



**DEFENDER**  
ECOCOOL



DESIGNED FOR  
**R744**  
CARBON DIOXIDE (CO<sub>2</sub>)



**KIRBY DEFENDER®**  
**ECOCOOL**  
CO<sub>2</sub> Evaporators



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**KIRBY**  
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# KIRBY DEFENDER® ECOCOOL

## CO<sub>2</sub> Evaporators

### Innovative Features, Real Benefits

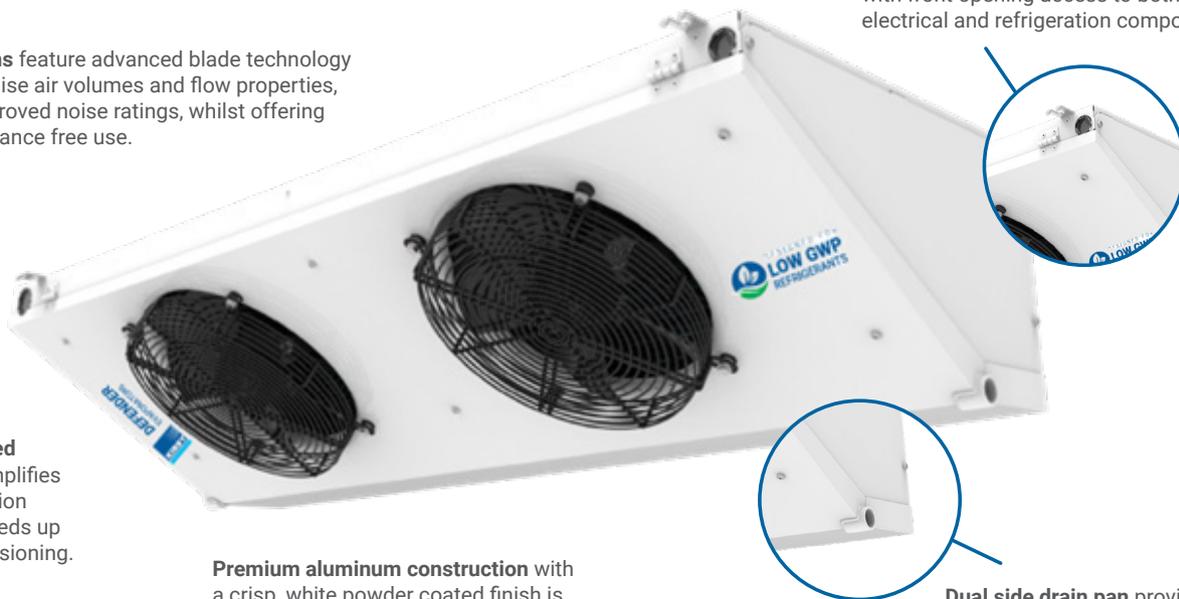
All models within the Kirby Defender® Ecocool range are rated for a maximum working pressure up to 80 Bar, making them suitable for both transcritical and subcritical applications.

**EBM fans** feature advanced blade technology to optimise air volumes and flow properties, and improved noise ratings, whilst offering maintenance free use.

**Pre-wired fans** simplifies installation and speeds up commissioning.

**Premium aluminum construction** with a crisp, white powder coated finish is durable, easy to clean and provides an aesthetically pleasing appearance.

**User friendly access panels** are designed for ease of commissioning and service, with front opening access to both electrical and refrigeration components.



**Dual side drain pan** provides flexibility when selecting installation locations while making maintenance quick and easy.

### Future Proof, Environmentally Friendly Performance

With a very low global warming potential (GWP) base value of 1, R744 is an environmentally friendly alternative to synthetic refrigerants. Naturally occurring, it is non-toxic (within a ventilated space), non-flammable and non-ozone depleting. Furthermore, not only does it provide exceptional performance, your investment is future proof for years to come.

### Kirby Defender® Ecocool CO<sub>2</sub> Evaporators – Nomenclature

<b>KD</b>	<b>MS</b>	<b>C</b>	<b>A</b>	<b>1</b>	<b>017</b>	<b>-RC</b>
<b>Fan Type &amp; Size</b> A 300mm (AC)				<b>Additional Functionality</b> -RC Ready Connect -E Defrost Heater (medium temperature only)		
<b>Fluid Type</b> C CO <sub>2</sub>				<b>Nominal Capacity - Watts/100 (rounded up or down)</b> 017 - 1700W CO <sub>2</sub> Models - R744		
<b>Usage Application</b> MS Medium Temperature – Standard				<b>Number of Fans</b> 1 - 4 Fans		
<b>Product Brand</b> KD Kirby Defender®						

# KIRBY DEFENDER® ECOCOOL EVAPORATORS

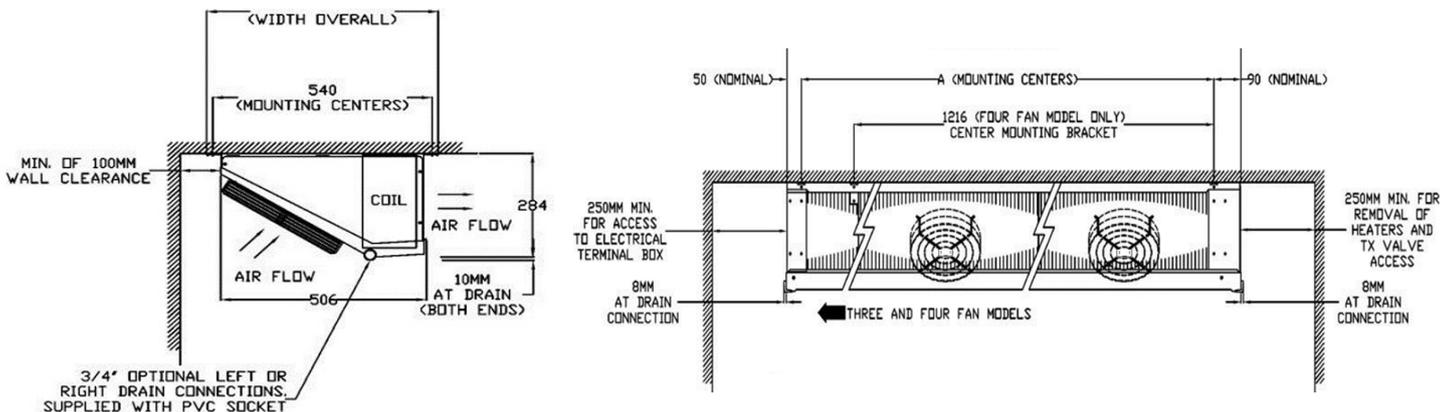
## Medium Temperature Performance Data

PRODUCT NUMBER	CAPACITY WATTS @ -4°C SST. & 6KTD (AUSTRALIAN CONDITION)	CAPACITY WATTS @ -8°C SST. & 8KTD (EN328 SC2 CONDITION)	REFRIGERANT CHARGE (kg)	FAN MOTOR DATA - S4E300-AS72-45/G01				SOUND POWER dB(A)	
				240V / 50HZ / 1 PHASE					
				NUMBER OF FANS	AIR MOVEMENT		MOTORS (TOTAL)		
FLOW (l/s)	THROW (m)	WATTS	AMPS						
<b>300mm FAN DIAMETER</b>									
KDMSCA1014	1350	1740	1.26	1	288	5.2	72	0.32	67
KDMSCA2020	1960	2590	1.63	2	618	7.9	144	0.64	71
KDMSCA2027	2700	3500	2.46	2	575	7.5	144	0.64	70
KDMSCA3030	2950	3890	2.58	3	928	8.7	216	0.96	73
KDMSCA3039	3900	5090	3.84	3	863	8.3	216	0.96	72
KDMSCA4054	5400	7000	5.10	4	1150	9.4	288	1.28	73

# KIRBY DEFENDER® ECOCOOL EVAPORATORS

## Physical Data

PRODUCT NUMBER	DIMENSIONS (mm)				CONNECTIONS (mm)		WEIGHT (kg)	PACKED
	LENGTH	DEPTH	HEIGHT	A	LIQUID	SUCTION	UNPACKED	
<b>KIRBY DEFENDER™ ECOCOOL – MEDIUM TEMPERATURE (300mm FAN DIAMETER)</b>								
KDMSCA1014	774	600	284	632	9.50	12.70	18.00	20.00
KDMSCA2020	1374	600	284	1232	9.50	12.70	30.00	33.00
KDMSCA2027	1374	600	284	1232	9.50	12.70	34.00	37.00
KDMSCA3030	1974	600	284	1832	12.70	15.90	39.00	43.00
KDMSCA3039	1974	600	284	1832	12.70	15.90	44.00	48.00
KDMSCA4054	2574	600	284	2423	12.70	15.90	57.00	62.00



	1FAN MODEL	2FAN MODEL	3FAN MODEL	4FAN MODEL
(A) Mounting Centres (mm)	632	1232	1832	2432
(B) Overall Length (mm)	774	1374	1974	2574



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