

Modular Step-in Cold Rooms

Powerful, quiet and energy efficient



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Modular Step-in Cold and Freezer Rooms



R290 R452A REFRIGERANT

Porkka reserves the right to make product alterations and or price adjustments at any time and can not be held responsible for any printing errors or omissions.

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The solution

The need of standard rooms is very versatile. New construction sets different needs compared to alteration and renovation work. The Porkka MCR walk-in room adapts to the customer's needs both in terms of cooking and space use, providing the most environmentally friendly, cost-effective and safe solution for modern professional kitchens.

Space requirements

Porkka MCR occupies least space outside the room chassis. The door handle projects 130 mm from the front wall. The refrigeration unit itself requires even less space.

Porkka recommends to have 100 mm additional space around the room to enable easy installation. Door opening radius is 160 mm more than the clear opening.

Assembly site

A floorless cold room requires floor underneath which is properly protected against moisture and is non-slippery.

Medium and low temperature rooms must always be supplied with a floor.

Trolley operation

To facilitate the use of trolleys, chill rooms can be supplied without a floor. In this instance, the room is erected on an insulated plinth.

If insulated floor element is essential, it is possible to recess the floor, or, if above ground, supply an optional ramp.

Trolley operation options

Special requirements for low temperature storages

The cold cut is essential to avoid ice building at the construction underneath the freezer room.

Porkka offer unique solution that protects the surroundings from excess humidity too.

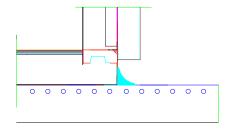
Traditional vs. MCR floor heating

How to re-use the heat

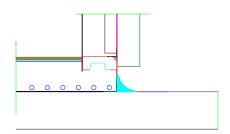
The heat load of the MCR consists of the heat delivered from the ambient, products stored and the room itself. This energy can be easily re-used in the building itself. Porkka offers several energy recycling solutions.

Comfortable working space

Porkka MCR is a solution for healthier and more quiet working space. Enjoy!

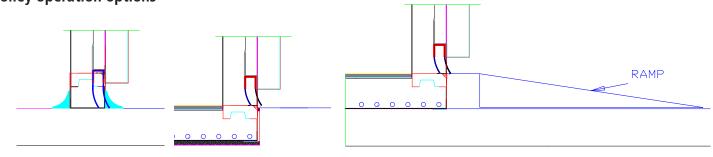


Traditional floor with heating allows ice building to proceed outside of the freezer room floor element creating possible moisture problems or excess energy consumption.



Porkka MCR floor with heating keeps the cold inside the floor element and doesn't allow any creation of moisture.

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PORKKA

Manufactured from high quality materials and combining low energy consumption with quiet operation. Porkka modular cold rooms are the ideal choice for the storage of perishable products.

Cooling units produced in our own factory have been designed to be both powerful and energy efficient. Digital temperature displays have built-in high/low alarms which are both audible and visual. These can be connected via a volt free relay to a building management system. The controller is also equipped with HACCP features to meet the more stringent temperature monitoring regulations being enforced. The unit or units can be connected to Porkka iTOP[™] temperature data logging and control system for more advanced monitoring.



Carefully planned materials and details

Porkka rooms are produced from modular CFC/HCFC/HFCfree polyurethane insulated panels which are moulded with male / female joints and held by eccentric action cam-locks, giving great all-round strength. The visible exterior surfaces of the panels are coated with durable scratch resistant polyester. Insulation thickness with excellent thermal efficiency is 80mm as standard with an option of 100mm for freezer application, if required.

Doors are semi-rebated and supplied with heavy duty hinges and a lockable door handle with emergency entrapment release. Thresholds and surrounds are produced from durable stainless steel with a heater supplied for freezer application. Doors are already pre-mounted on a panel for ease of assembly in the field.

Floors, when supplied, are insulated and have a strong marine plywood surface, which is coated with a non-slip glass fibre resin. Load limit for a standard floor max. 40 KN/ m2 or max 1,0 KN/ per 40mm castor. Heavy duty floor with stainless steel surface available as an additional accessory.

A ultra-hygienic shelving system allows the operator to wash individual shelves in a commercial dishwasher whilst larger dimensions increase storage areas within our rooms. Select from our extensive range, for a room to suit your requirements.

- Three temperature ranges; +2 to +8°C (+12°C) adjustable in increments of 1°C for chilled produce. For the storage of fresh meat or fish use -2 to +5°C and for frozen select -18 to -22°C.
- Insulation options of either 80 or 100mm.
- Select floorless chill rooms for trolley operation. (Chill temperature only).
- Medium and freezer rooms must be supplied with a floor which can be either recessed or with a ramp if a trolley is required.
- Cooling units can be manufactured for placement either to the left or right hand side of the door and can also be made for connection to a central cooling system.
- Door can be hung either left or right-hinged or changed in the field if required.
- Standard external height 2100mm (note 2140mm if 100mm insulation selected) or 2400 / 2440mm.
- 4 tier fully adjustable shelving is supplied for either 2 or 3 walls depending on model selected. Standard shelves are made of ABSplastics which is classified as food safe and can be washed in a commercial dishwasher. Stainless steel shelves are available as an additional accessory.

Combined digital temperature display with built-in control functions

- 1. Compressor RUN light
- Automatic defrost in operation light 2.
 - Evaporator fan RUN light
- 3. 4. Alarm activated light
- 5. Temperature/information display Temperature adjustment button 6.
- 7. Manual defrost button
- 8. Settings button
- 9. Light switch button with light to indicate ON mode
- 10. ON/OFF Stand-by mode button
- 11. Humidity control button (C models only)
- 12. Probe display button 3 1 11 6 7 *** (1) (5) 4 5 (12 6 8 (10)

Alarm functions

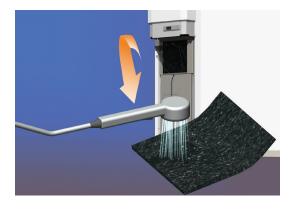
The Porkka temperature display is supplied with a built-in high/low temperature alarm which is both audible and visual and can also be connected to a building management system by means of a volt free connection.

HACCP

Versatile, built-in HACCP (Hazard Analysisand Critical Control Point) properties enable continuous and real-time temperature monitoring in compliance with the European Food Act being implemented by many governments.

Air-cooled condenser dust filter

The air inlet to the condenser is on the lower part of the refrigeration unit, ensuring the coolest air is always used helping to reduce running costs and extending the service life of the unit. The dust filter behind the air grill is easy to clean or replace. The controller provides information on when the filter requires cleaning or changing.





Shelving system

The Porkka modular cold room

shelving system is highly practical and easy to clean. Standard shelving delivery includes four (4) tier

dishwasher safe polycarbonate (food safe) inserts and supporting material. Shelving is supplied for either 2 or 3 walls dependent on model selected.



Safety

The door is supplied with heavy duty hinges and a lockable door handle with a luminous emergency entrapment release, which overrides the lock at all times, should someone accidentally be shut in the room. Door threshold and surround is fitted with a heater to prevent freezing of the gasket to the frame in low temperature models. If required floor panels can also be supplied with built-in heaters to prevent freezing or moisture damage below a larger freezer room.

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A large comprehensive range with volumes up to 22 m³

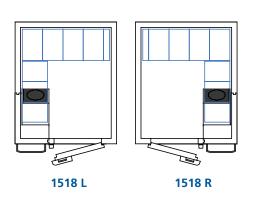
Porkka Modular Step-in Rooms are available in a range of 81 different sizes with volumes from 1.2 m³ up to 22 m³. The rooms are available in three temperature variations with optional insulation thickness and external heights. When this is combined with unit positions and door options, our range is truly massive. Porkka is the perfect partner to work with as we are bound to have a storage solution to suit your requirements.











Units can be ordered for left or right hand positioning

All Porkka Chiller & Freezer Rooms can be placed next to each other. The refrigeration unit can be placed on the left front side (standard) or on the right front side if required.

L = Refrigeration unit left side, door opening right hand hinged R = Refrigeration unit right side, door opening left hand hinged

New environmental friendly solutions instead of traditional remote units (CC)

EU F-gas regulation forbids to use traditional refrigerants with GWP \ge 2500 for new installations (e.g. R404A) from the beginning 1st January 2020. Porkka offers today the most environmental-friendly solutions for remote condensing cold rooms with natural refrigerants (HC, GWP 3). The RHDS[®] is a compact solution for small and medium size operators. The WHE offers the possibility to recycle and re-use the heat in the building's HVAC. Porkka solutions are cost-effective and reliable.

Porkka Remote Heat Disposal System (RHDS®)

The RHDS system is similar to the standard Porkka unit with the addition of a liquid condenser, header tank and pump. Water pipes are then connected from the remote condenser to the refrigeration unit. After connecting the system it is filled with a water glycol solution that will operate in both summer and winter conditions. The multi-fix condenser can be positioned either within an area that will benefit from heat input or externally. The unit can be floor or wall mounted. In addition the equipment benefits the environment by utilising a very small refrigerant charge and reducing running costs.

Installation of the equipment is quick and easy and can be undertaken by competent installers that do not necessarily have to be qualified refrigeration engineers, though they are recommended. The RHDS[®] can be used throughout our standard range of rooms and at all temperatures i.e. chilled, medium or freezer versions. For a standard installation, a pipe can be run as much as 20 meters horizontally with a maximum vertical lift of 5 meters within the run, the height of which is measured from the pump within the refrigeration unit. Variants for upto 40 and 60 m pipe run available as an option.

	DISTANCE A (max)DISTANCE A (max)15 m5 m30 m10 m		DISTANCE A (max)	
STANDARD PUMP	15 m	5 m	20 m	
HEAVY-DUTY PUMP PICO 25/1-8	30 m	10 m	40 m	
EXTRAHEAVY-DUTY PUMP MAXO	45 m	15 m	60 m	

Porkka Water Heat Exhanger (WHE)

The WHE system is similar to Porkka RHDS[®] unit the difference being removal of header tank and pump. Water pipes are then connected into the constructions condensed water systems. The typical usage of condence water is from 120 to 240 l/h (T_{in} +10°C, T_{out} +17°C)-



The Porkka RHDS[®] unit is equipped with a refrigerant-to-liquid heat exchanger Waste refrigeration heat is transferred to the water solution where it is circulated to the condenser where the heat is given up to the ambient air.



RHDS[®] liquid to air condenser can be wall, floor or roof mounted either externally or ideally within an area where the heat can be utilised such as a warehouse, etc. Noise levels are kept low as only fans are run on the external unit.

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Porkka Modular Cold Rooms offer hundreds of rooms to select

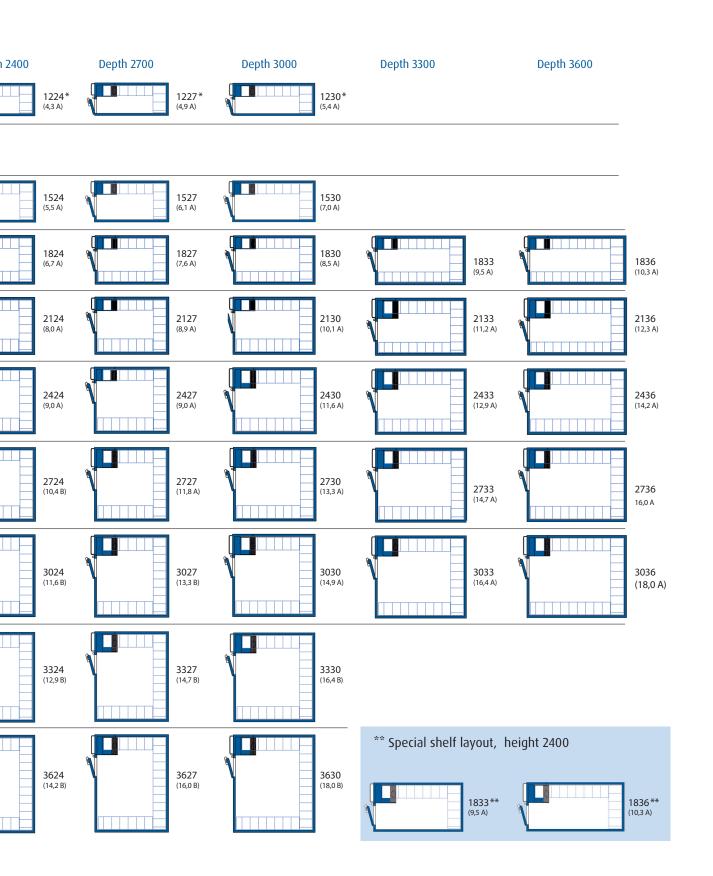


*Available only in 80mm insulation thickness

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Model MK 5 (R290 refrigerant)

Porkka have now developed a new range of cooling units that are even more efficient and environmentally friendly.

This has been achieved by using R290 refrigerant, a natural hydrocarbon, it's high efficiency combined with a very low 'Global Warming Impact' (GWP 3) makes this new Porkka cooling unit the optimum choice.

Even more important are the massive energy savings. In tests we have achieved up to 33% reduction in electrical consumption compared to the older refrigerants used.

This will save users of Porkka modular cold and freezer rooms, vast amounts of operating costs, over the life cycle of the equipment.



R290

	C950	M950	F850	F851
Temperature range	+2°C +12°C	-2°C +5°C	-22°C18°C	-22°C18°C
Volume	< 10 m ³	< 10 m ³	< 5 m ³	5-10 m ³
Connection power (plug-in)	0.7 kW	0,7 kW	1,43 kW	1,9 kW
Fuse	1 x 10 A	1 x 10 A	1 x 10 A	1 x 16 A
Voltage	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz
Ambient temperature	+5°C +32°C	+5°C +32°C	+5°C +32°C	+5°C +32°C
Refrigerant	R 290	R 290	R 290	R 290
Plug-in Unit			•	•
RHDS®	•	•	•	
WHE	•	•	•	

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	1209	1212	1213	1215	1218	1221	1224	1227	1230		
	(1,4 B)	(1,8A)	(2,3A)	(2,6 A)	(3,1 A)	(3,7 A)	(4,3 A)	(4,9 A)	(5,4 A)		
2,1	(1,40)	(1,0A)	(2,3A)	(2,0 A)	(3,17)	(3,7 Å)	(4,5 //)	(4,5 Å)	(3,4 /)		
2,1											
£14	1309	1312	1315	1318	1321						
	(1,6 B)	(2,3 B)	(2,9 A)	(3,6 A)	(4,2 A)						
2,1	(1/0 2)	(=/0 =/	(_/0 / 1)		(
2,4											
_, .	1509	1512	1513	1515	1518	1521	1524	1527	1530		
	(1,7 B)	(2,6 B)	(2,9 B)	(3,5 A)	(4,0 A)	(4,8 A)	(5,5 A)	(6,1 A)	(7,0 A)		
2,1	(, ,			(
2,4											
	1809	1812	1813	1815	1818	1821	1824	1827	1830	1833	1836
	(2,2 B)	(3,1 B)	(3,6 B)	(4,0 B)	(5,0 A)	(5,9 A)	(6,7 A)	(7,6 A)	(8,5 A)	(9,5 A)	(10,3 A)
2,1											
2,4											
	2112	2113	2115	2118	2121	2124	2127	2130	2133	2136	
	(3,7 B)	(4,2 B)	(4,8 B)	(5,9 B)	(6,9 A)	(8,0 A)	(8,9 A)	(10,1 A)	(11,2 A)	(12,3 A)	
2,1											
2,4											
	2412	2415	2418	2421	2424	2427	2430	2433	2436		
	(4,3 B)	(5,5 B)	(6,7 B)	(8,0 B)	(9,0 A)	(10,4 A)	(11,6 A)	(12,9 A)	(12,4 A)		
2,1											
2,4											
	2712	2715	2718	2721	2724	2727	2730	2733	2736		
	(4,9 B)	(6,1 B)	(7,6 B)	(8,9 B)	(10,4 B)	(11,8 A)	(13,3 A)	(14,7 A)	(16,0 A)		
2,1											
2,4											
	3012	3015	3018	3021	3024	3027	3030	3033	3036		
	(5,4 B)	(7,0 B)	(8,5 B)	(10,1 B)	(11,6 B)	(13,3 B)	(14,9 A)	(16,4 A)	(18,0 A)		
2,1											
2,4											
	3318	3321	3324	3327	3330						
	(9,5 B)	(11,2 B)	(12,9 B)	(14,7 B)	(16,4 B)						
2,1											
2,4											
	3618	3621	3624	3627	3630						
	(10,3 B)	(12,3 B)	(14,2 B)	(16,0 B)	(18,0 B)						
2,1											

Model MK 5 (R290 refrigerant)

F850, C950, M950	< 5m ³
F851, C950, M950	5 < 10m ³
N/A	10m ³ <







Simple and easy to install, manufactured from high quality components Porkka modular step in rooms are versatile and automatic in operation. Available in a range of sizes and operating temperatures and can be supplied with or without floors, for trolley operation.

Thousands of Porkka modular step-in cold rooms have sold throughout the world, their ease of installation and use our own manufactured refrigeration unit combined with large range of size and shape configurations makes Porkka cold rooms a popular choice.

Supplied in three temperature ranges Chill, Medium and Freezer a large range of temperature sensitive products can be stored.

CC models are available as R404A compatible (e.g. R448A, R449A, R452A and R454A). CC / C-models available for R134a as an option.

Our own design of shelving using easy to clean materials ensures Porkka modular cold rooms are ideal in many sectors of business including, food storage, scientific and marine applications.

	C940	C1240	M940	M1240	F840	F1140	F1540
Temperature range	+2°C +12°C	+2°C +12°C	-2°C + 5°C	-2°C + 5°C	-22°C18°C	-22°C18°C	-22°C18°C
Volume	< 12 m ³	< 22 m ³	< 12 m ³	< 22 m ³	< 11 m ³	< 14 m ³	< 22 m ³
Connection power (plug-in)	0.81 kW	1,07 kW	1,20 kW	1,62 kW	1,42 kW	1,91 kW	2,19 kW (2,27 kW)
Connection power CC	0,33 kW	0,39 kW	1,32 kW	1,83 kW	1,32 kW	1,83 kW	1,83 kW
Connection power H2O *	0,73 kW	0,99 kW	1,12 kW	1,54 kW	1,33 kW	1,83 kW	2,08 kW (2,16 kW)
Connection power RHDS®*	0,86 kW	1,13 kW	1,26 kW	1,68 kW	1,48 kW	1,97 kW	2,27 kW (2,35 kW)
Fuse	1 x 10 A	1 x 16 A	3 x 10 A				
Voltage	230 V / 50 Hz	400V/50Hz 3-Ph (220V 3-ph N)					
Cooling effect (CC)	1 330 W	1 900 W	1 240 W	1 800 W	1 200 W	1 430 W	2 025 W
Evaporating temperature (CC)	-8°C	-8°C	-10°C	-10°C	-28°C	-28°C	-28°C
Ambient temperature	+5°C +32°C						
Refrigerant	R 452A						
Level of sound pressure 1m / 1,5 m (dB re 20 µPa)	53 dB (A)	53 dB (A)	53 dB (A)	53 dB (A)	55 dB (A)	58 dB (A)	59 dB (A)
Level of sound pressure 1m / 1,5 m (dB re 20 µPa) RHDS®	49 dB (A)	51 dB (A)	54 dB (A)	55 dB (A)			
RHDS® liquid condenser	RHDS® 2140	RHDS® 2160	RHDS® 2140	RHDS® 2160	RHDS® 2140	RHDS® 2160	2 x RHDS® 2140
Fluid condenser acoustic pressure at location 10m (dB re 20 µPa)	34 dB (A)	34 dB (A)	34 dB (A)	34 dB (A)	34 dB (A)	34 dB (A)	37 dB (A)
Permitted temperature range at fluid condenser location	-40°C +35°C						

Porkka refrigeration unit technical data

Note: If there is a lack of ventilation or ambient temperatures are likely to remain above or below recommended levels for considerable periods of time please contact us for solutions. *Includes RHDS® fluid condenser

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	1209	1212	1213	1215	1218	1221	1224	1227	1230		
	(1,4 B)	(1,8A)	(2,3A)	(2,6 A)	(3,1 A)	(3,7 A)	(4,3 A)	(4,9 A)	(5,4 A)		
2,1											
2,4											
	1309	1312	1315	1318	1321						
	(1,6 B)	(2,3 B)	(2,9 A)	(3,6 A)	(4,2 A)						
2,1											
2,4											
	1509	1512	1513	1515	1518	1521	1524	1527	1530		
	(1,7 B)	(2,6 B)	(2,9 B)	(3,5 A)	(4,0 A)	(4,8 A)	(5,5 A)	(6,1 A)	(7,0 A)		
2,1											
2,4											
	1809	1812	1813	1815	1818	1821	1824	1827	1830	1833	1836
	(2,2 B)	(3,1 B)	(3,6 B)	(4,0 B)	(5,0 A)	(5,9 A)	(6,7 A)	(7,6 A)	(8,5 A)	(9,5 A)	(10,3 A)
2,1											
2,4											
	2112	2113	2115	2118	2121	2124	2127	2130	2133	2136	
	(3,7 B)	(4,2 B)	(4,8 B)	(5,9 B)	(6,9 A)	(8,0 A)	(8,9 A)	(10,1 A)	(11,2 A)	(12,3 A)	
2,1											
2,4											
	2412	2415	2418	2421	2424	2427	2430	2433	2436		
	(4,3 B)	(5,5 B)	(6,7 B)	(8,0 B)	(9,0 A)	(10,4 A)	(11,6 A)	(12,9 A)	(12,4 A)		
2,1											
2,4	0740	0745	2742	0704	0704				0706		
	2712	2715	2718	2721	2724	2727	2730	2733	2736		
2.4	(4,9 B)	(6,1 B)	(7,6 B)	(8,9 B)	(10,4 B)	(11,8 A)	(13,3 A)	(14,7 A)	(16,0 A)		
2,1											
2,4	3012	3015	3018	3021	3024	3027	3030	3033	3036		
	(5,4 B)	(7,0 B)	(8,5 B)	(10,1 B)				(16,4 A)			
2,1	(3,40)	(7,0 0)	(0,5 0)	(10,10)	(11,0 D)	(13,5 0)	(1-7,5 A)	(10,4 A)	(10,0 A)		
2,1											
-,-	3318	3321	3324	3327	3330						
	(9,5 B)	(11,2 B)	(12,9 B)	(14,7 B)	(16,4 B)						
2,1	(, , , = ,	、 .= -7									
2,4											
	3618	3621	3624	3627	3630						
	(10,3 B)	(12,3 B)	(14,2 B)	(16,0 B)	(18,0 B)						
2,1											
2,4											

Model MK 4 (R452A refrigerant)

C 940, M 940, F 840 C 1240, M 1240, F 1140 C 1240, M 1240, F 1541



Porkka is an internationally recognised designer and manufacturer of professional refrigeration solutions. Key target industries include HoReCa, Medical and Research and Marine. Porkka's products are well known on its long life cycle, high quality and technical advantage.

Porkka is a brand of the Huurre Group. Porkka brand is well known for its quality and reliability throughout the word. The success of Porkka is based on decades of experience, customer focused design and continuous product development. The materials used in Porkka products are as recyclable and eco-friendly as possible. The recyclability of our product is more than 95%.



Porkka solutions are designed and manufactured according to a quality standard ISO 9001, controlled and certified by Lloyd's Register Quality Assurance. Porkka also hold the environmental certificate ISO 14001, issued also by LRQA. Huurre Group reserves the right to make any changes without prior notice.

