

UGUR COOLER

TEST REPORT

USS 374 DTKL HARMONY R63

Written by:

Fatih UZUN
UGUR SOGUTMA
Yeni Sanayi Mahallesi Devlet Karayolu Caddesi No 127/C
09900
Nazilli – AYDIN / TURKEY.

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USS 374 DTKL HARMONY R63

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1 INTRODUCTION

1.1 Document revision history

<i>Report release date</i>	<i>Author</i>	<i>Report name and version</i>	<i>Remark / document change</i>
04.03.2021	Fatih UZUN	R20210304.180.00	Revision 00
15.04.2021	Fatih UZUN	R20210304.180.01	Revision 01 / Correct typo / Model name revised

1.2 General

This report provides the main results of measurements and an evaluation of a USS 374 DTKL HARMONY R63 to be operated at CC 2 Condition – 32,2°C/65% R.H environmental conditions

1.3 Sampling

The bottle cooler evaluated was a final prototype ready for production.

1.4 Subcontracting

All the tests were carried out by UGUR personnel (i.e. none of the work was performed by subcontracting parties).

2 COLLECTING INFORMATION

2.1 General information

Supplier's name or trademark:	UGUR
Model identifier:	USS 374 DTKL HARMONY R63
Tests performed Standard Name	EN 16902:2016
Comission Delegated Regulation	(EU) 2019/2018
Type of refrigerating appliance	Beverage Cooler
Cabinet family code	BCVT
Gross volume (dm3 or L)	358
Dimensions of cabinet (W/D/H)	595*689*2053
Ambient conditions for which the appliance is suitable Warmest temperature (°C) / Relative humidity (%)	32°C / % 65
Type of light source	LED
Light source energy deficiency class	D
Anti-sweat heater control (manual/auto/no anti-sweat heaters)	NO
Rated voltage/Frequency	230/50
Refrigerant / amount	R600a / 70gr

2.2 Test information

Date	Engineer Name	Ambient	Test	Observation or (corrective) action
20.04.2020	Ali Girgin	CC2	Energy Consumption	Pass

3 ENERGY CONSUMPTION TEST @CC2 CONDITION 32,2°C/65% R.H.

3.1 Preparation checklist

Parameters	Specification	Outcome
Environmental room, products and cooler stabilised	Yes/No	Yes
Environment room relative humidity stabilised	Yes/No	Yes
Rated Voltage	$225.4 \leq Vr \leq 234.6$	Yes
Rated Frequency	$49.5 \leq Fr \leq 50.5$	Yes
Test Climate Class	CC2-32,2°C/65% R.H	Yes

3.2 Test results

Parameters	Unit	Measured
Average ambient temperature		32,2
Min ambient	[°C]	31,73
Max ambient		32,65
Average relative humidity		65,0
Min ambient	[%]	66,9
Max ambient		62,46
Energy consumption during the 24-hour test period	[kWh/day]	1,569

Description	Measurement /Result	RequirementSpecial classification	Inspection
Highest temperature of warmest M-package [°C]	6,95	7,0	OK
the highest average compartment temperature of all compartments with chilled operating temperatures in degrees Celsius (°C) and rounded to the nearest integer	3	3,5	OK
Lowest temperature of coldest M-package[°C]	2,1	0	OK
Parameter	Value		
Recommended temperature(s) for optimised food storage (°C) (These settings shall not contradict the temperature conditions set out in Annex IV, Table 4, 5 or 6, as applicable)	3,5		




Test Summary:		
Kind of Product	Vertical Commercial Beverage Cooler	
M-package Class	K 1	
AE(kwh/a): (refrigerator cabinet's annual energy consumption, $E_{daily} \times 365$)	572,69	
SAE(kwh/a): (Standard annual energy consumption, $SAE = 365 \times P \times (M + N \times Y) \times C$.)	P value (correction factor)	1
	M value(modelling parameters)	2,1
	N value (modelling parameters)	0,006
	Y value(TDA)	404,092
	C value(temperature coefficient)	1
	Calculated SAE	1651,46
EEl: (Energy efficiency index, $EEl = AE/SAE$.)	34,68	
Energy efficiency Class	C	

Ecodesign requirements Compliance:									
Energy efficiency index	Value	Verifying limit	Verdict (Pass / False)						
EEl	34,68	<100 (from 2021.03.01)	Pass						
<p>From 1 March 2021, the EEl of refrigerating appliances with a direct sales function shall not be above the values as set out in Table 1</p> <p style="text-align: center;"><i>Table 1</i></p> <p style="text-align: center;">Maximum EEl for refrigerating appliances with a direct sales function, expressed in %</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>EEl</th> </tr> </thead> <tbody> <tr> <td>Ice-cream freezers</td> <td>80</td> </tr> <tr> <td>All other refrigerating appliances with a direct sales function</td> <td>100</td> </tr> </tbody> </table>					EEl	Ice-cream freezers	80	All other refrigerating appliances with a direct sales function	100
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Ice-cream freezers	80								
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4 MAIN RESULTS DATA, AND OFFICIAL SIGNATURES

Test	Result
Energy Consumption Test	Pass

This data is stored at the UGUR laboratories.

Revision 00	Testing Engineer / Author:	Approval by UGUR laboratory manager
Name:	Ali Girgin/Fatih Uzun	Barış Kızıltay
Company:	UGUR SOGUTMA A.S	UGUR SOGUTMA A.S
Signature:	 	
Location and date:	04.03.2021	04.03.2021