

01 65827 00

IV60SFA - ATEX

ORIGINAL INSTRUCTION MANUAL

FOR VACUUM CLEANER

READ THIS INSTRUCTION MANUAL BEFORE USING THIS APPLIANCE

SERIAL No:

(To be completed by user)



The model above carries this ATEX Certification Code

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

MODEL DESCRIPTION

- IV60SFA 1.1kW 230V 1PH ATEX D22
- IV60SFA 2.2kW 400V 3PH ATEX D22
- IV60SFA 1.1kW 230V 1PH ATEX G2 D22
- IV60SFA 2.2kW 400V 3PH ATEX G2 D22

PART NUMBER

- 55 65714 01
- 55 65714 02
- 55 65715 01
- 55 65715 02

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T160 SFA – ATEX INTERCEPTOR

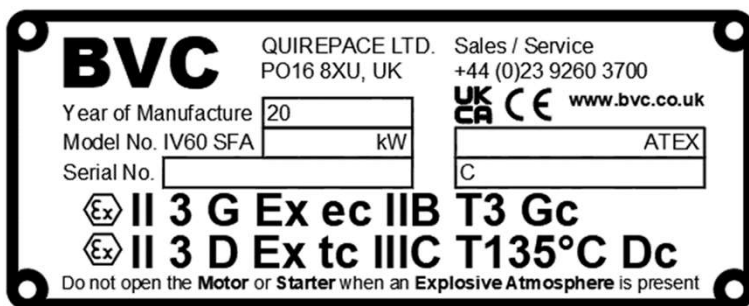
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IMPORTANT USER INFORMATION

IV60SFA

This appliance is a Dry Pick Up Vacuum Cleaner for collecting duct. Collection is directly into the Drum assembly. It is designed to be used by an operator within four 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 dust and debris in a Dust Zone 22, where the dust in the potentially explosive atmosphere may be conductive.

THREE

To pick up inert dust and debris that may ignite or explode in a Dust Zone 22, where the dust in the potentially explosive atmosphere may be conductive.

FOUR

To pick up conductive dust or debris that may ignite or explode in a Dust Zone 22, where the dust in the potentially explosive atmosphere may be conductive.

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

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

Ex 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

T135°C Surface temperature for dust evaluation is less than 135°C

Dc Equipment protection level (Dust zone 22)



RISK ASSESSMENT (ATEX)



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:

- Q Spark ignition sensitivity
- Q Hot surface ignition sensitivity (cloud)
- Q Hot surface ignition sensitivity (layer)
- Q Explosion severity
- Q Flammable gas generation
- Q Burning behaviour
- Q Thermal instability
- Q Chemical instability
- Q Static electricity generation
- Q Impact of collected material
- Q The ATEX certification code for the appliance being assessed. (See the rating plate on the machine).



Warnings

1. This appliance must only be operated by suitably trained and authorised personnel
2. This appliance or the accessories must not be modified.
3. This appliance must not be stored or used in wet conditions i.e. outside in the rain
4. The filtration systems on this appliance must only be configured as shown in these instructions.
5. When collecting dust or debris that may ignite or explode, empty the cleaner after every use.
6. The earth path continuity between the pick-up nozzle and the electrical earth of the fixed electrical supply should be checked (Should be < 800 Meg ohm's) by a competent person at regular intervals and documented records be kept of these checks.
7. This machine must not be installed as a fixed extraction system and/or run unattended.
8. Do not pull the machine along by the flexible cord.
9. Do not cover 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.
10. Do not allow the dust collecting bag (K4 Bag) to become so full as to reduce the pick-up effectiveness of the cleaner.
11. Only use the dust collecting bag (K4 Bag) once.
12. This appliance must only be repaired by SUITABLY TRAINED and authorised personnel and only genuine BVC spare parts be used.
13. Ensure that the product being collected is suitable for vacuum cleaning.
14. Equipment shall not be used where aggressive substances may be present
15. NOISE EMISSION 75 dB(A) @ 1m
16. WEIGHT (EMPTY) 18Kg Machine only – 26Kg Complete with trolley

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.

Part number 55 64229 01 takes a maximum running current of 13 Amps. The 110v appliance is rated at 0.9 kW in accordance with BS EN 60335-2-69.

Part number 55 64229 02 takes a maximum running current of 9 Amps. 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.

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

NOTE:

The electronic control limits the starting current to the above value.

When wired to the mains plug, but before use, the rotation of the exhauster must be checked.

Switch on momentarily and check that rotation is anticlockwise looking through the window.

If the direction of rotation is incorrect, interchange any two of the phase connections at the free end of the cable.



PREPARATION FOR USE

- 1** Unpack and identify each item of equipment against packing note.
- 2** Check that the details given on the motor rating plate are in accordance with your electricity supply
- 3** Check the rating plate against the ATEX zone, in which the machine and any accessories are to be used.
- 4** The user shall regularly inspect the equipment and cable and return to the manufacturer if there are signs of deterioration or damage.

PRE-USE CHECK ON FILTERS

This filtration system should be visually checked prior to moving machine to a contaminated area.

- 1** Unscrew the toggle clip fastening screws which lock the motor head assembly to the drum..
- 2** Remove motor head of machine and check that the HEPA filter (working air) is securely attached to the underside of the motor head.
- 3** Remove the filter bag assembly ATEX (Cloth) and check that a K4 collection bag has been correctly fitted over the hose entry spigot.
- 4** Refit the filter bag assy ATEX (Cloth) and motor head and tighten the locking screws of the toggle clips. (These locking screws must be screwed fully home to prevent unauthorised/accidental access to the filters.

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 a 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.

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.

2

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.

3

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

4

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

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.

6

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

7

Switch off the supply, remove the plug from the supply socket and coil the cable up neatly.

8

Remove the cleaning hose and tools.

HOSES AND ACCESSORIES

Returning the machine to BVC:

Please empty and thoroughly clean the machine so that it is safe to work on without personal protection prior to return. Contact BVC Service Department prior to return.

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











DESCRIPTION	PART NUMBER
ATEX Conti Belt J Section 8 Rib	53 64148 00 (2.2kw Version)
ATEX Filter Bag Assy	55 15359 07
ATEX HEPA filter	55 62369 04

OPTIONS – THE FOLLOWING ITEMS ARE AVAILABLE:

DESCRIPTION	PART NUMBER
Paper Bag 405W x 865L	53 34937 01
ATEX Paper Bag Support Ring	53 35924 00
ATEX Foam Gasket for Flat Top Lid	53 64157 00

ANTISTATIC TOOLS

IV60 – ATEX - 38MM

DESCRIPTION	ILLUSTRATIONS NOT TO SCALE	PART NUMBER	MATERIALS OF CONSTRUCTION
ATEX HOSE 38 SD M/M PE BK AS 7.5M		54 64150 02	ANTI STATIC POLYETHYLENE HOSE STAINLESS STEEL 304 COUPLING.
ATEX HOSE 38 SD M/M PE BK AS 3.75M		54 64150 01	ANTI STATIC POLYETHYLENE HOSE STAINLESS STEEL 304 COUPLING.
ATEX 38 EXTENSION ARM SS X 470		29 03803 00	STAINLESS STEEL 304.
ATEX 38 BEND 30° SS		29 03802 00	STAINLESS STEEL 304.
ATEX 38 CREVICE TOOL SS X 445		29 03807 00	STAINLESS STEEL 304.
ATEX 38 DUSTING BRUSH A/S 100 DIA		29 03806 10	CONDUCTIVE POLYETHYLENE BODY CONDUCTIVE BRISTLE WITH BRASS WIRE.
ATEX 38 CREVICE TOOL AS 300		29 03808 10	CONDUCTIVE POLYPROPYLENE.
ATEX 38 FLOOR BRUSH AS X 375 HD		29 03817 00	CONDUCTIVE POLYPROPYLENE BODY CONDUCTIVE BRISTLE WITH BRASS WIRE.
ATEX 38 FLOOR TOOL X 410 DRY SS		55 64130 03	STAINLESS STEEL BODY & WHEELS 316. ANTI STATIC NYLON BRUSH MILD STEEL. ZINC PLATED BRUSH RETAINERS AND WHEEL CARRIER.
ATEX 38 FLOOR TOOL X 410 WET SS		55 64130 04	STAINLESS STEEL BODY & WHEELS 316. ANTI STATIC RUBBER STRIP MILD STEEL. ZINC PLATED BRUSH ETAINERS AND WHEEL CARRIER.

ATEX EQUIPMENT LIST

DESCRIPTION	ILLUSTRATIONS NOT TO SCALE	PART NUMBER	MATERIALS OF CONSTRUCTION
ATEX HOSE 51 SD M/M PE BK AS 7.5M		54 64160 02	ANTI STATIC POLYETHYLENE HOSE STAINLESS STEEL 304 COUPLING.
ATEX HOSE 51 SD M/M PE BK AS 3.75M		54 64160 01	ANTI STATIC POLYETHYLENE HOSE STAINLESS STEEL 304 COUPLING.
ATEX 51 EXTENSION ARM SS X 900		53 63368 00	STAINLESS STEEL 304.
ATEX 51 BENT 50° EXTENSION SS		53 63367 00	STAINLESS STEEL 304.
ATEX 51 BEND 50° SS		53 63366 00	STAINLESS STEEL 304.
ATEX 51 FEMALE TO 38 MALE TOOL SS		53 62647 02	STAINLESS STEEL 304.
ATEX 51 CREVICE TOOL SS		53 63340 01	STAINLESS STEEL 304.
ATEX 51 DUSTING BRUSH A/S 125 DIA		55 52666 07	ANTI STATIC RUBBER BODY ANTI STATIC NYLON BRUSH.
ATEX 51 BENCH TOOL RUBBER X 500		53 63324 00	NEOPRENE RUBBER WITH ANTISTATIC PROPERTIES.
ATEX 51 FLOOR TOOL X 410 DRY SS		55 64130 01	STAINLESS STEEL BODY & WHEELS 316. ANTI STATIC NYLON BRUSH MILD STEEL. ZINC PLATED BRUSH RETAINERS AND WHEEL CARRIER.
ATEX 51 FLOOR TOOL X 410 WET SS		55 64130 02	STAINLESS STEEL BODY & WHEELS 316. ANTI STATIC RUBBER STRIP MILD STEEL. ZINC PLATED BRUSH RETAINERS AND WHEEL CARRIER.

MAINTENANCE



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



REPAIR This appliance must only be repaired by **SUSTABLY 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.

MAINTENANCE



COOLING AIR OUTLET HEPA FILTER Remove the five Motor Cover retaining screws and their securing washers, lift the cover clear taking care not to strain the interconnecting wiring. Disconnect the plug and socket in the interconnecting wiring and the earth connection. Remove the Cooling Air Outlet HEPA filter. Clean the inside of the Motor Cover and any exposed surfaces with an adhesive wipe.

Fit a new Cooling Air Outlet HEPA filter, re-connect the interconnecting wiring and replace the Motor Cover and the five retaining screws and their securing washers.



DEGENERATION Parts of the equipment are manufactured from plastic material with anti static properties. Care should be taken to avoid the use of the equipment where substances, which may degrade plastics, are present.



SERVICE Should service by BVC be required, contact the Service Manager stating what hazardous material is involved as special precautions during service will be required.



RETURNING THE MACHINE TO BVC Please empty and thoroughly clean the machine so that it is safe to work on without personal protection prior to return. Contact BVC Service Department prior to return.

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: -

IV60SFA 1.1kW 230V 1PH ATEX D22	55 65714 01	Serial No:	DKS
IV60SFA 2.2kW 400V 3PH ATEX D22	55 65714 02	Serial No:	DPS
IV60SFA 1.1kW 230V 1PH ATEX G2 D22	55 65715 01	Serial No:	DKS
IV60SFA 2.2kW 400V 3PH ATEX G2 D22	55 65715 02	Serial No:	DPS

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

UKCA CE  II 3 D Ex tc IIIC T135°C Dc

Gas Environments

UKCA CE  II 3 G Ex ec IIB T3 Gc

The product fulfils the following relevant provisions:

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



G Hall / M Brown Senior Engineers



R Pescott Managing Director

DATE 15/04/2024