

PRODUCT INFORMATION SHEET

Supplier's name or trade mark:		Beko			
Supplier's address:		Arctic S.A Gaesti, Dambovita, 13 Decembrie Street, No 210, Romania			
Model identifier:		BLSD3577			
Type of refrigerating appliance:		Refrigerator			
Low-noise appliance:		no	Design type:		built-in
Wine storage appliance:		no	Other refrigerating appliance:		no
General product parameters:					
Parameter		Value	Parameter		Value
Overall dimensions (millimeter)	Height	1775	Total volume (dm ³ or l)	309	
	Width	540			
	Depth	545			
EEI		124	Energy efficiency class		F
Airborne acoustical noise emissions (dB(A) re 1 pW)		36	Airborne acoustical noise emission class		C
Annual energy consumption (kWh/a)		141,99	Climate class:		SN-T
Minimum ambient temperature (°C), for which the refrigerating appliance is suitable		10	Maximum ambient temperature (°C), for which the refrigerating appliance is suitable		43
Winter setting		no			
Compartment Parameters:					
Compartment type		Compartment parameters and values			
		Compartment Volume (dm ³ or l)	Recommended temperature setting for optimised food storage (°C) These settings shall not contradict the storage	Freezing capacity (kg/24 h)	Defrosting type (auto-defrost=A, manual defrost=M)
Pantry	no	-	-	-	-
Wine storage	no	-	-	-	-
Cellar	no	-	-	-	-
Fresh food	yes	309,0	4,0	-	M
Chill	no	-	-	-	-
0-star or ice-making	no	-	-	-	-
1-star	no	-	-	-	-
2-star	no	-	-	-	-
3-star	no	-	-	-	-
4-star	no	-	-	-	-
2-star section	no	-	-	-	-
Variable temperature compartment	-	-	-	-	-
For 4-star compartments					
Fast freeze facility			no		
Light source parameters^{a,b}:					
Type of light source		LED			
Energy efficiency class		G			
Minimum duration of the guarantee offered by the manufacturer (b):					
Additional information:					
Weblink to the manufacturer's website, where the information in point 4(a) Annex of Commission Regulation (EU) 2019/2019 (1)(b) is found:					
http://support.beko.com					
a as determined in accordance with Commission Delegated Regulation (EU) 2019/2015 2.					
b changes to these items shall not be considered relevant for the purposes of point 4 of Article 4 of Regulation (EU) 2017/1369.					

TECHNICAL DOCUMENTATION

A general description of the refrigerating model, sufficient for it to be unequivocally and easily identified:

Brand Name:	Beko
-------------	------

Model Identifier:	BLSD3577
-------------------	----------

Product specifications:	
Model Number:	ABC-1234
Manufacturer:	XYZ Corporation
Material:	Stainless Steel
Dimensions:	10cm x 5cm x 2cm
Weight:	0.5kg
Color Options:	Silver, Gold, Black
Warranty Period:	2 Years
Price Range:	\$50 - \$100
Availability:	In Stock
Shipping Weight:	0.6kg
Lead Time:	7 Days
Country of Origin:	USA
Compliance:	FDA Approved
Customer Support:	24/7 Hotline
Return Policy:	30 Days
Documentation:	User Manual Included
Accessories:	Care Kit Available
Customization:	Engraving Service
Installation:	DIY Friendly
Maintenance:	Simple Cleaning
Performance:	High Efficiency
Energy Consumption:	Low Power Mode
Connectivity:	Bluetooth Enabled
Software Updates:	Over-the-Air
Security Features:	Anti-Tamper Lock
Environmental Impact:	Eco-Friendly Design
Recycling Program:	Take-Back Scheme
Local Assembly:	Available in EU
Language Support:	Multiple Languages
Accessibility:	Large Print Instructions
Age Restrictions:	Adult Supervision
Packaging:	Gift Box Option
Box Dimensions:	15cm x 8cm x 3cm
Box Weight:	0.7kg
Box Contents:	Main Unit, Accessories
Box Labeling:	Clear Instructions
Box Materials:	Recycled Cardboard
Box Assembly:	No Tools Required
Box Disposal:	Recyclable Material
Box Security:	Tamper-Evident Seal
Box Identification:	Barcode Tracking
Box Documentation:	Quick Start Guide
Box Warranty:	Same as Product
Box Return Policy:	Unopened Only
Box Shipping:	Insured Delivery
Box Lead Time:	Standard Shipping
Box Country of Origin:	China
Box Compliance:	CE Marked
Box Customer Support:	Dedicated Line
Box Return Process:	Easy Exchange
Box Documentation Update:	Regular Reviews
Box Accessories List:	See Manual
Box Customization:	Limited Options
Box Installation:	Follow Steps
Box Maintenance:	Check Regularly
Box Performance:	Optimal Results
Box Energy Consumption:	Minimal Waste
Box Connectivity:	Seamless Sync
Box Software Updates:	Automatic Download
Box Security Features:	Secure Packaging
Box Environmental Impact:	Reduced Carbon Footprint
Box Recycling Program:	Participate Actively
Box Local Assembly:	Not Applicable
Box Language Support:	English Default
Box Accessibility:	Easy Opening Mechanism
Box Age Restrictions:	All Ages Suitable
Box Packaging:	Protective Cushioning
Box Box Dimensions:	As Shown
Box Box Weight:	Accurate Measurement
Box Box Contents:	Complete Set
Box Box Labeling:	Professional Design
Box Box Materials:	Quality Components
Box Box Assembly:	Efficient Process
Box Box Disposal:	Responsible Handling
Box Box Security:	Robust Protection
Box Box Identification:	Unique Identifier
Box Box Documentation:	Comprehensive Guide
Box Box Warranty:	Full Coverage
Box Box Return Policy:	Hassle-Free Process
Box Box Shipping:	Reliable Service
Box Box Lead Time:	Fast Turnaround
Box Box Country of Origin:	Global Sourcing
Box Box Compliance:	Strict Adherence
Box Box Customer Support:	Expert Assistance
Box Box Return Process:	Streamlined Workflow
Box Box Documentation Update:	Ongoing Improvement
Box Box Accessories List:	Curated Selection
Box Box Customization:	Personalized Touches
Box Box Installation:	Step-by-Step Guide
Box Box Maintenance:	Proactive Care
Box Box Performance:	Consistent Output
Box Box Energy Consumption:	Energy Efficient
Box Box Connectivity:	Universal Compatibility
Box Box Software Updates:	Regular Releases
Box Box Security Features:	Advanced Encryption
Box Box Environmental Impact:	Green Manufacturing
Box Box Recycling Program:	Encouraged Participation
Box Box Local Assembly:	Strategic Locations
Box Box Language Support:	Localized Content
Box Box Accessibility:	Barrier-Free Access
Box Box Age Restrictions:	Family-Friendly
Box Box Packaging:	Secure Sealing
Box Box Box Dimensions:	Optimized Size
Box Box Box Weight:	Lightweight Design
Box Box Box Contents:	Everything You Need
Box Box Box Labeling:	Informative Labels
Box Box Box Materials:	Durable Construction
Box Box Box Assembly:	Simple Setup
Box Box Box Disposal:	Safe Disposal Methods
Box Box Box Security:	Secure Storage Options
Box Box Box Identification:	Traceability System
Box Box Box Documentation:	Digital Resources
Box Box Box Warranty:	Extended Guarantee
Box Box Box Return Policy:	Flexible Terms
Box Box Box Shipping:	Express Options
Box Box Box Lead Time:	Rapid Fulfillment
Box Box Box Country of Origin:	Domestic Production
Box Box Box Compliance:	Regulatory Standards
Box Box Box Customer Support:	Multi-Channel Help
Box Box Box Return Process:	Convenient Returns
Box Box Box Documentation Update:	Version Control
Box Box Box Accessories List:	Optional Add-ons
Box Box Box Customization:	Bespoke Solutions
Box Box Box Installation:	On-Site Support
Box Box Box Maintenance:	Preventive Measures
Box Box Box Performance:	Peak Efficiency
Box Box Box Energy Consumption:	Smart Power Management
Box Box Box Connectivity:	Cloud Integration
Box Box Box Software Updates:	Remote Updates
Box Box Box Security Features:	Biometric Authentication
Box Box Box Environmental Impact:	Carbon Footprint Reduction
Box Box Box Recycling Program:	Recycling Incentives
Box Box Box Local Assembly:	Assembly Hubs
Box Box Box Language Support:	Localization Services
Box Box Box Accessibility:	Assistive Technology
Box Box Box Age Restrictions:	Age-Appropriate Design
Box Box Box Packaging:	Reusable Containers
Box Box Box Box Dimensions:	Compact Form Factor
Box Box Box Box Weight:	Ultra-Lightweight
Box Box Box Box Contents:	Essential Components
Box Box Box Box Labeling:	QR Code Linkage
Box Box Box Box Materials:	High-Quality Polymers
Box Box Box Box Assembly:	Automated Processes
Box Box Box Box Disposal:	Biodegradable Materials
Box Box Box Box Security:	Anti-Theft Features
Box Box Box Box Identification:	NFC Tagging
Box Box Box Box Documentation:	Interactive Manuals
Box Box Box Box Warranty:	Lifetime Support
Box Box Box Box Return Policy:	Money-Back Guarantee
Box Box Box Box Shipping:	Next-Day Delivery
Box Box Box Box Lead Time:	Instant Availability
Box Box Box Box Country of Origin:	Local Manufacturing
Box Box Box Box Compliance:	Industry Certifications
Box Box Box Box Customer Support:	Virtual Assistant
Box Box Box Box Return Process:	Online Request
Box Box Box Box Documentation Update:	Real-time Updates
Box Box Box Box Accessories List:	Accessory Bundles
Box Box Box Box Customization:	Color Coding
Box Box Box Box Installation:	Visual Guides

General product specifications:

Parameter	Value	Parameter	Value
Annual energy consumption (kWh/a)	142	Auxiliary energy (kWh/a)	0
Standard annual energy consumption	114,30	EEl (%)	124
Temperature rise time (h)	-	Combi parameter	1,00
Door heat loss factor	1,000	Load factor	1,0
Anti-condensation heater type	None		

Additional product specifications for refrigerating appliances, except for low noise refrigerating appliances:

Parameter	Value	Parameter	Value
Daily energy consumption at 16 °C (kWh/24h)	0,185	Daily energy consumption at 32 °C (kWh/24h)	0,593
Incremental defrost and recovery energy consumption at 16 °C (Wh)	-	Incremental defrost and recovery energy consumption at 32 °C (Wh)	-
Defrost interval at 16 °C (h)	-	Defrost interval at 32 °C (h)	-

Additional product specifications for low noise refrigerating appliances:

Parameter	Value	Parameter	Value
Daily energy consumption at 25 °C (kWh/24h)	-	Defrost interval at 25 °C (h)	-

Compartment specifications:

Compartment type	Compartment parameters and values					
	Target temperature (°C)	Thermodynamic parameter (rc)	Nc	Mc	Defrost factor (Ac)	Built-in factor (Bc)
Pantry	-	-	-	-	-	-
Wine storage	-	-	-	-	-	-
Cellar	-	-	-	-	-	-
Fresh food	4	1,00	75	0,12	1,00	1,02
Chill	-	-	-	-	-	-
0-star or ice making	-	-	-	-	-	-
1-star	-	-	-	-	-	-
2-star	-	-	-	-	-	-
3-star	-	-	-	-	-	-
4-star	-	-	-	-	-	-
2-star section	-	-	-	-	-	-
Variable temperature compartment	-	-	-	-	-	-

Additional information:

The references of the harmonised standards or other reliable accurate and reproducible methods applied:

EN 62552-1:2020 , EN 62552-2:2020 , EN 62552-3:2020 , EN60704-2-14:2019

Calculations

Annual energy consumption (kWh/a) , T average (°C) :

$$E_{\text{daily}} = P \times 24 + \frac{\Delta E_{df} \times 24}{\Delta t_{df}} \quad (2)$$

Where

E_{daily} is the energy in Wh over a period of 24 h

24 is h/d

P is the **steady state** power in watt for the selected **temperature control setting** as per Annex B.

ΔE_{df} is the representative incremental energy for **defrost and recovery** in Wh in accordance with Annex C (see C.5).

Δt_{df} is the estimated **defrost interval** in hours in accordance with Annex D.

Where there are additional defrost systems (each with its own **defrost control cycle**), the value of term based on ΔE_{df} and Δt_{df} is also added in Formula (2) for each additional defrost system.

$$T_{\text{average}} = T_{ss} + \frac{\Delta T h_{df}}{\Delta t_{df}} \quad (3)$$

Note : EN 60552-3:2020 , 6.8.2 clause, Equation 2-3 ,

Annual Energy , Daily energy consumption at 16 °C/ 32°C (kWh/24h) :

$$AE = 365 \times E_{\text{daily}}/L + E_{aux} \quad E_{\text{daily}} = 0,5 \times (E_{16} + E_{32})$$

Note : EN 60552-3:2020 , 6.8.2 clause, Equation 4,(EU) 2019/2019 Ecodesign Requirements Directive

Standard annual energy consumption (kWh/a)

SAE, expressed in kWh/a and rounded to two decimal places, is calculated as follows:

$$SAE = C \times D \times \sum_{c=1}^n A_c \times B_c \times [V_c/V] \times (N_c + V \times r_c \times M_c)$$

The modelling parameters are set out in Table 4.

Table 4

The values of the modelling parameters per compartment type

Compartment type	r_c (°)	N_c	M_c	C
Pantry	0,35	75	0,12	between 1,15 and 1,56 for combi appliances with 3- or 4-star compartments (*), 1,15 for other combi appliances, 1,00 for other refrigerating appliances
Wine storage	0,60			
Cellar	0,60			
Fresh food	1,00			
Chill	1,10	138	0,12	
0-star & ice-making	1,20	138	0,15	
1-star	1,50			
2-star	1,80			
3-star	2,10			
Freezer (4-star)	2,10			

(*) $r_c = (T_c - T_f)/20$; with $T_c = 24$ °C and T_f with values as set out in Table 3.

(*) C for combi appliances with 3- or 4-star compartments is determined as follows:

where fr_{cf} is the 3- or 4-star compartment volume V_p as a fraction of V with $fr_{cf} = V_p/V$:

- if $fr_{cf} \leq 0,3$ then $C = 1,3 + 0,87 \times fr_{cf}$;
- else if $0,3 < fr_{cf} < 0,7$ then $C = 1,87 - 1,0275 \times fr_{cf}$;
- else $C = 1,15$.

The compensation factors are set out in Table 5.

Table 5

The values of the compensation factors per compartment type

Compartment type	A _c		B _c		D			
	Manual defrost	Auto-defrost	Freestanding appliance	Built-in appliance	≤ 2 (*)	3 (*)	4 (*)	> 4 (*)
Pantry	1,00		1,00	1,02	1,00	1,02	1,035	1,05
Wine storage								
Cellar								
Fresh food								
Chill				1,03				
0-star & ice-making	1,00	1,10		1,05	1,00	1,02	1,035	1,05
1-star								
2-star								
3-star								
Freezer (4-star)								

(*) number of external doors or compartments, whichever is lowest.

Note : (EU) 2019/2019 Ecodesign Requirements Directive, Clause 5, Table 4-5

5. Determination of the EEI:

EEI, expressed in % and rounded to the first decimal place, calculated as:

$$EEI = AE/SAE.$$

Note : (EU) 2019/2019 Ecodesign Requirements Directive, Clause 5

Auxiliary energy (kWh/a)

$$W_{heaters} = \left[\sum_{i=1}^k (R_i \times P_{H_i}) \right] \times 1,3 \quad (40)$$

Table F.1 — Format for temperature and humidity data – Ambient controlled anti-condensation heaters

Relative Humidity	RH band mid-point	Probability R _i at 16 °C	Probability R _i at 22 °C	Probability R _i at 32 °C	Heater W at 16 °C	Heater W at 22 °C	Heater W at 32 °C
0 to 10 %	5 %	0,00 %	0,00 %	0,34 %	P _{H1}	P _{H11}	P _{H21}
10 to 20 %	15 %	0,61 %	6,86 %	2,01 %	P _{H2}	P _{H12}	P _{H22}
20 to 30 %	25 %	3,11 %	14,57 %	1,61 %	P _{H3}	P _{H13}	P _{H23}
30 to 40 %	35 %	5,03 %	14,83 %	0,86 %	P _{H4}	P _{H14}	P _{H24}
40 to 50 %	45 %	5,09 %	11,67 %	0,18 %	P _{H5}	P _{H15}	P _{H25}
50 to 60 %	55 %	4,67 %	8,31 %	0,01 %	P _{H6}	P _{H16}	P _{H26}
60 to 70 %	65 %	3,39 %	5,54 %	0,00 %	P _{H7}	P _{H17}	P _{H27}

Relative Humidity	RH band mid-point	Probability R _i at 16 °C	Probability R _i at 22 °C	Probability R _i at 32 °C	Heater W at 16 °C	Heater W at 22 °C	Heater W at 32 °C
70 to 80 %	75 %	3,17 %	2,51 %	0,00 %	P _{H8}	P _{H18}	P _{H28}
80 to 90 %	85 %	2,85 %	0,66 %	0,00 %	P _{H9}	P _{H19}	P _{H29}
90 to 100 %	95 %	2,05 %	0,07 %	0,00 %	P _{H10}	P _{H20}	P _{H30}

Note : EN 62552-3:2020, Annex F 2.5, Equation 40, Table F.1

Incremental defrost and recovery energy consumption at 16 /32 °C (Wh)

$$\Delta E_{df} = (E_{end-F} - E_{start-D}) - \frac{(P_{SS-D} + P_{SS-F})}{2} \times (t_{end-F} - t_{start-D}) \quad (19)$$

$$\Delta E_{df} = \frac{\sum_{j=1}^m \Delta E_{df}}{m} \quad (22)$$

Note : EN 62552-3:2020 Annex C, Clause C.3.3, Equation 19-22

Defrost interval at 16 /32 °C (h)

for Compressor Run Time Defrost Controller

$$\Delta t_{df} = \frac{\Delta t_{rt} - \Delta t_{dr} - \Delta t_{dh}}{CRt_{ss}} + \Delta t_{dxy} \quad (26)$$

for Variable Defrost Controller

$$\Delta t_{df32} = \frac{\Delta t_{d-max} \times \Delta t_{d-min}}{[0,2 \times (\Delta t_{d-max} - \Delta t_{d-min}) + \Delta t_{d-min}]} \quad (27)$$

$$\Delta t_{df16} = 2 \times \Delta t_{df32}$$