



**AIR CONDITIONING**

**GENERAL SPECIFICATIONS  
AND  
PRODUCT DESCRIPTION**

**Effective 1 February 2013**



# PRODUCT DESCRIPTION - ALL MODELS

## FAN

Direct drive, high efficiency, low noise. All polymer with taper lock quick coupling attachment. Statically and dynamically balanced. The Powerflow fan used on the larger systems features a 'golf ball' like dimpled surface to improve efficiency and lower noise.

## FAN CURVE CHARACTERISTICS

Superior static pressure handling ability (fan curve) reflected as a percentage air flow at resistance points in pascals:

Static Pressure Pascals	600w Motor (%)	750w Motor (%)	1000w Motor (%)
0	100	100	100
20	98	98	98
40	95	94	95
60	93	92	91
80	88	88	88
100	86	86	85
120	82	78	82
140	78	71	77
160	73		71
180			65

## FAN MOTOR

Manufactured by Teco Australia. The motors feature quality Japanese bearings with ultra high temperature grease and have a projected bearing life in excess of 30,000 hours. The overall motor service life is projected to be in excess of 10 years, based on average annual usage in domestic installations.

Mounting the motor after the fan blade ensures the highest air velocity over the motor. This maximizes cooling and prevents moisture forming.

## WATER CIRCULATION PUMP

The heavy duty pump incorporates the best quality components and has been manufactured for an extended service life. A fully sealed basket enclosure prevents debris from entering the water circulation system.

## WATER MANAGEMENT & CONTROL SYSTEM

Electronic regulation of water level by measurement of 'magnetic hall effect'. Consistent water level accurate to within 1 mm. No adjustment required.

The inlet water is controlled by switching on and off a 24v inlet water solenoid valve which is only powered during fill times.

Our patented drain valve features a simple mechanical-only operation based on a 'weight of water' counterweight principle.

## FILTER PADS

The cellulose pads are manufactured to rigorous standards - flute size 5090.

## CASING

Thermoformed and extruded polymer. Manufactured by BASF under the LURAN-S brand name. Especially formulated for structural integrity and resistance to weathering and UV. Ten year casing warranty on polymer.

## ELECTRONIC CONTROLS

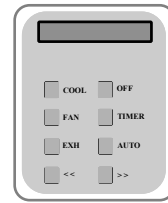
Designed and manufactured by Air Group Australia. C-Tick and RoHS approved to Australian standards, as well as the European CE standard. Circuit board independently fuse protected.

## FLOOR AREA CAPACITY

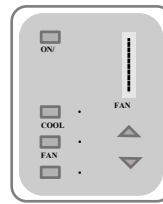
Model number denotes floor area to be cooled in m<sup>2</sup> i.e. D125 = 125m<sup>2</sup> floor area at 2.4 ceilings. See COMCOOL 2.

# CONTROLLER SPECIFICATIONS - ALL MODELS

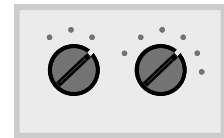
CONTROLLER FEATURES		QM	QA
Electrical Connection - via low voltage control cable		X	X
Cool Mode		X	X
Fan-Only Mode		X	X
Exhaust Mode		X	X
Pump only Mode (Bushfire mode)			X
Fan Speeds		10	100
Countdown Timer - Start/Stop			X
Display	LED indicators	X	
	LED text display		X
Temperature Display			X
Thermostat Control			X
Wash Cycle - Pads wet prior to fan starting		X	X
Periodic Drain Cycle - Adjustable hours		X 2.5, 5	X 5-99
Rinse Cycle - end of day rinses pads with fresh water		X	X
Auto Drain Function - Dry sump when not in use		X	X
Drain After Flush Cycle Option		X	X
Control Cable Length - Metres		15	15



**QA**



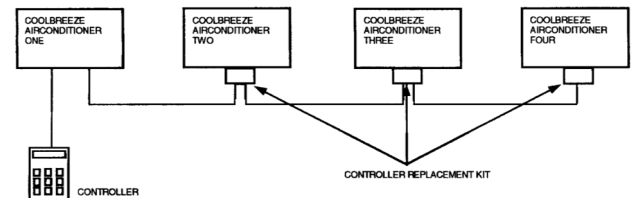
**QM**



**MOBILE**

## ACCESSORIES AVAILABLE:

- **4 Seasons Weather Seal - suits 550mm square dropper**
- **Controller Replacement Kit - suits QM & QA**  
Consists of PCB which is plugged into the controller header on the second and each subsequent air conditioning unit, which are then linked together by an interconnecting 12m controller cable.



**NOTE 1:** Minimum KW capacities have been calculated according to AS2910-2000 under standardized conditions. Inlet dry bulb temperature 38 degrees, inlet wet bulb temperature 21 degrees and comfort dry bulb temperature 27.4 degrees. Calculations are based on air flow as per CSIRO report. 00/228 and Celdek saturation efficiency test as per CSIRO report 90/16m.

**NOTE 2:** An indicative airflow to compare systems rated under the old 'air flow' and 'air change' method of sizing. The old ratings which are no longer applicable, were based on 'design' or nominal air flow output. Specifications are subject to change without notice.

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**For Service**  
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# SPECIFICATIONS - HERITAGE “D” SERIES DOWN DISCHARGE

Model		ALL	D 095	D 125	D160	D195	D230	D 255
<b>Motor</b>	Voltage (50 Hz)	220-240						
	Thermal Overload	Yes						
	Insulation	'F' Class						
	Capacitor - uf		25	25	30	30	30	30
	Resistance - Windings Main/Aux at 20°C		5.01/6.65	5.01/6.65	4.03/5.36	2.34/4.43	2.34/4.43	2.34/4.43
	Watts - Model TACEVA - VS -		600	600	750	1000	1000	1000
	Amp Draw - low/high		2.65/3.6	2.65/3.6	2.7/3.85	2.9/5.6	2.9/5.6	2.9/5.6
	RPM - low/high		600-750/1370	600-750/1370	600-750/1350	850/1400	850/1400	850/1400
<b>Fan</b>	Auswing II 35°		X	X				
	Auswing II 40°				X			
	Powerflow Fixed Pitch					X	X	X
	Diameter mm	524						
<b>Pump</b>	Voltage (50 Hz)	220-240						
	Thermal Overload - UL certified	Yes						
	Insulation	'C' Class						
	Performance - litres per minute to pads	26						
	Power at 1m head - Amps/Watts	.37/66						
	RPM at 1m head	2550						
<b>Water</b>	Inlet Connection	½ inch BSP						
	Drain (DVW)	40mm						
	Drain Optional	19mm Barb						
	Tank Capacity (litres)	10-12						
	Drain Valve	Yes						
	Provision for Bleed-off & drain valve	Yes						
	Water Level	Magna Sensor						
	*Max. water consumption per hour (litres)		21.5	27	36	42	51	60
<b>Filter Media</b>	Number of Filter Pads	4						
	Size mm		830 x 370	830 x 460	830 x 460	830 x 535	830 x 650	830 x 770
	Width mm		75	75	100	100	100	100
<b>Performance capacity kw (see note 1)</b>			7	9	11	13	15	17
<b>Cooling Capacity m3 (Comcool Zone 2)</b>			228	300	384	468	552	612
<b>Design Air Flow (see note 2)</b>	cmh		7500	10000	12500	15000	18000	19500
	cfm		4400	5900	7400	8900	10700	11600
	Lit/sec		2000	2800	3500	4200	5000	5400
<b>DBA - Measured at 1m - High/Low</b>			64/52	64/52	66/53	65/53	65/53	65/53
<b>Depth/Width mm</b>		1090x1090						
<b>Height mm</b>			570	660	660	735	850	970
<b>Height Above Dropper</b>			310	400	400	475	590	710
<b>Dropper Size</b>		550x550						
<b>Shipping Weight kg</b>			44.5	46	48	54	56.5	58.5
<b>Ship Vol m3 -</b>	Within Australia		.645	.72	.73	.765	.81	.865
<b>Operating Weight kg</b>			55	57.5	60	66.5	69	71.5

FM1371/0213

\* At 600 kpa the RPE barbed solenoid fills the sump at 4.5 lt per minute

# SPECIFICATIONS - CASCADE - "C" SERIES DOWN DISCHARGE

Model		ALL	C 125	C160	C205`	C240
<b>Motor</b>	Voltage	220-240 (50 Hz)				
	Thermal Overload	Yes				
	Insulation	'F' Class				
	Capacitor - uf		25	30	30	30
	Resistance - Windings Main/Aux at 20°C		5.01/6.65	4.03/5.36	2.34/4.43	2.34/4.43
	Watts - Model TACEVA - VS -		600	750	1000	1000
	Amp Draw - low/high		2.65/3.6	2.7/3.85	2.9/5.6	2.9/5.6
	RPM - low/high		600-750/1370	600-750/1350	850/1410	850/1410
<b>Fan</b>	Auswing II 35°		X			
	Auswing II 40°			X		
	Powerflow Fixed Pitch				X	X
	Diameter mm	524				
<b>Pump</b>	Voltage	220-240 (50 Hz)				
	Thermal Overload - UL certified	Yes				
	Insulation	'C' Class				
	Performance - litres per minute to pads	26				
	Power at 1m head - Amps/Watts	.37/66				
	RPM at 1m head	2550				
<b>Water</b>	Inlet Connection	½ inch BSP				
	Drain (DVW)	40mm				
	Drain Optional	19mm Barb				
	Tank Capacity (litres)	10-12				
	Drain Valve	Yes				
	Provision for Bleed-off & drain valve	No				
	Water Level	Magna Sensor				
	*Max. water consumption per hour (litres)		28	37	46	54
<b>Filter Media</b>	Number of Filter Pads	4				
	Size mm		830 x 1 x 275 1 x 640 2 x 640/300	830 x 1 x 265 1 x 635 2 x 635/295	830 x 1 x 385 1 x 755 2 x 755/415	830 x 1 x 495 1 x 863 2 x 865/525
	Width mm		75	100	100	100
	<b>Performance capacity kw (see note 1)</b>		9	11	14.5	16.5
<b>Cooling Capacity m3 (Comcool Zone 2)</b>			300	384	492	576
<b>Design Air Flow (see note 2)</b>	cmh		10000	12500	16000	18500
	cfm		5900	7400	9500	10700
	Lit/sec		2800	3500	4400	5100
<b>DBA - Measured at 1m - High/Low</b>			65/53	65/53	64/52	64/52
<b>Depth/Width mm</b>		1090x1090				
<b>Height mm</b>			825	825	945	1056
<b>Height Above Dropper</b>			565	565	685	795
<b>Dropper Size</b>		550x550				
<b>Shipping Weight kg</b>			47	49	56.5	59
<b>Ship Vol m3 -</b>	Within Australia		.8	.85	.91	.975
<b>Operating Weight kg</b>			58	60.5	68.5	72

FM1371/0213

\* At 600 kpa the RPE barbed solenoid fills the sump at 4.5 lt per minute

# SPECIFICATIONS - TWIN FAN "D" SERIES DOWN DISCHARGE

Model		ALL	D500
<b>Motor</b>	Voltage (50 Hz)	220-240	
	Thermal Overload	Yes	
	Insulation	'F' Class	
	Capacitor - uf	30	
	Resistance Winding Main/Aux at 20°C		2.34/4.43
	Watts - Model TACEVA - VS -		2X1000
	Amp Draw low/high PER MOTOR x 2		2.9/5.6
	RPM - low/high		850/1410
<b>Fan</b>	Auswing II 40°		
	Powerflow Fixed Pitch		X
	Diameter mm	524	
<b>Pump</b>	Voltage (50 Hz)	2X220-240	
	Thermal Overload - UL certified	Yes	
	Insulation	'C' Class	
	Performance - litres per minute to pads	26	
	Power at 1m head - Amps/Watts	.37/66	
	RPM at 1m head	2550	
<b>Water</b>	Inlet Connection	½ inch BSP	
	Drain (DVW)	40 mm	
	Drain Optional	19 mm Barb	
	Tank Capacity (litres)	18-20	
	Drain Valve	Yes	
	Provision for Bleed-off & Drain Valve	Yes	
	Water Level	Magna Sensor	
	*Max. water consumption per hour (litres)		100
<b>Filter Media</b>	Number of Pads		6
	Size mm		2 x 960H X 928W 4 X 960H X 645W
	Width mm		100
<b>Cooling Capacity m3 (Comcool Zone 2)</b>			1200
<b>Design Air Flow (see note 2)</b>	cmh		36000
	cfm		21300
	Lit/sec		10000
<b>DBA - Measured at 1m - High/Low</b>			83/63
<b>Depth/Width mm</b>		1630 x 1200	1630 x 1200
<b>Height mm</b>			1160
<b>Height Above Dropper mm</b>			910
<b>Shipping Weight kg</b>			101 kg
<b>Ship Vol m3 -</b>	Within Australia		1.6 m3
<b>Operating Weight kg</b>			114 kg

\* At 600 kpa the RPE barbed solenoid fills the sump at 4.5 lt per minute

# SPECIFICATIONS - TOP DISCHARGE

Model		ALL	T095	T125	T160	T195	T230	T255
<b>Motor</b>	Voltage (50 Hz)	220-240						
	Thermal Overload	Yes						
	Insulation	'F' Class						
	Capacitor - uf		25	25	30	30	30	30
	Resistance Windings Main/Aux at 20°C		5.01/6.65	5.01/6.65	4.03/5.36	2.34/4.43	2.34/4.43	2.34/4.43
	Watts - Model TACEVA - VS -		600	600	750	1000	1000	1000
	Amp Draw - low/high		2.65/3.6	2.65/3.6	2.7/3.85	2.9/5.6	2.9/5.6	2.9/5.6
	RPM - low/high		600-750/1370	600-750/1370	600-750/1350	850/1400	850/1400	850/1400
<b>Fan</b>	Auswing II 35°		X	X				
	Auswing II 40°				X			
	Powerflow Fixed Pitch					X	X	X
	Diameter mm	524						
<b>Pump</b>	Voltage (50 Hz)	220-240						
	Thermal Overload - UL certified	Yes						
	Insulation	'C' Class						
	Performance - litres per minute to pads	26						
	Power at 1m head - Amps/Watts	.37/66						
	RPM at 1m head	2550						
<b>Water</b>	Inlet Connection	½ inch BSP						
	Drain (DVW)	40 mm						
	Drain Optional	19 mm Barb						
	Tank Capacity (litres)	10-12						
	Drain Valve	Yes						
	Provision for Bleed-off & Drain Valve	Yes						
	Water Level	Magna Sensor						
	*Max. water consumption per hour (litres)		21.5	27	36	42	51	60
<b>Filter Media</b>	Number of Pads	4						
	Size mm		830 x 370	830x460	830x460	830x535	830x650	830x770
	Density mm		75	75	100	100	100	100
<b>Performance capacity kw (see note 1)</b>			7	9	11	13	15	17
<b>Cooling Capacity m3 (Comcool Zone 2)</b>			228	300	384	468	552	612
<b>Design Air Flow (see note 2)</b>	cmh		7500	10000	12500	15000	18000	19500
	cfm		4400	5900	7400	8900	10700	11600
	Lit/sec		2000	2800	3500	4200	5000	5400
<b>DBA - Measured at 1m - High/Low</b>			64/52	66/53	66/53	65/53	65/53	65/53
<b>Depth/Width mm</b>		1090x1090						
<b>Height mm</b>			815	905	905	980	1095	1215
<b>Height Above Mounting Base mm</b>			655	745	745	820	935	1055
<b>Flexible Connector - Outlet size mm</b>		550-700						
<b>Shipping Weight kg</b>			70.5	72.0	74	80	82.5	84.5
<b>Ship Vol m3 -</b>	Within Australia		1.05	1.125	1.13	1.16	1.21	1.26
<b>Operating Weight kg</b>			82	84.5	86	92.5	94.0	97.5

FM1371/0213

\* At 600 kpa the RPE barbed solenoid fills the sump at 4.5 lt per minute



# SPECIFICATIONS - SIDE DISCHARGE/MOBILE

Model		ALL	M240 - MOBILE	S100	S240
<b>Motor</b>	Voltage (V) (50 Hz)	220-240			
	Thermal Overload	Yes			
	Insulation	'F' Class			
	Capacitor - uf (uF)		30	15	30
	Resistance (OHMS) - Windings Main/Aux at 20°C		2.3/4.4	10.7/39.3	2.34/4.43/
	Watts - Model TACEVA - VS - Power (WATTS)		1000	315	1000
	Amp Draw - low/high current (AMPS)		2.9/5.6	2.0/3.3	2.9/5.6
	RPM - low/high SPEED (RPM)		850/1410	600/1230	850/1410
<b>Fan</b>	Auswing II 35°			X	
	Powerflow Fixed Pitch		X		X
	Diameter mm	524			
<b>Pump</b>	Voltage (50 Hz)	220-240			
	Thermal Overload - UL certified	Yes			
	Insulation	'C' Class			
	Performance - litres per minute to pads	26			
	Power at 1m head - Amps/Watts	.37/66			
	RPM at 1m head	2550			
<b>Water</b>	Inlet Connection	½ inch BSP			
	Drain (DVW)		N/A	40 mm	40 mm
	Drain Optional		N/A	19 mm Barb	19 mm Barb
	Tank Capacity (litres)		100	8-10	10-12
	Drain Valve		No	Yes	Yes
	Provision for extra Bleed-off		No	Yes	Yes
	Water Level		Manual	Magna Sensor	Magna Sensor
	*Max. water consumption per hour (litres)		55	23	55
<b>Filter Media</b>	Number of Pads	3			
	Size mm		3 x 830 x 950	1 x 830 x 930 2 x 270 x 930	3 x 830 x 950
	Width mm		100	75	100
<b>Cooling Capacity m3 (Comcool Zone 2)</b>			576	240	576
<b>Design Air Flow</b>	cmh		18500	8000	18500
	cfm		11600	4800	10700
	Lit/sec		5400	2200	5100
<b>DBA - Measured at 1m - High/Low</b>			65/53	64/52	66/53
<b>Depth/Width mm</b>			1130 x 1220	1090 x 470	1090 x 1090
<b>Height mm</b>			1540	1090	1320
<b>Height Above Mounting Base mm</b>			N/A	1065	1090
<b>Flexible Connector - Outlet size mm</b>			N/A	N/A	550-700
<b>Shipping Weight kg</b>			95	57.5	80
<b>Ship Vol m3 -</b>	Within Australia		1.9	.925	1.17
<b>Operating Weight kg</b>			195	67.5	92

\* At 600 kpa the RPE barbed solenoid fills the sump at 4.5 lt per minute

# GENERAL SPECIFICATIONS AND PRODUCT DESCRIPTION ALL MODELS



**DOWN DISCHARGE  
D95 - D255**



**CASCADE DOWN  
DISCHARGE C125 - C240**



**SIDE DISCHARGE  
S100**



**SIDE DISCHARGE  
S240**



**TOP DISCHARGE  
T095-T255**



**TWIN FAN  
D400 - D500**

**MOBILE M240**



## WARRANTY WITHIN AUSTRALIA

TYPE OF INSTALLATION	PARTS	LABOUR
Residential Installation	5 Years	3 Years
Commercial installation (includes Mobiles)	2 Years	2 Years

\*In areas not covered by Airgroup Australia technicians, please refer to service warranty contract agreement for further details.

## NOTES