INSTRUCTIONS MANUAL

FANS

for

for corrosive gas and vaporous in standard execution



Venplast srl

Via Staffali, 24 37062 Dossobuono di Villafranca (VR) – Italy Tel. 0039 045 8600479 – www.venplast.com Vat no. 02595330230

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FOREWORD

Warning: this manual describes the block fan + motor that comes with it (electroblowing fan). Should only the fan be supplied, without the electric motor, the parts of the manual concerning the electrical parts must not be taken into consideration. In this case the buyer chooses the electric motor.

WARRANTY

The manufacturer guarantees its products for a period of (twelve) months from the date of purchase. This warranty covers only free reparation or substitution of those parts that after careful examination by the company of manufacture result to be faulty (this excludes electrical parts and the tools). The warranty, with exclusion of any responsibility for direct or indirect damage, is limited only to faults in the material and is no longer valid should the parts returned result as having been disassembled, tampered with or repaired outside the factory.

The warranty does not cover damage caused by carelessness, negligence, bad or improper use of the equipment and incorrect use by the operator.

The warranty is no longer valid and VENPLAST s.r.l. will not answer for damages should the safey devices that come with the equipment have been removed. In addition, the warranty is no longer valid should non original spare parts be used.

The equipment returned, even if under warranty, must be delivered carriage paid.

See also the chapter "General sales conditions" on the last page.

PRESERVATION OF THE MANUAL

This manual must be kept in a safe place by the head of department's office.

The employer must give this instructions manual (original or copy) to the workers in order to adequately inform them of correct machine use.

GENERAL INFORMATION

SITUATIONS OF DANGER

It is strictly forbidden to introduce limbs or the whole body inside the parts in movement

Is is strictly forbidden to remove, take away, modify and/or alter the safeties.

LIMITATIONS OF USE

The fan has been designed and maunufactured to direct air with presence of corrosive gas/vapours at a temperature between -15C° and +70C°. The limits of concentration of corrosive substances that can be conveyed are shown below. Any other use is forbidden. For fan compatibility with the fluids/liquids trasported, keep to the table below.

TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ****The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	P
Acetaldehyde		25	3	1	2	Ammonia		25	1	1	1
-water base	100	60	3	2	-	-Dry Gas	100	60	1	1	1
solution		100	-	-	-	-Dry Gas		100	-	-	-
		25	3	1	1			25	2	1	1
	40	60	3	2	2	-Liquid	100	60	3	1	-
Acetic Acid		100 25	- 1	- 1	- 1	Ammonium		100 25	-	- 1	1
Acetic Acid	e3E	60	2	1	1	Ammonium	ant	25 60	2	1	1
	s25	100	-	-	1	-Acetate	sat	100	-	-	
		25	1	1	1			25	1	1	1
	30	60	2	1	1	-Carbonate	all	60	2	1	1
		100	-	-	1			100	-	-	
		25	1	1	1			25	1	1	1
	60	60	2	1	1	-Chloride	sat	60	1	1	1
		100	-	-	2			100	-	-	2
		25	1	2	1			25	1	1	1
	80	60	2	3	3	-Fluoride	25	60	2	1	1
		100	-	-	3			100	-	-	-
		25	2	1	1			25	1	1	1
-glacial	100	60	3	2	2	-Phosphate	all	60	1	1	1
Apotio Archardad I		100	-	-	3			100	-	-	-
Acetic Anhydride	100	25 60	3 3	2 2	1 2	الما والمحمد المرابع		25 60	1 2	1 1	1
	100	100	-	-	2	-Hydrosulphate	dil	100	-	-	
Acetone		25	- 3	- 1	3			25	- 1	- 1	1
	10	60	3	-	3	-Hydroxide	28	60	2	1	1
	10	100	-	-	3	Invaloxide	20	100	-	-	
		25	3	2	1			25	1	-	1
	100	60	3	2	3	-Metaphosphate	all	60	1	-	1
	100	100	-	-	3	. ietapiioopiiate	an	100	-	-	
Acetophenone		25	-	-	1			25	1	1	1
	nd	60	-	-	3	-Nitrate	sat	60	1	1	1
		100	-	-	-			100	-	-	1
Acrylonitrile		25	-	1	1			25	1	-	1
	technical pure	60	3	1	1	-Persulphate	all	60	1	-	
	pure	100	-	-	-			100	-	-	
Adipic Acid		25	1	1	1			25	1	1	1
-water base	sat	60	2	1	1	-Sulphur	deb	60	2	1	1
solution		100	-	-	-			100	-	-	-
Allyl Alcohol		25	2	1	1			25	1	1	1
	96	60	3	2	1		sat	60	1	1	1
		100	-	-	1			100	-	-	-
Alum		25	1	1	1			25	1	-	1
-water base	dil	60	2	1	1	-Triphosphate	all	60	1	-	1
solution		100	-	-	-			100	-	-	-
		25	-	1	1	Amyl Acetate		25	3	1	2
	sat	60	2	1	1		100	60	3	2	-
Aluminum		100 25	- 1	- 1	-	Amyl Alcohol		100 25	- 1	- 1	- 1
Alumnum	-	25 60	1	1	-		~ d	25 60	2	1	1
-Chloride	all	100	-	-	-		nd	100	-	-	1
		25	1	1	-	Aniline		25	3	2	1
-Fluoride	100	60	1	1	-		all	60	3	2	1
. acriae	100	100	-	-	-		un	100	-	-	
		25	1	-	-			25	2	2	2
-Hydroxide	all	60	1	-	-	-Chlorhydrate	nd	60	3	2	2
-		100	-	-	-			100	-	-	3
		25	1	-	-	Anthraquinone Sulfonic		25	1	1	1
-Nitrate	nd	60	1	-	-	Acid	susp	60	2	-	1
		100	-	-	-			100	-	-	<u> </u>
		25	1	1	1	Aqua Regia		25	2	3	(1)
-Sulfate	deb	60	1	1	1		100	60	2	3	3
		100	-	-	-			100	-	-	3
		25	1	1	1	Arsenious Acid		25	1	1	1
	sat	60	1	1	1		deb	60	2	1	1
<u> </u>		100	-	-	2			100	-	-	
Ammonia		25	1	1	1			25	1	1	1
-water base	deb	60 100	2	1	-		80	60 100	2	1	1
solution		100	- 1	-	- 1		1	100	-	-	2
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TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ****The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	РР	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP
Barium		25	1	1	1	Butyl Alcohol		25	1	1	1
	all	60	1	1	1			60	2	1	2
-Carbonate		100	_	-	_			100	-	-	2
		25	1	1	1	Butyl Phenol	100	25	2	3	3
-Chloride	10	60	1	1	1			60	2	3	3
		100	-	-	-			100	-	-	-
		25	1	1	1	Butylene Glycol	100	25	-	1	1
-Hydroxide	all	60	1	1	1			60	2	1	-
		100	-	-	-			100	-	-	-
		25	1	1	1	Butyric Acid		25	1	1	3
-Sulfate	nd	60	1	1	1		20	60	2	2	3
		100	-	-	-			100	-	-	3
		25	1	-	1			25	3	3	3
-Sulphur	sat	60	1	-	-		conc	60	3	3	3
Deen		100	-	-	-	Calaina	-	100	-	-	3
Beer		25	1	1	-	Calcium		25	1	1	1
	comm	60	1	1	-	-Bisulphate	nd	60	1	1	1
		100	-	-	-	Discipliate		100	-	-	-
Benzaldehyde		25	3	2	3			25	1	1	1
	nd	60	3	2	3	-Carbonate	all	60	1	1	1
Densene		100	-	-	-			100	-	-	-
Benzene	100	25	3	3	3			25	1	1	1
	100	60	3	3	3	-Chlorate	nd	60	1	1	-
		100	-	-	3			100	-	-	-
- D + - I	20/22	25	3	-	3			25	1	1	1
-+Petrol	20/80	60	3	-	3	-Chloride	all	60	2	1	1
		100	-	-	-			100	-	-	2
Chlouid	ta dania d	25	3	2	1	Underset 1		25	1	-	1
-Chloride	technical pure	60	-	-	-	-Hydroxide	all	60	1	-	1
Ponzoia Acid	+	100	-	-	- 1			100	-	-	-
Benzoic Acid	+	25	1	1	1	his on a state with		25	-	1	1
	sat	60	2	1	1	-Hypochlorite	sat	60	2	1	1
Ponnul Aleshal	+	100	-	-	3			100	-	-	-
Benzyl Alcohol	1.57	25	-	1	1			25	1	1	1
	100	60	-	2	2	-Nitrate	50	60	1	-	-
- · · · ·		100	-	-	-			100	-	-	-
Boric Acid		25	1	1	1			25	1	1	1
	deb	60	2	1	1	-Sulfate	nd	60	1	1	1
		100	-	-	1			100	-	-	-
		25	1	1	1			25	1	2	1
	sat	60	2	1	1	-Sulphur	sat	60	1	2	-
		100	-	-	1			100	-	-	-
Brine		25	1	-	1	Carbon		25	1	1	1
	comm	60	1	-	-		100	60	1	1	1
		100	-	-	-	-Dioxide Gas		100	-	-	-
Bromic Acid		25	1	1	-			25	1	1	1
	10	60	1	1	-	-water base solution		60	2	1	1
		100	-	-	-			100	-	-	-
Bromine	1	25	3	3	3			25	1	1	1
	100	60	3	3	3	-Monoxide	100	60	1	1	1
-liquid		100			3			100	<u> </u>		
		25	2	3	3			25	2	2	1
-steam	minim	60	-	3	3	-Sulphur	100	60	3	-	3
Steam		100	_	-	3	Supra	100	100	-	-	3
Butadiene		25	1	-	1			25	2	2	3
	100	60	1	3	3	-Tetrachloride	100	60	3	3	3
		100		-	_			100	-	-	-
Butane Gas		25	1	1	1	Carbonic Acid		25	1	-	-
	10	60	_	1	-		100	60	1	-	-
		100	_	-	_	-dry		100	-	-	
Butanediol		25	1	-	1			25	1	-	-
	10	60	3	-	-	-water base solution	sat	60	1	-	-
		100	-	-	-		540	100	-	-	-
		25	2	2	2			25	1	-	-
	conc.	60	3	3	2	-damp	all	60	1	-	-
		100	-	-	-			100	-	-	-
Butanone	1	25	3	1	1	Chloramine		25	1	1	1
	all	60	3	2	2		dil	60	-	-	-
		100	-	-	-	-water base solution		100	_		
Butyl Acetate		25	3	- 3	2	Chloric Acid	1	25	- 1	- 1	- 1
-,	100	60	3	3	3		20	60	2	3	3
	100	100	-	-	3		20	100	-	-	3
)

TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ***The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	Р
Chloride Methylene		25	3	3	3	Cyclohexane		25	3	1	
	100	60	3	-	3		all	60	3	-	
Chlorine		100 25	- 2	-	3	Cyclohexanone		100 25	- 3	- 1	
	sat	60	3	-	-		all	60	3	-	
		100	-	-	-			100	-	-	
-dry gas	10	25 60	1 2	-	3 3	Decalin decahydronaphthalene	nd	25 60	1 1	1 2	
-ury gas	10	100	-	-	-		nu	100	-	-	
		25	2	-	3	Dextrin		25	1	1	l
	100	60	3	-	3		nd	60	2	1	
		100 25	- 1	-	- 3	Dichloroacetic Acid		100 25	- 1	-	
-damp gas	5 gr/m3	60	3	-	3		100	60	2	2	
	-	100	-	-	-			100	-	-	
	10 ar/m2	25	2 2	-	3	Dichloro Benzene		25	3 3	-	
	10 gr/m3	60 100	-	_	3		all	60 100	-	-	
		25	2	-	3	Dichloroethane		25	3	3	T
	66 gr/m3	60	2	-	3		100	60	3	3	
		100 25	- 3	- 3	- 3	Dichloroethylene		100 25	- 3	-	
-liquid	100	60	-	-	3	Sieniorostnyiene	100	60	3	3	
		100	-	-	-			100	-	-	
Chloroacetic Acid	05	25	1	2	1	Diethylether	100	25	3	3	
	85	60 100	2	3	3 3		100	60 100	3	3	
		25	1	2	-	Diglycolic Acid		25	1	1	
	100	60	2	3	3		18	60	2	1	
Chloroform		100 25	- 3	- 2	3	Dimethylomine	_	100 25	- 2	-	
Chlorotorm	all	25 60	3	-	2	Dimethylamine	100	25 60	2	2	
	un	100	-	-	3		100	100	-	-	
Chlorosulfuric Acid		25	2	3	3	Dioctyl Phthalate		25	3	1	
	100	60	3	3	3		all	60	3	2	
Chromic Acid		100 25	- 1	- 2	3 1	Dybutil Phthalate		100 25	- 3	- 3	
	10	60	2	3	2		10	60	3	-	
		100	-	-	3			100	-	-	
	30	25 60	1 2	2 3	2 3	Ether	all	25 60	3 3	-	
	50	100	-	-	3		an	100	-	_	
		25	1	2	2	Ethyl Acetate		25	3	1	l
	50	60	2	3	3		100	60	3	3	
		100 25	- 1	- 3	3	Ethyl Alcohol		100 25	- 1	- 1	
-Solution	50/35/15	60	2	3	3		nd	60	2	2	
		100	-	-	-			100	-	-	
Citric Acid	50	25	1	1	1	Ethyl Chloride		25	3	2	
-water base solution	50	60	1	1	1		all	60	3	-	
Copper		100 25	- 3	-	1 1	Ethyl Ether		100 25	- 3	-	
	all	60	3	-	1		all	60	3	-	
-Cyanide		100	-	-	-			100	-	-	
Chlarida	+	25	1	1	1	Ethylene Glycol		25	1	1	
-Chloride	sat	60 100	1	1	1		comm	60 100	2	3	
		25	1	1	3	Ethylene Chlorohydrin		25	3	-	F
-Fluoride	all	60	1	1	3		100	60	3	-	
		100 25	-	- 1	- 1	Fatty Acids	_	100 25	-	-	L
-Nitrate	nd	25 60	1 2	1	1	Tally Acids	nd	25 60	1 1	-	
		100	-	-	-			100	-	-	
		25	1	1	3	Fertilizer		25	1	1	
-Sulfate	dl	60	1	1	3		%10	60	1	1	
		100 25	- 1	- 1	- 1			100 25	- 1	- 1	
	sat	60	1	1	1		sat	60	1	1	
-		100	-	-	-			100	-	-	
Cresol	-00	25	2	1	1	Fluorine Dry Gas	100	25	2	2	
	s90	60 100	3	-	-		100	60 100	3	3	
		25	3	-	2	<u>L</u>	1	100			<u> </u>
	> _	60	3	-	-						
	_	100	-	-	-						

TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ***The above data are not binding***

Addition	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP
image: book of the sector of the se	Formaldehyde					1	Hydrogen			-	-	-
Formic Add				2	1	1		all		-	-	-
906021111100-21111100-21111100100-111-upl and jule00111-upl and jule0-111-inom axhaut acid11111-inom axhaut acid01111-inom axhaut acid01111-inom axhaut acid01111-inom axhaut acid01111-inom axhaut acid011111-inom axhaut acid021111-inom axhaut acid0111111-inom axhaut acid0111111-inom axhaut acid0211111-inom axhaut acid0211111-inom00111111-inom00111111-inom001111111-inom0011111111-inom00111111 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
i 100 -	Formic Acid					1 1						
ind 25 1 <th1< th=""> 1 1 1</th1<>		50				1	-Peroxide	30				
initial <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
ind 100 i <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>50</td> <td></td> <td></td> <td></td> <td></td>						1		50				
Fruit 25 1 1 1 1 -pulp and juic comm 60 1 - - -from exhaust acids all 23 1 - - -from exhaust acids all 23 1 1 1 - -intm introus vapors traces 600 1 1 1 - - -intm introus vapors traces 600 1 1 1 - - -illuminating 100 60 1 - - - - -row 100 60 1 - - - - - -refined 100 60 1 - 1 - - - -refined 100 60 1 - - - - -refined 100 60 1 1 1 - - - -refine 25 1<		100				1		50				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Eei+											
	rruit											
Base Image Image <thi< td=""><td>-pulp and juice</td><td>comm</td><td></td><td></td><td></td><td>1</td><td></td><td>90</td><td></td><td></td><td></td><td></td></thi<>	-pulp and juice	comm				1		90				
-irrom exhaust adds all 60 1 i						-						
	GdS											
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	-from exhaust acids	all				1 1	-dry sulphide	sat				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												
-illuminating 25 1 1 1 Gasoline 25 1 - 1 -row 100 60 - - -row 100 60 - 1 -row 100 60 - 1 -row 100 60 - 1 -refined 100 60 - 1 100 60 - 1 1 100 60 - - - 265 1 1 1 1 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - - 100 - - - - -	-with nitrous vapors	traces				1	-damp sulphide	sat				
····································												
Image: base of the section o							Hydrosulphite					
Gasoline 25 1 - 1 -row 100 60 1 - 3 -row 25 1 - 1 100 60 1 - 12 60 1 - 1 -refined 100 60 - 1 - 1 10 60 2 1 1 1 10 60 2 1 1 1 10 60 2 1 1 10 60 2 1 1 1 10 60 2 1 1 1 10 100 - - 10 60 3 1 1 1 1 100 - - 10 60 3 1 1 1 1 1 10 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-illuminating	100						%10				
-row 100 60 1 - 3 suphate 12 60 1 - - -refined 100 60 - 1 3 Gelatine 25 1 1 1 1 10 60 2 1 1 000 60 1 1 1 1 10 60 2 1 1 000 60 1 1 1 1 10 60 3 3 3 Givcorine 25 1 1 1 1 1 1 1 1 100 - - 3 60 3	o "											
-row 100 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Gasoline					1 1						
i i	-row	100		1	-	3	Sulphace	12		1	-	1
refined 100 60 - 1 3 Gelatine 25 1	1011											
And 100 - <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>Hydrofluoric Acid</td> <td></td> <td></td> <td></td> <td></td> <td></td>						1	Hydrofluoric Acid					
Gelatine 25 1 1 1 1 100 60 1 - <t< td=""><td>-refined</td><td>100</td><td></td><td></td><td></td><td>1</td><td></td><td>10</td><td></td><td></td><td></td><td></td></t<>	-refined	100				1		10				
ind ind <td></td> <td>_</td>												_
Indian Indian <thindia< th=""> <thindia< th=""> India</thindia<></thindia<>	Gelatine					1						
Silucese 25 1 1 1 1 all 60 2 1 1 1 100 - - - - - - - - - - 100 -		100				1		60				
all 60 2 1 1 Glycerine 25 1 1 1 water base solution all 60 1 1 1 water base solution all 60 1 1 1 water base solution												-
Silverine Image: I	Glucose					1	Iodine				-	1
indication indicat		all		2	1	1	-dry and damp	3		3	-	-
							-dry and damp					-
	Glycerine		25	1	1	1			25	2	2	1
Silveccoll 100 - - 1 <t< td=""><td>water base colution</td><td>all</td><td>60</td><td>1</td><td>1</td><td>1</td><td>-iodine</td><td>3</td><td>60</td><td>3</td><td>3</td><td>3</td></t<>	water base colution	all	60	1	1	1	-iodine	3	60	3	3	3
10 60 1 1 1 1 Silvcolic Acid 25 1 1 1 37 60 1 1 3 Heptane 25 1 1 3 100 - - - Hexafluorosilicic Acid 25 1 1 1 32 60 1 1 1 100 - - - Hexafluorosilicic Acid 25 1 1 1 32 60 1 1 1 100 - - - Hexane 25 1 1 1 100 - - - - Hydrobromic Acid 25 1 1 1 100 - - 3 - 100 - - - - Hydrobromic Acid 25 1 1 <t< td=""><td>-water base solution</td><td></td><td>100</td><td>-</td><td>-</td><td>1</td><td></td><td></td><td>100</td><td>-</td><td>-</td><td>-</td></t<>	-water base solution		100	-	-	1			100	-	-	-
Shycolic Acid 100 - - 1 1 Shycolic Acid 25 1 1 1 37 60 1 1 1 Heptane 25 1 1 3 100 60 2 3 3 100 60 2 3 3 100 25 1 1 3 100 60 2 3 3 100 60 2 3 3 100 60 2 3 3 100 60 2 2 2 Hexane 25 1 1 1 100 60 2 2 2 Hydrobromic Acid 25 1 1 1 100 60 2 1 1 100 25 1 1 1 100 25 <th1< th=""> 1 1 <td>Glycocoll</td><td></td><td>25</td><td>1</td><td>1</td><td>1</td><td>Iron</td><td></td><td>25</td><td>1</td><td>-</td><td>1</td></th1<>	Glycocoll		25	1	1	1	Iron		25	1	-	1
Silveolic Acid 25 1 1 1 37 60 1		10	60	1	1	1		10	60	2	-	1
37 60 1 1 - - - - - - - - 1			100	-	-	1	-Chloride		100	-	-	-
Image: bold independence independ	Glycolic Acid		25	1	1	1			25	1	1	1
Heptane 25 1 1 3 100 60 2 3 3 100 60 2 3 3 Hexafluorosilicic Acid 32 60 1 1 1 32 60 1 1 1 1 100 - - - - Hexafluorosilicic Acid 32 60 1 1 1 100 - - - - - Hexane 25 1 1 1 1 1 100 60 2 2 2 - - Hydrobromic Acid 25 1 1 1 1 1 100 - - 3 - - - Hydrochloric Acid 255 1 1 1 1 1 100 - - 3 100 - - 3		37	60	1	1	-		sat	60	1	1	1
100 60 2 3 3 -			100	-	-	-			100	-	-	1
Image: Hexafluorosilicic Acid 100 - <t< td=""><td>Heptane</td><td></td><td>25</td><td>1</td><td>1</td><td>3</td><td></td><td></td><td>25</td><td>1</td><td>1</td><td>1</td></t<>	Heptane		25	1	1	3			25	1	1	1
Hexafluorosilicic Acid 25 1 1 1 1 32 60 1 <td></td> <td>100</td> <td>60</td> <td>2</td> <td>3</td> <td>3</td> <td>-ferrous Chloride</td> <td>sat</td> <td>60</td> <td>1</td> <td>1</td> <td>-</td>		100	60	2	3	3	-ferrous Chloride	sat	60	1	1	-
32 60 1			100	-	-	-			100	-	-	-
Hexane 100 - - - Hexane 25 1	Hexafluorosilicic Acid		25	1	1	1			25	1	1	-
Hexane 25 1 </td <td></td> <td>32</td> <td>60</td> <td>1</td> <td>1</td> <td>1</td> <td>-Nitrate</td> <td>nd</td> <td>60</td> <td>1</td> <td>1</td> <td>-</td>		32	60	1	1	1	-Nitrate	nd	60	1	1	-
100 60 2 2 2 2 1 <th1< th=""> 1 1 1</th1<>			100	-	-	-			100	-	-	-
Hydrobromic Acid 25 1 <th1< th=""> 1 1</th1<>	Hexane		25		1	1			25	1	1	1
Hydrobromic Acid 25 1 1 1 1 10 60 2 1		100	60	2	2	2	-ferric Sulfate	nd	60	1	1	-
10 60 2 1 1 -ferrous Sulfate nd 60 1 1 1 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 3 100 - - 100 - - 1				-	-	-				-	-	-
Image: Normal Sector	Hydrobromic Acid		25		1	1			25	1	1	1
48 25 1		10	60	2	1	1	-ferrous Sulfate	nd	60	1	1	-
48 60 2 1 1 100 - - 3 Hydrochloric Acid 25 1 1 1 525 60 2 1 1 100 - - 1 525 60 2 1 1 100 - - 1 525 60 2 1 1 100 - - 1 537 60 1 2 1 100 - - 2 1 Hydrocyanic Acid 25 1 1 1 100 - - 2 1 Hydrocyanic Acid 25 1 1 1 100 - - - - 100 - - - - Hydrocyanic Acid 60 1 1 1 100 - - - - 100 - - - 100 -												
Image: Normal system 100 - - 3 Hydrochloric Acid 25 1			25	1	1	1	Isooctane		25	1	2	2
Hydrochloric Acid 25 1 1 1 1 525 60 2 1		48	60	2	1	1		100	60	-	-	3
s25 60 2 1 1 100 - - 1 100 - - 1 s37 60 1 2 1 100 - - 2 Hydrocyanic Acid 25 1 1 1 deb 60 1 1 1 100 - - - Hydrocyanic Acid 25 1 1 1 100 - - - Lactic Acid 25 1 1 100 - - - Lactic Acid 25 1 1 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100										-	-	
Image: Normal system 100 - - 1 25 1	Hydrochloric Acid					1	Isopropyl Alcohol					
25 1		s25				1		100			-	1
s37 60 1 2 1 100 - - 2 Hydrocyanic Acid 25 1 1 1 deb 60 1 1 1 100 - - - 2 Hydrocyanic Acid 25 1 1 1 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - - 100 - - 1 100 - - 1 100 - -												-
Image: Normal condition 100 - - 2 Hydrocyanic Acid 25 1						1	Isopropyl Ether					
Hydrocyanic Acid 25 1 1 1 deb 60 1 1 1 100 - - - Lactic Acid 25 1 1 1 100 - - - - 100 - - 1 Lanolin 25 1 1 1 1 1 1 nd 60 2 1<		s37				1		100				
deb 60 1 1 1 100 - - - - 100 - - 1 Lanolin - - - - - 1 1 1												_
100 - - - 100 - - 1 Lanolin 25 1 1 nd 60 2 1 2	Hydrocyanic Acid						Lactic Acid					
Lanolin 25 1 1 nd 60 2 1 2		deb				1		<28				
nd 60 2 1 2			100	-	-	-		<u> </u>		-		1
							Lanolin			_		
								nd		2	1	

TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ***The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	РР	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	Р
Lead		25	1	1	1	Naphta		25	2	2	1
-Acetate	sat	60	1	-	2		100	60	3	3	3
Accidic		100	-	-	-			100	-	-	
T . C	100	25 60	1 2	1	1			25 60	1	- 2	1
-Tetra-Ethyl	100	100	-	_	-		comm	100	1	-	2
Lubricating Oils		25	1	3	1	Naphthalene		25	1	1	3
J	comm	60	1	-	2		100	60	-	2	3
		100	-	-	-			100	-	-	1
Magnesium		25	1	1	1	Nickel		25	1	1	1
-Carbonate	all	60	1	-	1	-Chloride	all	60	1	1	
carbonate		100	-	-	-	chionae		100	-	-	
		25	1 1	1	1			25	1	1	
-Chloride	sat	60 100	-	1	1 2	-Nitrate	nd	60 100	1	1	
		25	1	-	1	-		25	1	1	-
-Hydroxide	all	60	1	-	1	-Sulfate	dl	60	1	2	
,		100	-	-	-			100	-	-	
		25	1	1	1			25	1	1	
-Nitrate	nd	60	1	1	1		sat	60	1	1	
		100	-	-	-			100	-	-	
- K -		25 60	1 1	1	1	Nitric Acid		25	3 3	-	
-Sulfate	dl	100	-	1 -	1 -		anhyd.	60 100	-	-	
		25	1	1	1	-		25	1	1	
	sat	60	1	1	1		s20	60	2	2	
	Suc	100	-	-	-		520	100	-	-	
Maleic Acid		25	1	1	1			25	1	-	
	nd	60	1	1	1		40	60	1	2	
		100	-	-	1	_		100	-	-	
Malic Acid	nd	25 60	1	1	1 1		60	25 60	1 2	3 3	
	nu	100	-	-	-		00	100	-	-	
Mercury		25	1	1	1			25	3	3	
	100	60	2	1	1		98	60	3	3	
		100	-	-	-			100	-	-	
Currida	- 11	25	1	-	1	Nitrobenzene	- 11	25	3	-	
-Cyanide	all	60 100	1	-	1		all	60 100	3	2	
		25	1	1	1	Oil		25	1	-	
-Chloride	sat	60	1	1	1	6 H H	100	60	1	-	
		100	-	-	-	-fuel oil		100	-	-	
		25	1	1	1	-camphor		25	1	3	
-Nitrate	nd	60	1	1	1	oil	nd	60	-	3	
Methanesulfonic		100 25	- 1	2	- 2	-		100 25	-	-	
Acid	50	60	2	2	2	-olive oil	comm	60	2	3	
		100	-	-	3			100	-	-	
		25	1	3	3			25	1	1	
	100	60	2	3	3	-paraffin oil	nd	60	1	-	
Methyl		100 25	-	-	3			100 25	- 1	-	
i cenyi	100	60	-	_	1	-castornut	comm	60	1	-	
-Acetate	100	100		_	-	oil	comm	100	-	-	
		25	3	3	3	l F		25	1	-	
-Bromide	100	60	-	-	3	- cottonseed oil	comm	60	1	-	
		100	-	-	-			100		-	L
Chlowide	100	25	3	1	3	Barra 1 1		25	1	-	
-Chloride	100	60 100	3	-	3 3	-linseed oil	comm	60 100	2	2	
Methyl Alcohol		25	1	- 1	1	-		25	1	-	-
	nd	60	1	1	2	-silicon oil	nd	60	3	2	
		100	-	-	2			100	-	-	L
Methylamine		25	2	1	1	-vaseline	100	25	1	1	
	32	60 100	3	2	-	oil	100	60 100	3	2	
Milk		100 25	- 1	- 1	- 1			100 25	- 1	-	┢
	100	60	1	-	1	-	nd	60	2	2	1
		100	-	-	1	transformer oil		100	-	-	L
Molasses		25	1	1	1	Oleic Acid		25	1	-	
	comm	60	2	2	1		comm	60	1	2	
		100	-	-	2	1		100	-	-	1

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TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ****The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP
Oleum	1	25	3	3	3
	nd	60	3	3	3
		100	-	-	-
		25	3	-	3
-steam	minim	60	3	-	3
Steam		100	-	-	-
		25	3	-	3
		60	3	_	3
	high				5
<u> </u>		100	-	-	-
Oxalic Acid		25	1	1	1
	10	60	2	1	2
		100	-	-	2
		25	1	1	1
	sat	60	1	1	2
		100	-	-	3
Oxygen		25	1	1	3
	all	60	1	2	3
		100	-	-	-
Ozone		25	1	2	3
	nd	60	2	3	3
		100	_	-	-
Palmitic Acid	1	25	1	-	-
	10	60	1	-	3
		100	-	-	-
	<u> </u>	25	1	-	-
	70	60	1	3	3
		100	-	-	-
Paraffin		25	-	-	-
	nd	60	2	2	1
-emulsion	na	100	-	-	-
		25			
			1	2	3
	comm	60	1	2	3
		100	-	-	-
Perchloric Acid		25	1	1	1
	10	60	2	1	1
		100	-	-	-
		25	1	1	1
	70	60	2	2	-
		100	-	-	-
Phenol		25	1	1	1
-water base solution	1	60	-	-	1
		100	-	-	3
		25	2	1	1
	s90	60	3	-	3
		100	-	-	3
Phenylhydrazine		25	3	2	2
	all	60	3	2	2
	<u> </u>	100	-	-	-
	1	25	1	1	1
-Chloride	sat	60	3	3	3
Dhaagan - C		100	-	-	-
Phosgene Gas	100	25	1	2	2
	100	60	2	2	2
Dhoonhoric Asid	+	100	-	-	-
Phosphoric Acid		25	1	1	1
	s25	60	2	1	1
	<u> </u>	100	- 1	-	1
		25	1	1	1
	s50	60	1	1	1
	L	100	-	-	1
	1	25	1	1	1
	s85	60	1	2	1
Dhaarba	<u> </u>	100	-	-	1
Phosphorus	1	25	1	1	1
D	nd	60	2	1	-
-Pentoxide	1	100	-	-	-
	<u> </u>	25	3	1	1
-Trichloride	100	60	3	-	-
		100	-	-	-
Phthalic Acid	1	25	-	1	1
	1		1		
	50	60	3	1	1

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP
Piric Acid		25	1	1	1
	1	60	1	-	-
		100	-	-	-
		25 60	3 3	1 1	3 3
	>1	100	-	-	-
Plating chemical		25	1	-	-
solution	comm	60	1	-	-
	comm	100	-	-	-
Potassium		25	1	1	1
	40	60	1	-	-
-Dichromate		100	-	-	-
		25	1	-	1
-Borate	sat	60	2	-	1
		100	-	-	-
		25	1	1	1
-Bromide	sat	60	1	1	1
		100 25	- 1	- 1	- 1
-Carbonate	sat	60	1	1	-
ca. sonate	500	100		-	-
		25	1	1	1
-Chloride	sat	60	1	1	1
		100	-	-	2
		25	1	1	1
-Cyanide	sat	60 100	1	1	1
		25	1	- 1	- 1
-Chromate	40	60	1	1	1
omonace		100	-	-	-
		25	1	1	1
-Ferrocyanide	100	60	1	1	1
		100	-	-	2
		25	-	1	1
-Fluoride	sat	60	-	1	1
		100 25	- 1	- 1	- 1
-Hydroxide	60	60	2	1	1
, ===		100	-	-	1
		25	1	1	1
-Nitrate	sat	60	1	1	1
		100	-	-	-
-Perborate	all	25 60	1 1	-	1
renderate	an	100	-	-	_
		25	1	1	1
-Permanganate	10	60	1	1	2
		100	-	-	-
-Persulfate	nd	25 60	1 2	1 1	1 1
-reisulidle	nd	60 100		-	-
		25	-	-	1
-Sulfate	sat	60	1	1	1
		100	-	-	-
		25	1	1	1
-Chromic Sulfate	nd	60 100	2	1	1
Propane		100 25	- 1	- 1	2
	100	60	_	-	_
-gas		100	-	-	-
		25	1	2	2
-liquid	10	60	-	-	-
Propyl Alcohol		100 25	- 1	- 1	- 1
	~ d				
	nd	60	2	1	1
Pyridine		100 25	- 3	- 1	- 2
,	nd	60	3	2	2
		100	-	-	-
Silicic Acid		25	1	1	1
	all	60	1	1	1
	1	100	-	-	-

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TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant **The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP	CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	I
lver		25	1	-	1	Stearic Acid		25	1		Γ
-Cyanide	all	60	1	-	1		100	60	1	2	
Cydniae		100	-	-	-			100	-	-	_
		25	1	1	1	Sulphur	100	25	1	-	
-Nitrate	nd	60	2	1	1 2		100	60	2	-	
Sodium		100 25	- 1	- 1	1			100 25	2	- 1	┢
Jourum	100	60	1	1	1	-liquid Dioxide	100	60	3	2	
-Acetate	100	100	-	-	1		100	100	5	2	
		25	1	1	1			25	1	1	┢
-Baking Soda	nd	60	1	1	1	-dry	all	60	1	1	
Daning boad	na	100	-	-	1	u.,	un	100	_	-	
		25	1	1	1			25	1	1	t
-Bisulfite	100	60	1	1	1	-water base solution	sat	60	2	-	
		100	-	-	2			100	-	-	
		25	1	-	1			25	2	3	Γ
-Bromide	sat	60	1	-	1	-Trioxide	100	60	2	3	
		100	-	-	-			100	-	-	
		25	1	1	1	Sulphuric Acid		25	1	1	Γ
-Carbonate	sat	60	1	1	1		s10	60	1	1	
		100	-	-	-			100	-	-	
		25	1	-	1			25	1	1	1
-Cyanide	all	60	1	-	1		s75	60	2	2	1
		100	-	-	-			100	-	-	L
		25	1	1	1			25	1	2	1
-Chlorate	nd	60	2	1	-		s90	60	2	2	1
		100	-	-	-			100	-	-	L
		25	1	1	1			25	2	2	ſ
-Chloride	dl	60	2	1	1		s96	60	3	2	
		100	-	-	-			100	-	-	
		25	1	1	1			25	2	-	Γ
	sat	60	1	1	1	-steaming	all	60	3	-	
		100	-	-	3			100	-	-	
		25	1	1	-	Sulphuric Acid		25	1	3	Γ
-Ferrocyanide	sat	60	1	1	-	+Nitric Acid	48/49/3	60	2	3	
		100	-	-	-	+H2O		100	-	-	
		25	1	-	1			25	2	3	Γ
-Phosphate	all	60	1	-	1		50/50/0	60	3	3	
		100	-	-	1			100	-	-	
		25	1	1	1			25	1	2	Γ
-triphosphate	all	60	1	1	1		10/20/70	60	1	2	
		100	-	-	1			100	-	-	
		25	1	1	-	Tallow Emulsion		25	1	1	Γ
-Fluoride	all	60	1	1	-		comm	60	1	2	
		100	-	-	-			100	-	-	
		25	1	1	1	Tannic Acid		25	1	1	I
-Hydroxide	s60	60	1	1	1		10	60	1	1	
		100	-	-	1			100	-	-	
		25	1	1	1	Tartaric Acid		25	1	1	ſ
-hypochlorite	deb	60	2	-	2		all	60	2	1	1
		100	-	-	-			100	-	-	L
		25	1	-	1	Tetrachloroethane		25	3	2	1
-Hyposulphite	nd	60	1	-	-		nd	60	3	3	1
		100	-	-	-	.		100	-	-	L
		25	1	1	1	Tetrachloroethylene		25	3	2	1
-Nitrate	sat	60	1	1	1		nd	60	3	3	1
		100	-	-	-	Taturah 1. C	<u> </u>	100	-	-	┞
Davis		25	1	-	1	Tetrahydrofuran		25	3	2	1
-Perborate	all	60	1	-	-		all	60	3	3	1
		100	-	-	- 1	Thionyd Chlorida	├	100	-	-	┞
Culter		25	1		1	Thionyl Chloride		25	3	3	1
-Sulfate	dl	60	1	-	1			60	-	-	1
		100 25	- 1	- 1	- 1	Thiophene		100 25	- 3	- 2	╀
	cot	25 60	1	1	1	mophene	100	25 60	3	2	1
	sat						100			2	1
		100 25	- 1	-	- 1	Tin		100 25	- 1	-	╀
Culfita	ant.						ant				1
-Sulfite	sat	60	1	-	1	-stannic chloride	sat	60	1	1	1
		100 25	- 1	- 1	- 1			100 25	- 1	- 1	┞
Sulphur	a		2			-standous shlavida	ai				1
-Sulphur	dl	60 100		1	1	-stannous chloride	dl	60 100	1	1	1
		100 25	- 1	- 1	- 1		1	100	1 -	-	L
	cot	60	1	1	1						
	sat		-	-	-						
		100	-	-	-						

TABLE FOR COMPATIBILITY WITH CHEMICAL AGENTS 1 Resistant - 2 Partially Resistant - 3 NOT Resistant ***The above data are not binding***

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	PP
Toluene		25	3	2	2
	100	60	3	3	3
		100	-	-	3
Toluic Acid		25	2	-	-
	50	60	3	-	-
		100	-	-	-
Trichloride Antimony		25	1	1	1
	100	60	1	1	1
		100	-	-	-
Trichloroacetic Acid		25	1	1	1
	s50	60	3	2	1
		100	-	-	-
Trichloroethylene		25	3	2	3
	100	60	3	2	3
		100	-	-	-
Triethanolamine		25	2	1	1
	100	60	3	-	-
		100	-	-	-
Turpentine	1	25	2	2	3
	100	60	2	3	3
		100	-	_	-
Urea		25	1	1	1
	10	60	2	1	1
-water base solution	10			· ·	
Solution		100	-	-	-
	22	25	1	1	1
	33	60	2	1	1
		100	-	-	-
Uric Acid		25	1	-	-
	10	60	2	-	-
		100	-	-	-
Urine		25	3	1	1
	nd	60	2	1	1
		100	-	-	-
Vinyl Acetate		25	3	-	-
	nd	60	3	-	-
		100	-	-	-
Water		25	1	1	1
purified	100	60	1	1	1
-purified		100	-	-	1
		25	1	1	1
-sea water	100	60	1	1	1
		100	-	-	1
		25	1	1	1
-distilled	100	60	1	1	1
		100	-	-	1
		25	1	1	1
-rain water	100	60	1	1	1
		100	-	-	1
		25	1	1	1
-drinking water	100	60	1	1	1
anning match	100	100	-	-	1
		25	1	-	1
Water base solution	alto	60	2	-	-
soap	aitu	100	-	_	_
Whisky		25	- 1	-	- 1
isky				_	-
	comm	60 100	1		
Wina		100	-	-	-
Wine		25	1	1	1
	comm	60	1	-	1
	1	100	-	-	-
Vinegar		25	1	1	1
Vinegar	comm	25 60	1 2	1 1	1 1

CHEMICAL AGENTS	Conc. %	Temp. (°C)	PVC	PE	РР
Zinc		25	1	-	-
	all	60	1	-	-
-Cyanide		100	-	-	-
		25	1	1	1
-Chloride	dl	60	1	1	1
		100	-	-	-
		25	1	1	1
	sat	60	1	1	1
		100	-	-	2
		25	1	-	1
-Chromate	nd	60	1	-	1
		100	-	-	-
		25	1	-	1
-Nitrate	nd	60	1	-	1
		100	-	-	-
		25	1	1	1
-Sulfate	dl	60	1	1	1
		100	-	-	-
		25	1	1	1
	sat	60	1	1	1
		100	-	-	-

FAN DESCRIPTION

	Moves air with presence of corrosive gas/vapours that can be characterized by
AIM	corrosive concentrations.
	1 Aspiration
	Through the volute suction mouth the air is aspirated through a tube or directly from the environment in which it is installed.
WORK CYCLE	
	2 Expulsion
	The air can be directed into apposite pipes or into the outside air from the permanent mouth of the volute.
	1 Volute
	Plastic structure as described in the catologue, to direct the air with presence of gas/vapours moved by impeller.
	2 Impeller
	Rotor with vanes, is put into rotation by an electric motor.
	Balancing in according to ISO14694 – G6.3.
MAUNUFACTURE	3 Support structure
MAUNOFACTORE	Supports the parts which are used directly to convey air in the presence of gas/vapours.
	4 Motorization
	Mechanical system that gives the rotary mode to the impeller (in the model with suffix "T" there is a transmission belt-pulley).
OPERATIONS	Direct the air with presence of gas/vapours
OPERATIONS	The fan, as effect of the rotation of the impeller, creates a depression that
	aspirates the fluid into the volute and pushes it into the exit channel.

DESCRIPTION OF THE MOST COMMON ACCESSORIES

The fan has the following accessories that are available on request:

- Anti vibration coupling: absorb the vibrations that can be transmitted in the tubes of the aspiration system.
- Anti vibration supports: absorb the vibrations that can be transmitted to the support of the appliance.
- Butterfly valve: regulates the capacity of air in the tubes.
- Tubes: to connect the fan to the system.
- Condensation discharge: unloads the condensation that forms inside the volute.
- Curves and reductions: make up the junctions between the lengths of the pipes .

SAFETY DEVICES

The fan does not have active safety functions since it must be integrated in a system that controls feeding and control.

The buyer must therefore evaluate the risk of the appliance, on the whole, and adopt the necessary measures.

Uncovered moving parts (impeller) represent the main risk, which must be protected by protections in the areas of air entry and exit. These protections are usually represented by the air channels, in the installation phase.

ENVIRONMENTAL CONDITIONS ALLOWED

The fan can be installed in the work environment with a temperature between $-15C^{\circ}$ and $+70C^{\circ}$ and not exceeding 1000 metres above sea level (with the exception of particular agreements with the manufacturer)

WORK PLACE REQUIREMENTS

SUPPORT SURFACE:

Dimensioned so that it can support the weight as declared in the catalogue as well as loads that are already present and must be sufficiently stable to avoid possible falls.

NECESSARY CONNECTIONS: Electric Aeraulic



WARNING:

The products, object of this instructions manual, are not suitable for operation in explosive atmosphere (Atex). Explosive atmosphere is generated by inflammable gas (methane, hydrogen, petrol vapours, thinner, acetone, etc...)

For use in explosive atmosphere, the user must purchase from Venplast srl, fans that are certified CE ATEX with a category that conforms to the classified area in accordance to Legislative Decree 81/08.

TRANSPORT

TRANSPORT DATA

The fan must be transported inside a box or a pallet.

DANGERS

The fan must be handled as it has been delivered, it is heavy and has sharp and protruding parts which are dangerous and therefore the necessary individual items of protection must be used.

The equipment must be cleaned carefully before handling, in order to avoid debris from work processing falling inexpectably during lifting operations .

PRECAUTIONS TO BE ADOPTED



WARNING: take care at all times

WARNING: wear suitable accident prevention clothing.

WARNING: follow the procedures of this manual extremely carefully.



WARNING: make sure the lifting parts are adequately oversized for the weight needing lifting



Do not for any reason go near the equipment if it has not touched the ground and if the lifting measures are not active.

HOW TO TRANSPORT THE PACKAGING



WARNING: for safety reasons do not handle weights exceeding 25 kg by hand. If so carry out lifting operations together with other operators or use appropriate lifting devices.

- Lift the packaging and place it on the support surface inside the means of trasport.
- Transport to the place of installation.
- Unload the packaging from the means of transport and place it near the place of installation.

UNPACKAGING

- Place the packaging onto a stable surface
- Open the packaging
- Extract the fan

HOW TO TRANSPORT THE FAN

- Manual handling is allowed up to 25 kg
- Over 25 Kg more operators are required or use appropriate lifting measures.

INSTALLATION

HOW TO INSTALL THE FAN

PRECAUTIONS TO BE ADOPTED

WARNING: follow the procedures in this manual extremely carefully

WARNING: use suitable accident prevention clothing

WARNING: for anything regarding the electric part and for connection contact a qualified electrician



WARNING: before carring out connection to the electricity supply make sure it is impossible to access the impeller with ones limbs. If this is not so segregate the appliance using the protection grid and connect it to the return and aspiration tubes.

BEHAVIOUR TO BE ADOPTED

- 1. Transport and unpack as described beforehand
- 2. Use the fan itself to individuate the position of the fixing screws.
- 3. Make the slots.
- 4. Position the fan so that the slots of the support structure corrrespond with those of the surface of installation.
- 5. Fix the structure to the surface using pressure stoppers or bolts depending whether the surface of installation is of iron or of cement. If present, use the antivibration supports.
- 6. Connect the return and aspiration tubes.
- 7. Isolate the fan using appropriate fixed protections in order to make it inaccessible.
- 8. If present, apply the condensation discharge in the low part of the volute to allow the condensation to drain away. Make sure there is a system to collect this condensation.
- 9. Protect the fan using apposite grids/grates to avoid contact should the dangerous moving parts be accessible.
- 10.End of installation.

CONNECTION TO THE ELECTRICITY SUPPLY

Must be carried out when the fan has been positioned. A qualified electrician must follow the indications of the electrical technical documentation attached to the terminal box of the electric motor.

Carry out the electric connection to the earth.

The electric connection must be carried out in accordance to law CEI EN 6024-1

CALIBRATION

The fan does not require initial calibration.

MAINTENANCE

WARNING: Maintenance must be carried out only by specialized technical personnel, who know the machine and the risks connected to it.



WARNING: before carrying out maintenance attach signs "maintenance in progress" in well visible and various places.



WARNING: wear protective gloves suitable for contact with the nature of the fluid with possible presence of gas/corrosive/ harmful or toxic vapours and its deposits.

WARNING: wear accident prevention clothing as foreseen by the employer



WARNING: follow the indications in this manual.



WARNING: to see more clearly inside the volute use a portable auxiliary light with protection.

WARNING: before intervening on the fan make sure the electricity supply is cut off and that measures of prevention against undesired start up have been taken.



WARNING: The impeller presents an inertia, therefore after fan shut down it continues to rotate for some time depending on its size. Wait for complete shut down before access. Consider also the possibility that the impeller can start to rotate caused by the currents of air inside the pipes.

MAINTENANCE TABLE

INTERVENTION	PERIODICITY
Substitution of the electric motor bearings and of the transmission support, if present.	30.000 hours
Vibration check, anomalous noise , fixing the bolts, general integrity.	500 hours

REPARATIONS

TYPE OF SPECIALIZATION REQUIRED

Maintenance, reparation and cleaning operations must be carried out by skilled and qualified personnel who know the product. We recommend reparations be carried out only by the company of manufacture or by a company specialized in fans.

PREVENTIVE MEASURES

WARNING: before carrying out reparations on site attach signs "REPARATION IN PROGRESS" so that they are visible and in different places.



WARNING: wear accident prevention clothing.

FINDING BREAKAGES

The following table shows :

- The description of the problem that is the most probable symptom of malfunction;
- The possible cause or causes of damage;
- Suggested solutions;

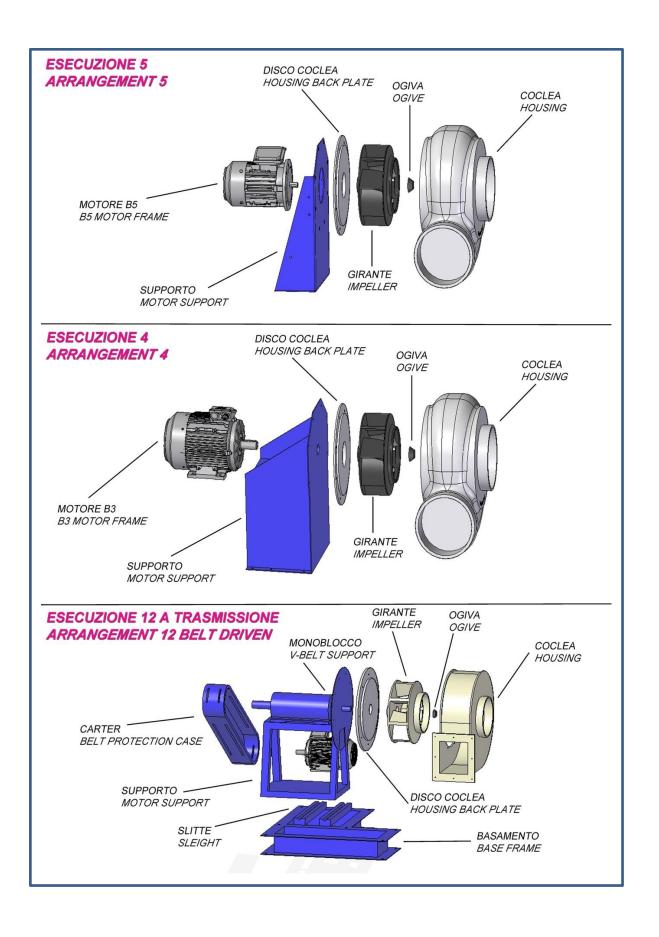
Finding breakages can be carried out by expert and qualified technical maintenance personnel, who know the machine and the risks connected to it.

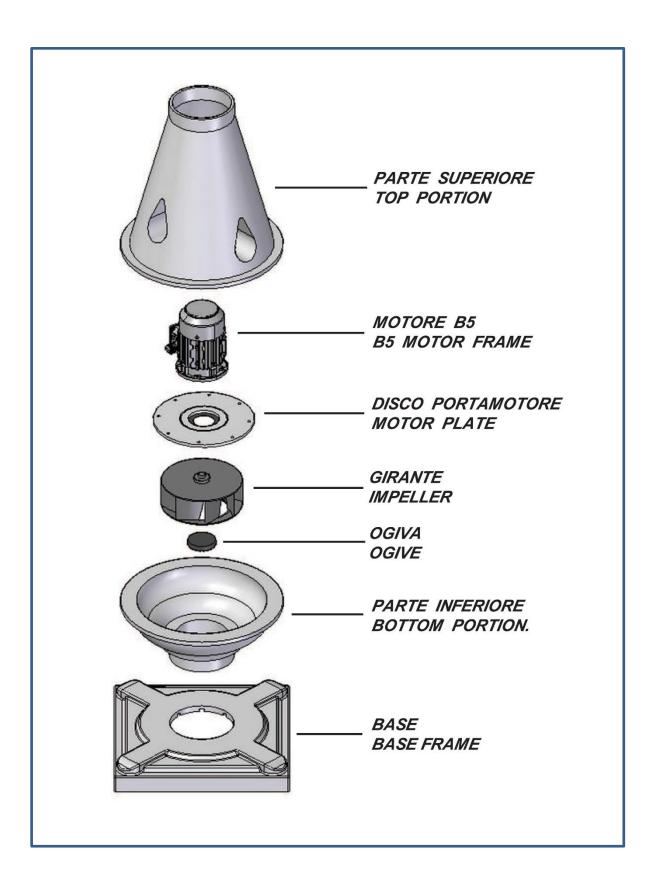
PROBLEM FOUND	CAUSE	SOLUTIONS
reduction of power at	aspiration points obstructed.	Clean tubes and hood, check position of the shutters Check connection of winding on motor terminal box Clean the impeller using the apposite door
Eccessive air capacity	Impeller obstructed Insufficient speed of rotation Speed of rotation	hatch when the appliance is shut down Check voltage and connect the clamps of the motor Check transmission, check that the belts do not slide Clean tubes and hood, check position of the shutters. Check direction of rotation; check conditions of turbulence at aspiration; check speed of motor rotation, voltage, defects in winding
		Check the system and substitute the faulty components
Insufficient pressure	Speed of rotation too low	Clean tubes and hood, check position of the shutters
	inverted	Check electric connection
	Impeller partially blocked and/or damaged	Check position of assembly and condition of the impeller
performance after a	Leakage in volute casings and/or leakage in the aspiration tubes	Substitute the gaskets and verify the condition of channeling
Start up difficult	Excessive power absorption	Check direction of rotation; check the conditions of turbulence at aspiration; check rotation speed of the motor, voltage, winding defects
	Reduced voltage	Check the data on the motor plate

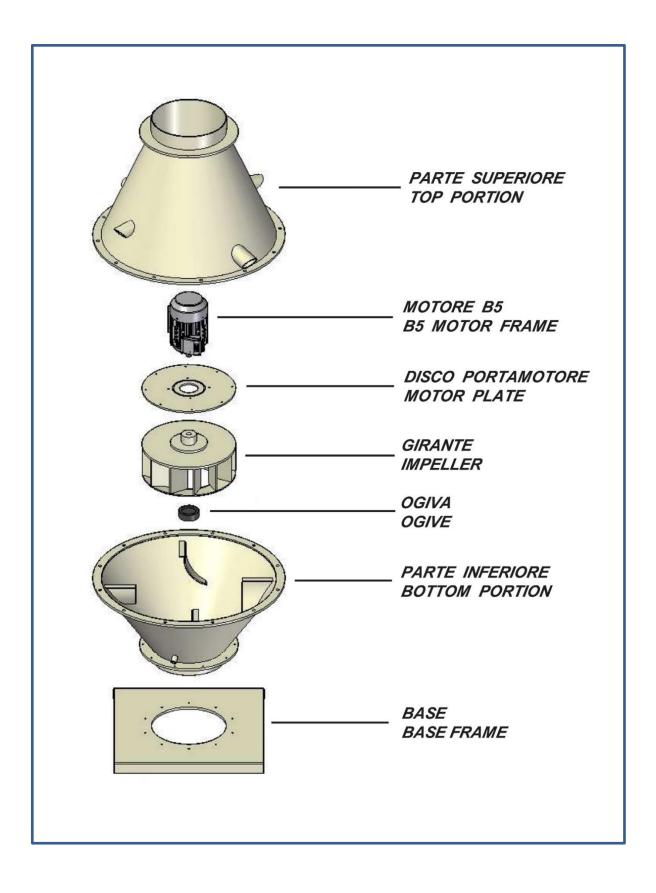
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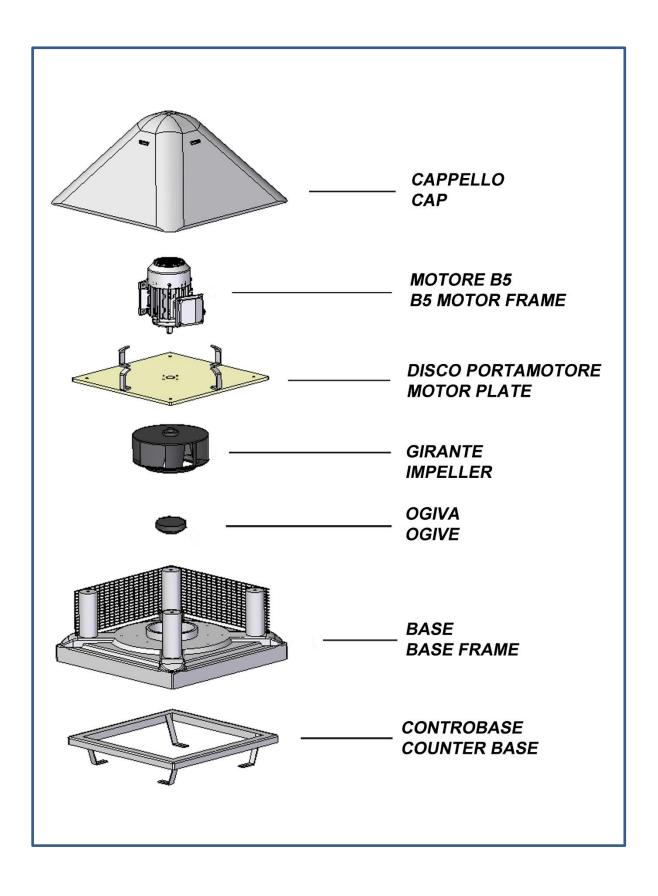
PROBLEM FOUND	CAUSE	SOLUTIONS
Excessive noise	Elevated number of rotations to obtain the required performance	
	Break down of the bearings	Check bearing wear (in particular for the airtight ones)
	Incorrect impeller balancing or impeller scraping on the volute	Check balancing of the impeller
Vibrations	Unbalance of the rotating parts	Check impeller balancing again
	Support structure not suitable	Add weights to the structure to make it more stable

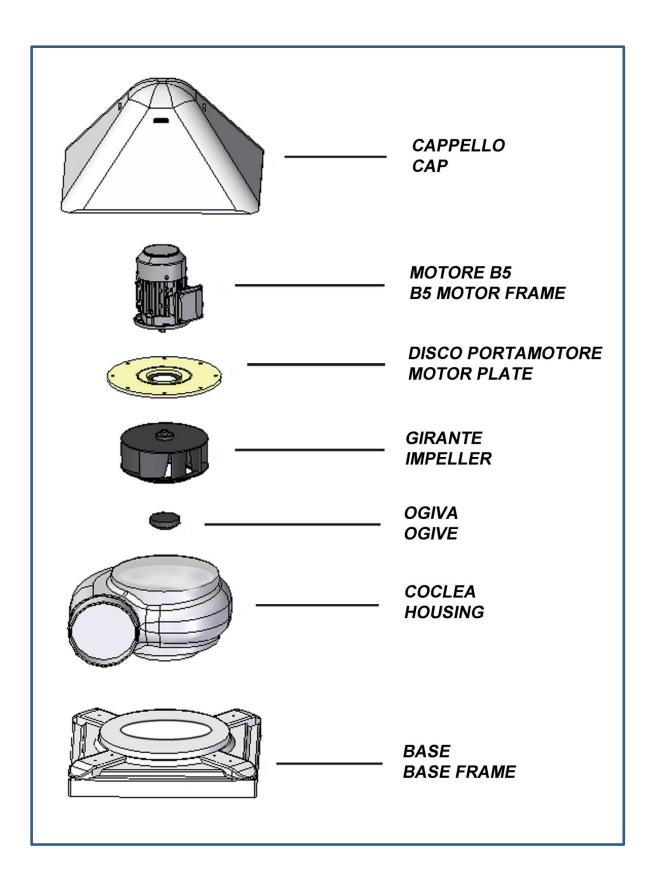
SPARE PARTS TABLE











CLEANING

TYPE OF SPECIALIZATION REQUIRED

Specialized worker with experience of machines and trained regarding accident prevention measures.

SITUATIONS OF DANGER

These are possible only on failure to follow the manual instructions and use the adequate individual items of protection described in this manual.

PREVENTIVE MEASURES

Cut off the electricity supply and carry out the protection measures against undesired start up.

Discharge the condensation inside the volute making it flow away.

Adopt the safety measures for the type of fluid conveyed from the fan (acids, bases, toxic, harmful, corrosive, etc...)

RECOMMENDED PRODUCTS

Use only and exclusively compressed air if the appliance is used to convey air with presence of gas/vapours without particles in suspension.

Should the appliance take in vapours of particular chemical substances, refer to the safety file of the substance itself, to individuate the most suitable product for cleaning.

BEHAVIOUR TO BE ADOPTED

- 1. Stop the appliance by cutting off the electricity supply.
- 2. Gain access to the internal part of the volute by disassembling it as described in the relative chapter
- 3. Clean the internal parts of the volute and of the impeller using compressed air or specific products necessary for air with presence of gas/vapours.
- 4. Assemble the volute as described in the relative chapter

DISMANTLING

SITUATIONS OF DANGER

Connected to the fact that some of the parts of the appliance are heavy.

PARTS, ELEMENTS, SUBSTANCES THAT REQUIRE PARTICULAR PROCEDURES

No part of the appliance must be disposed of in the environment.

Every part, component or group of components must be grouped in accordance to the type of material.

For the modality to be followed and the means adopted follow the prescriptions of the law in force at the date of dismantling.

Adopt the safety measures in accordance to the type of fluid conveyed by the fan (acids, bases, toxic, harmful, corrosive, etc...)

TERMINOLOGY

ASSEMBLY: (also to associate to assembly and disassemby)

Indispensable notions for installation, maintenance, reparations and possible transportation and dismantling.

INSTALLATION: (also to associate to activation)

Information on how to arrange the machine in accordance to the operation and maintenance requirements etc in conditions of safety. Both for the purposes of machine needs and for the situations on the site of destination.

CALIBRATION: (to associate also to checks and tuning)

Operations and indications relative to correct management of the regulations of the appliance and of the method of verification.

USE: (to associate also to activation)

All the necessary information for conduction distinguishing all the possible conditions of operation: manual, automatic, stand by, emergency, start up, stop etc. including the indications for first start up.

MAINTENANCE:

Normal verifications and restoration of the conditions of optimal operation, especially referred to situations of predictable consumption and/or wear. Must be carried out periodically.

REPARATION:

Interventions to restore the conditions of optimal operation, after a breakage. Where applicable the precautions needed for critical situations must be indicated.

FAN ASSEMBLY AND DISASSEMBLY

LEVEL OF SPECIALIZATION REQUIRED

The operations described in this chapter are mentioned again in different parts of the manual. The specialization is already specified at the beginning of the chapter.

PRECAUTIONS TO BE ADOPTED



WARNING: follow the indications in this manual.

WARNING: wear the appropriate accident prevention clothing.

BEHAVIOUR TO BE ADOPTED

DISASSEMBLY

- 1. Stop the appliance by cutting off the electricity supply.
- 2. Remove the aspiration and return tube from the appliance.
- 3. Unscrew the bolts that fix the volute to the support structure
- 4. Unscrew the anchor screw of the impeller on the electric motor shaft.
- 5. Extract the impeller
- 6. Unscrew the bolts that fix the electric motor.
- 7. End of disassembly.

ASSEMBLY

- 1. Screw the anchor screws that fix the electric motor.
- 2. Assemble the impeller on the motor shaft.
- 3. Screw the anchor screws of the impeller on the shaft of the electric motor.
- 4. Screw the anchor screws that fix the volute to the support structure.
- 5. Restore the return and aspiration tube from the appliance.
- 6. End of assembly.

OUT OF USE

LEVEL OF SPECIALIZATION REQUIRED

Specialization refers to any person who is 18 years of age or older, who is intelligent and has a normal physic, who has a copy of this chapter and whose employer can guarantee his specific training.

PRECAUTIONS TO BE ADOPTED



WARNING: follow the indications in this chapter

WARNING: wear the appropriate accident prevention clothing .

BEHAVIOUR TO BE ADOPTED

- 1. Stop the appliance.
- 2. Cut off the electricity supply
- 3. Disconnect the electric cables of the motor.
- 4. Spread a slight layer of oil on the metal parts to prevent oxidation.
- 5. Cover the appliance with a nylon covering.

GENERAL SALES CONDITIONS

1. Acceptance of client orders These sales conditions, with the exception of other written agreement, regulate all the present and future sales contracts between parties. Orders are subject to these sales conditions with the exception of derogations made under written form. Written sales conditions from the client in no way bind VENPLAST SRL and are to be considered invalid by these General Sales Conditions. Orders can not be cancelled or modified without agreement with VENPLAST SRL. In any case cancellations of non standard product orders or orders of products not in stock will not be accepted

2. Prices prices are in Euro, VAT, packaging and transport is not included.

3. Terms and conditions of payment Payment must be carried out exclusively at the VENPLAST SRL headquarters, unless otherwise specified in a written agreement , with legal currency and in accordance to the terms made. Should the client fail to abide to the terms and conditions of payment, VENPLAST SRL can:- request immediate payment of all the credits as a result of expiry of the terms;- suspend supplies in progress or complete them only on receipt of anticipated payment;- withdraw any other contract made with the client and interrupt negotiations in progress;- terminate the contract as in accordance with art.1456 c.c. and claim for damages as a result of client non-fulfilment.

4. **Ritention of title** Should the terms of payment be after delivery of the goods, the material remains property of VENPLAST SRL until payment of the goods has been carried out, pursuant to and in accordance with Article1523 c.c.

5. **Delivery – Costs of transport – Passage of risk** Date of delivery is approximate and not binding. In case of substantial modifications delivery starts form the date of modification itself. No penalty can be applied to VENPLAST SRL for delay of delivery, unless prevision of the fine has been expressely accepted under written form by VENPLAST SRL. All material, unless otherwise specified in a written agreement, are delivered ex warehouse VENPLAST SRL. All possible costs of transport and/or delivery are at the expense of the client. Delivery of the material to the client or to the transporter (in accordance to art. 1523 c.c.) determine the passage of risk at the expense of the client. If the client fails to withdraw the product in the terms agreed or does not supply adequate delivery instructions to VENPLAST SRL, withstanding the passage of risk to the client, VENPLAST SRL has the right to ask the client to reimburse all expenses sustained to preserve the material , and in any case, will carry out delivery in an assigned port without obligation of special warning.

6. Complaints and cancellations or partial or total modifications Complaints relative to quantity, faults and defects of quality or non conformity must be made in written form, under penalty of expiration, within and not exceeding 8 days from the date of receipt of the goods with detailed description of the defects or of the fault contested. VENPLAST SRL does not accept any cost regarding modifications and/or reparations carried out for VENPLAST SRL itself if not expressely agreed beforehand. Should the complaint be unfounded, the buyer must reimburse VENPLAST SRL all the expenses sustained for the verification. In case of damage to the products during trasportation, complaints must be made directly to the company of delivery. Complaints or disputes do not give the buyer the right to suspend payment of invoices relative to faulty material.

7. Returns Return of material will not be accepted unless authorized by VENPLAST SRL and must be made ex warehouse VENPLAST SRL. For return of material under warranty, any product returned but in reality not covered itself will be returned without any intervention to the client or with authorized intervention even over the phone by client will be charged in the invoice and however with cost of trasportation at the expense of the client. In any case VENPLAST SRL will not accept credit notes for a special product, not in stock, obsolete or non marketable.

8. Force majeure

In cases of force majeure supply of material will be suspended until the problem has been solved, subject to the right of VENPLAST SRL, at its own discretion, to cancel it.

9. Warranty VENPLAST SRL guarantees its products for a period of 12 (twelve) months from the date of purchase. This warranty regards only reparations and free substitution of those parts that, after careful examination by VENPLAST SRL, result to be faulty (electric parts are excluded). The warranty excludes any responsibility for direct or indirect damage and it is limited only to defects of material and no longer has effect should the parts returned result as having been disassembled, tampered or repaired outside VENPLAST SRL. Damage caused by negligence, bad or improper use of the machine or incorrect manoeuvres of the operator are excluded from the warranty. Removal of the safey devices, where present, will automatically make the warranty invalid and annul VENPLAST s.r.l. warranty and responsibility. In addition the warranty is no longer valid should non original spare parts be used. Equipment returned, even if under warranty, must be delivered free port.

10. Appliable law – Jurisdiction – Place of jurisdiction Contracts made with VENPLAST SRL are in accordance to the Italian law. For everything not foreseen in this contract the laws of the civil code regarding the sales of movable property are applied as far as possible. For any dispute which should occur regarding interpretation , fulfiment, non-fulfilment, execution or resolution of contracts made with VENPLAST SRL and any other question connected to these will be subject to Italian jurisdiction and the place of jurisdiction will be exclusively the one in Verona.