williams

Design Excellence : Cool Technology

Blast Chillers and Freezers

Reach-in and modular blast chillers, blast freezers and blast chiller/freezers

Blast chillers and freezers from Williams: a comprehensive range making food safety as easy as 1-2-3

From 10kg undercounter cabinets to 320+kg modular roll-in systems, Williams has developed a model to suit every application. And operating them is simple, thanks to the Williams Easy Blast (WEB) controller.

Williams Refrigeration is a leading manufacturer of professional refrigeration with a global reputation for delivering excellence.

Our extensive product range includes high performance, energy efficient and environment friendly refrigerated cabinets and counters, blast chillers, coldrooms, backbar and specialist bakery equipment.

Our customer commitment helps you meet the demands of food safety and energy efficiency legislation. Our competitive pricing, professional advice, innovative design and after sales service support attracts customers from all sectors of the market – including many of the world's leading hospitality and retail organisations.

Williams 'right first time' philosophy means that its products provide years of trouble-free operation and are easy to service and maintain.

Greenlogic:
Through the Greenlogic initiative, Williams is committed to supplying the most energy efficient and sustainable commercial refrigeration in today's market. For more information visit www.greenlogic.info

BLAST CHILLERS AND FREEZERS

Williams' Blast Chillers and Blast Freezers (WBCF) are the perfect choice for caterers in every sector who cook and then chill food e.g. Hospitals, pubs, airlines, schools, and event caterers.

Ranging from the compact WBC10 (10kg capacity) to the mighty WMBC320 (320kg capacity) Williams has a blast chiller to suit any space.

All Williams blast chillers have advanced air flow, and easy to use controls making HACCP compliance as easy as 1,2,3.

✓ Standard
- Not available
o Option

	Reach in		Roll in			Combi		
	Chiller	Chiller/ Freezer	Chiller	Freezer	Chiler/ Freezer	Chiller	Freezer	Chiller/ Freezer
Stainless exterior & interior	✓	✓	✓	✓	✓	✓	✓	✓
Left hand hung door	o	o	o	o	o	o	o	o
White PVC coated exterior / stainless steel interior	-	-	o	o	o	o	o	o
R404A refrigerant	✓	✓	✓	✓	✓	✓	✓	✓
Automatic switch to storage mode	✓	✓	✓	✓	✓	✓	✓	✓
Adjustable legs	o	o	-	-	-	-	-	-
Marine specification*	o	o	-	-	-	-	-	-
1/1 GN Pans	o	o	-	-	-	-	-	-
1/1 GN Shelves	o	o	-	-	-	-	-	-
2/1 GN trolley	-	-	o	o	o	o	o	o
TAB monitoring system	o	o	o	o	o	o	o	o
UV Disinfection system	o	o	o	o	o	o	o	o
Thermal printer for HACCP compliance	o	o	✓	✓	✓	✓	✓	✓
Roll-Through	-	-	o	o	o	o	o	o
Internal protective bumper bars	-	-	✓	✓	✓	✓	✓	✓
Door mullion heaters	✓	✓	✓	✓	✓	✓	✓	✓
POD type refrigeration system	-	-	o	o	o	o	o	o
90mm insulated floor / external ramp	-	-	o	✓	✓	o	✓	✓
Internal light	-	-	o	o	o	o	o	o
Williams Easy Blast controller	✓	✓	✓	✓	✓	✓	✓	✓
AirSmart airflow design	✓	✓	✓	✓	✓	✓	✓	✓
High density 90mm polyurethane insulation**	✓	✓	✓	✓	✓	✓	✓	✓
Automatic defrost	✓	✓	✓	✓	✓	✓	✓	✓

*Not available on WBCF50 or WBC50 **60mm on reach in

COOK CHILL – A REFRESHER

Why do you need a blast chiller?

If you cook and then chill food, its temperature needs to be reduced safely from 70°C to 3°C within 90 minutes. If you are freezing cooked food, the temperature needs to go from 70°C to -18°C in no more than 240 minutes. Otherwise you are breaking the law. Worse, you are putting your customers at risk.

This is because bacteria grows most aggressively between 5°C and 63°C – so the food needs to get past this 'danger zone' as quickly as possible.

It's no good putting hot food into a refrigerator or freezer – it won't cool fast enough, the resulting rise in the cabinet temperature will endanger other food being stored there, and it will overwork the refrigeration system.

The only safe way to comply with the food safety regulations governing the chilling or freezing of cooked food is to use a blast chiller or blast freezer.

What is a blast chiller or blast freezer?

A blast chiller or blast freezer uses powerful fans to blast cooled air onto the hot food, quickly reducing temperature.

A standard blast chiller will chill from 70°C to 3°C in less than 90 minutes, and a blast freezer will chill from 70°C to -18°C in less than 240 minutes whilst a Williams blast chiller or freezer can pull down from 90°C.

This eliminates the risk of slow cooling in the bacteria growth 'danger zone'.

The best models automatically control the blast chill/freeze process to preserve food quality in terms of appearance, taste, texture, aroma and nutritional values.

Early blast chillers and blast freezers were big, roll-in models designed for large institutional catering and tended to be difficult to operate.

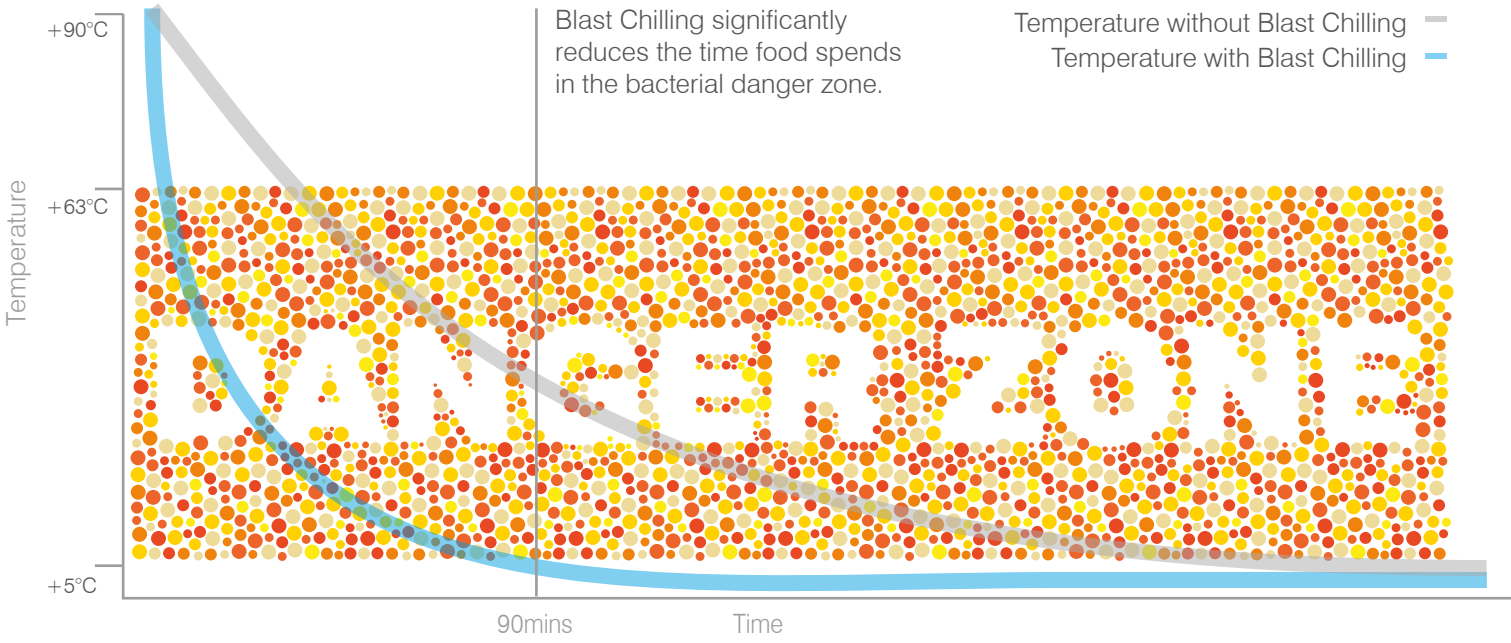
These days there are models to suit every application, even under counter units, and features such as WEB controller, bringing the benefits of blast chilling to large and small venues alike.

Once the blast chill/freeze cycle is complete, Williams blast chillers and blast freezers automatically switch to storage mode, so food can safely be left until you are ready to move it.

Alongside blast chillers and blast freezers, Williams offers combined blast chiller freezers that can switch between the two processes.

Blast Chill Freeze Advice: **Space food evenly...**

When loading food into the blast chiller or freezer, space it evenly on the tray and space the trays evenly through the cabinet. This will help ensure food is uniformly chilled.



De-stressing the kitchen and increasing profits...

Cook chill isn't just about food safety. Preparing food in advance – sometimes days in advance – means you can reduce costs and even out the peaks and troughs of the kitchen workload. Is Sunday lunch your busiest service? Prepare the food on Thursday afternoon, or whenever business is quiet. Making more productive use of time, and cooking foods in advance, allows you to expand your menu options.

A blast chiller or blast freezer can reduce labour costs by keeping chefs occupied profitably while it's quiet. And it will make life easier for chefs, by taking the stress out of busier periods. Plus a blast chiller or freezer can reduce food wastage, since food that's not required can be left in chilled or frozen storage. Williams estimates that a well-managed cook chill system can increase profitability by up to 30%.

Hard or soft chill?

Williams blast chillers offer the option of soft or hard chill. Soft chilling is a gentler process that ensures delicate products, such as fish, fruit and vegetables, do not develop ice crystals.

Hard chilling is suitable for denser foods such as meat, casseroles and lasagne. Here the air flow drops below freezing to maintain safety while ensuring the product stays in prime condition.

Who uses blast chillers or blast freezers?

Hospitals, pubs, airlines, schools, banqueting and event caterers, conference venues, prisons, restaurants, hotels, the MOD... caterers in every sector who cook then chill food need a blast chiller. Thanks to the huge range of sizes now available, there is a model for every application and site.

Blast Chill and Blast Freeze Can Help You To:

- Guarantee food safety and HACCP compliance
- Preserve the quality of food
- Reduce food wastage
- Expand your menu
- Reduce labour costs
- Improve kitchen efficiency and productivity
- Increase profitability by up to 30%

Blast Chill Freeze Advice: **Keep it closed...**

Once the blast cycle has started, do not open the door, for example to add more trays of product. The food already in the unit will be subjected to warm air, while the food that is added won't get the full blast cycle. Either way, food safety will be compromised.

WILLIAMS: SIMPLY THE BEST

Williams has been building blast chillers, blast freezers and combined blast chiller freezers for over 30 years.

We have developed a market-leading range that offers exceptional performance, energy saving features and the simplest controls on the market.

Advanced design features, such as our AirSmart airflow system, guarantee food quality through even and consistent chilling. There are now thousands of our units in use by leading institutions, hotels, restaurants and chains around the globe.

As simple as 1-2-3...

The Williams Easy Blast's (WEB) innovative design makes it the simplest to operate on the market.

1. Push 1 to select hard or soft chill or freeze
2. Push 2 to select 90 minute (chill) or 240 minute (freeze) or the food temperature probe-controlled cycle
3. Push 3 to start the blast chill or blast freeze cycle

The time display shows the elapsed time and the temperature display shows the food probe temperature (when using a probe-driven cycle).

HACCP

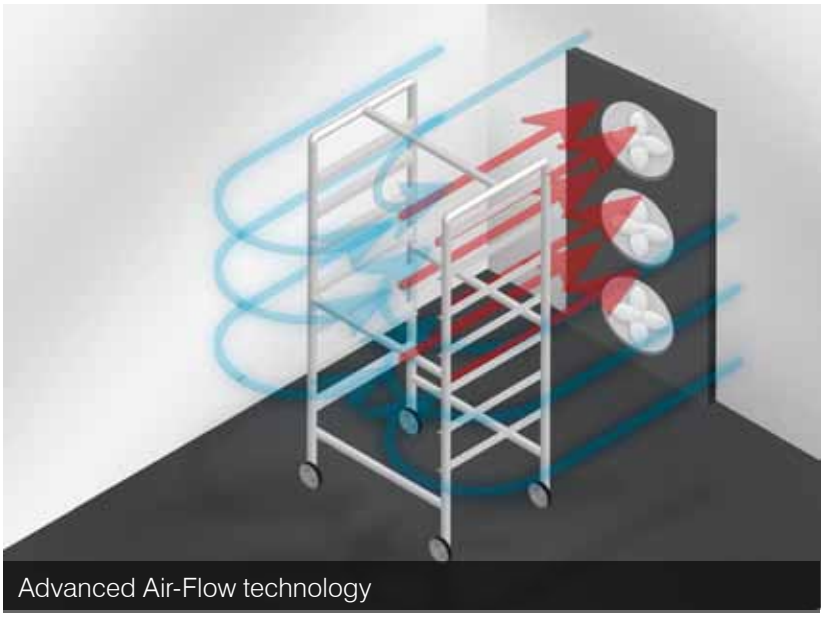
With a Williams blast chiller, HACCP is made easy.. Our blast chillers, freezers and chiller freezers offer a variety of options for data logging to meet your HACCP requirements, including the option of daisy-chaining units across sites and online monitoring.

Let's make life easier...

Williams blast chillers, freezers and chiller freezers are designed to make life as easy as possible. For example, whereas many conventional units can only handle food up to 70°C, our designs can accommodate it at 90°C – and still cool it to 3°C/-18°C within the required 90/240 minutes. It saves time, since chefs don't have to hang about waiting for food to cool.

Then there's our self diagnostics, which mean service engineers can quickly find a fault and correct it. And when it's time to call the engineer to clean the condenser, our blast chillers, freezers and chiller freezers remind you by flashing the red condenser light.

For optimum operating efficiency, all Williams models automatically switch to defrost at the end of each cycle. To ensure staff are aware when the blast cycle finishes, an audible alarm sounds.


Advanced Air-Flow technology


Food Probe

Maintaining food quality

The Williams AirSmart airflow system chills from three different directions. Powerful, energy efficient fans and the equalised air pressure chamber ensure the air flows evenly and gently over all the products, throughout the chamber.

Chilling or freezing is uniform and the product stays in perfect condition: Airflow eliminates the risk of dehydration, skinning or damage so that food maintains taste, texture, aroma, appearance and nutritional value.

Even delicate foods, such as gateaux, are protected, with not a single chocolate flake ruffled.

Greenlogic – energy saving solutions

Its latest generation of Williams blast chillers, freezers and chiller freezers has been developed under Williams' Greenlogic initiative and is designed to offer the most sustainable, energy-efficient and 'greenest' models on the market.

That's why we developed high performance foam insulation that delivers optimum thermal efficiency yet has an ODP (ozone depletion potential) of zero.

Our food-probe driven cycles can help operators minimise energy use, by stopping the blast chill cycle as soon as the food reaches the correct temperature, rather than waiting for the full 90 minutes.

For modular reach-in units we have developed an optional Storage Mode Pod. This takes over from the main blast chill or freeze refrigeration system when the blast cycle ends and minimises energy use for as long as the unit is in storage mode. It is especially useful for sites that blast chill or freeze over night or at weekends, when the storage mode may be in operation for long periods.

Energy Saving Tip:
Use a food probe...

Using a food probe to control the blast chill cycle can save energy. To ensure the most accurate temperature readings, position the probe in the middle of the tray on the middle shelf, in the densest part of the food.

REACH IN:

Blast chiller and chiller freezer cabinets.

Specifically developed for small- to medium-sized catering operations, our reach-in blast chiller and freezer cabinets and counters are ideal for pubs, restaurants, smaller hotels, care homes and schools.

With capacities from 10kg to 50kg, the range has the flexibility to meet your needs, delivering reliable performance in ambients up to 43°C.

For ease of cleaning and hygiene, construction is stainless steel throughout and interiors have radiused corners, fully removable trayslides / racking as well as magnetic, balloon door gaskets.

Standard features include energy-saving, self-closing doors, swivel and brake castors for easy positioning, and 75mm ODP zero foam insulation.

Self diagnostics and the easy to access integral refrigeration system simplify service and maintenance.

Options include marine-specification versions, US-specification versions, and adjustable legs in place of castors.

Blast Chill Freeze Advice:
Before you begin...

Ensure that the blast chiller or freezer is switched on and is at the correct temperature (3°C for chilling and -18°C for freezing) before hot food is loaded, otherwise the refrigeration system will be over-worked and the cycle may not complete in time.

Reach In

Features and Benefits

- Chiller +90°C to +3°C in 90 mins
- Freezers +90°C to -18°C in 240 mins
- Sizes available from 10-50kg capacity to suit the size of your operation
- Easy to use 1-2-3 WEB controller - 3 simple steps
- Designed to operate efficiently up to a 43°C ambient, exceeding Climate Class 5
- 75mm polyurethane insulation for excellent thermal efficiency
- Accommodates 1/1 Gastronorm pans or shelves
- Heavy duty, non marking swivel and brake castors
- Self closing doors with magnetic balloon gaskets

ROLL IN:

Modular blast chiller, freezer and chiller freezer units.

Delivering the performance demanded by larger catering operations, Williams modular blast chillers, freezers and chiller freezers are available in capacities from 90kg to 320kg, with larger systems available to order.

The range offers the flexibility to meet the needs of every sector including hospitals, large hotels, banqueting and event caterers, conference venues, CPUs, universities, the MOD, bakeries and food processors.

Robust construction ensures a long service life while a variety of finishes, including stainless steel and white PVC coated galvanised steel, offers a choice to suit all budgets.

Williams Roll-In modular units are designed to accommodate 2/1GN trays or combi trolleys.

The 90mm ODP zero insulation delivers excellent thermal efficiency. It combines with the large diameter, high-velocity, energy-efficient 4-pole fans and the powerful, large-surface evaporator to give superior performance, even in ambients of 43°C.

Accessibility is built in for faster maintenance and servicing and the fans are easy to remove for inspection.

Commissioning is simpler, too, thanks to the easy-to-access expansion valve for superheat adjustment during installation.

The latest defrost heaters reduce the defrost cycle time to maximise operational efficiency and minimises turnaround time.

Options include the energy efficient Storage Mode Pod, insulted floors, internal lighting and pass-through models enabling quick transfer into cold storage facilities.

Blast Chill Freeze Advice: **Don't cover food...**

Don't cover food in trays in the blast chiller or freezer, it will compromise the efficiency of the blast cycle. Williams' AirSmart technology will protect even delicate food, so there is no need to cover it.

Roll-In

Features and Benefits

- Chiller +90°C to +3°C in 90 mins
- Freezer +90°C to -18°C in 240 mins
- Sizes available from 90-320 kg capacity to suit the size of your operation
- Williams Easy Blast (WEB) - the simplest to use controller on the market
- Designed to operate efficiently up to a 43°C ambient,exceeding Climate Class 5
- Advanced airflow design for uniform chilling
- 90 mm polyurethane insulation for excellent thermal efficiency
- Accommodates 2/1 gastronorm trolleys
- Wide entry models designed to accommodate gastronorm 2/1 and Combi Trolleys

JADE BLAST CHILLER:

Blast chillers to compliment the Jade range of products.

Specifically developed for medium sized catering operations, our Jade reach-in blast chiller is designed to Blast Chill 23kg from +90°C to +3°C in 90 minutes.

As part of the Jade range of cabinets and counters, the Jade blast chiller has the same striking aesthetics as its standard counterparts.

Featuring a robust stainless steel exterior and full integral, easy grab handle the Jade design eliminates potential dirt traps.

For ease of cleaning and hygiene, construction is stainless steel throughout and interiors have radiused corners, fully removable trayslides / racking as well as magnetic, balloon door gaskets.

Standard features include energy-saving, self-closing doors, swivel and brake castors for easy positioning, and 75mm ODP zero foam insulation.

Self diagnostics and the easy to access integral refrigeration system simplify service and maintenance.

The J1BC features a unique advanced airflow design for even chilling of product load throughout cabinet and a choice of hard, soft, store and core food temperature probe controlled cycles with audible alarm indicating end of cycle.

Blast Chill Freeze Advice: **Half Loads...**

When blast chilling or freezing less than a full load, space the trays out evenly throughout the cabinet. This will speed up the process and ensure the food is uniformly chilled. If possible, use a food probe to control the cycle, as this will save energy by stopping the cycle as soon as the correct temperature is reached.

Jade

Features and Benefits

- Designed for efficient performance in 43°C ambient - Climate Class 5
- Heavy duty non marking swivel and brake castors
- Chiller +90°C to +3°C in 90 mins
- Easy to use 1-2-3 control panel - 3 simple steps
- Foodsafe stainless steel exterior and interior
- Integral Stainless Steel, easy grab handle
- Barrel locked doors for added security

OVERNIGHT THAW:

Safe and efficient thawing of frozen products.

Cooked and chilled foods that are to be eaten cold or at room temperature, should be consumed within 30 minutes of removal from storage.

If the food is to be regenerated, this should start no more than 30 minutes after the food is removed from chilled storage. Regeneration must take place close to the point of consumption.

The Williams overnight thaw cabinet provides safe, effective thawing of frozen foods. It ensures the product does not exceed 3°C throughout the thawing process, allowing it to be safely stored in a refrigerated cabinet for up to 5 days after defrosting.

Additional food can be placed in the cabinet with no detrimental effect on those products already inside, enabling a continual supply of thawed food. Cooking thawed food is quicker and safer than cooking from frozen - eliminating the risk of cold spots once cooking has finished.

Thaw

Features and Benefits

- Designed with forced air heating and cooling circuits which cycle alternatively keeping the food within the correct temperature range of 0°C to +3°C
- Foodsafe stainless steel exterior and interior
- Controller designed for easy operation and features clear digital display
- Designed to operate efficiently up to 43°C ambient environments
- Precision injected, high density 75mm polyurethane insulation. Provides excellent thermal efficiency with low GWP and zero ODP.

TECHNICAL DATA

Reach-In Blast Chillers

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WBC10	707	804	885	+90 to +3° in 90 mins	1/2	4.0	10kg
WBC20	707	804	1290	+90 to +3° in 90 mins	1	6.0	20kg
WBC30	707	804	1740	+90 to +3° in 90 mins	1 1/2	9.9	30kg
WBC40	707	804	1740	+90 to +3° in 90 mins	1 1/2	9.9	40kg
WBC50	707	804	1915	+90 to +3° in 90 mins	2	5.8	50kg

Reach-In Blast Chillers Freezers

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WBCF10	707	804	885	+90 to +3° in 90 mins +90 to -18° in 240 mins	1/2	4.0	10kg
WBCF20	707	804	1290	+90 to +3° in 90 mins +90 to -18° in 240 mins	1	6.0	20kg
WBCF30	707	804	1740	+90 to +3° in 90 mins +90 to -18° in 240 mins	1 1/2	9.9	30kg
WBCF40	707	804	1740	+90 to +3° in 90 mins +90 to -18° in 240 mins	1 1/2	9.9	40kg
WBCF50	707	804	1915	+90 to +3° in 90 mins +90 to -18° in 240 mins	2	5.8	50kg

Roll-In Blast Chillers*

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBC90	1470	1250	2295	+90 to +3° in 90 mins		4.3	90kg
WMBC120	1470	1250	2295	+90 to +3° in 90 mins		4.3	120kg
WMBC160	1470	1250	2295	+90 to +3° in 90 mins		5.2	160kg
WMBC200	1470	1250	2295	+90 to +3° in 90 mins		5.2	200kg
WMBC240	1470	2350	2295	+90 to +3° in 90 mins		7.7	240kg
WMBC320	1470	2350	2295	+90 to +3° in 90 mins		7.7	320kg

WBC/F 10 & 20 - 13 amp plug
WBC/F 30 & 40 - 16 amp hard wire
WBC/F 50 - 16 amp 3 phase and requires connection to a main drain

Roll-In Blast Chillers - Combi*

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBC90C	1670	1250	2295	+90 to +3° in 90 mins		4.3	90kg
WMBC120C	1670	1250	2295	+90 to +3° in 90 mins		4.3	120kg
WMBC160C	1670	1250	2295	+90 to +3° in 90 mins		5.2	160kg
WMBC200C	1670	1250	2295	+90 to +3° in 90 mins		5.2	200kg
WMBC240C	1670	2350	2295	+90 to +3° in 90 mins		7.7	240kg
WMBC320C	1670	2350	2295	+90 to +3° in 90 mins		7.7	320kg

Roll-In Blast Freezer*

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBF100	1470	1250	2385	+90 to -18° in 240 mins		5.0	100kg
WMBF200	1470	2350	2385	+90 to -18° in 240 mins		9.0	200kg

Roll-In Blast Freezer - Combi*

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBF100	1670	1250	2385	+90 to -18° in 240 mins		5.0	100kg
WMBF200	1670	2350	2385	+90 to -18° in 240 mins		9.0	200kg

*Condensing unit not included with product. Separate panel and power supply required. Unit requires connection to main drain.

WMBC Wide Entry Models will accommodate Combi-Trolleys
Reduction time depends on product type. Please enquire on application

TECHNICAL DATA

Roll-In Blast Chillers Freezer*

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBCF90	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		4.3	90kg
WMBCF120	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		4.3	120kg
WMBCF160	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		5.2	160kg
WMBCF200	1470	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		5.2	200kg
WMBCF240	1470	2350	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		7.7	240kg
WMBCF320	1470	2350	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		7.7	320kg

Roll-In Blast Chillers Freezer - Combi*

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
WMBCF90C	1670	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		4.3	90kg
WMBCF120C	1670	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		4.3	120kg
WMBCF160C	1670	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		5.2	160kg
WMBCF200C	1670	1250	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		5.2	200kg
WMBCF240C	1670	2350	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		7.7	240kg
WMBCF320C	1670	2350	2385	+90 to +3° in 90 mins +90 to -18° in 240 mins		7.7	320kg

*Condensing unit not included with product. Separate panel and power supply required. Unit requires connection to main drain.

WMBC Wide Entry Models will accommodate Combi-Trolleys
Reduction time depends on product type. Please enquire on application

Jade Blast Chiller

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
J1BC	865	801	1980	+90 to +3° in 90 mins		6.5	23kg

Overnight Thaw Cabinets

Model	Width	Depth	Height	Temp °C	HP	Running Amps	Capacity
OT1	865	701	1960	0/+3°C	1/4	5	13.3cu.ft (376 litres)
OT2	1655	701	1960	0/+3°C	1/2	7	26.6cu.ft (752 litres)

Design Excellence : Cool Technology

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Installation of all Williams products requires adequate ventilation.

Williams reserves the right to modify the design, materials and finish in accordance with its progressive development policy.

MK/Lit/BlastChillers_0813/V1