



## **EMSS - EMSD**

Flow variator for VAV systems

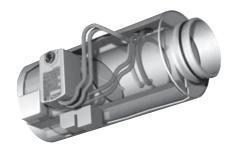
Product	EMSS	EMSD
Insulation	No	Yes
Construction material	Steel	Steel
Finishing	Galvanized	Galvanized

#### Flow variator EMSS - EMSD

Terminal device for demand controlled ventilation and control of the air flow in the supply air and/or the exhaust air system. The flow variator has a system for air flow mesaurement and a control damper which permits the connection of different types of control equipment to provide pressure independent air flow control within desired limits. All control equipment is installed on the apparatus casing.

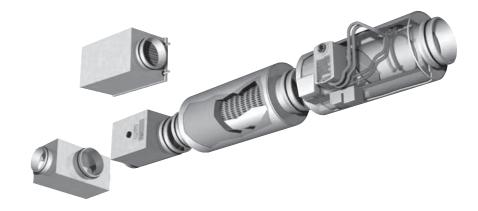
Manual mesaurement of the air flow can be performed without disturbing the control circuit via a separate pressure outlet on the orifice plate of the flow variator.

All duct connections have spigot dimensions and are equipped with sealing rings made of rubber.



The control damper is made of galvanized sheet steel or alternatively acid resistant steel and with a sealing strip of EPDM rubber. Its shaft is mounted in maintenance free nylon bearings.

A sound attenuator, reheaters with electric or water coil and an multi outlet box with four air outlets are supplied as accessories. EMSD is insulated with mineral wool of at least 40 mm thickness and with a density of at least 30 kg/m<sup>3</sup>.



# Electric reheater EMOZ -16

Electrical heating elements are installed in the air duct. Two over heating cut out switches, one with automatic (60°C) and one with manual (120 °C) resetting, interrupt the power supply to the heating elements if the risk of over heating, is present. Heaters are provided for single-phase, two-phase and three-phase current and in a number of power variants.



# Water reheater EMOZ -17

The water coil consists of copper tubes and aluminium fins. The maximum working presure is 1.0 MPa and the maximum water temperature is 100 °C. The coil is pressure tested at 2.1 MPa.



Sound attenuator, of which the internal surface is protected from fibre transference with fabric woven from staple fibres and perforated sheet metal.



# Multi outlet box EMOZ -14

The multi outlet box is not insulated internally and has four air outlets. All duct connections are equipped with sealing rings made of rubber.





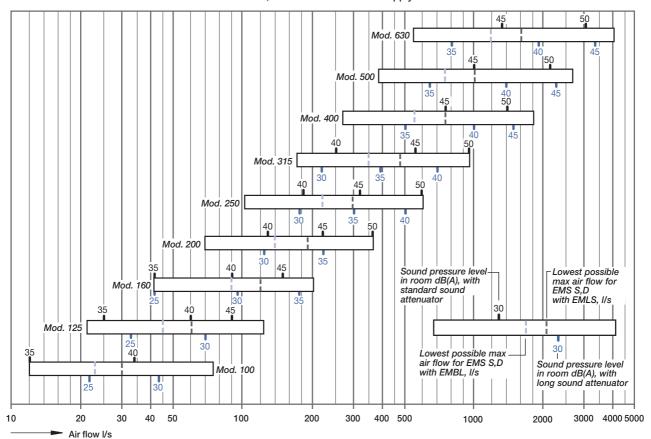


### **EMSS EMSD**

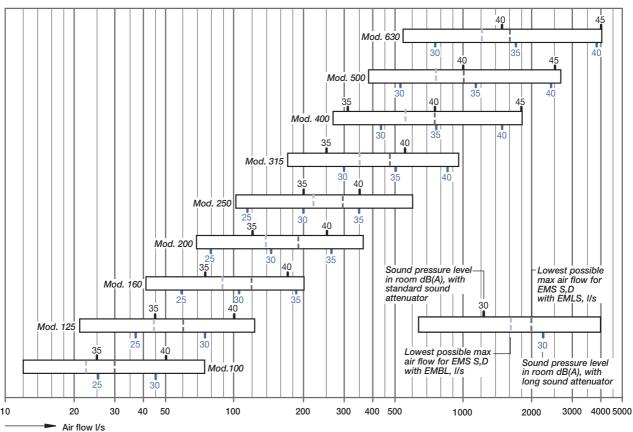
### flow variator for VAV systems

#### **Quick selection**

#### EMSS, EMSD flow variator for supply air



#### EMSS, EMSD flow variator for exhaust air



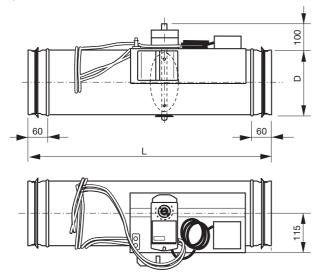
Noise levels are referred to a pressure differential of 250Pa



## **EMSS EMSD**

### flow variator for VAV systems

#### Size

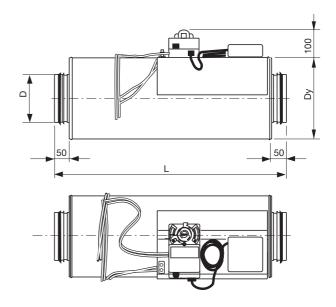


#### Flow variator EMSD (with insulation)

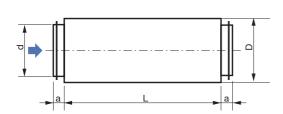
Size		Dimensions (mm)			
	ø D	ø Dy	L	kg	
100	99	182	600	3,9	
125	124	207	600	4,5	
160	159	242	600	5,4	
200	199	282	600	6,9	
250	249	332	600	8,1	
315	314	397	700	12,1	
400	399	482	700	15,9	
500	499	582	900	19,1	
630	529	712	900	26,5	

#### Flow variator EMSS (model without insulation)

Size	D	imensions (m	nm)	Weight		
	ø D		L	ŀ	<b>(</b> g	
		short lenght	normal lenght	short lenght	normal lenght	
100	99	320	600	0,7	1,2	
125	124	320	600	1,2	1,8	
160	159	320	600	1,4	2,2	
200	199	320	600	1,8	2,8	
250	249	320	600	2,1	3,3	
315	314	450	700	2,7	4,1	
400	399	580	700	3,6	4,4	
500	499	600	900	5,3	7,9	
630	629	600	900	8,2	11,5	

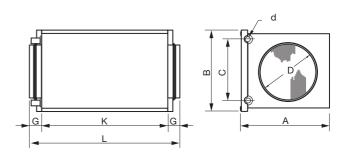


#### Sound attenuator EMOZ 15



Size		Dimension	Dimensions (mm)			
	ød	ø Dy	L	Α	kg	
100	99	300	600	40	7,5	
125	124	315	600	40	8,2	
160	159	355	900	40	13,6	
200	199	400	900	40	15,2	
250	249	450	900	40	19,8	
315	314	515	900	40	23,2	
400	399	630	1000	65	43	
500	499	711	1200	65	54	
630	529	812	1200	65	57	

Reheater water EMOZ 17



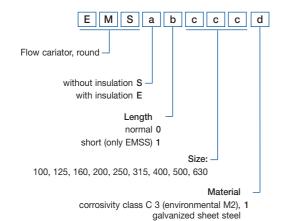
Size	Size			Dimensions (mm)					
	øD	ød	Α	В	С	G	L	K	kg
100	99	10	225	183	140	40	380	300	3,4
125	124	10	225	183	140	40	380	300	3,4
160	159	10	305	258	215	40	380	300	5,1
200	199	10	305	258	215	40	380	300	5,1
250	249	22	385	333	290	40	380	300	7,7
315	314	22	460	408	365	40	380	300	10,0
400	399	22	540	483	420	70	440	300	13,5



#### How to order

#### EMSS - EMSD flow variator for VAV systems

#### **Product code**



#### **Control equipment**

Ordering codes for electrical and control equipment; see separate codes in the Section "Control equipment".

If the electrical and control equipment is not to be supplied pre-installed by the factory, a shaft adapter (EMOZ 19) will normally be required, which must be ordered separately.

#### Plus code

EMOZ - 19 Shaft adapter

#### Ordering example

Flow variator insulation EMSD - 0 - 230 - 1

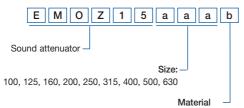
Sound attenuator EMOZ - 15 - 200 - 1

EMOZ - 16 - 200 - 1 - 1 - 0 Reheater, electric

Multi outlet box EMOZ - 14 - 200 - 160

#### Accessories

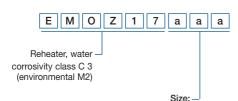
The accessories are supplied loose, not fitted



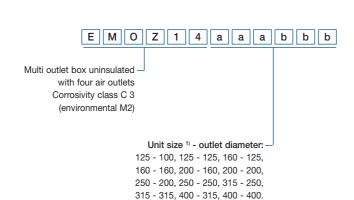
corrosivity class C 4 (environmental M3), 2

applies to parts in contact with the ventilation air

- corrosivity class C 3 (environmental M2), 1 galvanized sheet steel
- corrosivity class C 4 (environmental M3), 2 applies to parts in contact with the ventilation air



100, 125, 160, 200, 250, 315, 400



1) inlet diameter

E M O Z 1 2 a a a b c	d
Reheater, electric — corrosivity class C 3 (environmental M2)	
Size:	
100, 125, 160, 200, 250, 315, 400	
Voltage _	
1-phase, 230 V <b>1</b>	
2-phase, 400 V 2	
3-phase, 400 V 3	
' '	
Output variant —	
4 0 / 1 1 1 1 1	

1 - 3 (see table below)

		Output variant (kW)			
Size	Voltage	1	2	3	
100	1-ph 230 V	0,4			
125	1-ph 230 V	0,6	1,2		
160	1-ph 230 V	0,6	1,2	2,1	
200	1-ph 230 V	1,2	2,1	3,0	
250	1-ph 230 V	2,1	3,0		
315	1-ph 230 V	3,0			
200	2-ph 400 V	3,0			
250	2-ph 400 V	3,0			
315	2-ph 400 V	3,0			
200	3-ph 400 V	3,0			
250	3-ph 400 V	3,0	6,0		
315	3-ph 400 V	3,0	6,0		
400	3-ph 400 V	6,0	9,0	12,0	

Thyristor without 0 with 1