

Williams Professional Refrigeration

Counter Series

Williams present a series of ergonomic counter type refrigerators, built to maximise storage space and available with a variety of options for greater user flexibility

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-stie 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.

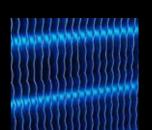
Designed and engineered to operate up to 43°C ambient

Effective in the harshest environment

09.

HACCP compliant

Ensures the food safety of Williams products



10.

Condenser and evaporator with Hydrophilic aluminium fins

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.

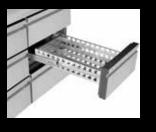
Forced air circulation system

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 fullloaded 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



* Available for Opal and Emerald only

- O1. Removable cassette type condensing unit and evaporator for easy servicing with zero down time
- O2. Excellent thermal efficiency, high density polyurethane insulation with Zero ODP (Ozone Depletion Potential) and Low GWP (Global Warming Potential)
- O3. 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 reduse energy consumption
- 07. Over 90° door opening allows easy loading and stock checking
- O8. Hygienic one-piece dished base with radiused corners avoids potential dirt traps *
- OO. Removable balloon type magnetic door gasket with air release points provides an excellent seal to prevent heat ingress, easy replacement and avoiding dirt traps

williams?

- 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. Condenser and evaporator with Hydrophilic aluminium fins 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









williams⁹ p.34

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



- * Available for Opal and Emerald only
- [#] Not available for LO3U/R(J) and LE2U/R(J)

- 01. 304 grade stainless steel exterior back / base
- 02. Heated film glass door
- (add 10mm to depth for Emerald)
- 04. Saladette opening *
- 05. Raised pan holder *
- 06. Wooden board under table top
- $\bigcirc 7$. Table top extension
- O8. 2mm thick 304 grade stainless steel table top
- ()9, 2, 3 or 1/3 + 2/3 drawers bank **
- 1). 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

p.36

Professional Refrigeration > Counter Series

Opal, Emerald & Bakery Product Code

Example:

HO3U(J)-XDNW-B-S



1. Te	mperat	ure Range
Н	=	+1 / +4 °C
Μ	=	-2 / +2°C
L	=	-19 / -22 °C
2. Se	eries	
0	=	Opal
E	=	Emerald
В	=	Bakery
3. Ni	umber o	of compartment
3. Nu 1	umber o	of compartment 1 compartment
1	=	1 compartment
1 2	=	1 compartment 2 compartments
1 2 3 4	= = =	1 compartment 2 compartments 3 compartments
1 2 3 4	= = =	1 compartment 2 compartments 3 compartments 4 compartments

5. T	ype of h	andle
(J)	=	New integral handle
6. C	onfigura	ation
Х	=	Location of the condensing unit / evaporator
D	=	Door
Ν	=	2 drawers bank
W	=	3 drawers bank
Т	=	1/3 + 2/3 drawers bank
7 0	ntions	

7. Opt	tions	
S	=	304 grade stainless steel back
HGD	=	Heated film glass door
PT	=	Pass through door
В	=	Back splash



Professional Refrigeration > Counter Series

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)-XT	O2U(J)-XTT	O3U(J)-XTTT	O4U(J)-XTTTT
01U(J)-XT	O2U(J)-XTT	O3U(J)-XTTT	O4U(J)-XTTTT

$\label{eq:professional Refrigeration > Counter Series > Self-contained type$

Opal Technical Data

Model	HO1U(J)	MO1U(J)	LO1U(J)	HO2U(J)	MO2U(J)	LO2U(J
Temp Range (°C)	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2	-19 / -22
External Dimension (mm)						
Width		905			1370	
Depth			6	70		
Height			8	50		
Internal Dimension (mm)				1		
Width		390			855	
Depth			50	60		
Height			5	70		
Thickness of 304 grade stair	less steel (m	m)				
Exterior			0	.7		
nterior			0	.6		
Door or drawer			0	.8		
Opening Depth (mm)						
Door type			10	90		
Drawer type			12	60		
Maximum loading height of d	lrawer (mm p	er drawer)				
2 drawers bank			2	15		
3 drawers bank			1	15		
1/3 + 2/3 drawers bank				wer: 120 wer: 343		
Capacity (cu.ft / litres)		6.2 / 178			11.5 / 327	
Dowow Cumply			220V / 50)HZ / 1PH		
Power Supply			13 am	ıp plug		
Power Input - Running (amps	s) *					
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)				1	1	
Door	1.	/4	1/2	1	/4	5/8
2 drawers bank	1.	/4	1/2	1	/4	5/8
3 drawers bank	1.	/4	1/2	1	/3	5/8
Heat Rejection (watts) (Evap	prating at -10	°C in 32°C ar	nbient)			
Door	48	85	1550	4	85	1844
2 drawers bank	48	85	1550	4	85	1844
3 drawers bank	48	85	1550	6	23	1844
Refrigerant	R1	34a	R404a	R1	34a	R404a
Standard fittings for door typ	e					
PE coated shelves		2			4	
Trayslides (pair)		2			4	



Opal Technical Data

Model	HO3U(J)	MO3U(J)	LO3U(J)	HO4U(J)	MO4U(J)				
Temp Range (°C)	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2				
External Dimension (mm)			I						
Width		1835		23	300				
Depth			670	1					
Height			850						
Internal Dimension (mm)									
Width		1320 1785							
Depth			560	1					
Height			570						
Thickness of 304 grade stain	nless steel (mm)								
Exterior			0.7						
Interior			0.6						
Door or drawer			0.8						
Opening Depth (mm)	1								
Door type			1090						
Drawer type	12	260	N/A	12	260				
Maximum loading height of o	drawer (mm per	drawer)							
2 drawers bank	2	15	N/A	2	15				
3 drawers bank	1	15	N/A	115					
1/3 + 2/3 drawers bank		wer: 120 wer: 343	N/A	1/3 drawer: 120 2/3 drawer: 343					
Capacity (cu.ft / litres)		16.8 / 476		22 /	/ 625				
			220V / 50HZ / 1PH	H					
Power Supply			13 amp plug						
Power Input - Running (amp	s) *								
Door type	3	3.5		4.5					
Drawer type	4	1.5	N/A	4	.5				
Rating Power (watts) *			·	·					
Door type	7	70		990					
Drawer type	9	90	N/A	9	90				
Compressor (HP)	ň		·	÷	1				
Door	1	/3	3/4	1	/2				
2 drawers bank	1	/2	N/A	3	3/4				
3 drawers bank	1	/2	N/A	3	3/4				
Heat Rejection (watts) (Evap	orating at -10°C	in 32°C ambier	nt)	·					
Door	6	23	2229	9	50				
2 drawers bank	9	50	N/A	12	289				
3 drawers bank	9	50	N/A	12	289				
Refrigerant	R1	34a	R404a	R1	34a				
Standard fittings for door typ	be		÷	1					
PE coated shelves		6			8				
Trayslides (pair)		6			8				

Professional Refrigeration > Counter Series > Remote Type

Opal Technical Data

Model	HO1R(J)	MO1R(J)	LO1R(J)	HO2R(J)	MO2R(J)	LO2R(J)			
Temp Range (°C)	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2	-19 / -22			
External Dimension (mm)									
Width		680			1145				
Depth			6	70					
Height			8	50					
Internal Dimension (mm)									
Width		390			855				
Depth			5	60					
Height		1	5	70	1	1			
Thickness of 304 grade stain	less steel (n	nm)							
Exterior		0.7							
Interior			0	.6					
Door or drawer		1	0	.8	1	1			
Opening Depth (mm)									
Door type			10	90					
Drawer type		1260							
Maximum loading height of d	rawer (mm p	er drawer)							
2 drawers bank				15					
3 drawers bank				15					
1/3 + 2/3 drawers bank		1		wer: 120 wer: 343	1	1			
Capacity (cu.ft / litres)		6.2 / 178			11.5 / 327	1			
Power Supply)HZ / 1PH					
		1	13 am	ip plug	1	1			
Power Input - Running (amps	5) *								
Door type		5	7		5	7			
Drawer type		5	7		5	7			
Rating Power (watts) *									
Door type	11	00	1540	11	00	1540			
Drawer type	11	00	1540	11	00	1540			
Compressor (HP)									
Door	1.	/3	1/2	1.	/3	3/4			
2 drawers bank	1	/3	1/2	1,	/3	3/4			
3 drawers bank	1.	/3	1/2	1.	/3	3/4			
Heat Rejection (watts) (Evapo	orating at -10)°C in 32°C a	mbient)						
Door	62	23	1539	62	23	2229			
2 drawers bank	62	23	1539	62	23	2229			
3 drawers bank	62	23	1539	62	23	2229			
Remote condensing unit with	า housing (W	idth x Depth	x Height) (m	m)					
Door type			530 x 350 x 33	5		580 x 350 x 335			
Drawer type			530 x 350 x 33	5		580 x 350 x 335			
Refrigerant Pipe Size (inch)				·					
Door type - Suction pipe	3	/8	1/2	3	/8	1/2			
Door type - Liquid pipe	1.	/4	3/8		1/4				
Drawer type - Suction pipe		3/8							
Drawer type - Liquid pipe			1	/4					
Maximum pipe length work (m)				8					
Refrigerant	R1	34a	R404a	R1:	34a	R404a			
Standard fittings for door typ)e								
PE coated shelves		2 4							
Trayslides (pair)		2			4				



Professional Refrigeration > Counter Series > Remote Type

Opal Technical Data

Model	HO3R(J)	MO3R(J)	LO3R(J)	HO4R(J)	MO4R(J)				
Temp Range (°C)	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2				
External Dimension (mm)									
Nidth		1610		20)75				
Depth			670						
Height			850						
Internal Dimension (mm)			000	I					
Vidth		1320 1785							
Depth			560						
Height			570						
Thickness of 304 grade stain	nless steel (mm)		I	I				
Exterior			0.7						
nterior			0.6						
Door or drawer			0.8						
Opening Depth (mm)				I.					
Door type			1090						
Drawer type	12	60	N/A	12	260				
Maximum loading height of d									
2 drawers bank	2-		N/A	2	15				
drawers bank	11		N/A		15				
/3 + 2/3 drawers bank	1/3 drav 2/3 drav		N/A		wer: 120 wer: 343				
Capacity (cu.ft / litres)		16.8 / 476	ń	22.	/ 625				
			220V / 50HZ / 1PH	1	I				
Power Supply			13 amp plug						
Power Input - Running (amp	s) *		10 00010 10103	I.					
Door type	1	5		7					
Drawer type		7	N/A	7					
Rating Power (watts) *									
Door type	11	00		1540					
Drawer type	15		N/A						
Compressor (HP)	10		14/7 (
Door	7/16	1/2		3/4					
2 drawers bank	3/		N/A	1	/4				
3 drawers bank	3/		N/A		/4				
leat Rejection (watts) (Evap									
Door	887	950	2229	10	89				
2 drawers bank	1	89	N/A	1	289				
drawers bank		89	N/A		289				
Remote condensing unit wit				12	.00				
Door type	530 x 350 x 335		50 x 335	730 x 4	95 x 400				
Drawer type	730 x 49	95 x 400	N/A	730 x 4	95 x 400				
Refrigerant Pipe Size (inch)				1					
Door type - Suction pipe	1/2	3/8		1/2					
Door type - Liquid pipe			/4	3/8					
Drawer type - Suction pipe	1	/2	N/A						
Drawer type - Liquid pipe	3/	/8	N/A	3	/8				
Maximum pipe length work (m)			8						
Refrigerant	R1	34a	R404a	R1	34a				
Standard fittings for door ty			i	1	I				
PE coated shelves		6			8				
Frayslides (pair)		6			8				
		5			-				

Professional Refrigeration > Counter Series Emerald Product List

E1U(J)-XD	E2U(J)-XDD	E3U(J)-XDDD
E1U(J)-XN	E2U(J)-XNN	E3U(J)-XNNN
E1U(J)-XT	E2U(J)-XTT	E3U(J)-XTTT
E1U(J)-XW	E2U(J)-XWW	E3U(J)-XWWW

Emerald Technical Data

Model	HE1U(J)	ME1U(J)	LE1U(J)	HE2U(J)	ME2U(J)	LE2U(J)	HE3U(J)	ME3U(J)	LE3U(J)
Temp Range (°C)	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2	-19 / -22
External Dimension (mn	n)								
Width		1102			1765			2426	
Depth					770				
Height					850				
Internal Dimension (mm	n)								
Width		587			1250			1911	
Depth					660				
Height					570				
Thickness of 304 grade	stainless st	eel (mm)							
Exterior					0.7				
Interior					0.6				
Door or drawer					0.8				
Opening Depth (mm)									
Door type					1387				
Drawer type				1	460				N/A
Maximum loading heigh	t of drawer	(mm per d	lrawer)						
2 drawers bank				1	215				N/A
3 drawers bank			115			N/A	1	15	N/A
1/3 + 2/3 drawers bank					awer: 120 awer: 343				N/A
Capacity (cu.ft / litres)		10.2 / 290			19.3 / 547			28.3 / 803	
Dever Cumply				22	0V / 50HZ /	1PH	i -		
Power Supply					13 amp plu	g			
Power Input - Running	amps) *								
Door type		3	4	3	3.5	4	3.5	4.5	4.5
Drawer type		3	4	3	3.5	4	3.5	4.5	N/A
Rating Power (watts) *									
Door type	6	60	880	660	770	880	770	990	990
Drawer type	6	60	880	660	770	880	770	990	N/A
Compressor (HP)									
Door	1	/4	1/2	1	/4	5/8	1	/2	3/4
2 drawers bank	1	/4	1/2	1.	/4	5/8	1	/2	N/A
3 drawers bank	1	/4	1/2	1.	/4	N/A	1	/2	N/A
Heat Rejection (watts) (Evaporating	at -10°C i	in 32°C ar	nbient)			Ϋ́		
Door	1	85	1550		35	1844	9	50	1289
2 drawers bank	4	85	1550			1844	9	50	N/A
3 drawers bank	4	85	1550			N/A	9	50	N/A
Refrigerant		R134a R404a R134a R404a R134a						R404a	
Standard fittings for do	or type	I	Ť	î.			ŕ		
PE coated shelves		2			4		6		
Trayslides (pair)		2			4			6	

* 20% increase for 60HZ power supply

williams⁹ p.44

Emerald Technical Data

Model	HE1R(J)	ME1R(J)	LE1R(J)	HE2R(J)	ME2R(J)	LE2R(J)	HE3R(J)	ME3R(J)	LE3R(J)
Temp Range (°C)	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2	-19 / -22	+1 / +4	-2 / +2	-19 / -22
External Dimension (mm)									
Width		877			1540			2201	
Depth		770							-
Height		850							
Internal Dimension (mm)									
Width		587			1250			1911	-
Depth					660				-
Height					570				
Thickness of 304 grade stainle	ess steel (mm)		I				I	1
Exterior					0.7				
Interior					0.6				
Door or drawer					0.8				
Opening Depth (mm)				I	0.0				
Door type					1387				
Drawer type				14					N/A
Maximum loading height of dra	awer (mm	ner drawe	r)	1-1	00				14/7 (
2 drawers bank			•)	21	5				N/A
3 drawers bank		215 115 N/A				1	15	N/A	
			115	1/0 alway	100	IN/A	1	15	N/A
1/3 + 2/3 drawers bank				1/3 drav 2/3 drav					N/A
Capacity (cu.ft / litres)		10.2 / 290			19.3 / 547		28.3 / 803		
Power Supply				-	V / 50HZ / 1 I3 amp plug				
Power Input - Running (amps)	*				lo unip plug				
Door type	1	5	7		5			7	
Drawer type	-	5	7		5		7 7 N		N/A
Rating Power (watts) *		5	I	1	0		I		11/74
Door type	11	00	1540	11	00		15	40	
Drawer type		00	1540		00		1540	40	N/A
Compressor (HP)		00	1540		00		1540	I	N/A
Door	-	/3	5/8	4	/3		3/4		1
2 drawers bank	-	/3	5/8						
					/3	N1/A	3/4	14	N/A
3 drawers bank		/3	5/8		/3	N/A	3	/4	N/A
Heat Rejection (watts) (Evapor				-	00	0000	10		0000
Door		23	1844		23	2229		89	3389
2 drawers bank		23	1844		23	2229		89	N/A
3 drawers bank Remote condensing unit with		23 Vidth x De	1844 oth x Heig		23	N/A	12	89	N/A
Door type			530 x 35				580 x 3	50 x 335	730 x 495
Drawer type				50 x 335				50 x 335	x 420
Refrigerant Pipe Size (inch)								1	
Door type - Suction pipe			3/8				1.	/2	
Door type - Liquid pipe			1/	/4		1	1	/8	1/4
Drawer type - Suction pipe	3/8 1/2							N/A	
Drawer type - Liquid pipe	1/4 3/8							N/A	
Maximum pipe length work (m)			1/	T	8		3		11/7
Refrigerant	D1	34a	R404a	D1	o 34a	R404a	D1	34a	R404a
		04a	n404a	KI	04d	n404a		04a	n404ä
Standard fittings for door type	;	0		[А				
PE coated shelves		2			4			6	
Trayslides (pair)		2			4			6	

 * 20% increase for 60HZ power supply

