



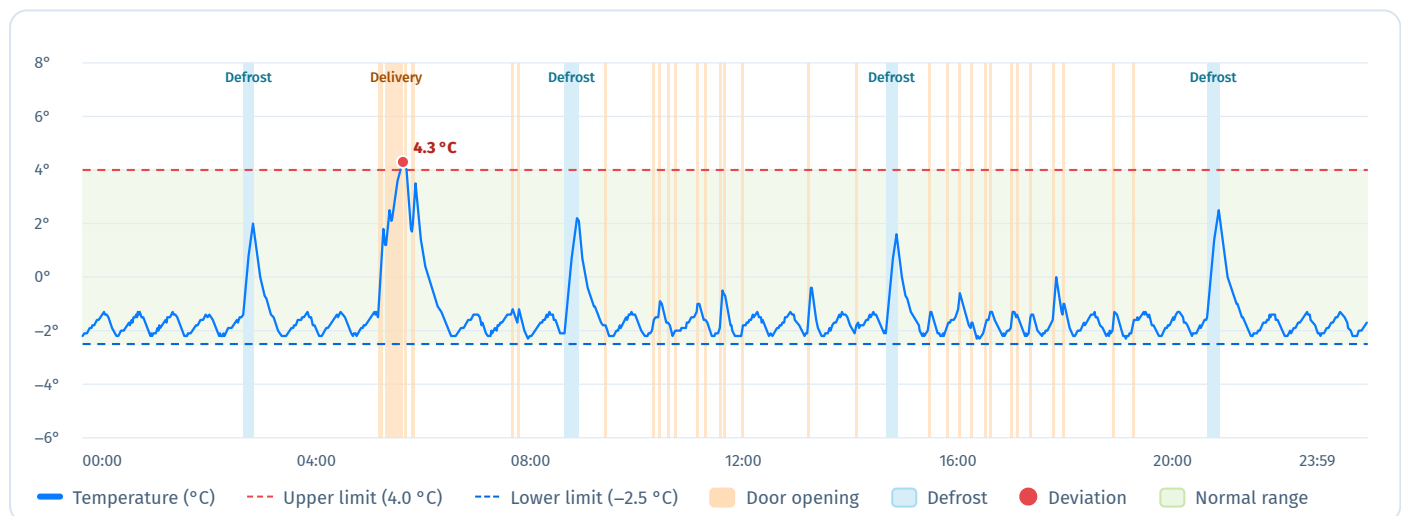
Customer	Riverside DC GmbH	Report no.	HACCP-ZLN-KR02-20260831
Site	Central warehouse North, Frankfurt am Main	Period	Monday, 31 Aug 2026 · 00:00–23:59
Equipment	Cold Room 02 · Positive cold room · meat and dairy	Measuring interval	1 min · resolution 0.1 °C
Measuring point	Room-air probe, measuring point KR02-T1	Data basis	1,440 of 1,440 readings (100%), no gaps
Limits	lower limit –2.5 °C · upper limit 4.0 °C	Created	1 Sep 2026, 00:05 (automatic)

Assessment: deviation closed with corrective action

1 limit deviation (upper limit), 6 min during the delivery, peak 4.3 °C at 05:59. Cause known, corrective action documented, goods not affected. 2 door alarms (door open longer than 5 min, 05:36, 05:50) during the delivery, acknowledged. All 4 defrosts as planned (peaks up to 2.5 °C), lower limit never undershot.

Key figures

CURRENT (23:59) –1.7 °C	MINIMUM –2.3 °C at 08:19	MAXIMUM 4.3 °C at 05:59	AVERAGE –1.4 °C	TIME IN RANGE 99.6% 1,434 of 1,440 min	DEVIATIONS 1 6 min
--	--	---	----------------------------------	--	--

Temperature history 31 Aug 2026 · 00:00–23:59**Door openings** count · duration

Total	32 · 56 min
Delivery 05:31–06:12	5 · 31 min
Daytime 08:00–20:00	27 · 25 min
Night 20:00–05:30	0
During a defrost	0
Door alarms (> 5 min)	2 · acknowledged

Compressor

Total run time	10 h 41 min
Duty cycle	44.5%
Starts	36
Longest run	1 h 25 min
Total stop time	13 h 19 min
Longest run 05:27–06:52 (delivery); stop time incl. 55 min of defrost.	

Defrosts

Count	4 of 4 as planned
Total duration	55 min
03:00 · 12 min	peak 2.0 °C
09:00 · 16 min	peak 2.2 °C
15:00 · 13 min	peak 1.6 °C
21:00 · 14 min	peak 2.5 °C

1 Limit deviation

Type	Upper limit exceeded (4.0 °C)	Duration	6 min (6 readings above 4.0 °C)
Start	05:57 (first value above the limit: 4.1 °C)	Peak	4.3 °C at 05:59
Last value > 4.0 °C	06:02	Back in range	06:03 (4.0 °C)
Alarm	05:57 – shift supervisor (portal + e-mail)	Acknowledged	06:05 – M. Weber, shift supervisor
Cause	Goods receipt/delivery, door opened repeatedly (5 openings 05:31–06:12, 31 min in total, longest 14 min)		
Corrective action	Door closed, goods put away promptly; core-temperature spot check of the delivered goods: 0.9 °C – goods not affected, released.		
Assessment	Short air-temperature peak without effect on product temperature; no further action required.		
Prevention	Goods-receipt staff instructed to close the door between pallets.		

2 Defrosts

NO.	START	END	DURATION	HEATER ON	PEAK	AT	BACK ≤ –1.3 °C	TYPE
1	03:00	03:12	12 min	10 min	2.0 °C	03:11	03:31 (+19 min)	planned
2	09:00	09:16	16 min	14 min	2.2 °C	09:14	09:36 (+20 min)	planned
3	15:00	15:13	13 min	11 min	1.6 °C	15:12	15:28 (+15 min)	planned
4	21:00	21:14	14 min	12 min	2.5 °C	21:13	21:37 (+23 min)	planned

Planned operating states (compressor and fans off, heater on, 2 min drip time) – peaks below the upper limit, not a deviation.

3 Door openings

Delivery 05:31–06:12: 5 openings · 31 min – 05:31 (5 min 30 s), 05:38 (5 min), 05:45 (14 min), 06:00 (2 min 10 s), 06:08 (4 min 20 s)

Daytime 08:00–20:00: 27 openings · 25 min · **Night 20:00–05:30:** 0 · **During a defrost:** 0

08:00 · 30 s	08:06 · 1 min 20 s	09:44 · 20 s	10:38 · 40 s	10:44 · 1 min 10 s	10:54 · 20 s	11:02 · 30 s	11:27 · 40 s	11:36 · 20 s	11:53 · 2 min 30 s
11:58 · 30 s	12:18 · 20 s	13:32 · 3 min	14:25 · 40 s	15:47 · 1 min	16:07 · 20 s	16:20 · 1 min 20 s	16:34 · 30 s	16:50 · 30 s	16:55 · 30 s
17:19 · 50 s	17:25 · 20 s	17:40 · 1 min	18:06 · 3 min	18:17 · 1 min 10 s	19:14 · 1 min	19:35 · 30 s			

4 Event log

TIME	EVENT	VALUE	DURATION	STATUS
03:00	Defrost 1 of 4 (planned)	peak 2.0 °C	12 min	Info
05:31	Delivery: door opened 5× (05:31–06:12), longest opening 14 min	—	31 min	Info
05:36	Door open longer than 5 min – alarm (delivery), acknowledged 05:38 (M. Weber)	—	5 min 30 s	Warning
05:50	Door open longer than 5 min – alarm (delivery), acknowledged 05:52 (M. Weber)	—	14 min	Warning
05:57	Upper limit 4.0 °C exceeded – alarm sent to shift supervisor	4.1 °C	6 min	Warning
05:59	Peak of the deviation	4.3 °C	—	Warning
06:03	Back in range (deviation 6 min)	4.0 °C	—	OK
06:05	Alarm acknowledged, corrective action documented (M. Weber, shift supervisor)	—	—	OK
08:00–20:00	Daytime door openings: 27× (20 s – 3 min each)	—	25 min	Info
09:00	Defrost 2 of 4 (planned)	peak 2.2 °C	16 min	Info
15:00	Defrost 3 of 4 (planned)	peak 1.6 °C	13 min	Info
21:00	Defrost 4 of 4 (planned)	peak 2.5 °C	14 min	Info
1 Sep · 00:05	Daily report created (PDF/Excel)	—	—	Info

Sensor & system

Sensor status	Healthy
Calibration due	12 Nov 2026
Battery level	100%
Signal strength	Excellent

Checksum

Data completeness	1,440 / 1,440 (100%)
SHA-256 of the measurement data (1,440 values, CSV):	
f6931efcba006db5da921035fde8d5730bcef057f448aef2f2c38f571d15a9aa	

Acknowledgement

Reviewed by:	
Date / signature:	