Comfort Cooling Kit
for DV245 Adroit

HVR AWARDS Highly Commended 2026 www.hvrawards.com













KEY FEATURES

- Maintains a healthy indoor environment through high-performance filtration and fresh cool air supply
- Enhanced summer comfort via an eco-friendly water coil solution
- Compatible with air-source heat pumps (ASHP)
- Features automatic 100% summer bypass and cool recovery for optimal seasonal performance
- Triple filter design including high-efficiency ePM1 50% supply filter
- Smart built-in controls, accessible via smartphone, tablet, or PC
- Helps to meet Approved Document O compliance by reducing overheating risk





The Comfort Cooling kits are available with our premium Adroit DV245 MVHR units, providing an effective solution for projects that require additional cooling support. MVHR unit not included in the kit. These units are ideal for domestic and residential applications with a maximum floor area of up to 165 m² (based on 1 ACH at ~50% fan speed).

Adroit controls feature an automatic 100% modulating summer bypass and a dedicated Cool Recovery mode to maintain comfortable indoor conditions during warmer periods. When outdoor air is hotter than both the extract air and the desired supply temperature, the system uses the cooler extract air to reduce the temperature of the incoming supply air. In this mode, the unit actively recovers coolness from the home, improving comfort and overall energy efficiency.

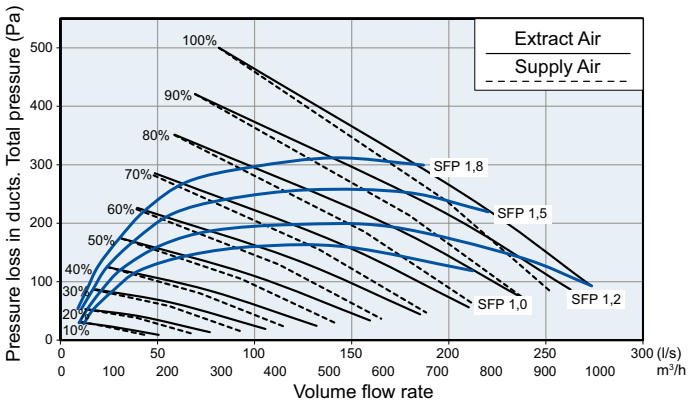
Comfort Cooling Kit
for DV245 Adroit

BILL OF MATERIALS

Adroit DV245 Comfort Cooling Kit - 90002289

Part No:	Description	Qty
90000610	Adroit digital controller	1
60000134	NTC sensor	1
90002280	Duct water cooling coil	1
90002284	50 litre volumiser vessel	1
90002282	Automatic air vent	1
90002283	22 mm brass lockshield gate valve	1

PERFORMANCE



* Guidance only. Dependant upon system pressure.

SOUND MATERIALS

		Sound power level in the supply air duct (one duct) by octave band L_w, dB					Sound power level in the extract air duct (one duct) by octave band L_w, dB				
		Adjustment position					Adjustment position				
Adjustment position		30 %	40%	50%	60%	100%	30%	40%	50%	60%	100%
Air flow (l/s)		132	160	190	213	250	143	170	204	230	278
Air flow m³/h		475.2	576	684	766.8	900	514.8	612	734.4	828	1000.8
Medium frequency of the octave band Hz	63	66.1	69.3	72.1	73.8	77.0	53.6	56.7	60.0	62.7	66.3
	125	61.8	63.2	66.6	68.8	71.5	54.2	54.1	56.7	59.7	62.4
	250	56.0	62.1	63.9	66.6	69.9	50.9	58.4	60.7	64.1	65.5
	500	51.3	55.9	59.4	62.8	68.6	38.4	42.2	45.9	47.9	51.8
	1000	50.5	54.7	58.1	60.7	64.0	37.4	41.1	44.8	47.5	50.7
	2000	49.2	54.0	58.0	60.8	64.4	31.5*	36.2*	40.5	43.4	47.1
	4000	35.6*	42.4	48.0	51.8	56.7	24.7*	28*	30.3*	33.6*	38.1
	8000	28.1*	36.3	44.3	48.8	54.2	23.6*	23.8*	24.6*	25.9*	28.2*
L_W,dB		68.0	71.2	74.1	76.1	79.4	58.0	61.6	64.4	67.4	70.0
L_{WA}, dB(A)		56.0	60.4	64.0	66.9	71.1	45.5	50.2	53.4	57.0	59.3

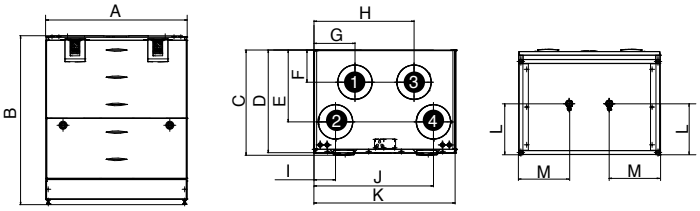
	Sound pressure level, in decibels (A) coming through the envelope from the room in which the unit is installed (10m² sound absorption) ADJUSTMENT POSITION / AIR FLOWS (supply/extract)				
Adjustment position	30%	40%	50%	60%	100%
Air flow (l/s)	132/148	159/179	192/214	214/243	251/282
Air flow m³/h	475.2/532.8	572.4/644.4	691.2/770.4	770.4/874.8	903.6/1015.2
L_{pA}, dB (A)	37.1	39.2	42.0	44.5	48.4

TECHNICAL SPECIFICATION

90002289 Max air flow (m³/h) / (l/s) at 100Pa Max cooling capacity (kW) * EAN	Adroit DV245 Comfort Cooling Kit 976 / 271 6.9 5019009338651
Specification	**Adroit DV245 MVHR Unit**
Suitable for dwellings up to m^2	400
Max air flow (m³/h) / (l/s) at 100Pa	976 / 271
Thermal efficiency (%)	Up to 90
Heat exchanger	Cross-Counter-Flow (Aluminium)
Fans	EC
Summer by-pass damper	100% automatic
Integral humidity sensor (RH %)	0 - 100
Integral CO_2 sensor (ppm)	500 - 2000
Frost protection (optional heater)	Smart Frost Protection Strategy
Controls (optional)	Digital - 4 Profiles, 100% adjustable Manual - 4 Speed controller, adjustable
Connection to BMS	Modbus / KNX optional
Mounting	Floor
Sound pressure level @3m (dB(A))	24.5
Duct diameter (mm)	250 (4 ports)
Condensate discharge	3/4 BSP
Electrical supply	230V / 1ph / 50Hz
Electrical power input at max flow (W)	328
Filter Class**	2x ISO Coarse > 75% (G4) and 1x ISO ePM1 50% (F7)
Built-in electric post-heater (optional) (W)	3000 (2 x 1500)
Protection class	IP34
Casing insulation (mm)	50
Weight (kg)	181
Dimensions (L x D x H) (mm)	1038 x 773 x 1226-1241
Duct entry	Top Entry
Versions available:	
Right Hand:	90001271
With optional electric post-heater:	90001271EPH
Left Hand:	90001272
With optional electric post-heater:	90001272EPH
Specification	**Duct water cooling coil**
Category	Water cooler/heater circular
Type	3 rows
Connection (mm)	22
Air tightness class	D
Diameter (mm)	250
Exchanger length (mm)	280
Exchanger height (mm)	325
Exchanger weight (kg)	5
Coil Casing Width (mm)	415
Coil Casing Height (mm)	360
Coil Casing Depth (mm)	417
Weight (kg)	8
Specification	**Hydraulic kit**
Volumiser vessel capacity (L)	50
Max. water pressure (bar) * **	3
Volumiser operating temperature	-10°C to 110°C
Automatic air vent type	15 mm 6 Bar
Lockshield gate valve type	22 mm brass

*Cooling capacity may vary depending on outdoor and indoor temperature and relative humidity conditions.**Complies with ISO 16890. *** Max. pressure 3 bar / 0,3 MPa. Correctly sized pipes should be used for installation. The relevant standards and regulations must be followed.

DIMENSIONS



Duct outlets, Model R

Inner diameter of the female collar: 250 mm

1.Extract air from the apartment to the unit
2.Supply air from the unit to the apartment
3.Outdoor air to the unit
4.Exhaust air flowing outdoors from the unit

Duct outlets, Model L

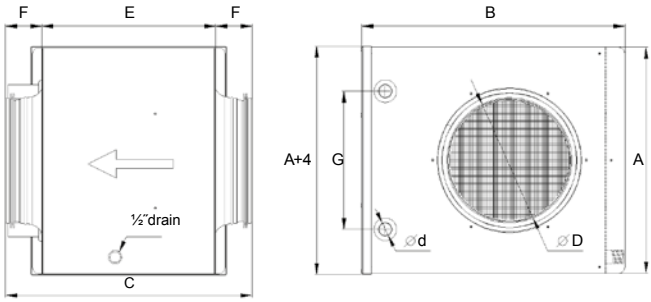
Inner diameter of the female collar: 250 mm

1.Outdoor air to the unit
2.Exhaust air flowing outdoors from the unit
3.Extract air from the apartment to the unit
4.Supply air from the unit to the apartment

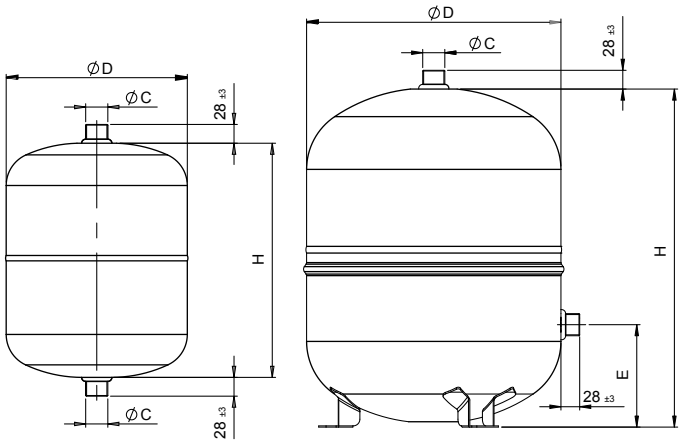
+ excludes motors. Motor warranty one year from date of purchase

Model	A	B	C	D	E	F	G
DV245	1038	1226-1421**	773	754	528	237	301
	H	I	J	K	L	M	
	735	158	878	1038	373	371	

**Adjustable feet



Ø D(mm)	A(mm)	B(mm)	C(mm)	E(mm)	F(mm)	G(mm)	Ø d(mm)
250	360	415	417	277	70	220	22



Height	Diameter	Connection Height	Connection Size
H	Ø	E	C
505	380	153	1"G

CAPACITY TABLES- Standard heat exchanger

Adroit DV245 Comfort Cooling Kit			Standard Aluminium Heat Exchanger Models										
External Conditions: 34°C; 50% rH													
Internal Conditions	**Max kW**	**Cooling Airflow Rates (l/s)**	**100**	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**
		Cooling Airflow Rates (m^3/h)	**360**	**396**	**432**	**468**	**504**	**540**	**576**	**612**	**648**	**684**	**720**
		Fan speed (%)	**50**	**52**	**55**	**57**	**61**	**63**	**66**	**70**	**73**	**75**	**78**
23°C, 50% rH	**5.09**	Combined kW	2.70	2.93	3.21	3.47	3.68	4.03	4.24	4.47	4.66	4.86	5.09
		Supply air °C	17.70	17.80	17.80	17.90	17.90	18.00	18.10	18.30	18.40	18.50	18.60
24°C, 50% rH	**5.00**	Combined kW	2.71	3.01	3.28	3.49	3.75	3.97	4.21	4.43	4.61	4.85	5.00
		Supply air °C	17.70	17.70	17.80	17.90	18.00	18.10	18.30	18.40	18.50	18.70	18.80
25°C, 50% rH	**4.95**	Combined kW	2.77	3.05	3.30	3.50	3.68	3.93	4.15	4.37	4.61	4.80	4.95
		Supply air °C	17.60	17.50	17.80	18.00	18.10	18.30	18.40	18.60	18.80	18.80	19.00
26°C, 50% rH	**4.92**	Combined kW	2.80	3.01	3.24	3.48	3.74	3.95	4.13	4.33	4.55	4.76	4.92
		Supply air °C	17.60	17.70	17.90	18.10	18.30	18.40	18.60	18.80	18.90	19.00	19.20
External Conditions: 32°C; 50% rH													
Internal Conditions	**Max kW**	**Cooling Airflow Rates (l/s)**	**100**	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**
		Cooling Airflow Rates (m^3/h)	**360**	**396**	**432**	**468**	**504**	**540**	**576**	**612**	**648**	**684**	**720**
		Fan speed (%)	**50**	**52**	**55**	**57**	**61**	**63**	**66**	**70**	**73**	**75**	**78**
23°C, 50% rH	**4.36**	Combined kW	2.39	2.56	2.67	2.97	3.15	3.40	3.59	3.79	4.02	4.22	4.36
		Supply air °C	17.10	17.40	17.70	17.60	17.60	17.70	17.80	17.80	18.00	18.10	18.20
24°C, 50% rH	**4.32**	Combined kW	2.37	2.51	2.73	2.97	3.22	3.44	3.56	3.77	3.98	4.18	4.32
		Supply air °C	17.30	17.60	17.50	17.60	17.70	17.80	17.90	18.00	18.10	18.20	18.30
25°C, 50% rH	**4.28**	Combined kW	2.33	2.53	2.78	3.02	3.15	3.38	3.62	3.73	3.94	4.14	4.28
		Supply air °C	17.50	17.40	17.50	17.60	17.70	17.80	18.00	18.10	18.30	18.40	18.50
26°C, 50% rH	**4.21**	Combined kW	2.33	2.55	2.82	2.96	3.19	3.39	3.57	3.78	3.90	4.11	4.21
		Supply air °C	17.30	17.40	17.50	17.70	17.80	18.00	18.10	18.30	18.40	18.50	18.70
External Conditions: 29°C; 50% rH													
Internal Conditions	**Max kW**	**Cooling Airflow Rates (l/s)**	**100**	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**
		Cooling Airflow Rates (m^3/h)	**360**	**396**	**432**	**468**	**504**	**540**	**576**	**612**	**648**	**684**	**720**
		Fan speed (%)	**50**	**52**	**55**	**57**	**61**	**63**	**66**	**70**	**73**	**75**	**78**
23°C, 50% rH	**3.31**	Combined kW	1.89	2.00	2.17	2.22	2.36	2.42	2.66	2.88	2.99	3.22	3.31
		Supply air °C	16.10	16.40	16.80	17.00	17.20	17.50	17.40	17.40	17.40	17.50	17.60
24°C, 50% rH	**3.30**	Combined kW	1.82	1.97	2.03	2.20	2.32	2.55	2.67	2.88	3.01	3.20	3.30
		Supply air °C	16.40	16.60	16.90	17.30	17.30	17.30	17.40	17.40	17.50	17.60	17.70
25°C, 50% rH	**3.27**	Combined kW	1.77	1.95	2.02	2.21	2.40	2.52	2.76	2.87	2.97	3.17	3.27
		Supply air °C	16.50	16.90	17.30	17.20	17.20	17.30	17.40	17.50	17.60	17.70	17.80
26°C, 50% rH	**3.23**	Combined kW	1.74	1.92	2.07	2.24	2.37	2.59	2.71	2.82	3.03	3.13	3.23
		Supply air °C	16.80	17.10	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	18.00

CAPACITY TABLES- Enthalpy heat exchanger

Adroit DV245 Comfort Cooling Kit			Optional Enthalpy Heat Exchanger Models										
External Conditions: 34°C; 50% rH													
Internal Conditions	**Max kW**	**Cooling Airflow Rates (l/s)**	**100**	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**
		Cooling Airflow Rates (m^3/h)	**360**	**396**	**432**	**468**	**504**	**540**	**576**	**612**	**648**	**684**	**720**
		Fan speed (%)	**50**	**52**	**55**	**57**	**61**	**63**	**66**	**70**	**73**	**75**	**78**
23°C, 50% rH	**6.91**	Combined kW	3.77	4.05	4.31	4.69	5.05	5.37	5.72	5.93	6.26	6.58	6.91
		Supply air °C	16.50	16.90	17.30	17.30	17.30	17.40	17.50	17.60	17.70	17.90	18.00
24°C, 50% rH	**6.59**	Combined kW	3.65	3.75	4.22	4.59	4.92	5.17	5.49	5.83	6.03	6.39	6.59
		Supply air °C	16.90	16.90	17.20	17.30	17.40	17.50	17.60	17.80	17.90	18.10	18.30
25°C, 50% rH	**6.37**	Combined kW	3.34	3.66	4.16	4.45	4.80	5.03	5.32	5.59	5.86	6.17	6.37
		Supply air °C	16.80	17.20	17.20	17.40	17.50	17.70	17.90	18.00	18.20	18.40	18.50
26°C, 50% rH	**6.18**	Combined kW	3.41	3.53	4.05	4.32	4.60	4.91	5.13	5.40	5.67	5.94	6.18
		Supply air °C	17.10	17.10	17.30	17.50	17.70	17.90	18.00	18.30	18.50	18.60	18.80
External Conditions: 32°C; 50% rH													
Internal Conditions	**Max kW**	**Cooling Airflow Rates (l/s)**	**100**	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**
		Cooling Airflow Rates (m^3/h)	**360**	**396**	**432**	**468**	**504**	**540**	**576**	**612**	**648**	**684**	**720**
		Fan speed (%)	**50**	**52**	**55**	**57**	**61**	**63**	**66**	**70**	**73**	**75**	**78**
23°C, 50% rH	**5.62**	Combined kW	3.09	3.36	3.59	3.80	4.09	4.37	4.62	4.93	5.16	5.38	5.62
		Supply air °C	16.10	16.50	16.90	17.20	17.20	17.20	17.30	17.40	17.50	17.60	17.70
24°C, 50% rH	**5.46**	Combined kW	2.97	3.25	3.42	3.70	3.98	4.28	4.50	4.73	4.96	5.21	5.46
		Supply air °C	16.50	16.90	17.20	17.20	17.20	17.30	17.40	17.50	17.70	17.80	17.90
25°C, 50% rH	**5.27**	Combined kW	2.85	3.07	3.33	3.65	3.93	4.15	4.39	4.60	4.84	5.07	5.27
		Supply air °C	16.80	17.10	17.10	17.20	17.30	17.40	17.60	17.70	17.90	18.10	18.20
26°C, 50% rH	**5.05**	Combined kW	2.76	3.03	3.31	3.55	3.80	4.03	4.20	4.39	4.63	4.84	5.05
		Supply air °C	17.10	17.10	17.20	17.30	17.40	17.60	17.70	18.00	18.10	18.30	18.40
External Conditions: 29°C; 50% rH													
Internal Conditions	**Max kW**	**Cooling Airflow Rates (l/s)**	**100**	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**
		Cooling Airflow Rates (m^3/h)	**360**	**396**	**432**	**468**	**504**	**540**	**576**	**612**	**648**	**684**	**720**
		Fan speed (%)	**50**	**52**	**55**	**57**	**61**	**63**	**66**	**70**	**73**	**75**	**78**
23°C, 50% rH	**4.00**	Combined kW	2.30	2.45	2.62	2.77	2.94	3.04	3.16	3.42	3.66	3.86	4.00
		Supply air °C	15.60	15.90	16.30	16.50	16.90	17.10	17.20	17.20	17.20	17.30	17.30
24°C, 50% rH	**3.84**	Combined kW	2.17	2.34	2.51	2.57	2.72	2.97	3.12	3.35	3.55	3.65	3.84
		Supply air °C	15.90	16.30	16.60	16.90	17.20	17.10	17.10	17.20	17.30	17.40	17.50
25°C, 50% rH	**3.66**	Combined kW	2.05	2.22	2.29	2.49	2.66	2.88	3.00	3.21	3.33	3.56	3.66
		Supply air °C	16.30	16.60	17.00	17.10	17.10	17.10	17.20	17.30	17.50	17.60	17.70
26°C, 50% rH	**3.50**	Combined kW	1.92	2.06	2.25	2.40	2.63	2.75	2.89	3.10	3.20	3.31	3.50
		Supply air °C	16.50	17.00	17.00	17.00	17.10	17.20	17.40	17.50	17.60	17.70	17.80

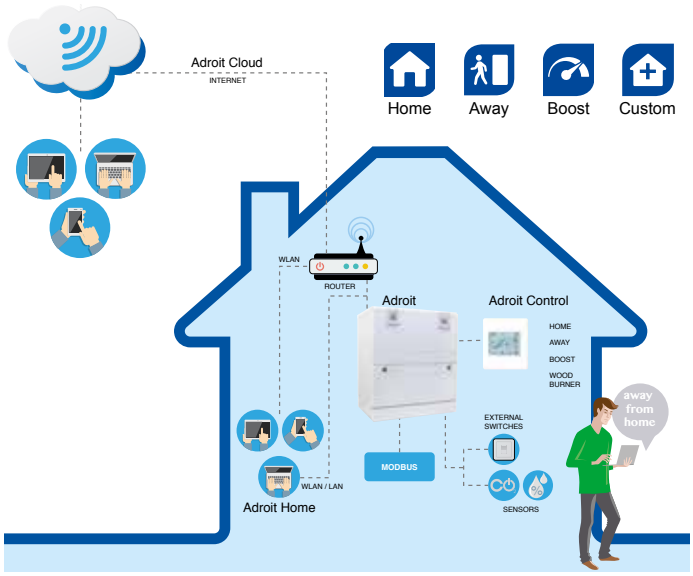
The combined total kW cooling accounted for coolth recovery, sensible and latent cooling. These results therefore reflect expected cooling power and supply air temperatures when in operation.
For cooling output data based on other assumed external design conditions, please contact Airflow.
The calculation method is assuming water used as circulating medium, inlet temperature = 6°C and outlet temperature = 12°C.
100 Pa pressure drop is assumed. Fan speed (%) = Generated via Selectair.

CONTROLS

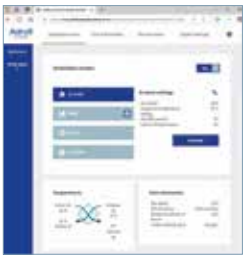
Ideal indoor air quality is achieved by automatically **adjusted ventilation**

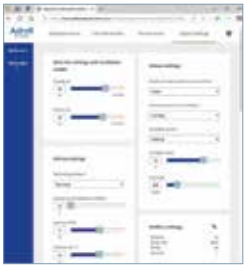
Adroit is controlled via 4 ventilation profiles controls providing the following features:

- **4 ventilation profiles,**100% adjustable
- **Internet** connection available
- **Automatic boost function** with delay timer
- **Filter maintenance reminder** via counter clock (standard)
- **Heater control** for optional post-heater
- **Connection to BMS** via LON or KNX
- **Self diagnostic** via fault signal relay
- **On-demand control** via humidity and CO_2 sensors
- **Separate fan control** for ease of commissioning
- **Weekly ventilation programming** allows users to pre-set the ventilation levels scheduled for different days
- **Indoor temperature control** based on extract air temperature or supply air temperature



Customised Control, Anywhere



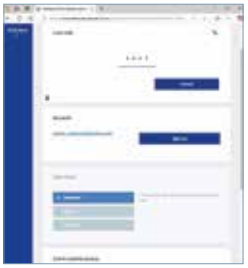


Adroit™

- Tailor your ventilation around your daily life
- Four customisable ventilation profiles can be scheduled around you
- BMS connectivity enables the property's ventilation to be controlled from a central point
- Maintain a healthy indoor air environment at all times whilst using minimal energy
- Profiles include:

Home - control the everyday running rate
Away - reduces the flow rate when demand is low
Boost - increases the flow rate when occupancy has increased
Custom - customise the unit operating mode to suit user preferences





CONTROLS & ACCESSORIES



AirflexPro Round Pipe - Red
No: 9041130
Ø75 mm x 50 M. A quick and easy to fit system of semi-rigid ducting (max. air volume 30 m³/h).



Boost Switch
No: 90000542
Single gang momentary boost modular switch in a smooth polar white finish.



AirflexPro Round Pipe - Blue
No: 90001971
Ø90 mm x 50 M. A quick and easy to fit system of semi-rigid ducting (max. air volume 50 m³/h)

DV245 Adroit Filter Set
No: 90000611
Replace filters 2x a year. (2 x G4/ISO Coarse 75%, 1 x F7/ISO ePM1 50%).

Others products available from **airflow.com**

Call: 01494 525252 **Visit: airflow.com**

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AIRFLOW

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