



Panasonic PRO Academy

With the rapid development of modern heating and cooling products, Panasonic UK recognise the need for constant training and up-skilling of Design Engineers, Contracts Managers, Installation and Commissioning Engineers. With this in mind, we have developed a comprehensive training structure to provide all our industry partners with the knowledge base to properly select, install and commission our solutions. To implement this we have developed a broad range of training courses covering areas from basic equipment theory to the more in-depth subject of system selection, design and commissioning.

To check the cost and availability of any courses please log onto our Panasonic pro club website (www.PanasonicProClub.com) and fill in the necessary application form. Alternatively contact Panasonic UK at Bracknell Pro Academy, Panasonic House, Willoughby Road, Bracknell, Berkshire RG12 8FP or call 01344 853393 for further information.



SPLIT SYSTEM SELECTION, INSTALLATION AND COMMISSIONING

This course is aimed at employees of our industry partners involved in the installation/commissioning of split systems in the capacity range 2.5 Kw-25Kw. On completion of the course, attendees will have a full knowledge and understanding of the following:

- Split system selection
- Refrigeration installation procedures
- Electrical installation procedures
- Commissioning procedures including
 - (a) Pressure testing requirements
 - (b) Electrical testing
 - (c) Operational testing
 - (d) Drainage testing
 - (e) Installing optional controls
 - (f) Instructing the customer in the use of the system
 - (g) System maintenance requirements
 - (h) Servicing and fault-finding

The course will run over one full day at our Bracknell Pro Academy. All attendees should be fully F-Gas registered.



VRF SELECTION AND DESIGN

This course is aimed at the Design Engineers and Contract Managers who either design or manage the installation of large VRF projects. The course is designed to give the attendee a full understanding of the operating characteristics of Panasonic VRF systems and their associated indoor units. The course will include an explanation of the following:



- Basic VRF operating principle both 2 and 3 pipe systems. To include:
 - (a) An explanation of the different components of a VRF system outdoor unit and their functions
 - (b) An explanation of the operation of the VRF Refrigerant system
- An explanation of the Panasonic electric VRF range of products - both 2 pipe heat pump and 3 pipe heat recovery systems. To include:
 - (a) An explanation of the different types of indoor units available
 - (b) An explanation of the different types of outdoor units available
 - (c) An explanation of outdoor unit possible combinations and limitations
- System Design using the Panasonic VRF design software, focusing on:
 - (a) Unit selection
 - (b) System capacity adjustments for extended pipe work and elevations
 - (c) Corrected capacity based on design conditions and ambient conditions
 - (d) Piping limitations
 - (e) How extra refrigerant charge affects room refrigerant limit density relating to EN378

The course will be run over one full day at our Bracknell Pro Academy or, by prior arrangement, on site or in the client's office or training room. All attendees will require their own laptop computer.

VRF 1: HEAT PUMP AND HEAT RECOVERY VRF SYSTEMS INSTALLATION

This course is aimed at the employees of our industry partners who are responsible for the installation of large VRF projects. The course is designed to give the attendee a full working knowledge of the requirements for installing Panasonic VRF heat pump and heat recovery systems. To include the following:

- VRF Product range overview
- An explanation of both 2 pipe and 3 pipe VRF operation
- VRF installation procedures to cover the following
 - (a) Positioning the outdoor unit
 - (b) Installing the refrigeration pipe work
 - (c) The use of dry nitrogen during hot works
 - (d) Installing control cabling
 - (e) Pressure testing completed pipework
 - (f) Evacuating the complete system
 - (g) Calculating the extra refrigerant charge
- Basic commissioning requirements
- Basic fault-finding on VRF systems

This course will be run over one full day at our Bracknell Pro Academy and all attendees should be fully F-Gas registered.



VRF 2: IN DEPTH COMMISSIONING PROCEDURES FOR PANASONIC VRF SYSTEMS

This course is aimed at the employees of our industry partners who have successfully completed VRF 1. This course will cover in-depth commissioning procedures focusing on system operational control. The course will include an explanation of the following:

- Detailed explanation of VRF system operation
- VRF refrigerant system operation
- VRF capacity control
- Head pressure control
- Defrost control
- Oil return control
- SVK operation
- Advanced detailed setting menu
- Using the standard remote controller as a service tool
- Connection of system controllers, basic and LCD touch screen models
- An explanation of other available controls for connection to BMS systems



The course will be run over 1 day at our Bracknell Pro Academy. All attendees should be fully F-Gas registered and must have already completed the course VRF 1.

GHP 1: GHP OPERATION AND INSTALLATION PROCEDURES

This course is aimed at the employees of our industry partners who are responsible for the installation of large GHP VRF projects. The course is designed to give the attendee a full understanding of the operating characteristics of Panasonic GHP VRF systems. The course will include an explanation of the following:

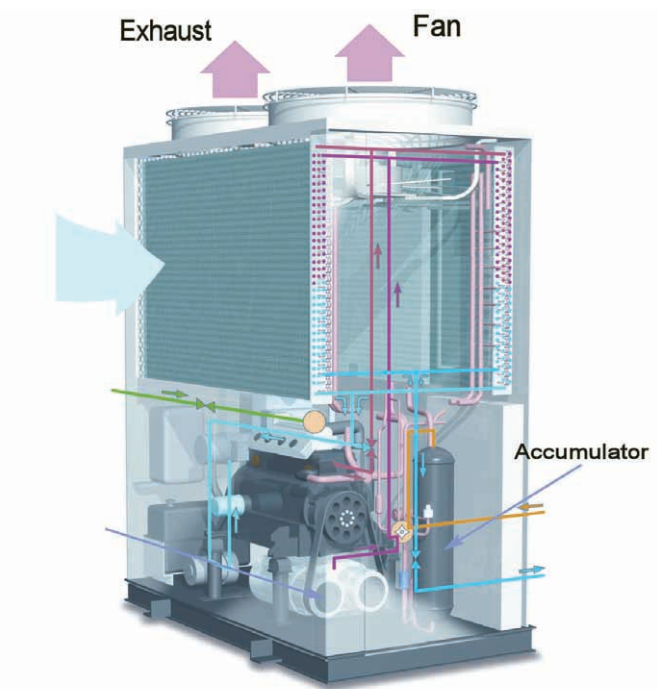


- GHP Product range overview
- A brief explanation of both 2 pipe and 3 pipe GHP operation
- GHP installation procedures to cover:
 - (a) Positioning the outdoor unit
 - (b) Refrigeration pipe work installation
 - (c) Control cable installation
 - (d) Fuel gas pipe work installation
 - (e) Condensate drainage from the outdoor unit
 - (f) Requirements for the positioning of the exhaust gas pipe work if required
- Installation and connection of all indoor units
- Pressure testing the GHP system
- Evacuating the GHP refrigeration system
- Basic GHP commissioning procedures
- Basic fault-finding on GHP systems, focused on common faults associated with the commissioning procedure

The course will be run over one full day at our Bracknell Pro Academy. All attendees should be fully F-Gas registered.

GHP 2: IN-DEPTH COMMISSIONING PROCEDURES

This course is aimed at the employees of our industry partners who have completed GHP 1 and who are involved in commissioning GHP VRF systems. The course is designed to give the attendee a deeper understanding of GHP operation and the requirements for commissioning the entire GHP system. The course will include an explanation of the following:



- Detailed explanation of the operation of the GHP engine system including the following:
 - (a) GHP refrigerant system operation
 - (b) GHP compressor operation and capacity control
 - (c) Head pressure control
 - (d) Oil return control
 - (e) Engine capacity control and operation
 - (f) Detailed explanation of the engine coolant water system
- SVK operation
- Advanced detailed setting menu explanation
- Using the Standard remote controller as a service tool
- Connection of system controllers basic and LCD touch screen models
- An explanation of other available controls for connection to BMS systems
- GHP outdoor PCB menu operation
- Introduction to GHP 10,000 hour service procedure

The course will take place over 1 full day at our Bracknell Pro Academy. All course attendees should be fully F-Gas registered and have successfully completed the GHP 1 course.

GHP 3: 10,000 HOUR SERVICE PROCEDURES

This course is aimed at the employees of our industry partners who have completed GHP 2 and who are involved in the service and maintenance of GHP VRF systems. The course is designed to give the attendee an understanding of the GHP outdoor PCB functions and optional settings. The course will include an explanation of the following:

- GHP 10,000 hour service requirements including:
 - (a) Changing the engine oil and oil filter
 - (b) Changing the engine spark plugs
 - (c) Changing the engine air filter
 - (d) Changing the compressor drive belt
 - (e) Setting the engine valve clearance
 - (f) Cleaning and replenishing the engine exhaust oil filter and condensate drain
- Checking the engine operation
- Outdoor PCB setting and software upgrade
- GHP engine coolant water replacement and air purging procedure
- Ignition timing checking and adjustment
- Fault-finding on GHP systems
- 30,000 hour refresh maintenance requirements



This course will last 1 full day and will take place at our European Technical centre. Attendance is by invitation only. All Attendees should be fully F-Gas registered and have completed the necessary natural gas core safety and engine training courses as is required by law.



A2W 1: AIR TO WATER HEAT PUMP DESIGN AND SPECIFICATION

This course is aimed at the employees of our industry partners who are involved in the design and selection of Air to Water heat pump systems. The course is designed to give the attendee a full understanding of the principle of Air to Water heat pump operation and the basic requirements for the design and selection of the correct heat pump for a given installation. The course will include the following:



- A2W Heat pump operating principle covering the following:
 - (a) An explanation of the function of heat pump components
 - (b) Basic unit selection
 - (c) An explanation of possible thermal losses due to ambient conditions and defrosts operation
- An explanation of the Panasonic range of Air to water heat pumps. To include the following:
 - (a) Mono Bloc systems
 - (b) Bi Bloc systems
 - (c) High Connectivity systems
 - (d) Total Capacity systems
 - (e) High Temperature systems
- Different system applications including, radiator heating, under-floor heating, mixed system cooling and heating
- Detailed instructions on the operation of the Aquarea design software

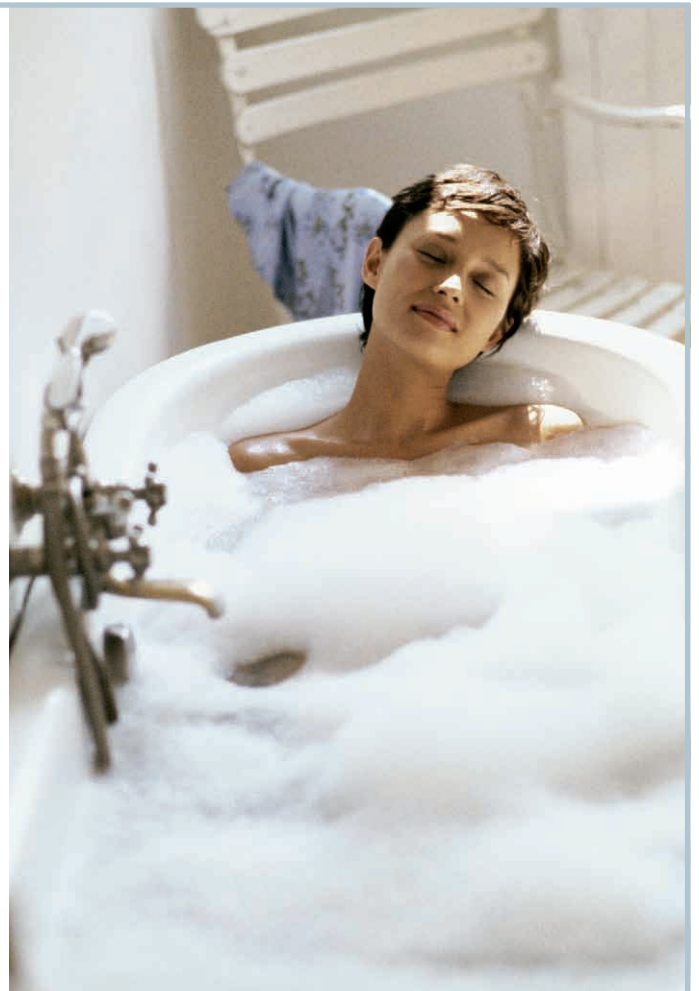
The course will take place over one full day at our Bracknell Pro Academy.

A2W 2: AIR TO WATER HEAT PUMP COMMISSIONING AND MAINTENANCE

This course is aimed at the employees of our industry partners who have completed A2W level 1 and who are involved in the installation, commissioning, service and maintenance of Panasonic A2W heat pump systems. The course is designed to give the attendee a full understanding of the commissioning and maintenance procedures for Panasonic A2W heat pumps along with knowledge of fault-finding procedures. The course will include information of the following:

- Commissioning procedures for A2W heat pump systems
- Detailed explanation of heat pump internal refrigeration and water circuits
- Detailed explanation of heat pump operation focusing on possible error codes and fault-finding

The course will take place over one full day at our Bracknell Pro Academy.



PANASONIC LAUNCHES ITS PRO CLUB INITIATIVE WITH PRO-ACADEMY COURSE BOOKING FEATURE

Panasonic PRO Club – A new communication initiative for all professionals in the heating and cooling industry

The Panasonic PRO Club is a feature-packed portal providing Panasonic's distributors, installers, engineers and specifiers with a wealth of technical data, software and support tools. The Panasonic ProClub is designed to streamline the provision of up-to-date, technical information covering Panasonic's air-to-air and air-to-water product ranges. It answers the demand for accurate and reliable information from the latest updates to design software to business support tools, such as the correct display of Panasonic logos and graphics on installer's vehicles. And of course, being online, it is open 24 hours a day – seven days a week.

The website contains detailed information on Panasonic heating and cooling products and offers authorised users access to the latest news, product developments, training programs, technical data and installation manuals, as well as being able to download the most up to date software and installation guides.

www.PanasonicProClub.com is accessible to registered users across 26 countries.

Latest Software

One of the main aspects to the PRO Club, is access to the latest software downloads, including the Aquarea and VRF Design Software. These programs provide guidance on specification and system design and are proving an extremely useful tool for installers and specifiers alike.



www.PanasonicProClub.com

Panasonic®

To find out how Panasonic cares for you,
log on to: www.PanasonicProClub.com

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