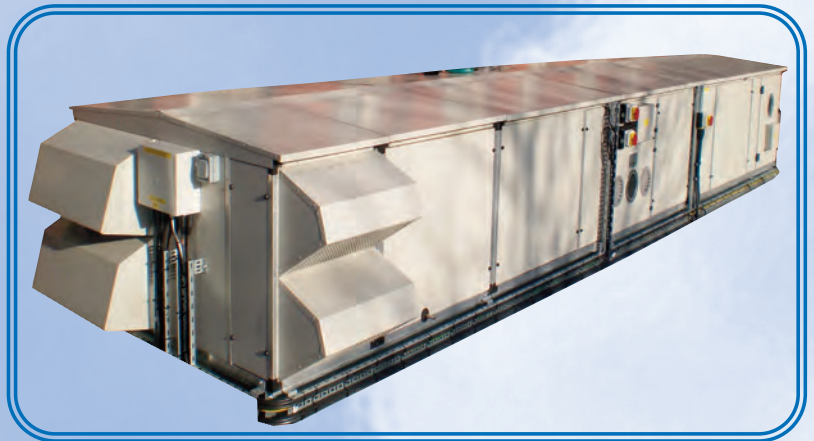


for fresher air
STP - STR



AIR VENT
TECHNOLOGY



DIRECT DRIVE - AIR HANDLING & HEAT RECOVERY



Certificate No: GB9455

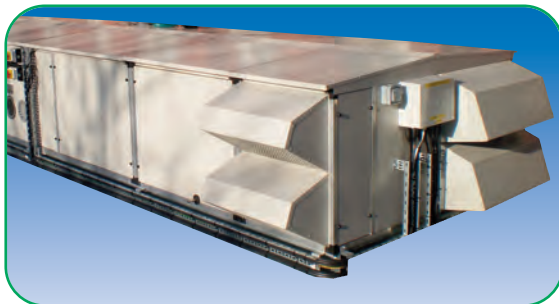


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Air Handling Units - Page 4

- Straight through supply units



Heat Recovery - Side by Side - Page 19

- Ideal for applications where height is at a premium



Heat Recovery - Stacked - Page 36

- Ideal for applications where footprint area is at a premium

General Specification

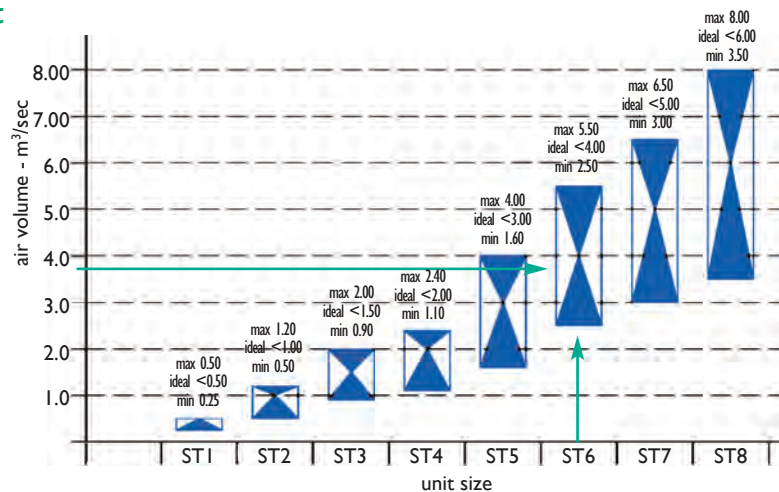
- Suitable for internal or external mounting
 - Internal units galvanized finish
 - External units Plastisol finish (BS10A05) with fitted double pitched weather lid and cowls
- 30x30 tubular frame construction with 25mm double skinned mineral wool filled panels
- Fitted 100mm high pressed steel channel base
- Backward curved direct driven plug fans with IE2 motors pre-wired to isolator and inverter
- Plastic plate heat exchangers with fitted motorised face and by-pass damper

Selection Example - Air Handling Unit

Unit Required:

- Roof mounted - STR
- LPHW heater - W
- Heat Recovery - HR
- Air Duty - 3.75m³/sec - size 06

Unit required - STRW-6





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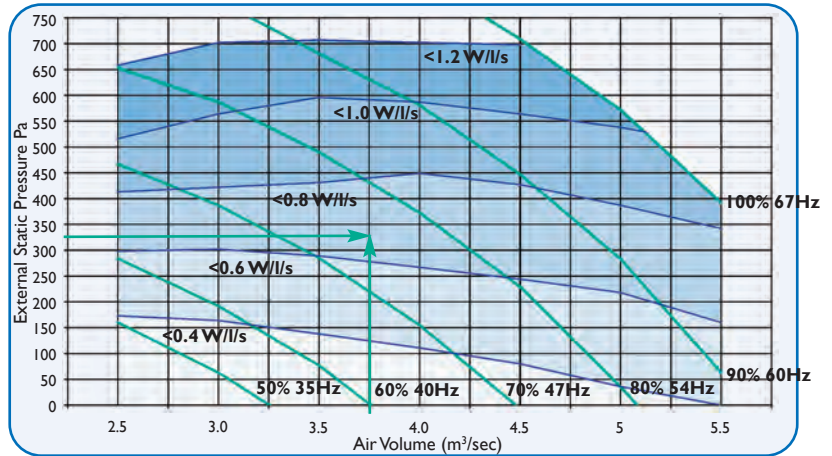
Selection Example - Air Handling Unit

Technical Details

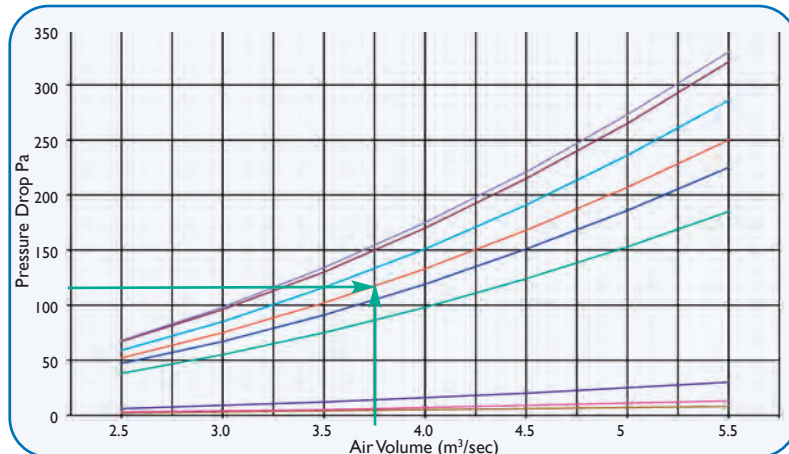
- external static = 325 Pa
- fan speed <80%
- fan SPF <0.8 W/l/s

Electrical Data

Models	Fan Power kW	Supply	FLC amps
Size 6	5.5	415V, 3Ph	11.8



Motor Speed	Size 6	Mid Octave Frequency band / Hz								Total in Duct		Breakout @ 1m		Breakout @ 3m	
		63	125	250	500	1k	2k	4k	8k	dB	dB(A)	dB(A)	NR	dB(A)	NR
80%	Inlet in duct dB	74	82	82	77	77	79	69	72	88	84	61	>50	51	50
	Outlet in duct dB	77	84	86	87	84	84	73	73	93	90				



Ancillary Selection

- F6 20" bag filter to be added
- add 120 Pa to External Static
- reselect as above

Selection Example – Heat Recovery - Stacked

Following the below process will allow derivation of unit SFP for a Heat Recovery unit

- As above, determine the supply and extract SFP's from the relevant curves
 - Eg supply 3.75m³/s @ 425Pa <= 0.8W/l/s
 - and extract 3.25m³/s @ 250Pa <=0.6W/l/s
- Next calculate the motor absorbed power
 - SFP / Airflow = Absorbed Power
 - Supply 0.8 / 3.75 = 3kW
 - Extract 0.6 / 3.25 = 1.95kW
- Combine the motor absorbed powers to give total unit absorbed power
 - 3 + 1.95 = 4.95kW
- Divide by the supply or extract airflow whichever is greater to give unit SFP
 - 4.95 / 3.75 = 1.32W/l/s

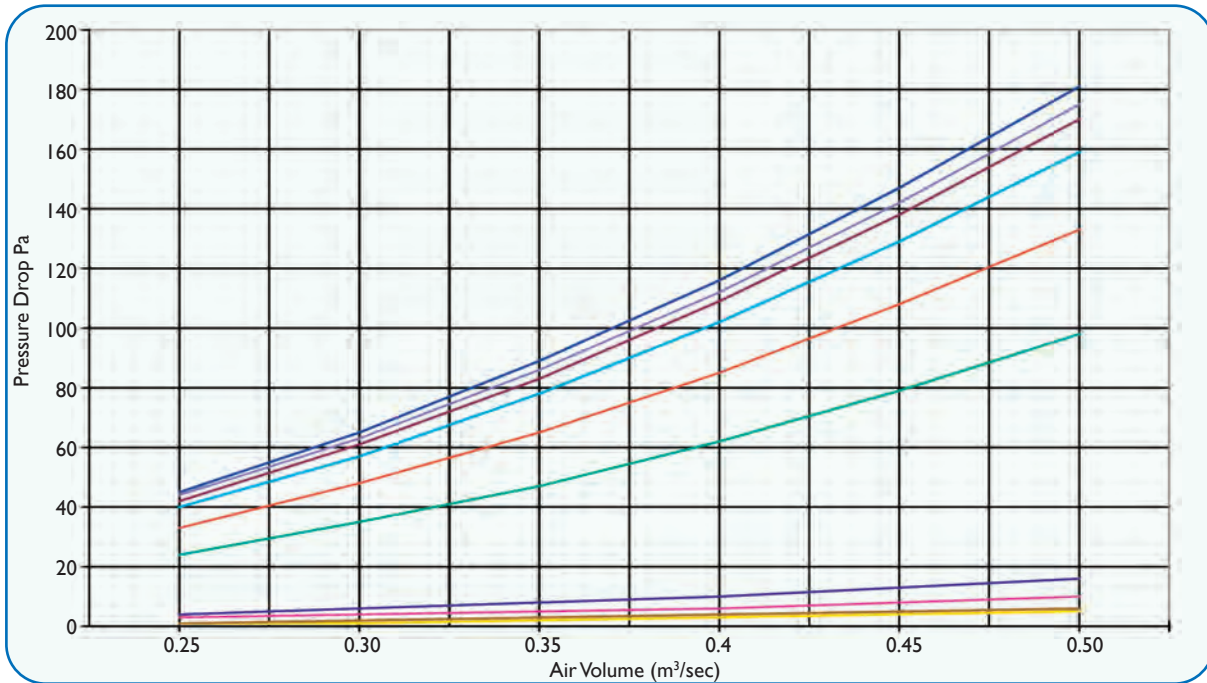


STP-STR - Direct Drive



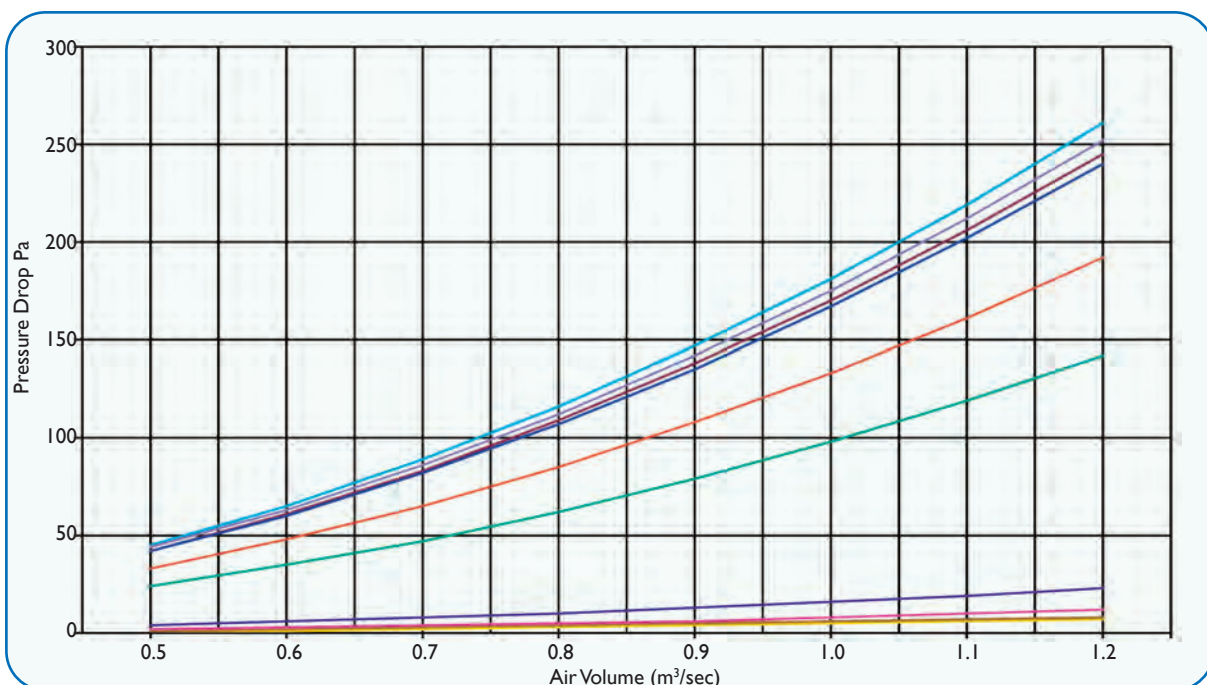
Ancillaries

Size 1



Damper - Plantroom	Cooling Coil - DX
Damper - Rooftop	F620"
Frost - EHB	F625"
Frost - LPHW	F820"
Cooling Coil - CW	F825"

Size 2



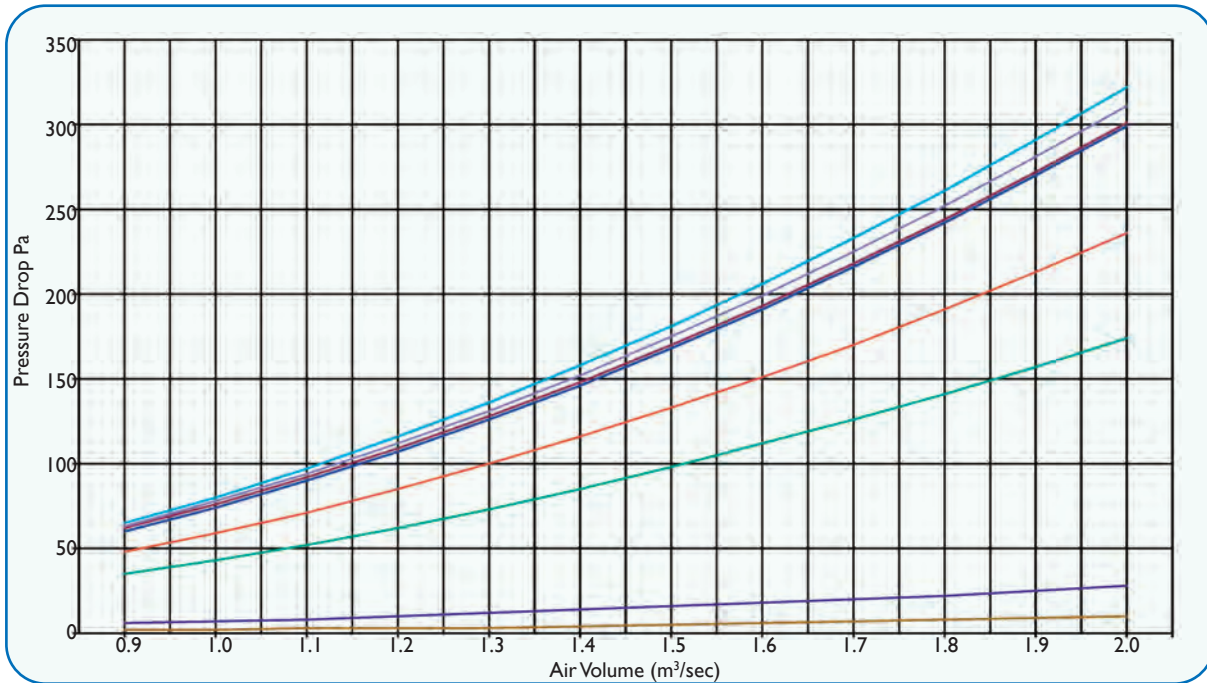


STP-STR - Direct Drive



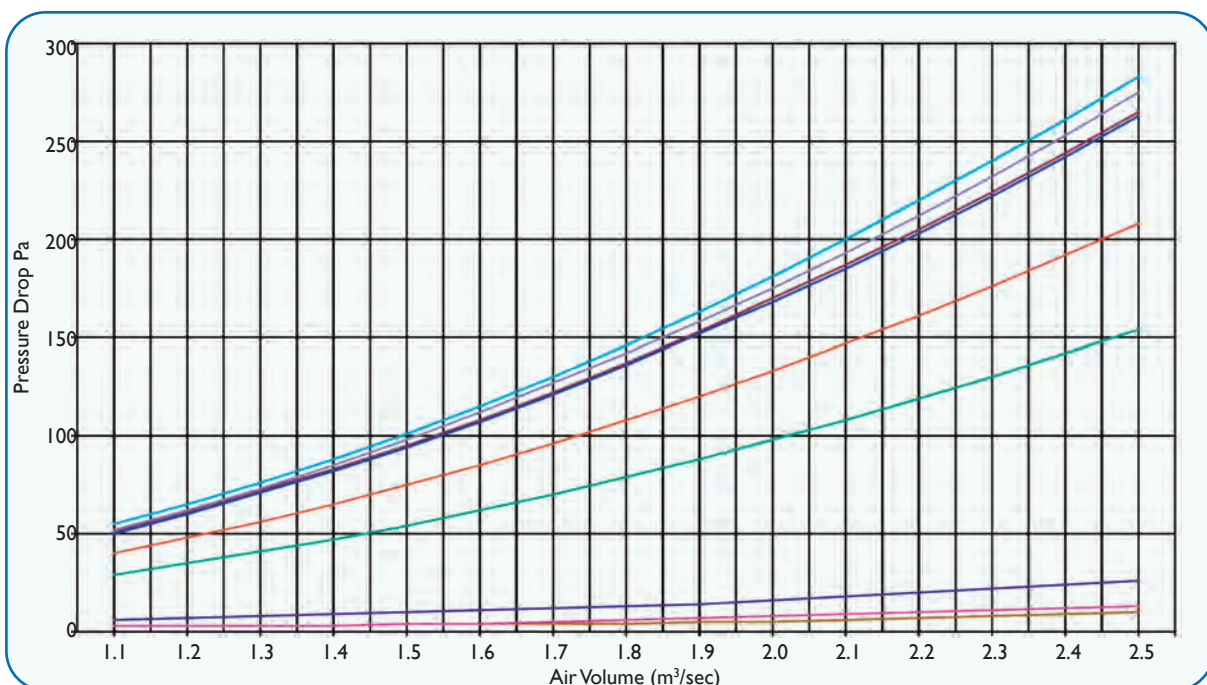
Ancillaries

Size 3



Damper - Plantroom	Cooling Coil - DX
Damper - Rooftop	F620"
Frost - EHB	F625"
Frost - LPHW	F820"
Cooling Coil - CW	F825"

Size 4



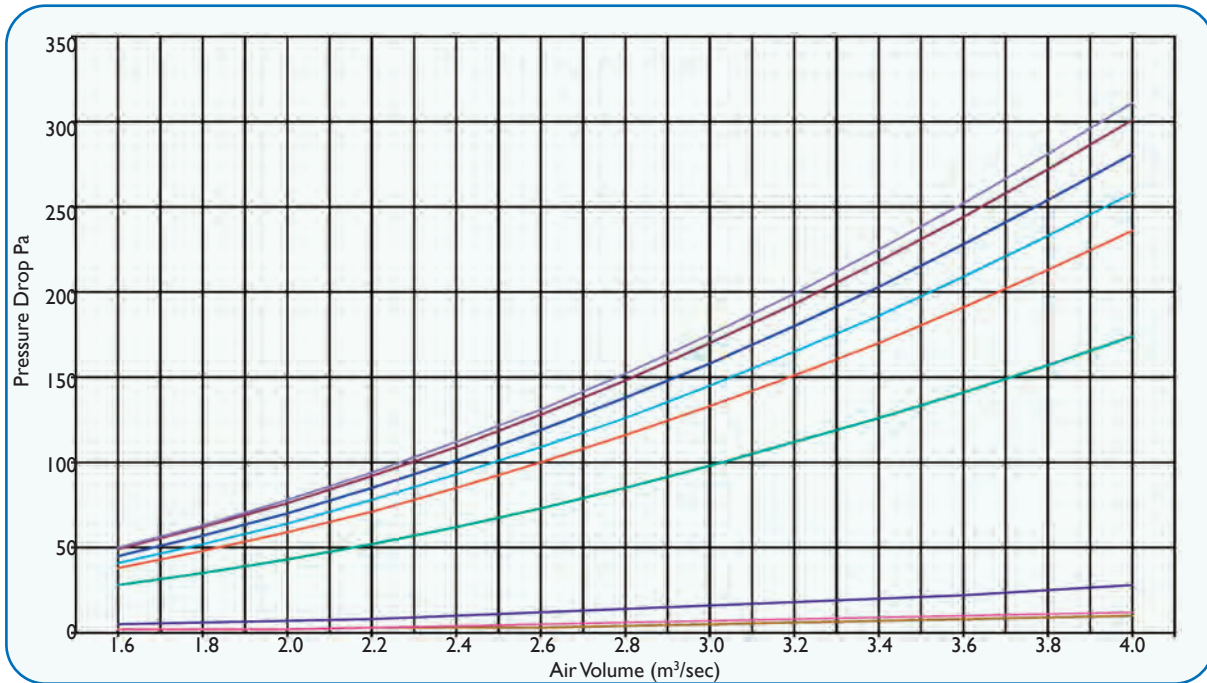


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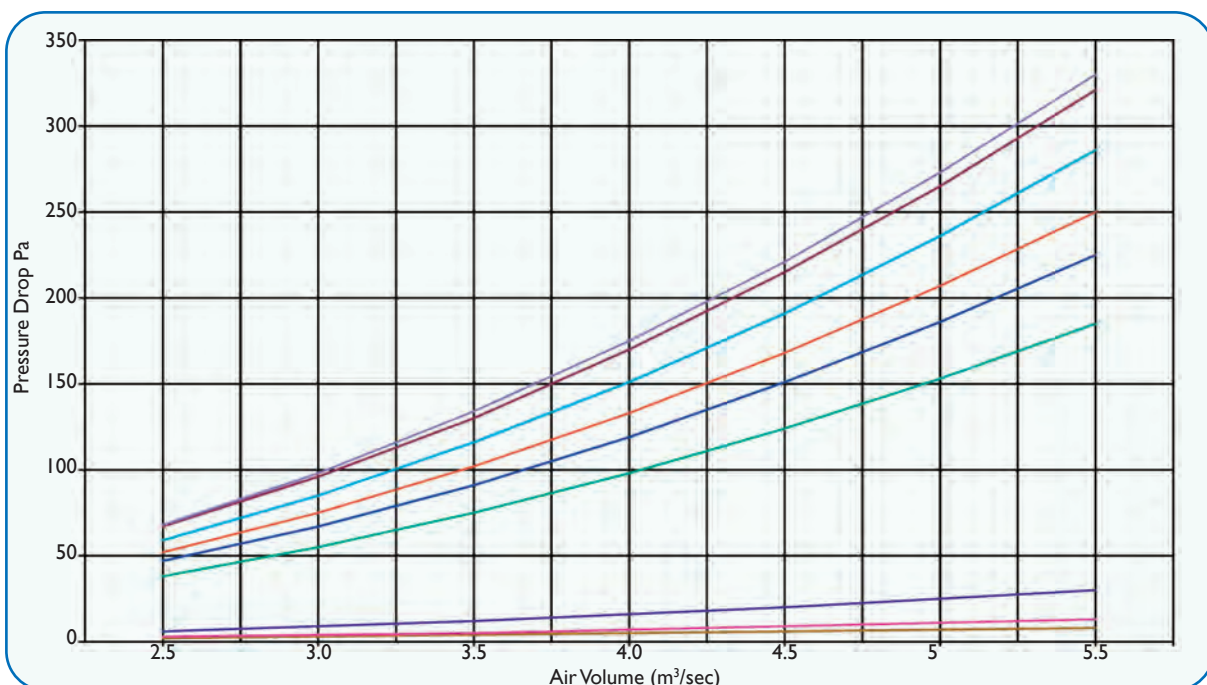
Ancillaries

Size 5



Damper - Plantroom	Cooling Coil - DX
Damper - Rooftop	F620"
Frost - EHB	F625"
Frost - LPHW	F820"
Cooling Coil - CW	F825"

Size 6



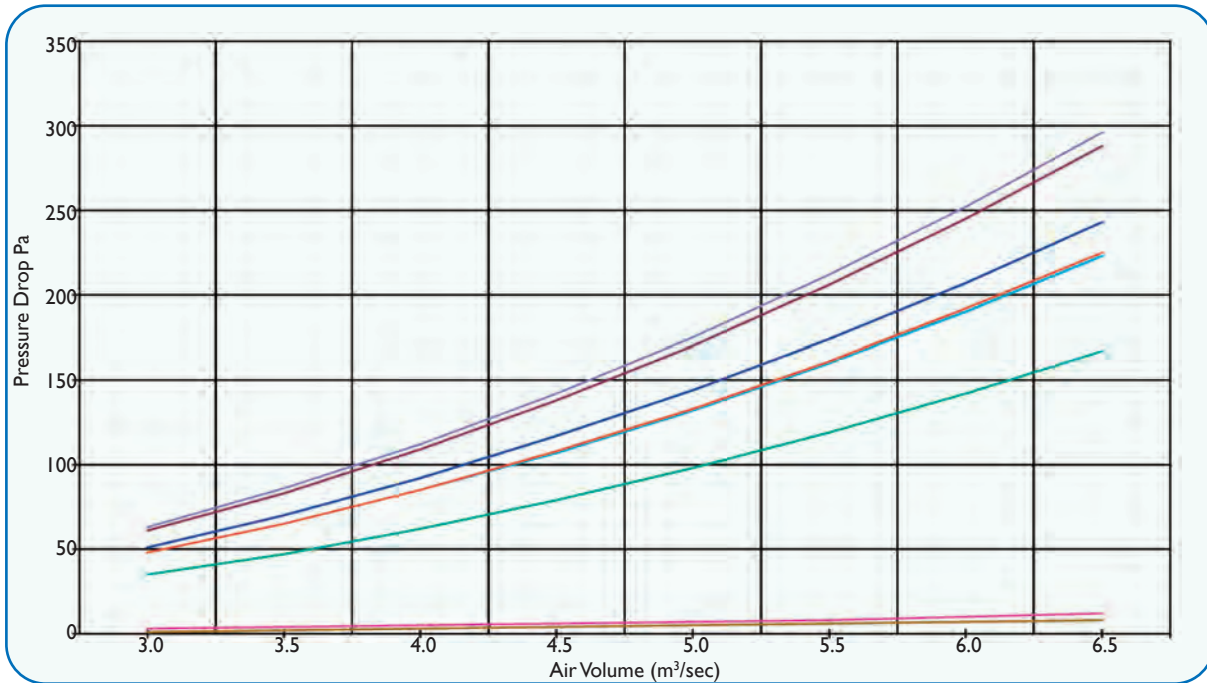


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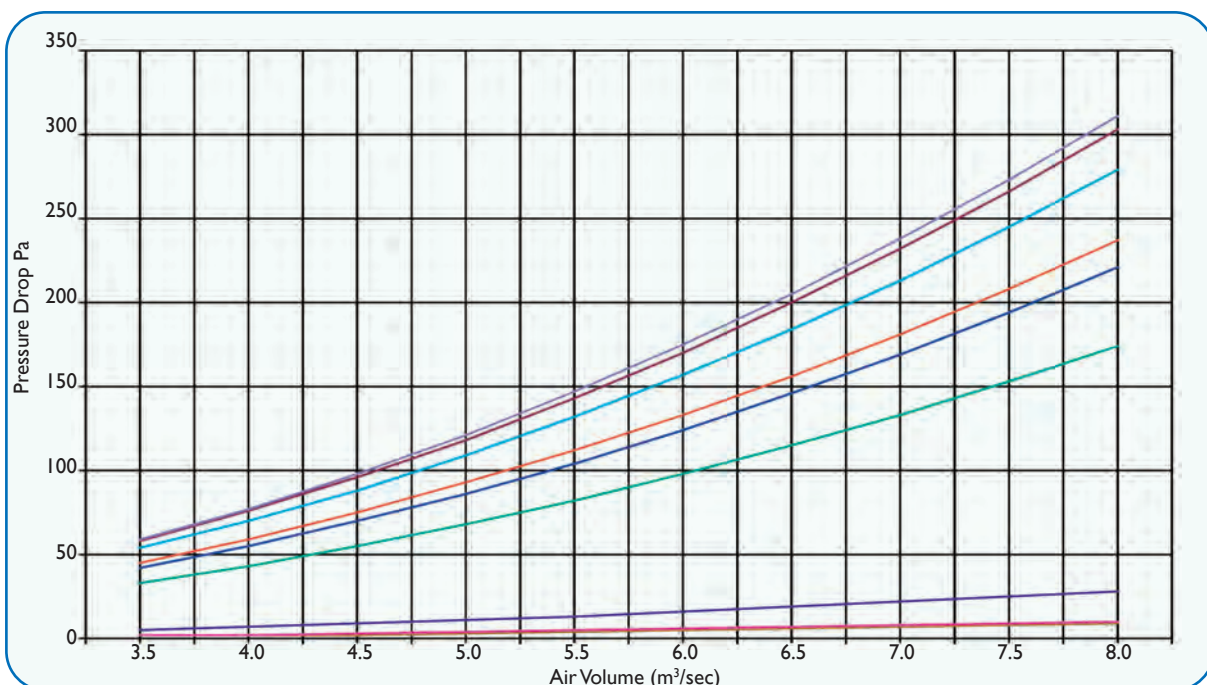
Ancillaries

Size 7



Damper - Plantroom	Cooling Coil - DX
Damper - Rooftop	F620"
Frost - EHB	F625"
Frost - LPHW	F820"
Cooling Coil - CW	F825"

Size 8



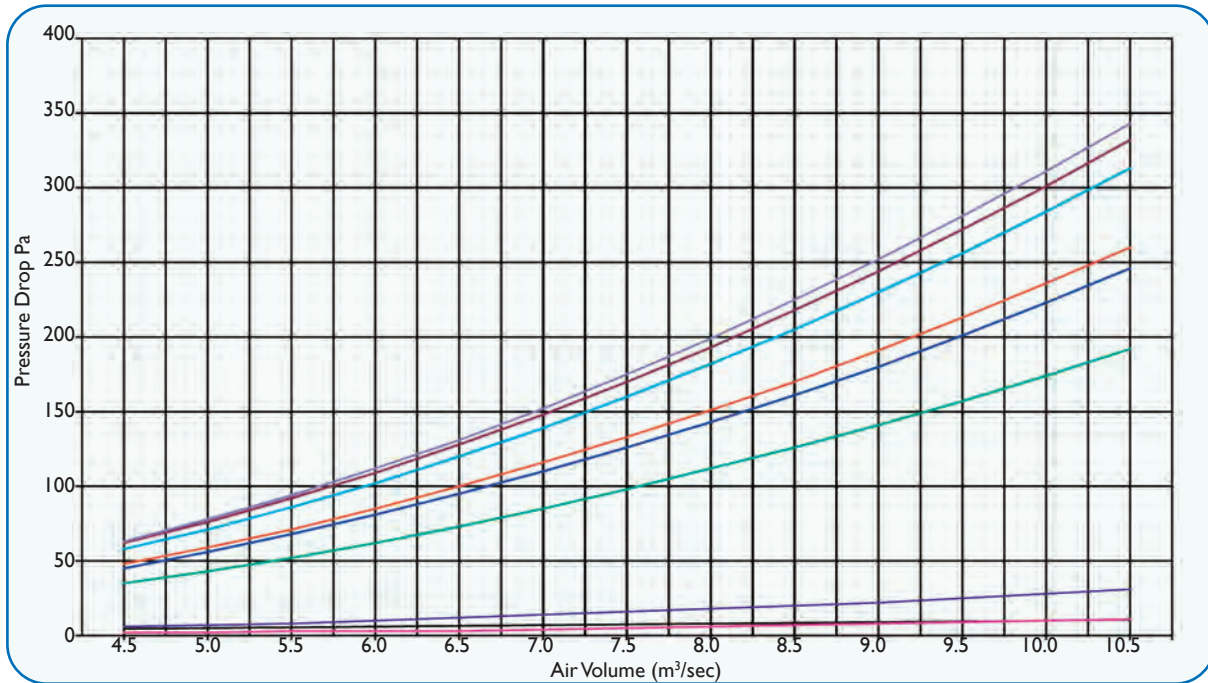


STP-STR - Direct Drive



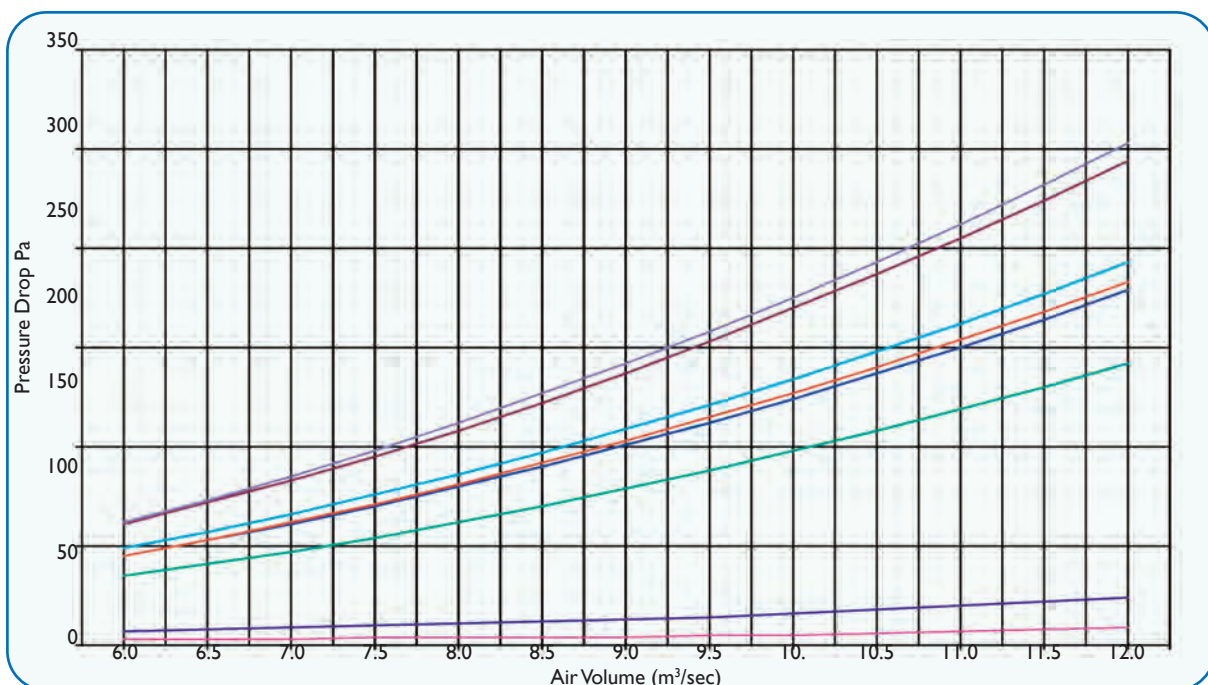
Ancillaries

Size 9



Damper - Plantroom	Cooling Coil - DX
Damper - Rooftop	F620"
Frost - EHB	F625"
Frost - LPHW	F820"
Cooling Coil - CW	F825"

Size 10



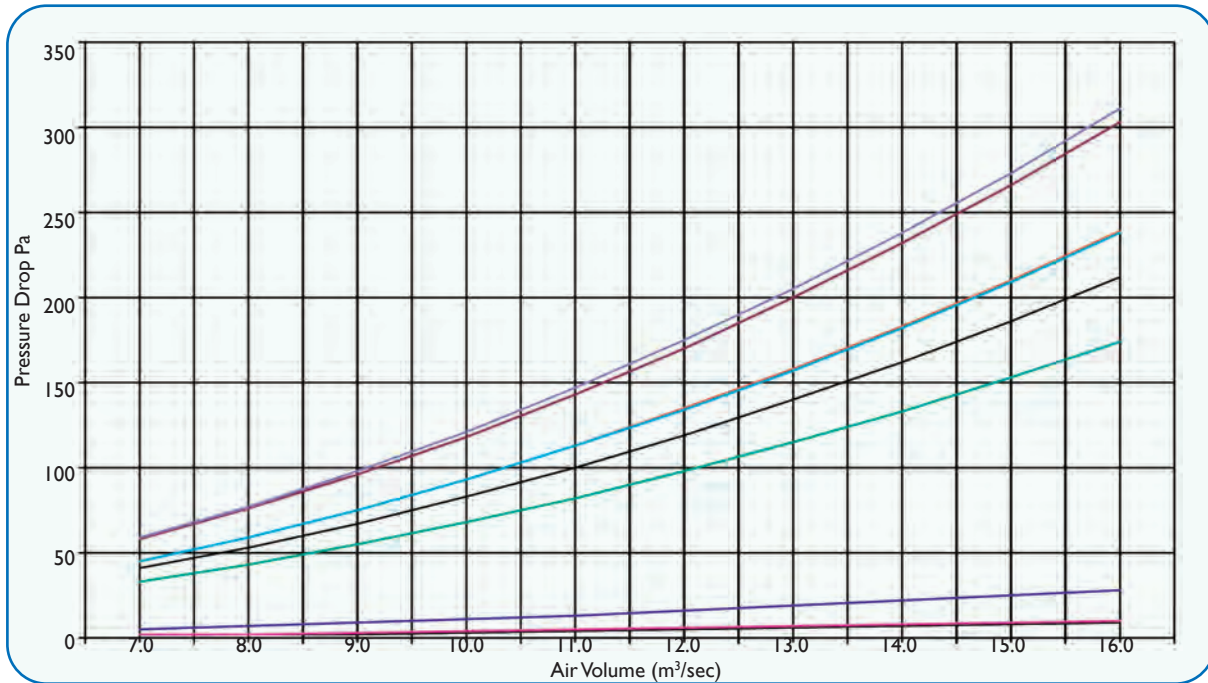


STP-STR - Direct Drive



Ancillaries

Size II



Damper - Plantroom	Cooling Coil - DX
Damper - Rooftop	F620"
Frost - EHB	F625"
Frost - LPHW	F820"
Cooling Coil - CW	F825"

Air Volume (m³/sec)

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