

# **DUCTO**ducted fan coil with costant air flow



Variable speed, constant air flow





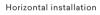
# DUCTO, the smart fancoil

DUCTO is the new INNOVA ducted fan coil.

A very high efficiency product that automatically adjusts the fan speed to ensure a constant air flow and consequently constant comfort over time.

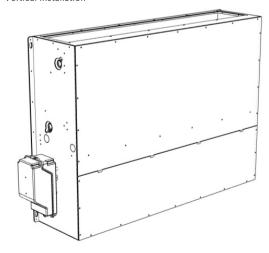
DUCTO fits perfectly into any wall or false ceiling. The extreme quiet operatin makes it the ideal model for any type of home.

# A single product, two installations





Vertical installation





Configurations 0-10 V or modulated air flow control



Sizes



Cooling Capacity (kW)



Available Static Pressure
(Pa)





# **EASY INSTALLATION**

# **NOISELESS**

Costant air flow thanks to the autoadaptive fan speed to the ducts lenght

The continuous modulating fan is progressively reducing the speed whilst reaching the set point, so to guarantee the perfect silence of operation.





# MODULATED AIR FLOW

# **ETHERNET / BMS**

Whilst standard "on off" products alternate silly airflows to complete stops, with DUCTO the airflow is at the same time effective and imperceptible.

DUCTO can be integrated with the most complex and modern systems of remote management, thanks to its electronic boards that can be easily integrated with the most diffused building management systems.





# **DC INVERTER**

# **CONTROLS**

Thanks to this newest technology, DUCTO has extremely low electrical consumption and perfect stability of functioning.

Smartouch controls at the highest level both for design and functions, in a wide range of varieties and versions.





# **INSTALLATION**

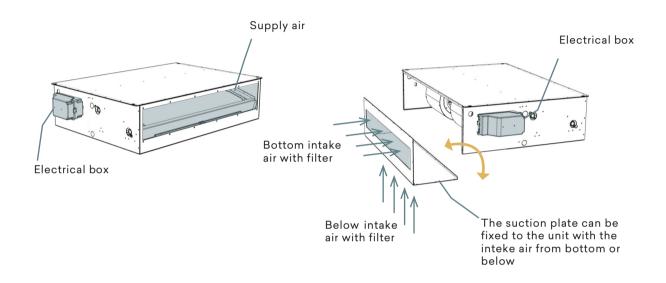
# **TWO VERSIONS**

DUCTO can be installed either horizontally in the false ceiling or vertically built in the wall. Two effective solutions suitable for any home.

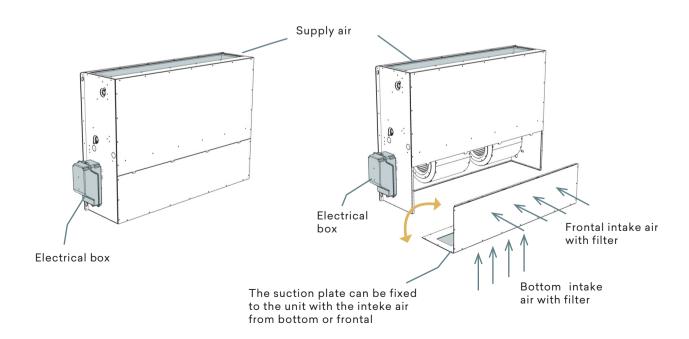
There are two control versions of DUCTO: Pi logic and modulating speed with WiFi or Modbus thermostat, speed control 0-10 V.

# A single product suitable for any installation.

# HORIZONTAL INSTALLATION



# **VERTICAL INSTALLATION**





# **FANS**

The unit is equipped with single motor centrifugal fans for each impeller. Low consumption DC inverter motor and integrated control that guarantees a constant flow rate.



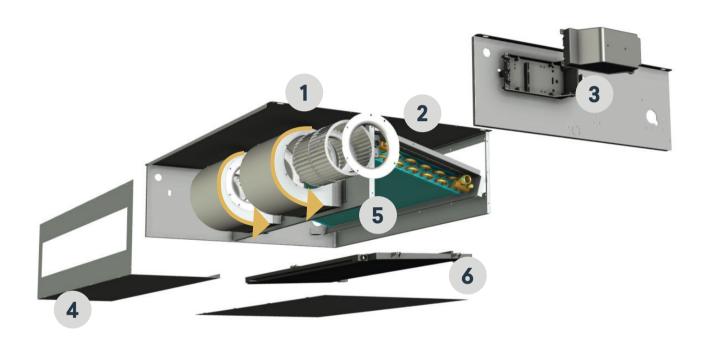
# **HEAT EXCHANGER**

Cupper aluminium Water to air heat exchanger with hydrophilic treatment fins.



# **ELECTRICAL BOX**

Electrical box excluded from the air flow, with electronic main board control.





# **REVERSIBILE SUCTION PLATE WITH AIR FILTER**

The suction plate can be fixed to the unit with the inteke air from bottom or below Filtration class ISO Coarse 80%



# **VERTICAL CONDENSATE TRAY**

Allows the collection of condensate if the unit is installed vertically.



# **HORIZONTAL CONDENSATE TRAY**

Allows the collection of condensate if the unit is installed horizontally.

# Controls

# On board electronic control with PID full modulating fan connected to EDA649-EDB649-EWG649-EWW649 wall mounted panel



- · automatic modulating fan speed
- manual fan speed
- proportional-integral logic
- inlet water temperature control
- 2 or 3 way oin/off valve control
- dry contact enabling heating generator
- dry contact enabling cooling generator
- management of the underfloor heating system

## SMART TOUCH wall controller with integrated ModBus serial port

## SMART TOUCH wall controller with integrated WiFi









white color cod: **EDB649II** 



black color cod: **EWG649II** 



Wi Fi

white color cod: **EWW649II** 

- The Smart touch wall controller can be manage up to 31 units
- There is a programmable digital input for window contact or remote summer / winter change



# For connection with 0-10 V fan speed control





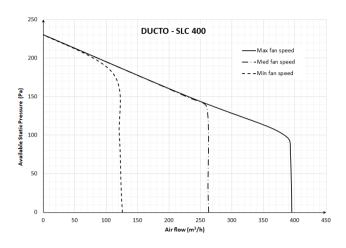
- thermoregulation and control are managed by an external device (not supplied)
- the fan speed is managed proportionally through the 0-10V signal

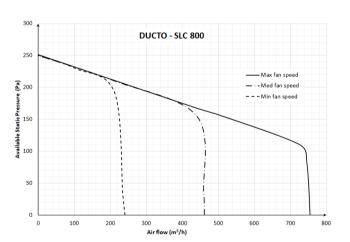
Thermostat with 0-10 V output

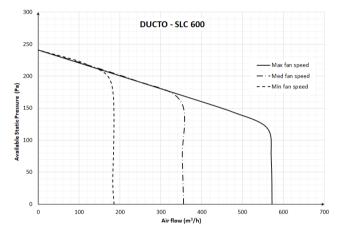
KONNEX thermostat + actuator

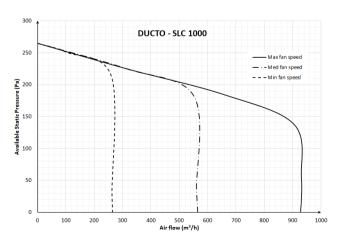
Home automation control or BMS (Building Management System)

# Fan performances











# **TECHNICAL DATA**

		SLC					
Sizes	u.m.	400	600	800	1000		
COOLING PERFORMANCES (A 27 °C; W 7 °C)							
Total cooling capacity (1)	kW	1,91	3,01	3,49	4,40		
Sensible cooling capacity (1)	kW	1,42	2,20	2,83	3,60		
Water flow (1)	L/h	330	520	605	760		
Water pressure drop (1)	kPa	4,0	11,0	21,0	14,0		
		-,-	.,,2	,-	1,1,2		
HEATING PERFORMANCES (A 20 °C; W 45 °C)							
Heating capacity (2)	kW	2,30	3,20	3,90	5,30		
Water flow (2)	L/h	392	555	673	910		
Water pressure drop (2)	kPa	7,5	11,4	22,3	16,0		
HEATING PERFORMANCES (A 20 °C; W 35 °C)							
Heating capacity (3)	kW	0,96	1,89	2,61	3,21		
Water flow (3)	L/h	166	328	453	556		
Water pressure drop (3)	kPa	2,7	4,5	10,0	7,0		
HYDRAULIC DATA							
Coil water content	L	0,8	1,13	1,46	1,46		
Maximum operating pressure	bar	10	10	10	10		
Water connections	"EK	3/4	3/4	3/4	3/4		
AERAULIC DATA							
Air flow at the maximum fan speed (4)	m³/h	390	560	730	905		
Air flow at the medium fan speed (4)	m³/h	260	350	440	550		
Air flow at the minimum fan speed (4)	m³/h	120	180	240	260		
Static pressure available	Pa	90	130	110	140		
ELECTRICAL DATA	\// \	000##50	000 4 15 2	000 4/50	- 000 11 15-		
Power supply	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50		
Power input at the maximum fan speed	W	75	95	170	230		
Current absorbed at the maximum allowed conditions	A	0,6	0,8	1,2	1,8		
Electrical power absorption at minimum speed	W	22	38	45	45		
DATI SONORI							
Sound power level at maximum air flow	dB(A)	55	59	61	63		
Sound pressure level at maximum air flow (4)	dB(A)	43	46	48	49		
Sound pressure level at medium air flow (4)	dB(A)	37	39	41	43		
Sound pressure level at minimum air flow (4)	dB(A)	30	31	34	37		
DIMENSIONS							
Larghezza	mm	590	790	990	1190		
Altezza	mm	240	240	240	240		
Profondità	mm	690	690	690	690		
Peso	kg	32	42	46	46		

<sup>(1)</sup> Water temperature 7/12 ° C, air temperature 27 ° C DB and 19 ° C WB according to EN 1397 (2) Water temperature 45/40 ° C, air temperature 20 ° C DB and 15 ° C WB according to EN 1397 (3) Water temperature 45/40 ° C, air temperature 20 ° C DB and 15 ° C WB according to EN 1397 (4) Air flow rate measured with clean filters (5) Sound pressure measured at a distance of 1 meter according to ISO7779

# Accessories

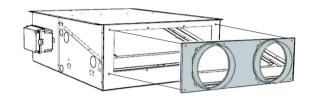
# Supply air plate

# Description

Supply air outlet plate with circular connections DN160 mm. The number of circular connections depends of the fan coil size, from 2 connections for size 400 to 6 for size 1000.

### Codes

GR1100II plate with 2 connections DN160 for SLC 400 plate with 3 connections DN160 for SLC 600 plate with 4 connections DN160 for SLC 800 plate with 6 connections DN160 for SLC 1000



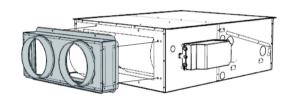
# Intake air plate

# Description

Intake air plate with circular connections DN160 mm. The number of circular connections depends of the fan coil size, from 2 connections for size 400 to 6 for size 1000.

### Codes

GR1104II plate with 2 connections DN160 for SLC 400 plate with 3 connections DN160 for SLC 600 plate with 4 connections DN160 for SLC 800 plate with 4 connections DN160 for SLC 1000



# Hydraulic kit

### Description

2 way valve group (water inlet valve, shut off valve and electro thermal motor)

### Code

V20718II 2 way valve group

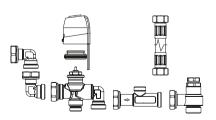


### **Description**

3 way valve group (with inlet 3 way valve, shut off valve, and electro thermal motor

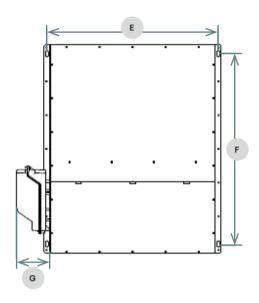
### Code

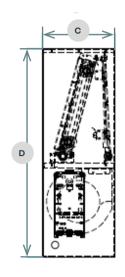
V30717II 3 way valve group

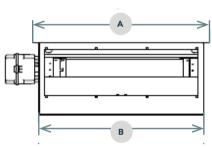


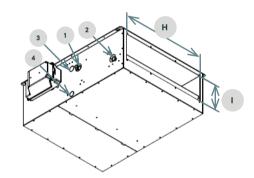


# Dimensional

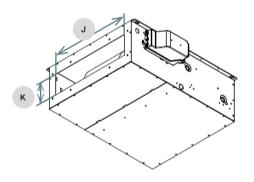








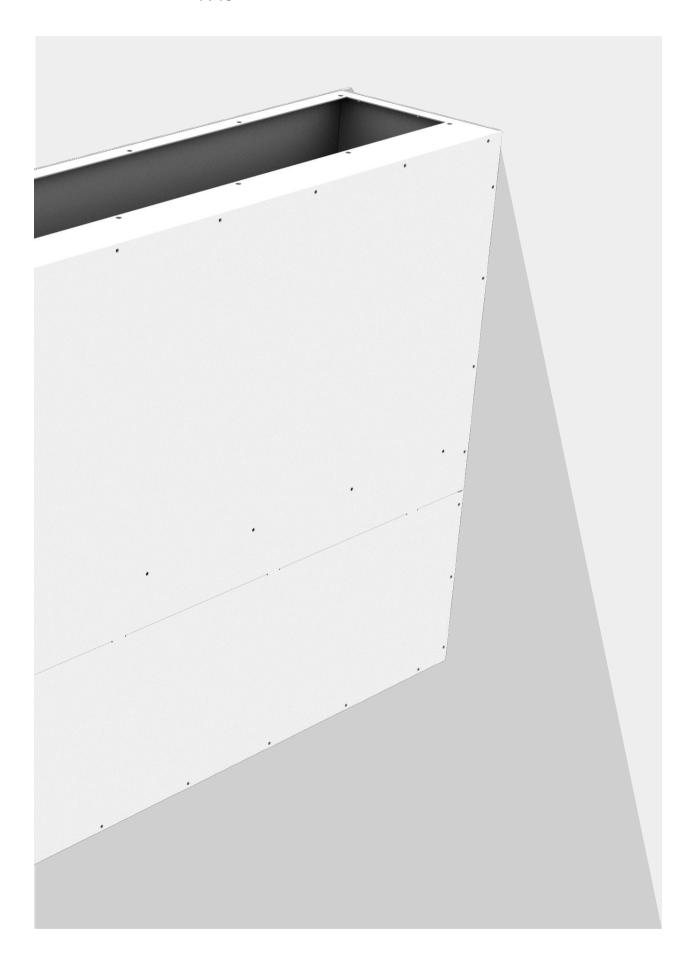
		400	600	800	1000
Α	mm	590	790	990	1190
В	mm	550	750	950	1150
С	mm	240	240	240	240
D	mm	695	695	695	695
E	mm	570	770	970	1170
F	mm	637	637	637	637
G	mm	110	110	110	110
Н	mm	510	710	910	1110
I	mm	150	150	150	150
J	mm	460	660	860	1060
K	mm	120	120	120	120
Weight	ka	32	42	46	46



		400	600	800	1000
1 - Water inlet	"EK	3/4			
2 - Water outlet	"EK	3/4			
3 - Vertical inst. condensate connection	mm	18			
4 - Horizontal inst. condensate connection	mm		2	0	



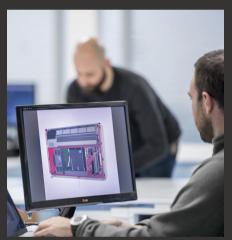








With our hands we turn dreams into reality.





<sup>&</sup>lt;sup>®</sup> All rights reserved -No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of INNOVA





Innova s.r.l. Via 1º Maggio, 8 38089 Storo (Tn) Tel. +39 0465 670104 Fax: +39 0465 674965 info@innovaenergie.com

www.innovaenergie.com Edition 2020