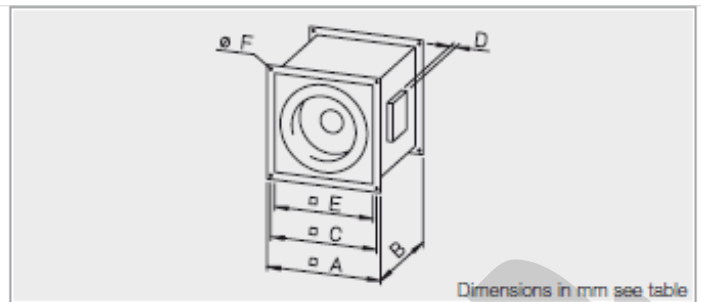


# ARDA METAL WORKS LTD.

Unit 6 • 20 Kynoch Road Edmonton • London • N18 3BD  
020 8807 78 78 • activems@gmail.com

## 450 - 630 MM Diameter Square Mix Flow Fan Extraction Motor Unit Details



Unit dimensions in mm						
Type	A	B	C	D	E	ø F
SMV.. 450	492	400	470	65	447	10
SMV.. 500	547	450	520	65	502	10
SMV.. 560	595	485	573	65	550	10
SMV.. 630	707	510	680	65	661	10

### Applications/use

- For medium airflow volumes against high resistances.
- Square flanges for quick connection onto ducting.

### Features

- The Square Mixed flow vent range offers excellent fan performance in nominal duct dimensions of 450 to 660 mm square.
- Compact design to minimise space and cost.
- Square quick fix flanges offer fast and effective installation.
- 100 % speed controllable.
- Extensive range of accessories including starters, speed controllers, flexible connectors, silencers and filters.
- Units can be mounted in any position.
- Simple electrical connection via a terminal box on the casing.
- Robust corrosion resistant casing, designed for duct connection. Suitable for internal or external installation.

### Specification

- Motor**  
Maintenance free, external rotor motor with sealed for life ball bearings. Protection to IP 54, insulation-class B for 1 phase and class F for 3 phase motors.

### Motor protection

- All models are fitted with thermal contacts which should be connected to a motor protection device.

### Casing

- Made from galvanised sheet steel with fitted quick fix flanges.

### Impeller

- Mixed-flow impeller made from galvanised steel.

### Speed control

- All models are fully speed controllable. Suitable controllers, electronic and auto-transformers, are available as accessories.

### Terminal box

- The external terminal box for electrical connection is IP 55.

### Electrical connection

- The connection of the electrical supply must be carried out in accordance with all relevant regulations. Connection is via the terminal box on the casing.

### Installation

- Installation at any angle.

### Safety notice

- Protection against accidental contact to DIN EN 294 must be provided by the installer.

### Noise levels

- The data table below gives the sound pressure level (air noise) in dB(A) at 1 metre under freefield conditions. The total sound power levels shown on the performance curves are for intake, extract and case break-out.

### Performances

- All performances are at an air density of 1.20 kg/m<sup>3</sup>.

Other accessories	Pages
Adaption plate for circular ducts, flexible connectors, attenuators, filters, heaters and speed controllers	210

Type	Ref. No.	R.P.M.	Air flow volume FID	Sound press. level at 1 m	Power	Max air flow temp.	Current Amps	Wiring diagram	Nominal Weight	5 step transformer controller	5 step transformer controller with full motor protection		
		min <sup>-1</sup>	m <sup>3</sup> /s	dB(A)	KW	+°C	FLC	No.	kg	Type	Ref. No.	Type	Ref. No.
<b>Single phase, 230 V / 1 ph. / 50 Hz, capacitor start motor, protection to IP 54</b>													
SMVW 450/4	7822	1385	1.00	54	0.33	50	1.55	SS-434	26.0	TSW 3.0	1496	MWS 3	1948
SMVW 500/4	7823	1330	1.45	62	0.51	45	2.27	SS-434	41.0	TSW 3.0	1496	MWS 3	1948
SMVW 560/4	7824	1280	1.94	61	0.86	45	4.10	SS-434	42.0	TSW 5.0	1497	MWS 5	1949
SMVW 630/4	7825	1315	3.10	69	1.50	40	6.60	SS-434	57.0	TSW 7.5	1596	MWS 7.5	1950
<b>Three phase, 400 V / 3 ph. / 50 Hz motor, protection to IP 54</b>													
SMVD 500/4	7826	1400	1.48	57	0.55	70	1.48	SS-469	32.0	TSD 3.0	1502	RDS 2	1315
SMVD 560/4	7827	1315	1.87	62	0.79	50	1.51	SS-469	40.0	TSD 3.0	1502	RDS 2	1315
SMVD 630/4	7828	1305	2.90	63	1.28	50	2.24	SS-469	52.0	TSD 3.0	1502	RDS 4	1316

# ARDA METAL WORKS LTD.

Unit 6 • 20 Kynoch Road Edmonton • London • N18 3BD  
020 8807 78 78 • activems@gmail.com

## 450 - 630 MM Diameter Square Mix Flow Fan Silencer Details

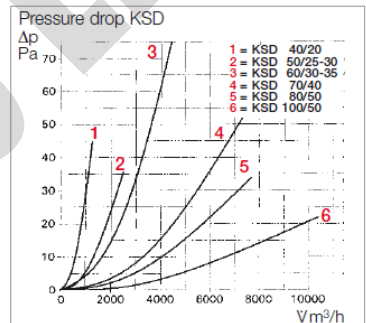
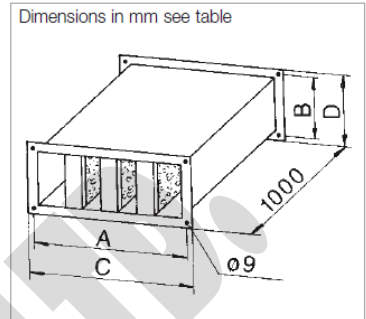
### ■ Rectangular attenuator KSD

#### □ Specification – Installation

Casing made from galvanised steel with flanges to fit the fan's dimensions. To be installed in-line with ducting on inlet or exhaust. To reduce vibration transmission from the fan, a flexible connector (accessories VS or VS... Ex) should be installed between fan/attenuator and ducting.

#### □ Pressure drop

The attenuator will add an additional resistance to the duct system (see chart), which must be considered when selecting a fan. The figures shown refer to an equal inlet into the attenuator. Turbulences from the fan's exhaust can be reduced if 1 metre of straight ducting is fitted between fan and attenuator. Otherwise allow for a higher resistance.



Type	Ref. No.	Duct size in mm	Dimensions in mm				Nominal weight kg	Attenuation D <sub>a</sub> dB						Average attenuation	
			A	B	C	D		125	250	500	1000	2000	4000		8000
KSD 400/200	8728	400/200	420	220	443	240	13	8	11	23	31	31	26	18	17
KSD 500/250..	8729	500/250-300	520	270/320	540	340	16.5	6	9	19	25	25	20	15	14
KSD 600/300..	8730	600/300-350	620	320/370	640	390	20	7	10	21	28	28	23	16	12
KSD 700/400	8731	700/400	720	420	740	440	25	6	8	18	24	24	20	14	12
KSD 800/500	8732	800/500	820	520	840	540	31	7	9	19	26	26	21	15	14
KSD 1000/500	8733	1000/500	1020	520	1040	540	35	5	7	16	21	21	17	12	11

## 450 - 630 MM Diameter Square Mix Flow Fan Speed Controller



Type	Ref. No.	I max.	Dims. in mm		
			A	W	H
<b>For 1 ph. / 230 V</b>					
TSW 3.0	1496	3.0	154	200	148
TSW 5.0	1497	5.0	200	254	98
TSW 7.5	1596	7.5	200	254	167
<b>For 3 ph. / 400 V</b>					
TSD 3.0	1502	3.0	200	254	167

### 5 step transformer controller

#### TSW / TSD

Robust ISO casing, of impact resistant polymers colour light grey. Protection IP 54. Built in 5 step switch providing on/off and 5 speed settings. Available for 220/240 V 1 ph. and 400/440 V, 3 ph. supply.