

IV40 A- ATEX

ORIGINAL INSTRUCTION MANUAL

For Dry Collection Only

READ THIS INSTRUCTION MANUAL BEFORE USING THIS APPLIANCE

SERIAL No:
(To be completed by user)



The model above carries this ATEX Certification Code

UK CE | ATEX Certification Code
II 3 D Ex tc III C T100°C Dc

MODEL DESCRIPTION

IV40A 0.9kW 110v 1ph 50/60 Hz - ATEX D22
IV40A 1.0kW 230v 1ph 50/60 Hz - ATEX D22

PART NUMBER

55 64229 03
55 64229 04

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IMPORTANT USER INFORMATION

IV40 - ATEX

This appliance is a Dry Pick-Up Vacuum Cleaner for collecting dust. Collection is directly into the Drum assembly or into an optional paper bag. It is designed to be used by an operator within three different environments.

The ATEX certification code which is shown on the machines rating plate is made up as follows:

ONE

To pick up inert dust and debris in an atmosphere where inflammable dust, gases or vapours are never present.

TWO

To pick up inert and debris in a Dust Zone 22.

THREE

To pick up inert dust and debris that may ignite or explode in a Dust Zone 22.

BVC	QUIREPACE LTD. PO16 8XU, UK	Sales / Service +44 (0)23 9260 3700
Year of Manufacture	<input type="text" value="20"/>	UK CA CE www.bvc.co.uk
Model No.	<input type="text" value="IV40"/> <input type="text" value=""/> kW	<input type="text" value="/1/50-60 ATEX"/>
Serial No.	<input type="text" value=""/>	<input type="text" value="C"/>
Ex II 3 D Ex tc IIIC T100°C Dc Do not Dismantle this Head when an Explosive Atmosphere is present		



The **UKCA** mark (UK Conformity Assessed).



The **CE** mark (European Conformity Assessed).



The distinctive community mark showing a product is suitable for use in an explosive dust atmosphere.

II

Equipment group II (surface industries)

3

Category 3 product

D

Explosive dust atmosphere

Ex

Explosion protection (letters below indicate type of protection)

tc

Protection concept (Enclosure ingress protection level - IP6X with IIIC)

IIIC

Equipment group - Combustible dusts, Conductive Dusts

T100°C

Surface temperature for dust evaluation is less than 100°C

Dc

Equipment protection level (Dust zone 22)

RISK ASSESSMENT (ATEX)

RESPONSIBILITY

If this vacuum cleaner is used for collecting flammable/explosive materials or within a zoned area classified under the ATEX Directive 2014-34 EU then a risk assessment must be carried out by a competent person to verify the suitability of the application.

The risk assessment will be the responsibility of the customer/end user and should take into account (but not be limited to) the characteristics of the material being collected such as:

RESPONSIBILITY

- ▶ Spark Ignition
- ▶ Hot Surface Ignition Sensitivity (cloud)
- ▶ Hot Surface Ignition Sensitivity (layer)
- ▶ Explosion Severity
- ▶ Flammable Gas Generation
- ▶ Burning Behaviour
- ▶ Thermal Instability
- ▶ Chemical in stability
- ▶ Static Electricity Generation
- ▶ Impact of Collected Material
- ▶ The ATEX Certification Code for the appliance being assessed. (See the rating plate on the machine)

PREPARATION FOR USE



- ▶ Unpack and identify each item of equipment against packing note.
- ▶ Check that the details given on the motor rating plate are in accordance with your electricity supply
- ▶ Check the rating plate against the ATEX zone, in which the machine and any accessories are to be used.

WARNINGS

- ▶ The appliance must only be operated by suitably trained and authorised personnel.
- ▶ This appliance or the accessories must not be modified.
- ▶ This appliance must not be stored or used in wet conditions i.e. outside in the rain.
- ▶ The filtration system of this appliance must only be configured as shown in these instructions
- ▶ When collecting dust or debris that may ignite or explode, empty the cleaner after every use
- ▶ The earth path continuity between the pick-up nozzle and the electrical earth of the fixed electrical should be checked (should be <800 meg ohm's) by a competent person at regular intervals and documents records to be kept of these checks
- ▶ This machine must not be installed as a fixed extraction system and/or run unattended
- ▶ Do not pull the machine along by flexible cord
- ▶ Do not restrict the motor head or coil the lead around the motor head as this could restrict the by-pass cooling airflow and cause overheating of the motor
- ▶ Do not allow the dust collecting bag (K4 Bag) to become so full as to reduce the pick up effectiveness of the cleaner
- ▶ Only use the dust collecting bag (K4 Bag) once
- ▶ This appliance must only be repaired by SUITABLY TRAINED and authorised personnel and only genuine BVC spare parts are to be used.
- ▶ Ensure that the product being collected is suitable for vacuum cleaning
- ▶ Equipment shall not be used where aggressive substances may be present
- ▶ Noise emission 75dB@ @ 1m
- ▶ Weight (Empty) 18KG Machine only - 26KG Complete with trolley.

WARNINGS

- ▶ Not for the collection of hot particles
- ▶ This machine is not to be pushed faster than 6km/hr
- ▶ This vacuum cleaner is a dry dust type, a risk assessment must be carried out by a competent person to verify the suitability of the application.
- ▶ This equipment is not suitable for connecting to other equipment that produces ignition sources
- ▶ This vacuum cleaner is not to be used as a fixed installation
- ▶ The contamination, cooling and reconsolidation and clogging are typical circumstances that can lead collected substances to change state inside the collection tank and can be reasons to exclude the use of the vacuum cleaner for such substances due to potential ignition hazards. **WARNING:** For dusts with an ignition energy less than 10mJ, additional restrictions may apply.
- ▶ This appliance contains dust/liquids hazardous to health. Emptying and maintenance operations, including removal of the collection, shall only be carried out by authorised personnel wearing suitable personal protection. **DO NOT OPERATE WITHOUT THE FULL FILTRATION SYSTEM FITTED.**
- ▶ When carrying out service or repair operations, all contaminated items which cannot be satisfactorily cleaned, are to be disposed of. Such items shall be disposed of in impervious bags.
- ▶ Empty the collection tank and clean the suction hose and accessories after each use. Do not allow collected substances to sit for extended periods of time inside the vacuum cleaner. An excessive accumulation of collected substances can create ignition hazards.
- ▶ When after having been used to collect a specific kind of substance, the vacuum cleaner, the filters, the suction hose and the accessories shall be cleaned before use.
- ▶ The materials used in this machine are: stainless steel, mild steel and plastic. It is the customer's responsibility to ensure that the materials being collected are compatible and do not cause damage.

WARNINGS

MACHINE:

- Noise Emission 75dB(A) @1m.
- Weight (Empty) 18KG Machine only - 26KG Complete with trolley.
- This appliance or the accessories must not be modified.
- This machine is not to be pushed faster than 6km/hr.
- The earth part continuity between the pick-up nozzle and the electrical earth of the fixed electrical should be checked (Should be <800 meg ohm's) by a competent person at regular intervals and documents records to be kept on these checks.
- This machine must not be installed as a fixed extraction system and/or run unattended.
- The equipment is not suitable for connecting to other equipment that produces ignition sources.

USER:

- The appliance must only be operated by suitable trained and authorised personnel.
- This appliance must only be repaired by SUITABLY TRAINED and authorised personnel and only genuine BVC spare parts are to be used.
- This vacuum cleaner is a dry dust type, a risk assessment must be carried out by a competent person to verify the suitability of the application .

WARNINGS

COLLECTION:

- When collecting dust and debris that may ignite or explode, empty the cleaner after every use.
- Ensure that the product being collected is suitable for vacuum cleaning.
- The filtration system of this appliance must only be configured as shown in these instructions.
- Do not operate without the full filtration system fitted.
- Equipment shall not be used where aggressive substances may be present.
- Not for the collection of hot particles.

MAINTENANCE:

- This appliance contains dust/liquids hazardous to health. Emptying and maintenance operations, including removal of the collection, shall only be carried out by a authorised personnel wearing suitable personal protection.
- When carrying out service or repair operations, all contaminated items which cannot be satisfactorily cleaned, are disposed of. Such items shall be disposed of in impervious bags.
- Empty the collection tank and clean the suction hose and accessories after each use. Do not allow collected Substances to sit for extended periods of time inside the vacuum cleaner. An excessive accumulation of collected substances can create ignition hazards.
- When after having been used to collect a specific kind of substance, the vacuum cleaner, the filters, the suction hose and the accessories shall be cleaner before use.

INSPECTIONS

- ▶ The ignition minimising properties of the vacuum cleaner and its accessories can be ensured if routine inspections, service and cleaning are carried out.
- ▶ If the vacuum cleaner has been used in hazardous areas that have been the source of several recorded fires, then the operation and service of the vacuum cleaner shall be carried out by a qualified personnel wearing proper equipment and breathing apparatus.
- ▶ Inspection to be performed on the vacuum cleaner before each use, a checklist may be done for this purpose.
- ▶ A general visual verification shall be performed by the operator before each use to make sure the vacuum cleaner and the constitute parts of the vacuum cleaner are not damaged. NOTE: Contact supplier for repair if machine is damaged.
- ▶ Recommended intervals of inspection, for example: the time between inspections shall be reduced if the vacuum cleaner is exposed to dust and corrosive atmospheres.
- ▶ The vacuum cleaner should be inspected and serviced following the occurrence of noticeable problems, such as unexpected noise, temperature and vibrations.
- ▶ Routine inspections, service and cleaning which shall be performed on the filtration system in order to maintain proper filtration efficiency.
- ▶ Look for dust deposit on the clean air side when replacing a high-efficiency particle air filter or using a specific device measuring the vapour concentration at the air exhaust for vapour filtration systems.
- ▶ Regular cleaning operations which shall be performed at appropriate intervals for all applications where dust can be expected to form layers on the vacuum cleaner surfaces and on its components.
- ▶ The disposal of substances collected which shall be performed after each use and after each shift of a maximum of 8hr or if the collection tank is full.
- ▶ Clean any accessories and suction hose that shall be performed after each use and after each shift of a maximum of 8hr.

ELECTRICAL SUPPLY

! WARNING - THIS APPLIANCE MUST BE EARTHED !

The electrical connections of these machines must be carried out by a competent electrician. The wires in the mains lead of this cleaner are coloured in accordance with the following:

1 Green & Yellow

2 Blue = Neutral (N)

3 Brown = Live (L)

ELECTRICAL CONNECTIONS FOR EARTHED APPLIANCE.

The **110v** appliance is rated at 0.9 kW in accordance with BS EN 60335-2-69.

The **230v** appliance is rated at 1.0 kW in accordance with BS EN 60335-2-69.

Both motors used on this appliance are non-sparking electronically commutated brush less motors.

Part number 55 64229 03 takes a maximum running current of 13 Amps.

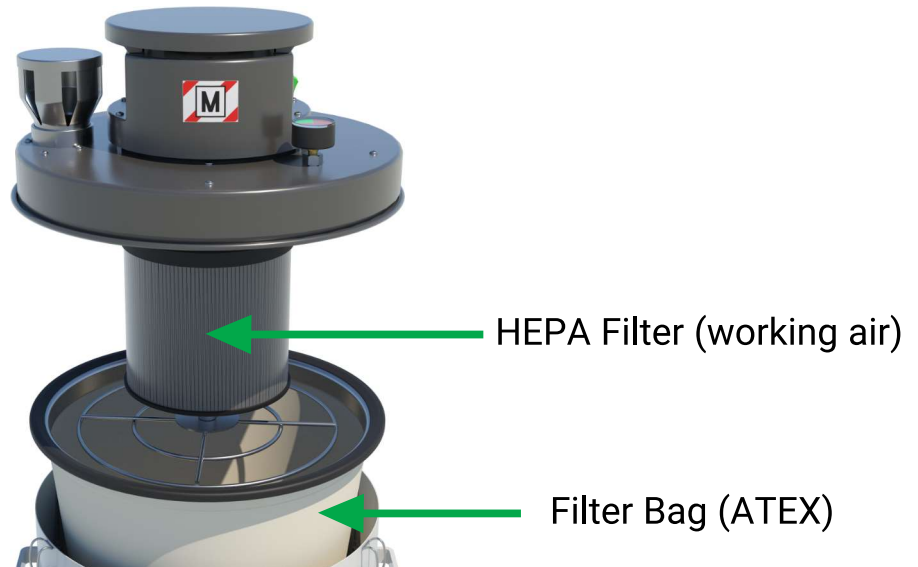
Part number 55 64229 04 takes a maximum running current of 9 Amps.

The supply should be fitted with a fuse/protective device suitable for this current demand.



PREPARATION FOR USE

This machine is fitted with working air double filtration. A filter bag assembly ATEX (cloth) and a HEPA filter.



The use of a micro-porous collection bag is optional.

This filtration system should be visually checked prior to using the machine.

Release the toggle clips which lock the motor head assembly to the drum, remove motor head of machine and check that the HEPA filter (working air) is securely attached to the underside of the motor head.

Remove the filter bag assembly ATEX (Cloth) and check that the collection bag has been correctly fitted over the hose entry spigot (if used).

Refit the filter bag assembly ATEX (Cloth) and motor head and attach the toggle clips.

SPECIAL CONDITIONS FOR SAFE USE

DO

1. Check the mains lead and plug for damage prior to use
2. Have a competent person, or return the machine to BVC for electrical safety checks at least once a year or more frequently if used in an arduous environment. (Please empty and clean the machine prior to return). Contact the BVC Service Department who will arrange collection.
3. In the event of an accident or breakdown, disconnect the Vacuum Cleaner from the supply by removing the plug from the supply socket and return to BVC for repair. (Please empty and clean the machine prior to return). Contact the BVC Service Department who will arrange collection.
4. Only use spare parts provided by BVC.
5. Regularly empty the container before it becomes too full and the pick-up effectiveness of the cleaner is reduced.
6. Clean the cloth filter bag frequently to maintain pick up effectiveness.
7. Keep trailing leads tidy, flat on the floor to avoid trip hazard.
8. Vacuum clean the motor cooling air inlet filters (annular slot at top of motor head) once a week or more often in very dusty atmospheres.
9. Tie back long hair and loose clothing when operating this vacuum cleaner.
10. Be careful when moving/operating on slopes as the unit may 'run away' when in use.
11. Check that the material being collected is compatible with the drum material.

DO NOT

1. Pull the machine along by the mains lead.
2. Wrap the mains lead around the head as it may restrict the by pass cooling airflow causing the motor to overheat.
3. Cover the motor head as this could restrict cooling air and overheat the motor.
4. Use for the collection of highly hazardous dusts or flammable or explosive dusts.



NORMAL USE - OPERATION

1

Position the vacuum cleaner adjacent to the area to be cleaned. Remove the cap and fit the hoses/ tools applicable for the cleaning task to the inlet on the collection drum.

If the vacuum cleaner is supplied with a trolley, the drum is placed in the retaining ring of the trolley, with the inlet position over the castor wheel.

2

3

Fully uncoil the electrical supply lead, placing it carefully flat on the floor to minimise the trip hazard. Then, plug it into a suitable supply socket and switch on.

Ensure the K4 collection bag and the filter bag assembly ATEX (Cloth) are correctly fitted.

4

5

Hold the cleaning tool, switch the vacuum on via the switch on the vacuum cleaner head and proceed to clean the area as required.

When the area has been cleaned switch the machine off at the vacuum head.

6

7

Switch off the supply, remove the plug from the supply socket and coil the cable up neatly. Remove the cleaning hose and tools

HOSES AND ACCESSORIES

This machine must only be used with hose(s) and accessories from the BVC ATEX appropriate range (See next page). Contact BVC sales for information and advice if further items are required.

The machine has a threaded inlet on the drum, Attach the anti-static hose assembly to the drum via the threaded connection. Connect the stainless-steel bent hose end and wands to the cuff end of the hose assembly

SPARES - WE RECOMMEND STOCK LEVELS ARE RETAINED FOR THE FOLLOWING ITEMS:









DESCRIPTION	PART NUMBER	QUANTITY
FILTER BAG ASSY - ATEX (CLOTH)	55 56224 03	1 OFF
K4 MICROFIBER BAG	29 30024 20	5 OFF
K4 DISPOSABLE PAPER BAG	29 30024 10	10 OFF
SELF ADHESIVE SEALING LABEL	53 63438 00	10 OFF
HEPA FILTER (WORKING AIR)	55 61796 02	1 OFF
HEPA FILTER (COOLING AIR - INLET)	55 60690 01	1 OFF
HEPA FILTER (COOLING AIR - OUTLET)	53 6422400	1 OFF

SPARES - WE RECOMMEND STOCK LEVELS ARE RETAINED FOR THE FOLLOWING ITEMS:

DESCRIPTION	PART NUMBER	QUANTITY
FILTER BAG ASSY - ATEX (CLOTH)	55 56224 03	1 OFF
K4 MICROFIBER BAG	29 30024 20	5 OFF
K4 DISPOSABLE PAPER BAG	29 30024 10	10 OFF

ANTISTATIC TOOLS

IV40 - ATEX - 38MM

29 03801 00		1	Hose Standard Duty 3.0m PVC Anti-Static
29 03801 01		1	Hose Standard Duty 6.0m PVC Anti-Static
29 03802 00		1	ATEX Bend 30 Degree Stainless Steel
29 03803 00		1	ATEX Extension Arm 470mm Stainless Steel
29 03808 10		1	ATEX 38mm Crevice Tool Anti-Static 300mm
29 03807 10		1	ATEX 38 x 70mm Dusting Brush Anti-Static
29 03806 10		1	ATEX 38 x 100mm Dusting Brush Anti-Static
29 03817 00		1	ATEX 38 x 375mm Heavy Duty Floor Tool with Brushes Anti-Static

MAINTENANCE



DO NOT Carry out maintenance in a potentially explosive atmosphere. Always disconnect the machine from electrical supply prior to carrying out any maintenance. (Safety First Must Apply)



REPAIR This appliance must only be repaired by **SUITABLY TRAINED** and authorised personnel and only genuine BVC parts are to be used.



CHECKING / REPLACING HEPA FILTERS A good rule is to check the HEPA filters every six months.



HEPA FILTER (WORKING AIR) Release the toggle clips and carefully remove motor head and the filter bag assy ATEX (Cloth). Unscrew and remove the bag spreader and lift off the HEPA filters (working air).

Fit a new HEPA filter (working air) , refit the bag spreader. Check for security of seals. Fit a new collection bag if required on the hose entry spigot, replace the filter bag assy ATEX (Cloth) and locate motor head on the drum, fasten the toggle clips.



COOLING AIR INLET HEPA FILTER Remove the retaining screw from the Cooling Air inlet HEPA filter cover and remove the cover. Lift off the Cooling Air inlet HEPA and dispose of in an impervious plastic bag in accordance with current regulations. The bag should carry an appropriate warning label.

Clean inside the head with an adhesive wipe. Fit a new Cooling Air inlet HEPA filter, replace cover and secure with the retaining screw.

UKCA/EC DECLARATION OF CONFORMITY
(INDUSTRIAL VACUUM CLEANERS)

Manufacturer: - Quirepace Ltd, Pennant Park, Fareham, Hants, PO16 8XU

Authorised Representative: - Headlands Consulting Limited, Carrow Castle, Geevagh, Boyle, Co Roscommon, F52 FC89, Ireland

We QUIREPACE LTD DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCT (S) DESCRIBED BELOW: -

IV40AH 0.9kW 110V 1PH 50Hz ATEX D22	55 64229 01	Serial No:	HG
IV40AH 1.0kW 230V 1PH 50Hz ATEX D22	55 64229 02	Serial No:	HH
IV40A 0.9kW 110V 1PH 50Hz ATEX D22	55 64229 03	Serial No:	HI
IV40A 1.0kW 230V 1PH 50Hz ATEX D22	55 64229 04	Serial No:	HJ

UKCA Regulations:

Supply of Machinery (Safety) Regulations 2008

Electromagnetic Compatibility Regulations 2016

Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016

To which this declaration relates fulfil(s) the requirements of the following legislation and is/are in conformity with the listed standards:

- BS EN 60335-1:2012+A15:2021** Household and similar electrical appliances. Safety - General requirements.
- BS EN 60335 - 2 - 69: 2012** Particular requirements, for wet and dry vacuum cleaners, including, power brush for industrial and commercial use.
- BS EN 61000 - 6 - 4: 2019** Electromagnetic compatibility (EMC) - Generic standards. Emission standard for industrial environments
- BS EN ISO 80079-36:2016** Explosive atmospheres - Non-electrical equipment for explosive atmospheres. Basic method and requirements
- BS EN ISO 80079-37:2016** Explosive atmospheres - Non-electrical equipment for explosive atmospheres. Non-electrical type of protection constructional safety "c", control of ignition sources "b".
- BS EN IEC 60079-0:2018** Explosive atmospheres. Equipment. General requirements

Certification codes:

Dust Environments



The product fulfils the following relevant provisions:

ATEX Directive	2014/34/EU
Machinery Directive	2006/42/EU
Electromagnetic Compatibility Directive	2014/30/EU





G Hall / M Brown Senior Engineers
R Pescott Managing Director

DATE 15/04/2024