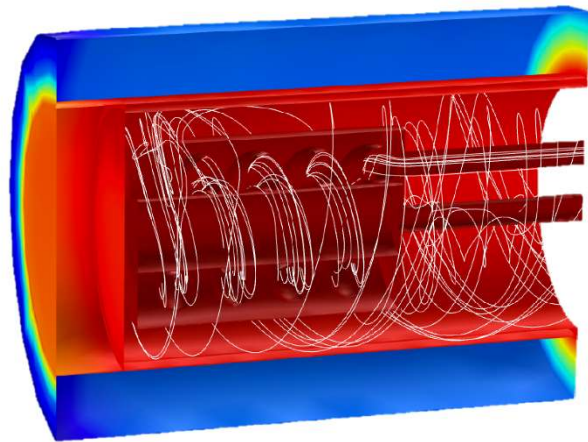


# Climatic Camera



## Operation Manual

2020 Edition

### Overview

The Climatic Camera is designed to be used inside an environmental test chamber. Each climatic Camera is unique and should be installed by a qualified technician. All instructions should be read before using the climatic camera. Use at your own risk.

### Components

Item #	Item Description	Qty
1	Borescope Camera	1
2	Glass Housing	1
3	Housing Body	1
4	Clamp for Housing	1
5	Clamp set	1
6	Goose neck	1
7	Magnet base	1
8	Pipe Insulation	1
9	Inside pipe	1
10	Anti-reflective glass	1
11	Supply Air Hose	1
12	Desiccant Air Dryer	1
13	Main Line to supply adapter	2
14	Ball Valve	1
15	Copper Sleeve	1

### Integration

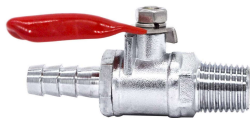
The Climatic Camera is preinstalled and set up for the specific application of Danfoss. **Do Not** attempt to modify any existing parts without consulting the designers. Camera software is to be installed on the user's computer. The Software can be downloaded at <http://gto.so/echd.apk>. The operation manual for the

camera is included with installation and more instructions on how to download the software.

### Operation of Climatic Camera

Check air hoses for any signs of degradation or wear. If there are any signs or abnormalities, do not use the climatic camera and replace damaged parts or contact customer service (designers).

1. Verify camera operation  
→Run camera software on user's computer to confirm camera operation.
2. Adjust desired position for the device  
→Open thermal chamber and adjust camera so that the computer screen shows what you want to record.
3. Turn on main ball valve parallel to pipe (shown below)



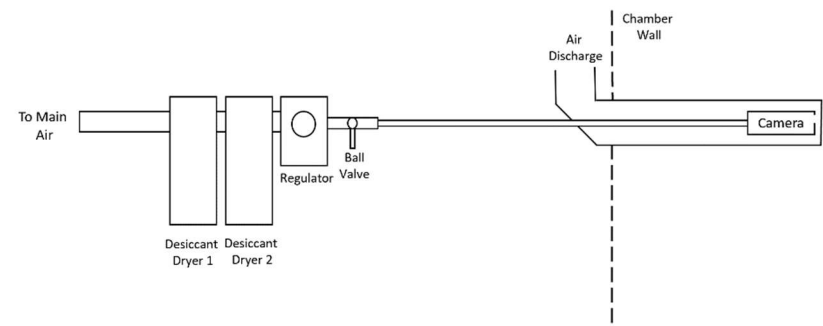
4. Check for any air leakage. If no air is exiting the tube contact service.
5. Verify proper tightness for insulation and clamps along the device.
6. Close thermal Chamber and lock door.
7. Run Climatic chamber test.
8. Periodically check the thermometer and or warning lights to verify the device is in operating temperatures (0 to 45 °C).

After Use: Turn Ball valve Perpendicular to pipe

**CAUTION!** Camera or any parts located inside the chamber are extremely hot or cold. DO NOT touch without proper PPE.

### Troubleshooting

**Air Leakages:** if there is an air leakage along the air flow pipe, adjust and tighten all pieces to make sure device is airtight. If leakages continue, contact service or designers (likely, parts will have to be changed). An air hose diagram is pictured below



**Camera not Working:** Please verify connection to computer is stable, avoid turning the cable as much as possible. The camera has a waterproof level IP67, if camera stops working and is properly connected it's likely that the temperature exceeded operational values. Try checking for proper operation without chamber test. If camera still doesn't work, a replacement should be ordered. (Air Leakages could affect temperature inside the camera housing, please read our section on Air Leakages in Troubleshooting)

Camera Link: [https://www.teslong.com/USB-Endoscope?product\\_id=195](https://www.teslong.com/USB-Endoscope?product_id=195)