



BLUE STAR

Storage Water Cooler



User 's Manual

Reprinted in August 2010

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BLUE STAR

WATER-COOLER



Letter from the Vice President

Dear Customer,

Congratulations on the purchase of your new Blue Star Water Cooler, just one of the many world-class products that we market. This superior product has been engineered for convenient and optimum performance. It has been manufactured with the best available materials, with stringent quality controls undertaken during all the manufacturing processes. It has been tested rigorously in the factory to ensure you years of satisfactory and trouble-free performance.

We are confident that time and performance will justify the trust you have placed in this product. This manual will help you get the best out of your Blue Star Water Cooler. Please do spare some time to go through this manual carefully.

In the unlikely event, if you are facing any problem with your Water Cooler problem, kindly check the *Troubleshooting Chart* to diagnose the possible cause and take necessary steps. However, do not hesitate to approach your dealer or the nearest Blue Star office, if you require help. The list of Blue Star service offices is given on page 21 of this manual.

I do hope that you will enjoy using your Blue Star Water Cooler.

With warm regards,

P Venkat Rao

Vice President

Refrigeration Products Department

Blue Star Limited



Product Features

Blue Star Water Coolers come in three exciting versions.

These are:

1. SDLx Model Water Coolers
2. NST Model Water Coolers
3. Plain and Cold Water Coolers

All Blue Star Water Coolers make use of **Eco-Friendly** refrigerants.

SDIx Model Water Coolers

Models : SDLx1210, SDLx20, SDLx240, SDLx480, SDLx680, SDLx8120, SDLx15150, SDLx100.

- Eco-friendly
- Available with full stainless steel outer body
- Sturdy Compressor
- Silent operation
- Seam welded stainless steel tank
- Single phase operation
- In-situ PUF insulation
- Compact design
- Mechanically expanded condensor
- Adjustable cold water thermostat
- Sturdy moulded flat / extended plastic legs
- Auto cutout
- Riveted body assembly
- Compressor over-load protection



NST Model Water Coolers

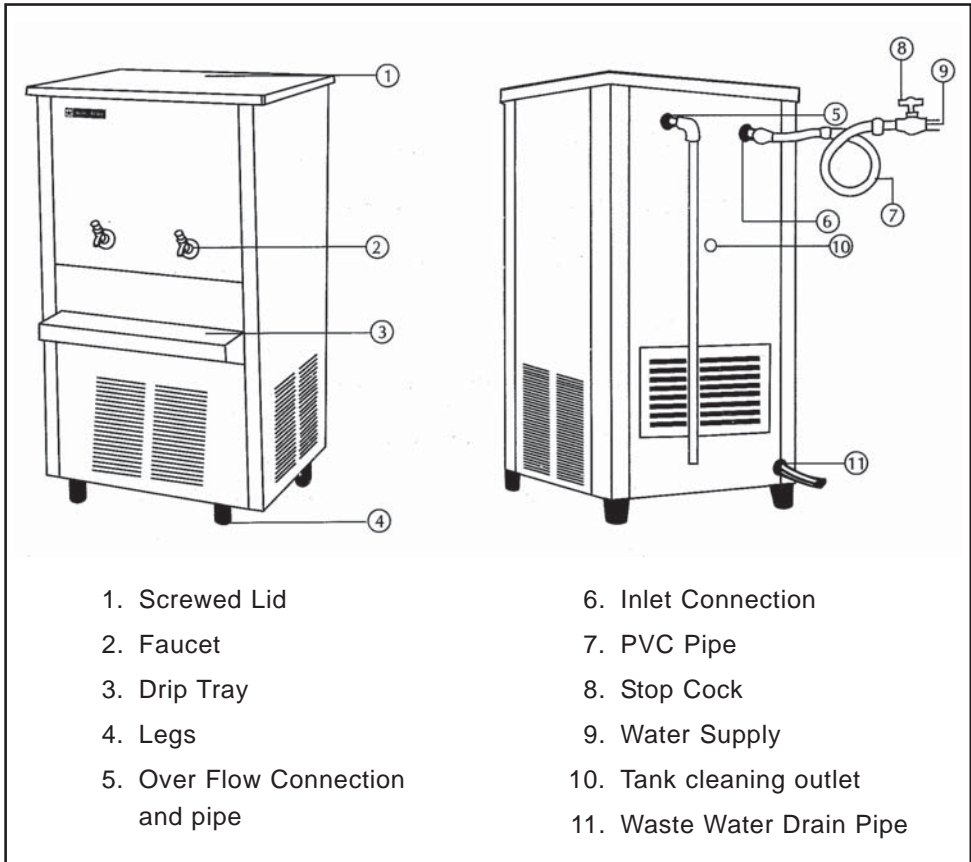
Models : NST15, NST480, NST5120, NST8150

- Eco-friendly
- Front panel in stainless steel only
- Pre painted outer body for better corrosion resistance
- Sturdy compressor
- Silent operation
- Seam welded stainless steel tank
- Single phase operation
- In-situ PUF insulation
- Compact design
- Mechanically expanded condensor
- Adjustable cold water thermostat
- Sturdy moulded flat / extended plastic legs
- Auto cutout
- Riveted body assembly
- Compressor over-load protection



Know your Water Cooler

SDLx and NST Models





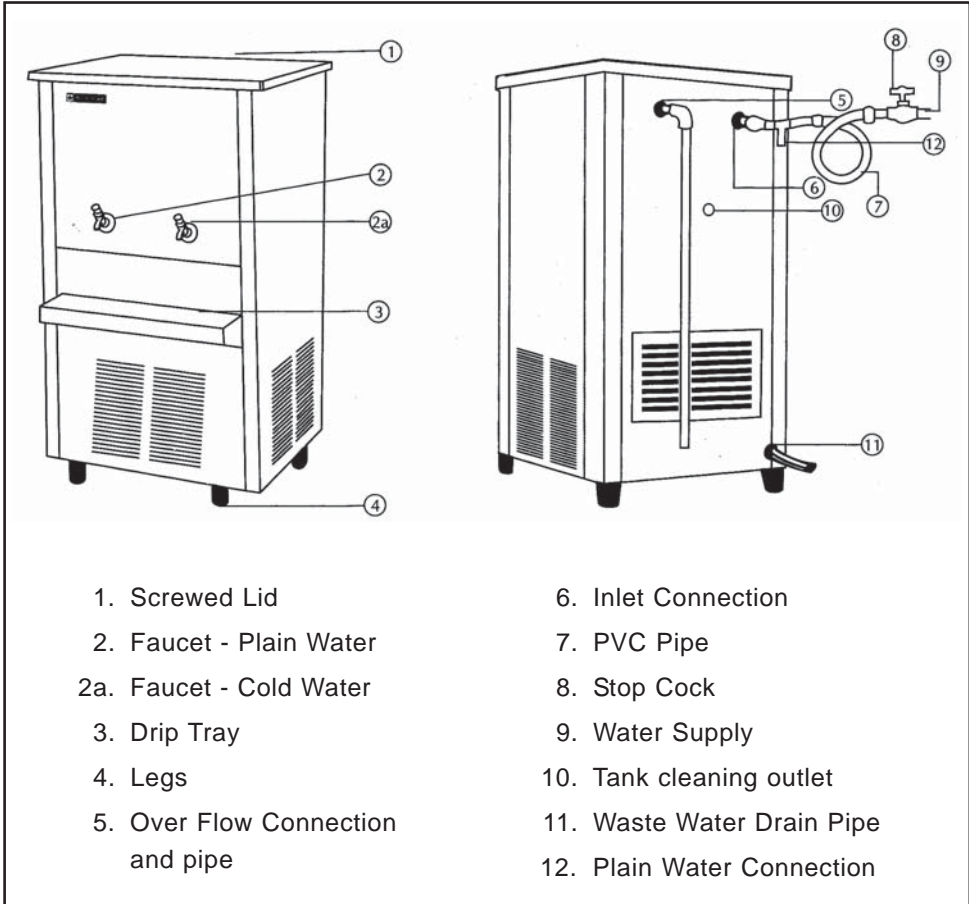
Plain and Cold Water Coolers

Models : PC15, PC240, PC480, PC8120, PC15150.

- Option for Plain Water
- No extra plumbing required
- Plain / Cold Water faucets at same level
- Eco-friendly
- Available in full stainless steel outer body
- Sturdy compressor
- Silent operation
- Seam welded stainless steel tank
- Suitable for single phase operation
- In-situ PUF insulation
- Compact design
- Mechanically expanded condensor
- Adjustable cold water thermostat
- Sturdy moulded flat / extended plastic legs
- Auto cutout
- Riveted body assembly
- Compressor over-load protection



Plain and Cold Water Models



- 1. Screwed Lid
- 2. Faucet - Plain Water
- 2a. Faucet - Cold Water
- 3. Drip Tray
- 4. Legs
- 5. Over Flow Connection and pipe

- 6. Inlet Connection
- 7. PVC Pipe
- 8. Stop Cock
- 9. Water Supply
- 10. Tank cleaning outlet
- 11. Waste Water Drain Pipe
- 12. Plain Water Connection

Installation & Operation

Installation

Unpacking

Your Blue Star dealer's technician will unpack your Blue Star Water Cooler carefully and check for any external transit damage.

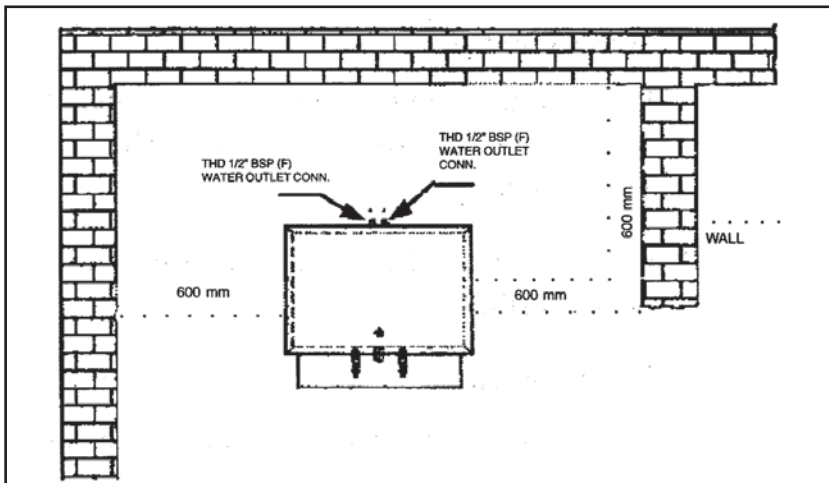
He will remove the bottom panel of the machine by removing the holding bolts from underneath.

He will also inspect the condensing unit and refrigerant piping, by removing the service panel provided on the front side of the Water Cooler.

To reduce the risk of damage in transit, the water faucet(s) is are packed separately along with the drip tray and kept inside the tank.

Location

Your Blue Star dealer's technician will find a suitable location for the unit. However the following points will be of interest to you.



Water Cooler Installation layout



- The Water Cooler should be placed where there is free circulation of fresh air.
- It should be accessible from all the sides. It should be installed about 300mm away from the rear wall.
- It is important that the Water Cooler should be levelled to floor with proper alignment.
- The Water Cooler should preferably be installed on a raised platform to facilitate cleaning and easier servicing.

Plumbing

The faucet(s) and the drip tray shall be installed in position by the Blue Star dealer's technician.

The drip tray is mounted in position under the water faucet(s) with the help of chrome-plated / stainless steel screws.

Plumbing connections shall be as per the diagrams on pages 6 & 8.

You are required to provide a 1/2" water supply line terminating in a 1/2" (BSP) fitting through a stopcock preferably 1.0 meter from the floor. Preferably 1/2" flexible PVC tube is to be used to connect the water supply line to the inlet of the Water Cooler.

After the drip tray is fitted on to the Water-cooler a 3/4" flexible tube, which is provided with the Water-cooler, is connected to the drain connection.

A drain/suitable connection to the drain needs to be provided, by you, at floor level to collect the waste water.

The inlet water supply pressure must not be more than 3kg/cm² (about 30 meter water head). If the maximum water head exceeds 30m, an online pressure reducing valve should be used in the water inlet supply line.

Water Filter (Optional)

In case you would like to use a water filter, it needs to be installed in the water supply line between the shut-off valve and the Water Cooler.



Please check if sufficient water pressure is available for the filter to function satisfactorily.

Electrical connections

All internal electric wiring has been completed at the factory.

You have only to provide a power point of 15 Ampere rating, a three pin plug and a fuse.

Your electrician must use a line fuse rated at almost twice the full load amperage rating of the machine as shown on the data plate.

The power point should be placed within one meter of the Water Cooler.

To prevent the possibility of any electric shock, earthing of the unit is essential.

Please ensure that the electric line is not overloaded because of connecting other appliances.

The Water Cooler is capable of running on AC 230V \pm 10%, Single phase, 50Hz supply. In case the supply is erratic in your area, you will need to provide an automatic voltage stabiliser.

Start-Up

Clean the tank and flush with water.

Open water shut-off valve and allow the tank to fill up. Ensure that the float valve closes when the water level reaches about 40mm below the inlet.

The thermostat position should be approximately in the middle of its range.

Now switch on power to the unit.

Cold water should be drawn only after the unit stops automatically on the initial run.



Operation

The operation of the machine is completely automatic. During the initial run of the Water Cooler, it is advisable to not draw out cold water till the unit has stopped automatically.

When the preset temperature of water is reached in the tank, the unit will stop automatically, through the action of the thermostat.

You may need to adjust the thermostat setting to obtain desired water temperature, but it is advisable not to adjust the thermostat frequently.

The thermostat controls the water temperature between 7°C and 22°C. In all models the thermostat is located at the rear.

As water is drawn for use, the float valve will admit fresh water into the tank. This will raise the temperature of the water in the tank. The thermostat will automatically set the unit into operation. The float valve will automatically maintain a predetermined water level, and should it get stuck and remain open for any reason, the excess water will flow out from the overflow pipe.

Notes

Condensing Unit

For silent operation of your Water Cooler, the hermetic compressor used is internally spring-mounted and the condensor fan motor is mounted on a resilient base.

Compressor Lubrication

Before leaving the factory, every unit carries the correct charge of refrigerant and lubricating oil. Except for an accidental leak, no additional charge of refrigerant or oil is required.

Overload Protection

The motor compressor unit is equipped with a thermal overload protector.



Maintenance

Your Blue Star Water Cooler requires minimum attention and maintenance. However, in order that the unit may continue to give satisfactory performance, periodical checking and cleaning are necessary. A check list is given below.

1. **General Upkeep:** The finish on your Blue Star Water Cooler will last longer if it is well cared for.

Do not allow the cabinet panels to be banged or scratched.

Every three months, have the panels polished with a good wax polish.

2. **Cooling Tank:** It is essential to drain out water from the cooling tank and flush it every 10 to 15 days.

During the cleaning process, the unit should be switched off.

All Water Coolers are provided with Stainless Steel tanks. The tank can be accessed by unscrewing the top lid.

The tank should be cleaned with a mild detergent. Failure to do this periodically will result in brown stains on the tank which will be difficult to remove at a later stage.

3. **Air-cooled Condensor:** The efficiency of the Water Cooler is drastically affected if the condensor is clogged with lint or dust.

In order to maintain free circulation of air over the condensor, it should be cleaned periodically with a small brush that can get between the fins.

Better still, suck the dust and lint out with a vacuum cleaner or use an air blower.

4. **Water Filter (Optional):** The filtering element which is replaceable should be periodically renewed. If the element is not renewed when clogged with foreign matter, water supply is liable to get choked and unsatisfactory operation would result.



5. **Lubrication:** The fan motor bearings are of self lubricating type. Should there be any hard movement of the fan shaft, lubricate it with SAE30 oil.
6. **Long-Period Shutdowns:** If the Water Cooler is to be kept out of service for a week, or a longer period, shut off the water supply and disconnect the plug from the electrical socket.



Do's & Don'ts

Do's (✓)

- ✓ Remove the plastic film as soon as you install the Water Cooler.
- ✓ Clean the dirt accumulated over condensor every fortnight.
- ✓ Choose the right temperature to avoid over cooling.
- ✓ Clean the tank every fortnight with mild detergent.
- ✓ Fill the machine when water tank is half empty.

Don'ts (X)

- X Do not keep Water Cooler exposed to direct sun rays or very close to wall.
- X Avoid keeping unit in excessively heated areas.
- X Do not adjust cooling thermostat frequently. Please allow unit to run for 20 minutes between consecutive settings.
- X Do not run machine without water.
- X Do not use metal scrubber, harsh soaps, iron brush for tank cleaning.
- X Do not switch on unit immediately after switching it off. Wait for 3 minutes.
- X Do not rotate the faucet knob, as it is a press type faucet, in case of SDIx and NST Water Coolers.



Troubleshooting

S.No.	Symptoms	Possible Cause	Suggested Remedy
1.	Compressor does not run and produces no sound at all	<ul style="list-style-type: none"> Supply switch off Fuse blown Defective wiring 	<ul style="list-style-type: none"> Switch on or if the switch is defective, replace. Replace the fuse wire, Rectify the defect
2.	Compressor tries to start with a humming sound and shuts down or Compressor runs for a short time and shuts down	<ul style="list-style-type: none"> Low voltage Capacitor / relay defective 	<ul style="list-style-type: none"> If the supply voltage is usually less than 200V, install a voltage booster Call service personnel
3.	Unit blows fuse on starting	<ul style="list-style-type: none"> Compressor defective Faulty wiring with the unit 	<ul style="list-style-type: none"> Call service personnel Call service personnel
4.	Water at outlet warm	<ul style="list-style-type: none"> Thermostat set too "warm" Water consumption too high Refrigeration system not in order 	<ul style="list-style-type: none"> Lower the setting by turning the knob in counter clockwise direction Compare the consumption with the capacity of the Water Cooler and if high, reduce it Call service personnel
5.	Condenser fan motor noisy	<ul style="list-style-type: none"> Fan blade touching the Condenser fins 	<ul style="list-style-type: none"> Call service personnel
6.	Condenser fan motor not working	<ul style="list-style-type: none"> Fan motor connections open Capacitor defective 	<ul style="list-style-type: none"> Call service personnel Call service personnel
7.	No water flow through Water Cooler	<ul style="list-style-type: none"> No water supply Water filter element clogged Defective faucet Float valve stuck in closed position (in case of storage type) 	<ul style="list-style-type: none"> Ensure water supply Replace / clean filter element Call service personnel Call service personnel
8.	Water leaking through faucet	<ul style="list-style-type: none"> Defective faucet 	<ul style="list-style-type: none"> Call service personnel



Warranty

1. This Water Cooler is warranted, to the original purchaser, to be free from defects in material and workmanship under normal use and service.
2. This Warranty will be limited to repair / replacement, ex-Branch Office of any part of the unit found defective within 12 months from the date of sale.
3. Free transportation of the equipment to the workshop for repairs is available during the Warranty period if the appliance is used within the Municipal limits of the city or town where the Blue Star office / dealer is located.
4. The defective parts must be sent to the Company, freight prepaid and insured, for the company's examination and satisfaction that they are defective. Return freight and insurance on such repaired / replacement parts plus any excise duty and taxes / levies will be extra.
5. This Warranty will be valid only if the Water cooler is operated on a power supply of AC single phase 50 cycles 230V±10%.
6. This Warranty ceases to be valid if :
 - (a) Service / repairs on the equipment are carried out by any person other than the one authorised by the Company.
 - (b) The equipment is let on hire.
 - (c) A defective voltage stabiliser is in use.
 - (d) All handles, hinges, locks, lights and rubber / glass / plastic parts are not covered under this Warranty.
7. Any consequential damage or loss arising from any cause whatsoever, is excluded from this Warranty.
8. Failure / deterioration of any part / assembly arising, in the Company's opinion, by reasons of shifting to another location, accident, alteration, abuse / misuse, substitution of original part(s) with unauthorised part(s) or any damage caused by fire / flood, etc. or exposure to weather conditions, are not covered under this Warranty.



9. This Warranty will continue to be in force for the term herein specified irrespective of any replacement parts which may be provided under Warranty and such replacement parts shall not carry any fresh Warranty.
10. Employees and / or authorised dealers of the Company have no authority to vary the terms of this Warranty. No person is authorised to assume, in Company's name or on Company's behalf, any other obligation or liability in respect of this appliance.
11. Any dispute whatsoever covering our Warranty terms, if not amicably settled, shall be referred to mutually approved arbitrator, in Chennai.
12. **Warranty Registration:** You can register your product warranty with Blue Star in either of two easy ways:
 - a. Visit www.bluestarindia.com/customer-service/online-warranty-register.asp and follow instructions therein.
 - b. Fill in the Warranty Certificate Cards in this manual and mail the lower card to the address printed on it.



Warranty Certificate

Water Cooler



Customer's Name :

Address :

.....

City State Pin.....

Phone No. : (O)..... (R).....

Bill No..... Date :

Model No. Serial No.....

Dealer's Name & Address

Dealer's Signature & Stamp



Warranty Certificate

Water Cooler



Customer's Name :

Address :

.....

City State Pin.....

Phone No. : (O)..... (R).....

Bill No..... Date :

Model No. Serial No.....

Dealer's Name & Address

Dealer's Signature & Stamp



Cut and mail to Blue Star Ltd to the address on reverse.

Please
Affix
Postage
Stamp

Blue Star Limited,
CBO - ACRSD
II Pokharan Road,
Majiwada,
Thane - 400 601

24x7 Customer Care

Phone : 1800 209 1177 / 1860 266 6666

SMS : "Service" to 57007

Email : customerservice@bluestarindia.com

EAST

BHUBANESHWAR

3A, Satya Nagar, 2nd Floor,
Bhubaneswar 751 007.
Tel: (0674) 2572403 / 2573670

GUWAHATI

New Star Freeze Building
2nd Floor,
Opp. Kunjalata Bibah Bhawan,
G. S. Road, Guwahati 781 005.
Tel: (0361) 2468496

KOLKATA

7, Hare Street
Kolkata 700 001.
Tel: (033) 22134200 / 22106609

NORTH

CHANDIGARH

SCO 1, Madhya Marg,
Sector 26,
Chandigarh 160 019.
Tel: (0172) 2790482 / 5024000

JAIPUR

A-19, Main Sahakar Path,
Near Sahakar Bhawan,
Jaipur 302 001.
Tel: (0141) 2744033 / 35

LUCKNOW

177/4, Faizabad Road,
Lucknow 226 007.
Tel: (0522) 4034000

NEW DELHI

E-44/12 Okhla Ind. Area
Phase II, Okhla
New Delhi 110 020.
Tel: (011) 41494200 / 41494000

SOUTH

BANGALORE

Ozone Manay Technology Park
Sy. No. 56/18 & 55/9
Hongasandra Village
Begur Hobli,
Garvebhavipalya
Bangalore – 560 068
Tel: (080) 41854000

CHENNAI

104, 'Garuda Building',
Cathedral Road,
Chennai 600 086.
Tel: (044) 28124000 / 42444000

KOCHI

2nd Floor, Millennium Plaza,
MKK Nair Road,
Alinchuvadu Junction,
Kochi 682 024.
Tel: (0484) 4499000

SECUNDERABAD

207, Sikh Road,
Bantia Estate
Secunderabad 500 003.
Tel: (040) 44004000

TRIVANDRUM

T.C. IX/1490 'Chandrika',
Sasthamangalam
Trivandrum 695 010.
Tel: (0471) 2720025 / 2720065

VISAKHAPATNAM

D. No. 49-24-65/1,
Near Sankarmattam Road,
Madhura Nagar,
Visakhapatnam 530 016.
Tel: (0891) 2748405 / 2748433

WEST

AHMEDABAD

2nd Floor, Shivalik - II,
Near Shivrjanani Cross Roads,
132 Feet Ring Road, Satellite,
Ahmedabad - 380015.
Tel: (079) 40224000

BHOPAL

"Star Arcade", 2nd Floor
Plot No.165A & 166, Zone-I
Maharana Pratap Nagar,
Bhopal 462 011.
Tel: (0755) 2553378 / 4273378 / 79

GOA

1st Floor, Buddhaseth Apartments,
Tonca, Caranzalem, Goa 403 002.
Tel: (0832) 2461671

MUMBAI

Blue Star House
9A, Ghatkopar Link Road
Saki Naka, Mumbai 400 072.
Tel: (022) 66684200 / 66684000

NAGPUR

219, Bajaj Nagar, 1st Floor,
South Ambazari Road,
Nagpur 440 010.
Tel: (0712) 6624000 / 2249000

PUNE

201/A, Nityanand Complex
1st Floor, 247/A, Bund Garden Road
Pune 411 011.
Tel: (020) 41044000 / 26169332

VADODARA

Ramakrishna Chambers
7th Floor, Productivity Road
Alkapuri, Vadodara 390 005.
Tel: (0265) 2332021 - 22 /
2330334 / 6614000

