disan®

Central Vacuum Systems

OWNER'S MANUAL
CENTRAL VACUUM CLEANERS
DS MODULAR

MOD. DS A01
MOD. DS B01
MOD. DS B02
MOD. DS BC100i
MOD. DS C03
MOD. DS CD125i
MOD. DS D02
MOD. DS EF125i
MOD. DS F03
MOD. DS H02
MOD. DS HK175i

Photos, drawings and descriptions in this handbook reflect the state of the art at the moment when this catalogue was printed. The company Disan reserves the right to update its production, previous catalogues and handbooks. For further information, please contact “DISAN”’s technical office.

Disan acknowledges a 2 years guarantee for parts having manufacturing defects. The guarantee is valid only if the instructions set out in this handbook are fully complied with.

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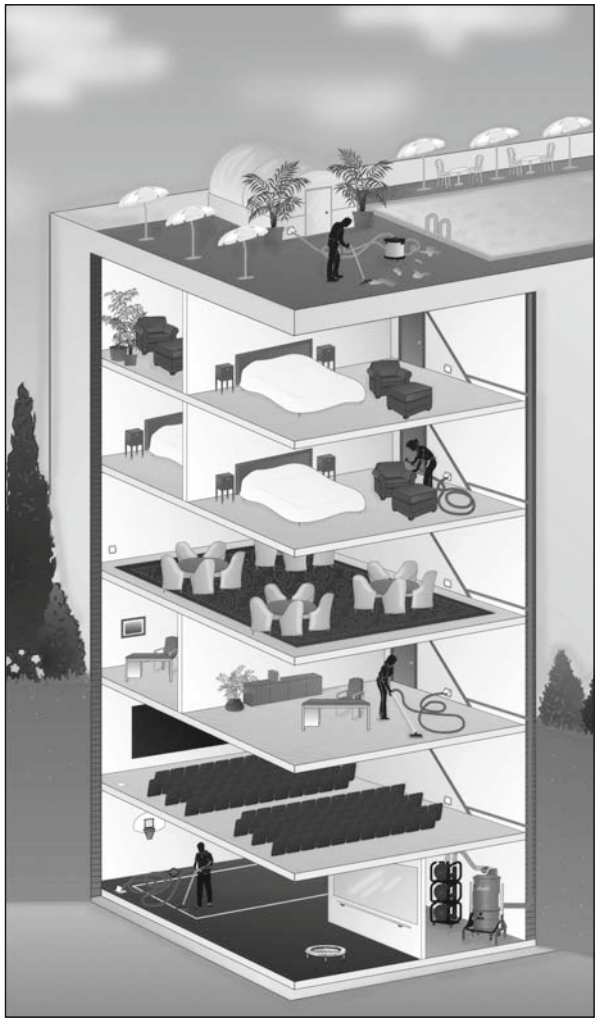
INDEX

INTRODUCTION

Dear Client

Thank you for trusting and choosing our brand. We are confident that the use of this three phase central vacuum cleaning system with a modular system will fully satisfy you.

This product's details have been carefully designed so as to make it durable and always fully efficient.



• System quality

The components of the central vacuum cleaner have been manufactured in full compliance with EU directives on the safety of electrical systems.
Disan's central vacuum cleaner was engineered for a professional use, particularly focusing on the following elements:

1. solidity and resistance;
2. suction power;
3. long life with minimum maintenance;
4. safety of the low voltage electric system;
5. technologic quality, reliability;
6. reduced dimensions.

• Purpose of these instructions

The use of the central vacuum cleaning system is very simple and does not require specific technical knowledge. Nevertheless, a number of instructions have to be carefully followed in order to avoid any inconvenience during operation.
The purpose of this handbook is to convey to operators the fundamental criteria for the operation of the system. A table of failures at the end of this handbook helps troubleshoot the causes of malfunctions, if any.

Please treat this handbook with care and keep it for future reference.

• Appointment of the person in charge of the system

We suggest to nominate a person in charge of the vacuum cleaning system, who attends to the emptying of the dust canister and to the maintenance of the system, who teaches cleaners how to use the system and who serves as an interlocutor with the technical assistance (to be provided by the installer).

• Loss of the handbook

If you lose or damage this handbook, ask the installer for another copy.

• State of the art and updates of this handbook

This handbook reflects the state of the art at the moment when it has been printed.
The manufacturer reserves the right to update its products and the corresponding handbooks.

QUALITY CHECKS

• Checks during production
Disan's central vacuum cleaners and their components are repeatedly subjected to quality and functional checks by highly qualified technicians during its manufacturing, in order to guarantee a long operation life and perfect operation for professional use. In this way it is guaranteed that *Disan*'s products leave the manufacturing department in perfect conditions.

• Checks on delivery (to be performed by the client)
All the material shipped was carefully controlled before its delivery to the forwarder.

It is the purchaser's responsibility always to control the goods on delivery and check that they were not damaged during their transport. If a damage is found, accept the goods with reservation, specifying your observations on the delivery note. In case of damage of the material, inform immediately the carrier for subsequent damage compensation.

• Check of the finished system
The installer checks the system and performs a series of functional checks during its installation.

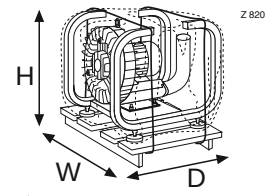
UNLOADING AND HANDLING OF THE EQUIPMENT

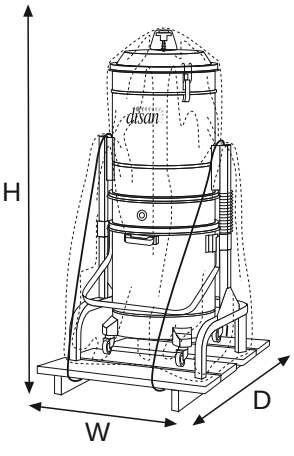
This handbook is attached to the packaging in such a way as to be clearly visible.

• Indications on handling
Lift the pallet carefully using the lift truck fitting this purpose.
Since the dust separators are particularly tall, check the stability and balanced positioning of the load on the forks. When moving, keep the load as low as possible for more stability and visibility, then operate with the maximum caution.

The modulus of the motor suction are separately furnished on the pallet. In the waste container you will find a pipe connection for the dust and motor separator, connection couplings and tighten wrappers.

• Dimensions of the central vacuum cleaner
The dust separator and the motor(s) are separately mounted on pallets designed for this purpose and shrink-wrapped and box packing.
The following calculation of sizes and weights includes packaging. Measures are in centimeters.





Engines	*A01*	*B01*	*BC100i*	*CD125i*	*EF125i*	*B02*	*C03*	*D02*	*F03*	*H02*	*HK*
Weight kg	78	185	94	192	260	135	190	358	532	465	367
Width	80				80	80			80		80
Depth	120				120	120			120		120
Height	75				132	162			219		142

Dust separator	*Separator 100l*	*Separator 125l*	*Separator 175l*
Weight without automatic filter-shaker kg	57	95	–
Weight with automatic filter-shaker kg	62	100	173
Width	86	86	95
Depth	70	70	88
Height	175	175	216

CHARACTERISTICS OF THE CENTRAL VACUUM CLEANER AND MAIN PARTS

Central vacuum cleaner model DS A01 100l – 125l

1 x 2,2 kW for 1 operator Code A100 – A125

Central vacuum cleaner consisting of:
- one silenced SIEMENS turbine with three-phase side channel motor without transmission, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation system in the dust bag, manual filter shaker;
- electric control box with IP56 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS B01 100 l – 125 l

1 x 5,5 kW for 2 operators Code B100ST – B125ST

Central vacuum cleaner consisting of:
- one silenced SIEMENS turbine with three-phase side channel motor without transmission, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation system in the dust bag, manual filter shaker;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS B02 100 l - 125 l

2 x 2,2 kW for 2 operators Code B200 – B225

Central vacuum cleaner consisting of:
- Two silenced SIEMENS turbines with three-phase side channel motor without transmission, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag, manual filter shaker;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS BC 100i

1 x 4,5 kW for 2+1 operators Code BC100i

Central vacuum cleaner consisting of:
- one silenced SIEMENS turbine with three-phase side channel motor without transmission, secured on a metal frame;
- electronic inverter for continuous modulation of the frequency and the other motor parameters with electromagnetic shielding of type B (for applications within the private and the industrial sector)
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag;
- automatic self-cleaning filter device through programmable shaking device;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- Ø70 metal muffler for low noise level;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS C03 100 l – 125

3 x 2,2 kW for 3 operators Code C100 – C125

Central vacuum cleaner composed of:
- three silenced SIEMENS turbines with three-phase side channel motor without transmission, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag, manual filter shaker;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS CD 125i

1 x 5,5 kW for 3+1 operators Code CD125i

Central vacuum cleaner consisting of:
- one silenced SIEMENS turbine with three-phase side channel motor without transmission, secured on a metal frame;
- electronic inverter for continuous modulation of the frequency from 34 to 84 Hertz with electromagnetic shielding of type B (for applications within the private and the industrial sector);
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag;
- automatic self-cleaning filter device through programmable shaking device;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- Ø100 metal muffler for low noise level
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS D02 100 l - 125 l

2 x 5,5 kW for 4 operators Code D100 – D125

Central vacuum cleaner consisting of:
- two silenced SIEMENS turbines with three-phase side channel motor without transmission, star-triangle starting, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag, manual filter shaker;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS CD 125i

1 x 7,5 kW for 5+1 operators Code EF125i

Central vacuum cleaner consisting of:
- one silenced SIEMENS turbine with three-phase side channel motor without transmission, secured on a metal frame;
- electronic inverter for continuous modulation of the frequency from 34 to 84 Hertz with electromagnetic shielding of type B (for applications within the private and the industrial sector);
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag;
- automatic self-cleaning filter device through programmable shaking device;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- Ø100 metal muffler for low noise level
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS F03 125 l

3 x 5,5 kW for 6 operators Code F125ST

Central vacuum cleaner consisting of:
- three silenced SIEMENS turbines with three-phase side channel motor without transmission, star-triangle starting, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag, manual filter shaker predisposed for self-cleaning filter device;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS H02 175 l

2 x 7,5 kW for 8 operators Code H175ST

Central vacuum cleaner consisting of:
- two silenced double-V shaped SIEMENS turbines with three-phase side channel motor without transmission, star-triangle starting, secured on a metal frame, IP55 safety degree;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag, manual filter shaker predisposed for self-cleaning filter device;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system;
- CE certificate.

Central vacuum cleaner model DS HK175i

1x11kW for 8+1 operators Code HK175i

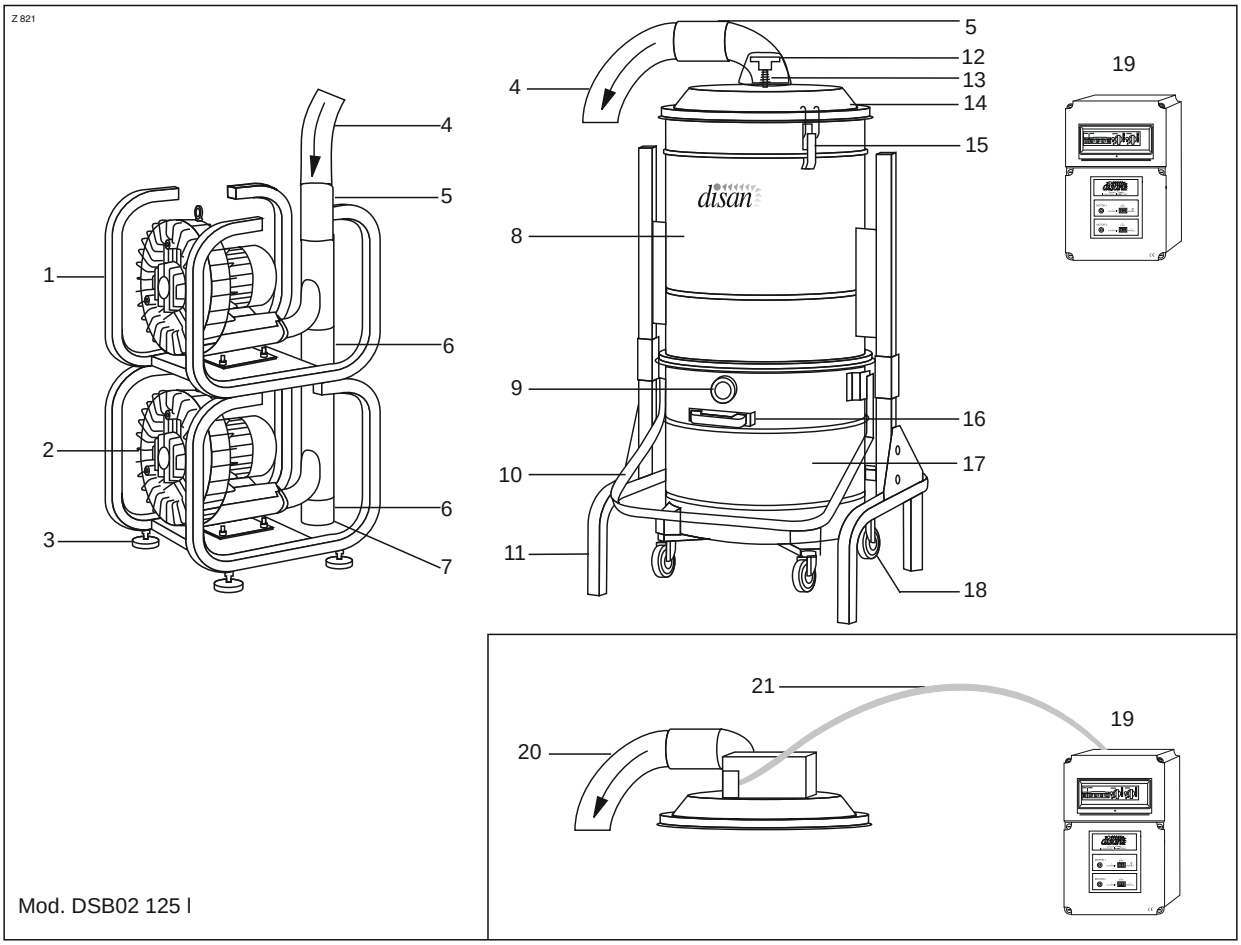
Central vacuum cleaner consisting of:
- one silenced double-V shaped SIEMENS turbine with three-phase side channel motor without transmission, secured on a metal frame;
- electronic inverter for continuous modulation of the frequency from 34 to 84 Hz with electromagnetic shielding type B;
- cyclonic dust separator in steel, painted with epoxy powder, secured on a metal frame, filter chamber equipped with industrial-conceived star filter made of special polyester cloth with high withholding properties, deflector for the mechanical-gravitational separation of dust, dirt receptacle on wheels with disposable plastic bags and cushioned fasteners, safety and compensation valves, arranged for pressure compensation system in the dust bag;
- automatic self-cleaning filter device through programmable shaking device;
- electric control box with IP55 safety degree, realized in accordance with CEI norms, with low-voltage (12 V) outlet and equipped with electric chart for linkage;
- double Ø'3f100 metal muffler for low noise level;
- connections for correct linkage to the piping network and all other parts and accessories for the professional setting of the system.

Central vacuum cleaner Mod. DS MODULAR		***Mod. DS A01 100L***	***Mod. DS A01 125L***	***Mod. DS B01 100L***	***Mod. DS B01 125L***	***Mod. DS B02 100L***	***Mod. DS B02 125L***	***Mod. DS BC 100i***	***Mod. DS C03 100L***	***Mod. DS C03 125L***	***Mod. DS CD 125i***	***Mod. DS D02 100L***	***Mod. DS D02 125L***	***Mod. DS EF 125i***	***Mod. DS F03 125L***	***Mod. DS H02 175L***	***Mod. DS HK 175i***
		1	1	2	2	2	2	2+1	3	3	3+1	4	4	5+1	6	8	8+1
Operators																	
Nominal motor powe	kW	1x2,2	1x2,2	1x5,5	1x5,5	2x2,2	2x2,2	1x4,5	3x2,2	3x2,2	1x5,5	2x5,5	2x5,5	1x7,5	3x5,5	2x7,5	1x11
Voltage requirement	Volt	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400	380-400
Inlets voltage requirement	Volt	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Suction power	mbar	320	320	360	360	320	320	340	320	320	360	360	360	360	360	380	320
Airflow max	m^3/ h	316	316	552	552	632	632	690	942	942	868	1100	1100	1431	1640	1810	1490
Airflow @ 140 mbar	m^3/ h	224	224	407	407	440	440	165-565	655	655	223-784	805	805	1036	1210	1470	1220
Sound level	dB	68	68	78	78	68	68	68	68	68	71	78	78	78	78	78	84
Engine weight	kg	51,5	51,5	156	156	106	106	65	157	157	163	325	325	200	486	369	195
Engine width	cm	47,5	47,5	59,5	59,5	47,5	47,5	53	47,5	47,5	67	59,5	59,5	59,5	59	59,5	67
Engine depth	cm	65	65	96	96	65	65	63,5	65	65	97	96	96	96	96	97	97
Engine height	cm	50	50	65	65	97	97	58	97	97	65	125	125	145	185	145	70
Filter chamber capacity	l	160	210	160	210	160	210	160	160	210	210	160	210	210	210	580	580
Dirt receptacle capacity	l	100	125	100	125	100	125	100	100	125	125	100	125	125	125	175	175
Filter surface	cm^2	19.500	45.000	19.500	45.000	19.500	45.000	19.500	19.500	45.000	45.000	19.500	45.000	45.000	45.000	62.000	62.000
Separator weight	kg	57	95	57	95	57	95	57	57	95	95	57	95	95	95	175	175
Separator width	cm	65	80	65	80	65	80	65	65	80	80	65	80	80	80	85	85
Separator depth	cm	63	72	63	72	63	72	63	63	72	72	63	72	72	72	92	92
Separator height	cm	153	157	153	157	153	157	153	153	157	157	153	157	157	157	210	210

Main parts

1.	Frame of the motor 2,2 kW	code IE102
	Frame of the motor 5,5 / 7,5 / 11kW	code IE101
2.	Suction motor 2,2 kW	code CE660
	Suction motor 5,5 kW	code CE662
	Suction motor 7,5 kW	code CE663
3.	Support foot 2,2 kW	code CE111
	Support foot 5,5 kW/7,5kW /11kW	code CE111
4.	Flexible Air tube 100 l	code CE211
	Flexible Air tube 125-175 l	code CE212
5.	Rubber hose 2,2kW Ø70mm	code CE412
	Rubber hose 7,5kW Ø100mm	code CE411
6.	Hose-coupling 2,2kW Ø70mm	code CE908
	Hose-coupling 5,5kW Ø100mm	code CE909
	Hose coupling 7,5kW Ø100mm	code CE909
7.	Cap 2,2 kW Ø70mm	code CE450
	Cap 5,5 kW Ø100mm	code CE451
	Cap 7,5 kW Ø100mm	code CE451
8.	Filter chamber 100 l	code CE702
	Filter chamber 125 l	code CE701
	Filter chamber 175 l	code CE713
9.	Visual indicator “too full” 100 l	code CE213
	Visual indicator “too full” 125-175 l	code CE214
10.	Lever Open/Close dust container 100 l	code CE215
	Lever Open/Close dust container 125-175 l	code CE216
11.	Frame support sep. 100 l	code CE217
	Frame support sep. 125 l	code CE218
	Frame support sep. 175 l	code CE219

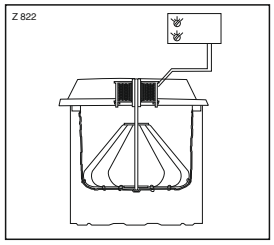
12.	Knob of filter shaker 100 l	code CE706
	Knob of filter shaker 125 l	code CE707
13.	Bracket blocking the knob 100 l	code CE708
	Bracket blocking the knob 125-175 l	code CE709
14.	Cover 100 l	code CE700
	Cover 125 l	code CE703
	Cover 175 l	code CD704
15.	Cover locking clasp 100 l	code CE710
	Cover locking clasp 125-175 l	code CE710
16.	Separator handle 100 l	code CE711
	Separator handle 125-175 l	code CE712
17.	Dust container 100 l	code CE317
	Dust container 125-175 l	code CE318
18.	Wheels 100 l	code CE219
	Wheels 125-175 l	code CE220
19.	Main electric control box	
·	Mod. DS A01	code IE201
·	Mod. DS B01	code IE203
·	Mod. DS B02	code IE202
·	Mod. DS C03	code IE204
·	Mod. DS D02	code IE208
·	Mod. DS F03	code IE209
·	Mod. DS H02	code IE218
20.	Automatic filter-shaker device 100L + control box	code IS92
	Automatic filter-shaker device 125-175 l + control box	code IS01
21.	filter cleaner device wire for IS01	code IS91



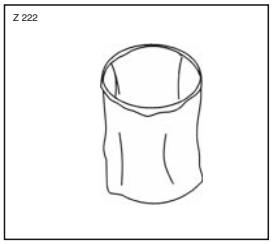
Mod. DSB02 125 l

LIST OF OPTIONALS

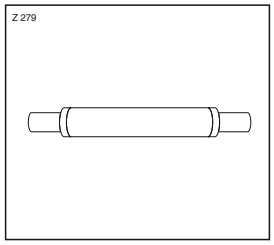
Automatic self-cleaning filter device with electronic card. This device permits the automatic, daily cleaning of the filter, thereby always guaranteeing its full vacuum efficiency.
- Mod. with separator 100 l code IS92
- Mod. with separator 125-175 l code IS01



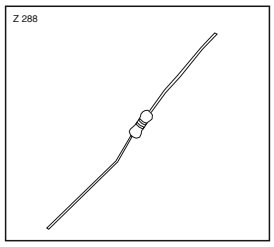
Plastic bags for dust collection, 20-piece-package.
- Mod. with separator 100 l code IE601
- Mod. with separator 125-175 l code IE602



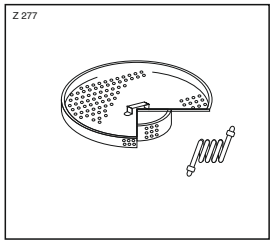
Zinc-coated muffler with couplings
- Diam. 70 mm code IS10
- Diam. 100 mm code IS11



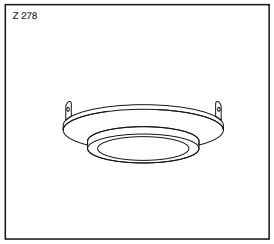
Inlet resistance
4700 Ω code IS06



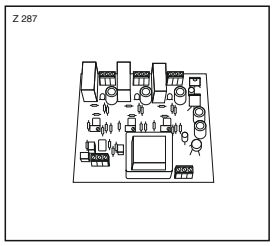
Grill and pipe complete with two plastic bags.
It allows the insertion in the dust container of the plastic bags to collect the dust
- Mod with separator 100 l code IE601
- Mod with separator 125 l code IE602



Cyclone
The upper cyclone protects the filter and improves dust storage inside the container.
- Mod. with separator 100 l code IS08



Electronic control-sequential starting device.
- 2 motors code IS02
- 3 motors code IS03



For their installation, please see the instructions attached to each optional.

INSTALLATION OF THE CENTRAL VACUUM CLEANER

The central vacuum cleaner must be installed and hooked up by an authorized installer. Instructions for a correct installation of the system are given in the corresponding handbook “DESIGN - INSTALLATION – INSPECTION OF DS SUPER COMPACT AND DS MODULAR SYSTEMS”.

ORDINARY MAINTENANCE (by the person in charge of the central vacuum cleaner)

Regular filter cleaning

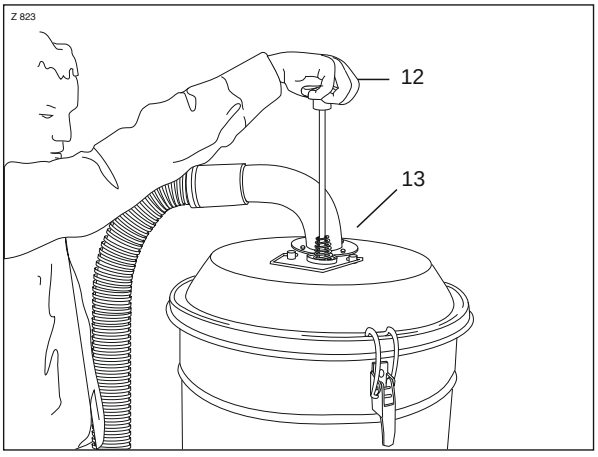
The system works perfectly only if the filter in the filter chamber is cleaned with particular care. Cleaning operations are carried out when the system is switched off.
If you intend to empty the dust container or the plastic bag after cleaning, first operate the filter cleaning devices and then wait a few minutes for the dust to deposit on the bottom of the container.

Manual operation

Manual cleaning of the filter must be carried out at regular time intervals, depending on the use of the system (e.g. every 3-34 weeks if the system is used daily), before emptying the dust container or in any case if you notice a reduction in suction power.

Sequence procedure

1. Lower the blocking bracket *(13).*
2. Energetically raise and lower the knob *(12)* with one hand, several times (approx. 10-15 times).
3. Bring back the blocking bracket *(13)* to its original position.

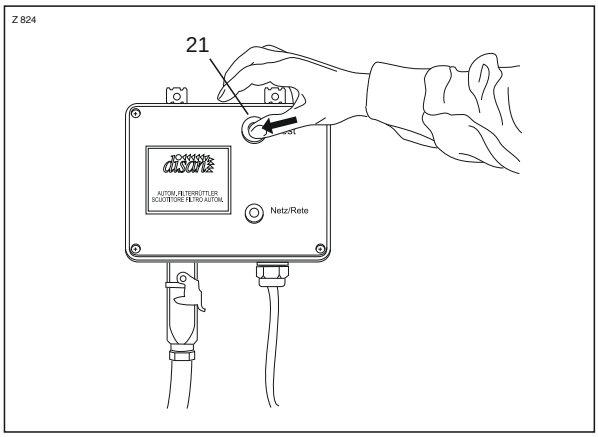


Filter self-cleaning system

An automatic filter shaking device (optional) is available for three-phase central vacuum cleaners, ensuring the automatic self cleaning of the filter every 12-24 hours.

- To start the command-operated filter shaking device, press the switch (21) on the control panel of the shaker. We suggest performing this operation before emptying the dust container and in any case if you notice a reduction in suction power.
- The automatic shaking device works only when the system is switched off.

Please notice: shaking times exceeding one minute do not improve cleaning but do contribute to an early wear of the filter.



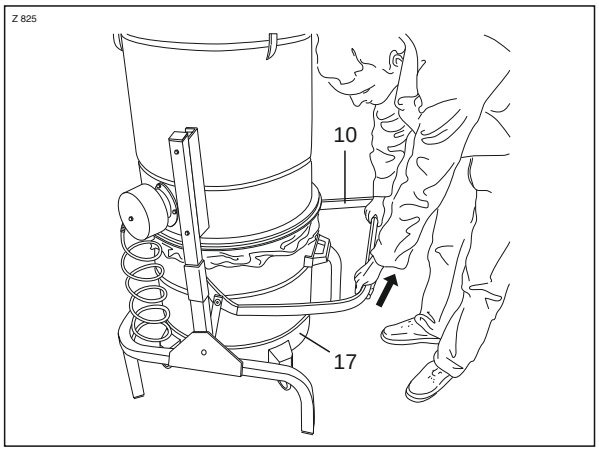
Emptying of the dust container

It is essential to control the dust level every month. Dust may be collected directly in the container or in the plastic bag fitting this purpose. If necessary, dispose of the dust in compliance with the rules envisaged for separate waste collection and replace the bag. Before emptying, shake the filter (see “Regular filter cleaning”).
Wait a few minutes for the dust to deposit on the bottom of the container.

Sequence procedure

In the containers without dust bag the visual indicator *(9)* shows how full the dust container *(17)* is and when it is covered by dust it must be emptied.

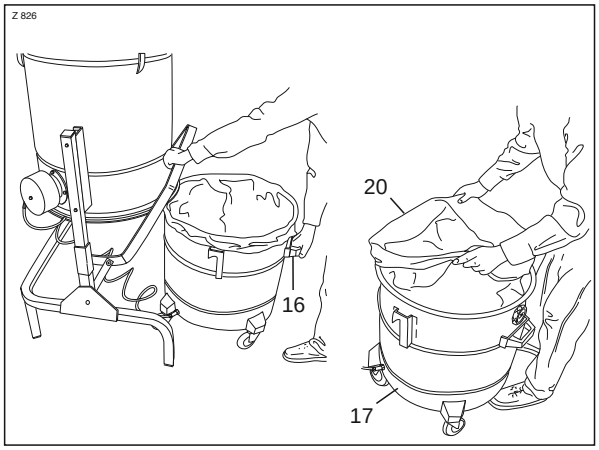
1. Release slowly the lever *(10)* until when the wheels of the container *(17)* are perfectly leant on the floor.



2. Grasp the handle *(16)* and extract the container (17). Empty the container or replace the plastic bag *(20).*

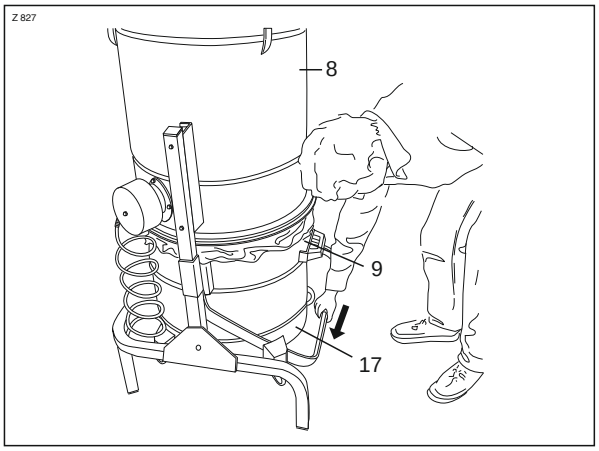
Plastic bag for separator 100 l
code IE601

Plastic bag for separator 125-175 l
code IE602



Please notice: The insertion of the plastic bag in the dust container is possible only through the installation of the grill and pipe (see attached instruction of the article)

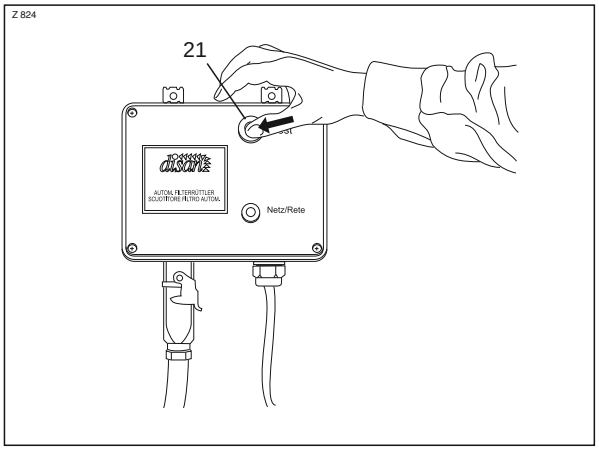
3. Reinsert the container by setting it under the vacuum cleaner. Please pay attention that the visual indicator *(9)* remains outside. Push the lever to the bottom so that the container *(17)* goes up so that it fits tightly again in the filter chamber *(8).* During the operation of hooking of the dust container, please pay attention not to crush the suction pipe.



Functional check of the automatic filter shaking device

Check whether the filter shaking device works properly:

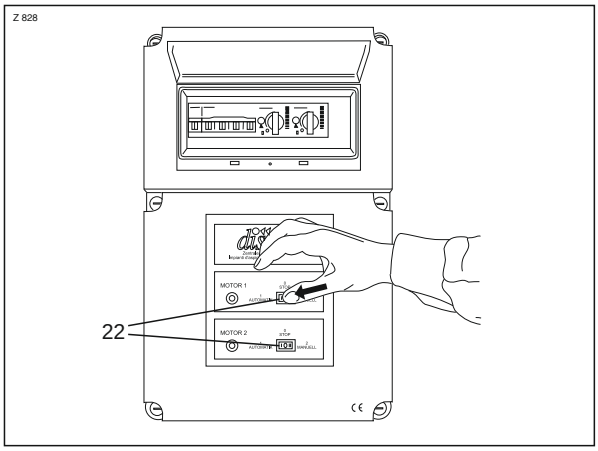
1. Keep pressed for a few seconds button (21) on the control panel of the shaker.
2. If noisiness or the emission of vibrations is higher than normal or in any case excessive, contact the installer.



Functional check of the turbine

Check whether the turbine works properly:

1. Switch the system on and set the switches of the turbines *(22)* on the control panel in the position “manual”.
2. If noisiness or the emission of vibrations is higher than normal or in any case excessive, contact the installer.
3. After the control remember to replace the switches *(22)* of the turbine control in the position “automatic”.



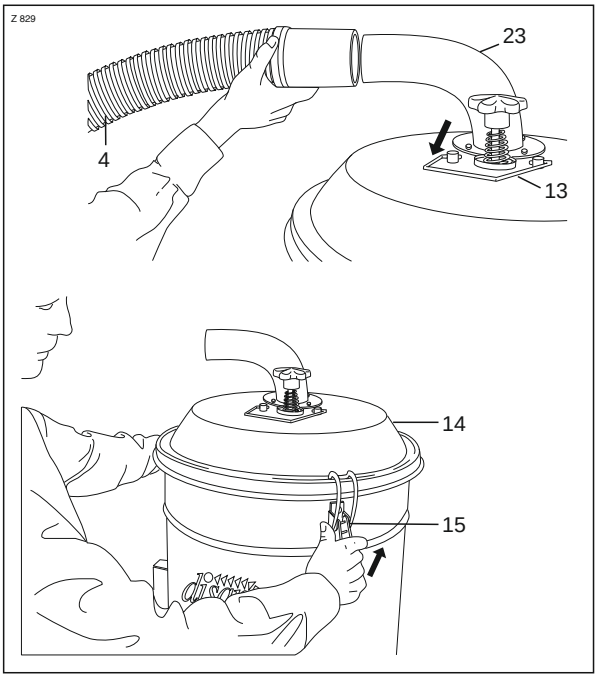
EXTRAORDINARY MAINTENANCE (by the installer)

Perform the following controls every year:

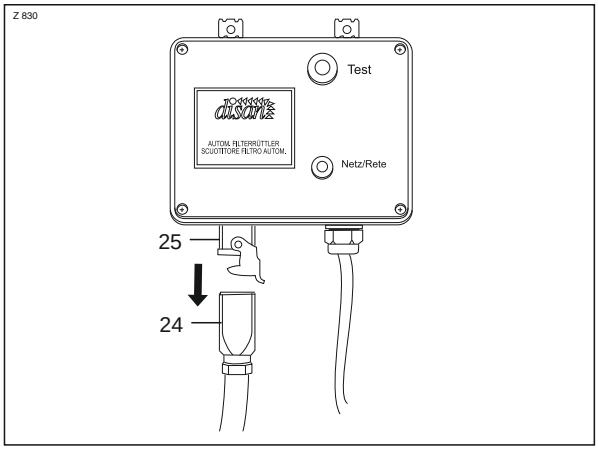
Filter control and replacement

Stages to disassemble the lid:

While the system is switched off, detach the hose *(4)* from the lid fitting *(23).* Lower the blocking device *(13).* Unblock the locking hooks *(15)* and lift the lid *(14)* together with the filter.



If there is an automatic filter shaking device, disconnect the plug *(24)* from the socket *(25)* on the back of the control panel.



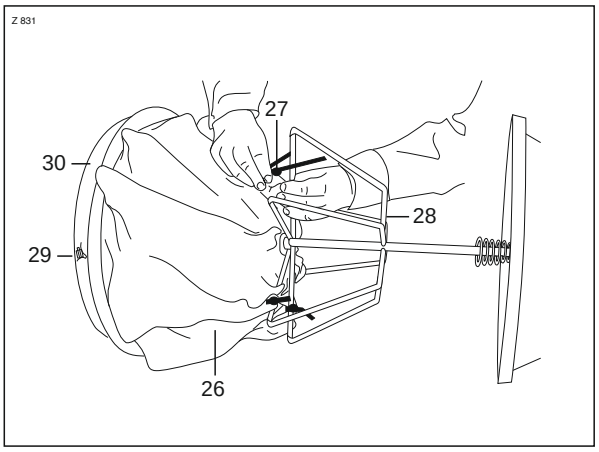
- Checking the filter conditions: check whether the internal surface of the filter is completely white. If it isn’t, the filter is probably pierced. Check whether there are holes. To check, follow the steps necessary to disassemble the lid and the filter.

- Filter cleaning: if the internal surface of the filter is white while the external one is excessively dirty, clean it with a brush, a compressor or a traditional vacuum cleaner. The filter can also be cleaned by washing it in a washing machine at low temperatures. To clean the filter, follow the steps necessary to disassemble the lid and the filter.

- Filter replacement: if the filter is pierced and therefore no longer usable, put it in a plastic bag, close it and dispose of it in compliance with the rules for separate waste collection. Replace the filter as described below.

Steps for filter dismantling:

1. Turn the filter *(26)* upside down to expose the fixing clamps *(27).*
2. Cut the clamps *(27)* and detach the housing *(28)* from the filter (26).
3. Unscrew the clamp *(29)* from the filter ring *(30),* remove it from the filter and set aside.



!WARNING!

The filter must be carefully replaced.
It must be replaced by another filter with the same characteristics, otherwise you risk jeopardising the correct operation of the vacuum cleaner.

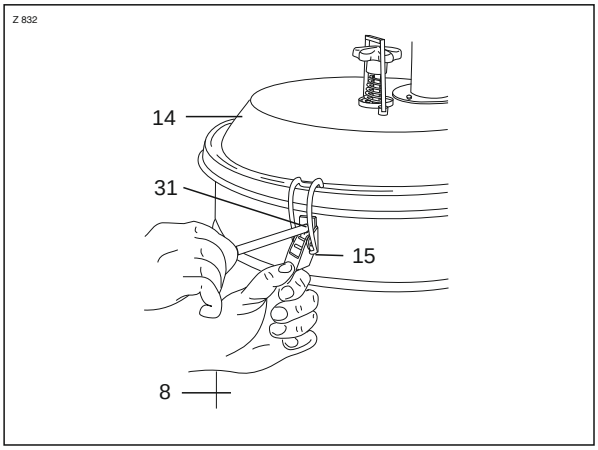
Star filter with a 460 mm diameter for separator 160 l Cod. ER17080
Star filter with a 560 mm diameter for separator 210 l Cod. ER17081
Star filter with a 780 mm diameter for separator 580 l Cod. ER17082

Steps for filter and lid mounting onto the central vacuum cleaner:

Mount the filter and the lid onto the central vacuum cleaner following in reverse sequence the procedure indicated for the disassembly of the filter and of the lid.

Control of the tight of the lid

Control the tight of the lid *(14)* with the filter chamber *(8).* If the seal under the lid *(14)* has given way unscrew the blocking screws *(31)* of the locking clasps *(15),* and make them slide to the bottom until the perfect closing of the lid *(14).* After this operation tighten the blocking screws *(31).*



Sequence of the functioning of the motors

The sequence of the functioning of the engine is automatically adjusted by a meter in the electrical panel. This allows a functioning in work-hours equivalent for every engine.

SAFETY INSTRUCTIONS (read carefully)

Failed observance of the safety instructions may compromise the operation of the system or seriously damage it. The following “safety instructions” contain essential indications for the system’s safety and for the safety of the people using it.

System’s safety prearranged during its production
The vacuum cleaner was made paying particular attention to the safety of operators. Each component was designed on the basis of strict safety guarantees which *Disan* has adopted.

Electrical safety
- ☞ Connect the central vacuum cleaner only to a current with the same tension indicated on the “identification data” plate (see chapter “IDENTIFICATION DATA”, page 18) .
- ☞ Establish the electrical connection provided with efficient grounding and with a neutral phase.
- ☞ The safety of the electronic system is guaranteed only if there is a suitable safety ground fault circuit-breaker complying with the regulations in force.

!WARNING!

For models with electronic inverter it’ s necessary to provide a safety switch (FI) of 300mA at least.

System’s safety
- ☞ Before using it for the first time, make sure – via the installer - that the entire system works perfectly.
- ☞ Do not expose the central vacuum cleaner to the direct action of the weather (e.g. rain, snow
- ☞ Check at regular time intervals the dust container or the plastic bag, if the machine is provided (see paragraph “Emptying of the dust container”, page 11).
- ☞ At regular time intervals, shake the filter manually (see paragraph “Periodic filter cleaning”, page 11).
- ☞ Never vacuum-clean without having the filter installed and, under any circumstance, use only original *Disan* star-filters
- ☞ Leave always the switch of the electric box in the position “automatic”.
- ☞ Do not start the system when out of order.

Technical assistance
- ☞ If the green light signalling connection to the mains (at the centre of the control panel) remains on and if the causes of the failed operation cannot be found among those listed in the “TABLE OF FAILURES”, page 16, please contact your dealer or an authorised installer.
- ☞ Any intervention must be carried out only when the system is switched off and disconnected from the mains.
- ☞ We suggest checking the system and overhauling the central vacuum cleaner every 4-5 years.

!WARNING!

Safety devices must never be tampered with!

TROUBLESHOOTING

SYMPTOM							CAUSE
The inlet socket whistles	No vacuum power	Low vacuum power	The system does not start	The system remains on	The system turns on and off intermittently	The ground fault circuit-breaker trips	
		✓					1 Filter clogging
	✓	✓					2 Hose clogging
		✓					3 Wrong closing of the dust container – cyclone's gasket (optional) damaged or out of place
		✓					4 Simultaneous use of several inlet sockets
	✓	✓					5 Tubes clogging – air infiltration
	✓		✓				6 Thermal contact breaker
	✓		✓	✓	✓		7 Defective or dirty microswitch of the socket
			✓				8 Wear of the inlet socket's contacts
	✓		✓				9 12 Volt mains lead to inlet sockets is damaged
	✓		✓	✓			10 Defective electric parts– motor failure
	✓	✓					11 Dust container full
✓		✓					12 Defective gasket of the inlet socket – protruding screws

1. FILTER CLOGGING

If suction power at the inlet socket is low, the filter may be excessively clogged.
In this case:
- if the machine has a manual shaking device, clean it as indicated on page 15;
- if it equipped with an automatic shaking device, see page 11.

2. HOSE CLOGGING

If the suction power at the inlet socket is good, clogging is in the hose or in the brushes. If – on the contrary - suction power at the inlet socket is weak, clogging is
a. in the socket (visible to the naked eye)
b. in the tubing (see item 5)
If necessary, clean them manually (for precaution, wear latex gloves, as those used in the kitchen).

3. WRONG CLOSING OF THE DUST CONTAINER – CYCLONE'S GASKET (OPTIONAL) DAMAGED OR OUT OF PLACE

After emptying, make sure that the dust container closes tightly to avoid suction power reductions. Furthermore, check that the gasket is positioned correctly and that it is not damaged.

4. SIMULTANEOUS USE OF SEVERAL INLET SOCKETS

The central vacuum cleaners are designed for a number of operators depending on the model of the machine. The simultaneous use of several inlet sockets on the same network entails a considerable suction power reduction.

5. TUBES CLOGGING – AIR INFILTRATION

If the procedures listed under 1,2,3 and 4 do not increase the air flow rate, clogging is in the tubing. (caused by punctures, drillings, or nails driven into the wall).
If the system is provided by sphere valve for the manual closing of the different pipe lines, close the valve corresponding to the defective line until the intervention of the installer. The system can be used on the pipe line corresponding to the others closing valves.

6. THERMAL CONTACT BREAKER

The contact breaker (the main switch) blows when
- the vacuum motor has been subjected to a considerable electric current overload;
- the motor is defective;
- the motor has overheated due to filter clogging, clogging of the tubing or a narrowing in the breather pipe.

Before switching the system on again, wait 8-10 minutes for the motor to cool down. If after completing the procedures as of items 1, 2 and 5 the switch continues to trip, switch the system off and contact your installer

7. DEFECTIVE OR DIRTY MICROSWITCH OF THE SOCKET

If the central vacuum cleaner remains switched on or does not start despite the closing or opening of the inlet socket, check whether the microswitch on the socket itself works properly. If you cannot find the cause, contact your installer.

8. WEAR OF THE INLET SOCKET'S CONTACTS If the system does not start and you use inlet sockets with contacts, check whether the contacts are worn.

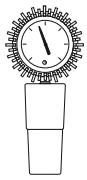
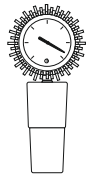
9. 12 VOLT MAINS LEAD TO INLET SOCKETS IS DAMAGED
It happens rarely that the mains lead connecting the inlet sockets to the central vacuum cleaner gets damaged.

10. DEFECTIVE ELECTRIC PARTS – MOTOR FAILURE
If the procedures listed above do not start the vacuum motor, the cause lies in the damage of an electric part. Contact your installer.

11. DUST CONTAINER FULL
Empty the container (see page 11 "Emptying of the dust container")

12. DEFECTIVE GASKET OF THE INLET SOCKET – PROTRUDING SCREWS
Replace the gasket or tighten the screws correctly

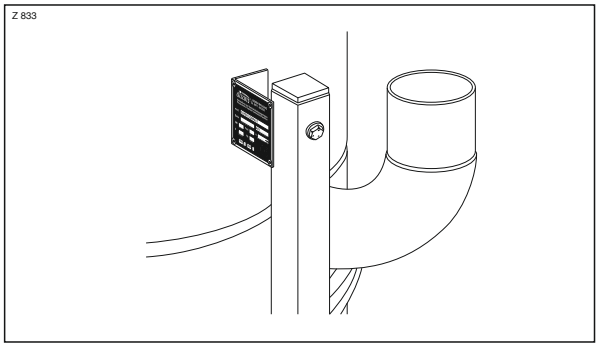
Clogging of the tubes – air infiltrations

ANALYSIS	PROGNOSIS	REMEDY
 Drop in suction power	clogged	1A Open the dust container 1B Vacuum the other way round, connecting a powerful vacuum cleaner to the inlet sockets 2 Explore the tubes with a spiral probe (used for plumbing works) 3 Contact *Disan*'s technical office
 insufficient suction	air infiltrations	1A If there is no noise, switch on the system keeping the inlet sockets closed 1B Locate the source of whistling due to air infiltrations 2 Use the suitable inspection camera (code GE903) 3 Contact *Disan*'s technical office

IDENTIFICATION DATA

Position of the identification data plate
The position of the identification data plate indicating the machine's data is as shown in the picture:

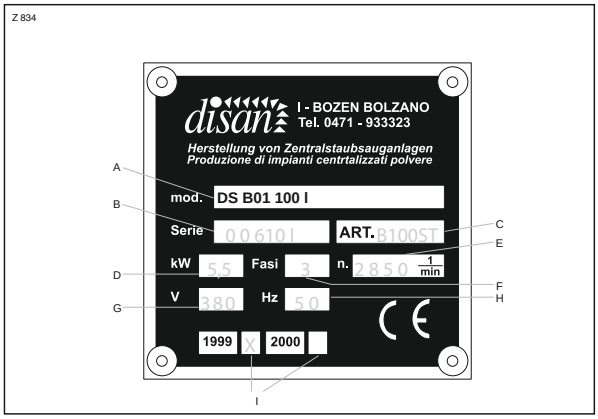
Z 833



Data on the plate
All technical and construction data pertaining to your central vacuum cleaner are indicated on the identification plate.

A = vacuum cleaner's model
B = serial number
C = article code
D = motor absorption (kW)
E = number of revolutions per minute of the motor
F = motor's stages
G = supply tension (V)
H = operating frequency (Hz)
I = year of construction

Z 834



Data identification for assistance or guarantee purposes
Whenever you contact *Disan*'s "technical assistance service" or the installer, specify the data of your machine. A clear indication of the "machine's model" and of the "serial number" will help the constructor answering you and will avoid inaccuracies or mistakes. Please refer to the data indicated in your guarantee certificate (see last page).

CHECK LIST FOR THE INSTALLER

- **Check of inlet socket's tightness**
- **Check of the starting of the system at the inlet sockets**
- **Check of the wear of vacuum cleaning accessories**
- **Check of the suction value**
- **Filter check and cleaning**
- **Check of the functioning of the automatic filter-shaking device***
- **Check of the turbine's operation**
- **Check of the functioning of the starting device system***
- **Check of the correct adjusting of the by-pass valves**
- **Inversion of sequence of the starting of the turbines.**

*** if available**

YEARLY MAINTENANCE CONTRACT

We suggest entrusting your installer with the yearly maintenance
of the modular systems in order to always keep the system at its maximum efficiency

Guarantee certificate

To be filled in by the manufacturer

Tested by:

Model: _____

Serial number: _____

GUARANTEE CERTIFICATE

!IMPORTANT!

Please send us this card, filled in, within 30 days to allow the recording of your guarantee right.

Guarantee certificate

Seller's stamp and signature

Model: _____

Date of purchase: _____

Serial number:

Purchaser's name and address: _____

_____

_____

24 MONTH GUARANTEE

GUARANTEE TERMS

Terms valid when purchased
The central vacuum cleaner has been delivered to the user under the terms in force at the time of purchase.

24 months
The ***Disan*** company undertakes to replace under warranty the parts which have manufacturing defects during a period of 24 months from their date of purchase.

Guarantee certificate
The guarantee is valid if the detachable coupon (see last page, GUARANTEE CERTIFICATE) is filled-in in a readable way and is returned within 30 days maximum from the date of purchase.

Contact your installer
For any abnormal condition, please contact your installer, always indicating the identification data.

Disan's reserve
For the guarantee to be acknowledged, the defective part must be sent to the Company's seat in Bolzano so that it can be tested at the technical assistance laboratories. ***Disan*** reserves to establish the cases when the defective parts meet the conditions allowing for a "replacement under warranty".

Expenses charged to the client
Installation, disassembly and transport expenses for the defective parts are charged to the purchaser.

Non acknowledgement:
For the guarantee to be valid, the instructions contained in this booklet have to be compulsorily followed.
Otherwise ***Disan*** may choose not to make the repairs. Furthermore, the manufacturer holds himself relieved from any liabilities for damage to people and things resulting from non-compliance in the following cases:
- incorrect installation;
- improper use of the central vacuum cleaner or of the accessories;
- the foreseen maintenance has not been made or has been made improperly;
- use of non original spare parts;
- total or partial inobservance of the instructions for use;
- natural wear;
- attempts to disassemble, modify or in general tamper with any component of the central vacuum cleaner by the user or unauthorised personnel;
- the guarantee certificate has not been sent in;
- non regular payment.

Area of Jurisdiction
The Tribunal of Bolzano (Italy) is exclusively competent for any dispute.

Please stamp

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Central Vacuum Systems

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39100 BOLZANO
ITALY

PR051(E)

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