

## **CCE –condensers/dry coolers**

### **Capacity range 15 – 93 kW**



#### **Characters**

Air-cooled CCE –condensers/dry coolers are for outdoor use suitable at once ready units which are equipped with safety switches per every fan.

7 sizes and 4 different fan rotation speed classes.

Two mounting alternatives:

- H-type with air flow upwards
- V-type with horizontal air flow

#### **Accessories**

- Different casing colour alternatives
- Special materials for heat transfer
- Fan motor(s) electrical board and control automatic center.

#### **Technical data**

Heat transfer section is made of copper tubes and aluminium fins. Fin spacing is 2,5 mm. Frame construction is done of efficiently corrosion protected hot galvanised steel. Casing is of plastic covered sheet metal (standard color is white).

Fan motors are high efficiency external ring motors with protection class IP 54.

Units are provided with partition walls between fan sections.

Condensers have neutral gas charge for preinstallation period.

#### **Unit selection**

Condenser selection is available on base of leaf-let table or by selection program.

## Performance data

Unit size	Fan(s) pce.	7			9			11			14		
		Cap. kW	Air flow m <sup>3</sup> /s	Sound level dB(A)	Cap. kW	Air flow m <sup>3</sup> /s	Sound level dB(A)	Cap. kW	Air flow m <sup>3</sup> /s	Sound level dB(A)	Cap. kW	Air flow m <sup>3</sup> /s	Sound level dB(A)
1	1	15,4	1,2	34	18,2	1,55	42	20,1	1,8	48	23,4	2,3	55
2	1	18,3	1,3	34	22,3	1,75	42	24,8	2,05	48	28,2	2,5	55
3	2	27,0	2,5	37	31,7	3,3	45	35,1	3,9	51	39,0	4,85	58
4	2	30,4	2,4	37	36,4	3,1	45	40,1	3,6	51	46,4	4,6	58
5	2	36,6	2,6	37	44,6	3,5	45	49,6	4,1	51	56,4	5,0	58
6	3	46,2	3,6	39	54,6	4,65	46	60,4	5,4	52	70,0	6,9	60
7	4	60,8	4,8	40	72,8	6,2	48	80,2	7,2	54	92,8	9,2	61

Performance data is given by conditions:

- Sound information is given for sound pressure level dB(A) at 10 m's distance from unit end (by ISO 3741 standard)
- Fin step 2,5 mm
- Condensing capacity by condensing temperature + 45 °C, ambient air +30 °C and refrigerant R134a. Correction factor for refrigerant R407c is 0,89.

## Product designation

<b>C</b>	<b>C</b>	<b>E</b>	-	<b>x</b>	-	<b>yy</b>	-	<b>aa</b>	-	<b>b</b>	-	<b>cc</b>	-	<b>TK</b>
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- x** Unit size
- y** Rotation speed rpm
- a** Fin step
- b** Air flow direction (H = vertically upwards; V = horizontally)
- c** Condenser's circuits
- TK** Safety switches

## Fan motors electrical data

Fan speed class	7	9	11	14
Power input / fan [ kW ]	0,20	0,39	0,61	0,80
Nominal amps / fan [ A ] (1)	0,48	0,92	1,05	1,55
Max. amps / fan [ A ] (2)	0,57	1,1	1,25	1,86
Mains	400 V – 50 Hz – 3 Ph			

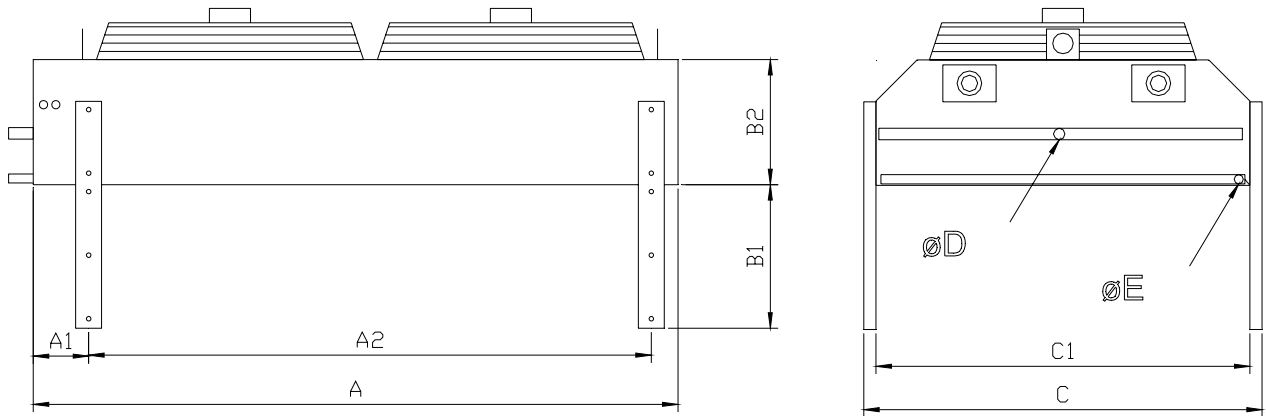
Notes:

- (1) Nominal amps by +40 °C air condition.
- (2) Max. amps by -30 °C ambient air condition. Motors overload protections must be dimensioned on base of motors max amps data! Overload protectors should have +/- 20 % adjusting margin for possible motor(s) performance changes.

***CHILLER OY reserves the right to changes without prior notice***

## Dimensions

Air flow upwards ( CCE – x – yy – aa – H – cc – TK )



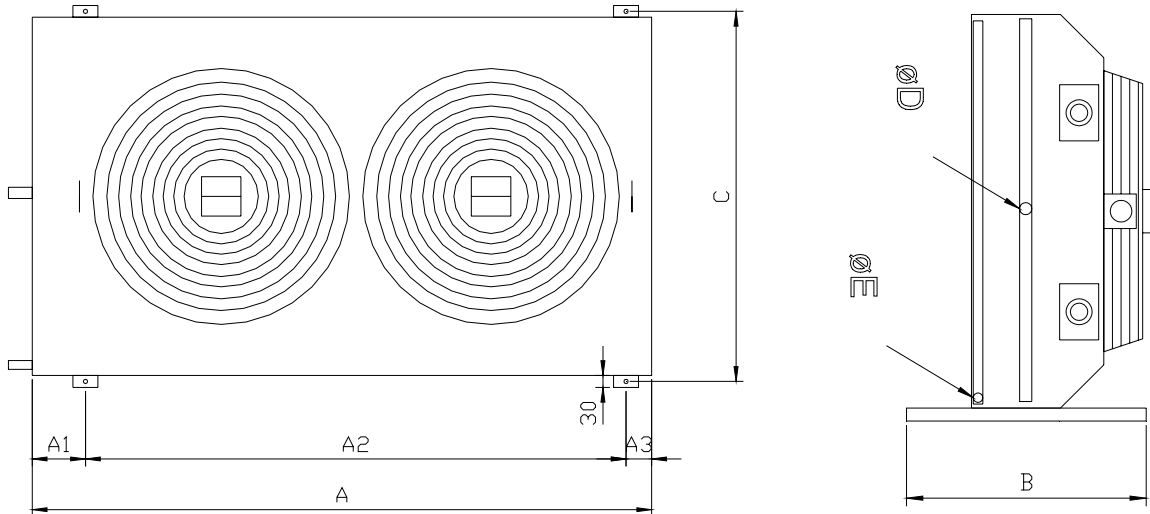
Unit size	A mm	A1 mm	A2 mm	B mm	B1 mm	B2 mm	C mm	C1 mm	Weight (cargo) kg	Internal volume l	D mm	E mm
1	870	135	670	655	350	305	970	910	45	8	28	22
2	1170	135	970	655	350	305	970	910	54	11,0	28	22
3	1570	135	1370	655	350	305	970	910	77	11,5	28	22
4	1570	135	1370	655	350	305	970	910	90	15,5	35	28
5	2170	135	1970	655	350	305	970	910	108	21	35	28
6	2270	135	2070	655	350	305	970	910	133	22	35	28
7	2970	135	2770	655	350	305	970	910	180	29	42	35

NOTE ! Size CCE-7 : 3 legs/side (middle feet fixing hole dimension  $A2 / 2 = 1385$  mm)

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## Dimensions

Horizontal air flow ( CCE – x – yy – aa – V – cc – TK )



Unit size	A mm	A1 mm	A2 mm	A3 mm	B mm	C mm	Weight (cargo) kg	Internal volume l	D mm	E mm
1	870	135	670	65	553	940	45	8	28	22
2	1170	135	970	65	553	940	54	11,0	28	22
3	1570	135	1370	65	553	940	77	11,5	28	22
4	1570	135	1370	65	553	940	90	15,5	35	28
5	2170	135	1970	65	553	940	108	21	35	28
6	2270	135	2070	65	553	940	133	22	35	28
7	2970	135	2770	65	553	940	180	29	42	35

NOTE ! Size CCE-7 : 3 legs/side (middle feet fixing hole dimension  $A2 / 2 = 1385$  mm)

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Marketing

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