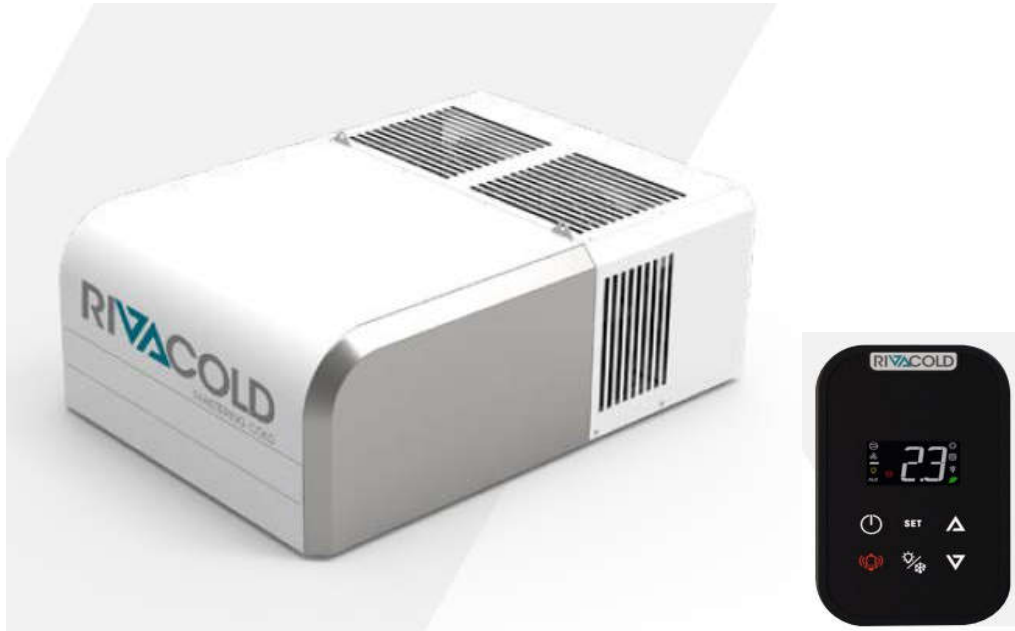


CELLBOX Ceiling units R290 - KD (cooling) und TD (freezing)

CELLBOX ceiling units R290 are factory-manufactured and ready-to-use refrigeration units (monobloc) that contain all components of the complete refrigerant circuit. CELLBOX ceiling units R290 are a simple, economical, and future-proof solution for a wide range of cooling applications. CELLBOX ceiling units R290 are available in various versions and offer impressive reliability and energy efficiency, which we guarantee thanks to the accurate selection and harmonisation of components, strict production and quality control and our many years of experience in the refrigeration sector.

GENERAL TECHNICAL CHARACTERISTICS

- **Refrigerant: R290 (propane)**
- Refrigerant charge <150 g per refrigerant circuit
(according to DIN EN 378, no additional safety device is required)
- Electronic control, can be parameterised to customer specifications if required
- Hermetic compressor with thermal winding protection
- CE conformity
- Min. / max. ambient temperature +5 °C / +43 °C
- Air-cooled condenser (water-cooled versions on request)
- Thermostatic expansion valve (TEV)
- Automatic defrost programmable: Intervals, real time, demand
- Condensate drain directly into condensate evaporation tray
- Heat exchanger made of copper pipes and aluminium fins
- Protection class IP 20
- Connectivity: Bluetooth via APP (standard), Modbus (standard), IoT (optional)

CELLBOX KD – Roof-mount Units for Chilling – Propane

Compact plug-in refrigeration unit for ceiling installation with refrigerant R290 (propane) for coldroom temperatures from -5 to +15 °C.

Standard equipment:

- Electronic control instrument with Bluetooth connectivity
- Remote control panel with 5 m connection cable
- Power cable 2,5 m with 3-pin CEE-plug (1Ph+N+PE) 230V 16A – Fuse protection on site
- Door contact switch with 2.5 m cable
- Lighting with 5 m cable
- Modbus connection with 5 m cable
- Heated evaporation tray for condensation water
- High pressure transmitter
- Low pressure transmitter

For illustrations and installation dimensions, see pages 6 - 7

Type	CELLBOX KD100-R290 B			CELLBOX KD200-R290 B			CELLBOX KD300-R290 B			CELLBOX KD400-R290 B			CELLBOX KD500-R290 B		
Form	CM130			CM130			CM130			CM230			CM230		
Electrical Data															
Voltage Volt/Ph/Hz	230/1/50			230/1/50			230/1/50			230/1/50			230/1/50		
Absorption W	395			570			765			975			1200		
Absorption A	2,1			3,1			4,2			5,3			6,5		
Compressor															
Number and type	1 x hermetic			1 x hermetic			1 x hermetic			1 x hermetic			1 x hermetic		
Condenser															
Fan: number and Ø mm	1 x 300			1 x 300			1 x 300			2 x 300			2 x 300		
Airflow m ³ / h	1100			1100			1100			2450			2450		
Evaporator															
Fan: number and Ø mm	1 x 300			1 x 300			1 x 300			2 x 300			2 x 300		
Luftmenge m ³ / h	750			750			750			1300			1300		
Air throwing range m	3			3			3			4,5			4,5		
Expansion	TEV			TEV			TEV			TEV			TEV		
Defrost	Hotgas			Hotgas			Hotgas			Hotgas			Hotgas		
Weight kg net / gross	64 / 85			65 / 86			65 / 86			90 / 120			97 / 127		
Sound level¹⁾ db(A)	31,5			31,7			31,5			35,7			36,7		
Cooling capacity W															
Cold room temperature °C	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5
+32°C ambient temp.	858	737	626	1236	1074	924	1520	1332	1156	1926	1683	1457	2245	1972	1717
+43°C ambient temp.	749	640	541	1093	947	812	1352	1184	1026	1711	1496	1294	2005	1755	1521
Cold room volume m³															
Cold room temperature °C	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5
+32°C ambient temp.	9,4	6,0	3,9	16,1	9,7	6,5	21,5	13,0	8,6	29,2	19,0	11,5	35,5	23,4	15,2
+43°C ambient temp.	4,8	3,1	2,1	7,8	5,3	3,6	10,4	7,1	5,0	15,7	9,7	6,7	20,3	11,9	8,3

Data for room volumes refer to insulation thickness PUR 80 mm

Accessories for the units (prices on request):

- Water-cooled condenser
- Mounting opening or recess

¹⁾ Measured at a distance of 10 m at nominal power in the installation position. Depending on local conditions and installation position, the values achieved may vary.

CELLBOX KD – Roof-mount Units for Chilling – Propane

Compact plug-in refrigeration unit for ceiling installation with refrigerant R290 (propane) for coldroom temperatures from -5 to +15 °C.

Standard equipment:

- Electronic control instrument with Bluetooth connectivity
- Remote control panel with 5 m connection cable
- Power cable 2,5 m with 3-pin CEE-plug (1Ph+N+PE) 230V 16A – Fuse protection on site
- Door contact switch with 2.5 m cable
- Lighting with 5 m cable
- Modbus connection with 5 m cable
- Heated evaporation tray for condensation water
- High pressure transmitter
- Low pressure transmitter

For illustrations and installation dimensions, see pages 7

Type	CELLBOX KD600-R290 B			CELLBOX KD700-R290 B			CELLBOX KD800-R290 B		
Form	CM230			CM230			CM230		
Electrical Data									
Voltage Volt/Ph/Hz	400/3/50			400/3/50			400/3/50		
Absorption W	1475			1790			2245		
Absorption A	2,8			3,3			4,2		
Compressor									
Number and type	2 x hermetic			2 x hermetic			2 x hermetic		
Condenser									
Fan: number and Ø mm	2 x 300			2 x 300			2 x 300		
Airflow m ³ / h	2300			2300			2300		
Evaporator									
Fan: number and Ø mm	2 x 300			2 x 300			2 x 300		
Luftmenge m ³ / h	1150			1150			1150		
Air throwing range m	4			4			4		
Expansion	TEV			TEV			TEV		
Defrost	Hotgas			Hotgas			Hotgas		
Weight kg net / gross	110 / 140			110 / 140			124 / 154		
Sound level ¹⁾ db(A)	34,5			36,8			38,2		
Cooling capacity W									
Cold room temperature °C	+5	0	-5	+5	0	-5	+5	0	-5
+32°C ambient temp.	3078	2698	2341	3521	3097	2698	4053	3584	3140
+43°C ambient temp.	2739	2400	2080	3123	2748	2393	3634	3196	2786
Cold room volume m³									
Cold room temperature °C	+5	0	-5	+5	0	-5	+5	0	-5
+32°C ambient temp.	52,6	35,1	23,7	61,9	41,7	28,4	73,3	50,0	34,6
+43°C ambient temp.	31,5	21,0	12,8	37,7	25,4	17,2	46,2	31,3	21,4

Data for room volumes refer to insulation thickness PUR 80 mm

Accessories for the units (prices on request):

- Water-cooled condenser
- Mounting opening or recess

¹⁾ Measured at a distance of 10 m at nominal power in the installation position. Depending on local conditions and installation position, the values achieved may vary.

CELLBOX KD – Roof-mount Units for Freezer – Propane

Compact plug-in refrigeration unit for ceiling installation with refrigerant R290 (propane) for coldroom temperatures from -10 to -25 °C.

Standard equipment:

- Electronic control instrument with Bluetooth connectivity
- Remote control panel with 5 m connection cable
- Power cable 2,5 m with 3-pin CEE-plug (1Ph+N+PE) 230V 16A – Fuse protection on site
- Connecting cable 5 m zur door frame heater
- Door contact switch with 2.5 m cable
- Lighting with 5 m cable
- Modbus connection with 5 m cable
- Heated evaporation tray for condensation water
- High pressure transmitter
- Low pressure transmitter

For illustrations and installation dimensions, see pages 6 - 7

Type	CELLBOX TD 100-R290 B			CELLBOX TD 200-R290 B			CELLBOX TD 300-R290 B		
Form	CM130			CM130			CM230		
Electrical Data									
Voltage Volt/Ph/Hz	230/1/50			230/1/50			230/1/50		
Absorption W	590			810			1030		
Absorption A	3,2			4,4			5,6		
Compressor									
Number and type	1 x hermetic			1 x hermetic			1 x hermetic		
Condenser									
Fan: number and Ø mm	1 x 300			1 x 300			2 x 300		
Airflow m ³ / h	1100			1100			2450		
Evaporator									
Fan: number and Ø mm	1 x 300			1 x 300			2 x 300		
Luftmenge m ³ / h	750			750			1300		
Air throwing range m	3			3			4,5		
Expansion	TEV			TEV			TEV		
Defrost									
	Hotgas			Hotgas			Hotgas		
Weight kg net / gross	66 / 87			73 / 94			98 / 119		
Sound level ¹⁾ db(A)	31,4			32,9			35,3		
Cooling capacity W									
Cold room temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
+32°C ambient temp.	898	755	625	1176	1000	837	1422	1212	1017
+43°C ambient temp.	792	665	550	1034	875	728	1256	1067	891
Cold room volume m³									
Cold room temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
+32°C ambient temp.	8,6	5,6	3,6	13,1	8,3	5,5	19,2	10,9	7,2
+43°C ambient temp.	4,7	3,1	2,1	6,9	4,7	3,1	9,1	6,2	4,2

Data for room volumes refer to insulation thickness PUR 100 mm

Accessories for the units (prices on request):

- Water-cooled condenser
- Mounting opening or recess

¹⁾ Measured at a distance of 10 m at nominal power in the installation position. Depending on local conditions and installation position, the values achieved may vary.

CELLBOX KD – Roof-mount Units for Freezer – Propane

Compact plug-in refrigeration unit for ceiling installation with refrigerant R290 (propane) for coldroom temperatures from -10 to -25 °C.

Standard equipment:

- Electronic control instrument with Bluetooth connectivity
- Remote control panel with 5 m connection cable
- Power cable 2,5 m with 3-pin CEE-plug (1Ph+N+PE) 230V 16A – Fuse protection on site
- Connecting cable 5 m zur door frame heater
- Door contact switch with 2.5 m cable
- Lighting with 5 m cable
- Modbus connection with 5 m cable
- Heated evaporation tray for condensation water
- High pressure transmitter
- Low pressure transmitter

For illustrations and installation dimensions, see pages 7

Type	CELLBOX TD 400-R290 B			CELLBOX TD 500-R290 B			CELLBOX TD 600-R290 B		
Form	CM230			CM230			CM230		
Electrical Data									
Voltage Volt/Ph/Hz	400/3/50			400/3/50			400/3/50		
Absorption W	1230			1560			1900		
Absorption A	2,4			2,9			3,5		
Compressor									
Number and type	2 x hermetic			2 x hermetic			2 x hermetic		
Condenser									
Fan: number and Ø mm	2 x 300			2 x 300			2 x 300		
Airflow m ³ / h	2300			2300			2300		
Evaporator									
Fan: number and Ø mm	2 x 300			2 x 300			2 x 300		
Luftmenge m ³ / h	1150			1150			1150		
Air throwing range m	4			4			4		
Expansion	TEV			TEV			TEV		
Defrost									
	Hotgas			Hotgas			Hotgas		
Weight kg net / gross	111 / 141			125 / 155			125 / 155		
Sound level ¹⁾ db(A)	34,7			35,9			36,1		
Cooling capacity W									
Cold room temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
+32°C ambient temp.	2026	1706	1416	2382	2025	1695	2624	2249	1898
+43°C ambient temp.	1791	1503	1240	2097	1774	1474	2321	1982	1662
Cold room volume m³									
Cold room temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
+32°C ambient temp.	33,3	20,5	11,4	42,4	26,7	16,6	48,8	31,4	20,0
+43°C ambient temp.	17,8	10,0	6,7	23,0	13,3	8,5	27,1	17,5	10,0

Data for room volumes refer to insulation thickness PUR 100 mm

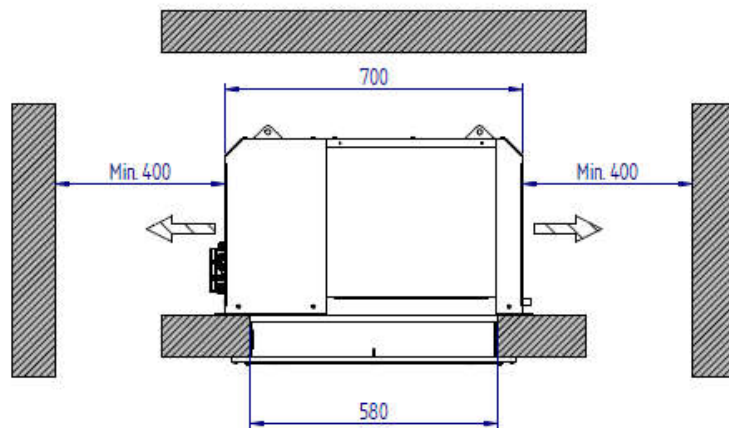
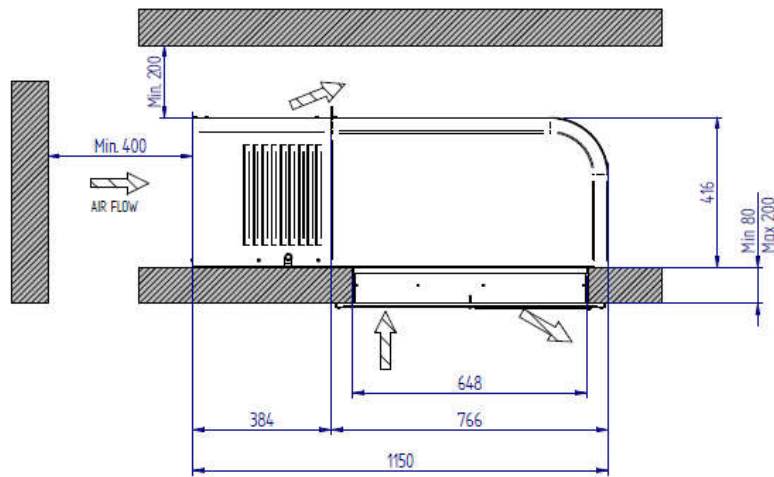
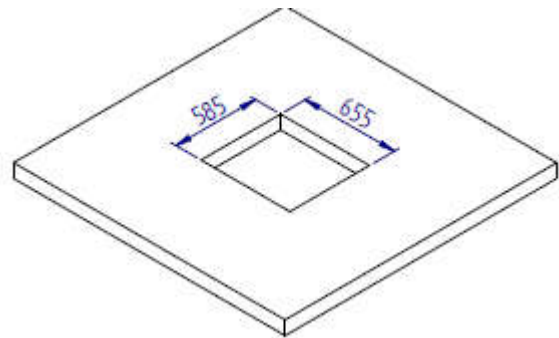
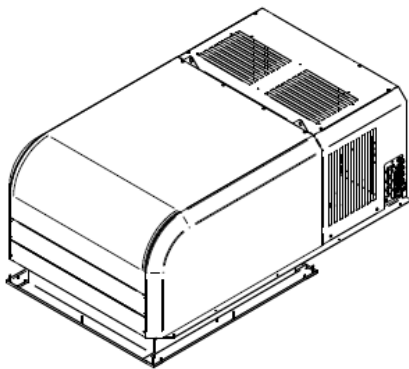
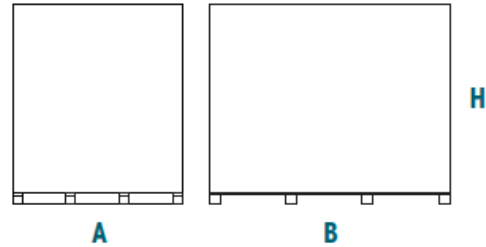
Accessories for the units (prices on request):

- Water-cooled condenser
- Mounting opening or recess

¹⁾ Measured at a distance of 10 m at nominal power in the installation position. Depending on local conditions and installation position, the values achieved may vary.

Figures and installation dimensions – Form CM130

Packaging Dimensions:
A = 830 mm
B = 1.300 mm
H = 815 mm



Figures and installation dimensions – Form CM230

FORM CM230

Packaging Dimensions:
A = 1.040 mm
B = 1.410 mm
H = 845 mm

