

KC Series V-Type Air Cooled Condensers with 800mm EC fan motors

Karyer KC series V-Type remote air cooled condensers are designed in a compact V shape for high efficiency to provide professional solutions for industrial coolrooms, freezer applications, chillers and air conditioning projects.

The V-Type condensers are highly efficient heat exchangers that provide an extremely small footprint for the large capacity ranges offered.

KC series condensers are supplied with corrugated aluminium fin surface and optimum tube diameters for excellent heat transfer in order to increase efficiency.

They are supplied with 2.1mm fin spacings and have a maximum operating pressure of 32 bar.

These condensers are supplied with the latest EC fan technology utilising ebm three phase 800mm EC fan motor assemblies which are renowned worldwide for quality, reliability with high energy savings performance.

The KC series standard features:

- Quality three phase 800mm ebm EC fan motor assemblies.
- High performance coils with an extremely small footprint for capacities offered.
- Coils designed for multiple refrigerants with a maximum operating pressure of 32 bar.
- Aluminium corrugated fin surface with 2.1mm spacings and high-performance copper tube.
- Condensers are supplied with Hydrophilic fin treatment.
- Fan motors individually pre-wired to an electrical connection box.
- Stainless steel fasteners - screws, nuts & bolts etc.
- Panels are galvanised sheet coated in Traffic White (RAL 9016) electrostatic powder coating.



KARYER KC V-TYPE CONDENSERS with EC motors

KC Series V-Type Remote Air Cooled Condensers

800mm EC Fan Motors (400V-3Ph-50Hz.)

Fin Spacing: 2.1mm

Model	KC102VT2800EC3	KC181VT4800EC3	KC220VT4800EC3	KC282VT6800EC3	KC332VT6800EC3
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R134A						
940 rpm (Max Speed)	Watts 1ktd	10200	18100	21300	27400	32400
	Watts 10ktd	102000	181000	213000	274000	324000
680 rpm	Watts 10ktd	80000	144000	166000	218000	252000
380 rpm	Watts 10ktd	52000	94000	106000	143000	160000

R513A						
940 rpm (Max Speed)	Watts 1ktd	10200	18200	21500	27500	32500
	Watts 10ktd	102000	182000	215000	275000	325000
680 rpm	Watts 10ktd	81000	144000	168000	217000	251000
380 rpm	Watts 10ktd	52000	94000	108000	142000	160000

R404A						
940 rpm (Max Speed)	Watts 1ktd	10600	18600	22300	28200	33200
	Watts 10ktd	106000	186000	223000	282000	332000
680 rpm	Watts 10ktd	83000	147000	172000	223000	256000
380 rpm	Watts 10ktd	53000	95000	109000	145000	163000

R507						
940 rpm (Max Speed)	Watts 1ktd	10600	18800	22300	28500	33600
	Watts 10ktd	106000	188000	223000	285000	336000
680 rpm	Watts 10ktd	83000	147000	172000	223000	257000
380 rpm	Watts 10ktd	53000	95000	109000	145000	163000

R449A						
940 rpm (Max Speed)	Watts 1ktd	10800	19000	22500	28700	33800
	Watts 10ktd	108000	190000	225000	287000	338000
680 rpm	Watts 10ktd	84000	148000	173000	224000	258000
380 rpm	Watts 10ktd	54000	96000	110000	145000	163000

R448A						
940 rpm (Max Speed)	Watts 1ktd	10800	19000	22500	28800	33900
	Watts 10ktd	108000	190000	225000	288000	339000
680 rpm	Watts 10ktd	84000	148000	174000	225000	258000
380 rpm	Watts 10ktd	54000	96000	110000	145000	163000

Based on 43°C Ambient & 53°C Condensing Temperature

KARYER KC V-TYPE CONDENSERS with EC motors

KC Series V-Type Remote Air Cooled Condensers (cont'd)

800mm EC Fan Motors (400V-3Ph-50Hz.)

Fin Spacing: 2.1mm

Model		KC364VT8800EC3	KC436VT8800EC3	KC470VT10800EC3	KC551VT10800EC3
R134A 940 rpm (Max Speed)	Watts 1ktd	36400	42700	45500	53600
	Watts 10ktd	364000	427000	455000	536000
	680 rpm	288000	333000	364000	422000
380 rpm	Watts 10ktd	188000	212000	239000	269000
R513A 940 rpm (Max Speed)	Watts 1ktd	36500	43000	45500	53800
	Watts 10ktd	365000	430000	455000	538000
	680 rpm	287000	333000	362000	420000
380 rpm	Watts 10ktd	188000	212000	238000	269000
R404A 940 rpm (Max Speed)	Watts 1ktd	37300	43600	47000	55100
	Watts 10ktd	373000	436000	470000	551000
	680 rpm	295000	340000	373000	430000
380 rpm	Watts 10ktd	191000	215000	243000	273000
R507 940 rpm (Max Speed)	Watts 1ktd	37700	44200	47500	55800
	Watts 10ktd	377000	442000	475000	558000
	680 rpm	295000	340000	373000	431000
380 rpm	Watts 10ktd	191000	215000	243000	273000
R449A 940 rpm (Max Speed)	Watts 1ktd	38000	44400	48000	56300
	Watts 10ktd	380000	444000	480000	563000
	680 rpm	296000	341000	376000	433000
380 rpm	Watts 10ktd	192000	216000	244000	274000
R448A 940 rpm (Max Speed)	Watts 1ktd	38100	44500	48100	56400
	Watts 10ktd	381000	445000	481000	564000
	680 rpm	297000	341000	377000	434000
380 rpm	Watts 10ktd	192000	216000	244000	274000

Based on 43°C Ambient & 53°C Condensing Temperature

KARYER KC V-TYPE CONDENSERS with EC motors

Technical Specifications

Model	KC102VT2800EC3	KC181VT4800EC3	KC220VT4800EC3	KC282VT6800EC3	KC332VT6800EC3
Air Flow (max. speed) (m ³ /hr)	47052	90690	87228	135962	130842
800mm EC Fans (Qty)	2	4	4	6	6
400/3/50Hz EC Fan Motors	Total Watts	3900	7800	7800	11700
	Total Amps	6.2	12.4	12.4	18.6
Inlet Connection (mm)	2 x 35mm	2 x 35mm	2 x 42mm	2 x 54mm	2 x 54mm
Outlet Connection (mm)	2 x 28mm	2 x 28mm	2 x 35mm	2 x 42mm	2 x 42mm
Fin Spacing (mm)	2.1	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	387.0	600.0	800.0	900.0	1198.0
Internal Tube Volume (l)	39.8	66.0	85.2	101.4	127.0
Maximum Pressure (bar)	32.0	32.0	32.0	32.0	32.0
Dry Weight (kg)	525	1143	1205	1596	1653
Overall Dimensions (mm)	Height	1808	2453	2453	2453
	Depth	1150	2300	2300	2300
	Frame Width (with tails-not cover)	2660	2650	2650	3750
Dimension Diagram	DDKC02	DDKC04	DDKC04	DDKC06	DDKC06

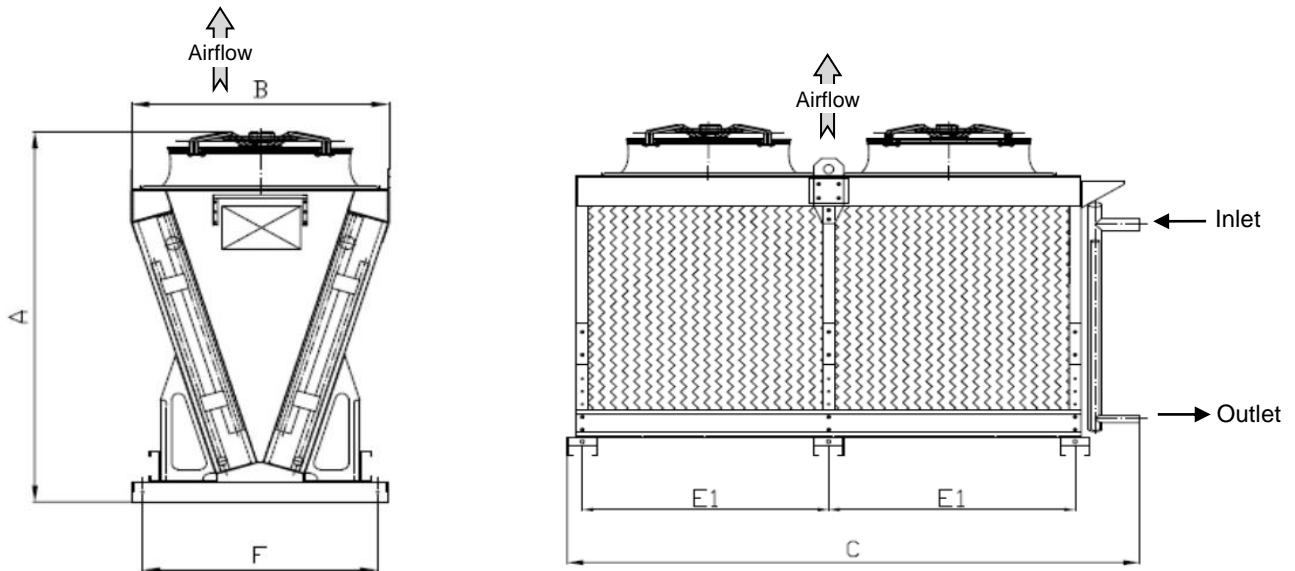
Model	KC364VT8800EC3	KC436VT8800EC3	KC470VT10800EC3	KC551VT10800EC3
Air Flow (max. speed) (m ³ /hr)	181382	174456	226728	218070
800mm EC Fans (Qty)	8	8	10	10
400/3/50Hz EC Fan Motors	Total Watts	15600	15600	19500
	Total Amps	24.8	24.8	31.0
Inlet Connection (mm)	2 x 54mm	2 x 54mm	2 x 54mm	2 x 54mm
Outlet Connection (mm)	2 x 42mm	2 x 42mm	2 x 42mm	2 x 42mm
Fin Spacing (mm)	2.1	2.1	2.1	2.1
Heat Exchange Surface Area (m ²)	1200.0	1600.0	1500.0	2000.0
Internal Tube Volume (l)	128.6	167.0	157.4	205.2
Maximum Pressure (bar)	32.0	32.0	32.0	32.0
Dry Weight (kg)	2001	2112	2420	2568
Overall Dimensions (mm)	Height	2453	2453	2453
	Depth	2300	2300	2300
	Frame Width (with tails-not cover)	4850	4850	5950
Dimension Diagram	DDKC08	DDKC08	DDKC10	DDKC10

KARYER KC V-TYPE CONDENSERS with EC motors

Condenser Dimensions

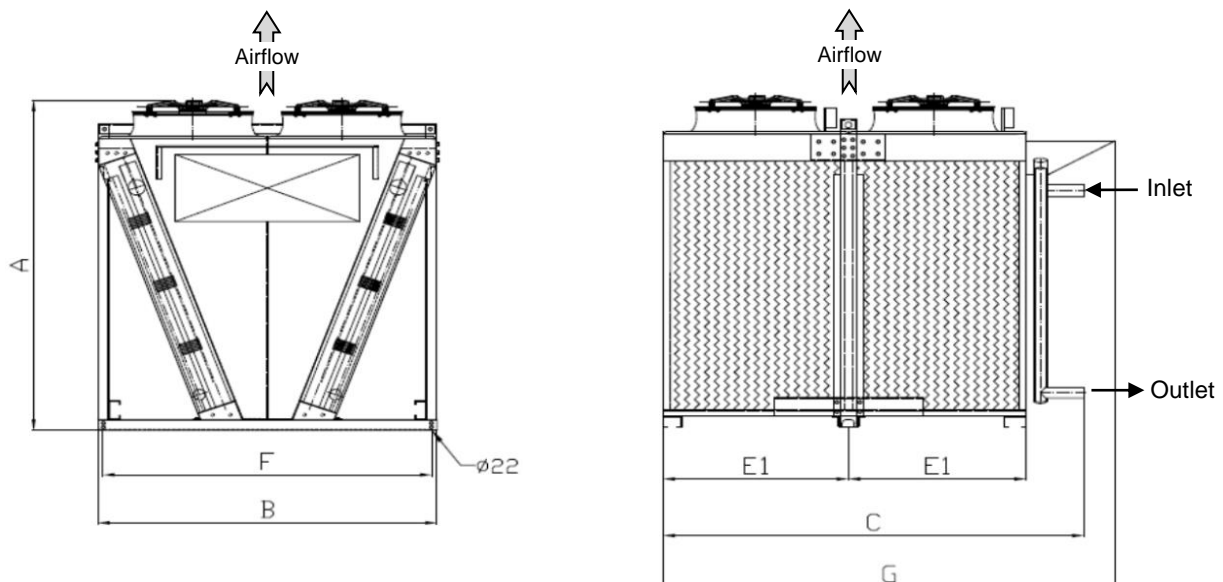
Dimension Diagram: DDKC02

Condenser Model (2 x 800mm EC Fans)	A (mm)	B (mm)	C (mm)	E1 (mm)	F (mm)
KC102VT2800EC3	1808	1150	2660	1130	1050



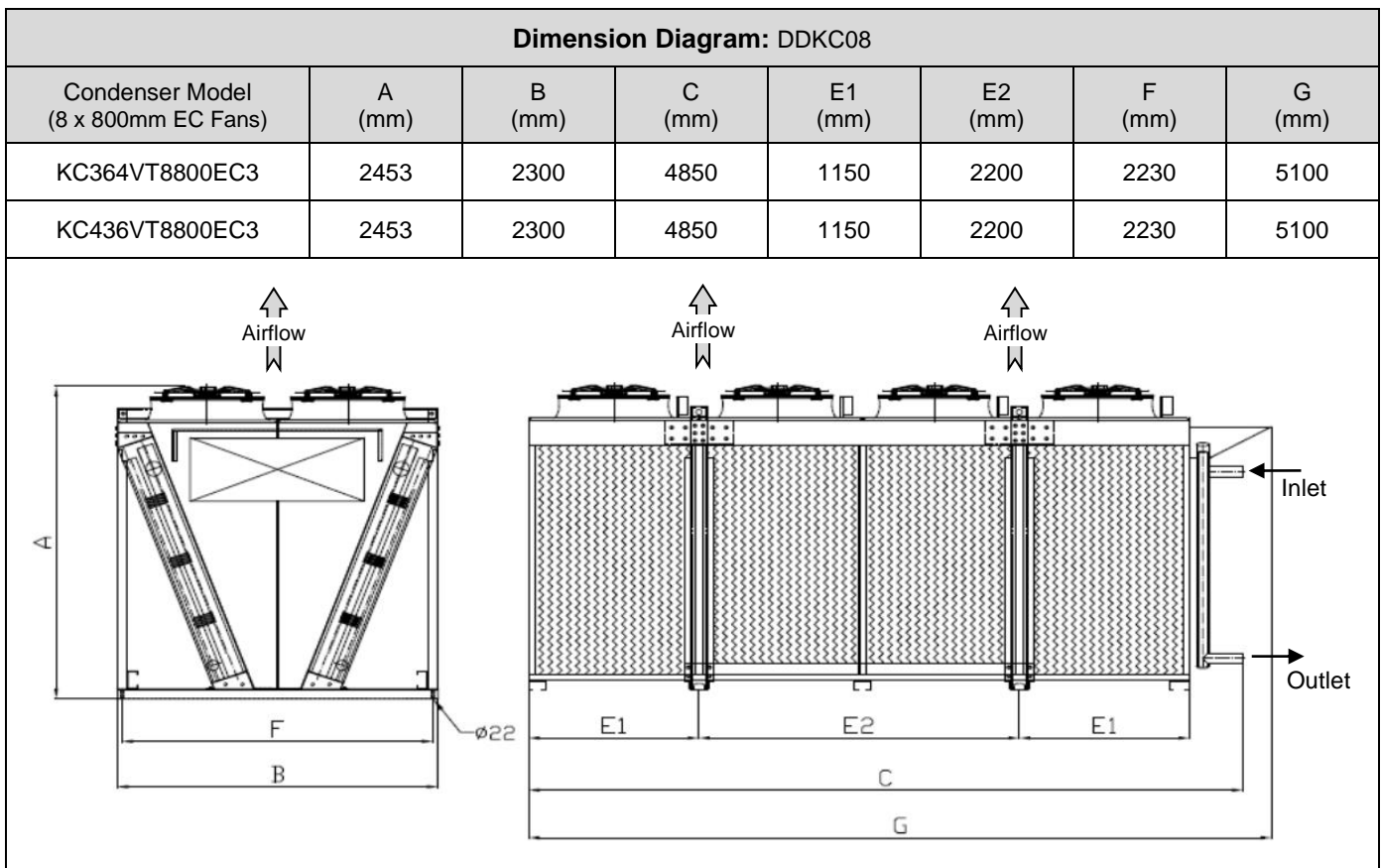
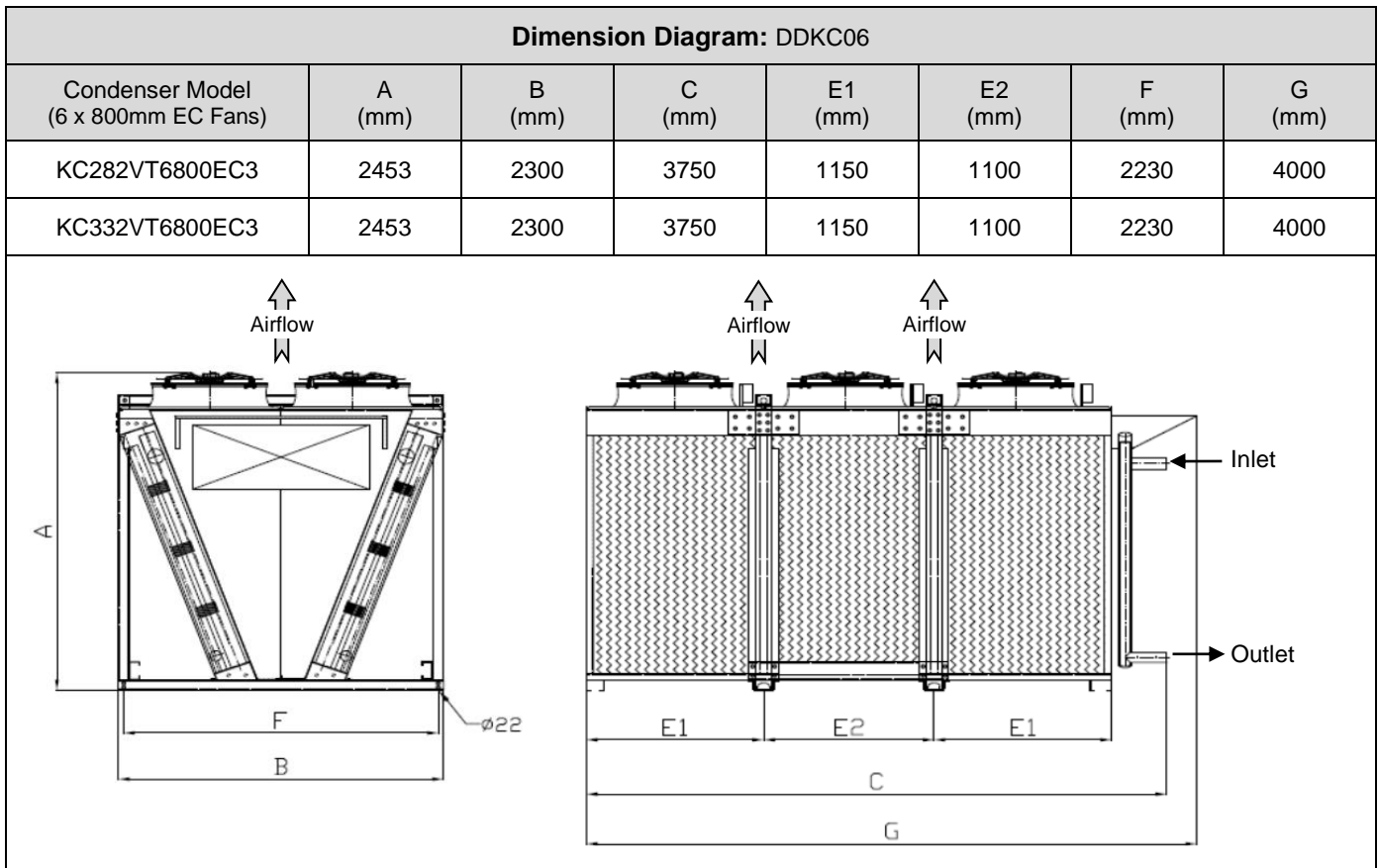
Dimension Diagram: DDKC04

Condenser Model (4 x 800mm EC Fans)	A (mm)	B (mm)	C (mm)	E1 (mm)	F (mm)	G (mm)
KC181VT4800EC3	2453	2300	2650	1150	2230	2900
KC220VT4800EC3	2453	2300	2650	1150	2230	2900



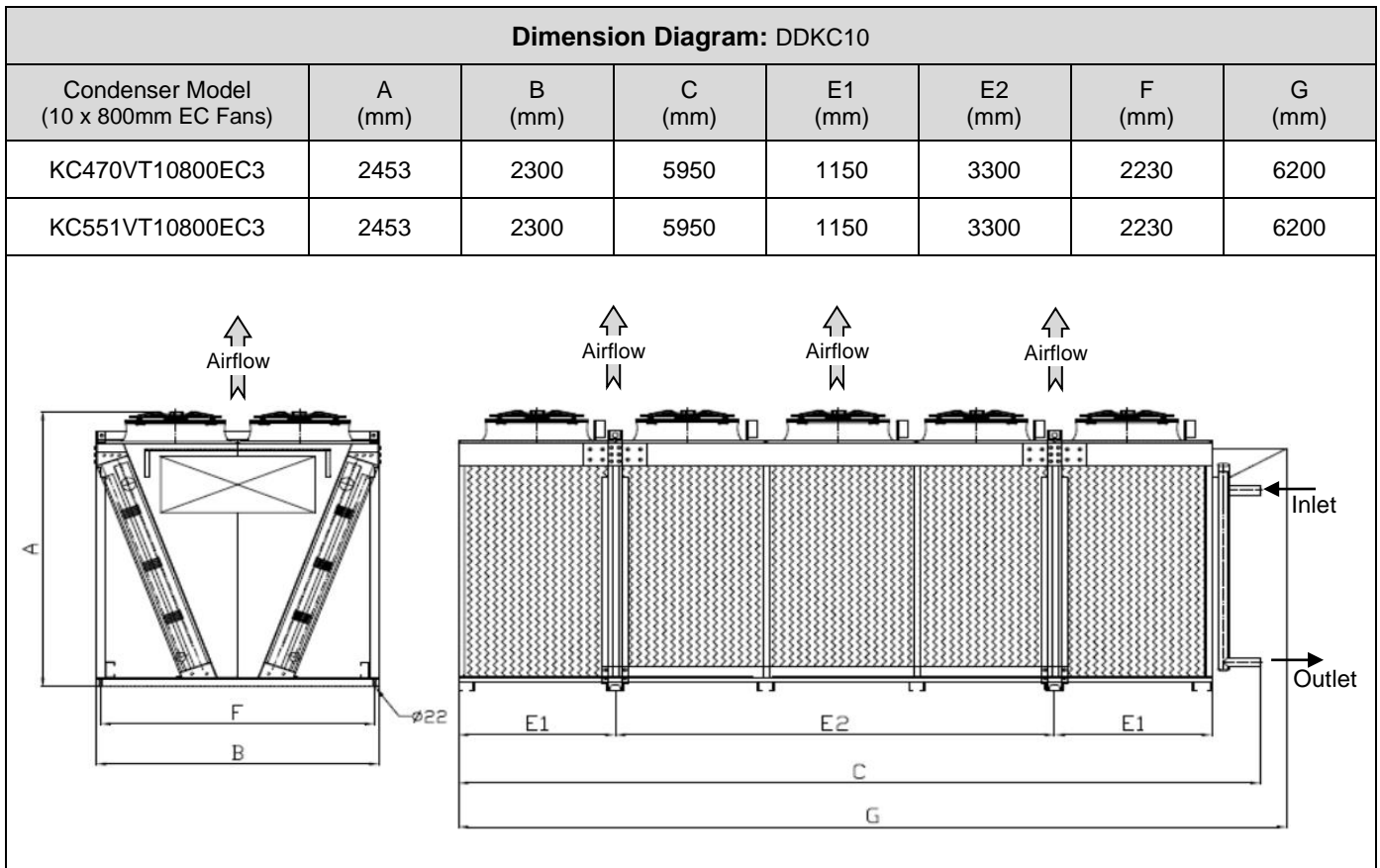
KARYER KC V-TYPE CONDENSERS with EC motors

Condenser Dimensions (cont'd)



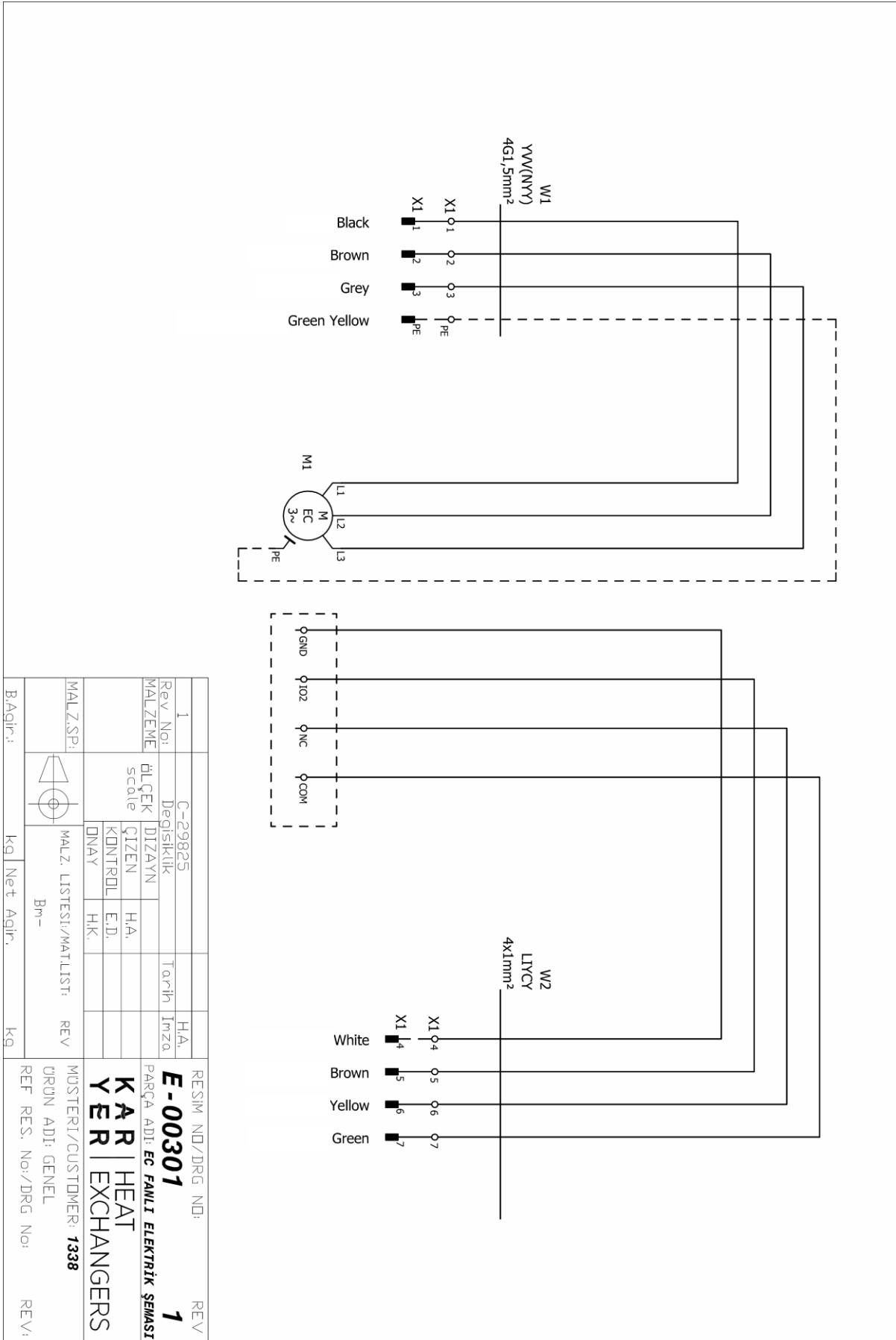
KARYER KC V-TYPE CONDENSERS with EC motors

Condenser Dimensions (cont'd)



KARYER KC V-TYPE CONDENSERS with EC motors

Condenser Fans Factory Wiring Diagram



KARYER KC V-TYPE CONDENSERS with EC motors

Condenser Shipping Dimensions & Weights

Shipping Dimensions & Weights				
KC Condenser Models	Shipping Package Dimensions (mm)			Shipping Weight (Kg)
	Depth	Width	Height	
KC102VT2800EC3	1170	2710	1858	525
KC181VT4800EC3	2320	2950	2500	1143
KC220VT4800EC3	2320	2950	2500	1205
KC282VT6800EC3	2320	4050	2500	1569
KC332VT6800EC3	2320	4050	2500	1653
KC364VT8800EC3	2320	5150	2500	2001
KC436VT8800EC3	2320	5150	2500	2112
KC470VT10800EC3	2320	6250	2500	2420
KC551VT10800EC3	2320	6250	2500	2568

Condenser Spare Parts

KC Condenser Models	Fan Motor Qty	Fan Motors - ebm EC 800mm (400V / 3 Phase / 50Hz)
KC102VT2800EC3	2	W3G800KS3903
KC181VT4800EC3	4	W3G800KS3903
KC220VT4800EC3	4	W3G800KS3903
KC282VT6800EC3	6	W3G800KS3903
KC332VT6800EC3	6	W3G800KS3903
KC364VT8800EC3	8	W3G800KS3903
KC436VT8800EC3	8	W3G800KS3903
KC470VT10800EC3	10	W3G800KS3903
KC551VT10800EC3	10	W3G800KS3903