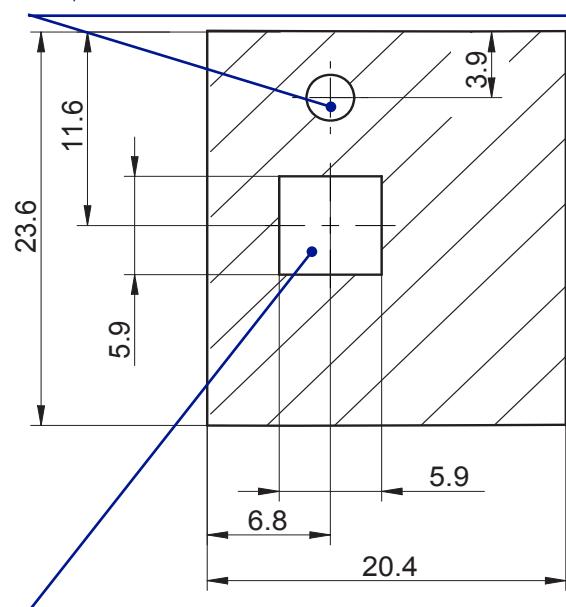
Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

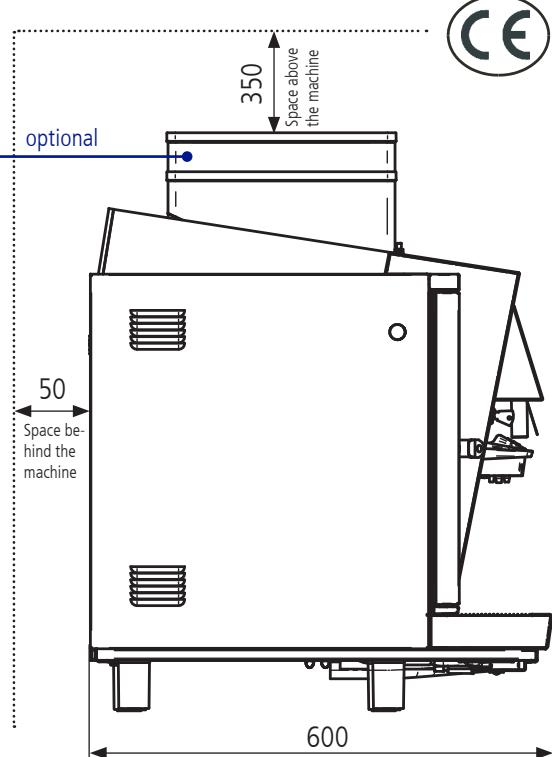
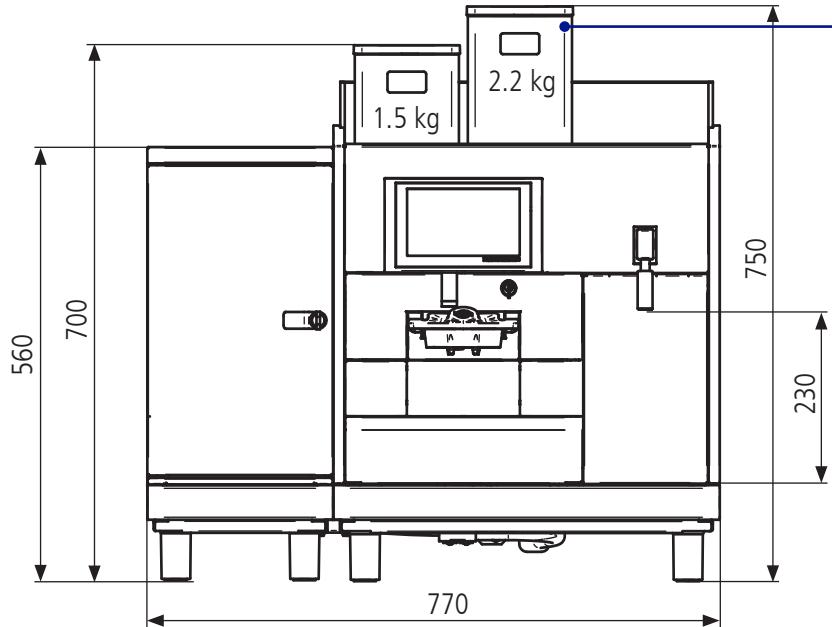
For more information see Technical Manual.

Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CBTM



Automatic coffee machine Black&White 3 CBTM

Connections	220-240 VAC 16 A 50/60 Hz Refrigerator: 220-240 VAC 0.3 A 50/60 Hz
Output	3200-3800 W Refrigerator: 72
Dimensions	770 x 600 x 700 (750) mm (W / D / H)
Coffee spout height standard	80-173 mm
Weight	94 kg

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

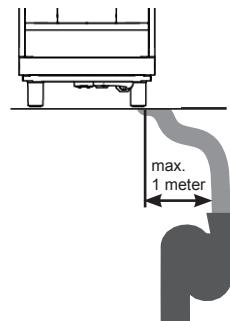
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

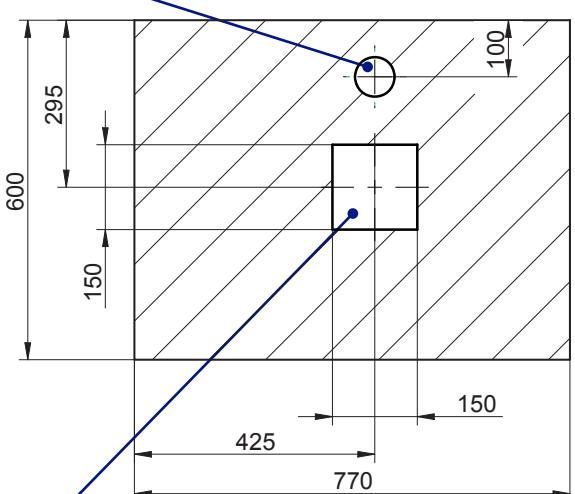
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

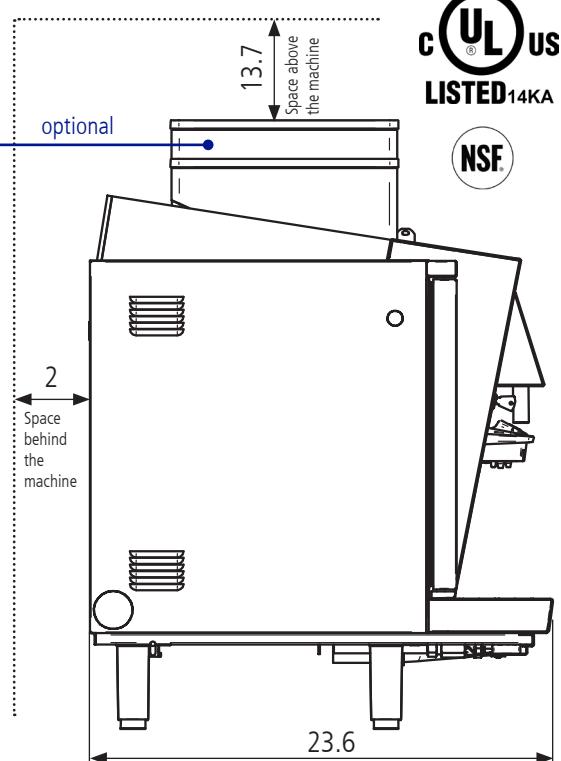
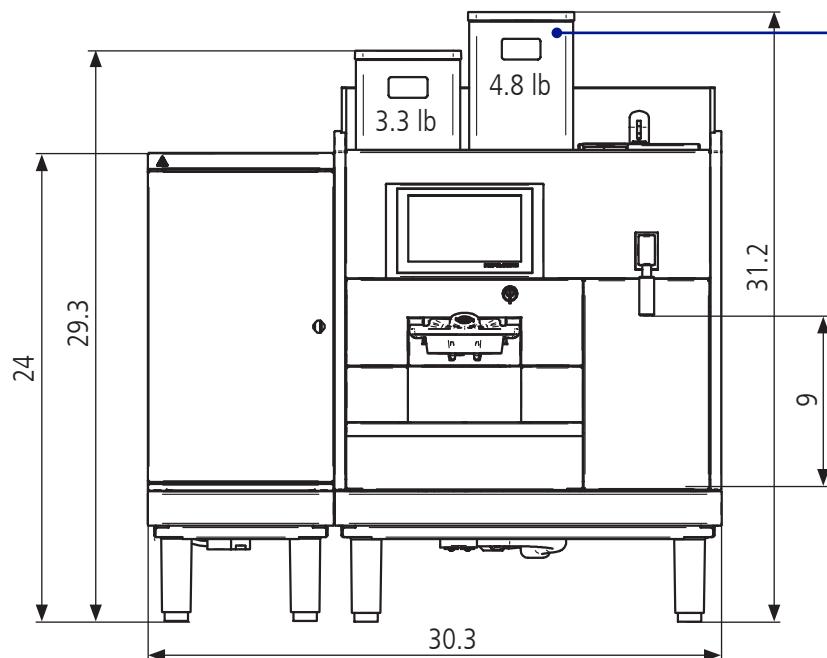


Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CBTM (USA / CAN)



UL
LISTED^{14KA}

NSF

Automatic coffee machine Black&White 3 CBTM

Connection	208 VAC 15 A 60 Hz Refrigerator: 100-120 VAC 0.7A 50/60 Hz
Output	3150 W Refrigerator: 78 W
Dimensions	30.3 x 23.6 x 29.3 (31.2) in (W / D / H)
Coffee spout height standard	3.1-6.8 in
Weight	207.2 lb

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8 - 14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

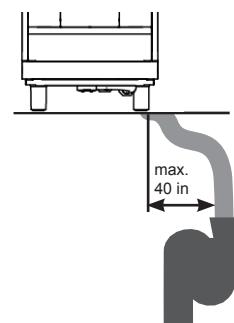
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

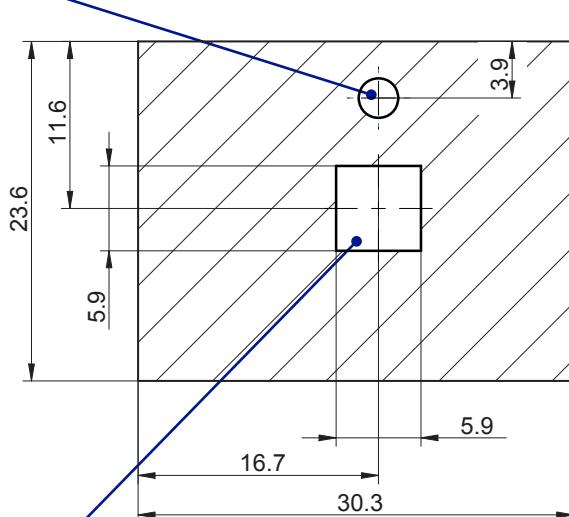
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

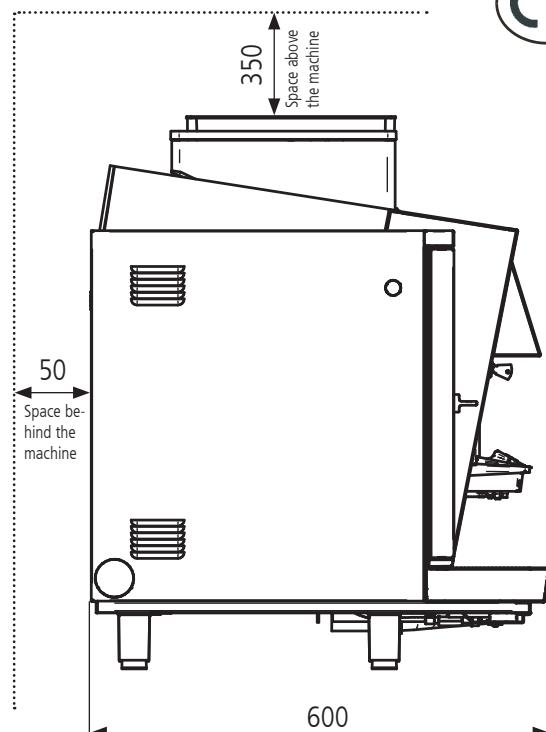
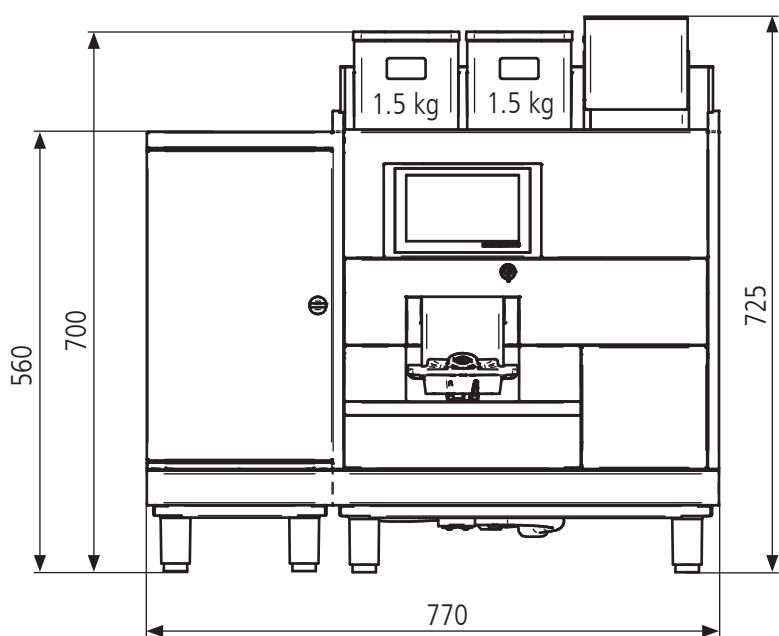


Hole diameter 2.7 in for water inlet and outlet. Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTMC



Automatic coffee machine Black&White 3 CTMC

Connections	220-240 VAC 16 A 50/60 Hz Refrigerator: 220-240 VAC 0.3 A 50/60 Hz
Output	3200-3800 W Refrigerator: 72 W
Dimensions	770 x 600 x 725 mm (W / D / H)
Coffee spout height standard	80-173 mm
Weight	95 kg

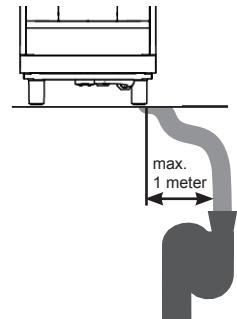
Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

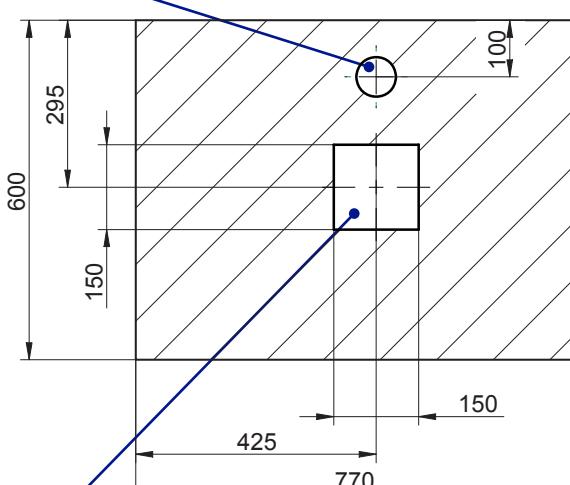
Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



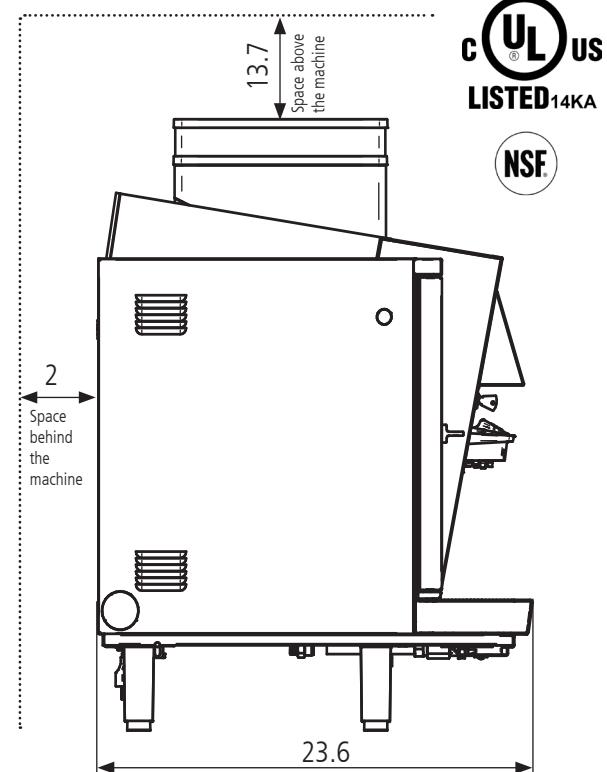
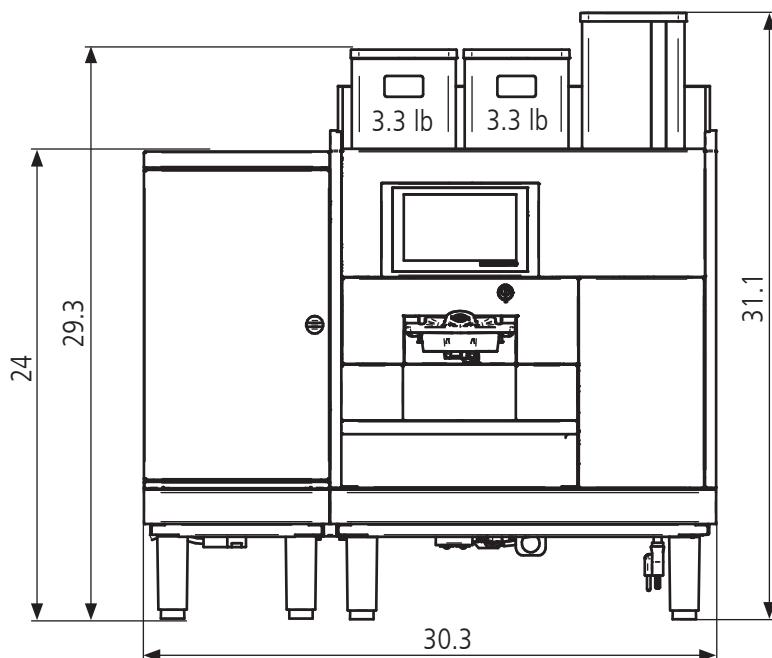
Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

For more information see Technical Manual.

Cut sheet CTMC (USA / CAN)



UL
LISTED 14KA

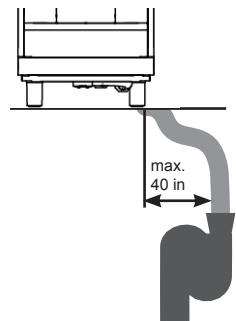
NSF

Automatic coffee machine Black&White 3 CTMC

Connections	208 VAC 13.5 A 60 Hz Refrigerator: 100-120 VAC 0.7 A 50/60 Hz
Output	2800 W Refrigerator: 78 W
Dimensions	30.3 x 23.6 x 31.1 in (W / D / H)
Coffee spout height standard	3.1-6.8 in
Weight	208 lb

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



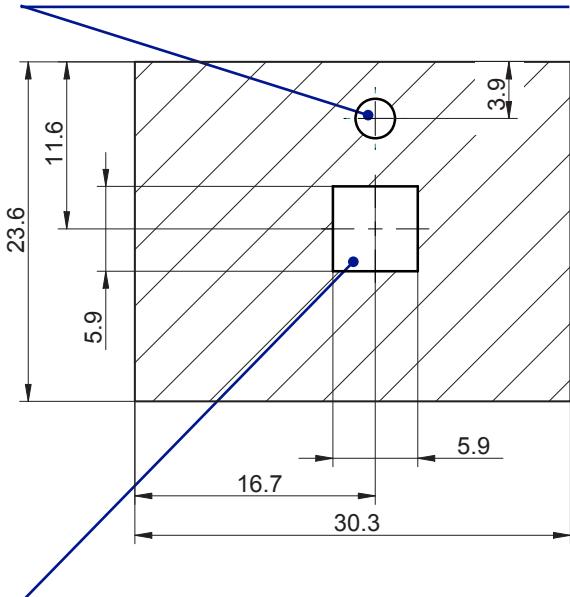
Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

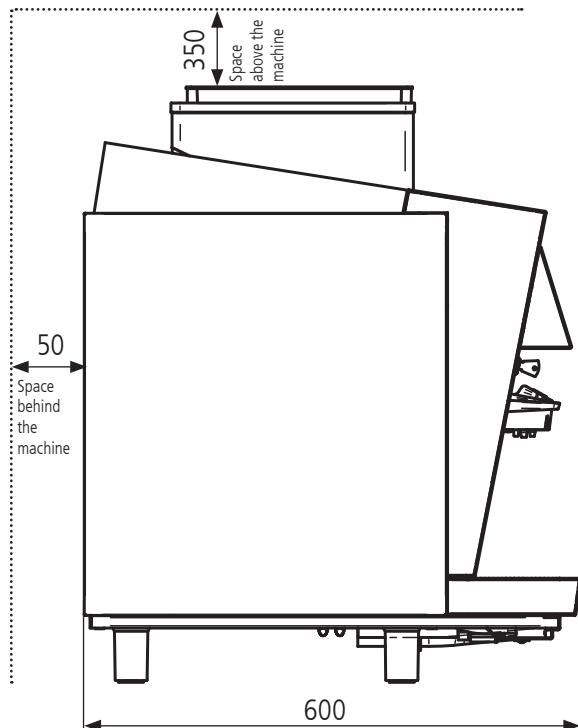
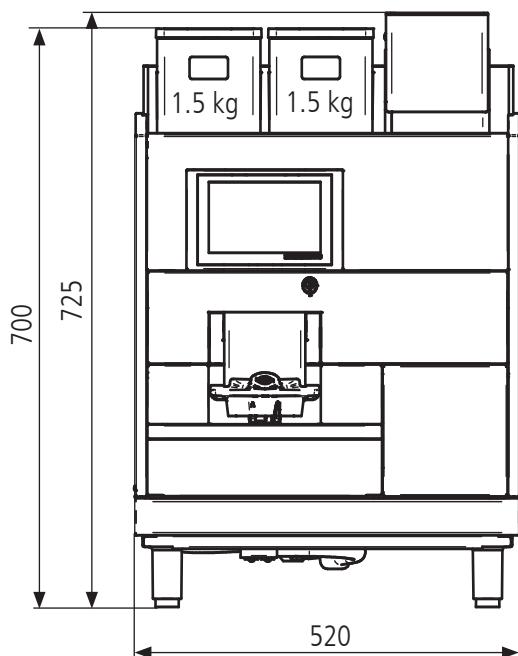
Weitere Informationen zur Installation befinden sich im Technischen Handbuch

Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTMC without refrigerator



Automatic coffee machine Black&White 3 CTMC without refrigerator

Connections	220-240 VAC 16 A 50/60 Hz
Output	3200-3800 W
Dimensions	520 x 600 x 725 mm (W / D / H)
Coffee spout height standard	80-173 mm
Weight	71.5 kg

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °F)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

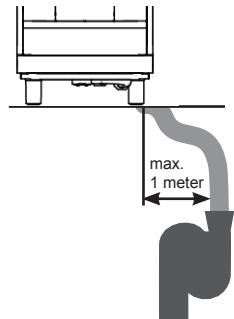
Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

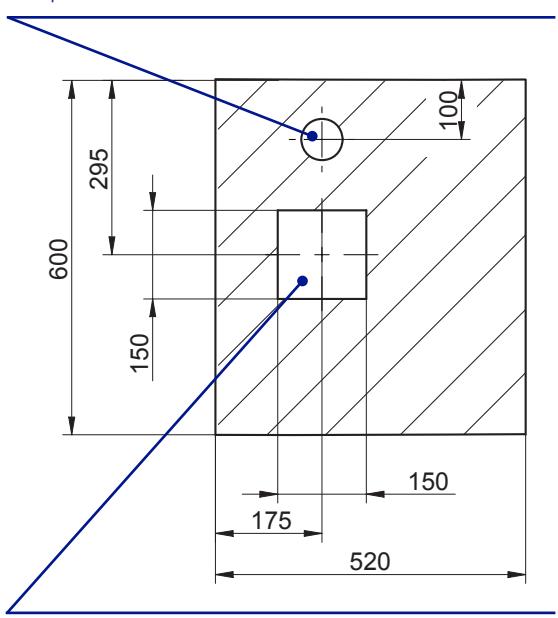
For more information see Technical Manual.

Drainage

The distance between the drain and the machine must not be more than 1 m. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.

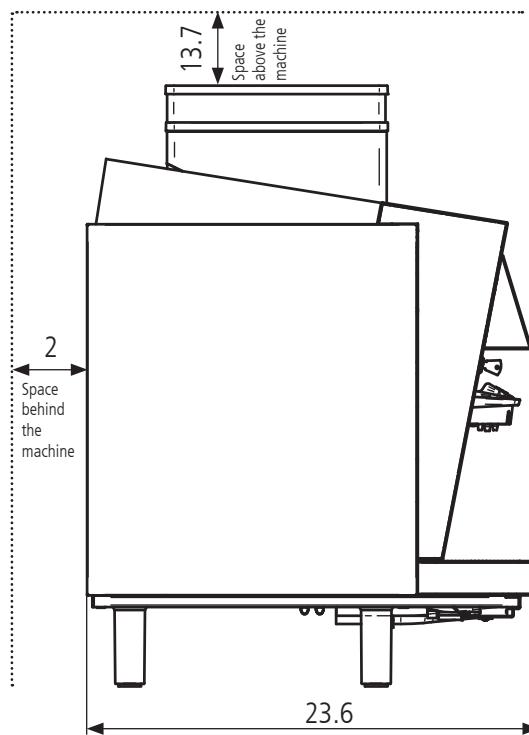
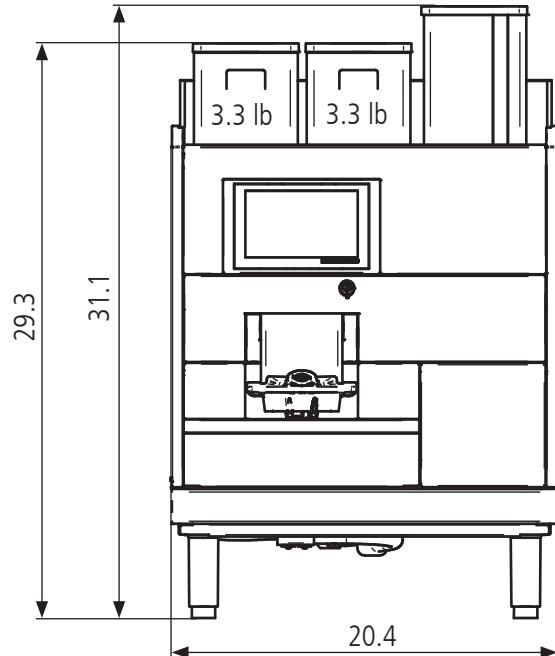


Hole diameter 70mm for water inlet and outlet.
Also possible for electric cords.



Hole 150 x 150mm for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet CTMC without refrigerator (USA / CAN)



UL
LISTED^{14KA}

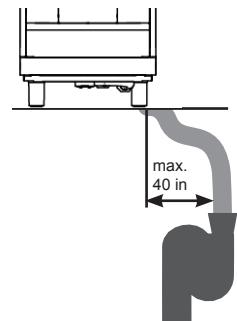
NSF

Automatic coffee machine Black&White 3 CTMC without refrigerator

Connections	208 VAC 13.5 A 60 Hz
Output	2800 W
Dimensions	20.4 x 23.6 x 31.1 in (W / D / H)
Coffee spout height standard	3.1-6.8 in
Weight	157.6 lb

Drainage

The distance between the drain and the machine must not be more than 40 in. Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



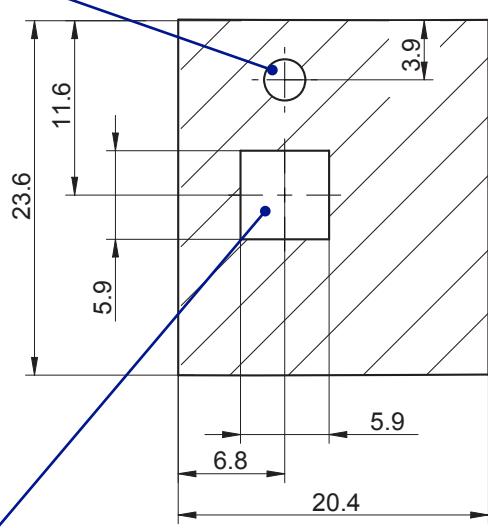
Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	none
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

Conversion table water hardness:

Water hardness	DE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

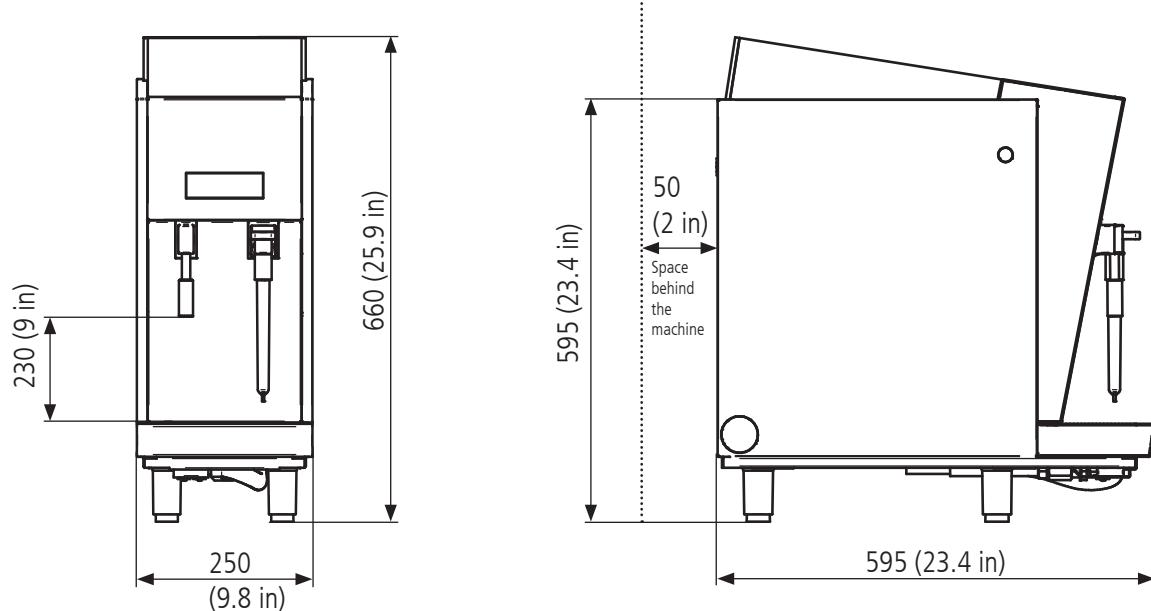
For more information see Technical Manual.

Hole diameter 2.7 in for water inlet and outlet.
Also possible for electric cords.



Hole 5.9 x 5.9 in for coffee grounds drawer.
Special grounds drawer needed.

Cut sheet TS Standalone



Standalone Black&White 3 TS

Connections	220-240 VAC 20 A 50/60 Hz 380-415 VAC 3 x 11 A 50/60 Hz
Output	4000-4800 W
Dimensions	250 x 595 x 652 mm (W / D / H) 9.8 x 23.4 x 25.9 in (W / D / H)
Weight	35 kg 77.1 lb

Water connection	3/8"
Water pressure	2-4 bar / 30-60 psi
Chlorine	Kein
TDS	70-200 ppm
Hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	less than 100 ppm
Iron	less than 0.25 ppm

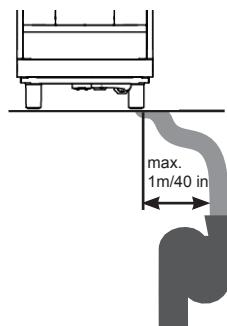
Conversion table water hardness:

Water hardness	GE	FR	EN	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0

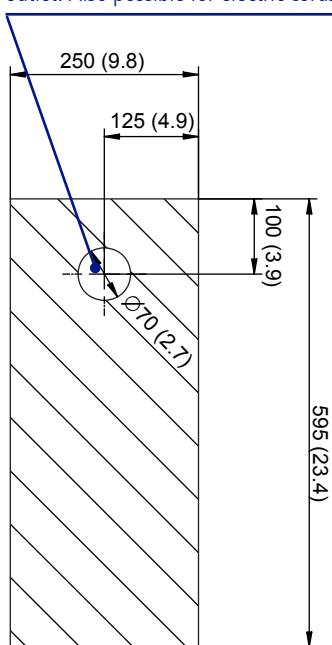
For more information see Technical Manual.

Drainage

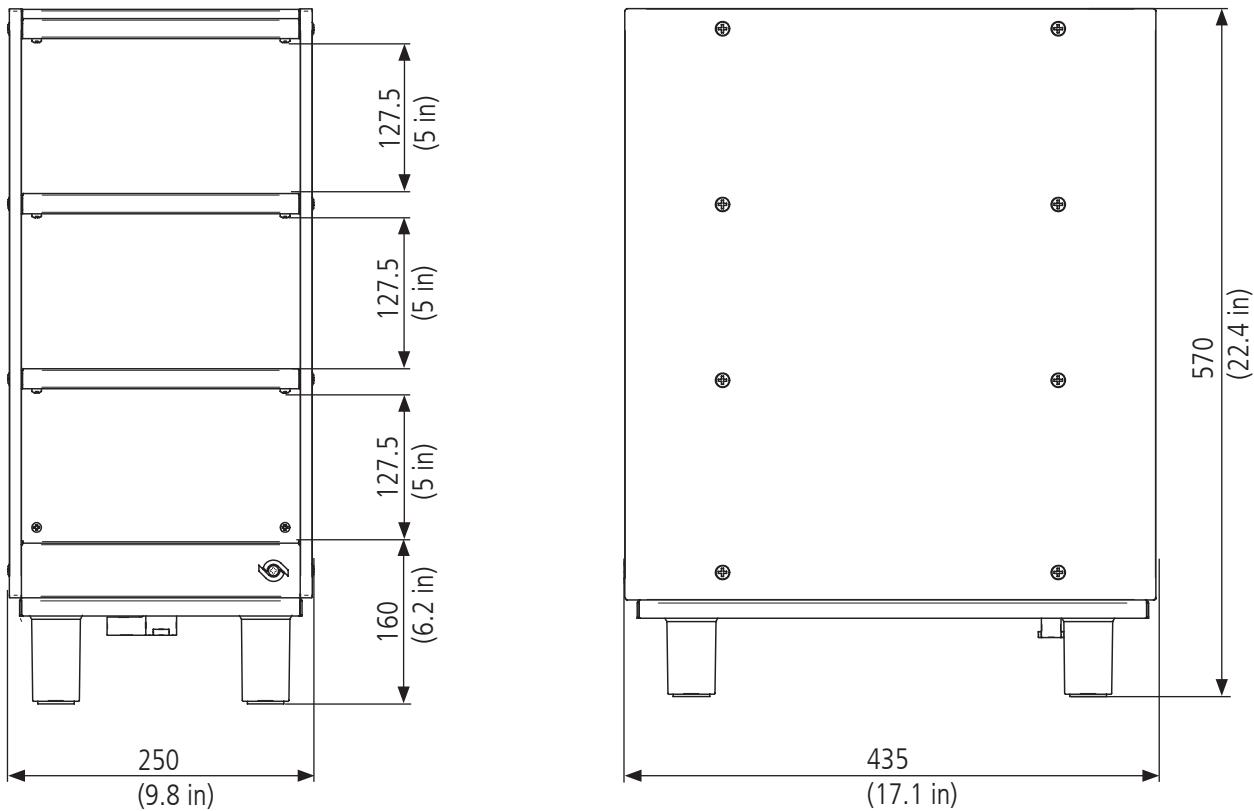
The distance between the drain and the machine must not be more than 1 m (40 in). Make sure there is no dip or any back pressure in the drain hose. The end of the hose must not be in the water.



Hole diameter 70mm (2.7 in) for water inlet and outlet. Also possible for electric cords.



Cut sheet CH (Cup heater)

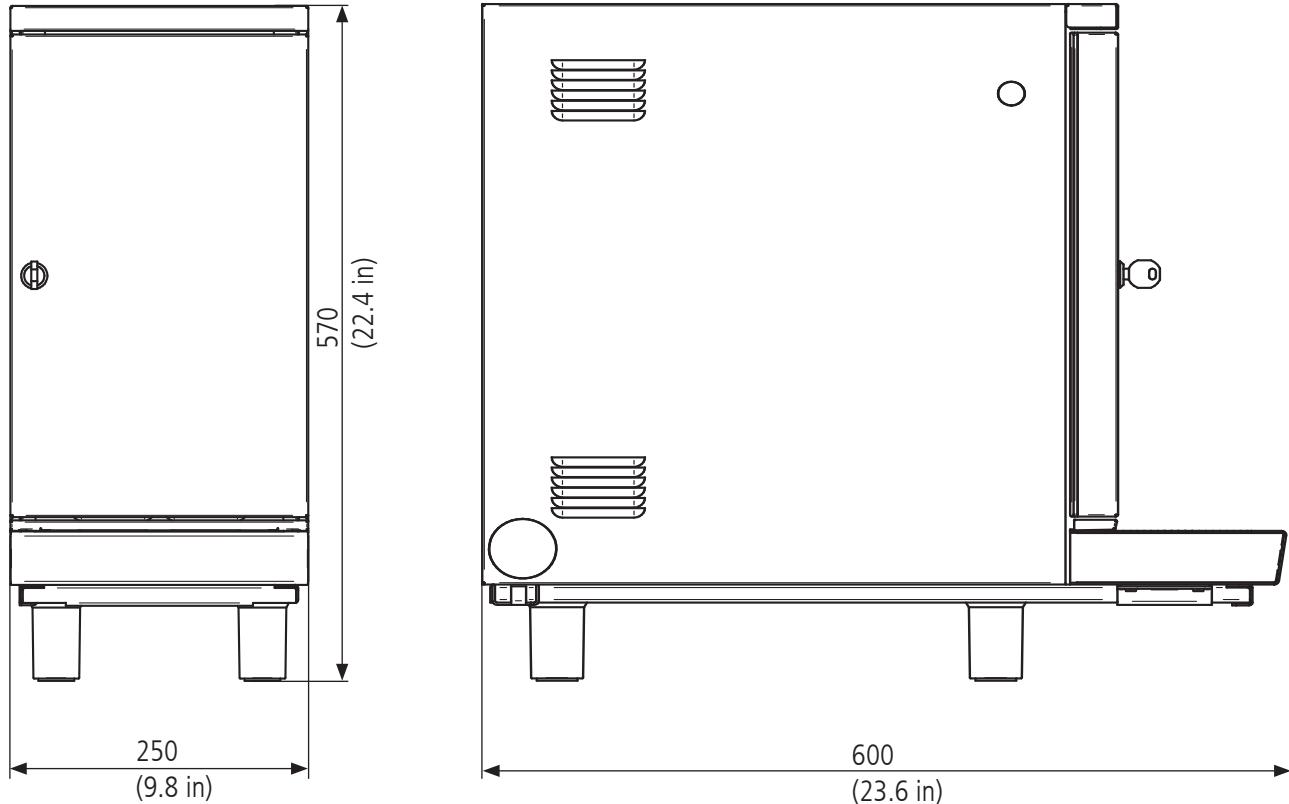


Cup heater Black&White 3 CH

Capacity	Holds 100 to 150 cups
Connections	220-240 VAC 0.5 A 50/60 Hz 100-120 VAC 0.7 A 50/60 Hz
Output	90-110 W 85 W
Dimensions	250 x 435 x 565 mm (W / D / H) 9.8 x 17.1 x 22.4 in (W / D / H) Optional with higher feet (USA / CAN): 250 x 435 x 610 mm (W / D / H) 9.8 x 17.1 x 24 in (W / D / H)
Weight	17 kg 37.4 lb

For more information see Technical Manual.

Cut sheet RF (Refrigerator)



Refrigerator Black&White 3 RF

Capacity	Storing up to 5 l (1 US gal) of cold milk
Connections	220-240 VAC 0.75 A 50/60 Hz 100-120 VAC 1.6 A 50/60 Hz
Dimensions	250 x 600 x 570 mm (W / D / H) 9.8 x 23.6 x 22.4 in (W / D / H) Optional with higher feet (USA / CAN): 250 x 600 x 610 mm (W / D / H) 9.8 x 23.6 x 24 in (W / D / H)
Weight	25 kg 55.1 lb



Optional: Door knob left.

For more information see Technical Manual.

General view

CT

Bean hopper mill 2

Bean hopper mill 1

Touchscreen



Coffee- / hot water outlet

Grounds drawer

Drip tray grill

Drip tray

General view

CTM

Refrigerator with milk container

Bean hopper mill 2

Bean hopper mill 1

Touchscreen



Coffee- / hot water / milk outlet

Grounds drawer

Drip tray grill

Drip tray

General view

CTM-RU

Bean hopper mill 2

Bean hopper mill 1

Touchscreen



General view

CTS

Bean hopper mill 2

Bean hopper mill 1

Touchscreen



General view

CTMS

Bean hopper mill 2

Bean hopper mill 1

Touchscreen

Refrigerator with milk container



General view

B

Brew coffee tank

Bean hopper

Touchscreen



Grounds drawer

Drip tray grill

Brew coffee outlet

Drip tray

General view

CBT

- Brew coffee tank
- Bean hopper mill 2
- Bean hopper mill 1
- Touchscreen



- Coffee outlet
- Milk outlet
- Tea outlet
- Grounds drawer (lockable)
- Drip tray grill
- Drip tray
- Brew coffee outlet

General view

CBTM

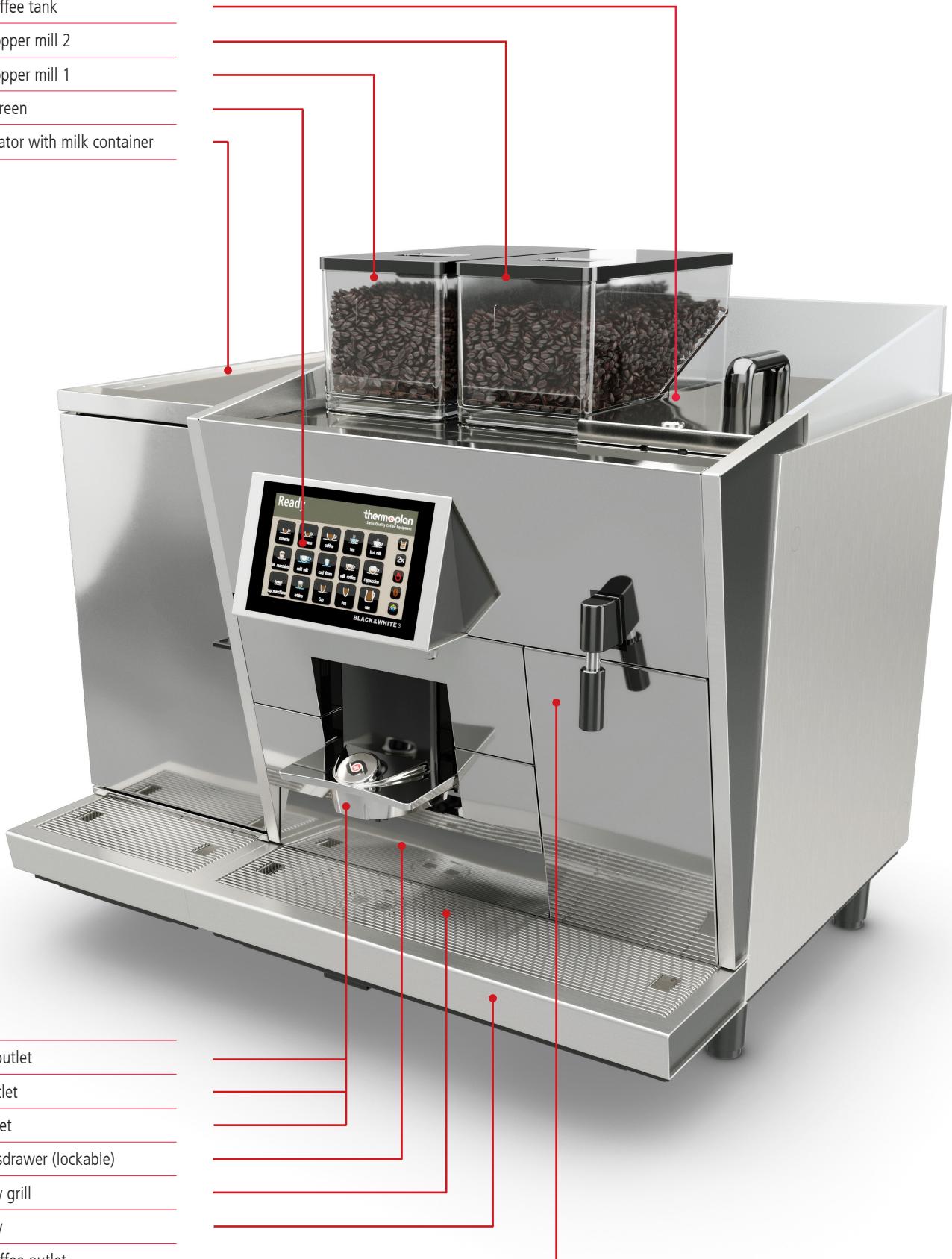
Brew coffee tank

Bean hopper mill 2

Bean hopper mill 1

Touchscreen

Refrigerator with milk container



Coffee outlet

Milk outlet

Tea outlet

Groundsdrawer (lockable)

Drip tray grill

Drip tray

Brew coffee outlet

General view

CTMC

Chocolate hopper
Bean hopper mill 2
Bean hopper mill 1
Touchscreen
Refrigerator with milk container



General view

TS

Steam outlet

Product buttons

Hot water outlet



Drip tray grill

Drip tray

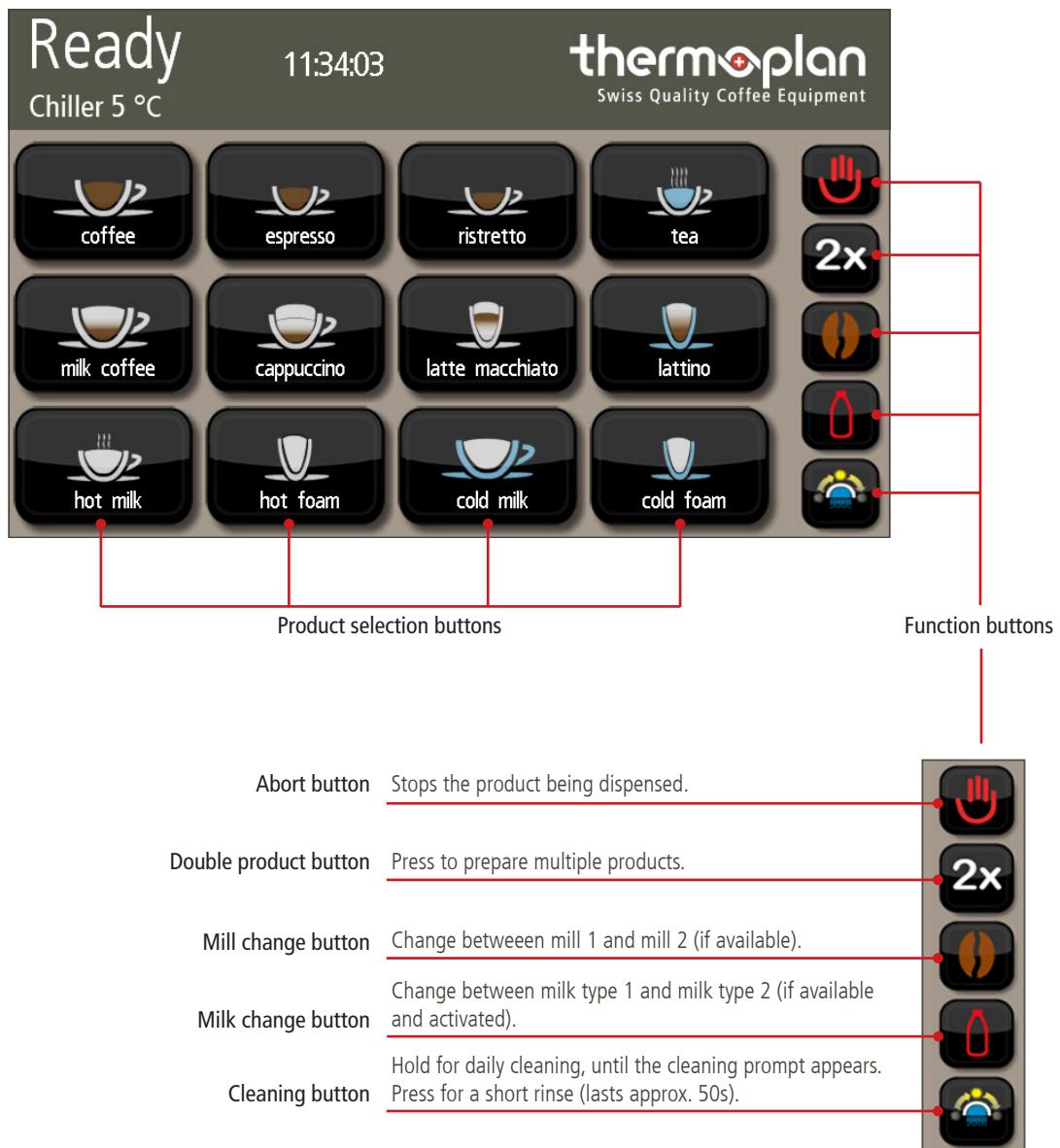
General view

CH

Heating plates



Touchscreen CT / CTM / CTS / CTMS / CTMC



Touchscreen B / CBT / CBTM

Ready
Milk 2.0°C Level middle

thermoplan
Swiss Quality Coffee Equipment



Product selection buttons

Function buttons

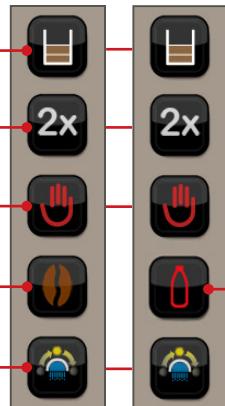
Level-Button Press Level button to raise brew coffee level in the tank.
Hold the button down to enable or disable the timer.

Double product button Press to prepare multiple products.

Abort button Stops the product being dispensed.

Mill change button Change between mill 1 and mill 2 (if available)

Cleaning button Hold for daily cleaning, until the cleaning prompt appears.
Press for a short rinse (lasts approx. 50s).



Milk change button Change between milk type 1 and milk type 2, if option is activated (only for CBTM machines).

The container has the following filling levels (display on the touchscreen flashes when the filling level has not yet been reached):



Empty level	No pre-brewing
Min level	approx. 1.5l brewed coffee are pre-brewed
Middle level	approx. 4l brewed coffee are pre-brewed
Max level	approx. 7l brewed coffee are pre-brewed

When a coffee is dispensed, the amount is automatically topped up.