

Upright Display Freezer Cabinet Test Report

Test Laboratory Name/Address

Laboratory of FROST TECH(Guangzhou) Refrigeration Facilities CO.,LTD.
Xiaowu Industrial Zone Dongchong Town,Nansha District,Guangzhou,
Guangdong Province,P.R.China.

Manufacturing Name/Address

FROST TECH(Guangzhou) Refrigeration Facilities CO.,LTD.
Xiaowu Industrial Zone Dongchong Town,Nansha District,Guangzhou,
Guangdong Province,P.R.China.

Brand Name	FROST TECH
Product	upright display cabinet
Description	The product covered by this report is a commercial used,cord connected upright display freezer cabinet.
Model(s)	ECO-UGF60
Voltage/Frequency	220-240V,50Hz
Rating current	
Teststandard(s)orcriteria(s)	(EU)2019/2018 (EU)2019/2024 ENISO23953-2:2015
Conclusion	The results are incompliance with there requirements of the EC regulation 2019/2024. Energy efficiency class: D

Prepared by:He Jianjin

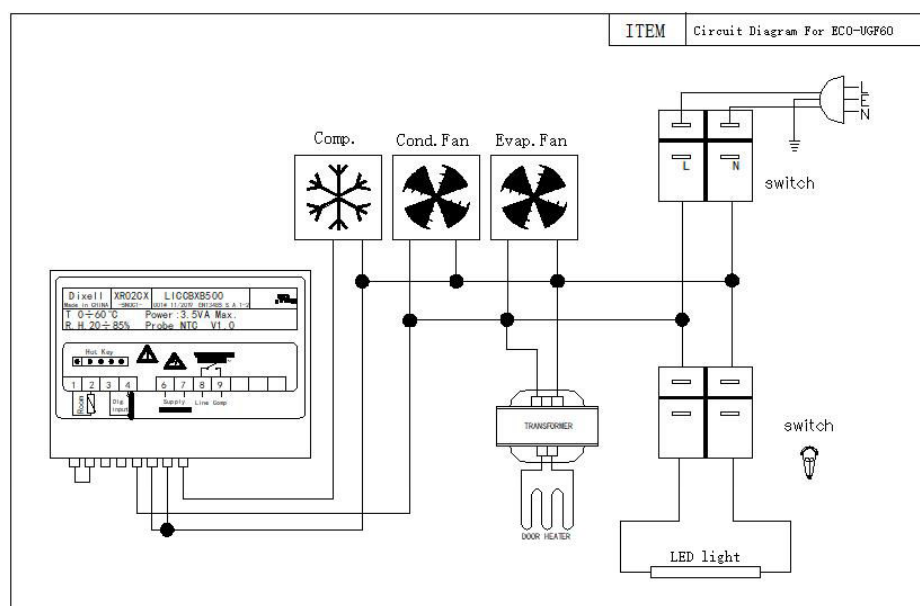
Photo 1 - Front view:



Name plate:

COMMERCIAL DISPLAY CABINET	
Model	ECO-UGF60
Voltage/Frequency	220-240/50Hz
Rating current	3.8A
Refrigerant	R290A - R452A - R404A - R134A / 120g
Compressor	Embraco T2170U
Controller	LAE AD2-5C
Vesicant	Cyclopentane

Photo 2 - Circuit diagram:



Product details:

Cabinet family code	
Cabinet type	Integral
Model number of Unit Under Tested	ECO-UGF60
Brand name	FROST TECH
Operating temperature(s)	freezing
Category	Vertical and combined supermarket freezer cabinets
Energy efficiency class	D
Climate class	3
M PackageTemperatureClass	L1
Doors	2 Self-closing sliding glass doors
Shelves	5 adjustable shelves
Light	LED vertical light tube T8 16W
Refrigerant	R290A - R452A - R404A - R134A
Charge of refrigerant(g)	120g
Over all dimensions(W*D*H)[mm]	600*655*1970

Performance parameter:

Highest temperature of the warmest M-package of the compartment(s) with chilled operating temperatures (°C)	-15
Lowest temperature of the coldest M-package of the compartment(s) with chilled operating temperatures, or the highest minimum temperature of all M-packages of the compartment(s) with chilled operating temperatures (°C)	-18

Critical Components:

Name	Manufacturer/trademark	Type/model	Technical data
Compressor	Embraco	T2170U	220-240V,50Hz
Controller	LAE	AD2-5C	220-240V,50Hz

Test Condition:

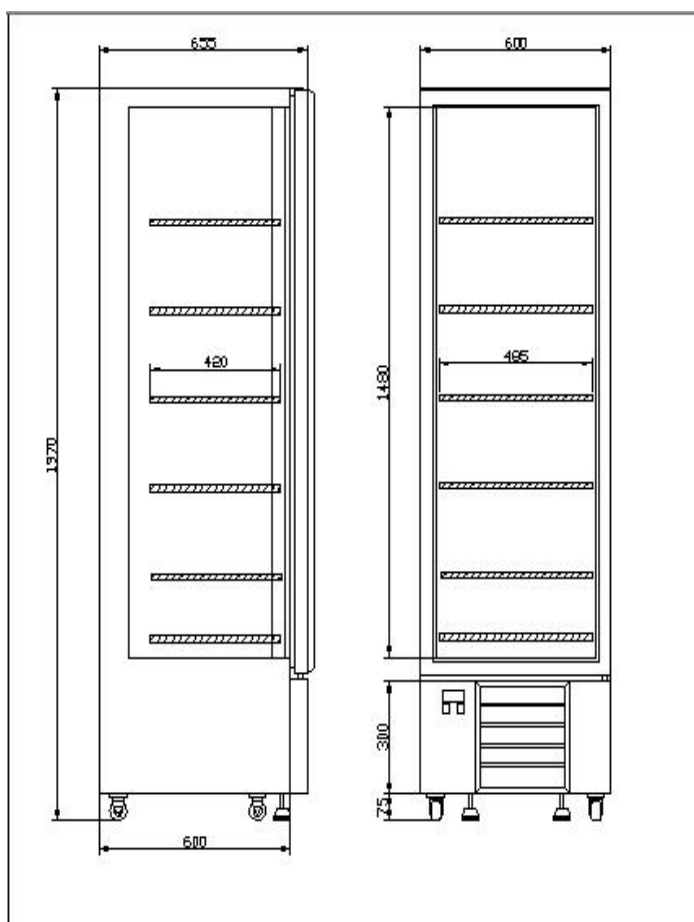
Dry Bulb	25±1°C
Relative humidity	60±3%
Input Voltage	230V
Input Frequency	50Hz

Temperature and total display area Tests:

Temperature Class	Symbol	Temperature Test (°C)			Total display
		Temperature	Limit	Verdict	area test (m²)
L1	θ _{ah}	-15		Pass	0.74
	θ _b	-18		Pass	

Calculation for EEI and conclusion:

Total display area TDA (m²)	0.74
M	7.5
N	19.3
P	1.1
Y	0.74
C	1
Calculation formula	SAE: 365 * P * (M + N * Y) * C
Standard annual energy consumption SAE (kWh/24h)	8745.41
Daily energy consumption E _{daily} (kWh/24h)	10
Annual energy consumption AE (kWh/a)	3650
Energy Efficiency Index EEI	41.7
Energy efficiency class	D
From 1 March 2021: EEI < 100, Ice-cream freezers: EEI < 80	Pass
From 1 September 2023: EEI < 80, Ice-cream freezers: EEI < 50	Pass



Type	Length	Depth	Height	Nom. voltage/ frequency	Electrical fusing	Temperature range
ECO UGF60	600 mm	655 mm	1970 mm	230 V/50 Hz	13A slow	-24...-18°C