



**PLASTER TECHNOLOGY**

[www.hama-equipment.com](http://www.hama-equipment.com)

# **HAMA H455 230V compressor**



**USER MANUAL**  
**INCLUDING SPARE PARTS LIST**



READ THIS MANUAL BEFORE USING THE MACHINE

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#### *Language*

- Original manual.
- Translation of the original manual.

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## PREFACE

Dear customer, Congratulations on choosing a HAMA H455 compressor. Thanks to this quality machine from HAMA, you can look forward to years of low maintenance plaster application.

Due to its compact but sturdy build, the HAMA H455 compressor is ideally suited to construction work. The compressor produces a delivery rate of 455 litres per minute, without compromising the high operating pressure of 6 to 8 bar. The simple control enables you to work safely and efficiently.

For your safety it is important that the machine is operated and maintained correctly. Read this manual before using the machine. Follow the instructions to avoid injury and property damage. Do not hesitate to contact HAMA if you have questions.

## TABLE OF CONTENTS

1	INTRODUCTION .....	5
2	SAFETY .....	9
3	GENERAL DESCRIPTION .....	10
4	COMMISSIONING.....	11
5	OPERATION .....	12
6	MAINTENANCE.....	14
7	TROUBLESHOOTING .....	18
8	ENVIRONMENT.....	19
9	DISPOSAL.....	20
10	TECHNICAL SPECIFICATIONS.....	21
11	SPARE PARTS.....	22

# 1 INTRODUCTION

## Intended use

The HAMA H455 compressor is only meant for spraying plaster in combination with the HAMA Duo-Power 2.0, HAMA MC3V 230V 50L or the HAMA GR1500 repair gun.

## Intended audience

Only adequately trained people who have read and understood this manual may use and maintain the HAMA H455 compressor.

## About this manual

This manual describes the operation and maintenance of the HAMA H455 compressor.

## Supplied documentation

The compressor is accompanied by the following documentation:  
User manual (including spare parts lists)

## Availability

The user manual must always be near the HAMA H455 compressor. If the manual is lost, you can request a new copy from HAMA or download it from [www.hama-equipment.com](http://www.hama-equipment.com).

## Conventions used in this document

- This symbol indicates a summary of information.
- 1. Preceding numbers indicate the order in which steps must be performed.
- [1] Numbers inside square brackets are references to parts in an illustration.

## Left, right, front and rear

The designations "left", "right", "front" and "rear" are to be interpreted from the forward driving direction, with the folding handle being the "front".

## Customer service

If you have questions about the HAMA H455 compressor that are not answered in this user manual, please do not hesitate to contact HAMA. For other instructions you can naturally always consult our website [www.hama-equipment.com](http://www.hama-equipment.com).

## Warranty



You are, of course, entitled to warranty coverage if a defect develops despite correct operation and completion of the prescribed maintenance. The warranty does not cover the following:

- Normal wear
- Failure to heed instructions on the compressor
- Ignoring the instructions in this manual
- Inadequate maintenance
- The use of non-OEM parts
- Abnormal external influences
- A modification not authorised by HAMA

HAMA honours the warranty conditions laid down in the METAALUNIE terms and conditions. A summary of the HAMA general terms and conditions is available online on our website.

### Machine identification

Fill in the identification data for the machine. These data can be found on the type plate. The type plate is located on the tank under the compressor block. Fill in the delivery date as well.

 	HAMA® Type	<input type="text"/>	V (V)	<input type="text"/>
	Serial nr.	<input type="text"/>	~+N+PE	<input type="text"/>
	Year	<input type="text"/>	In (A)	<input type="text"/>
	Output (l/min)	<input type="text"/>	F (Hz)	<input type="text"/>
	Volume (L)	<input type="text"/>	P (kW)	<input type="text"/>
	Weight (kg)	<input type="text"/>	Pn (Bar)	<input type="text"/>
	www.hama-equipment.com Handelsstraat 36b, 7482 GW Haaksbergen, Holland			

Type	:	<input type="text"/>
Serial number (s/n)	:	<input type="text"/>
Year of manufacture	:	<input type="text"/>
Delivery date	:	<input type="text"/>

You can also register the machine online at [www.hama-equipment.com](http://www.hama-equipment.com). By registering your product, you make it possible for us to optimize your experience. Registration is beneficial to you in a number of ways, one of which is that we will keep you up to date on the latest developments concerning technical improvements and use of the HAMA H455 compressor. You will also receive news about the latest developments at HAMA.

## EC declaration of conformity (only valid for Europe)

Manufacturer: Modulen & Engineering Menzing B.V.  
Address: Handelsstraat 36b  
Postcode: 7482 GW

### Product identification:

Description of the product: Compressor  
Type or model: H455  
Serial number: Pxxxxxx-xxx

### Meets the requirements:

EU Directive: 2006/42/EC relating to machinery  
2006/95/EC relating to electrical equipment designed for use  
within certain voltage limits  
89/336/EEC relating to electromagnetic compatibility

Harmonised standards: EN1012-1, relating to compressors and vacuum pumps  
EN60204-1 relating to safety of machinery – – electrical  
equipment for machinery

Haaksbergen, July 2015



E. Jansen  
Director  
Modulen & Engineering Menzing B.V.



## 2 SAFETY

### Introduction

Read this manual before using the machine. Follow the instructions to avoid injury and property damage. Do not hesitate to contact HAMA if you have questions.

**REMAIN ALERT! YOUR SAFETY AND THE SAFETY OF OTHERS DEPENDS ON IT!**

### Symbols in this manual

The following symbols are used in this manual:



#### WARNING

Indicates a risky situation which, if not avoided, may result in severe bodily injury or death.

#### CAUTION

Indicates a risky situation which, if not avoided, may result in property damage.



This symbol indicates additional information and tips. This symbol is not used to indicate a risky situation.

The machine may not be modified without written permission from the manufacturer. Modifications to the machine may cause hazardous situations.

## 3 GENERAL DESCRIPTION

### Introduction

The H455 compressor consists of the following parts:

- Frame
- Electric motor
- Compressor block
- Pressure regulator
- Protective cover

### Frame

The frame serves as a base for the compressor. There is an 8-litre tank integrated into the frame to maintain a constant pressure.

### Electric motor

The H455 compressor is powered by a 2.2 kW motor.

### Compressor block

The compressor block produces a maximum operating pressure of 8 bar and a delivery rate of 455 litres per minute.

### Pressure regulator

The pressure regulator provides a variable operating pressure of 6 to 8 bar. When the highest pressure setting is reached the pump continues to run but the pressure regulator ensures that the set pressure values are not exceeded.

### Protective cover

The protective cover shields the moving parts of the compressor and protects all the components from adverse external influences.

#### CAUTION

Extension leads that are too long or have a conductor cross-section that is too small can cause undervoltage, causing the electric motor to burn out. HAMA recommends against the use of any extension lead with a conductor cross-section of less than 2.5 mm<sup>2</sup>.



The temperature in and on the compressor block increases greatly while it is running. During and shortly after running, the cooling ribs of the compressor block are hot and can cause burns if touched.



The compressor tank is constructed for a maximum operating pressure of 8 bar.



Removal of the protective cover while the compressor is connected to power or is pressurized can lead to severe bodily injury.

## 4 COMMISSIONING

### Introduction

Check the compressor for possible transport damage at the time of delivery. Report transport damage to the carrier and HAMA immediately.

### Oil level

Check the oil level in the compressor before the first use.

### Set-up

Ensure that the compressor is level prior to use.

### Connection to a power supply

The HAMA H455 compressor must be connected to a 230 V wall socket with earth connection and 16 A fuse or circuit breaker.

If no wall socket is available in the immediate area, no more than one fully extended extension reel or extension lead with an earth connection and a minimum core cross-section of 2.5 mm<sup>2</sup> may be used.

**CAUTION**

The compressor and a plastering machine must not be connected to the same circuit, otherwise the circuit will be overloaded.



Extension reels must be fully extended in order to prevent fire.

## 5 OPERATION

### Introduction

This chapter provides information about operating the compressor.



- All safety markings and hazard designations on the machine must be clearly visible throughout the service life of the machine.
- Only use the machine in combination with a HAMA plastering machine or repair gun GR1500.
- Wear hearing protection. Being close to the running compressor for a long time can result in hearing damage.
- Wear eye protection (safety goggles). The airflow from the flywheel or unexpected leakage of an air hose can cause small, hard particles to be ejected at high speed.
- Only people with special training are permitted to operate the machine.
- The HAMA compressor must be connected to a 230 V wall socket with earth connection that is protected by a 16 A fuse or circuit breaker. If no wall socket is available in the immediate area of the workplace, no more than one fully extended extension reel or extension lead with an earth connection and a minimum core thickness of 2.5 mm<sup>2</sup> may be used.



Removal of protective covers before or during operation of the machine creates a danger of pinching/crushing.

## 5.1 Operation in steps

### Switching on the compressor

1. Ensure that there is no pressure in the compressor tank.
2. Screw the air bleed nipple closed.
3. Level the compressor on a flat surface.
4. Ensure that the power connection meets the prescribed requirements.
5. Connect the air hose.
6. Put the plug in the wall socket. The compressor will now continue to run as long as the power supply is not interrupted. The pressure regulator allows the compressor to run continuously with no load. The pressure in the tank is maintained at between 6 and 8 bar.

### Switching off the compressor

1. Remove the plug from the wall socket.
2. Disconnect the air hose.
3. Place a board under the wheel on the right side so the compressor is tilted and the air bleed nipple is at the lowest point on the tank.
4. Bleed off the air in the tank and drain any condensate.
5. Condensate must be collected and disposed of in accordance with national regulations.
6. Screw the air bleed nipple closed.
7. Clean the compressor immediately after use, before any contamination has a chance to harden. This prevents safety instructions and hazard indications from becoming illegible. Ensure that any water-sensitive parts are covered beforehand and are removed again after cleaning.

## 6 MAINTENANCE

### Introduction

The chapter provides information about maintaining the machine.



#### Safe maintenance

- The pressure must be released from the tank prior to maintenance or repair of the compressor.
- Always disconnect the power supply before performing maintenance and repairs! Remove the plug from the wall socket.
- Do not use the compressor if any part is worn or damaged. Only replace parts with genuine HAMA parts.
- Wear close-fitting overalls, safety goggles and safety shoes.
- Use appropriate tools of the correct size.
- Ensure that no one can activate the machine during maintenance. Disconnect the connecting cable from the wall socket and ensure that the compressor cannot be unexpectedly switched on.
- Tighten bolts and nuts with the correct torque (see “Tightening torques” section).
- Always have electric faults and failures resolved by a certified electrician. Failure to do so may lead to LIFE THREATENING situations.
- Disconnect the connecting cable from the wall socket immediately when a fault or failure occurs or when electrical parts are damaged.



#### Compressor block

Contamination is the number one enemy of mechanical systems:

- Work with clean hands and clean tools.
- Clean the area around a part before removing it.
- Cover the area where a part has been removed.
- Cap open hoses and lines until they are connected again.
- NEVER use your fingers to try to locate a leak. Use a piece of cardboard. Compressed air under high pressure can contain compressor oil that can penetrate your skin. The penetration of oil is an emergency situation. Danger of infection! Seek the help of a doctor immediately!

## 6.1 Daily maintenance

- Check the cables and hoses for damage.
- Check for air and oil leaks.
- Check the safety markings and hazard designations.
- Ensure that the maximum air pressure setting does not exceed 8 bar.

### Oil level

Check the oil level monthly (after the pump has not run for at least ten minutes):

1. Check the oil level with the dipstick on the fill cap.
2. Top off the oil if necessary (part number 2011450).

### Changing the oil

Compressor oil must be replaced 1x per year.



Excessive oil consumption or a sudden drop in oil level indicates an internal or external leak. Stop the pump immediately and contact your technical department or HAMA.

## 6.2 Tightening torques



Incorrectly tightened bolts and nuts can cause accidents. Tighten bolts and nuts in accordance with the table below (unless otherwise indicated in this manual).



Original bolts may only be replaced with bolts having the same dimensions and bolt class. Bolts that do not match the original ones can cause accidents.

Dimension	Tightening torques		
	Class 8.8	Class 10.9	Class 12.9
	Nm	Nm	Nm
M6	10	15	18
M8	25	37	43
M10	51	75	87
M12	87	130	150
M12 x 1.5	92	135	155
M14	140	205	240
M14 x 1.5	150	220	260
M16	215	310	370
M16 x 1.5	230	340	390
M18	300	430	510
M18 x 1.5	350	490	580
M20	430	620	720
M20 x 1.5	480	690	800
M22	580	830	970
M22 x 1.5	640	920	1070
M24	740	1060	1240
M24 x 2	810	1160	1350
M24 x 1.5	830	1180	1380
M27	1100	1550	1850
M27 x 2	1190	1700	2000
M30	1500	2100	2500
M 30 x 2	1610	2300	2690
M33	2000	2800	3400
M36	2600	3700	4300



The bolt class is indicated on the bolt head. The tightening torques apply for dry bolts.



### 6.3 Maintenance schedule

#### First scheduled maintenance service

Part	Action/material	Interval
Compressor block	Re-torque head bolts	3 hours of operation
Compressor block	Changing the oil	100 hours of operation
Compressor, general	Inspection for leaks and vibration	100 hours of operation
Compressor, general	Check belt tension	100 hours of operation

#### Routine maintenance

Part	inspect/clean	Daily	Monthly	Annually
Compressor, general	Inspection for leaks and vibration	✓		
Compressor, general	Check belt tension		✓	
Compressor block	Check oil level		✓	
Compressor block	Blow off air filter		✓	
Pressure regulator	Check maximum pressure setting		✓	
Compressor block	Replace air filter			✓
Compressor, general	Check electrical connections			✓
Compressor block	Change oil after first service			✓
Compressor block	Clean cooling channel ribs			✓
Compressor block	Changing the oil			✓

## 7 TROUBLESHOOTING

### Introduction

Consult the table to resolve problems. Contact your technical department or HAMA if you cannot resolve the problem.

Problem	Possible cause	Solution
Motor will not run.	The connecting cable has not been connected.	Insert the plug in the wall socket.
	Wall socket has no power.	Wall socket is faulty or fuse is faulty.
	The connecting cable is faulty.	Replace the connecting cable.
	Cables / wires are damaged or loose.	Replace or fasten cables / wires.
	The tank is not depressurized.	Open the air bleed valve and depressurize the tank.
	Use of an extension lead that is too long or has a conductor cross-section that is too small.	Replace the extension lead and press the RESET button at the back of the electric motor.
Motor runs but there is no pressure (or too little).	An external leak has occurred.	Find the external leak and fix it.
	There is an external leak.	The compressor block is damaged and must be replaced.
	The pressure regulator setting has been changed.	The pressure regulator must be set within a range of 6 to 8 bar.
	The V-belt tension is too low.	Tighten the V-belt by using the adjusting bolt to pull back the mounting cradle for the electric motor. If the adjustment is insufficient, the V-belt must be replaced.
	The V-belt is worn.	Replace the V-belt.
	The air filter is contaminated.	Blow off the air filter, from the inside to the outside. If the air filter is not clean after you have blown it off, replace it.
The compressor makes a whining noise.	The V-belt tension is too low.	Tighten the V-belt by pulling the motor slide back using the adjusting bolt. If the adjustment is insufficient, the V-belt must be replaced.
	The V-belt is worn.	Replace the V-belt.
	The compressor block is wearing quickly.	The oil level has been too low for a long time and must be replaced immediately. If the noise continues after the oil has been changed, replace the compressor block.
Condensate contains a lot of oil.	An internal leak has developed.	The compressor block is damaged and must be replaced.
Loss of air	Poor seal at a connection.	Check all connections by wetting them with soap and water. Seal poor connections or replace parts if necessary.

## 8 ENVIRONMENT

### Introduction

Environmental impact must be prevented as much as possible during use and maintenance of the HAMA H455 compressor.

### Measures to protect the environment

- Operate and maintain your compressor in accordance with the instructions in this manual.
- Dispose of oil filters, spent oil and condensation in accordance with national regulations.
- Dispose of the defective parts in accordance with national regulations.

## 9 DISPOSAL

### Introduction

With normal use and proper maintenance, the HAMA H455 compressor will have a very long service life. When the machine is disposed of after many years, this must be done in a safe and environmentally responsible manner. Many of the materials used are recyclable.



### Disposal procedure

Follow this procedure:

1. Wear close-fitting overalls, safety shoes and safety glasses.
2. Use appropriate tools of the correct size.
3. Use suitable, safety-tested lifting equipment.
4. Dispose of all oil in accordance with national regulations.
5. Remove all rubber and plastic parts.
6. Remove all electronic parts.
7. Dispose of all parts in accordance with national regulations.

## 10 TECHNICAL SPECIFICATIONS

### Dimensions and weights

Length	mm	650
Width	mm	350
Height	mm	800
Weight	kg	65

### Compressor, general

Max. operating pressure	bar	8
Tank volume	L	8
Min. operating temperature	°C	-20
Max. operating temperature	°C	50
Mains power	V	230 / 50 Hz
Max. mains current	A	16
Max. noise level	dB(A)	75



The noise level shown above is measured at a distance of 1 metre from the compressor.

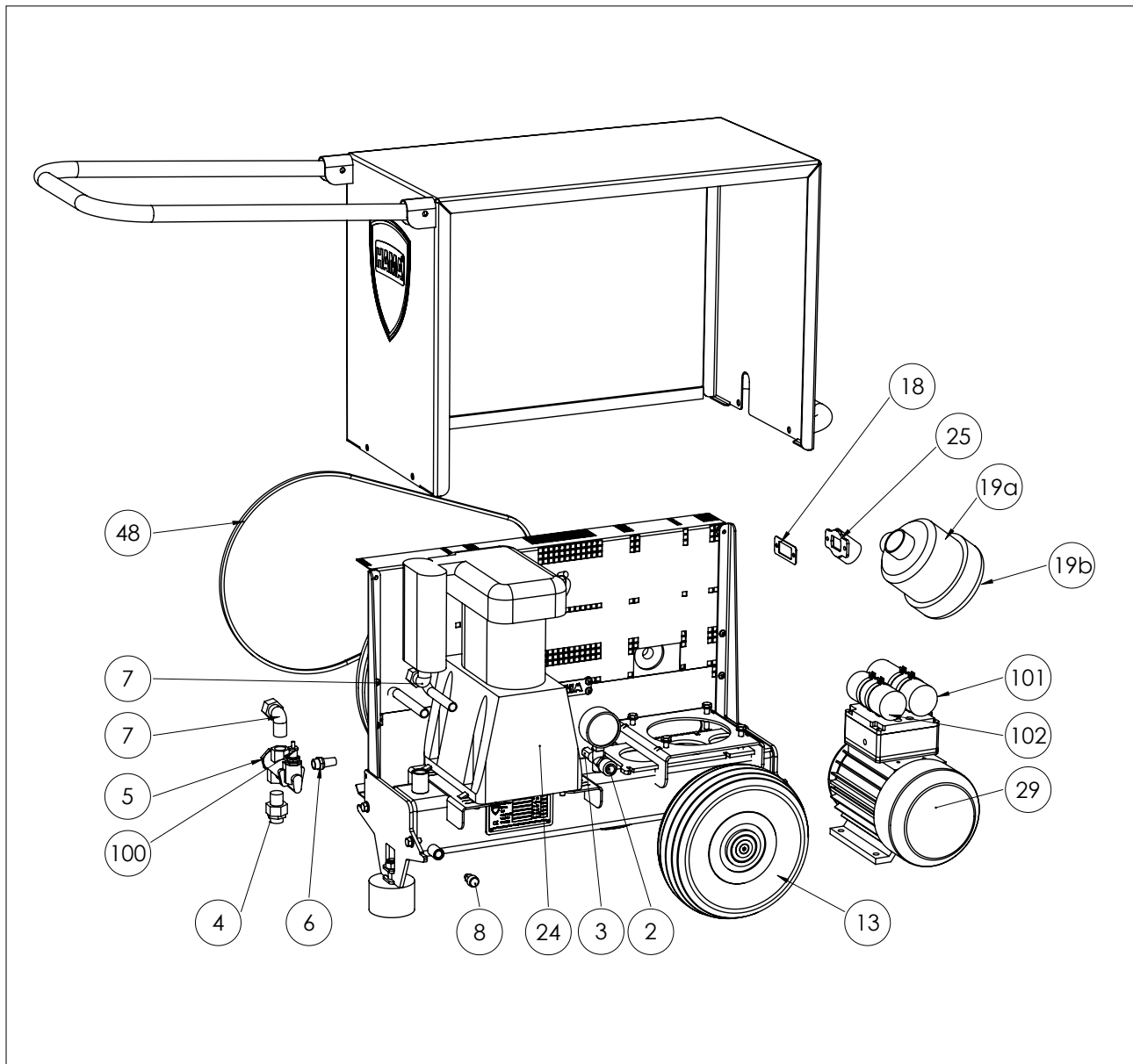
# 11 SPARE PARTS

## Spare parts

Use genuine HAMA parts. You can order these machine-specific parts at [www.hama-equipment.com](http://www.hama-equipment.com). Genuine HAMA parts are specifically designed for this compressor. The use of non-OEM parts can have a negative impact on the operation of the compressor and can make the compressor unsafe. HAMA accepts no liability for damage or injury resulting from the use of non-OEM parts.



Parts without a part number are not sold by HAMA as spare parts. However, these are not machine-specific and are available from general suppliers of technical parts.



Pos.	HAMA part number	Description
0	108403AS000	HAMA compressor H455
2	108403BP002	Quick-connect coupling 1/4" EWO
3	108403BP003	Safety valve 1/4" 8.5 bar
4	108403BP004	3D coupler 1/2" male x 1/2" male
5	108403BP005	Pressure regulator H400/H450/H455
6	108403BP006	Damper 3/8"
7	108403BP007	Elbow compression fitting 1/2" x 15mm
8	108403BP008	Condensate drain 1/4"
13	108403BP010	Pneumatic tyre 300x4 with steel rim
18	108403PA003	Seal for air inlet H455
19a	108403BP011	Air filter housing
19b	2012666	Air filter element
24	108403BP013	Compressor block H455
25	108403AS001	Air filter adapter
29	108403AS102	Motor 2.2kW 230V
48	108403BP019	V-belt A56
100	108403BP024	Adjustable safety valve
101	108403BP022	Starting capacitor 160 $\mu$ F (1.5 & 2.2kW)
102	108403BP023	Capacitor 50 $\mu$ F (2.2kW)