

CELLBOX Roof-mount units for Chilling (KD) and Freezing (TD) – R452a

The CELLBOX BLOCK SYSTEMS consist of a ready-to-use condensation unit, a vaporizer, and an electronic temperature controller. They provide a simple solution for various refrigeration applications. They are available in different designs and deliver reliability due to accurate selection of components, our most stringent production and quality controls, and our long-time experience in refrigeration.

GENERAL TECHNICAL CHARACTERISTICS

- **Coolant: R452a**
- Self-supporting housing consisting of galvanised sheets, powder-coated
- Electronic temperature display and controller which - by means of an interface converter available as optional equipment - facilitate the connection to a monitoring and remote maintenance system
- Compressor (hermetic or semi-hermetic) with thermal coil protection
- CE approval
- Operating conditions: + 5 / + 43° C.
- Winter and/or tropics controller optional
- Air-cooled condensers (water-cooled condensers are available upon request)
- Expansion by means of capillary tube or expansion valve
- Automatic defrosting programmable by means of controller
- Condensed water discharge directly into condensate evaporation bowl
- Heat exchanger with copper pipes and aluminum ribs

CELLBOX KD – Roof-mount Units for Chilling – R452a

- 5 / + 5 °C

Compact ready-to-use chilling unit for ceiling mounting

Coolant: R452 a

Standard equipment:

- Electronic controller
- Remote control panel with 5 m connection cable
- Power cord 2.5 m with plug, fuse protection provided by customer
- Connection cable 2.5 m for door contact switch
- Lighting with 2.5 m cord
- Heated evaporation bowl for condensate
- High pressure switch
- For ambient temperature of up to 43°C

Refer to page 6 for figures and dimensions

Type	CELLBOX KD 100	CELLBOX KD 200	CELLBOX KD 300	CELLBOX KD 400								
Form	A	B	C	C								
Electrical Parameters												
Voltage Volt/Ph/Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50								
Power consumption W	539	814	1095	1280								
Current consumption A	3.2	4.9	5.8	6.2								
Compressor												
Type / output PS	Fully hermetic – 0.43	Fully hermetic – 0.5	Fully hermetic – 1.0	Fully hermetic – 1.12								
Condenser												
Fan (diameter) mm	1 x 254	1 x 300	2 x 254	2 x 254								
Air quantity m ³ / h	546	1053	1314	1314								
Vaporizer												
Fan (diameter) mm	1 x 200	1 x 200	2 x 200	2 x 200								
Air quantity m ³ / h	510	560	1020	960								
Air dispersion m	3	3	3.5	3.5								
Expansion	Capillary tube	Capillary tube	Capillary tube	Capillary tube								
Type of defrosting	Hot gas	Hot gas	Hot gas	Hot gas								
Weight net / gross (kg)	49 / 66	63 / 86	84 / 119	89 / 124								
Noise level¹⁾ db(A)	32,5	44,0	41,7	45,1								
Cooling output W												
Coldroom temperature °C	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5
At +32° C outside temp.	860	753	655	1218	1072	934	1870	1619	1385	2298	1996	1711
At +43° C outside temp.	710	622	540	1018	901	783	1557	1349	1154	1949	1692	1448
Coldroom volume m³	All values based on 80 mm PUR insulation											
Coldroom temperature °C	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5
At +32° C outside temp.	6,6	4,3	3,7	11,3	7,1	5,9	19,5	12,9	10,2	25,7	17,0	13,7
At +43° C outside temp.	5,0	3,3	2,8	8,1	5,3	4,4	14,3	9,4	7,4	19,2	12,7	10,2

Accessories:

- Water-cooled condenser
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Oil sump heater
- Low pressure switch
- Assembly opening and/or recess
- Expansion valve

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.

²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

CELLBOX KD – Roof-mount Units for Chilling – R452a

- 5 / + 5 °C

Compact ready-to-use chilling unit for ceiling mounting

Coolant: R452 a

Standard equipment:

- Electronic controller
- Remote control panel with 5 m connection cable
- Power cord 2.5m w. plug, fuse protection provided by customer
- Connection cable 2.5m for door contact switch
- Lighting with 2.5 m cord
- Heated evaporation bowl for condensate
- High pressure switch
- For ambient temperature of up to 43°C

Refer to page 7 for figures and dimensions

Type	CELLBOX KD 500	CELLBOX KD 600				
Form	D	D				
Electrical Parameters						
Voltage Volt/Ph/Hz	400 / 3 / 50	400 / 3 / 50				
Power consumption W	1428	1646				
Current consumption A	3.6	4.4				
Compressor						
Type / output PS	Fully hermetic – 1.25	Fully hermetic – 2.0				
Condenser						
Fan (diameter) mm	2 x 300	2 x 300				
Air quantity m ³ / h	2500	2281				
Vaporizer						
Fan (diameter) mm	3 x 200	3 x 200				
Air quantity m ³ / h	1480	1390				
Air dispersion m	4	4				
Expansion	Capillary tube	Capillary tube				
Type of defrosting	Hot gas	Hot gas				
Weight net / gross (kg)	90 / 127	110 / 147				
Noise level ¹⁾ db(A)	47,2	47,4				
Cooling output W						
Coldroom temperature °C	+5	0	-5	+5	0	-5
At +32° C outside temp.	2851	2442	2060	3415	2961	2531
At +43° C outside temp.	2398	2051	1725	2846	2456	2088
Coldroom volume m³	All values based on 80 mm PUR insulation					
Coldroom temperature °C	+5	0	-5	+5	0	-5
At +32° C outside temp.	33,8	21,9	17,2	42,8	28,2	22,5
At +43° C outside temp.	25,0	16,2	12,8	31,4	20,5	16,2

Accessories:

- Water-cooled condenser
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Oil sump heater
- Low pressure switch
- Assembly opening and/or recess

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.

²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

CELLBOX TD – Roof-mount Units for Freezing – R452a**-15 / -25 °C**

Compact ready-to-use freezing unit for ceiling mounting

Coolant: **R452a****Standard equipment:**

- Electronic controller
- Remote control panel with 5 m connection cable
- Power cord 2.5 m with plug, fuse protection provided by customer
- Connection cable 2.5 m for door contact switch
- Lighting with 2.5 m cord
- Heated evaporation bowl for condensate
- High pressure switch
- For ambient temperature of up to 43°C

Refer to page 6 for figures and dimensions

Type	CELLBOX TD 100	CELLBOX TD 200	CELLBOX TD 300						
Form	A	B	C						
Electrical Parameters									
Voltage Volt/Ph/Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50						
Power consumption W	598	786	1127						
Current consumption A	2.9	3.8	6.4						
Compressor									
Type / output PS	Fully hermetic – 0.75	Fully hermetic – 1.0	Fully hermetic – 1.5						
Condenser									
Fan (diameter) mm	1 x 254	1 x 300	2 x 254						
Air quantity m ³ / h	546	1053	1314						
Vaporizer									
Fan (diameter) mm	1 x 200	1 x 220	2 x 200						
Air quantity m ³ / h	510	560	960						
Air dispersion m	3	3	3,5						
Expansion	Expansion valve	Expansion valve	Expansion valve						
Type of defrosting	Hot gas	Hot gas	Hot gas						
Weight net / gross (kg)	52 / 69	54 / 77	90 / 125						
Noise level¹⁾ db(A)	32,4	44,1	42,2						
Cooling output W									
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	693	586	486	1068	895	734	1523	1268	1030
At +43° C outside temp.	582	493	408	889	734	589	1257	1041	836
Coldroom volume m³	All values based on PUR 100 mm insulation thickness								
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	3,5	2,8	1,8	7,3	5,7	3,8	13,0	10,4	6,8
At +43° C outside temp.	2,5	2,0	1,4	5,2	4,0	2,6	9,1	7,3	4,6

Accessories:

- Water-cooled condenser
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Oil sump heater
- Low pressure switch
- Assembly opening and/or recess

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

CELLBOX TD – Roof-mount Units for Freezing – R452a

-15 / -25 °C

Compact ready-to-use freezing unit for roof mounting

Coolant: R452a

Standard equipment:

- Electronic controller
- Remote control panel with 5 m connection cable
- Power cord 2.5 m with plug, fuse protection provided by customer
- Connection cable 2.5 m for door contact switch
- Lighting with 2.5 m cord
- Evaporation bowl for condensate heated
- High pressure switch
- For ambient temperature of up to 43°C

Refer to page 7 for figures and dimensions

Type	CELLBOX TD 400	CELLBOX TD 500	CELLBOX TD 600						
Form	D	E	E						
Electrical Parameters									
Voltage Volt/Ph/Hz	400 / 3 / 50	400 / 3 / 50	400 / 3 / 50						
Power consumption W	1288	2084	2882						
Current consumption A	3.5	5.8	6.9						
Compressor									
Type / output PS	Fully hermetic – 2.0	Fully hermetic – 3.0	Fully hermetic – 4.0						
Condenser									
Fan (diameter) mm	2 x 300	2 x 350	2 x 350						
Air quantity m ³ / h	2500	4287	3825						
Vaporizer									
Fan (diameter) mm	3 x 200	3 x 300	3 x 300						
Air quantity m ³ / h	1480	2200	2100						
Air dispersion m	4	5	5						
Expansion	Expansion valve	Expansion valve	Expansion valve						
Type of defrosting	Hot gas	Hot gas	Hot gas						
Weight net / gross (kg)	119 / 156	179 / 233	192 / 246						
Noise level¹⁾ db(A)	47,5	46,9	47,8						
Cooling output W									
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	2103	1733	1395	3302	2772	2276	4220	3560	2949
At +43° C outside temp.	1736	1417	1124	2684	2244	1828	3471	2924	2415
Coldroom volume m³	All values based on PUR 100 mm insulation thickness								
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	22,2	17,3	11,1	44,7	36,4	24,2	65,2	52,7	35,7
At +43° C outside temp.	15,7	12,1	7,6	31,1	25,1	16,9	46,1	34,9	25,6

Accessories:

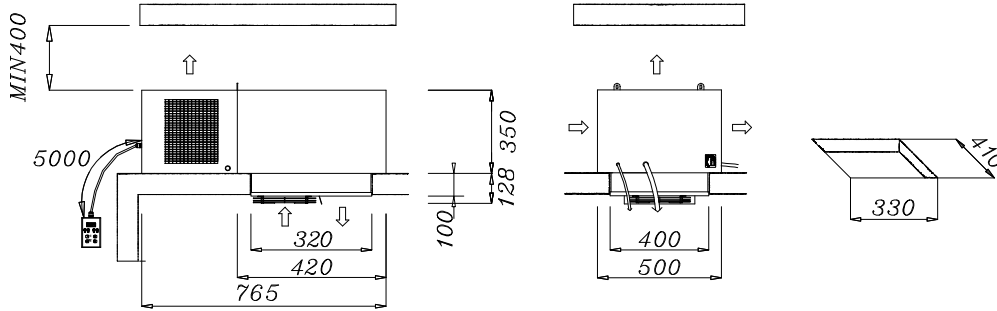
- Water-cooled condenser
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Oil sump heater
- Low pressure switch
- Assembly opening and/or recess

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.

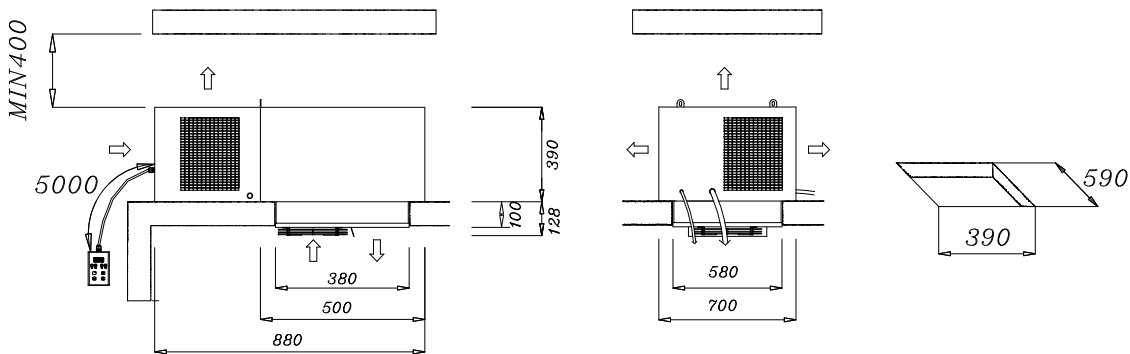
²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

CELLBOX Roof-mount Units (R452a) – Figures and Dimensions

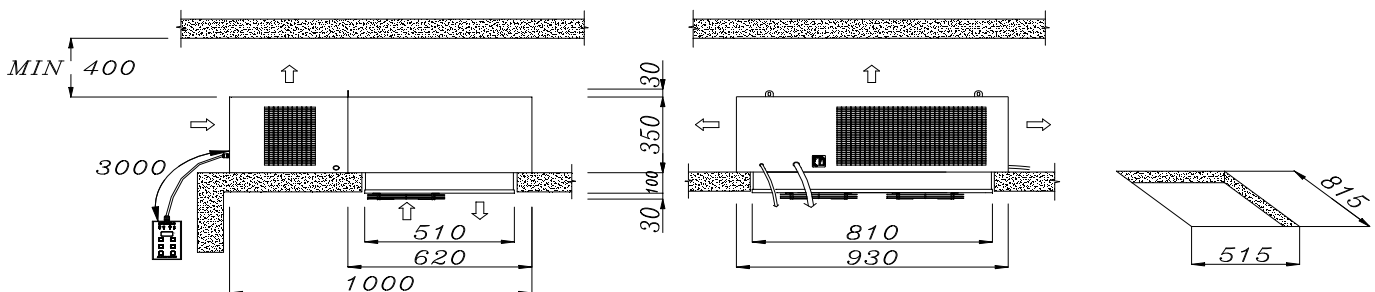
FORM A Packaging dimensions W x L x H: 920 x 600 x 661 mm



FORM B Packaging dimensions W x L x H: 990 x 800 x 700 mm

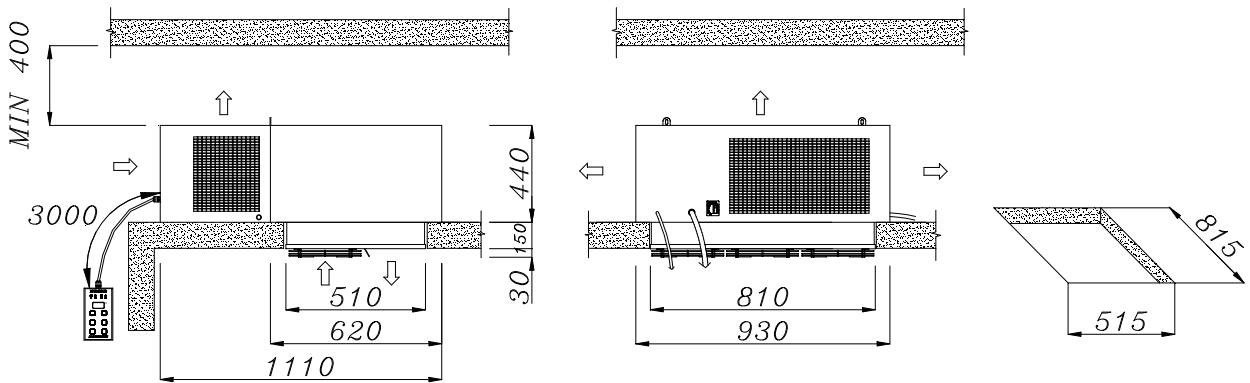


FORM C Packaging dimensions W x L x H: 1050 x 1250 x 806 mm



CELLBOX Roof-mount Units (R452a) – Figures and Dimensions

FORM D Packaging dimensions W x L x H: 1050 x 1250 x 806 mm



FORM E Packaging dimensions W x L x H: 1420 x 1460 x 876 mm

