

Counter Series

General Features



01.

Condensing Unit



- **Removable cassette type condensing unit and evaporator**
 - Zero down time, whole unit with evaporator can be replaced with new one immediately
 - Interchangeable temperature cassette unit allows flexible application
 - Easy for maintenance on-site if necessary
 - Allows ventilation and service maintenance at front, and thus enabling the compact equipment set up

02.

CoolSmart Controller



- **Automatic internal condition detecting to ensure efficient energy use**
Energy saving up to 15%
- **Intelligent defrost function**
Ensures the evaporator working to its optimum performance
- **The interval of compressor start and rest time can be limited**
Reduces wear and tear and prolonging compressor life
- **Self-diagnostics**
Self performance check to indicate the operational condition
- **Failsafe device for failure of thermocouple**
Minimises the loss of food products and reduces wear and tear of the compressor due to the sensors failed
- **Audible and visual Hi/Lo, door open (over 5 minutes) alarm for freezer**
Ensures food quality and minimises energy consumption
- **HACCP compliant**
Ensures the food safety of Williams products

03.

304 Grade stainless steel exterior and interior finish

Foodsafe, durable and easy cleaning

04.

High density insulation foam with zero ODP (Ozone Depletion Potential) and low GWP (Global Warming Potential)

Provides excellent thermal efficiency and is environmental-friendly

05.

Accurate helium leak detection system for entire refrigeration system

Quality guaranteed

06.

Automatic vaporising the defrost water in remote type

No drain connection is required

07.

Air release point on magnetic door gaskets

Excellent sealing and avoids slitting caused by door closing pressure

08.

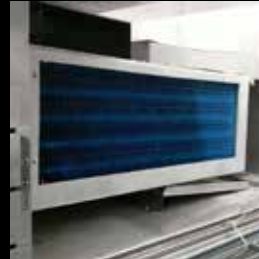
Designed and engineered to operate up to 43°C ambient

Effective in the harshest environment

09.

HACCP compliant

Ensures the food safety of Williams products



10.

Evaporator with Hydrophilic coated aluminum

Provides high corrosion resistance properties



11.

Varied table top profiles

Flexible for different customers' needs



12.

Adjustable racking system

Allows flexible storage and ease of cleaning



13.

Anti-tilt trayslides

Prevents tipping but easy to remove for cleaning



14.

Cylindrical door locks

Added security and stock control



15.

Door mullion heaters

Anti-condensation and prevents potential dirt traps



20.

Hygienic one-piece stainless steel dished base with radiused corners

Easy for cleaning and prevents potential dirt traps



16.

Optional Heated film glass door

Anti-condensation and clear visibility



21.

Air ducting for two sections or above

Ensures the cool air can spread to everywhere inside the counter



17.

Removable balloon type magnetic door gaskets

Prevents dirt traps and ensures easy replacement



22.

Forced air circulation system

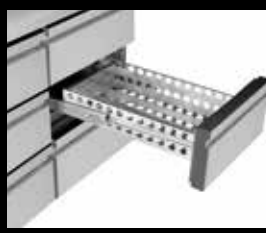
Ensures fast and even cool air distribution



18.

Self-closing doors

Avoids heat ingress and reduces energy consumption



23.

Optional fully extendable work out drawer

Allows vertical access (without bullnose at front) of the full-loaded GN pan



19.

Over 90° door opening

For easy loading and stock checking



24.

Adjustable legs or castors (optional)

Maximises flexibility and stability

Williams Refrigeration is renowned for its
innovative designs
and quality of
product build

as well as its ability to provide tailor-made
solutions. We have the technical know-how
and expertise to design and create bespoke
solutions.



Opal, Emerald & Bakery Key Features

Ergonomic counter design with different Gastronorm size and configurations to suit any application



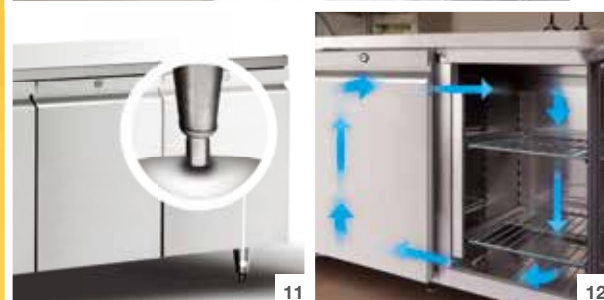
01. Removable cassette type condensing unit and evaporator for easy servicing with zero down time
02. Excellent thermal efficiency, high density polyurethane insulation with Zero ODP (Ozone Depletion Potential) and Low GWP (Global Warming Potential)
03. Adjustable racking system allows flexible storage
04. Anti-condensation door mullion heaters
05. Removable anti-tilt trayslides to prevent tipping *
06. Self-closing doors minimise cool air loss and reduce energy consumption
07. Over 90° door opening allows easy loading and stock checking
08. Hygienic one-piece dished base with radiused corners avoids potential dirt traps *
09. Removable balloon type magnetic door gasket with air release points provides an excellent seal to prevent heat ingress, easy replacement and avoiding dirt traps

* Available for Opal and Emerald only

10. Air ducting for two sections or above ensures the cool air is spread to everywhere inside the counter
11. 150Hmm adjustable legs (± 15 Hmm) to ensure stability on an uneven floor
12. Forced air refrigeration system ensures effective air circulation
13. CoolSmart controller with clear digital display is designed for easy operation
14. Imported, durable and energy-efficient compressors
15. Evaporator with Hydrophilic coated aluminum provides high corrosion resistance properties
16. Accurate helium leak detection system ensures the quality of the entire refrigeration system
17. Automatic defrost ensures the evaporator working to its optimum performance
18. Automatically vaporises defrost water, drainage is not required and applied to self-contain and remote type condensing unit
19. Designed and engineered to operate up to 43°C ambient
20. Environmental-friendly CFC-free refrigerant (R134a or R404a)
21. HACCP compliant



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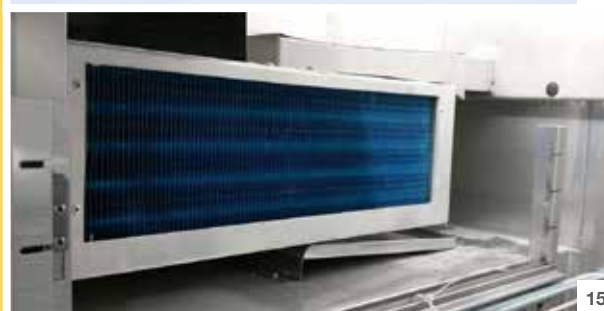


11

12



13



15

Professional Refrigeration > Counter Series

Opal, Emerald & Bakery Specification

- Accommodates 1/1 GN size for Opal
- Accommodates 2/1 GN size for Emerald
- Accommodates 400 x 600mm EN size for Bakery
- Foodsafe 304 grade stainless steel exterior and interior
- 1.5mm thick durable 304 grade stainless steel table top
- Galvanised steel exterior back and base
- Fitted with cylindrical lock for door(s)



Opal, Emerald & Bakery Options



02



10



04



13



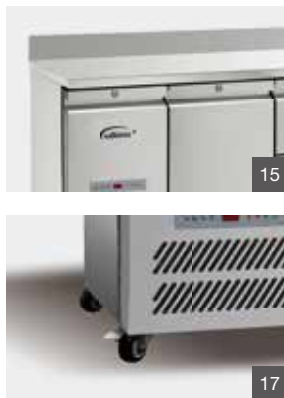
05



14



07



15



09



18

01. 304 grade stainless steel exterior back / base
02. Heated film glass door
03. Pass through door
04. Saladette opening *
05. Raised pan holder *
06. Wooden board under table top
07. Table top extension
08. 2mm thick 304 grade stainless steel table top
09. 2, 3 or 1/3 + 2/3 drawers bank **
10. Cylindrical lock for drawer(s) **
11. Lock plate
12. Internal LED for door type
13. Right-hand-side condensing unit
14. Remote type condensing unit
15. Back / side splash
16. Front / side skirting
17. Castors in lieu of legs
18. 50Hmm skirting with louvre for sitting on plinth
19. Additional shelving/ trayslides for door type
20. 220V / 60HZ / 1PH

* Available for Opal and Emerald only

Not available for LO3U/R(J) and LE2U/R(J)

Opal, Emerald & Bakery

Product Code

Example:

HO3U(J)-XDNW-B-S



1. Temperature Range

H	=	+1 / +4 °C
M	=	-2 / +2°C
L	=	-18 / -22 °C

2. Series

O	=	Opal
E	=	Emerald
B	=	Bakery

3. Number of compartment

1	=	1 compartment
2	=	2 compartments
3	=	3 compartments
4	=	4 compartments

4. Type of condensing unit

U	=	Self-contained condensing unit
R	=	Remote condensing unit

5. Type of handle

(J)	=	New integral handle
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6. Configuration

X	=	Location of the condensing unit / evaporator
D	=	Door
N	=	2 drawers bank
W	=	3 drawers bank
T	=	1/3 + 2/3 drawers bank

7. Options

S	=	304 grade stainless steel back
HGD	=	Heated film glass door
PT	=	Pass through door
B	=	Back splash

Opal Product List

O1U(J)-XD	O2U(J)-XDD	O3U(J)-XDDD	O4U(J)-XDDDD
			
O1U(J)-XN	O2U(J)-XNN	O3U(J)-XNNN	O4U(J)-XNNNN
			
O1U(J)-XT	O2U(J)-XTT	O3U(J)-XTTT	O4U(J)-XTTTT
			
O1U(J)-XW	O2U(J)-XWW	O3U(J)-XWWW	O4U(J)-XWWWW
			

Opal Technical Data

Model	HO1U(J)	MO1U(J)	LO1U(J)	HO2U(J)	MO2U(J)	LO2U(J)
Temp Range (°C)	+1 / +4	-2 / +2	-18 / -22	+1 / +4	-2 / +2	-18 / -22
External Dimension (mm)						
Width	905			1370		
Depth	670					
Height	850					
Internal Dimension (mm)						
Width	390			855		
Depth	560					
Height	570					
Thickness of 304 grade stainless steel (mm)						
Exterior	0.7					
Interior	0.6					
Door or drawer	0.8					
Opening Depth (mm)						
Door type	1090					
Drawer type	1260					
Maximum loading height of drawer (mm per drawer)						
2 drawers bank	215					
3 drawers bank	115					
1/3 + 2/3 drawers bank	1/3 drawer: 120 2/3 drawer: 343					
Capacity (cu.ft / litres)	6.2 / 178			11.5 / 327		
Power Supply	220V / 50HZ / 1PH					
	13 amp plug					
Power Input - Running (amps)						
Door type	3.5	2.6	4	3.5	2.6	4.5
Drawer type	3.5	2.6	4	3.5	2.6	4.5
Rating Power (watts) *						
Door type	770	572	880	770	572	990
Drawer type	770	572	880	770	572	990
Compressor (HP)						
Door	1/4		7/16	1/4		5/8
2 drawers bank	1/4		7/16	1/4		5/8
3 drawers bank	1/4		7/16	1/3		5/8
Heat Rejection (watts) (Evaporating at -10°C in 32°C ambient)						
Door	485		1319	485		1844
2 drawers bank	485		1319	485		1844
3 drawers bank	485		1319	623		1844
Refrigerant	R134a		R404a	R134a		R404a
Standard fittings for door type						
PE coated shelves	2			4		
Trayslides (pair)	2			4		

* 20% increase for 60HZ power supply

V4

Opal Technical Data

Model	HO3U(J)	MO3U(J)	LO3U(J)	HO4U(J)	MO4U(J)
Temp Range (°C)	+1 / +4	-2 / +2	-18 / -22	+1 / +4	-2 / +2
External Dimension (mm)					
Width	1835		2300		
Depth	670				
Height	850				
Internal Dimension (mm)					
Width	1320		1785		
Depth	560				
Height	570				
Thickness of 304 grade stainless steel (mm)					
Exterior	0.7				
Interior	0.6				
Door or drawer	0.8				
Opening Depth (mm)					
Door type	1090				
Drawer type	1260	N/A		1260	
Maximum loading height of drawer (mm per drawer)					
2 drawers bank	215	N/A		215	
3 drawers bank	115	N/A		115	
1/3 + 2/3 drawers bank	1/3 drawer: 120 2/3 drawer: 343	N/A		1/3 drawer: 120 2/3 drawer: 343	
Capacity (cu.ft / litres)	16.8 / 476			22 / 625	
Power Supply	220V / 50HZ / 1PH				
	13 amp plug				
Power Input - Running (amps)					
Door type	3.5			4.5	
Drawer type	4.5	N/A		4.5	
Rating Power (watts) *					
Door type	770			990	
Drawer type	990	N/A		990	
Compressor (HP)					
Door	1/3	3/4		1/2	
2 drawers bank	1/2	N/A		3/4	
3 drawers bank	1/2	N/A		3/4	
Heat Rejection (watts) (Evaporating at -10°C in 32°C ambient)					
Door	623	2229		950	
2 drawers bank	950	N/A		1289	
3 drawers bank	950	N/A		1289	
Refrigerant	R134a		R404a		R134a
Standard fittings for door type					
PE coated shelves	6		8		
Trayslides (pair)	6		8		

* 20% increase for 60HZ power supply

V4

Opal Technical Data

Model	HO1R(J)	MO1R(J)	LO1R(J)	HO2R(J)	MO2R(J)	LO2R(J)
Temp Range (°C)	+1 / +4	-2 / +2	-18 / -22	+1 / +4	-2 / +2	-18 / -22
External Dimension (mm)						
Width	680			1145		
Depth				670		
Height				850		
Internal Dimension (mm)						
Width	390			855		
Depth				560		
Height				570		
Thickness of 304 grade stainless steel (mm)						
Exterior				0.7		
Interior				0.6		
Door or drawer				0.8		
Opening Depth (mm)						
Door type				1090		
Drawer type				1260		
Maximum loading height of drawer (mm per drawer)						
2 drawers bank				215		
3 drawers bank				115		
1/3 + 2/3 drawers bank				1/3 drawer: 120 2/3 drawer: 343		
Capacity (cu.ft / litres)						
	6.2 / 178			11.5 / 327		
Power Supply						
	220V / 50HZ / 1PH					
	13 amp plug					
Power Input - Running (amps)						
Door type	5	7	7	5	7	7
Drawer type	5	7	7	5	7	7
Rating Power (watts) *						
Door type	1100	1540	1540	1100	1540	1540
Drawer type	1100	1540	1540	1100	1540	1540
Compressor (HP)						
Door	1/3	1/2	1/2	1/3	3/4	3/4
2 drawers bank	1/3	5/8	5/8	1/3	3/4	3/4
3 drawers bank	1/3	5/8	5/8	1/3	3/4	3/4
Heat Rejection (watts) (Evaporating at -10°C in 32°C ambient)						
Door	623	1539	1539	623	2229	2229
2 drawers bank	623	1844	1844	623	2229	2229
3 drawers bank	623	1844	1844	623	2229	2229
Remote condensing unit with housing (Width x Depth x Height) (mm)						
Door type	530 x 350 x 335				580 x 350 x 335	
Drawer type	530 x 350 x 335	580 x 350 x 335	530 x 350 x 335	530 x 350 x 335	580 x 350 x 335	
Refrigerant Pipe Size (inch)						
Door type - Suction pipe	3/8	1/2	1/2	3/8	1/2	
Door type - Liquid pipe	1/4	3/8	3/8	1/4		
Drawer type - Suction pipe	3/8			1/2		
Drawer type - Liquid pipe				1/4		
Maximum pipe length work (m)						
	8					
Refrigerant						
	R134a	R404a	R404a	R134a	R404a	
Standard fittings for door type						
PE coated shelves	2			4		
Trayslides (pair)	2			4		

* 20% increase for 60HZ power supply

V4

Opal Technical Data

Model	HO3R(J)	MO3R(J)	LO3R(J)	HO4R(J)	MO4R(J)
Temp Range (°C)	+1 / +4	-2 / +2	-18 / -22	+1 / +4	-2 / +2
External Dimension (mm)					
Width	1610		2075		
Depth	670				
Height	850				
Internal Dimension (mm)					
Width	1320		1785		
Depth	560				
Height	570				
Thickness of 304 grade stainless steel (mm)					
Exterior	0.7				
Interior	0.6				
Door or drawer	0.8				
Opening Depth (mm)					
Door type	1090				
Drawer type	1260	N/A		1260	
Maximum loading height of drawer (mm per drawer)					
2 drawers bank	215	N/A		215	
3 drawers bank	115	N/A		115	
1/3 + 2/3 drawers bank	1/3 drawer: 120 2/3 drawer: 343	N/A		1/3 drawer: 120 2/3 drawer: 343	
Capacity (cu.ft / litres)	16.8 / 476			22 / 625	
Power Supply	220V / 50HZ / 1PH 13 amp plug				
Power Input - Running (amps)					
Door type	5			7	
Drawer type	7	N/A		7	
Rating Power (watts) *					
Door type	1100			1540	
Drawer type	1540	N/A		1540	
Compressor (HP)					
Door	7/16	1/2	3/4		
2 drawers bank	3/4		N/A		3/4
3 drawers bank	3/4		N/A		3/4
Heat Rejection (watts) (Evaporating at -10°C in 32°C ambient)					
Door	887	950	2229	1289	
2 drawers bank	1289		N/A		1289
3 drawers bank	1289		N/A		1289
Remote condensing unit with housing (Width x Depth x Height) (mm)					
Door type	530 x 350 x 335	580 x 350 x 335		730 x 495 x 400	
Drawer type	730 x 495 x 400		N/A		730 x 495 x 400
Refrigerant Pipe Size (inch)					
Door type - Suction pipe	1/2	3/8	1/2		
Door type - Liquid pipe	3/8	1/4		3/8	
Drawer type - Suction pipe	1/2		N/A		1/2
Drawer type - Liquid pipe	3/8		N/A		3/8
Maximum pipe length work (m)	8				
Refrigerant	R134a		R404a		R134a
Standard fittings for door type					
PE coated shelves	6			8	
Trayslides (pair)	6			8	

* 20% increase for 60HZ power supply

V4