



GUARDIAN
ECOCOOL



KIRBY GUARDIAN™ ECOCOOL

CO₂ Evaporators

Future proof,
environmentally
friendly performance



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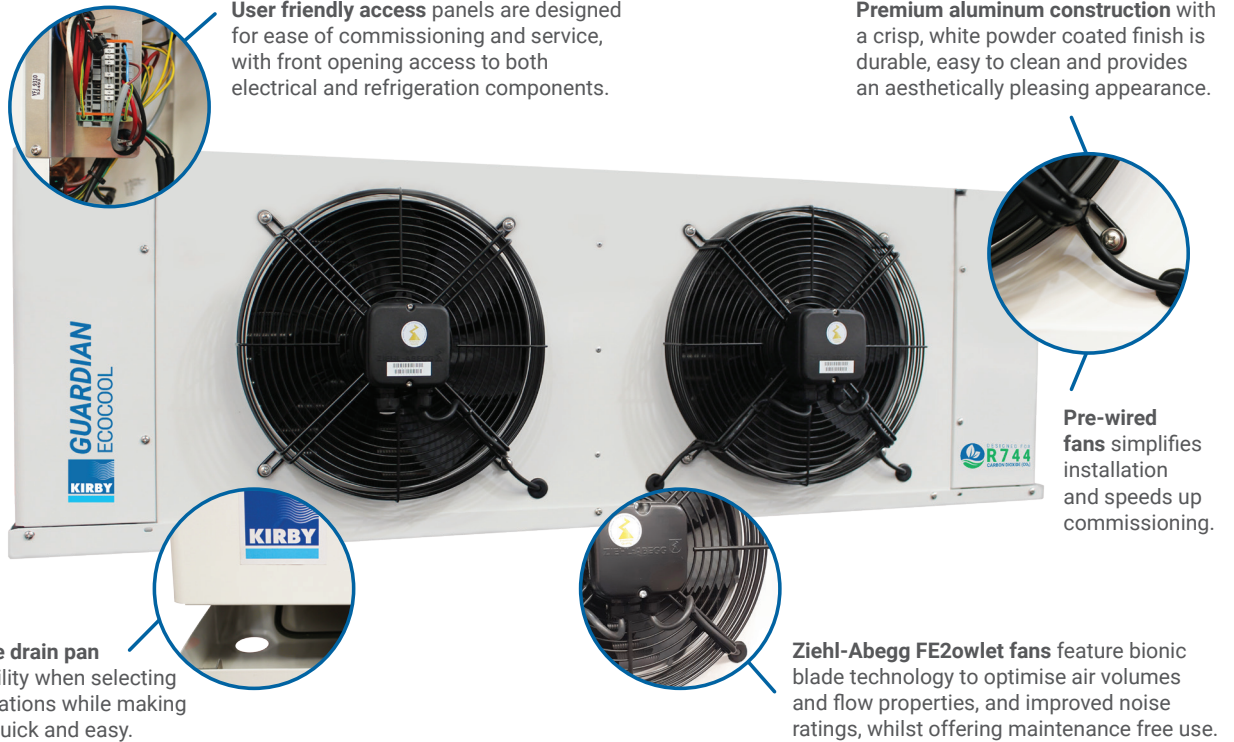
KIRBY
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CO₂ Evaporators

Innovative Features, Real Benefits

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



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

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

Pre-wired fans simplifies installation and speeds up commissioning.

Ziehl-Abegg FE2owlet fans feature bionic blade technology to optimise air volumes and flow properties, and improved noise ratings, whilst offering maintenance free use.

Fully reversible 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 Guardian™ Ecocool CO₂ Evaporators – Nomenclature

K	MS	H	A	A	3	-RC
			Fan Type & Size			
			A 300mm (AC)	C 300mm (EC)		
			B 350mm (AC)	D 350mm (EC)		
			Fluid Type			
			H HFC & HFC Blends	C CO ₂		
			Usage Application			
			LU Low Temperature – Low Frost			
			LS Low Temperature – Standard			
			MU Medium Temperature – Low Frost			
			MS Medium Temperature – Standard			
			Manufacturer Brand			
			K Kirby			
			Additional Functionality			
			-E Electric Defrost			
			-RC Factory Fitted Carel EVD-Ice			
			Nominal Capacity			
			HFC Models - R448A			
			CO ₂ Models - R744			
			Number of Fans			
			1 1 Fan	4 4 Fans		
			2 2 Fans	5 5 Fans		
			3 3 Fans			

GUARDIAN 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					SOUND POWER dB(A)
	R774	R774		240V / 50HZ / 1 PHASE					
				NUMBER OF FANS	AIR MOVEMENT		MOTORS (TOTAL)		
					FLOW (l/s)	THROW (m)	WATTS	AMPS	
300mm FAN DIAMETER									
KMSCA1014	1420	1770	0.76	1	364	7.1	85	0.42	68
KMSCA1017	1694	2111	1.13	1	322	6.4	85	0.42	69
KMSCA2025	2499	3115	1.16	2	778	10.6	170	0.84	71
KMSCA2032	3180	3964	1.89	2	683	9.6	170	0.84	71
KMSCA3044	4396	5480	2.18	3	1091	12.5	255	1.26	72
KMSCA4059	5853	7297	2.90	4	1455	14.0	340	1.68	74
350mm FAN DIAMETER									
KMSCB1020	1976	2463	0.83	1	725	8.9	215	1.05	72
KMSCB2044	4400	5486	1.86	2	1450	13.0	430	2.10	77
KMSCB2061	6086	7587	3.73	2	1189	11.7	430	2.10	77
KMSCB3077	7705	9605	3.77	3	2017	14.8	645	3.15	79
KMSCB4104	10395	12958	5.02	4	2689	16.5	860	4.20	81
KMSCB4122	12238	15256	7.45	4	2378	15.7	1075	5.25	81

GUARDIAN ECOCOOL EVAPORATORS

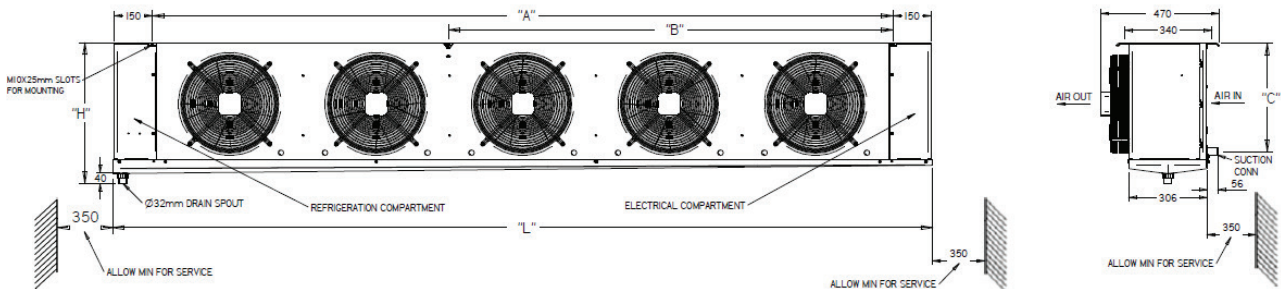
Low Temperature Performance Data

PRODUCT NUMBER	CAPACITY WATTS @ -24°C SST. & 6KTD (AUSTRALIAN CONDITION)	CAPACITY WATTS @ -25°C SST. & 7KTD (EN328 SC3 CONDITION)	REFRIGERANT CHARGE (kg)	FAN MOTOR DATA					SOUND POWER dB(A)
	R774	R774		240V / 50HZ / 1 PHASE					
				NUMBER OF FANS	AIR MOVEMENT		MOTORS (TOTAL)		
					FLOW (l/s)	THROW (m)	WATTS	AMPS	
300mm FAN DIAMETER									
KLUCA1013	1270	1482	0.81	1	386	6.1	85	0.42	68
KLUCA2025	2470	2881	1.61	2	772	9.5	170	0.84	71
KLUCA3033	3308	3859	1.82	3	1233	11.2	255	1.26	72
350mm FAN DIAMETER									
KLUCB1018	1773	2068	0.88	1	767	8.3	215	1.05	73
KLUCB2039	3907	4558	1.98	2	1533	12.1	430	2.10	77
KLUCB2050	5045	5886	3.31	2	1350	11.0	430	2.10	77
KLUCB3068	6836	7975	3.96	3	2158	14.3	645	3.15	79
KLUCB4090	9041	10547	5.28	4	2878	15.6	860	4.20	81
KLUCB4100	10037	11710	6.61	4	2700	15.3	860	4.20	81

GUARDIAN ECOCOOL EVAPORATORS

Physical Data

PRODUCT NUMBER	DIMENSIONS (mm)						CONNECTIONS (mm)		WEIGHT (kg)	PACKED
	LENGTH	DEPTH	HEIGHT	A	B	C	LIQUID	SUCTION	UNPACKED	
KIRBY GUARDIAN™ ECOCOOL – MEDIUM TEMPERATURE (300mm FAN DIAMETER)										
KMSCA1014	750	470	494	440	-	375	9.50	9.52	15.00	18.00
KMSCA1017	750	470	494	440	-	375	9.50	9.52	17.00	20.00
KMSCA2025	1155	470	494	845	-	375	9.50	12.70	23.00	28.00
KMSCA2032	1155	470	494	845	-	375	9.50	12.70	26.00	31.00
KMSCA3044	1560	470	494	1250	-	375	12.70	15.90	TBA	TBA
KMSCA4059	1970	470	494	1660	-	375	12.70	15.90	TBA	TBA
KIRBY GUARDIAN™ ECOCOOL – MEDIUM TEMPERATURE (350mm FAN DIAMETER)										
KMSCB1020	850	470	545	540	-	420	9.50	12.70	18.00	22.00
KMSCB2044	1485	470	545	1175	-	420	12.70	15.90	32.00	52.00
KMSCB2061	1485	470	545	1175	-	420	12.70	15.90	42.00	62.00
KMSCB3077	2060	470	545	1745	-	420	12.70	15.88	49.00	74.00
KMSCB4104	2630	470	545	2320	1165	420	15.90	19.10	65.00	95.00
KMSCB4122	2630	470	545	2320	1165	420	15.90	19.05	78.00	108.00
KIRBY GUARDIAN™ ECOCOOL – LOW TEMPERATURE (300mm FAN DIAMETER)										
KLUCA1013	750	470	494	440	-	375	9.52	9.50	15.00	18.00
KLUCA2025	1155	470	494	845	-	375	9.50	12.70	24.00	29.00
KLUCA3033	1560	470	494	1250	-	375	9.50	12.70	32.00	48.00
KIRBY GUARDIAN™ ECOCOOL – LOW TEMPERATURE (350mm FAN DIAMETER)										
KLUCB1018	850	470	545	540	-	420	9.50	9.50	18.00	22.00
KLUCB2039	1485	470	545	1175	-	420	9.50	12.70	32.00	52.00
KLUCB2050	1485	470	545	1175	-	420	9.52	12.70	38.00	58.00
KLUCB3068	2060	470	545	1745	-	420	12.70	15.90	49.00	74.00
KLUCB4090	2630	470	545	2320	1165	420	15.90	19.10	65.00	95.00
KLUCB4100	2630	470	545	2320	1165	420	15.90	19.10	73.00	103.00



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