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compact

ICE CUBES MAKERS

SERVICE MANUAL

SELF CONTAINED UNITS WITH TIMER

CP 30SC E
CP 30 E
CP 45 E
CP 70 E
CP 120 E

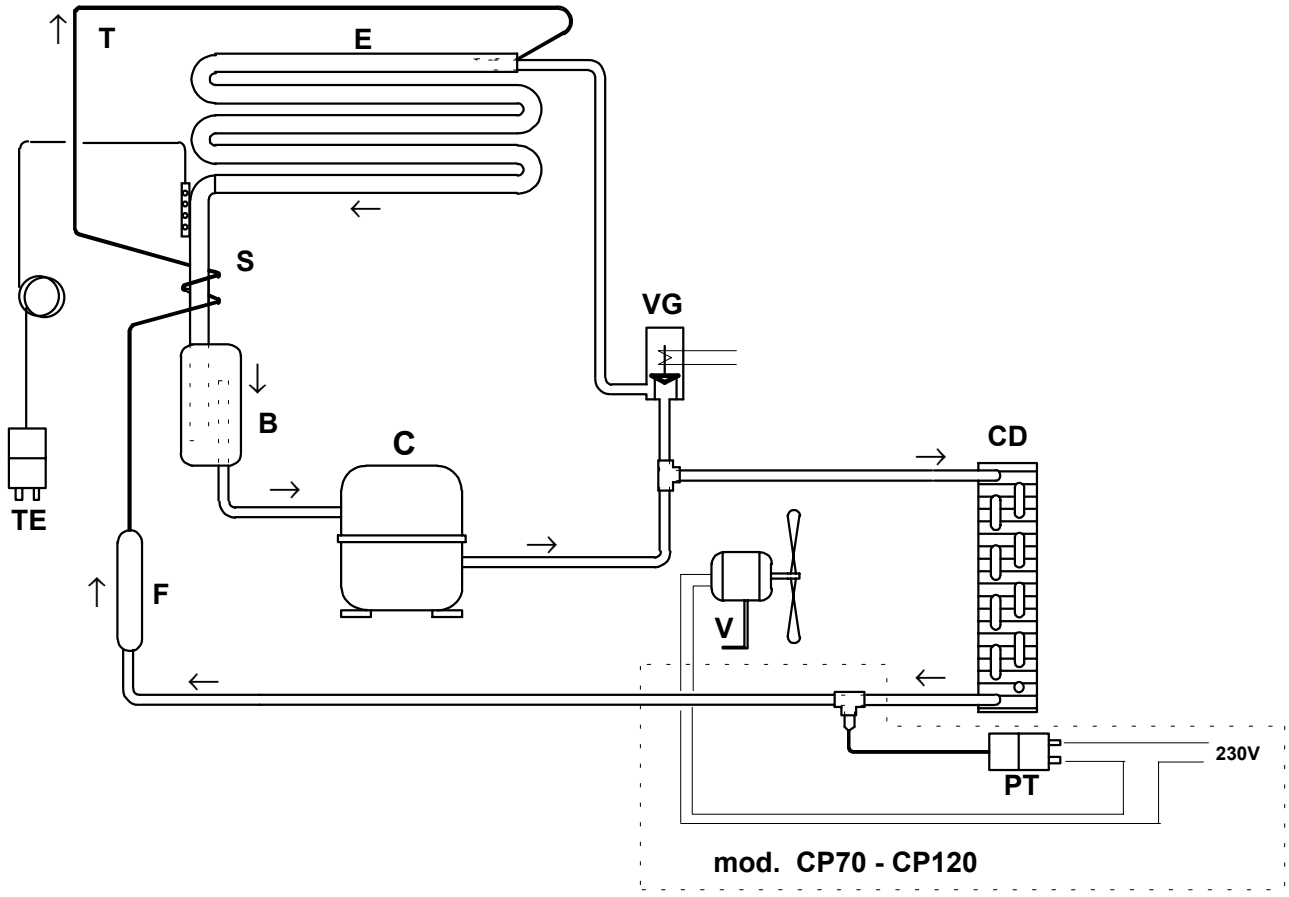
INDEX

1. HOW IT WORKS

The system is very simple and efficient. The evaporator is built up connecting together a series of reversed cups with a cooling coil. The refrigerant flows into the tubes while the pump sprays water into the cups. Thus inside each cup, an ice cube grows layer by layer.
When the cubes are ready, harvest starts : hot gas flows through cooling coil of the evaporator and fresh water enters on top of evaporator. This melts the outer surface of the cubes which fall into the bin.
A new freezing cycle then begins.
When the bin is full of ice, the unit stops production. When a quantity of ice is taken away, the unit restarts production.

1.A. REFRIGERATION SYSTEM

REFRIGERATION TUBING SCHEMATICS



AIR COOLED

C Compressor
V Fan motor
VG Hot gas valve
T Capillary tube
CD Air cooled condenser
PT Pressure switch
CP70, CP120 only

F Molecular sieve
E Evaporator
B Receiver
S Heat exchanger
TE Evaporator thermostat

1.A.a.Freezing cycle

1. The compressor **C** pumps the refrigerant to the condenser **CD** or **CA** when the hot gas valve **VG** is closed.
2. The liquid line reaches the evaporator **E** through the molecular sieve **F** and the capillary tube **T**.
3. In the evaporator the refrigerant expands, thus producing the freezing effect.
4. The refrigerant goes back to the compressor through the receiver/tank **B** and suction line/heat exchanger **S**.
5. The freezing cycle ends when the evaporator thermostat **TE** reaches the set temperature thus starting the TIMER; when the time is over, the refrigeration cycle ends and the **VG** hot gas valve is opened.

1.A.b.Defrost cycle (harvest)

1. When the hot gas valve **VG** open, refrigerant flows directly from the compressor **C** to the evaporator **E** and back to the compressor through **S**.
2. Duration of harvest is fixed by the timer. There is a delay in starting the TIMER in the defrost period. The TIMER is energized when the evaporator thermostat **TE** reaches the preset high 'IN' temperature; for this reason the motor of the TIMER is connected directly with the COMMON contact of the evaporator thermostat. When the harvest ends, the timer is de-energized, the hot gas valve **VG** is closed and a new freezing cycle begins.

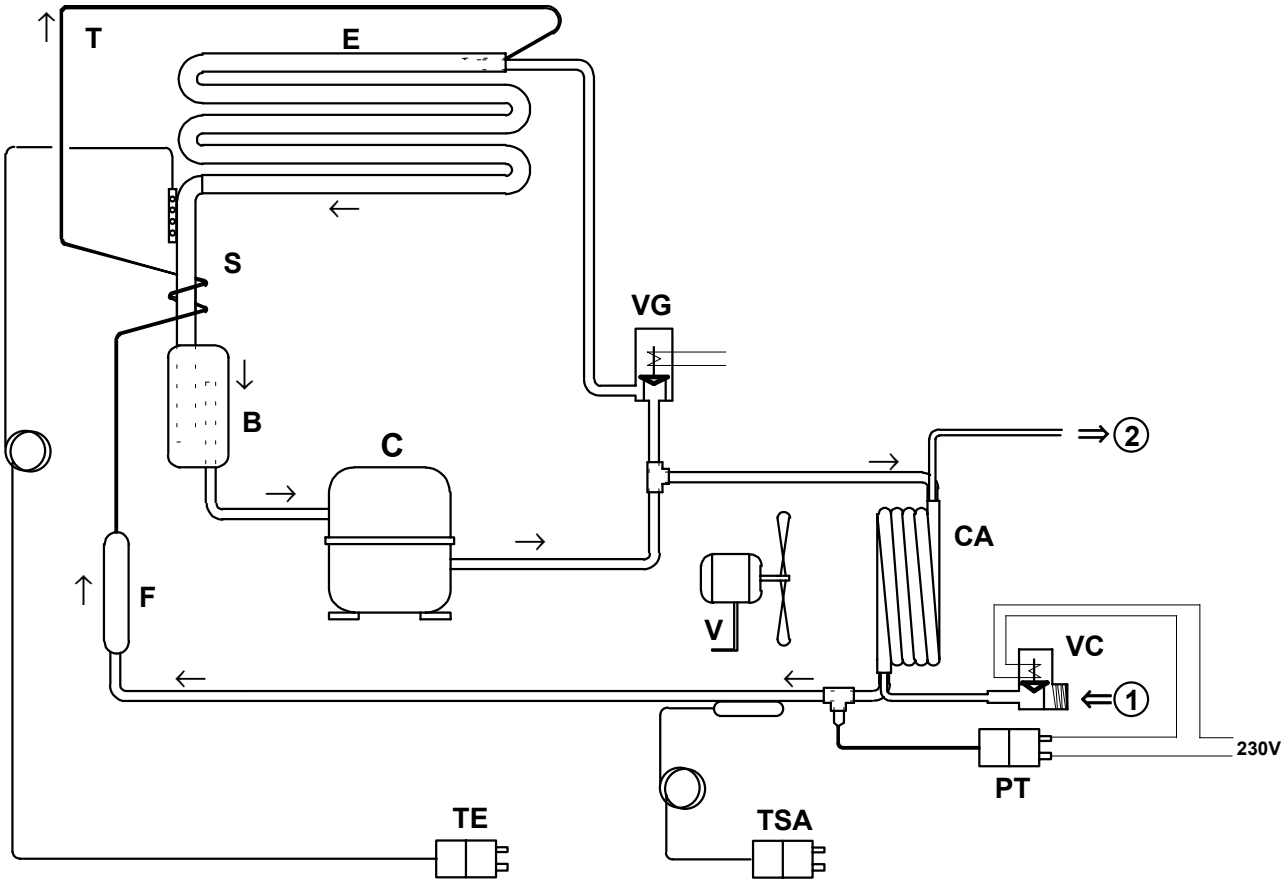
1.A.c.Air cooling

1. Models with air cooled condenser, have a fan motor **V** which is always energized (mod. CP30, CP45) or is switched on and off by the pressure switch **PT**, (mod.CP70, CP120) which senses condensing pressure.
2. Pressure switch PT is factory set. After sale service is ***not allowed*** to make adjustments for any reason.

1.A.d.Water cooling

1. Models with water cooled condenser, have a fan motor **V** which is always energized.
2. Water inlet to condenser is regulated by the pressure switch **PT**, which senses condensing pressure and energizes or not the condenser water inlet solenoid valve **VC**.
3. The safety thermostat **TSA** feels condensing temperature, too. In case of excessive temperature, due e.g. to water shortage, valve failure etc., it shuts down the unit. When temperatures decreases, it starts again.
4. Condenser thermostats and pressure switch are factory set. After sale service is ***not allowed*** to make adjustments for any reason.

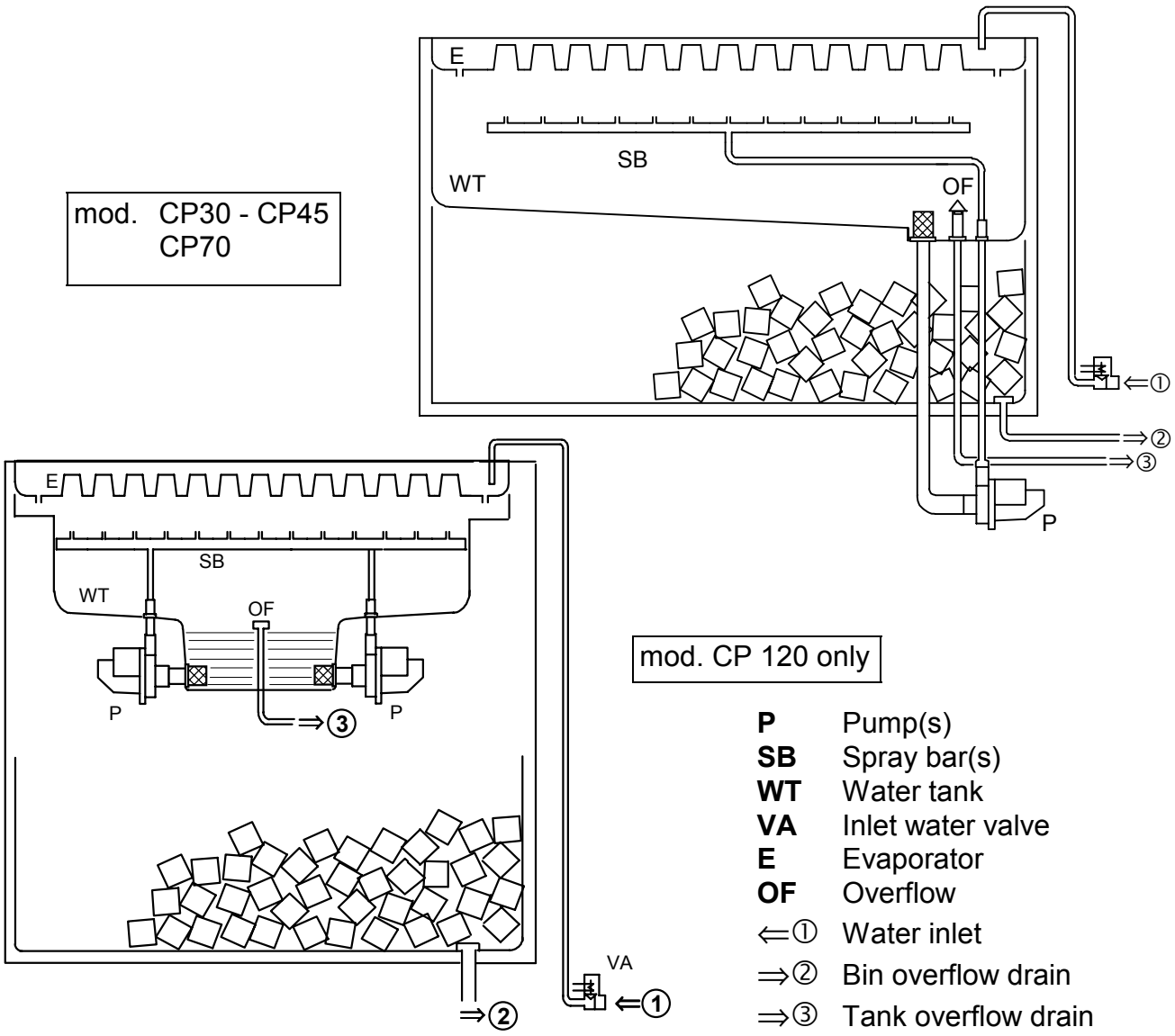
REFRIGERATION TUBING SCHEMATICS



WATER COOLED

C	Compressor
V	Fan motor
VG	Hot gas valve
VC	Condenser water valve
TSA	Safety thermostat
T	Capillary tube
CA	Water cooled condenser
PT	Pressure switch
TE	Evaporator thermostat
F	Molecular sieve
E	Evaporator
B	Receiver
S	Heat exchanger
⇐①	Water inlet
⇒②	Water drain

1.B. WATER SYSTEM



1.B.a.Freezing cycle

1. The pump **P** takes water from the water tank **WT** through a suction pipe and sends it to the spray bar **SB** (two pumps and two spray bars for mod. CP120).
2. The water sprayed by the nozzles reaches the cooled cups on the evaporator **E**. A quantity of water freezes and the excess falls again into the water tank.
3. The water inlet valve **VA** is closed.

1.B.b.Defrost cycle (harvest)

1. The water inlet valve **VA** is open. Fresh water goes up on top of evaporator, helping defrost.
2. From the top of the evaporator, water falls into the water tank and refills it.
3. Excess water is discharged by the overflow control **OF**.
4. Water pump(s) is not working.

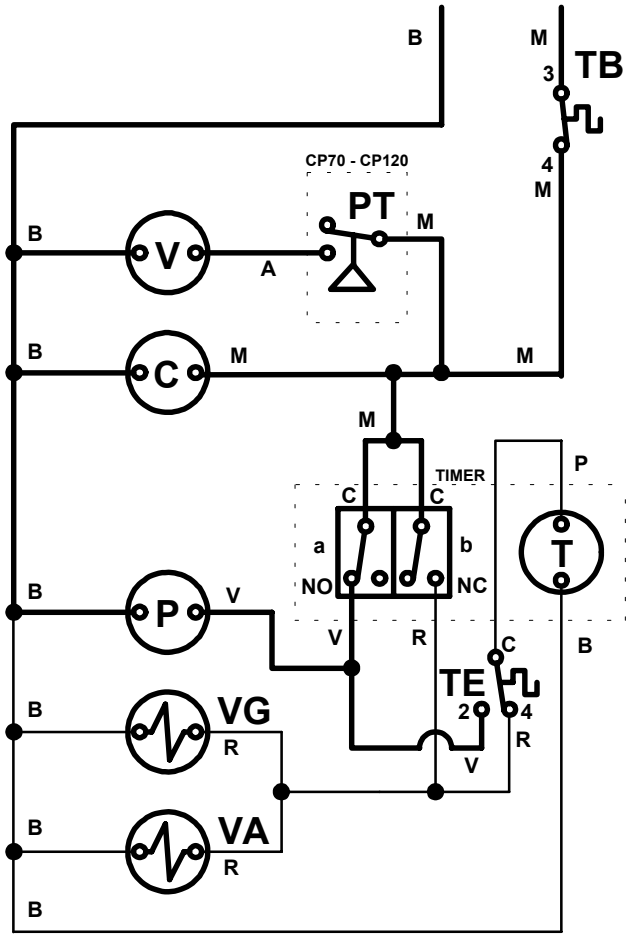
1.B.c.Ice storage bin

1. Water from melted ice is drained separately, and does not enter again into the water system.

1.C. ELECTRICAL SYSTEM

- Compressor is always ON. Fan motor is regulated by the pressure switch **PT** only in models CP70 & CP120. In models CP30sc, CP30 & CP45 fan motor is always ON.
- The bin thermostat **TB** opens, when the ice-feeler is in contact with ice. The unit then stops.

WIRING DIAGRAM
air cooled

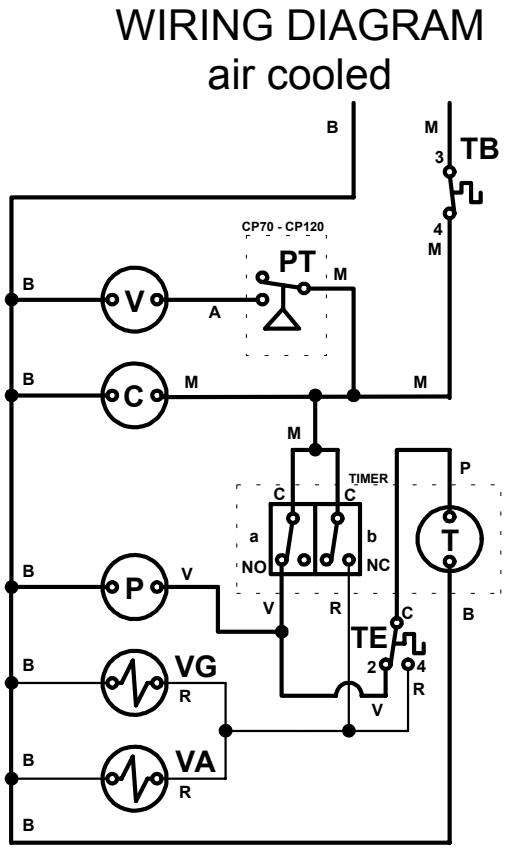


A) Start of freeze cycle

C	compressor	**ON**
V	fan motor	**ON (PT)**
P	pump	**ON**
T	timer	**OFF**
a	micro a	**C-NO**
b	micro b	**C-NO**
VG	gas valve	**OFF**
VA	water valve	**OFF**
TE	evaporator thermostat	**WARM (C-4)**
TB	bin thermostat	**closed**

A) Start of freeze cycle. The pumps spray water to the cups on the evaporator which is freezing. The evaporator thermostat **TE** has not reached set-point. It is in WARM position.

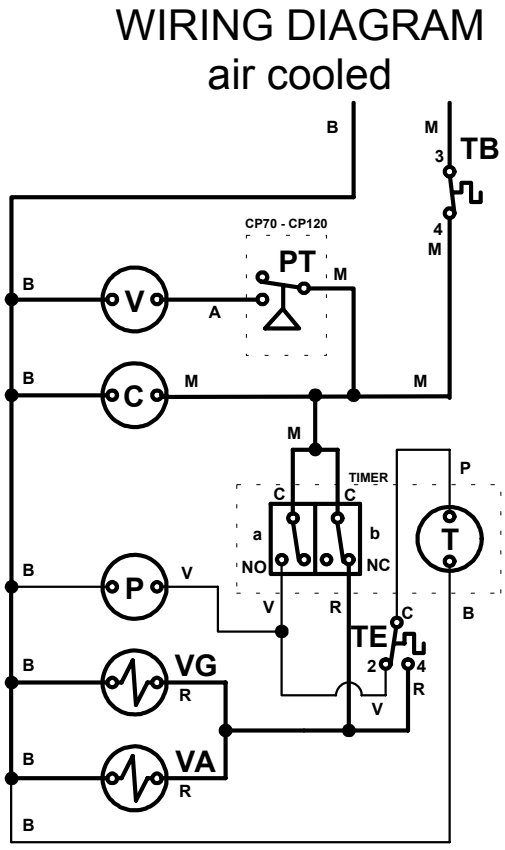
M	Brown
B	Blue
V	Green
R	Red -
A	Orange
P	Pink



B) End of freeze cycle

C	compressor	**ON**
V	fan motor	**ON (PT)**
P	pump	**ON**
T	timer	**ON**
a	micro a	**C-NO**
b	micro b	**C-NO**
VG	gas valve	**OFF**
VA	water valve	**OFF**
TE	evaporator thermostat	**COLD (C-2)**
TB	bin thermostat	**closed**

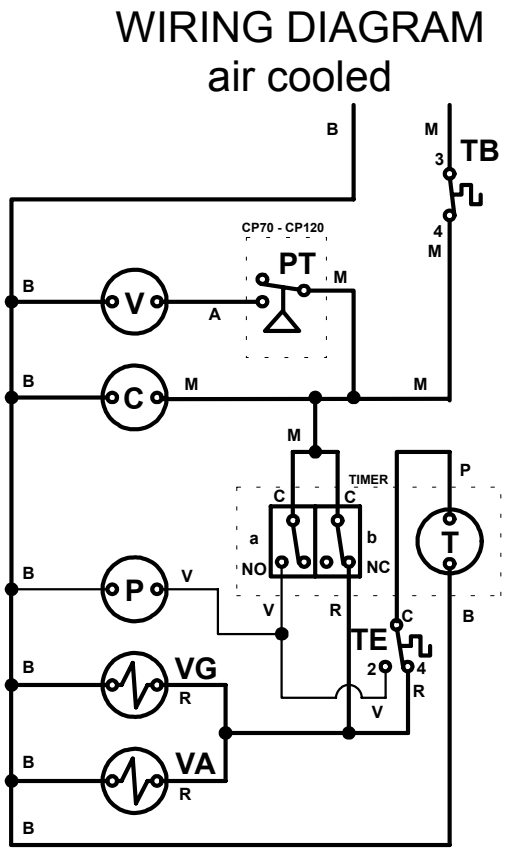
B) End of freeze cycle. The evaporator thermostat **TE** has reached the set-point. It is in COLD position. The timer starts to complete freezing cycle.



C) Start of defrost

C	compressor	**ON**
V	fan motor	**ON (PT)**
P	pump	**OFF**
T	timer	**OFF**
a	micro a	**C-NC**
b	micro b	**C-NC**
VG	gas valve	**ON**
VA	water valve	**ON**
TE	evaporator thermostat	**COLD (C-2)**
TB	bin thermostat	**closed**

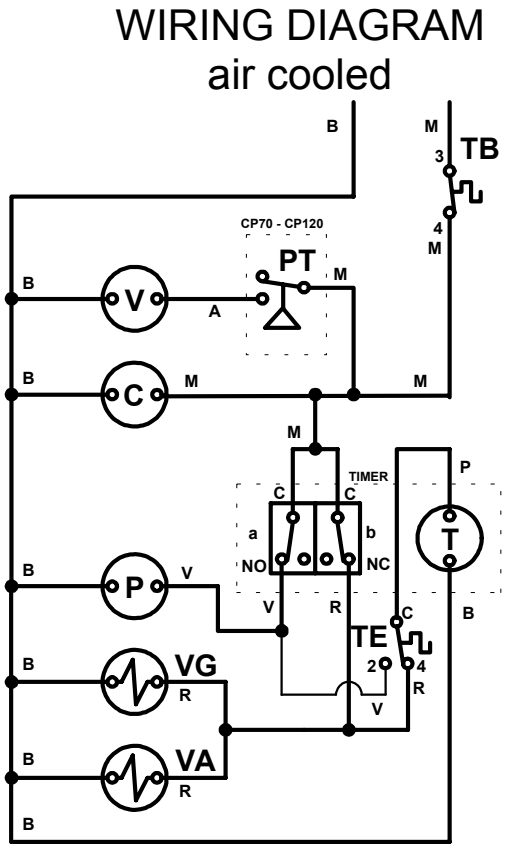
C) Start of Defrost. Microswitches **a** and **b** are operated by the two levers and the rotating cam of the timer. The pumps stop and the hot gas and water valves open. The evaporator thermostat is still in COLD position. The motor of the timer stops.



D) Defrost

C	compressor	**ON**
V	fan motor	**ON (PT)**
P	pump	**OFF**
T	timer	**ON**
a	micro a	**C-NC**
b	micro b	**C-NC**
VG	gas valve	**ON**
VA	water valve	**ON**
TE	evaporator thermostat	**WARM (C-4)**
TB	bin thermostat	**closed**

D) Defrost. The evaporator thermostat switches to WARM position starting the motor of the Timer, thus completing defrost.

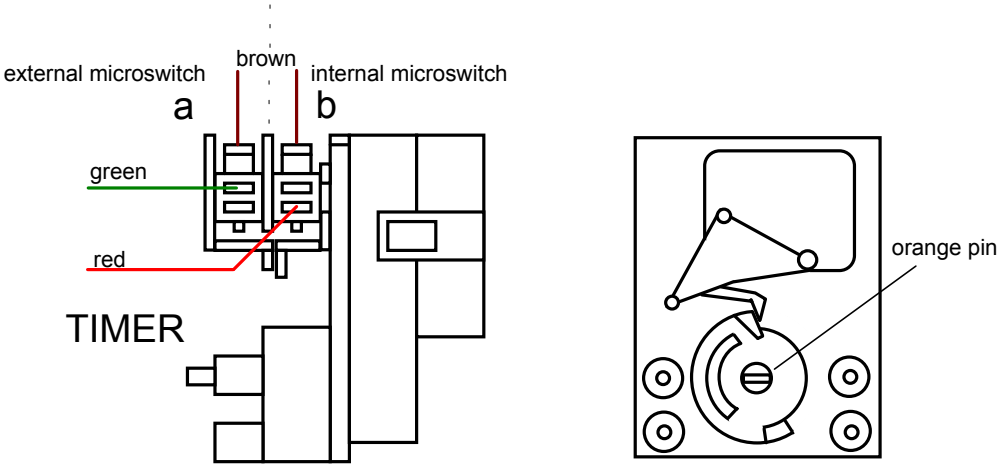


E) End of defrost

C	compressor	**ON**
V	fan motor	**ON (PT)**
P	pump	**ON**
T	timer	**ON**
a	micro a	**C-NO**
b	micro b	**C-NC**
VG	gas valve	**ON**
VA	water valve	**ON**
TE	evaporator thermostat	**WARM (C-4)**
TB	bin thermostat	**closed**

E) End of Defrost. Defrost ends when both levers reach top of the rotating cam of the timer. This is not simultaneous but first the external micro **a** and then the internal micro **b** are activated.

IT IS VERY IMPORTANT NOT TO CHANGE CONNECTIONS BETWEEN THE TWO INTERNAL (a) AND EXTERNAL (b) MICROSWITCHES OF THE TIMER.

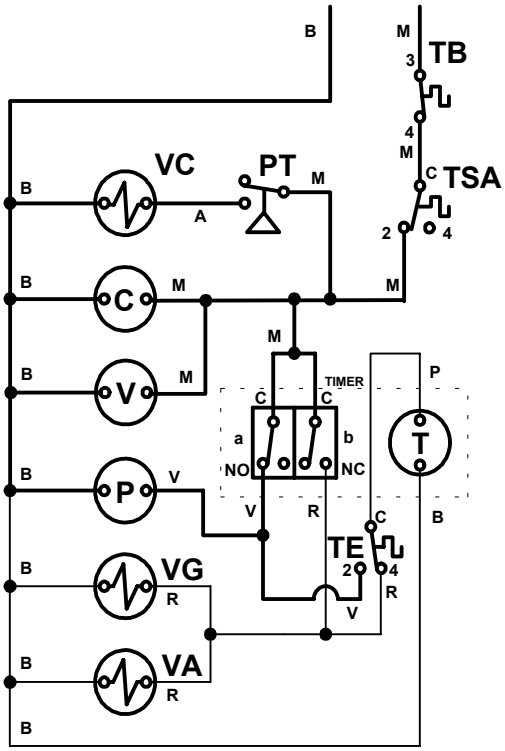


It is possible to manually put the unit in defrost cycle by turning the orange pin of the TIMER clockwise.

1.C.a.Water cooled models

Water inlet to the condenser is regulated by the pressure switch **PT**, which energizes or not the condenser water inlet solenoid valve **VC**, sensing condensing pressure.
The safety thermostat **TSA** feels condensing temperature, too. In case of excessive temperature, due e.g. to water shortage, valve failure etc., it shuts down the unit. When temperatures decreases, it starts again.

WIRING DIAGRAM
water cooled



A) Start of freeze cycle

C	compressor	**ON**
V	fan motor	**ON (PT)**
P	pump	**ON**
T	timer	**OFF**
a	micro a	**C-NO**
b	micro b	**C-NO**
VG	gas valve	**OFF**
VA	water valve	**OFF**
TE	evaporator thermostat	**WARM (C-4)**
TB	bin thermostat	**closed**
TSA	safety thermostat	**closed**

All the other diagram are similar to the air cooled ones, provided you change the **V** fan motor with the condenser water inlet valve **VC** , and you add the safety thermostat **TSA** and the fan motor **V.**

2. INSTALLATION

2.A. CONNECTIONS

1. Choose a location far from heating sources and in a well ventilated dry place, not dusty, near water inlet & drain connections.
2. Provide enough clearance at both sides and at rear of the unit (20 cm at least).

DO NOT USE UNIT OUTSIDE AND DO NOT EXPOSE IT TO RAIN.

3. Set upstream of the units an electrical multi-pole disconnect switch having a contact separation of at least 3 mm in all poles. Switch rating shall comply with power specifications of each ice-maker, as per specifications given in the plate on rear of each unit.

ALL CONNECTIONS SHOULD BE MADE IN ACCORDANCE WITH EXISTING LOCAL ELECTRICAL REQUIREMENTS.

4. Power supply must match voltage specifications on registration plate on rear of unit. +/- 6% deviation permitted. On higher rushes no assurance of correct operation is given.
5. Water inlet should be regulated by a 3/4" threaded tap, for an easy installation of the supply hose.

ATTENTION! CONNECT UNIT TO DRINKING (POTABLE) WATER ONLY.

6. Check if water inlet pressure is between 1 to 3 bar. If it is higher, install a pressure reducer set at 2,5 bar.
7. Water outlet must be at ground level connected to an open vented siphon.

2.B. SET-UP

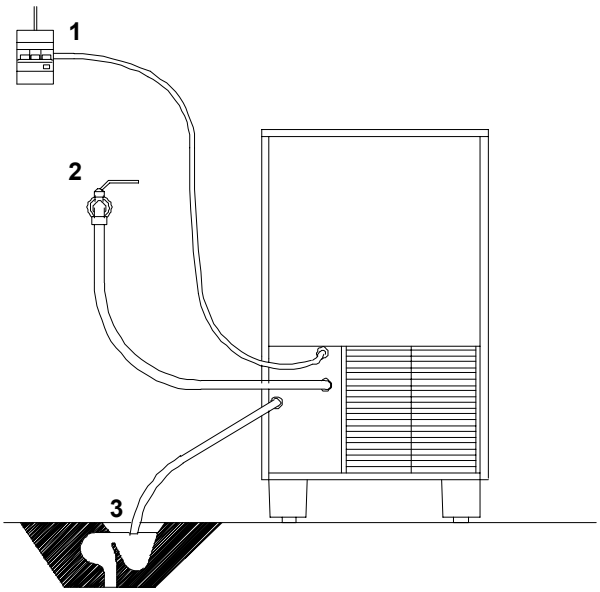
2.B.a.AIR COOLED CONDENSER UNITS

1. Unpack the ice maker without turning the unit upside down, check for damage, remove all cartons and the wooden pallet.
2. Remove the bag with the accessories from inside the unit. Take care of the Final User Manual and give it to your customer. Remove the water blinds assembly. Check that the water spray-bar and the internal ice chute are in the correct position, then re-install water blinds assembly.
3. Connect the unit to the external multi-pole switch for electric supply.
4. Check that the unit is perfectly level. If required, adjust leveling feet.
5. Connect the water inlet solenoid valve to the water mains tap with the rubber water supply tube.
6. Connect a drain hose to the water outlet of the unit and the open vented siphon at floor level.
7. Clean walls and bottom of storage bin with a wet cloth.
8. Open tap on water mains and check for leakage.
9. Switch on main external disconnect switch.
10. The unit starts in defrost at first installation. Water is charged and fills water tank. When the timer ends the defrost cycle, the freezing cycle begins.
11. After a shut-off period, it is possible that the unit will not re-start in defrost. In this case or in case more water is needed, turn clockwise the orange pin of the timer with a screwdriver, until the unit goes in defrost.
12. Always charge fresh water before starting ice production, at first installation and after a long shut-off period.

To start and stop unit, only use the external disconnect multi-pole switch.

2.B.b.WATER COOLED CONDENSER UNITS

1. Follow steps 1 to 12 as described before (2.B.a).
2. Water inlet to the condenser is through the same water inlet solenoid valve, except for the fact that the valve has one way-in and two solenoid operated way-out.
3. Drain out of the condenser is collected in the same drain-out connector.



air & water cooled installation

1. multi-pole disconnect switch
2. water mains tap
3. open vented siphon at floor level

fig. 2.B.1

3. START-UP & TEST

When all the installation procedures have been completed, and all panels that should have been removed, have been replaced in position, you can start-up the unit.

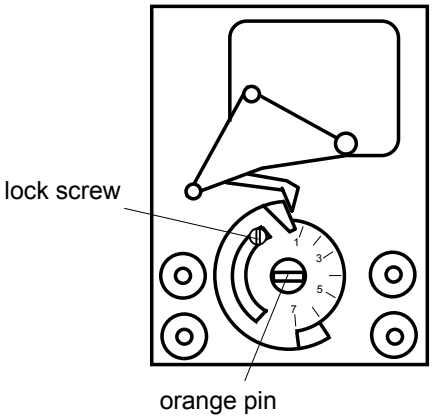
3.A. START-UP

1. Clean walls and bottom of storage bin with a wet cloth.
   If needed, follow instructions for sanitizing the storage bin and/or the ice-maker.
2. Open tap on water mains and check for leakage.
   Always charge water before starting ice production at first installation, or after a shut-off period.
3. Ambient temperature must range 10°C to 43°C .
   Water temperature must be between 10°C and 25°C.
4. Switch main external disconnect switch on.
   To switch unit ON and OFF operate on the external disconnect switch only.
5. Unit starts production.
   Within half an hour the first ice cubes will fall into the storage bin.
6. For best performance, we suggest that ambient temperature should be between 12°C and 38°C.

3.B. TEST

1. Wait three producing cycles before making any adjustment, then check the ice cubes. They must have a small dimple. If they are too empty, turn the adjusting screw of the ice-control thermostat clockwise to '+'. If they are too full, turn the screw counter clockwise to '-'.
2. Always make slight adjustments and wait for results. Do not insist on obtaining a full cube without any dimple by adjusting the evaporator thermostat (ice-control) to full '+'.
   Especially with hot external temperatures, adjusting the evaporator thermostat (ice-control) to full '+' will cause the unit to have very long producing cycles, with a great decrease in production. It is also possible that too full cubes won't fall into the bin during the defrost cycle and so they will be cut and melted by water spray, obtaining the opposite of what thought.
3. If cubes are white or not complete, clean spray bar and nozzles.
4. With ice in contact with the ice bin level feeler inside the bin, the unit should stop within 1 min. If not, slightly turn the adjusting screw of the bin thermostat counter clockwise towards 'SUMMER' until the unit stops. With the feeler cleared from ice, the unit should restart within 5 min. If not, screw slightly clockwise towards 'WINTER'.
5. To reach thermostats or Timer remove front panel.
6. *Final User is not allowed to change adjustments of the thermostats or to service unit.*

With water and/or ambient temperature below 10°C, to help ice cubes fall into the bin, it is possible to increase duration of harvesting operating on the adjustable cam of the TIMER.



Timer

To change duration of harvest cycle, loosen the lock screw releasing the moving cam.
Change position of the cam referring to the numbers printed on the orange part.
Lock the cam with the screw.

fig. 3.B.1

4. CLEANING

CAUTION ! : HAZARDOUS MOVING PARTS INSIDE MOTOR COMPARTMENT !
Do not operate with panels removed !

DANGER ! : ELECTRIC SHOCK HAZARD !
Disconnect power before servicing unit !

4.A. CONDENSER CLEANING

Clean condenser every month.
Disconnect power, remove front panel and brush away dust and dirt from the condenser with a hard brush and a vacuum cleaner.

CAUTION: the fins of the condenser have sharp edges which might hurt your fingers.

A dirty condenser causes loss of production and may jeopardize correct operation of the unit.

4.B. INTERNAL CLEANING & SANITIZING

CAUTION ! : DO NOT MIX CLEANER AND SANITIZING SOLUTION TOGETHER

WARNING ! WEAR RUBBER GLOVES AND SAFETY GOGGLES WHEN HANDLING ICE MACHINE CLEANER OR SANITIZER

4.B.a.Cleaning - To remove lime scale or other mineral deposits

1. Disconnect power and remove front panel and, for easier operation, top panel and door.
2. Discard all the ice present in the ice bin.
3. To drain water tank, remove water blinds and ice chute and gently remove the moving part of the overflow regulator (fig. 4.B.1).
4. To clean tank and water system, add an approved liquid ice machine cleaner to water tank following the directions of the manufacturer of the product.
   Otherwise you can pour two spoons of vinegar or citric acid in the water tank.
5. Re-place all items removed (overflow regulator, spray bar, ice chute and water blinds) and start the unit with the Timer in defrost position. Fresh water will be charged.
6. Leave the unit work for some producing cycles.
7. To rinse, place the Timer in defrost position allowing fresh water in. To drain water follow instructions as per #3.
8. To clean ice bin discard the ice produced and gently rub sides and bottom of the bin with a cloth using the same cleaning solution.

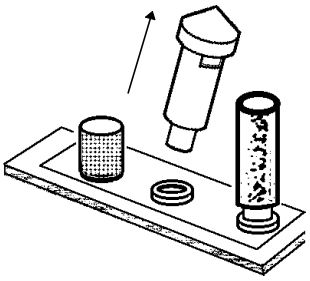
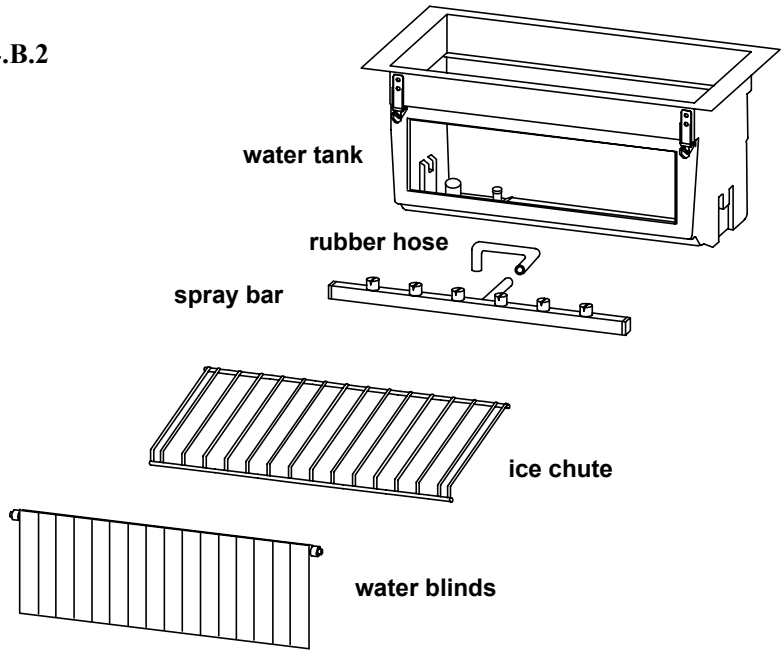


fig. 4.B.1

For a more thorough cleaning you can remove spray bars, ice chute and water blinds and clean them separately.

fig. 4.B.2



When you re-assemble all the parts removed for cleaning, it is very important to verify that the nozzles are free to spray water and that the ice chute does not interfere with the spray bar. (nozzle must be in the middle of the rows of the ice chute fig 4.B.3).

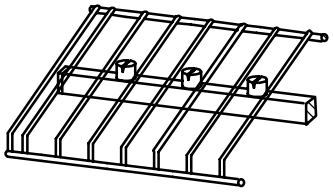


fig 4.B.3

4.B.b.Sanitizing - To remove algae or slime

1. To sanitize ice storage bin, take away all the ice and gently wipe walls and bottom of the bin with a cloth and a sanitizing cleaner following the directions of the manufacturer of the product. You can use household products or a diluted solution of sodium hypoclorite (bleach).
2. To sanitize water tank and all the water system, follow instructions for cleaning using a sanitizing product instead of a cleaner.

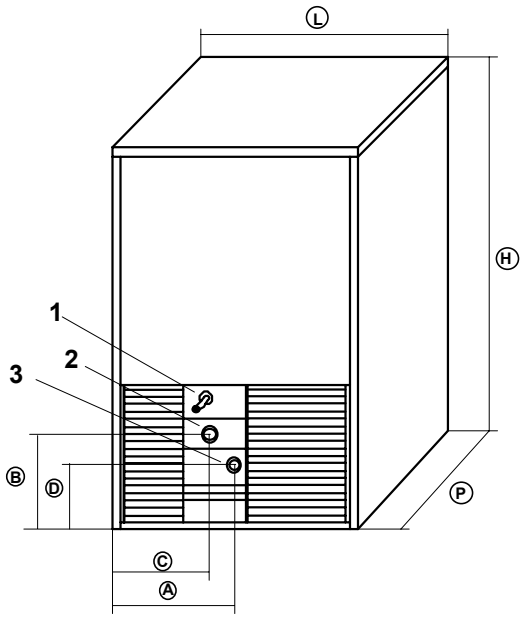
If your water is rich in chlorine, you will not obtain a full clear and crystal ice-cube, and the ice will melt sooner.

It may be necessary to connect water supply to a water treatment system to inhibit scale formation, filter sediment or remove chlorine taste.

Water treatment will pay for itself through decreased maintenance, higher efficiency and quality of product.

5. GENERAL INFORMATION

5.A. WEIGHTS & DIMENSIONS



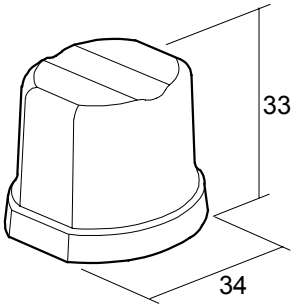
dimensions

1) Electrical cord
2) Water inlet 3/4”
3) Water drain ø 20 mm

MODEL	L	P	H	A	B	C	D
	mm			mm		mm	
CP 30SC E CP 30SC E W	405	430	650	55	90	100	70
CP 30 E CP 30 E W	495	560	745	220	145	275	65
CP 45 E CP 45 E W	495	560	815	220	145	275	65
CP 70 E CP 70 E W	710	560	900	425	195	485	120
CP 120 E CP 120 E W	710	560	1270	425	195	485	120

5.B. CUBE SIZE

Two types of ice cubes are available, the standard cube and the big cube, except the model CP30SC which is available only with the standard cube.
The standard cube has an average weight of 19 grams, while the big one has an average weight of 32 grams.
Shapes and dimensions are explained in fig. 5.B.1



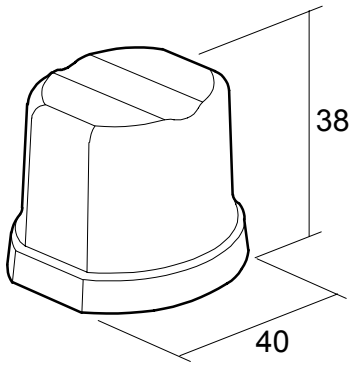


fig. 5.B.1

standard cube 19g ***big cube 32g***

The two versions can be easily detected because the models producing the big cube 32g show the letter **G** after the model number.

5.C. MODEL NUMBER BREAKDOWN

Let's take for example model CP 70E W G X (-- means no letter)

CP 70 E W G X

- voltage
  - X = 220V 60Hz
  - Y = 115V 60Hz
  - -- = 220-240V 50Hz
- cube size
  - G = big cube 32g
  - -- = standard cube 19g
- condensation
  - W = water cooled
  - -- = air cooled
- refrigerant
  - E = R134a
  - Z = R404a
  - -- = R12 (obsolete)
- model
- brand
  - CP = compact

(e.g. CP70EWGX = compact 70, R134a, water cooled, big cube, 220/1/60).

5.D. GENERAL DATA

MODEL	TIMER ADJUSTMENT DEFROST	N. OF CUBES PER CYCLE	Q.TY OF ICE PER CYCLE IN GRAMS	THEORETICAL WATER USAGE l/h	
				air cooled	water cooled
CP 30SC E	2,5	24	456	9	32
CP 30 E	2,5	24	456	9	32
CP 30 E G	3,5	20	640	13	54
CP 45 E	3,5	32	608	13	55
CP 45 E G	4,5	28	896	13	55
CP 70 E	3,5	52	988	13	60
CP 70 E G	4,5	44	1536	13	60
CP 120 E	3,5	104	1976	22	62
CP 120 E G	4,5	96	3072	22	62

MODEL	NET WEIGHT kg	GROSS WEIGHT kg	SHIPPING VOLUME m^3	TOTAL AMPS	POWER W	FUSE RATE	COMP-RESSOR	REFRIGERANT CHARGE g	
								air cooled	water cooled
CP 30SC E	32	35	0,16	2,5	400	10A	¼ Hp	210	180
CP 30 E	41	46	0,31	2,5	400	10A	¼ Hp	210	180
CP 30 E G	41	46	0,31	2,5	400	10A	¼ Hp	210	170
CP 45 E	44	50	0,33	3,2	510	10A	⅜ Hp	220	195
CP 45 E G	44	50	0,33	3,2	510	10A	⅜ Hp	220	195
CP 70 E	66	71	0,45	5,0	800	10A	½ Hp	370	300
CP 70 E G	66	71	0,45	5,0	800	10A	½ Hp	350	285
CP 120 E	86	93	0,63	6,2	1150	16A	1 Hp	350	285
CP 120 E G	86	93	0,63	6,2	1150	16A	1 Hp	330	270

5.E. PRODUCTION

5.E.a.THEORETICAL DAILY ICE PRODUCTION - N. of cubes/24h

Average production at different ambient temperatures with water temperature of 10°C

MODEL	15°C	21°C	25°C	30°C	38°C
CP 30SC E	1600	1460	1350	1190	1040
CP 30 E	1600	1460	1350	1190	1040
CP 30 E G	1020	920	840	730	630
CP 45 E	2050	1800	1600	1500	1400
CP 45 E G	1340	1160	1015	935	835
CP 70 E	3500	3300	3040	2830	2600
CP 70 E G	2270	2110	1920	1760	1620
CP 120 E	6100	5700	5300	4950	4600
CP 120 E G	4325	3995	3670	3375	3130

Average production at different ambient temperatures with water temperature of 15°C

MODEL	15°C	21°C	25°C	30°C	38°C
CP 30SC E	1420	1310	1200	1090	970
CP 30 E	1420	1310	1200	1090	970
CP 30 E G	910	820	740	665	580
CP 45 E	1900	1700	1500	1400	1300
CP 45 E G	1245	1060	945	870	765
CP 70 E	3300	3200	3000	2790	2500
CP 70 E G	2140	2040	1880	1740	1540
CP 120 E	5600	5350	5100	4800	4500
CP 120 E G	3985	3740	3505	3265	3030

Average production at different ambient temperatures with water temperature of 21°C

MODEL	15°C	21°C	25°C	30°C	38°C
CP 30SC E	1250	1150	1080	1000	900
CP 30 E	1250	1150	1080	1000	900
CP 30 E G	790	720	670	600	530
CP 45 E	1700	1500	1400	1200	1100
CP 45 E G	1080	945	860	735	620
CP 70 E	3250	3140	2940	2710	2400
CP 70 E G	2090	2010	1870	1650	1430
CP 120 E	5200	5000	4800	4600	4400
CP 120 E G	3655	3495	3330	3075	2875

Production could change of ± 5/10% depending on cube size and cube concavity adjustment.

5.E.b.THEORETICAL DAILY ICE PRODUCTION - kg/24h

Average production at different ambient temperatures with water temperature of 10°C

MODEL	15°C	21°C	25°C	30°C	38°C
CP 30SC E	30,4	27,74	25,65	22,61	19,76
CP 30 E	30,4	27,74	25,65	22,61	19,76
CP 30 E G	32,64	29,44	26,88	23,36	20,16
CP 45 E	38,95	34,2	30,4	28,5	26,6
CP 45 E G	42,88	37,12	32,48	29,92	26,72
CP 70 E	66,5	62,7	57,76	53,77	49,4
CP 70 E G	72,64	67,52	61,44	56,32	51,84
CP 120 E	115,9	108,3	100,7	94,05	87,4
CP 120 E G	138,4	127,84	117,44	108	100,16

Average production at different ambient temperatures with water temperature of 15°C

MODEL	15°C	21°C	25°C	30°C	38°C
CP 30SC E	26,98	24,89	22,8	20,71	18,43
CP 30 E	26,98	24,89	22,8	20,71	18,43
CP 30 E G	29,12	26,24	23,68	21,28	18,56
CP 45 E	36,1	32,3	28,5	26,6	24,7
CP 45 E G	39,84	33,92	30,24	27,84	24,48
CP 70 E	62,7	60,8	57	53,01	47,5
CP 70 E G	68,48	65,28	60,16	55,68	49,28
CP 120 E	106,4	101,65	96,9	91,2	85,5
CP 120 E G	127,52	119,68	112,16	104,48	96,96

Average production at different ambient temperatures with water temperature of 21°C

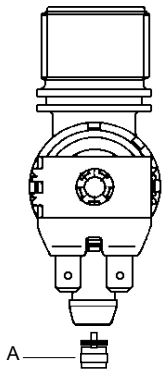
MODEL	15°C	21°C	25°C	30°C	38°C
CP 30SC E	23,75	21,85	20,52	19	17,1
CP 30 E	23,75	21,85	20,52	19	17,1
CP 30 E G	25,28	23,04	21,44	19,2	16,96
CP 45 E	32,3	28,5	26,6	22,8	20,9
CP 45 E G	34,56	30,24	27,52	23,52	19,84
CP 70 E	61,75	59,66	55,86	51,49	45,6
CP 70 E G	66,88	64,32	59,84	52,8	45,76
CP 120 E	98,8	95	91,2	87,4	83,6
CP 120 E G	116,96	111,84	106,56	98,4	92

Production could change of ± 5/10% depending on cube size and cube concavity adjustment.

5.F. WATER VALVE & FLOW REGULATOR CHART

5.F.a.AIR COOLED

ELBI single water solenoid valve

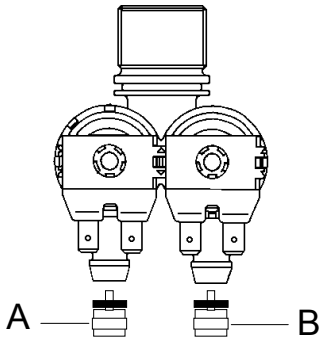


FLOW REGULATOR - A -		
TYPE	COLOR	MODELS
1,2 l/m	**WHITE**	CP 30SC E - CP 30 E - CP 45 E
2,5 l/m	**ORANGE**	CP 45 EG **
2,5 l/m	**ORANGE**	CP 70 E - CP 120 E

** big cube versions only

5.F.b.WATER COOLED

ELBI double water solenoid valve



FLOW REGULATOR - A - *ice making water inlet*		
TYPE	COLOR	MODELS
1,2 l/m	**WHITE**	CP 30SC EW - CP 30 EW CP 45 EW
2,5 l/m	**ORANGE**	CP 45 EWG **
2,5 l/m	**ORANGE**	CP 70 EW - CP 120 EW

FLOW REGULATOR - B - *condenser water inlet*		
TYPE	COLOR	MODELS
0,5 l/m	**RED**	CP 30SC EW - CP 30 EW
1,2 l/m	**WHITE**	CP 45 EW
2,5 l/m	**ORANGE**	CP 70 EW - CP 120 EW