HF30A Nitrogen Generator

EN

Installation and operating instructions

CE

1150704011L02

chromalytic
A DÜRR TECHNIK COMPANY

2004V002

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1 About this document

These installation and operating instructions represent a part of the unit. They correspond to the relevant version of the unit and the status of technology valid at the time of its market launch.

In the event that the instructions and notes in these installation and operating instructions are not observed, Chromalytic accepts no warranty or liability of any kind for the safe operation and reliable function of the unit.

This translation was prepared to the best of our knowledge. The original German language version of the manual is the definitive version. Chromalytic is not liable for translation errors.

1.1 Warnings and symbols

Warnings

The warnings in this document are intended to draw your attention to possible injury to persons or damage to machinery.

The following warning symbols are used:


General warning symbol


Warning – dangerous high voltage


Warning - automatic start-up of the unit

The warnings are structured as follows:

Description of the type and source of danger

Here you will find the possible consequences of ignoring the warning

› Follow these measures to avoid the danger.

The signal word differentiates between four levels of danger:

– **DANGER**
  Immediate danger of severe injury or death
– **WARNING**
  Possible danger of severe injury or death
– **CAUTION**
  Risk of minor injuries
– **NOTICE**
  Risk of extensive material/property damage

Other symbols

These symbols are used in the document and on or in the unit:

Note, e.g. specific instructions regarding efficient and cost-effective use of the unit.

CE labelling


De-energise the unit prior to working on it or in the event of potential danger (e. g. pull the mains plug) and prevent it from being switched back on again.


Comply with the specification in the accompanying documents.


Dispose of correctly in accordance with EU Directive 2012/19/EU (WEEE).


Dispose of the packaging material in an environmentally responsible manner.

1.2 Copyright information

2 Safety

Chromalytic has developed and constructed the units in such a way that danger is to a large extent excluded if the units are used as intended. Nevertheless, residual risks can remain.
You should therefore observe the following information.

2.1 Intended use

The unit is intended for the production of nitrogen derived from the compression of atmospheric air.

The unit has been designed for operation in dry, ventilated rooms. The unit must not be operated in a damp or wet environment. Its use in the vicinity of gases or flammable liquids is prohibited.

Only operate the mobile units in an upright position.

2.2 Improper use

Any use of this unit / these units above and beyond that described in the Installation and Operating Instructions is deemed to be incorrect usage. The manufacturer cannot be held liable for any damage resulting from incorrect usage. The operator will be held liable and bears all risks.

WARNING
Serious injury and material damage due to improper usage

› Conveying explosive mixtures in any way other than that specified is not permitted.

2.3 General safety information

› Always comply with the specifications of all guidelines, laws, and other rules and regulations applicable at the site of operation for the operation of this unit.
› Check the function and condition of the unit prior to every use.
› Do not convert or modify the unit.
› Comply with the specifications of the Installation and Operating Instructions.
› The Installation and Operating Instructions must be accessible to all operators of the unit at all times.

2.4 Specialist personnel

Operation

Unit operating personnel must ensure safe and correct handling based on their training and knowledge.

› Instruct or have every user instructed in handling the unit.

Installation and repairs

› Always arrange for any assembly work, readjustments, alterations, extensions, and repairs to be performed by Chromalytic or by personnel authorised and trained by Chromalytic. Qualified personnel are defined as those trained and certified by Chromalytic; who are familiar with the unit technology; and are aware of the dangers presented by the unit.

2.5 Electrical safety

› Observe and comply with all the relevant electrical safety regulations when working on the unit.
› Replace any damaged cables or plugs immediately.

2.6 Only use original parts

› Only use accessories specified or approved by Chromalytic.
› Only use original working and spare parts.

Chromalytic accepts no liability for damage resulting from the use of non-approved accessories or any non-original working or spare parts.

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2.7 Transportation and storage

The original packaging provides optimum protection for the unit during transport.

Chromalytic will not accept any responsibility or liability for damage occurring during transport due to the use of incorrect packaging, even where the unit is still under guarantee.

– Only transport the unit in its original packaging.

– Keep the packing materials out of the reach of children.

WARNING
Risk of explosion of the pressure vessel and pressure hoses
Danger of personal injuries or material damage from flying parts
› The pressure vessel and the pressure hoses must be vented before they are stored or transported.
› Protect the unit from moisture during transportation.
› Always transport the unit in an upright position.

The unit may be stored in its original packaging

– in warm, dry and dust-free rooms;
– protected from contaminants.

If possible, retain the packaging material.

Ambient conditions during storage and transport

Ambient conditions during storage and transport		
Temperature	°C	-25 to +55
Rel. humidity	%	10 % to 90 %

Please refer to the labels on the packaging padding.

2.8 Disposal

Unit

The unit must be disposed of properly. Within the European Union, the unit must be disposed of in accordance with EU Directive 2012/19/EU (WEEE).

› Please contact Chromalytic if you have any questions regarding the proper disposal of the unit.

Packaging

Dispose of the packaging material in an environmentally responsible manner.

– Note current disposal routes.
– Keep the packing materials out of the reach of children.

2.9 Safe operating pressure limits

Typically, when the unit leaves manufacturing it has been set and tested to operate at 7.0 bar nitrogen. These are the optimal conditions for the use of the unit. Before being integrated into an existing installation or system, the owner must satisfy themselves that these pressure limits do not exceed the safe operating pressure of any other equipment within the system. If it identified that other equipment within the system operates at a lower pressure, then either a regulator MUST be installed to protect the equipment, or the operating conditions of the compressor changed to suit. Please refer to "10.9 Setting the pressure reducer" for the instructions to adjust the operating pressure of the unit.

2.10 Written scheme of examination

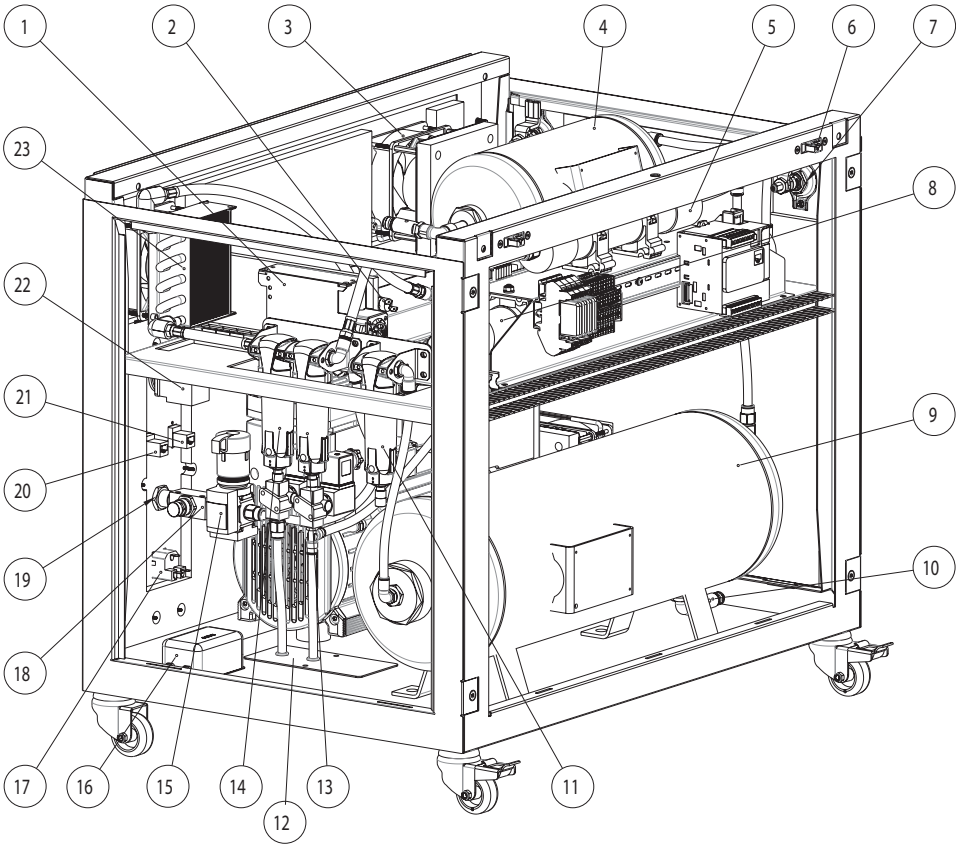
In accordance with the PSSR 2000 (128) Regulations, any system with a combined storage volume of over 250 bar.litres is subject to a written scheme of examination. Please refer to Regulation 8 of the PSSR 2000.

It is the responsibility of the owner / hirer of the equipment to ensure that this is in place before the installed machine is used within a complete system.

Please note that this is for a total combined storage volume and not that of the compressor and air receiver only

3 Overview

3.1 Operation



1 Power supply
2 Temperature protection switch
3 Fan
4 Air buffer tank
5 Second stage nitrogen separator
6 Front panel clip
7 Front panel lock
8 First stage nitrogen separator
9 Nitrogen holding tank
10 Safety Valve
11 Activated carbon filter
12 Heated condensate separator
13 0.01 µ filter
14 5 µ filter

15 Pressure regulator
16 EMC filter
17 Mains connection
18 Flow control valve
19 Nitrogen out
20 Modbus connection
21 Ethernet connection
22 On/off switch
23 Cooler

*If included in the scope of delivery

Air is drawn in from the surrounding atmosphere through the air intake filters. This air is compressed by the pistons in the cylinder which is a direct drive from the motor. The inlet/outlet valve blocks within the cylinder head controls the direction of the air flow. The compressed air is guided through the pressure hose into the cooler.As the air flows through the cooler it reduces in temperature to with 4 degrees of ambient.

The air then passes into the 2-stage coalescing filters, which remove particles, contaminates and any water within the air flow. The filter assembly is drain by PLC controlled valves which direct the water into the condensate tray. The condensate tray is heated to safely evaporate off the water from the system, if the maximum level is reached the overflow directs the excess water out on to the floor under the unit.

From the filters the air passes through an unloader valve and into the air buffer tank. From the air buffer tank, the air flows to the membrane elements where only the nitrogen is retained within the system. All other gases and contaminates are purged from the membranes, fans within the cabinet remove these gases from the generator. The retained nitrogen passes through the pressure relief valve and the non-return valve to the nitrogen storage vessel.

The compressor unit supplies compressed air until the cut-off pressure is reached within the nitrogen storage vessel. The unit then switches off or vents excess air to atmosphere depending current operating conditions. The pressure is indicated by the pressure gauge within the unit and via the HMI display.

The motor, pressure hose, cooler and coalescing filters are depressurised by the integrated unloader valve.

As nitrogen is used, the pressure in the nitrogen storage vessel drops, which switches-on, the compressor when the lower limit is reached. Safety valves on both pressure vessels prevents the maximum permissible vessel pressure from being exceeded. Nitrogen from the nitrogen vessel passes through an active carbon final filter to the output via the pressure regulator.

Maximum nitrogen flow rates are restricted by a flow control valve to ensure purity is maintained.

3.2 Spare parts

Minor service spare parts set

Designation and article no.		Consisting of:
Minor service spare parts set	1150P00001	2 x air intake filters
		1 x 5 µm filter
		1 x 0.01 µm filter
		1 x activated carbon filter
		1 x silencer

Major service spare parts set

Designation and article no.		Consisting of:
Major service spare parts set	1150P00002	2 x air intake filters
		1 x 5 µm filter
		1 x 0.01 µm filter
		1 x activated carbon filter
		1 x silencer
		1 x cylinder / cup seal

4 Technical data

Electrical data		Nitrogen HF30A / 1150704010
Electrical frequency	Hz	50
Nominal voltage	V	230
Rated power	P1 (kW)	1.7
Nominal current	A	7.4
Nominal pressure	bar / MPa	7 / 0.7
Protection rating (motor)	IP	54

General data		
Air buffer tank volume	L	5
Nitrogen holding tank volume	L	20
Delivery quantity at 0 bar (0 MPa)	l/min	32
Duty cycle	%	100
Safety pressure PS	bar / MPa	9.5 / 0.95
Purity		Up to 99%
Typical pressure dew point	°C	- 40
Touchscreen protection rating	IP	20
Noise level (at a distance of 1 m)	dB (A)	59
Weight excluding shipping packaging	kg	123
Dimensions* (L x W x H)	mm	800 x 605 x 695

*Dimensions without quick-release coupling and hose nozzle

Ambient conditions during operation		
Temperature	°C	+5 to +35
Relative humidity	%	Max. 85

5 Pressure tank

5.1 Overview

Pressure vessels from Behälter-Werk Burgau GmbH are installed in the units.
The instructions for use given below apply to the following types of pressure vessel:

Type	Pressure[1)]	Vessel[2)]	APP[3)]	c[4)]	Remark[5)]
316804	PS 12 bar	V 5 l	A	c = 0 mm	See [5)]
316806	PS 12 bar	V 20 l	A	c = 0 mm	See [5)]

For serial number and build year refer to the labelling on the vessel.

[1)]**Pressure**	Maximum operating pressure PS in bar
[2)]**Vessel**	Vessel volume V in litres
[3)]**Application (APP)**	A = Pressure vessel for compressors
	B = Pressure vessel for stationary systems
[4)]**Corrosion allowance**	c in mm
Maximum temperature	+100 °C
Minimum temperature	-10 °C
Medium	Air/nitrogen
[5)]**Remark**	The vessel is capable of sustained operation within the pressure fluctuations seen within the unit.
Applied standards	EN 286-1:1998 ASME BPVC-VIII-1-2019

5.2 Instructions for use for the pressure vessel (explanation by Behälter-Werk Burgau GmbH)

The pressure vessel must only be used in accordance with the aforementioned intended purpose and the specified technical data (please refer to the PSSR 2000 regulations). Other forms of use are not permitted for reasons of safety. The pressure vessel has been designed in accordance with Directive 2014/29/EU and has been manufactured as a single component without safety equipment for the application area detailed above.

The unit has been designed for internal pressure loads.

Before commissioning, the vessel must be fitted with the necessary safety equipment such as a pressure gauge and safety equipment designed to protect against overpressure, etc. These parts are not included in our scope of delivery.

No welding work or heat treatment may be carried out on the pressure-retaining walls of the vessel. It must be ensured that the internal pressure does not exceed the operating pressure PS specified in the labelling on the vessel during operation. However, this pressure may be temporarily exceeded by up to 10%. Vibration stress that would be damaging for the pressure vessel and corrosion on the vessel must be prevented using appropriate measures.

The assembly or installation of the pressure vessel must be carried out in such a way that safe use of the vessel is ensured (e.g. no rigid connection to the floor or machine base frame without vibration dampers).

The operating instructions to be provided by the equipment supplier must include the following information in accordance with the equipment fitted:

– a) Instructions for draining the condensate

– b) Instructions and information about maintenance to ensure safety of use

The supplier must also specify whether the pressure vessel, when fully equipped for operation, has to undergo an acceptance test before commissioning. The supplier/owner must observe the laws and regulations regarding the operation of the pressure vessel that apply in the country of operation.

The design is intended for predominantly static internal pressure loads and covers the following operating parameters:

1000 load changes from 0 to PS and capable of sustained operation within a pressure fluctuation range of 1.6 bar to 2.2 bar

Refer to the "5.1 Overview"**Remarks**.

6 Declaration of conformity for machines in accordance with the 2006/42/EC Directive

We hereby declare that the unit described below conforms to all requirements of the machine directive 2006/42/EC.

The unit named below fulfills the requirements of the following directives:

– Electromagnetic Compatibility (EMC) Directive 2014/30/EU
– Low voltage directive 2014/35/EC
– Simple pressure vessel directive 2014/29/EU
– RoHS directive 2011/65/EU

Manufacturer's name:	Chromalytic Ltd
Manufacturer's address:	Unit A Lake Works, Cranleigh Road, Fareham, PO16 9DR. UK

Reference number:	1150704010
Article designation:	Nitrogen Generator

We hereby declare that the unit may only be commissioned once it has been established that the machine into which this unit is to be installed complies with the provisions as set out in Machinery Directive 2006/42/EC.

The following harmonised standards and other standards have been applied:

DIN EN 1012-1:2011-02
DIN EN 60034-1:2011-02
DIN EN 60034-5:2007-09
DIN EN 60034-7:2001-12
DIN EN 60034-8:2014-10
DIN EN 60335-1:2014-11
DIN EN 61000-3-2:2015-03
DIN EN 61000-6-3:2012-11
DIN EN 61010-1:2010
DIN EN 60204-1:2010-05
DIN EN ISO 12100:2013-08

Chromalytic Limited / Fareham UK, 09/09/2019

Mark Jones
Managing Director, Chromalytic Limited

Signature in the original document
held by Chromalytic Limited

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7 Requirements

7.1 Installation/setup room

The room chosen for set up must fulfil the following requirements:

- Dry, well ventilated room
- Should not be a purpose-made room (e. g. boiler room or wet room)
- Set up the unit on a clean, level and sufficiently stable surface (take the weight of the unit into account).
- The socket-outlet must be easily accessible.
- The type plate of the unit must be easily readable (also after installation).
- The unit must be easily accessible for operation and maintenance.
- Once the unit has been installed, the connecting terminals must be easily accessible when removing/opening housing access.
- Maintain sufficient distance from the wall (minimum 50 mm).

The air is filtered when it is sucked in. This does not alter the composition of the air. The source of the air taken in should be free of any harmful substances (e.g. must not be placed next to the exhaust of power plants, air conditioning units, generators, compactors, cutting / milling machines etc.).

NOTICE
Risk of overheating due to insufficient ventilation
The units generates heat. Possibility of heat damage and/or reduced service life of the unit.
› Do not cover the unit.
› Air must be able to flow in and out unobstructed.
› Ventilation openings must be sufficiently large.
› Installed units may require an independent ventilation system in unfavourable cases.

7.2 Vibration damping between compressor unit and instrument

The unit generates vibrations.The use of flexible pipework between the generator and the instrument is recommended.

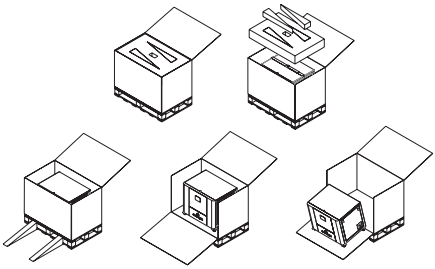
CAUTION
The use of rigid connections may damage the units or the system in which the units have been installed.
The unit can be damaged from strong shocks or unit vibrations.
› Install vibration dampers between the generator and the instrument.

7.3 Installation position and fastening

Install the units as near as possible to the horizontal. Free standing units must be at least 40 cm away from any other walls or surfaces. Other fitting positions must be agreed in advance by Chromalytic.

8 Commissioning

8.1 Remove the transport locks



The unit is securely protected with packaging material to ensure safe transportation.

› Open the top cover of the box.
› Remove foam tray.
› Detach wedges from foam tray as illustrated.
› Place wedges in front of packaged unit as shown.
› Remove all other packaging and transportation straps within the box.
› Open side cover and place on foam wedges. Side cover now acts as a ramp to safely remove unit from packaging.

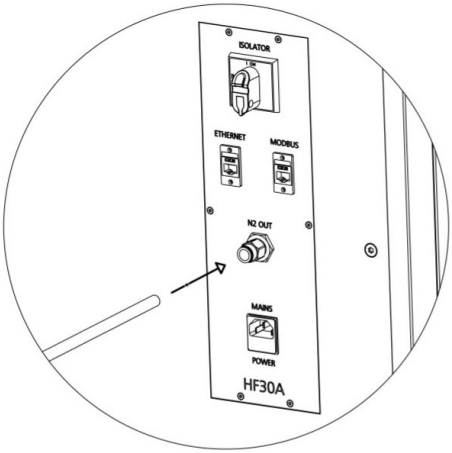
8.2 Establishing a connection to the instrument

The devices are designed as standard for a nominal pressure of 7 bar. Exceeding the nominal pressure on a regular basis will reduce the service life of the device.

The unit is equipped as standard with a PLC (programmable logic controller) and touchscreen user interface, a pressure sensor, pressure gauge, safety valve, non-return valve and condensate drain.

In order to avoid leaks, we recommend installing a flexible pressure hose between the nitrogen outlet and consumer application.

› The nitrogen supply is connected to the outlet by means of a G 1/4" internal thread.
› Use a suitable fitting such as a G 1/4" x 6 mm push fit stud to provide a connection to the consumer application.
› Ensure that the tube used to connect the nitrogen outlet to the application is of a suitable type and pressure rating, and free from damage.



8.3 Start-up cycles

The motors in the compressor stations are designed for 10 starts/stops per hour. More frequent switching will lead to increased wear.

In high-demand applications, the PLC controller will run the compressor continuously, safely venting off excess air, in order to reach the optimal operating conditions for the motor. Continuous running of the motor in such applications is normal, and does not indicate a fault.

8.4 Condensate

During operation, condensed water is continuously separated off in the coalescing filtration or within the air pressure vessel.

The condensate is collected and managed in an automated evaporation device.

› Residual heat from the compressor, together with a thermostatically controlled evaporation device, is used to safely evaporate condensate to atmosphere.
› The condensate removal from the filters is automatic and will be drained away at timed intervals.

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8.5 Electrical installation

Electrical connection using a mains plug

› The unit may only be connected to a correctly installed socket outlet.

› Make sure that none of the electrical cables leading to the unit are under any mechanical tension.

› The socket-outlet must be easily accessible.
› Before commissioning, verify that the power supply voltage complies with the voltage specifications of the model identification plate.

DANGER
Risk of electric shock due to defective power cord
Risk of electric shock.
› The power cord must not be allowed to come into contact with any hot surfaces on the unit.
› Route power cords without mechanical tension.
› Connect the mains plug to an earthed socket outlet.

Electrical connection without a mains plug

DANGER
Danger to life from electric shock
Mortally dangerous voltage is present at the connection point of the electrical network.
› Make sure that the connection point is free of voltage.
› Connection to the power supply may only be performed by a qualified electrician.

8.6 Check of the pressure switch

The cut-off pressure is factory-set to 8.6 bar nitrogen (0.86 MPa), measured at the nitrogen vessel.

The adjustment of the electronic pressure switch must only be performed by qualified personnel.

› To ensure correct and safe operation of the unit, access to the adjustment screen is restricted by means of a username and password

The cut-off pressure must be at least 0.5 bar (0.05 MPa) below the maximum pressure of 9.5 bar (0.95 MPa). Otherwise the safety valve can open too early, which will prevent the compressor unit from attaining the cut-off pressure, and as a result it will run continuously.

If the pressure of the pressure switch is set above the maximum pressure of the compressor, this will VOID the warranty.

8.7 Replacement of the safety valve

Chromalytic suggest that the safety valves are replaced every 3 years to ensure the correct operation. There are two safety valves within each unit. Care must be taken to ensure the replacement valves have the same specification as the originals.

DANGER
Risk of explosion of the pressure vessel and pressure hoses
› Do not change the safety valve settings.

WARNING
Risk of damage to the safety valve
Risk of explosion of the pressure vessel and pressure hoses due to a defective safety valve
› Do not use the safety valve to vent the pressure vessel.

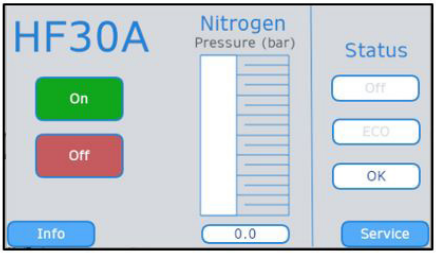
9 Language selection

The user interface can be set to use any of the supported languages. By default the user interface will be set to English.

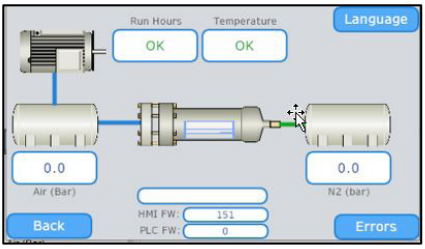
› Switch on the unit at the main power switch (see "10.3 Switching the unit on/off").

After initialization is complete, the home screen will be displayed.

› Select the INFO action button to display the Instrument Details page.



› Select the LANGUAGE action button to display the Language Selection page.



› Select the desired operating language, then BACK to return to the previous screens.

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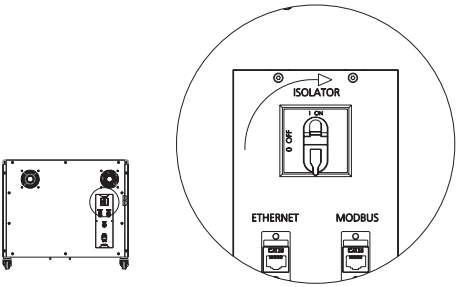
10 Operation

10.1 Turning on the power

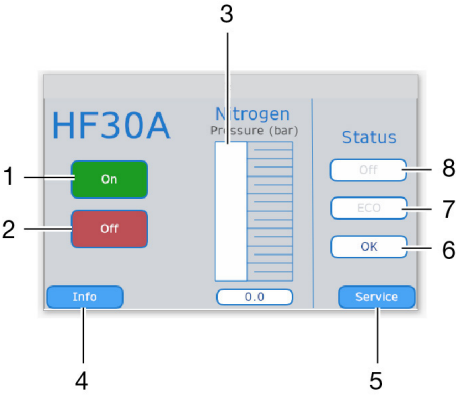
An electrical isolator with lockout capability is provided on the rear of the generator.

› Move the isolator to the ON position to connect power to the generator.



10.2 User interface – main page layout

The touchscreen is a resistive panel with IP20 protection. It can be used with gloves and a suitable non-damaging stylus.



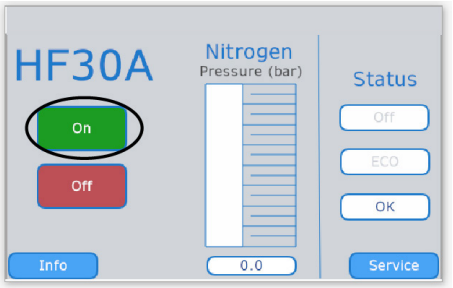
1 Start N2 production
2 Stop N2 production
3 Nitrogen vessel pressure indicator
4 Instrument details screen navigation
5 Service parameters screen navigation
6 Run / stop status indicator
7 ECO mode active indicator
8 Service status indicator

10.3 Switching the unit on/off

Control of the unit is via the touchscreen user interface.

The unit is designed for continuous automatic operation, and will adjust nitrogen production to meet application demands. The unit may be left in the ON mode, and does not need to be turned off during normal operation.

› Touch the ON control button to start nitrogen production.



On first start up, air in the nitrogen vessel must be purged to atmosphere. Allow the unit to vent to atmosphere for at least 30 minutes before use.

› The nitrogen vessel pressure is displayed from the home screen

› Touch the OFF control button to place the unit into standby mode (i.e. not producing nitrogen)

10.4 ECO mode

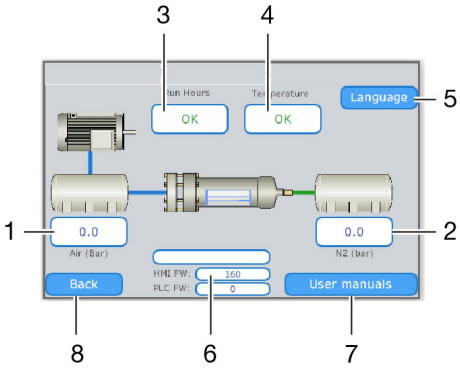
When operating in lower demand conditions, the controller will turn off the compressor when nitrogen is not required to reduce wear and electrical consumption.

› ECO mode operation is fully automatic, and will be determined by monitoring current nitrogen demand patterns.

› ECO mode operation is indicated by GREEN status LEDs on the front panel, and the status message on the touchscreen homepage (see section "10.8 Front panel status indicator").

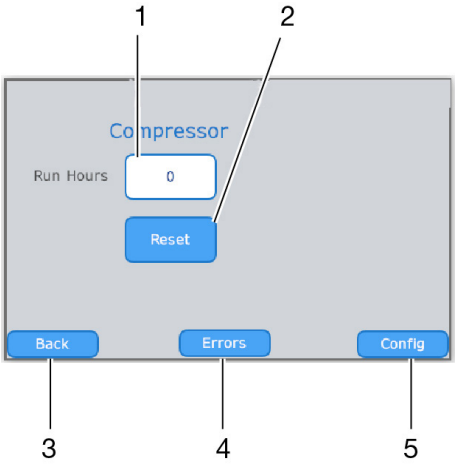
10.5 User interface – instrument details screen

The instrument details screen provides further information on instrument parameters, and allows the user interface language to be changed.



1 Air vessel pressure indicator
2 Nitrogen vessel pressure indicator
3 Maintenance status
4 Temperature status
5 User interface language selector
6 Instrument serial number and HMI / PLC firmware revisions.
7 User manuals navigation
8 Back to previous screen

10.6 User interface - Service parameteres screen



1 Compressor run hours
2 Reset compressor hours (refer to Service Manual)
3 Back to main page
4 Error details screen navigation.
5 Advanced configuration options (refer to Service Manual)

10.7 User interface – Error details

In the event that an error condition is detected in the generator, further information will be displayed on the Error Details screen.

› Navigate to ERRORS from the instrument details screen
› After the error has been rectified, it is necessary to power-cycle the generator to return to normal operation.

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10.8 Front panel status indicator

The generator front panel is equipped with LEDs that provide an “at-a-glance” indication of the current status of the equipment.

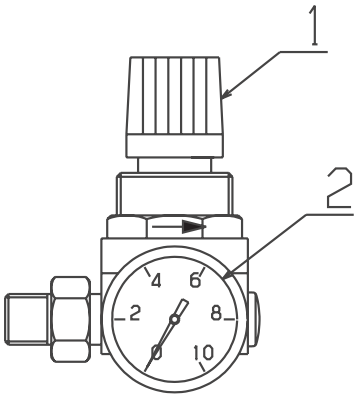
Front panel LED	Description
chromalytic	**Solid Blue** Unit in STANDBY mode
chromalytic	**Rotating Blue** Unit running Unit in continuous run mode
chromalytic	**Rotating Green** Unit running Compressor in ECO mode
chromalytic	**Flashing Red** Error condition

10.9 Setting the pressure reducer

The pressure reducer (optionally available) regulates the vessel pressure (primary pressure) to the required operating pressure (secondary pressure). An increase of pressure when the consumer is switched off is prevented by an additional secondary vent. The pressure reducer is mounted on the pressure switch (G1/4").

Adjusting the pressure reducer:

- Pull up the adjuster knob (1).
- **To increase the supply pressure:** Turn the adjuster knob (1) clockwise towards "+".
- **To decrease the supply pressure:** Turn the adjuster knob (1) anti-clockwise towards "-".
- Once you have reached the required supply pressure (this can be read from the pressure gauge (2)), push the adjuster knob (1) down until it clicks into place.
- Check the supply pressure on the pressure gauge (2).



1 Adjuster knob
2 Pressure gauge

11 Maintenance

De-energise the unit prior to working on it or in the event of potential danger (e. g. pull the mains plug) and prevent it from being switched back on again.

Perform an inspection and maintenance no later than after one year or 5000 operating hours. If needed, service the unit at shorter intervals.

Maintenance and repair work may be done only by Chromalytic or Chromalytic-qualified personnel / service engineers.

Maintenance interval	Maintenance work	Remark
Annually / after 5000 operating hours	Minor service spare parts set: Article no. 1150P00001: 2 x air intake filters, 3 x filters (1 x 5 µm, 1 x 0.01 µm, 1 x RAC), 1 x noise reducer	Maintenance by Chromalytic-qualified service engineer / technician
Every 3 years	Major service spare parts set: Article no. 1150P00002: 2 x cylinders / cup seals (A-200), 2 x air intake filters, 3 x filters (1 x 5 µm, 1 x 0.01 µm, 1 x RAC), 1 x noise reducer.	Maintenance by Chromalytic-qualified service engineer / technician

12 Taking out of use

12.1 Taking the unit out of use

EN

If the unit is not to be used for a prolonged period of time, we recommend that it is properly shut down and taken out of use.

To do this, the accumulated condensation water from the unit must be drained.

› Switch on the unit and wait until the cut-off pressure is reached.

Pressure tank

› Switch off the unit.

› Disconnect the mains plug.

› Relieve the full pressure from the compressed air vessel (e.g. using a blow-off gun connected to the outlet).

› Disconnect the compressed air connection on the outlet.

12.2 Storage of the unit

WARNING
Risk of explosion of the pressure tank and pressure hoses

› The pressure tank and the pressure hoses must be vented before they are stored or transported.

› Protect the unit against moisture, dirt and extreme temperatures during transport (refer to the section on "Ambient conditions").

› Only store the unit when it has been completely emptied.

13 Troubleshooting

13.1 Tips for operators and service technicians

For further information on trouble-shooting refer to the assembly and operating instructions "Oil-free piston compressors KK and piston vacuum pumps KV".

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Any repairs exceeding routine maintenance may only be carried out by qualified personnel or our service.

De-energise the unit prior to working on it or in the event of potential danger (e. g. pull the mains plug) and prevent it from being switched back on again.

Fault	Probable cause	Solution
Unit does not start	No power supply voltage	› Inform an electrician. Check mains fuse and if possible, switch on unit again. If the safety fuse is defective, replace it.
	Undervoltage or overvoltage	› Inform an electrician. Measure power supply voltage.
	Condensor defective	› Notify electrician/engineer. Check condensor and replace if necessary.
	Motor defective	› Replace the unit.
	Temperature switch in the motor (not fitted in all units) has switched off 1. High ambient temperature 2. Mechanical sluggishness 3. Pressure in the line	1. Allow the unit to cool down. Ensure better cooling. Warning: unit restarts automatically. 2. Factory repair. 3. Evacuate air from the suction volume.
	Air intake filter cartridge blocked	› Insert a new air intake filter cartridge.

Fault	Probable cause	Solution
Output drops.	Lines, hoses or connections leaking	› Inform a service technician. Check / renew lines, hoses or connections.
	Defective separation membrane	› Inform a service technician. Replace the separation membrane.
	Air intake filter soiled	› Replace the air intake filter at least 1x per year. The air intake filter must never be cleaned.
	Head kit leaking as a result of wear and/or for one or more of the following reasons: – Soiling – Excessive ambient temperature – Unsuitable materials drawn in	Inform a service technician. Replace the head kit. – Install the filter upstream or replace the filter. – Ensure that cooling is more effective. – Only convey approved materials.
	Defective valve plate	› Inform a service technician. Replace the valve plate.
	Too frequent switching cycles	› Wait 20 minutes to allow unit to exit ECO mode automatically. Inform a service technician if the problem persists.
Unit too noisy	Bearing damaged	› Inform a service technician.
	Vibrations are being transmitted to the housing	› Use suitable vibration dampers.
	Defective vibration dampers	› Install new vibration dampers.
Water dripping from air consumers	High ambient humidity Defective condensate management system	› Normal operation – use condensate tray to collect water.
	Other environments, e.g. very high humidity	› Inform a service technician.

14 Addresses

14.1 Returns / Repairs

Chromalytic Limited
Unit A Lake Works
Cranleigh Road
Fareham, UK
PO16 9DR
Telephone: +44 (0)1329 722 072
Email: support@chromalytic.com

WARNING
Risk of explosion of the pressure tank and pressure hoses
› The pressure tank and the pressure hoses must be vented before they are stored or transported.

Use the original packaging when returning units, if possible. Always pack the units in a plastic bag. Use recyclable packing material.

14.2 To order spare parts

Telephone: +44 (0)1329 722 072
Email: office@chromalytic.com

The following information is required when ordering spare parts:
– Type designation and item number
– Order number as appears on the spare parts list
– Quantity required
– Exact shipping address
– Shipping information

14.3 Service

Telephone: +44 (0)1329 722 072
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Chromalytic is a Dürr Technik company.

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see "14.4 Addresses worldwide"

14.4 Addresses worldwide

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