

Design: F. Trabucco & Associates







# VORT QUADRO I RANGE

### Centrifugal duct fans for flush mounting

2-3 speed centrifugal duct fans for recessed installation in correspondence with walls and ceilings, designed for ventilation of residential and commercial premises whose layout requires ducting of the exhaust. The elegant front panel which hides the hole behind it reduces the aesthetic impact of the installed product.

#### Key features

- Closed front panel that confers a modern image to the product and facilitates its cleaning.
- Possibility of rear or side ducting.
- Possibility of connection to a second duct for additional ventilation of an adjacent room.
- 2 or 3 speed fan motors for an ideal compromise between performance, consumption and sound emissions
- High protection from water, suitable for use in Zone 1 bathroom installations and in the presence of high relative humidity.
- Non-return valves to prevent unwanted inflows of cold air and bad odours when the appliance is switched off.

#### Version

6 models, different in size, performance and supply, also available in versions with timer and relative humidity sensor.

#### **Technical features**

- White, shock-proof, plastic resin (ABS) casings prevent ageing caused by exposure to sunlight ("UV resistant").
- Recessed boxes in black plastic resin (PP), loaded to give suitable resistance to the parts to be walled, rear exhaust, pre-set for side exhaust.
- 3-speed fan motors, obtained from the combination of:
  - Heat protected motors with shafts mounted on ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature. Speed adjustment using VORTICE accessory devices.
  - Forward-curved centrifugal impellers moulded in plastic resin, resistant to aggressive agents.
- Dishwasher-safe air filters in PU.
- Non-return valves integrated on the exhaust ducts to prevent unwanted inflows of air and bad odours when the appliance is switched off.
- T models equipped with electronic timer for automatic product switch-off after a pre-fixed period of time, which can be set in the installation phase, from 3'-20' (default setting 3').
- T-HCS models equipped with circuit board with relative humidity sensor (RH), adjustable to 4 predefined threshold levels (60%, 70%, 80%, 90 %), alternatively can be set during installation, which determines automatic fan activation. The board integrates an electronic timer for automatic shut-down of the product after return to a RH below the pre-set threshold. The duration of the timer can be set at installation within the interval 3'-20' (default setting 3').
- Performance and safety certified by third party body (IMQ)
- Class of electric isolation: II 🔲 (earthing not required).



# **RANGE**

	BASIC	TIMER	TIMER HCS		
MICRO 100 I	<b>12017</b> MICRO 100 I	<b>12018</b> MICRO 100 I T	<b>12065</b> MICRO 100 I T HCS		
MEDIO I	12020 MEDIO I	<b>12021</b> MEDIO I T	12066 MEDIO I T HCS		
SUPER I	<b>12023</b> SUPER I	<b>12024</b> SUPER I T	<b>12067</b> SUPER I T HCS		







# TECHNICAL DATA

MODELS	V~50HZ	W	Α	RPM	MAX AIRFLOW		MAX PRESSURE		Lp dB(A)	MAX	KG
		min/max	min/max	min/max	m³/h min/max	l/s min/max	mmH <sub>2</sub> O min/max	Pa min/max	3m min/max	<u> </u>	
MICRO 100 I	220-240	20 27	0,10 0,12	1010 1450	75 100	21 28	20 22	196 218	26,3 34,3	50	1,91
MEDIO I	220-240	25 29	0,14 0,18	1150 1890	70 122	19 34	21 34	206 331	35,9 41,2	50	2,8
SUPER I	220-240	50 115	0,36 0,50	1280 2190	140 285	38 79	20 48	196 476	33,6 46,7	50	4,27



### VORT QUADRO I RANGE | TECHNICAL DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	MICRO 100 I	MEDIO I
Supplier's name or trade mark	-	VORTICE	VORTICE
Specific Energy Consumption class SEC in average climate zone	-	NA	NA
Specific Energy Consumption class SEC average		-15,0	-14
Specific Energy Consumption class SEC cold	kWh/m² year	-1,7	-1
Specific Energy Consumption class SEC warm		6,0	7
Declared typology	-	RVU-U*	RVU-U*
Type of drive	-	NA	MSD
Type of heat recovery system HRS	-	none	none
Thermal efficiency of heat recovery at reference air flow	%	NA	NA
Maximum flow rate	m³/h	100	106
Electric power input of the fan drive, including any motor control equipment, at maximum flow rate		27,0	29,6
Sound power level LWA	LWA [DB(A)]	54	62
Reference flow rate	m³/s	0,0194	0.02944
Reference pressure difference	Pa	95	196
SPI	W/(m³/h)	0.35714	0.384
Control factor CTRL	-	1	1
Control typology	-	manual	manual
Maximum internal leakage rates	%	NA	NA
Maximum external leakage rates	%	NA	NA
Mixing rate	-	NA	NA
Position and description of visual filter warning	-	NA	NA
Airflow sensitivity to pressure variations at + 20 Pa and – 20 Pa	-	NA	0,06
Indoor/outdoor air tightness	m³/h	NA	NA
Annual electricity consumption (AEC)	kWh electricity/year	492	529
AHS average Annual heating saved		1397	1397
AHS cold Annual heating saved	kWh primary energy/year	2732	2732
AHS warm Annual heating saved		632	632

<sup>\*</sup> RVU-U: Unit Ventilation Residential - Unidirectional - \*\*NRVU-U: Unit Ventilation Non Residential - Unidirectional - \*\*\*MSD: Multi-Speed Drive - NA: Not applicable

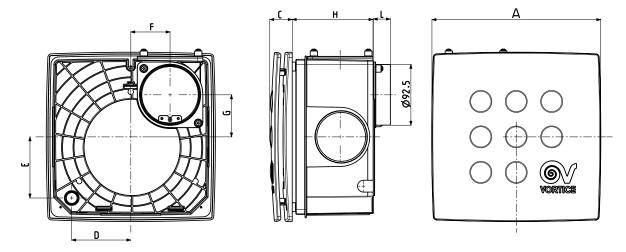
#### VORT QUADRO I AC RANGE | TECHNICAL DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	SUPER I
Supplier's name or trade mark	-	VORTICE
Declared typology	-	NRVU-U**
Type of dive		VSD***
Type of heat recovery system HRS	-	None
Thermal efficiency of heat recovery	-	NA
Nominal NRVU flow rate	m³/s	0,05833
Effective electric power input	kW	0,095
SFPint	W/(m³/h)	NA
Face velocity at desogn flow rate	m/s	7,894
Nominal external pressure (Δps,int)	Pa	205
Internal pressure drop of ventilation components (Δps,int)	Pa	245
Internal pressure drop of non-ventilation componenets (Δps,int)	Pa	0
Static efficiency of fans used in accordance with Regulation (EU) N. 3272011	%	27,6
Declared maximum internal leakage rate of the casing of ventilation units	%	NA
Declared maximum external leakage rate of the casing of ventilation units	%	NA
Energy performance energy or classification of the filters	-	NA
Description of visual filter warning	%	NA
Casing sound power level (LWA)	dB(A)	67

<sup>\*</sup> RVU-U: Unit Ventilation Residential - Unidirectional - \*\*NRVU-U: Unit Ventilation Non Residential - Unidirectional - \*\*\*VSD: Variable-Speed Drive

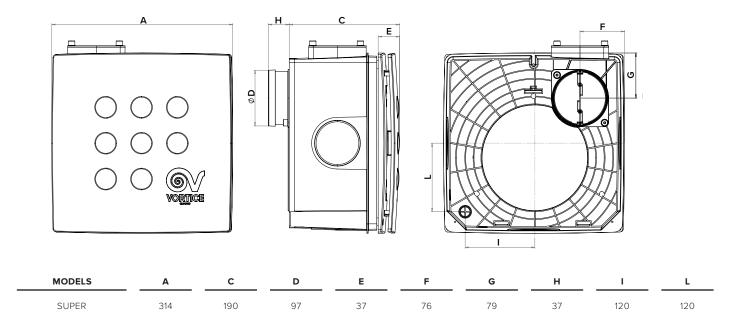


# **DIMENSIONS**



MODELS	A	c	D	E	F	G	н	L
MICRO 100 I	258	34	92	90	64	60	118	26
MICRO 100 I ES	258	34	92	90	64	60	118	26
MEDIO I	287	37	97	103	72	69	130	26

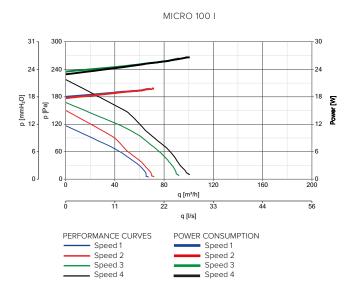
Dimensions (mm)

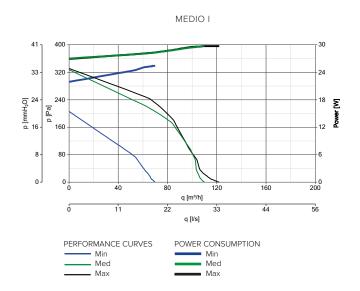


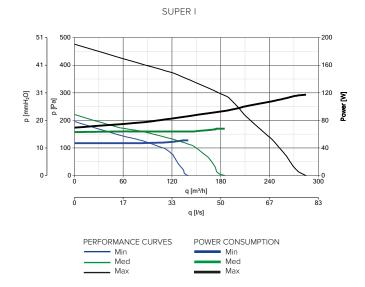
Dimensions (mm)



### **PERFORMANCE CURVES**









# CONTROLLER

MODELS	DESCRIPTION	CODE	PRODUCT	
	C 1.5 - RElectronic speed controller 1.5 A	12966	ALL PRODUCTS	
	SCNRB - Electronic speed controller built-in	12971	ALL PRODUCTS	
111	SCB KIT - Bult-in controller adaptor for C 1.5	22481	12966	
ICI	TRIO-S - Bult-in controller adaptor for C 1.5	12871	12023 - 12024 -12067	

# **ACCESSORIES ON REQUEST**

MODELS	DESCRIPTION		CODE	PRODUCT	
	AIR DEFLECTOR	100/4	22310	ALL PRODUCTS	
^		MICRO 100 I	22491	12017 - 12018 - 12065	-
CEILING KIT	CEILING KIT	MEDIO I	22492	12020 - 12021 - 12066	
		SUPER I	22493	12023 - 12024 - 12067	-

# **APPLICATIONS**



