

#### **DOMESTIC RANGE**

# NEW 2017 — 2018

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#### **New Etherea**

New Etherea with Econavi intelligent sensor and new nanoe™ air-purifying system: outstanding efficiency A+++, comfort (Super Quiet technology only 19dB(A)) and healthy air combined with a breakthrough design.





# Panasonic new 2017 range is **Compact Style**

Excellent features with an compact and elegant pure white matte finish. Reaches great comfort with this new compact and quiet unit in Split and Multi Split.

# New R32 gas environmentally friendly

Compared to R22 and R410A, R32 has a very low potential impact on the depletion of ozone layer and global warming. More efficiency and less refrigerant charge needed.





# New Anti-allergy nanoe™ and PM2,5 Filter

It also neutralises odours to provide a more pleasant and healthy environment.

# **Control and connectivity**

Control your units from anywhere with the Wifi adapter or Integrate to any protocol: KNX, Modbus or BACnet. And new integration to P-Line to connect to PACi or VRF systems.











Certified to ISO 14001: 2004



# THE LAST GENERATION OF AIR CONDITIONING

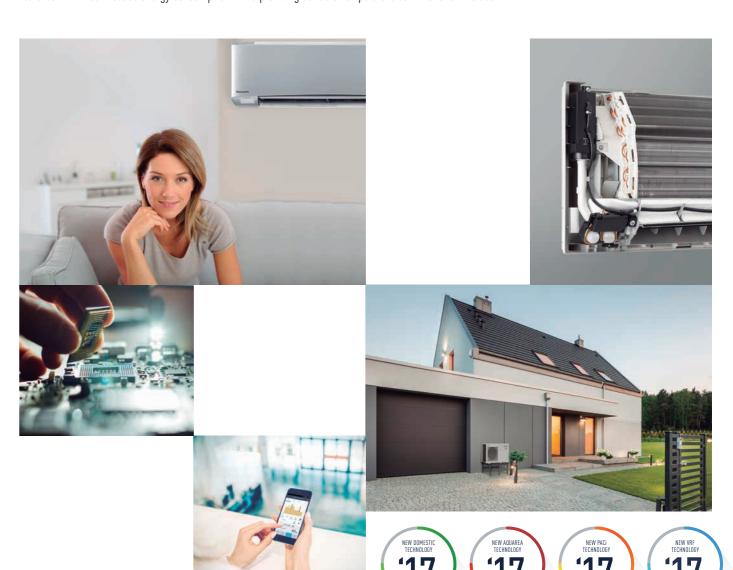
**NEW PANASONIC** TECHNOLOGY

Panasonic is committed to creating a better life and a better world thanks to its breakthrough technology, continuously contributing to the evolution of society and to the happiness of people around the globe.

#### **Constantly Improving**

At Panasonic, we know that the best is always yet to come. This is why our air conditioning and heat pump solutions are constantly upgraded. We are always looking to improve our technology; finding the most efficient solutions that save our customers money.

Our Technology & Design teams anticipate the needs of tomorrow. We look to produce smaller, quieter, efficient solutions - with better technological features — that can reduce energy consumption while providing suitable temperature conditions for the user.



#### Look ahead to the "Future," keep taking on challenges

Starting 1918, Panasonic has constantly added to its guarantee for innovation, taking tomorrow's technologies and applying them to today's needs.

Always making "people" central to our activities, and thereby focusing on "people's lives," we will continue to provide better living for our customers. This is the unchanging commitment we at Panasonic have had over many years.

We are aiming for now is to expand our contribution to "better living" everywhere. This means that in the variety of spaces where our customers go about their lives, ranging from inside the home, the office, the store, the automobile, and the airplane, as well as the town, we will provide not only single pieces of hardware,

but also total solutions including software and services. We will pursue the concept of "A Better Life, A Better World," meeting the needs of each individual customer.

To that end, we will leverage the strengths that we at Panasonic have long developed in our consumer electronics business, the strengths of our business partners who have in-depth expertise in many areas, and will work to combine these strengths by pursuing "Cross-Value Innovation." In this way, we will create new value. This is the new and challenging task we are now addressing.

# A GLOBALLY TRUSTED AIR CONDITIONING BRAND



Panasonic – leading the way in Heating and Cooling. With more than 30 years of experience, selling to more than 120 countries around the world, Panasonic is unquestionably one of the leaders in the heating and cooling sector.

With a diverse network of production and R&D facilities, Panasonic delivers innovative products incorporating cutting-edge technologies that set the standard for air conditioners worldwide.

Expanding globally, Panasonic provides superior international products transcending borders.



#### 100% Panasonic: we control the process

The company is also a world leader in innovation as it has filed more than 91,539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's heat pumps. This wish to excel has made Panasonic the international leader in heating and turn-key air conditioning solutions. These offer maximum effectiveness, comply with the strictest environmental standards and meet the most avant-garde construction requirements of our time.

#### **History of Air Conditioning Group**

Panasonic starts with a desire to create things of value. As hard work and dedication results in one innovative product after another, the new company took its first steps towards becoming the electronics giant of today.

Heating and Cooling Solutions designed and produced by Panasonic since 1958. See more information on www.aircon.panasonic.eu



1958
First room air conditioner launched for domestic installation.



Starts production of absorption chillers.



1973
Panasonic launches the first highly efficient air-to-water heat pump in Japan.



Panasonic becomes the first Japanese air conditioner manufacturer in Europe.



1785
Introduces first GHP (gas heat pump) VRF air conditioner.



1989
Introduces world's first
simultaneous 3-Pipe heating/
cooling VRF system.



2008
Etherea new concept of air conditioning systems: high efficiency and high performances with a great design.



2010 New Aquarea. Panasonic has created Aquarea, an innovative new, low-energy system.



2012 New GHP units. Pansonic's gas-driven VRF systems are ideal for projects where power restrictions apply.



Looking ahead

New VRF Systems ECOI EX
with Extraordinary EnergySaving Performance and
Powerful Operation EER 4,7.

Testing laboratory Panasonic Gunma, Japan (PAPARS).

# 100% PANASONIC, THE DNA OF JAPANESE CRAFTSMANSHIP





Applying advanced technologies that truly make life better, we live by an unparalleled commitment to product quality. Panasonic is building on the Japanese tradition of uncompromising quality control worldwide, developing and manufacturing fine products and delivering them to customers everywhere.

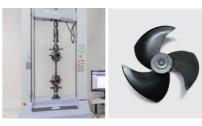
At Panasonic, we believe that the best air conditioner is one that works quietly and effectively in the background whilst minimising its impact on the environment

People who use our products can look forward to long years of high-quality performance without the need for constant service. As part of our rigorous design and development process, Panasonic air conditioners undergo a variety of stringent tests to ensure their effectiveness and long-term reliability. Tests for durability, waterproofing, shock resistance, and noise are conducted on component parts or on the finished products themselves.

As a result of all of these time consuming efforts, Panasonic air conditioners meet even the most demanding industrial standards and regulations in every country where they are sold.

#### **International Standard Quality**

To uphold the company's reputation around the world, Panasonic strives continuously to offer the highest quality with the lowest possible environmental impact.



# Reliable parts that meet or exceed industrial standards

In every country where they are sold, Panasonic air conditioners comply with all required industrial standards and regulations. In addition, Panasonic conducts stringent testing to ensure the reliability of parts and materials. The strength of the resin material used in a propeller fan is confirmed by a tension test.



#### **RoHS / REACH compliant parts**

All Panasonic parts and materials comply with Europe's strict RoHS/REACH environmental regulations. During the development and production of parts, stringent inspections are conducted on over 100 materials to ensure that no hazardous substances are included.



#### Sophisticated production process

Panasonic's air conditioner production lines employ state-of-the-art factory automation technologies to ensure products are manufactured efficiently and with uniformly high levels of quality and reliability.

#### Durability

At Panasonic we know the importance of a long service life with minimal maintenance. That's why we subject our air conditioners to a wide range of stringent durability tests.



#### Long-term durability test

To ensure durability and stable operation for many years, we conduct a long-term continuous operation test under conditions that are much more severe than actual operating conditions.



#### Compressor reliability test

After the continuous operation test, we remove the compressor from a selected outdoor unit, disassemble it, and examine the internal mechanisms and parts for potential failure. This helps ensure reliable long-term performance under harsh conditions.



# Waterproofing test

The unit - which is subject to rain and wind - complies with IPX4 waterproof specifications. Contact sections on printed circuit boards are resin-potted to prevent adverse effects caused by exposure to water (an unlikely occurrence).

# PANASONIC: ECO & SMART IDEAS FOR A SUSTAINABLE LIFESTYLE



Panasonic Green Innovation Company.

We will make the environment central to all our business activities and work to realise our vision with innovations for both every day life and business.

#### **Exemplary sustainable projects**

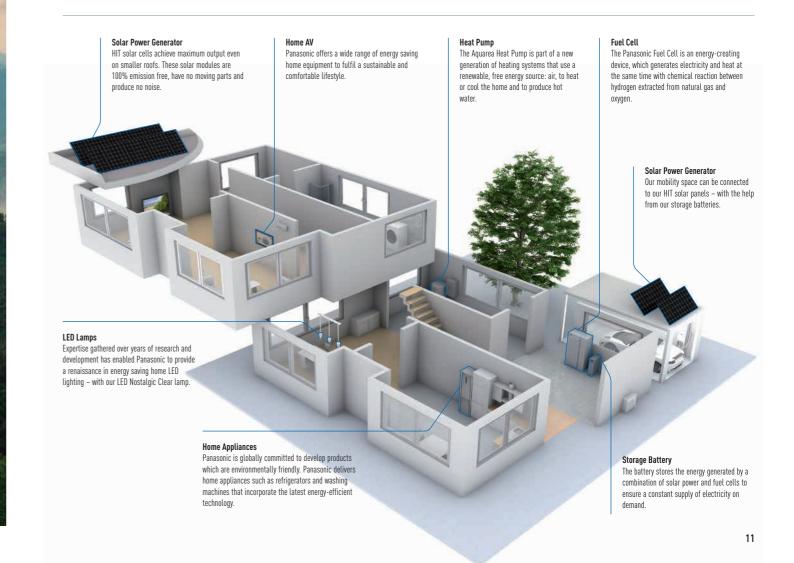
#### Fujisawa Sustainable Smart Town Goes Into Full-Scale Operation Near Tokyo

Fujisawa SST Council is a consortium led by Panasonic Corporation spearheading the development of the Fujisawa Sustainable Smart Town (Fujisawa SST). With its core facility supporting sustainable development of the town and its community now coming into operation, the Fujisawa SST is moving from the construction stage into a new stage where the town is nurtured to grow in full-scale into an eco and smart town that puts a high priority on the residents' lifestyles.

The Fujisawa SST Management Company is the town management company located in the SQUARE. Together with partner companies, the company provides five essential services in the town: energy, security, mobility, healthcare and community. The company will also collect and manage information relating to the town's overall environment, energy, security and safety to support an eco and smart life in the town. As a fresh development in the town, the Fujisawa SST has set a detached housing zone for non car owners for the second phase of sales. By using the town's eco-car sharing and rent-a-car services, residents in the zone



can enjoy their lifestyles without the need to own a car while reducing economic burden and making effective use of the lot. Preparations are also underway for a new base to provide environmentally-friendly logistic services to the residents.



# PROJECTS & CASE STUDIES OF PANASONIC HEATING AND COOLING SOLUTIONS

New Hotel Monument 5\*GL is located in an 1896 palace. Barcelona, Spain. ECOi and E-Control

Panasonic, a partner with the knowledge and experience to achieve your objectives and green needs.

Integrated technology that permits better work, easy installation, high efficiency performance, and energy saving.

Our main targets are the distributed services and B2B-integrated solutions.

Panasonic provides a single point of contact for the design and maintenance of your system, making things easy for you.

Given our experience in processes, technologies and complex business models, we can offer you effective solutions that reduce costs, whilst also being efficient, user-friendly, reliable and innovative.

Another advantage we offer to our clients is a support service for systems integration projects, which we provide through our wide range of services and solutions.

As a global company, we have at our disposal the financial, logistical and technical resources to develop complex and wide-ranging solutions, both at country and international level by implementing them both on-time and on-budget.



Ramada Hotels. 45 Panasonic Etherea air conditioning units were fitted. Norwich, UK. RAC



Brabrand Boligforening has constructed 75 low-energy houses in Hasselager near Århus ADNARFA



An water tower has been converted into a stunning family home. Yorkshire, UK.



21 of the 5-6 bedroom luxury homes in Straffan Co.Kildare, Ireland. **AQUAREA** 



Duplex in Boves, CN. Italy. AQUAREA



Make the most of RHI. An off-grid, mediumsized property. Fife, Scotland. **AQUAREA** 



77 house project in Latvia. AQUAREA



Passive House. Tychowo Poland. AQUAREA



A new building, housing 84 apartments in Cornella de Llobregat, Barcelona. **AQUAREA** 



Munich Municipal Hospital benefits from Panasonic PKEA for its Server Room. **RAC** 



New Housing in Rossåsen. Norway. AQUAREA



Panasonic Smart Home. A house with zero emissions. Tokyo. Japan. **RAC-AQUAREA** 

To find out more: www.aircon.panasonic.eu

# PRO CLUB. THE PROFESSIONAL WEBSITE OF PANASONIC



Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in the heating and cooling markets.

Panasonic PRO Club (www.panasonicproclub.com) is the online tool which makes your life easier! You just have to register and a lot of functionalities are freely available to you, where ever you are, from your computer or smart phone!

- Print catalogues with your logo and your address
- Download the latest Aquarea designer to define your system and select the good Aquarea Heat pump.
- Calculate the specs of the Aquarea Air fan coil based on the parameters of your system
- Get Documents of conformity and all other documents you may need
- Download all the service manuals, end user manuals and installation manuals
- Know what to do with error codes
- · Find out about the latest news first
- Register for training

#### **Highlighted Features**

- Extensive library of resources
- Tools & Apps for end users. Check availability in your country:
- My Home: sizing wizard for domestic and A2W range
- My Project: Contact form to Panasonic team
- iFinder: Lists of installers displayed by postcode



Easy download Panasonic service documentation and hrochures

Customise leaflets with your logo & contact details. Save and print the PDF

- Special offers & promotions
- Training PRO Academy
- Catalogues (Commercial documentation)
- Marketing (Images in high resolution, advertisements, deco guidelines)
- Tools (Professional software, sizing tools...)
- Installers customize leaflets in PDF format with their logo & contact details
- Energy label generator. Download energy labels of any device in PDF format
- Heating calculator
- Noise calculator for outdoor unit
- Aquarea Radiator calculator
- Error Code Search by error code or unit ref. Compatible with smartphone and tablet computer
- Revit / CAD Images / Spec texts
- Access to Pananet, online library of technical documentation
- Download Documents of Conformity and other Certifications
- Commissioning online

# Panasonic PRO Club is fully compatible with tablet computer and smartphone.



Energy label generator. Download Energy labels of any device in PDF format



Error Code on your smartphone and your PC: Search by error code or model reference. Online version + downloadable version for offline use

#### The Panasonic PRO Academy

Panasonic takes its responsibility to its distributors, specifiers and installers seriously and has developed a comprehensive Training Programme. The Panasonic Pro-Academy encompasses the traditional hands-on approach to teaching.

New training courses cover three levels. Design, installation, and commissioning & trouble-shooting. Training courses include:

- Domestic applications Air to Air
- Aquarea air source heat pumps
- VRF ECOi

The courses are offered on site at Panasonic's premises across Europe. The Training Centres display Panasonic's latest product range and give delegates an opportunity to get a hands-on experience with the latest controllers, indoor and outdoor units from the VRF ECOi, Etherea, GHP and Aquarea ranges.

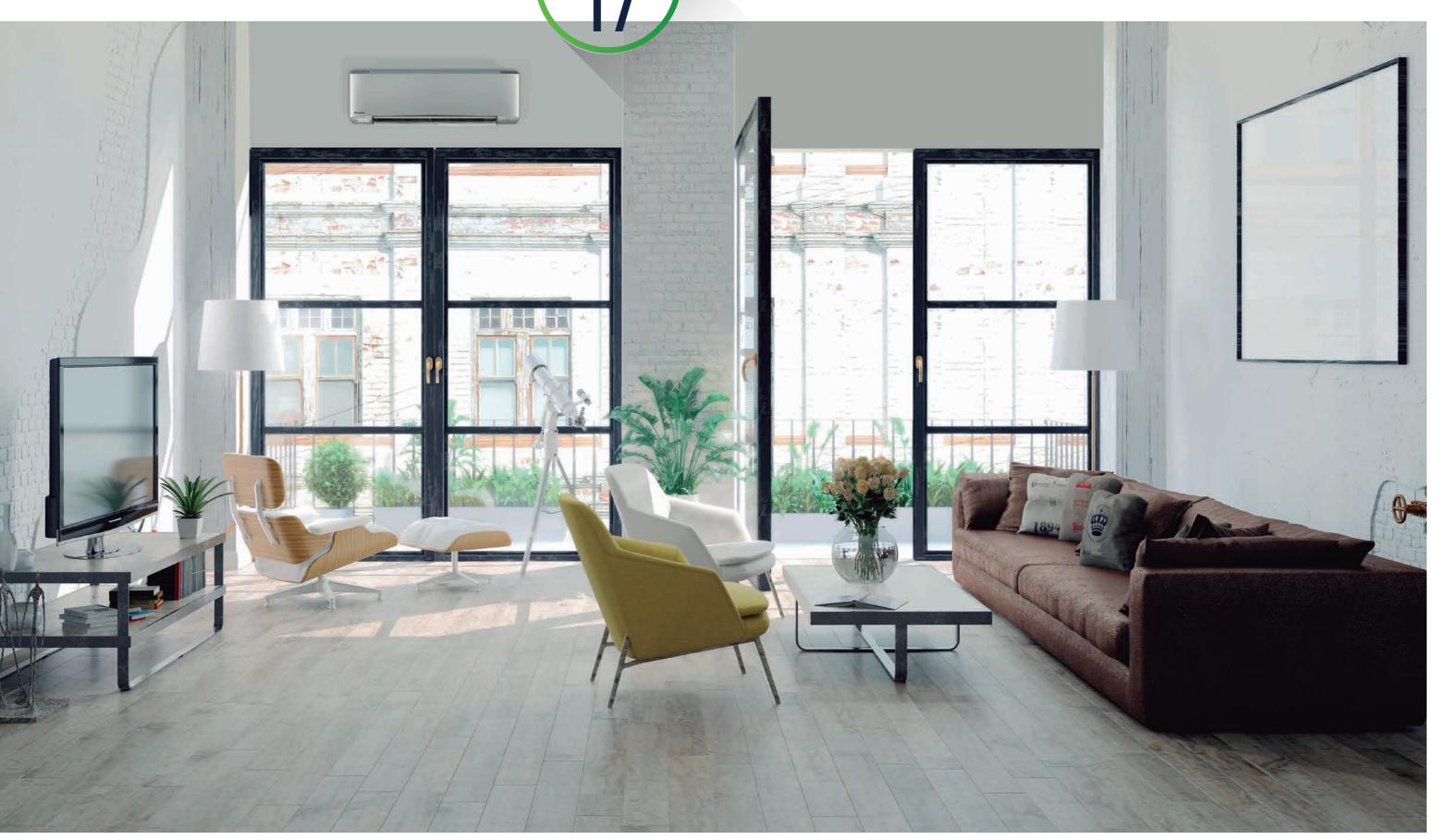


NEW DOMESTIC TECHNOLOGY

# WELCOME TO DOMESTIC RANGE

Go green. Go clean. Go your way.

Panasonic Air Conditioners are designed to provide more than just comfort cooling to homes. They save energy. They purify your surroundings. They adjust cooling power to suit your living spaces and styles. Living an eco-lifestyle your way is now easier than ever.



# HIGHLIGHTED FEATURES





Panasonic has developed a range of products designed for you, better than ever before.

With its innovative design, high efficiency and incomparable purification system, the Etherea range has been designed with your clients in mind.

#### Panasonic air conditioners provide more savings and more comfort

We believe that going green shouldn't compromise on comfort. That's why Panasonic is introducing the new Econavi system; combining human sensor and control program technology to detect and reduce energy waste

Our super silent air conditioners guarantee the purest air to take care of

you and your family. And, for a cleaner living environment, the new nanoe™ helps purify the air as well as your surroundings. Together, these breakthrough technologies define what Panasonic's Eco Clean Life Innovation is all about - innovations that improve our environment while making life as comfortable as possible.

#### **Energy saving**



Intelligent Human Activity Sensor and new Sunlight Sensor technologies that can detect and reduce waste by optimising air conditioner according to room conditions. With just one touch of a button, you can save energy.



Exceptional Seasonal Cooling Efficiency based on the new ErP Higher SEER ratings mean greater efficiency. Save all the year while cooling!



Exceptional Seasonal Heating Efficiency based on the new ErP Higher SCOP ratings mean greater efficiency. Save all the year while



The A Inverter system provides energy savings of up to 50%. Both you and nature wins!



Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, it delivers high performance and efficiency.



Our heat numps containing the new refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP). An important step to reduce greenhouse gases. R32 is also a components refrigerant, making it easy to recycle.

#### High performance and healthy air



New nanoe™ utilises nanotechnology fine particles to purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould. Seal of Approval of the British Allergy Foundation.



Down to -15°C in heating mode. The air conditioner works in heat pump mode with an outdoor temperature as low as -15°C.



Particulate matter (PM2.5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. Sized at 2,5µm, these particles are said to pose health problems as they can easily enter our lungs.



Summer House, this innovative function keeps the house at 7/8°C to avoid freezing pipes during the winter. This function is highly appreciated in summer



With Super Quiet technology our devices are much more quiet than a library (30dB(A)).



The Perfect Humidity Air controls the humidity level in the air to prevent over-dryness.



More comfort with Aerowings. Direct airflow to ceiling to create shower cooling effect by twin flap built in indoor.



Down to -10°C in cooling only mode. The air conditioner works in cooling only mode with an outdoor temperature of -10°C.





The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency



The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing new high efficiency R32 systems.



5 Years Warranty. We guarantee the outdoor unit compressors in the entire range

#### **High connectivity**



New Domestic integration to P-Line - CZ-CAPRA1. Can connect all ranges to P-Line. Full control is now possible.



Internet Control is a next generation system providing a user-friendly remote controller of air conditioning or heat pump units from everywhere, using a simple Android or iOS smartphone, tablet or PC via internet.



The communication port is integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.

# NEW R32 REFRIGERANT GAS





#### A 'small' change that changes everything

Not everyone is ready for change. Indeed, there are some who resist the

But at Panasonic we will keep believing in technologies that improve

Which is why we are now presenting a new generation of air conditioners with R32, an innovative refrigerant in all ways imaginable: it is easy to install, environmentally friendly and saves energy.

The result? Greater wellbeing for people and for the planet. Because there will always be people who resist change. But we say: Goodbye yesterday. Hello R32.

#### Today Panasonic. Tomorrow everyone.

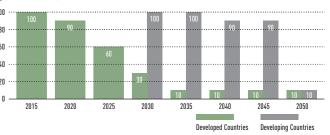
European regulation CE 517/2014 makes the replacement of fluorinated gases (F-gases) compulsory, such as R410A, for environmental reasons, although it also grants a transition period from 2017 to 2030.

Must we wait? No. Our commitment to innovation is not hampered by

Which is why we are jumping the gun and are now presenting our new generation of air conditioners that employ the R32 refrigerant.

#### HCFC phase-down schedule

Cap (Percent of Baseline)



\* By replacing R22 with R32 we are significantly reducing the ozone depletion potential of our air conditioners The use of air conditioning is rapidly increasing in developing countries thus making it increasingly necessary to use refrigerants with low global warming potential

#### Goodbye yesterday

The new generation of air conditioners with R32 represents innovation in every way.

Shall we list them?

#### 1. Installation innovation

- Extremely easy to install, practically the same as for the R410A. (Just remember to verify that the pressure gauge and vacuum pump are compatible with the R32)
- This refrigerant is 100% pure, which makes it easier to recycle and reuse

#### 2. Environmental innovation

- · Zero impact on the ozone layer
- 75% less impact on global warming

	R410A	R32
Composition	Blend of 50%. R32 + 50% R125	Pure R32. (No blend)
GWP (Global Warming Potential)	2.087,5	675
ODP (Ozone Depletion Potential)	0	0

R32 is a refrigerant with just one-third the global warming potential of R410A, meaning less risk of damage to the environment.

# 3.500 3 100 400 Enthalpy (Kj/Kg)

1. Expansion. 2. Evaporization. 3. Condensation. 4. Compression.

#### 100 Year global warming potential of different refrigerants

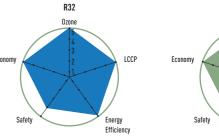


IPCC Fourth Assessment Report. Values for 100 years warming potential.

#### 3. Economic and energy consumption innovation.

- · Lower cost and greater savings:
- 30% less refrigerant
- Higher energy efficiency A+++ than R410A
- R32 consumes less energy when there are extreme temperatures outside

LCCP: Life Cycle Climate Performance (lower global warming impact). Safety: Low toxicity level



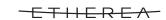


# NEW ETHEREA. NEW TECHNOLOGY '17





New Etherea with Econavi intelligent sensor and new nanoe™ air-purifying system: outstanding efficiency A+++, comfort (Super Quiet technology only19dB(A)) and healthy air combined with a breakthrough design.



#### New Etherea 2017. Perfect outside, perfect inside

#### The new Etherea has an astonishingly slim design

A breakthrough design that combines perfectly with the most modern environments. We have selected the best materials and processes for a refined design. And now they're available in an elegant metallic or matt silver and matt or gloss white.



# Discover how to achieve energy savings with the new Etherea

Econavi Sensor technology reduce waste by adjusting the operation of the air conditioner to suit the requirements of the room. With just one touch of a button, you can save energy efficiently with uninterrupted cooling, comfort and convenience.

#### Get the best for your health with Etherea and nanoe $^{\text{TM}}$

Using nanoe™ with nano-technology, fine particles purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould thus ensuring a cleaner living environment.

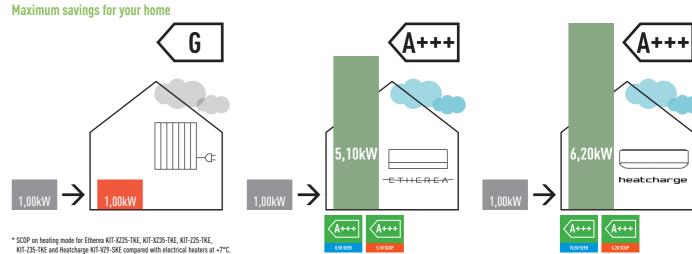


# New Etherea and Heatcharge performance: the very best SEER and

Etherea and Heatcharge. Economical, environment-friendly operation high SCOP (Seasonal Coefficiency of Performance).

Original Panasonic Inverter technology and a high performance compressor provide top-class operating efficiency. This lets you enjoy lower electricity bills while contributing to environmental protection.





# NEW NANO-SIZED ELECTROSTATIC ATOMIZED WATER PARTICLES, NANOE™, THAT IMPROVE AIR QUALITY



The world is focusing its attention on this breakthrough VIRUS technology that could be the key to the air purification. **BACTERIA** POLLEN INHIBITION Airborne Inhibit 99,9% bacteria and viruses in the air. nanoe™ attack particles released from Inhibit 99.9% bacteria. fabric elements. Also. nanoe™ is nano-sized electrostatic atomized water particles with plentiful Its effectiveness of bacteria inhibition depends on the number of OH radical, which is generated at the rate of 480 billion per second.

Proven benefits of electrostatic atomized water particles, nanoe<sup>™</sup>, through experiments. The benefits range widely from inhibiting viruses and bacteria, inhibiting mould and allergens, moisturizing skin. Experiments by universities and research institutions have proven the effects of nanoe<sup>™</sup>.



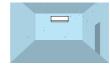
#### Characteristics of nanoe™ Technology

**1. Long Life.** 6 times longer lifespan than general negative ion. nanoe™ contains moisture around 1.000 times more than general negative ion. Being contained in water particles, it has a longer lifespan and is able to spread for a long distance.

#### Comparison of distribution in the room







General negative ion lons decay before spreading throughout the room.

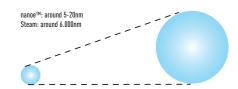
**2. Water-originated.** nanoe<sup>™</sup> comes from condensed moisture in the air so that water replenishment for nanoe<sup>™</sup> generation is not required.

nanoe™ is tiny enough to penetrate into clothes for inhibiting



**3. Microscopic Scale.** Only one-billionth the size of a steam particle nanoe™ is much smaller than steam that can deeply penetrate into cloth fabrics to deodorize.

\* 1nm (nanometer) = one billionth of meter.



#### How does nanoe™ technology help you?

**1. Virus / Bacteria / Pollen inhibition.** Inhibits virus. Influenza virus 99,9% inhibited.









Virus / bacteria / Pollen is suspended in indoor air.

approach and those objects.

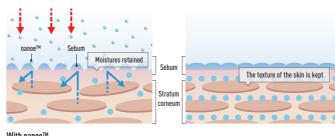
nanoe™ metamorphose completion structure of Virus / Bacteria /

Pollen. (Remove hydrogen.)

#### The effectiveness of nanoe $^{\rm TI}$

Ŧ	ed contents	Result	Testing	condition	Tested laboratory /	December No.
Iesti	ea contents	(deactivate)	Size	Time	company	Report doc No.
Airborne	Virus (Coliphage)	99,7%	10m <sup>2</sup>	6h	Kitasato research center for Environmental science	KRCES 24_0300_1
Airb	Bacteria (Staphylococcus aureus)	99,7%	10m²	4h	Kitasato research center for Environmental science	KRCES 24_0301_1
	Virus (Coliphage)	99,8%	10m²	8h	Japan food research laboratories	13001265005-01
Adhesive	Virus (Influenza)	99,9%	1m²	2h	Kitasato research center for Environmental science	KRCES 21_0084_1
Adhe	Bacteria (Staphylococcus aureus)	99,1%	10m²	8h	Japan food research laboratories	13044083003-01
	Tobacco odour	Deodorized in 2h	10m <sup>2</sup>	2h	Panasonic analysis center	BAA33-130125-D01
	Cedar pollen	99%	45L	2h	Panasonic analysis center	E02-080303IN-03

**3. Moisturing Skin.** Helps retain the moisture of the skin.



After 28 days

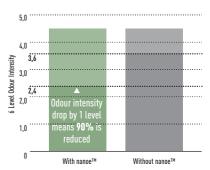
Skin is hydrated that nanoe™ keeps the texture of the

With nanoe™ nanoe™ hydrate the sebum on the skin to prevent th

loss of moistures.

Test Laboratory: FCG Research Institute Inc. Report no. 19104

**2. Deodorization.** The smell adhered at curtain and sofa are deodorized. Reduce 90% Odour (tobacco smell) after 120 minutes.



Deodorization Effect for Adhering

Odour intensity 1,2 level down.

The deodorization effect will vary subject to the surrounding environment (temperature / humidity), operation time, types of smell and clothes.

- Test Laboratory: Panasonic Corporation Analysis Center. - Test Methodology: Verifying with 6-level odour intensity indication in 10m² test room. - Deodorization Method: nanoe™ emit. - Test Subject: Adhering Tobacco Smell. - Test Result: 1,2 level of odour intensity is decreased affer 120 minutes. - Panaval. 1,3012...Dul

# Reliable technology chosen by the world

The cutting edge technology of Panasonic's nanoe™ purifying technology has been chosen by Lexus to equip its vehicles for clean indoor air.





# ECONAVI INTELLIGENT SENSORS. DISCOVER HOW TO ACHIEVE ENERGY SAVINGS



Econavi detects and reduces this waste in all the right ways
Using high-tech sensors and precise control programs, it analyses room
conditions and adjusts cooling power accordingly.
Econavi is smart enough to locate and operate in all the right places to
give you more comfort and better energy savings.



#### 5 Features saving energy all at once: Econavi with intelligent eco sensors

Intelligent Sensors detect potential waste of energy using the Human Activity Sensor and Sunlight Sensor. It is able to monitor human location, movements, absence and sunlight intensity. It then automatically adjusts cooling power to save energy efficiently with uninterrupted heating and cooling comfort and convenience.



Area Search







Temperature Wave
Rhythmic temperature-controlled pattern to save
energy without sacrificing comfort.

Directs airflow to wherever you are in the room.

Econavi detects changes in human movements and reduces the waste of cooling the unoccupied area of the room.

Activity Detection

Adapts cooling power to your daily activities.

Econavi detects changes in activity levels and reduces the waste of cooling with unnecessary

Absence Detection
Reduces cooling power when you are not around
Econavi detects human absence in the room and
reduces the waste of cooling an empty room.

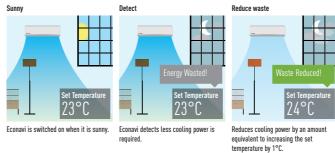
Sunlight Detection
Adjusts cooling power to changes in sunlight intensity.

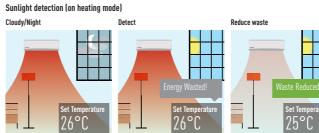
#### **Econavi sunlight sensor**

#### Sunlight Detection (on Cooling and Heating Mode).

Econavi detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night. It reduces waste energy by reducing cooling under less sunny conditions on the cooling mode or reducing heating operation under more sunnier conditions on the heating mode.

#### Sunlight detection (on cooling mode)





Econavi is switched on when it is cloudy/ Econavi detects less heating power is night. required.

Reduces heating power by an amount equivalent to decreasing the set temperature by 1°C.

#### Temperature wave

# Rhythmic temperature-controlled pattern to save energy without sacrificing comfort.

Econavi with Temperature Wave was developed based on an understanding of Thermal Physiology; the human body adapts physiologically to changes in temperature. Taking advantage of this understanding, Panasonic's R&D Centre has developed the Rhythmic Temperature Control pattern, which offsets the air conditioner's performance against thermal physiological responses.

Hence, when Econavi detects human presence and low activity level, Temperature Wave adapts to this rhythmic temperature control to realise further energy savings without sacrificing comfort.

#### How does temperature wave works?

# When Econavi detects low activity +1,33 °C +0,66 °C +0,33 °C 0 10 20 30 40 50 60 70 80 90 100 110 120 Time (min) Offset Thermal Physiological Response Average Room Temperature (°C) - Rhythmic temperature wave - Result: More Energy Saving Thermal Sensation Votes (Mean Votes) - Sensation vote: -0,1 - Result: Maintain within the comfortable range\*

The result of the experiment showed that thermal sensation was maintained within the comfortable range\* even though average set temperature was moderately increased. Hence, when Econavi detects human presence and low activity level, Temperature Wave adapts to this rhythmic temperature control to realise further energy saving without sacrificing comfort.

 The thermal condition of which PMV (Predicted Mean Value) is within -0,5 to +0,5 is recommended as comfortable condition (in the condition B) by International Standard EN ISO 7730.



So much saved with so little effort Up to 38%\* energy savings for Inverter cooling model with temperature wave

#### **Econavi Intelligent Sensors**

Econavi Intelligent Sensors are able to monitor sunlight intensity, human movements, activity levels and human absence to detect unconscious waste of energy and automatically adjusts cooling power to save energy efficiently whilst still providing uninterrupted cooling comfort and convenience.

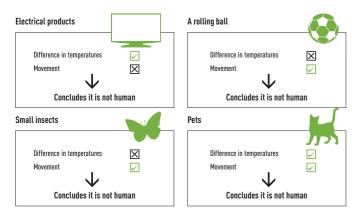


Sunlight Sensor Detects changes in Sunlight Intensity

Human Activity Sensor Detects human movements, changes in activity levels and human absence.

#### Differentiating objects

Econavi's sensor technology uses factors such as speed, frequency and temperature of every object to determine if it is human.

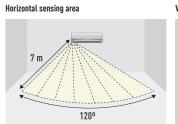


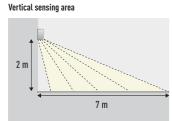
Both changes may be detected, but they are too small to have any effect on the sensor.

From the difference in temperatures and the nature of the object's movement, Econavi can determine if it's human\*.

#### Coverage capabilities

Human Activity Sensor covers a wider area due to its improved area detection function. The entire room is divided into 7 detection areas.





#### High-precision sensing

**Detecting Human Presence** 

 $\boxtimes$ 

 $\boxtimes$ 

Difference in temperatures

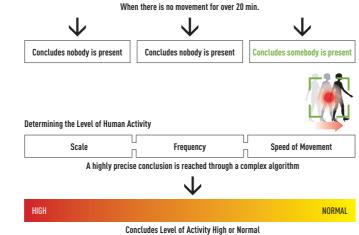
All objects emit infrared rays which, although invisible, can be detected as heat by Econavi's Human Activity Sensor if it is within the detection zone. When an object moves within its detection zone, Econavi compares the object's temperature with the room temperature to determine if it is human, and level of activity based on its movement.

Difference in temperatures

abla

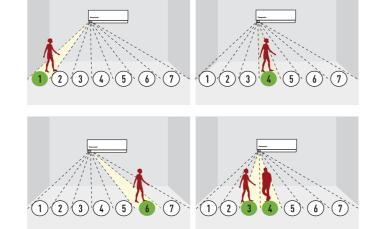
 $\boxtimes$ 

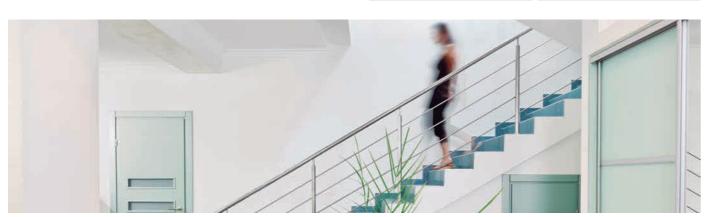
Difference in temperatures



#### Sensor detection principle

Human Activity Sensor detects human activity level and directs airflow to occupied or high activity zone.





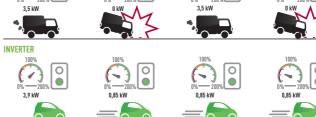
#### Inverter technology

#### The secret is flexibility

Panasonic Inverter air conditioners have the flexibility to vary the rotation speed of the compressor. This allows it to use less energy to maintain the set temperature while also being able to cool the room quicker at start

So you can enjoy better savings on your electricity bills while maintaining cooling comfort.





NO INVERTER Slow to start. Takes longer to reach the temperature set point. The temperature oscillates between the two extremes and never stabilises. The temperature falls and then rises quickly, leading to a consumption peak.

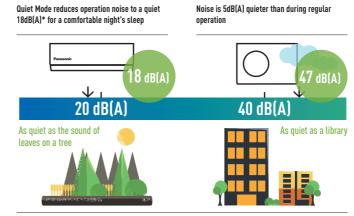
INVERTER Rapidly reaches the desired temperature. Adjusts the temperature: more comfort and greater savings. Keeps the temperature comfortable all the time.

# Exceptional energy-saving performance. Reduces electricity consumption

Panasonic Inverter air conditioners are designed to give you exceptional energy savings and performance. At the start up of an air conditioner's operation, a boost in power is required to reach the set temperature. After the set temperature is reached, less power is required to maintain it. The Panasonic Inverter air conditioner varies the rotation speed of the compressor. This provides a highly precise method of maintaining the set temperature.

#### Silent ambient and relaxing atmosphere 18 dB(A)

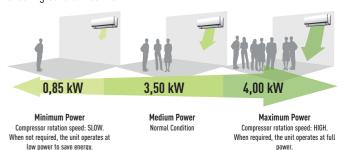
We have succeeded in making one of the most silent air conditioners on the market. Panasonic Inverter air conditioner's indoor operating noise has been reduced as the Inverter constantly varies its output power to enable more precise temperature control.



Heatcharge: In the Quiet Mode during cooling operation with low fan speed

#### **Constant Comfort**

Precise temperature control with a wide power output range enables an inverter air conditioner to meet different room occupancy levels – thus ensuring constant comfort.

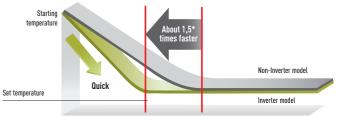


Graph shows the 1,5HP Inverter model's wide power output range during cooling./ Graph shows the 1,5HP Inverter model's wide power output range during cooling.

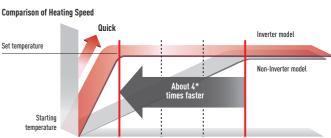
#### **Quick Comfort**

Panasonic Inverter air conditioners can operate with higher power during the start up period to cool the room 1,5 times faster and heat the room 4 times faster than non-Inverter models.

#### Comparison of Cooling Speed



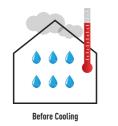
\* 1,5HP Inverter vs. non-Inverter. Outside room temperature: 35°C; setting temperature: 25°C

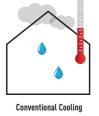


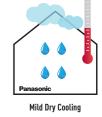
\* Comparison of 1.0HP Inverter and Non-Inverter. Outside room temperature: 2°C ; Setting temperature:  $25^{\circ}$ C

#### Mild Dry Cooling

Mild dry cooling maintains a higher level of relative humidity of up to 10% compared to regular cooling operation. This helps to reduce skin dryness - and a dry throat.







Lowers room temperature while maintaining high humidity

<sup>\*</sup> The sensor may deem pets as humans, unless it moves within the detection zone at speeds that are not humanly possible.

**NEW DOMESTIC** 

TECHNOLOGY

# NEW WALL MOUNTED TZ/TE COMPACT STYLE



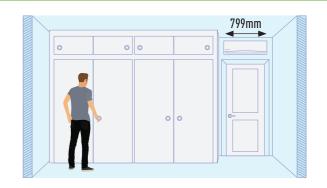
#### TZ/TE compact indoor size.

The new TZ/TE indoor units have a new size. With 799mm of width, you can put the air conditioner on the top of the door.

#### New TZ Inverter models powerful and efficient

#### Heating power and efficiency

- NEW! New design
- R32 gas environmental friendly
- Complete line-up of standard Inverter models
- Super Quiet! Only 20dB(A)
- High energy savings
- Long connection distance (from 15m up to 30m)
- Wired Controller (optional)





#### New PM2,5 Filter

Panasonic new PM2,5 purifying filter catch virus & allergen, even micro size ones, to remove from the air and create clean &

#### What's PM2.5 and how harmful

PM2,5 is an air pollutant that can drastically affect people's health. The size of the suspended particulate is thirty times smaller than the width of human hair, essentially making it difficult to see with the naked eye. It causes dangerous breathing problems such as acute bronchitis and lung cancer in older people and young children.



#### **Aerowings**

Panasonic's new Aerowings feature incorporates two independent blades that concentrate airflow to cool you down in the shortest time possible. This also helps distribute cool air evenly throughout the room.

#### Superior airflow control. Indirect airflow after reaching set temperature.

New Aerowings features two independent blades that give you more control over the direction of the airflow.

Without Aerowings, with direct airflow, the target never changes, so you can easily begin to feel too cold as you are subjected to the continuous icy blast.



#### Comfort that goes on and on with Shower Cooling

After reaching a set temperature, the Aerowings twin blades direct air towards the ceiling to create the Shower Cooling effect. Then, the Human Activity Sensor detects the level of activity and adjusts the temperature to keep you comfortable.

Panasonic Air Conditioners with Aerowings feature an indoor design with wider intake grille and super-high fan speed to produce bigger air volume.

#### For Shower Cooling



Before you feel too cold and uncomfortable, Aerowings shifts the airflow upwards to spread cool air over a wider area. This ensures cool air is evenly distributed throughout the room and you can stay comfortable without experiencing continuous direct cooling.

#### Bigger intake





Panasonic Air Conditioners feature a new intake grille which is 22mm wider and improved indoor fan speed that goes up to a super-high fan speed at start up. The new chassis design generates bigger air volume that contributes to faster cooling.

# HEATCHARGE. ENERGY CHARGE SYSTEM





# Heating power and efficiency

- Energy Charge System. Heat storage unit which features Non-Stop heating and fast heating function
- Maximum efficiency and comfort with Econavi sunlight detection and human activity detection
- nanoe<sup>™</sup> air purifying system
- More powerful airflow to quickly reach the desired temperature

#### Panasonic's new full line-up of A+++ heat pumps

In response to the Kyoto Protocol, the European Union set some challenging targets for the reduction in greenhouse-gas emissions. By the year 2020, across the member states, the EU wants to have achieved the following objectives:

heatcharge

- A 20% cut in greenhouse gas emissions (from 1990 base levels)
- The share of renewables in the energy mix to increase by 20%
- An overall reduction of 20% in energy consumption

# Powerful, reliable heating even at low ambient winter temperatures

When the air conditioner is operating, the compressor, which is the power source of the unit, generates heat. Until now, this heat was released into the atmosphere. Panasonic focused on this waste heat!

Heatcharge is a unique, innovative Panasonic technology that stores this waste heat in the compressor and effectively uses it as heating energy. This lets you enjoy a new level of air conditioner heating power and

Conventional. The room gradually becomes cold. Defrost operation: About 11 to 15 min. Fall in room temperature: About 5 to 6  $^\circ\text{C}$ 

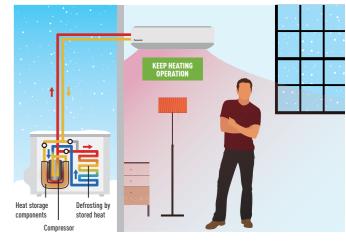
efficiency.

# STOP HEATING OPERATION Waste heat Defrosting Compressor

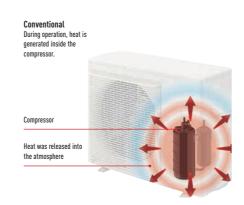
#### **Constant heating**

Using stored heat provides stable heating with less drop in temperature. Even when heating operation stops during defrost operation, stored heat continues to constantly warm the room. This eliminates the previous discomfort due to the temperature dropping when heating temporarily stops to ensure stable air conditioner heating.

## Heatcharge. The room is thoroughly warmed. Defrost operation: About 5 to 6 min. Fall in room temperature: About 1 to 2 $^\circ\text{C}$



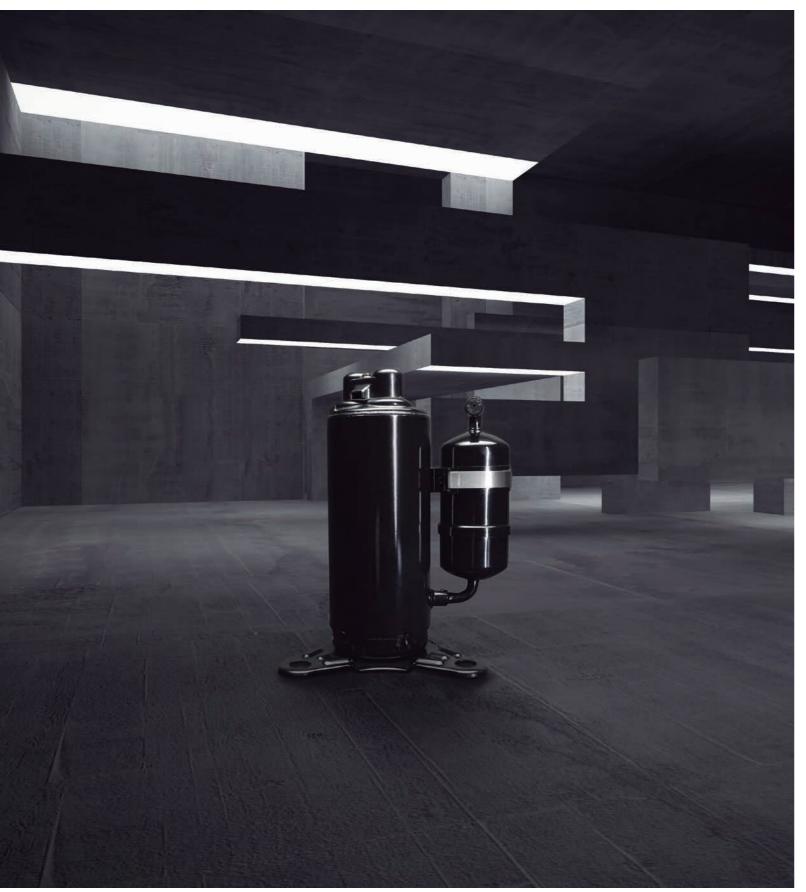
- \* Defrost operation time and how low room temperature falls differ depending on the environment in which the unit is being used (how insulated and airtight and room is), operation conditions, and temperature conditions.
- \* Output air temperature falls during defrost operation. How low room temperature falls differs depending on the environment in which the unit is being used (how insulated and airtight and room is), operation conditions, and temperature conditions.
  \* In environments where a lot of frost accumulates, heating may stop during defrost operation.







# PANASONIC R2 ROTARY COMPRESSOR



R2 rotary compressors utilize rolling piston technology. The R2 compressor has been tested in extreme conditions: higher efficiency, single and dual piston, R32 / R-410A refrigerant, compact size.

#### Making the world a cooler place since 1978.

Panasonic Rotary Compressors for Room Air Conditioners have been installed in the most demanding environments around the world. Designed to withstand extreme conditions, Panasonic Rotary delivers high performance, efficiency and reliable service, no matter where you are. Panasonic, the world's largest manufacturer of rotary compressors.

#### Why is the Panasonic R2 Rotary Compressor so efficient?

- 1. High Efficiency Motor The premium silicon steel motor meets industry efficiency requirements.
- 2. Improved Lubrication of High Volume Oil Pump The extended, high volume oil pump in conjunction with a larger capacity oil reservoir provides superior lubrication.
- 3. Accumulator has Larger Refrigerant Capacity The larger accumulator accomodates generous refrigerant amounts needed in longer line length installations.

#### **R2 Compressor Value**

#### **About R2 Compressor**

Built upon 36 years of compressor design and production experience, R2 is the next generation of Rotary Compressors for residential central air conditioning. New technology improvements, enhanced materials and simple design ensure R2 compressors are reliable, efficient and quiet. The R2 Compressor delivers quality, comfort and peace of mind in homes around the world.

Panasonic's Rotary Compressors have been life tested in some of the world's most demanding environments. Proven for years many of the most demanding areas of the world, the R2 design is the compressor of choice by contractors and homeowners in these challenging climates. For the high performance that homeowners demand, R2 Rotary Compressors are the best air conditioning engines for today's residential cooling solutions.

#### Leading Technology

Used in over 80% of cooling solutions globally, rotary is the world's dominant

residential air conditioning compression technology. Panasonic is the leading rotary and residential AC compressor manufacturer in the world, with over 200 million compressors produced.

#### **Benefits**

Central air conditioning delivered with a Panasonic R2 Rotary Compressor ensures a superior level of comfort at an economical cost.



The special Physical Vapor Deposition (PVD) coating applied to the Vane



The piston is made of unique high-grade steel

#### FAQ

#### How does a Panasonic Rotary compressor work?

R2 compressors are rolling piston rotary compressors. The heart of the rotary compressor is the cylinder which houses the piston and the vane. The vane maintains constant contact with the piston as the piston rolls along the inside wall of the cylinder. As the piston rotates, gas is compressed into an increasingly smaller area until the discharge pressure is reached, releasing gas into the shell chamber. At the same time, more gas comes in through the suction port, enabling a continuous process of suction and discharge. The simple design and symmetry of the cylinder components, combined with a special coating and premium materials, provide a highly durable and reliable product, rotation after rotation.

#### What SEER range does the Panasonic Rotary compressor support?

R2 compressors are found in air conditioning products featuring the very latest technology and offering the highest efficiency on the market today. Our R2 compressors are engineered specifically for this SEER efficiency requirement. Combined with the inherently simple design of the rotary, this results in a high desirable and impressively economical solution.

#### What makes Panasonic Rotary compressor so reliable?

Changes to the construction and material of internal components enables the

R2 compressor to reliably operate with an above average maximum discharge pressure. A Physical Vapor Deposition (PVD) coating on the vane, along with enhanced steel materials, significantly reduces wear and increases durability.

#### What makes a Panasonic Rotary compressor so quiet?

The structure of the R2 compressor mechanism has been redesigned to increase stability and reduce vibration. Specifically, the compressor has an upper cylinder discharge, an enhanced fixed upper bearing, and reduced friction in the cylinder parts. The lower discharge and muffler in the dual piston compressors also enables lower noise levels. As a result, this new design optimises efficiency and minimises noise.

#### How do R2 rotary compressors compare to scroll and reciprocating compressors?

R2 rotary compressors are very similar to some scroll compressors in overall performance, including efficiency and reliability. The simple and symmetrical key components contribute to the R2 compressor's reliability, light weight, compact size, and economical applied cost, without sacrificing the key performance requirements of high efficiency and low noise levels.

### Which refrigerants can be used with Panasonic Rotary compressor?

Panasonic has R2 Rotary Compressors available for R32 and R410A applications.

# R22 RENEWAL. PANASONIC STANDARD UNITS CAN BE INSTALL ON EXISTING R22 PIPINGS



An important drive to further reduce the potential damage to our ozone

- All Panasonic standard NKE, PKE, QKE, RKE and SKE units can be install on existing R22 pipings
- No need of additional accessories (only pipe reduces)
- Approximately 30% energy saving compare to R22 units

#### Panasonic are doing our part

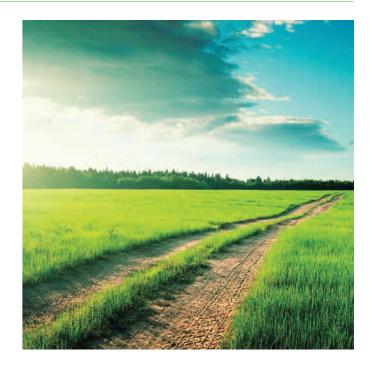
We at Panasonic are also doing our part – recognising that all finances are under pressure at the moment. Panasonic has developed a clean and cost effective solution to enable this latest legislation to be introduced with as minimum an effect on businesses and cash reserves as possible.

The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A systems. By bringing a simple solution to the problem Panasonic can renew all Split Systems and PACi systems; and depending upon certain restrictions we don't even limit the manufacturer's equipment we are replacing. By installing a new high efficiency Panasonic R410A system you can benefit from around 30% running cost saving compared to the R22 system.

#### Yes...

- 1. Check the capacity of the system you wish to replace
- 2. Select from the Panasonic range the best system to replace it with
- 3. Follow the procedure detailed in the brochure and technical data Simple...

R22 - The reduction of Chlorine critical for a cleaner future.



# Guidance on re-using of existing R22 piping for a new R410A installation

#### 1. Precaution

The existing R22 piping can be re-used for a R410A system installation if the following conditions are met and the piping are finally verified to be:

- Dry (no moisture remained in the piping)
- Clean (no dust remained in the piping)
- Tight (no refrigerant leak at the joining and piping)

#### 2. Conditions

• Recover the refrigerant and oil.

Operate "force cooling" according to the recommended operation time, regardless of the piping length.

Single split: 10min.

Multi split: 30min.

After that, carry out "pump down" to recover the refrigerant and oil from the existing R22 system

\* Note: If pump down operation is not possible due to the malfunction of the system, flush and wash the existing piping to collect back the oil and dirt inside the system.

Check the oil condition.

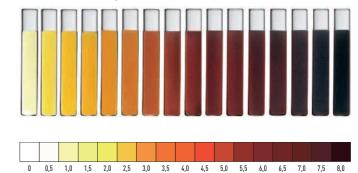
If the oil contains dirt, wash the existing pipes

· Check the oil color.

After pump down, use a cotton bud to wipe the oil from the existing

If the oil color is higher than ASTM3, use a new pipe as re-use of old piping is not allowed

#### eterioration Criteria for Refrigerant Oil



· Check pipe thickness.

Make sure that the pipe thickness is more than 0,8mm.

If the thickness is less than 0,8mm, use a new pipe

• Rework the flare for R410A connection.

Do not reuse the old flare nuts.

Make sure to use the new flare nuts attached to the R410a system

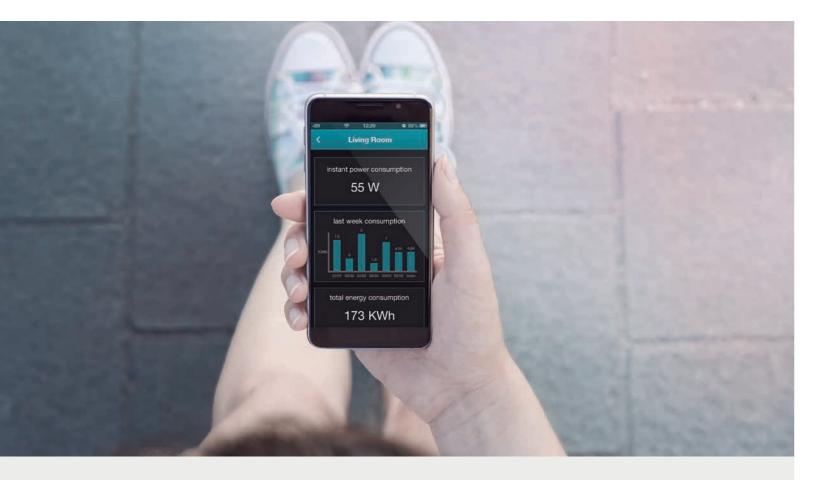
\* Note: If the existing piping size is 1/4" (6,35mm) and 1/2" (12,7mm), and the new R410a system is 1/4" (6,35mm) and 3/8" (9,52mm), use a pipe reducer connected at indoor and outdoor unit.

#### 3. Applicable Model

Panasonic single split room air conditioner from CS/CU-RE/UE/YE/XE/CE/NE/E\*NKE and PKE series onwards.

Panasonic multi split room air conditioner from CU-2E/3E/4E/5PBE series onwards.

# **CONTROL & CONNECTIVITY**

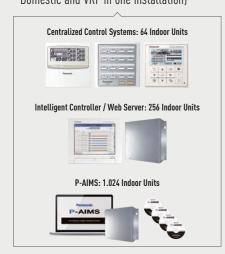


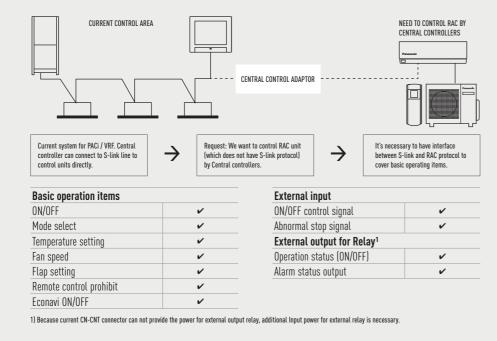
#### New Domestic integration to P-Line - CZ-CAPRA1

Can connect all ranges to P-Line. Full control is now possible.

#### Integrates any unit in big system control

- PKEA Server room integration
- Small offices with Domestic indoors
- Tender for refurbishment (old system Domestic and VRF in one installation)





Panasonic offers its customers cutting-edge technology, specially designed to ensure our air conditioning systems deliver maximum performance. You can properly manage the air conditioning and perform comprehensive monitoring and control, with all of the features the remote controller provides at home, from anywhere in the world thanks to the internet applications Panasonic has created for you.

#### Internet Control

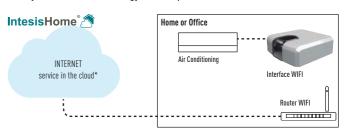
Control your air conditioning from wherever you are. Control your comfort and efficiency with the lowest energy consumption.

#### PAW-IR-WIFI-1

IntesisHome IS-IR-WIFI-1 device is an easy to install and small device which allows connectivity with the IntesisHome application and connects with your climate system using Infrared (IR). The device enables the control of the Panasonic RAC units without CN-CNT connector (RE, UE, GFE and Free Multi lines).

Specific features: • ON/OFF, mode, set point, fan speed, vanes and room temperature • Easy installation (no special electrical work needed) • Feedback to the IntesisHome system when changes are made from the infrared remote controller.

General IntesisHome features:  $\cdot$  Calendar scheduler  $\cdot$  Scenes  $\cdot$  Several languages  $\cdot$  Control from anywhere.



\* Functionalities depend on the license. The information indicated above is subject to changes and updates.

Reference: PA-AC-WIFI-1 For Etherea and Heatcharge, with full communication.

Reference: PAW-IR-WIFI-1 by Infra red sensor, only ON/OFF and temperature setting.

#### Connectivity. Control by BMS

Great flexibility for integration into your IntesisHome, KNX, EnOcean, Modbus and BacNet projects allows fully bi-directional monitoring and control of all the functioning parameters.

Reference	PAW-AC-KNX-1i	Modbus <sup>®</sup> PAW-AC-MBS-1	enocean <sup>o</sup> PAW-AC-ENO-1i	<b>®BACnet</b> ™ PAW-AC-BAC-1¹
Quick installation and possibility of hidden installation	<b>✓</b>	<b>✓</b>	<b>✓</b>	V
External power not required	·	·	<b>✓</b>	
Direct connection to the AC indoor unit	✓ (split unit or Multi split unit)	✓ (split unit or Multi split unit)	✓ (split unit)	~
Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication	Fully KNX compatible	Fully Modbus compatible	Fully EnOcean compatible	
Use the air conditioner ambient temperature or the one measured by	A KNX temperature sensor or Thermostat	A Modbus temperature sensor or Thermostat	An EnOcean temperature sensor or Thermostat	
AC unit can be controlled simultaneously by the remote controller of the AC unit and	by KNX devices	by Modbus devices	by EnOcean devices	
Advanced control functions: use it as a room controller	<b>✓</b>	<b>v</b>	<b>✓</b>	
4 binary inputs	They work as standard KNX binary inputs as well as being used to control the AC directly	They work as standard Modbus binary inputs as well as being used to control the AC directly	They work as standard EnOcean binary inputs as well as being used to control the AC directly	
Total Control and Supervision. Real states of the AC unit's internal variables				~
Allows using simultaneously the IR and wired remote controls				and BACnet

1) This interface allows a complete and natural integration of Panasonic air conditioners into either BACnet IP or MS/TP networks.

#### PAW-AC-DIO

Dry contact ON/OFF Interface. Panasonic has developed for hotels applications a dry contact PCB which works with Etherea, RE, UE and YE indoor units in order to control simply the unit centrally.

- ON/OFF signal by 3rd party BMS
- PCB connected to CN-RMT port on Indoor Unit PCB

#### **Easy connectivity**

CN-CNT easy to access. Previous Etherea indoor unit had to be dismantle to reach connector.

Can easier connect: Wi-Fi accessory / KNX / Modbus / New CZ-CAPRA1 to integrate to PACi control.







Model name	Interface
CZ-CAPRA1	Domestic with CZ-CNT port integration to PACi and ECOi
PA-AC-WIFI-1	Interface for IntesisHome for Etherea, Heatcharge and Flagship, with full communication
PAW-IR-WIFI-1	Interface for IntesisHome by Infra red sensor, only ON/OFF and temperature setting
PAW-AC-ENO-1i	Interface for En-ocean (Etherea, 4-Way 60x60 cassette and Low static pressure hide away)
PAW-AC-KNX-1i	Interface for KNX (Etherea, 4-Way 60x60 cassette and Low static pressure hide away)
PAW-AC-MBS-1	Interface for Modbus (Etherea, 4-Way 60x60 cassette and Low static pressure hide away)
PAW-AC-BAC-1	Interface for BacNet (Etherea, 4-Way 60x60 cassette and Low static pressure hide away)
PAW-AC-HEAT-1	Heating only PCB for Etherea, 4-Way 60x60 cassette and Low static pressure hide away
PAW-AC-DIO	PCB for wall mounted with dry contacts, On/Off, Error message (all QKE and RKE wall mounted)
PAW-SMSCONTROL	Control of the Etherea, Flagship and Heatcharge by SMS (need additional SIM card)

# DOMESTIC AIR CONDITIONER RANGE

1x1 Kits	2,0kW	2,5kW	3,5kW	4,2kW	5,0kW	6,0kW	7,1kW
Wall Mounted Heatcharge VZ							
Inverter+ • R32 GAS							
		KIT-VZ9-SKE	KIT-VZ12-SKE				
Wall Mounted Etherea Inverter+ Silver	DLOGY W						
R32 GAS	KIT-XZ20-TKE	KIT-XZ25-TKE	KIT-XZ35-TKE		KIT-XZ50-TKE		
Wall Mounted Etherea							
Vall Mounted Etherea nverter+ Pure White Matt	7) –	= -		_	_	1 -	-
KJZ OAS	KIT-Z20-TKE	KIT-Z25-TKE	KIT-Z35-TKE	KIT-Z42-TKE	KIT-Z50-TKE		KIT-Z71-TKE
Nall Mounted Etherea nverter+ Silver		_					
R32 GAS	WIT VITE OUT	WIT YTO OVE	WIT NAME ONE		NIT NATO ONE		
Vall Mounted Etherea	KIT-XZ7-SKE	KIT-XZ9-SKE	KIT-XZ12-SKE		KIT-XZ18-SKE		
verter+ Matt Pearl White		_		_			
R32 GAS	KIT-Z7-SKEM	KIT-Z9-SKEM	KIT-Z12-SKEM	KIT-Z15-SKEM	KIT-Z18-SKEM		
/all Mounted Etherea							
nverter+ Silver R410A GAS	=	-1-			- ,		
/all Mounted Etherea	KIT-XE7-SKE	KIT-XE9-SKE	KIT-XE12-SKE		KIT-XE18-SKE		
verter+ Matt Pearl White							
R410A GAS	KIT-E7-SKEM	KIT-E9-SKEM	KIT-E12-SKEM	KIT-E15-SKEM	KIT-E18-SKEM		
lew Wall Mounted TZ		INI EZ SIKETI	INTELE SILET	INT ETO OKET	KIT ETO OKEN		
ompact Style (TECHN	7					_	_
NJZ UAJ	KIT-TZ20-TKE	KIT-TZ25-TKE	KIT-TZ35-TKE	KIT-TZ42-TKE	KIT-TZ50-TKE	KIT-TZ60-TKE	KIT-TZ71-TKE
lew Wall Mounted TE Compact Style  PR/10A GAS	DLOGY						
Compact Style • R410A GAS							
	KIT-TE20-TKE	KIT-TE25-TKE	KIT-TE35-TKE	KIT-TE42-TKE	KIT-TE50-TKE	KIT-TE60-TKE	
Vall Mounted KE Type Standard Inverter  1	OLOGY )				_		
R410A GAS		KIT-KE25-TKE	KIT-KE35-TKE		KIT-KE50-TKE		
Vall Mounted BE Type	W DI DOY						
Vall Mounted BE Type tandard Inverter R410A GAS	7)						
114104 043		KIT-BE25-TKE	KIT-BE35-TKE		KIT-BE50-TKE		
Vall Mounted DE Type tandard Inverter  1	DLOGY						
R410A GAS		KIT-DE25-TKE	KIT-DE35-TKE		KIT-DE50-TKE		
/all Mounted UZ Type	w	WI DEED INC	IN DESCRIPTION		INI DESCRIPTION		
Vall Mounted UZ Type itandard Inverter	7	_			_		
NJZ UAJ		KIT-UZ9-SKE	KIT-UZ12-SKE		KIT-UZ18-SKE	KIT-UZ60-TKE	
Wall Mounted PZ Type Standard Inverter  Net Technology 1	W DLOGY						
tandard Inverter R32 GAS		WIT DIES THE	WI DOOF THE		NI DEC INC		
Vall Mounted Professional		KIT-PZ25-TKE	KIT-PZ35-TKE		KIT-PZ50-TKE		
nverter -20°C		5	5		5		
R410A GAS		KIT-E9-PKEA	KIT-E12-PKEA	KIT-E15-PKEA	KIT-E18-PKEA		
loor Console Type		2	2				
nverter+ R410A GAS							
		KIT-E9-PFE	KIT-E12-PFE		KIT-E18-PFE		
i-Way 60x60 Cassette Standard Inverter		- Ba					
R410A GAS		KIT-E9-PB4EA	KIT-E12-PB4EA		KIT-E18-RB4EA	KIT-E21-RB4EA	
Low Static Pressure Hide Away		- 27	276		- 11/2		
tandard Inverter							
R410A GAS			KIT-E9-PD3EA KIT-E12-QD3EA		KIT	-E18-RD3EA	

# FEATURES EXPLAINED

#### **Energy saving**

Econavi. The sensor determines the human activity level and the position in the room and adjust the air flow orientation for maximum comfort and maximum

savings, and detects changes in sunlight intensity and judges whether it is sunny or cloudy/night. It reduces unnecessary heating under more sunlight conditions.



Inverter Plus System. Inverter plus products improve on the characteristics of standard Inverter air GINVERTER+ conditioners by over 20%. This means 20% less

consumption and 20% off your electric bill. Inverter plus is also A class on cooling and heating mode.



Inverter system. The Inverter range provides greater efficiency, more comfort. Provides more precise temperature control, without highs and lows, and

keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration



R2 Rotary Compressor. Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, it delivers high performance and

efficiency.



step to reduce greenhouse gases. R32 is also a components refrigerant, making it easy to recycle.

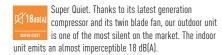
#### High performance and healthy air

nanoe™. nanoe™ utilises nano-technology fine particles to purify the air in the room. It works effectively on airborne and adhesive micro-

organisms such as bacteria, viruses and mould thus ensuring a cleaner living environment. Seal of Approval of the British Allergy Foundation.

PM2,5 Filter. Particulate matter (PM2,5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. Sized at 2,5µm, these particles are said to pose health problems as they can easily enter our lungs.







sleeping with the air conditioner on.



Aerowings. More comfort with Aerowings. Direct airflow to ceiling to create shower cooling effect by twin flap built in indoor.

Down to -10°C in cooling only mode. The air conditioner works in cooling only mode with an outdoor temperature of -10°C.



Down to -15°C in heating mode. The air conditioner works in heat pump mode with an outdoor temperature as low as -15°C.



Summer House. This innovative function keeps the house at 7/8°C to avoid freezing pipes during the winter. This function is highly appreciated in summer house or week end houses.



R22 Renewal. The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A systems.



R410A/R22 Renewal. The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing new high efficiency R32 systems.



Odour-removing function. Allows the exchanger to be cleaned, preventing possible odours. While this function is connected, the fan also remains off momentarily to avoid unpleasant odours while the exchanger is being cleaned.

Removable, washable panel. The front panel is easy to keep clean. It can be removed quickly in one single step and can be washed in water. A clean front panel ensures smoother, more efficient operation, which can save energy.



Powerful Mode. The rapid and effective powerful mode is ideal for when you come home on the hottest or coldest days. It works at maximum power to reach the desired temperature in just 15 minutes.



Soft Dry Operation Mode. The soft dry mode eliminates excess moisture with a soft breeze and provides a sense of wellbeing without much change in temperature.



Personal Airflow Creation, Permits the air direction to be adjusted vertically and horizontally. This feature can be conveniently selected by remote controller



Automatic Vertical Airflow Control. The flap swings up and down automatically. The flow can also be set at a fixed angle with the remote controller.



Manual Horizontal Airflow Control.



Auto Mode (Inverter). Automatically changes from cooling to heating depending on the set temperature for the room



Simple Auto Changeover. When the difference between the measured temperature and the set temperature is 3°C or more, it automatically

switches the current operation mode to heating or cooling mode necessary to keep the temperature at a constantly comfortable

Hot Start Mode. At the start of heating cycle and after defrost cycle, the indoor fan will start up once the indoor heat exchanger is warm.



Real time clock with dual ON&OFF timer. This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 74-hour time frame



Real time clock with single ON&OFF timer. The exact operating time (hour and minute) can be set in advance. From here on, the unit will operate in accordance to these preset hours every day until the system is



LCD Wireless Remote Controller.



Automatic Restart. This function permits automatic restarting if safe mode operation has stopped for some unusual reason, such as after a power cut. As soon as the power is back, the unit restarts with the parameters selected before it stopped.



Long Piping. Indicates the maximum length of pipe between the outdoor unit and the indoor unit(s). The distances permitted, demonstrate the installations



Ton-Panel Maintenance Access. Maintenance of an outdoor unit used to be quite a tedious task. Now, with the possibility of removing the top cover, maintenance is quick and easy.

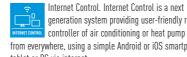


Self-Diagnosis Function. With this function the unit carries out a process self-diagnosis when a particular function does not work correctly. This allows faster servicing.

#### High connectivity



CZ-CAPRA1: CZ-CNT port integration to PACi and ECOi. New Domestic integration to P-Line. Can connect ranges to P-Line. Full control is now



generation system providing user-friendly remote controller of air conditioning or heat pump units from everywhere, using a simple Android or iOS smartphone, tablet or PC via internet



asy control by BMS. The communication port is ntegrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.



5 Years Warranty. Panasonic guarantees the compressors in the entire range for five years.

# FEATURE COMPARISON

MODELS	HEATCHARGE VZ INVERTER+ • R32 GAS	WALL MOUNTED ETHEREA INVERTER+ SILVER / WHITE • R32 GAS	WALL MOUNTED ETHEREA INVERTER+ SILVER / MATT PEARL WHITE • R32 GAS	WALL MOUNTED ETHEREA INVERTER+ SILVER / MATT PEARL WHITE • R410A GAS	NEW WALL MOUNTED TZ COMPACT STYLE • R32 GAS	NEW WALL MOUNTED TE COMPACT STYLE • R410A GAS	WALL MOUNTED KE TYPE STANDARD INVERTER • R410A GAS	BE TYPE STANDARD INVERTER • R410A GAS	WALL MOUNTED DE TYPE STANDARD INVERTER • R410A GAS	UZ TYPE STANDARD INVERTER • R32 GAS	PZ TYPE STANDARD INVERTER • R32 GAS		TYPE INVERTER+	4-WAY 60x60 CASSETTE STANDARD INVERTER • R410A GAS	PRESSURE AWAY STANI INVERTE • R410A 6
Econavi	✓ Sunlight Detection	~	~	~											
Inverter+ system	~	~	V	~								~	~		
Inverter system					~	~				~	~			~	~
R2 Rotary Compresso	r •	V	V	~	V	V	V	V	V	V	V	~	V	~	V
2 Refrigerant R32	~	V	V		V					V	V				
% nanoe™	~	~	V	~											
PM2,5 Filter					V	V	V			V					
Antiallergy properties		~	~	~											
Super Quiet*	~	✓ 19dB(A) for XZ/Z20, XZ/Z25 and XZ/Z35	✓ 19dB(A) for XZ/Z7, XZ/Z9 and XZ/Z12	✓ 20dB(A) for XE/E7, XE/E9 and XE/E12	✓ 20dB(A) for TZ25 and TZ35	✓ 20dB(A) for TE25 and TE35	✓ 20dB(A) for KE25 and KE35	✓ 20dB(A) for BE25 and BE35	✓ 20dB(A) for DE25 and DE35	✓ 20dB(A) for UZ9 and UZ12	✓ 20dB(A) for PZ9 and PZ12	✓ 23dB(A) for E9	✓ 23dB(A) for E9	✓ 23dB(A) for E9 and E12	
Mild Dry Cooling		₩ W	V.	V											
Aerowings		V	V	~	~	V									
C Down to -10°C in coo	ling 🗸	V	V	~	V	V						✔ -15°C		~	~
°C Down to -15°C in hea	ting ✓-35°C	V	V	~	V	V	V	V	V		V	~	✓ -20°C	✓ -10°C	<b>✓</b> -10°
Summer House	~														
R22 renewal	~	V	V	~	~	V	~	V	~	V	~	~	~	V	~
R410A/R22 Renewal	~	V	~		~					~	~				
Odour-removing func	ion 🗸	V	~	~	~	V	~	V	~	~	~	~	~	V	~
Removable, washable	panel 🗸	V	V	~	V	V	V	V	V	V	V	~	V		
Powerful mode	~	V	V	~	~	V	V	V	V	V	V	~	V	~	~
Soft dry operation mo	de 🗸	V	V	~	~	V	V	V	V	V	V	~	V	~	~
Personal airflow crea	tion 🗸	V	V	~	✓ For TZ50,  TZ60 and TZ71	✓ For TE50 and TE60									
Automatic vertical air	flow				✓ For TZ20, TZ25, TZ35 and TZ42	✓ For TE20, TE25, TE35 and TE42				V	V		V	~	
Manual horizontal air control	Flow				✓ For TZ20, TZ25, TZ35 and	✓ For TE20, TE25, TE35 and				V	V		~		
AUTO mode (Inverter)	~	V	V	~	T242	TE42	V	V	V	V	V	~	V	~	~
Simple Auto Changeo	ver 🗸	V	V	~	~	V	V	V	V	V	V				
Hot start mode	~	V	V	~	V	V	V	V	V	V	V	~	V	V	~
Real time clock with	dual	V	V	~								~			
Real time clock with	single				V	V	V	V	V	V	V		V	~	~
LCD Wireless remote controller	~	V	~	~	~	V	V	V	~	~	~		~	V	
Automatic restart	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Long piping	<b>✓</b> 15 m	✓ 15 m 20 m (XZ/Z50)	✓ 15 m 20 m (XZ/Z18)	✓ 15 m 20 m (XE/E18-21)	✓ 15 m 20 m (TZ50)	✓ 15 m 20 m (TE50)	<b>✓</b> 15 m	<b>✓</b> 15 m	✓ 15 m	<b>✓</b> 15 m	<b>✓</b> 15 m	✓ 15 m 20 m (E18)	✓ 15 m 20 m (E18)	✓ 20 m 30 m (E18-21)	<b>✓</b> 20 30 m (E
Top-Panel maintenan	DE V	~	~	30 m (XE/E24-28) ✓	30 m (TZ71)	30 m (TE71)	~	V	~	~	~	~	~	~	~
Self-diagnosis function	on 🗸	~	~	~	~	~	~	~	~	~	~	~	~	~	~
CZ-CAPRA1: CZ-CNT p	ort d ECOi	V	~	~	~	V	~	V	V	~	V	~		~	~
Internet Control	V	~	V	~	~	V	~	V	V	V	V		V		
Easy control by BMS	· ·	~	V	~	~	V	~	V	V	V	V	~		~	~
W	oressor 🗸	~	~	~		~	~	V	~	~	~	~	~	~	

## WALL MOUNTED HEATCHARGE VZ **INVERTER+ • R32 GAS**

#### heatcharge

The new Heatcharge from Panasonic has the capacity to store heat on the outdoor unit which allows heating to start quickly just after turning on the heat pump. It also ensures maximum comfort and heat in the house even during defrost operation as Heat charge also stores heat to prevent cool air during defrost.

Econavi builds-in a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving

Furthermore, the nanoe™ revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



#### Technical focus

- R32 gas environmental friendly
- Performance tested at -35°C Outdoor temperature
- Energy Charge System. Heat storage unit which realizes NON-STOP heating and fast heating function
- Maximum efficiency and comfort with Econavi sensor
- nanoe<sup>™</sup> air purifying system, 99% effective on both airborne and adhesive mould, viruses and bacteria
- Super Quiet! Only 18dB(A), equivalent to night-time in the country
- More powerful airflow to quickly reach the desired temperature

Kit			KIT-VZ9-SKE	KIT-VZ12-SKE
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.60 - 3.00)	3.50 (0.60 - 4.00)
SEER		W/W	10.50 A+++	10.00 A
Pdesign (cooling)		kW	2,5	3,5
Input power cooling	Nominal (Min - Max)	kW	0,43 (0,14 - 0,61)	0,80 (0,14 - 1,01)
Annual electricity consumption	n (cooling) 2)	kWh/a		
Heating capacity	Nominal (Min - Max)	kW	3,60 (0,60 - 7,80)	4,20 (0,60 - 9,20)
COP 1)		W/W	5,63 A	5,04 A
Heating capacity at -7°C		kW	5,00	5,60
COP at -7°C 1)		W/W	2,07	2,00
SCOP		W/W	6,20 A	5,90 A***
Pdesign at -10°C		kW	3,6	4,2
Input power heating	Nominal (Min - Max)	kW	0,64 (0,14 - 2,72)	0,83 (0,14 - 3,16)
Annual electricity consumption	n (heating) <sup>2)</sup>	kWh/a		
Indoor Unit			CS-VZ9SKE	CS-VZ12SKE
Power source		V	230	230
Recommended fuse		A	16	16
Connection		mm <sup>2</sup>	4 x 1,5	4 x 1,5
Air volume	Cooling / Heating	m³/min	17,0	17,5
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	44 / 27 / 18	45 / 33 / 18
outilu pressure -	Heating (Hi / Lo / Q-Lo)	dB(A)	44 / 26 / 18	45 / 29 / 18
Dimensions / Net weight	H x W x D	mm / kg	295 x 798 x 375 / 14,5	295 x 798 x 375 / 14,5
Outdoor Unit			CU-VZ9SKE	CU-VZ12SKE
Air volume	Cooling / Heating	m³/min	33,0 / 31,5	34,2 / 31,5
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	49 / 49	50 / 50
Dimensions 4 / Net weight	H x W x D	mm / kg	630 x 799 x 299 / 39,5	630 x 799 x 299 / 39,5
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)
Piping length range / Elevatior	n difference (in/out)	m	3 ~ 15 / 12	3 ~ 15 / 12
Pipe length for additional gas	/ Additional gas amount	m / g/m	7,5 / 20	7,5 / 20
R32 Refrigerant amount		kg	1,05	1,10
Operating range	Cooling Min ~ Max	°C	-10 ~ +43	-10 ~ +43
operacing range	Heating Min ~ Max	°C	-35 / +24	-35 / +24
Accessories	I		Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi inter		PAW-SMSCONTROL	Control by SMS (need additional SIM card)
PAW-IR-WIFI-1	IR Wifi interface for Interne	et control		

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70mm for piping port.



























## WALL MOUNTED ETHEREA INVERTER+ SILVER / PURE WHITE MATT • R32 GAS

#### ETHEREA

#### Etherea with enhanced Econavi sensor and new nanoe™ air-purifying system

#### Outstanding efficiency, comfort and healthy air combined with state-of-the-art design.

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, energy savings of up to 38% are possible, whilst increasing your comfort. Furthermore, the nanoe™ revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



#### Technical focus

- R32 gas environmental friendly
- · Maximum efficiency and comfort with Econavi sensor
- nanoe™ air purifying system, 99% effective on both airborne and adhesive mould, viruses, bacteria and pollen allergen
- Aerowings to control air draft direction
- Mild Dry Cooling: prevent a rapid decrease in room humidity
- Super Quiet! Only 19dB(A), equivalent to night-time in the countryside
- More powerful airflow to quickly reach the desired temperature
- Wired control (Optional)
- Smartphone control (Optional)



Kit Silver			KIT-XZ20-TKE	KIT-XZ25-TKE	KIT-XZ35-TKE	_	KIT-XZ50-TKE	_
Kit Pure White Matt			KIT-Z20-TKE	KIT-Z25-TKE	KIT-Z35-TKE	KIT-Z42-TKE	KIT-Z50-TKE	KIT-Z71-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75 - 2,40)	2,50 (0,85 - 3,20)	3,50 (0,85 - 4,00)	4,20 (0,85 - 5,00)	5,00 (0,98 - 6,00)	7,10 (0,98 - 8,50)
EER 1)	Nominal (Min - Max)	W/W	4,56 (3,13 - 4,32) A	4,81 (3,54 - 4,05) A	4,22 (3,54 - 3,81) A	3,39 (3,27 - 3,18) A	3,55 (3,50 - 3,08) A	3,27 (2,33 - 2,93) A
SEER		W/W	7,50 A++	8,50 A+++	8,50 A+++	6,90 A++	7,90 A++	6,50 A++
Pdesign (cooling)		kW	2,1	2,5	3,5	4,2	5,0	7,1
Input power cooling	Nominal (Min - Max)	kW	0,45 (0,24 - 0,56)	0,52 (0,24 - 0,79)	0,83 (0,24 - 1,05)	1,24 (0,26 - 1,57)	1,41 (0,28 - 1,95)	2,17 (0,42 - 2,90)
Annual electricity consumption	n (cooling) <sup>2)</sup>	kWh/a	98	103	144	213	222	382
Heating capacity	Nominal (Min - Max)	kW	2,80 (0,70 - 4,00)	3,40 (0,80 - 5,00)	4,00 (0,80 - 5,80)	5,30 (0,80 - 6,80)	5,80 (0,98 - 8,00)	8,60 (0,98 - 10,200)
Heating capacity at -7°C		kW	2,38	2,95	3,40	4,11	4,80	6,31
COP 1)	Nominal (Min - Max)	W/W	4,52 (3,89 - 4,04) A	4,79 (4,44 - 3,97) A	4,44 (4,44 - 3,87) A	3,68 (4,21 - 3,51) A	4,03 (2,88 - 3,16) A	3,66 (2,45 - 3,46) A
SCOP		W/W	4,70 A++	5,10 A+++	5,10 A+++	4,00 <b>A</b> +	4,70 A++	4,20 A+
Pdesign at -10°C		kW	2,1	2,7	3,2	3,6	4,2	5,5
Input power heating	Nominal (Min - Max)	kW	0,62 (0,18 - 0,99)	0,71 (0,18 - 1,26)	0,90 (0,18 - 1,50)	1,44 (0,19 - 1,94)	1,44 (0,34 - 2,53)	2,35 (0,40 - 2,95)
Annual electricity consumption	n (heating) <sup>2)</sup>	kWh/a	626	741	878	1.260	1.251	1.833
Indoor Unit Silver			CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ35TKEW	_	CS-XZ50TKEW	
Indoor Unit Pure White Ma	tt		CS-Z20TKEW	CS-Z25TKEW	CS-Z35TKEW	CS-Z42TKEW	CS-Z50TKEW	CS-Z71TKEW
Power source		V	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	
Air volume	Cooling / Heating	m³/min	9,9 / 10,8	10,0 / 11,5	10,7 / 12,4	11,2 / 12,3	19,2 / 21,3	19,8 / 21,5
Moisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8	4,1
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 24 / 19	39 / 25 / 19	42 / 28 / 19	43 / 31 / 25	44 / 37 / 30	47 / 38 / 30
Juliu piessuie	Heating (Hi / Lo / Q-Lo)	dB(A)	38 / 25 / 19	41 / 27 / 19	43 / 33 / 19	43 / 35 / 29	44 / 37 / 30	47 / 38 / 30
Dimensions / Net weight	H x W x D	mm / kg	295 x 919 x 194 / 9	295 x 919 x 194 / 10	295 x 919 x 194 / 10	295 x 919 x 194 / 10	302 x 1.120 x 236 / 12	299 x 1.120 x 236 / 13
Outdoor			CU-Z20TKE	CU-Z25TKE	CU-Z35TKE	CU-Z42TKE	CU-Z50TKE	CU-Z71TKE
Air volume	Cooling / Heating	m³/min	26,9 / 26,9	28,7 / 28,7	34,4 / 35,6	33,3 / 33,7	39,7 / 38,6	44,7 / 45,8
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	49 / 51	47 / 47	52 / 54
Dimensions 4 / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 30	542 x 780 x 289 / 31	619 x 824 x 299 / 34	619 x 824 x 299 / 32	695 x 875 x 320 / 42	695 x 875 x 320 / 49
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 5/8 (15,88)
Piping length range / Elevation	n difference (in/out) 5)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 20 / 15	3 ~ 30 / 20
Pipe length for additional gas	/ Additional gas amount	m / g/m	7,5 / 10	7,5 / 10	7,5 / 10	7,5 / 10	7,5 / 15	10 / 25
R32 Refrigerant amount		kg	0,76	0,85	0,91	0,87	1,11	1,37
Operating range	Cooling / Heating Min ~ Max	°C	-10 ~ +43 / -15 ~ +24	-10 ~ +43 / -15 ~ +24	-10 ~ +43 / -15 ~ +24	-10 ~ +43 / -15 ~ +24	-10 ~ +43 / -15 ~ +24	-10 ~ +43 / -15 ~ +24

Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control
PAW-IR-WIFI-1	IR Wifi interface for Internet control

CZ-RD514C	Wired remote controller for wall type
CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/12/006-97 specification. 0-Lo: Quiet mode. Lo: The lowest fan speed. 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. \* Tentative values.



















# WALL MOUNTED ETHEREA INVERTER+ SILVER / MATT PEARL WHITE • R32 GAS

#### ETHEREA

#### Etherea with enhanced Econavi sensor and new nanoe™ air-purifying system

#### Outstanding efficiency, comfort and healthy air combined with state-of-the-art design.

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, energy savings of up to 38% are possible, whilst increasing your comfort. Furthermore, the nanoe™ revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



#### **Technical focus**

- R32 gas environmental friendly
- Maximum efficiency and comfort with Econavi sensor
- nanoe<sup>™</sup> air purifying system, 99% effective on both airborne and adhesive mould, viruses, bacteria and pollen allergen
- Aerowings to control air draft direction
- Mild Dry Cooling: prevent a rapid decrease in room humidity
- · Super Quiet! Only 19dB(A), equivalent to night-time in the countryside
- More powerful airflow to quickly reach the desired temperature
- Wired control (Optional)
- Smartphone control (Optional)



Kit Silver			KIT-XZ7-SKE	KIT-XZ9-SKE	KIT-XZ12-SKE	_	KIT-XZ18-SKE	
Kit Matt Pearl White			KIT-Z7-SKEM	KIT-Z9-SKEM	KIT-Z12-SKEM	KIT-Z15-SKEM	KIT-Z18-SKEM	
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75 - 2,40)	2,50 (0,85 - 3,00)	3,50 (0,85 - 4,00)	4,20 (0,85 - 5,00)	5,00 (0,98 - 5,60)	
EER 1)	Nominal (Min - Max)	W/W	4,56 (3,13 - 4,32) A	4,76 (3,54 - 4,20) A	4,17 (3,54 - 3,77) A	3,39 (3,27 - 3,18) A	3,33 (3,50 - 3,26) A	
SEER	<u>'</u>	W/W	7,50 A++	8,50 A+++	8,50 A	6,90 A++	7,30 < A++	
Pdesign (cooling)		kW	2,1	2,5	3,5	4,2	5,0	
nput power cooling	Nominal (Min - Max)	kW	0,45 (0,24 - 0,56)	0,53 (0,24 - 0,72)	0,84 (0,24 - 1,06)	1,24 (0,26 - 1,57)	1,50 (0,28 - 1,72)	
Annual electricity consumpti	ion (cooling) 2)	kWh/a	225	263	420	620	750	
leating capacity	Nominal (Min - Max)	kW	2,80 (0,70 - 4,00)	3,40 (0,80 - 5,00)	4,00 (0,80 - 5,80)	5,30 (0,80 - 6,80)	5,80 (0,98 - 7,50)	
leating capacity at -7°C		kW	2,38	2,95	3,40	4,11	4,66	
OP 1)	Nominal (Min - Max)	W/W	4,52 (3,89 - 4,04) A	4,72 (4,44 - 3,94) A	4,35 (4,44 - 3,82) A	3,68 (4,21 - 3,51) A	3,41 (2,88 - 3,19) B	
SCOP		W/W	4,70 A++	4,90 A++	4,90 A++	4,00 A+	4,40 A+	
Pdesign at -10°C		kW	2,1	2,7	3,2	3,6	4,2	
nput power heating	Nominal (Min - Max)	kW	0,62 (0,18 - 0,99)	0,72 (0,18 - 1,27)	0,92 (0,18 - 1,52)	1,44 (0,19 - 1,94)	1,70 (0,34 - 2,35)	
Annual electricity consumpti	ion (heating) 2)	kWh/a	626	771	914	1.260	1.336	
ndoor Unit Silver	•		CS-XZ7SKEW	CS-XZ9SKEW	CS-XZ12SKEW	_	CS-XZ18SKEW	
ndoor Unit Matt Pearl Wh	nite		CS-Z7SKEW-M	CS-Z9SKEW-M	CS-Z12SKEW-M	CS-Z15SKEW-M	CS-Z18SKEW-M	
ower source		V	230	230	230	230	230	
lecommended fuse		A	16	16	16	16	16	
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	
ir volume	Cooling / Heating	m³/min	9,9 / 10,8	10,0 / 11,3	10,7 / 12,0	11,2 / 12,2	11,7 / 12,4	
Noisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8	
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 24 / 19	39 / 25 / 19	42 / 28 / 19	43 / 31 / 25	44 / 37 / 34	
outiu pressure »	Heating (Hi / Lo / Q-Lo)	dB(A)	38 / 25 / 19	40 / 27 / 19	42 / 33 / 19	43 / 35 / 29	44 / 37 / 34	
Dimensions / Net weight	H x W x D	mm / kg	295 x 919 x 194 / 9	295 x 919 x 194 / 10	295 x 919 x 194 / 10	295 x 919 x 194 / 10	295 x 919 x 194 / 10	
Outdoor			CU-Z7SKE	CU-Z9SKE	CU-Z12SKE	CU-Z15SKE	CU-Z18SKE	
Air volume	Cooling / Heating	m³/min	26,9 / 26,9	28,7 / 28,7	34,4 / 35,6	33,3 / 33,7	39,2 / 37,9	
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	49 / 51	47   47	
Dimensions 4) / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 30	542 x 780 x 289 / 33	619 x 824 x 299 / 35	619 x 824 x 299 / 32	695 x 875 x 320 / 46	
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	
iping length range / Elevati	on difference (in/out) 5)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 20 / 15	
ipe length for additional ga	s / Additional gas amount	m / g/m	7,5 / 10	7,5 / 10	7,5 / 10	7,5 / 10	7,5 / 15	
R32 Refrigerant amount	-	kg	0,76	0,85	0,91	0,87	1,03	
Inorating range	Cooling Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	
Operating range	Heating Min ~ Max	°C	-15 ~ +74	-15 ~ +74	-15 ~ +74	-15 ~ +74	-15 ~ +74	

Operating reason	Cooling Min ~ Max	)°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	
	·						
Accessories				Accessories			
PA-AC-WIFI-1	Full bidirectional V	Vifi interface for I	nternet control	CZ-RD514C		Wired remote controller for wall type	
PAW-IR-WIFI-1	IR Wifi interface for	or Internet control		CZ-CAPRA1		H Generation interface to ECOi control into	egration

11 EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 21 The annual energy consumption is calculated in accordance with the ErP directive. 31 The Sound pressure of the units shows the value measured of a position 1 m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. O-Lo: Quiet mode. Lo: The lowest fan speed. 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.





















## **WALL MOUNTED ETHEREA INVERTER+** SILVER / MATT PEARL WHITE • R410A GAS

#### ETHEREA

#### Etherea with enhanced Econavi sensor and new nanoe™ air-purifying system

#### Outstanding efficiency, comfort and healthy air combined with state-of-the-art design.

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, energy savings of up to 38% are possible, whilst increasing your comfort. Furthermore, the nanoe™ revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



#### Technical focus

- · Maximum efficiency and comfort with Econavi sensor
- nanoe™ air purifying system, 99% effective on both airborne and adhesive mould, viruses, bacteria and pollen allergen
- Aerowings to control air draft direction
- Mild Dry Cooling: prevent a rapid decrease in room humidity
- Super Quiet! Only 19dB(A), equivalent to night-time in the countryside
- More powerful airflow to quickly reach the desired temperature
- Wired control (Optional)
- Smartphone control (Optional)



Kit Silver			KIT-XE7-SKE	KIT-XE9-SKE	KIT-XE12-SKE	_	KIT-XE18-SKE
Kit Matt Pearl White			KIT-E7-SKEM	KIT-E9-SKEM	KIT-E12-SKEM	KIT-E15-SKEM	KIT-E18-SKEM
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75 - 2,40)	2,50 (0,85 - 3,00)	3,50 (0,85 - 4,00)	4,20 (0,85 - 5,00)	5,00 (0,98 - 5,60)
EER 1)	Nominal (Min - Max)	W/W	4,51 (3,13 - 4,29) A	4,67 (3,54 - 4,11) A	4,07 (3,54 - 3,67) A	3,33 (3,27 - 3,13) A	3,16 (3,50 - 3,08) B
SEER		W/W	7,10 A++	8,20 A++	8,10 A++	6,60 A++	6,90 A++
Pdesign (cooling)		kW	2,1	2,5	3,5	4,2	5,0
Input power cooling	Nominal (Min - Max)	kW	0,46 (0,24 - 0,56)	0,54 (0,24 - 0,73)	0,86 (0,24 - 1,09)	1,26 (0,26 - 1,60)	1,58 (0,28 - 1,82)
Annual electricity consumpt	ion (cooling) <sup>2)</sup>	kWh/a	104	107	151	223	254
Heating capacity	Nominal (Min - Max)	kW	2,80 (0,70 - 4,00)	3,40 (0,80 - 5,00)	4,00 (0,80 - 5,80)	5,30 (0,80 - 6,80)	5,80 (0,98 - 7,50)
Heating capacity at -7°C		kW	2,38	2,95	3,40	4,11	4,66
COP 1)	Nominal (Min - Max)	W/W	4,48 (3,89 - 4,00) A	4,59 (4,44 - 3,82) A	4,21 (4,44 - 3,72) A	3,58 (4,21 - 3,42) B	3,30 (2,88 - 3,10) C
SCOP		W/W	4,60 A++	4,70 A++	4,80 A++	3,90 <b>A</b>	4,20 A+
Pdesign at -10°C		kW	2,1	2,7	3,2	3,6	4,2
Input power heating	Nominal (Min - Max)	kW	0,63 (0,18 - 1,00)	0,74 (0,18 - 1,31)	0,95 (0,18 - 1,56)	1,48 (0,19 - 1,99)	1,76 (0,34 - 2,42)
Annual electricity consumpt	ion (heating) 2)	kWh/a	639	804	933	1.292	1.400
Indoor Unit Silver			CS-XE7SKEW	CS-XE9SKEW	CS-XE12SKEW	_	CS-XE18SKEW
Indoor Unit Matt Pearl W	hite		CS-E7SKEW-M	CS-E9SKEW-M	CS-E12SKEW-M	CS-E15SKEW-M	CS-E18SKEW-M
Power source		V	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5
Air volume	Cooling / Heating	m³/min	9,9 / 10,8	10,0 / 11,3	10,7 / 12,0	11,2 / 12,2	11,7 / 12,4
Moisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 24 / 19	39 / 25 / 19	42 / 28 / 19	43 / 31 / 25	44 / 37 / 34
Somin hiesznie .	Heating (Hi / Lo / Q-Lo)	dB(A)	38 / 25 / 19	40 / 27 / 19	42 / 33 / 19	43 / 35 / 29	44 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	295 x 919 x 194 / 9	295 x 919 x 194 / 10	295 x 919 x 194 / 10	295 x 919 x 194 / 10	295 x 919 x 194 / 10
Outdoor			CU-E7SKE	CU-E9SKE	CU-E12SKE	CU-E15SKE	CU-E18SKE
Air volume	Cooling / Heating	m³/min	26,9 / 26,9	28,7 / 28,7	34,4 / 35,6	33,3 / 33,3	39,2 / 37,9
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	49 / 51	47 / 47
Dimensions 4) / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 30	542 x 780 x 289 / 33	619 x 824 x 299 / 35	619 x 824 x 299 / 32	695 x 875 x 320 / 46
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevat	ion difference (in/out) 51	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 20 / 15
Pipe length for additional ga	as / Additional gas amount	m / g/m	7,5 / 20	7,5 / 20	7,5 / 20	7,5 / 20	7,5 / 20
Operating range	Cooling Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories		Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control	CZ-RD514C	Wired remote controller for wall type
PAW-IR-WIFI-1	IR Wifi interface for Internet control	CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1 m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. Q-Lo: Quiet mode. Lo: The lowest fan speed. 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit















Ontional wired remote





















## WALL MOUNTED TZ COMPACT STYLE **INVERTER • R32 GAS**



#### TZ compact indoor size

The new TZ indoor units have a new size. With 799mm of width, you can put the air conditioner on the top of the door.

New TZ Inverter models are powerful and efficient, with an outstanding energy ranking of A++/A+, unique in the market! The TZ works up to an outdoor temperature of -15°C in heating mode and -10°C up a outdoor temperature of -15°C in heating and -10°C in cooling and still with a high efficiency and capacity! Furthermore, the annual energy consumption has never been so low.



#### Technical focus

- NEW! New compact design with 799mm
- R32 gas environmental friendly
- Aerowings to control air draft direction
- PM2.5 Filter to create clean and comfort indoor quality
- Complete line-up of standard Inverter models
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R410A and R22 pipings
- Long connection distance (from 15m up to 30m)
- Wired control (Optional)
- Smartphone control (Optional)

Kit			KIT-TZ20-TKE	KIT-TZ25-TKE	KIT-TZ35-TKE	KIT-TZ42-TKE	KIT-TZ50-TKE	KIT-TZ60-TKE	KIT-TZ71-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,00 (0,75 - 2,40)	2,50 (0,85 - 3,00)	3,50 (0,85 - 3,90)	4,20 (0,85 - 4,60)	5,00 (0,98 - 5,60)	6,30 (0,98 - 7,10)	7,10 (0,98 - 8,10)
EER 1)	Nominal (Min - Max)	W/W	3,92 (3,00 - 3,87) A	3,79 (3,40 - 3,37) A	3,50 (3,33 - 3,28) A	3,33 (3,21 - 2,79) A	3,40 (3,44 - 3,24) A	3,26 (3,50 - 2,98) A	3,17 (2,33 - 3,03)
SEER		W/W	6,40 A++	6,40 A++	6,20 A++	5,80 A+	6,80 A++	6,50 A++	6,10 A++
Pdesign (cooling)		kW	2,0	2,5	3,5	4,2	5,0	6,3	7,1
Input power cooling	Nominal (Min - Max)	kW	0,51 (0,25 - 0,62)	0,66 (0,25 - 0,89)	1,00 (0,26 - 1,19)	1,26 (0,265 - 1,65)	1,47 (0,29 - 1,73)	1,93 (0,28 - 2,38)	2,24 (0,42 - 2,67)
Annual electricity consumption	in (cooling) 2)	kWh/a	255	330	500	630	735	339	407
Heating capacity	Nominal (Min - Max)	kW	2,70 (0,70 - 3,60)	3,30 (0,80 - 4,10)	4,00 (0,80 - 5,10)	5,00 (0,80 - 6,80)	5,80 (0,98 - 7,80)	7,20 (0,98 - 8,50)	8,60 (0,98 - 9,90)
Heating capacity at -7°C		kW	2,14	2,70	3,30	3,90	4,79	6,13	_
COP 1)	Nominal (Min - Max)	W/W	4,03 (3,78 - 3,46) A	4,13 (4,10 - 3,63) A	3,81 (4,00 - 3,59) A	3,70 (4,00 - 3,32) A	3,77 (2,88 - 3,39) A	3,44 (2,88 - 3,15) C	3,51 (2,45 - 3,47)
SCOP		W/W	4,10 A+	4,20 A+	4,20 A+	3,80 <b>A</b>	4,30 A+	4,20 A+	4,00 A+
Pdesign at -10°C		kW	1,9	2,4	2,8	3,6	4,0	4,6	5,5
Input power heating	Nominal (Min - Max)	kW	0,67 (0,19 - 1,04)	0,80 (0,20 - 1,13)	1,05 (0,20 - 1,42)	1,35 (0,20 - 2,05)	1,54 (0,34 - 2,30)	2,09 (0,34 - 2,70)	2,45 (0,40 - 2,85)
Annual electricity consumption	in (heating) 2)	kWh/a	649	800	933	1.326	1.302	1.533	1.925
Indoor Unit	. 0.		CS-TZ20TKEW	CS-TZ25TKEW	CS-TZ35TKEW	CS-TZ42TKEW	CS-TZ50TKEW	CS-TZ60TKEW	CS-TZ71TKEW
Air volume	Cooling / Heating	m³/min	10,0 / 10,9	10,9 / 11,6	11,8 / 12,5	12,3 / 12,9	19,9 / 20,8	17,9 / 18,9	_
Moisture removal volume	, v	L/h	1,3	1,5	2,0	2,4	2,8	3,9	_
2)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 25 / 20	40 / 26 / 20	42 / 30 / 20	44 / 31 / 29	44 / 37 / 34	45 / 37 / 30	47 / 38 / 35
Sound pressure 3)	Heating (Hi / Lo / Q-Lo)	dB(A)	38 / 26 / 22	40 / 27 / 22	42 / 33 / 22	44 / 35 / 28	44 / 37 / 34	45 / 37 / 30	47 / 38 / 35
Dimensions / Net weight	H x W x D	mm / kg	290 x 799 x 197 / 8	302 x 1.102 x 244 / 12	302 x 1.102 x 244 / —	302 x 1.102 x 244 / -			
Outdoor Unit	,		CU-TZ20TKE	CU-TZ25TKE	CU-TZ35TKE	CU-TZ42TKE	CU-TZ50TKE	CU-TZ60TKE	CU-TZ71TKE
Power source		V	230	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20	_
Connection (indoor/outdoor)		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5	_
Air volume	Cooling / Heating	m³/min	31,2 / 29,7	30,0 / 28,9	28,7 / 30,4	33,6 / 34,0	33,0 / 32,2	50,2 / 50,2	_
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	46 / 47	47 / 48	48 / 50	49 / 51	48 / 49	49 / 49	52 / 54
Dimensions 4 / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 27	542 x 780 x 289 / 32	619 x 824 x 299 / 32	619 x 824 x 299 / 40	695 x 875 x 320 / 67	695 x 875 x 320 / -
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	_
Piping length range / Elevatio	n difference (in/out)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 20 / 15	3 ~ 30 / 20	_
Pipe length for additional gas	/ Additional gas amount	m / g/m	7,5 / 10	7,5 / 10	7,5 / 10	7,5 / 10	7,5 / 15	10,0 / 25	_
R32 Refrigerant amount		kg	0,58	0,67	0,77	0,86	1,14	1,49	_
0	Cooling Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24
Accessories	Full Eddinger 1000	::::	tt		Accessories	141-	d accordance accordance (		
PA-AC-WIFI-1	Full bidirectional W		iternet control		CZ-RD514C		d remote controller for		

Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control
PAW-IR-WIFI-1	IR Wifi interface for Internet control
	· · · · · · · · · · · · · · · · · · ·

Accessories	
CZ-RD514C	Wired remote controller for wall type
CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 0-Lo: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for TZ50/60]. 4) Add 70mm for piping port. \* Tentative values























# TECHNOLOGY

#### TE compact indoor size

The new TE indoor units have a new size. With 799mm of width, you can put the air conditioner on the top of the door.

New TE Inverter models are powerful and efficient, with an outstanding energy ranking of A++/A+, unique in the market! The TE works up to an outdoor temperature of -15°C in heating mode and -10°C up a outdoor temperature of -15°C in heating and -10°C in cooling and still with a high efficiency and capacity! Furthermore, the annual energy consumption has never been so low.



#### Technical focus

- **NEW!** New compact design with 799mm
- Aerowings to control air draft direction
- PM2,5 Filter to create clean and comfort indoor quality
- Complete line-up of standard Inverter models
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R22 pipings
- Long connection distance (from 15m up to 30m)
- Wired control (Optional)
- Smartphone control (Optional)

Kit			KIT-TE20-TKE	KIT-TE25-TKE	KIT-TE35-TKE	KIT-TE42-TKE	KIT-TE50-TKE	KIT-TE60-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,00 (0,75 - 2,40)	2,50 (0,85 - 3,00)	3,50 (0,85 - 3,90)	4,20 (0,85 - 4,60)	5,00 (0,98 - 5,60)	6,30 (0,98 - 7,10)
EER 1)	Nominal (Min - Max)	W/W	3,77 (3,00 - 3,75) A	3,73 (3,40 - 3,30) A	3,43 (3,33 - 3,22) A	3,28 (3,21 - 2,75) A	3,23 (3,44 - 3,20) A	3,20 (3,50 - 2,93) A
SEER		W/W	6,10 A++	6,10 A++	6,10 A++	5,60 A+	6,50 A++	6,20 A++
Pdesign (cooling)		kW	2,0	2,5	3,5	4,2	5,0	6,3
Input power cooling	Nominal (Min - Max)	kW	0,53 (0,25 - 0,64)	0,67 (0,25 - 0,91)	1,02 (0,26 - 1,21)	1,28 (0,27 - 1,67)	1,55 (0,29 - 1,75)	1,97 (0,28 - 2,42)
Annual electricity consumptio	n (cooling) 2)	kWh/a	115	143	201	263	269	356
Heating capacity	Nominal (Min - Max)	kW	2,70 (0,70 - 3,60)	3,30 (0,80 - 4,10)	4,00 (0,80 - 5,10)	5,00 (0,80 - 6,80)	5,80 (0,98 - 7,80)	7,20 (0,98 - 8,50)
Heating capacity at -7°C		kW	2,14	2,70	3,30	3,90	4,98	6,13
COP 1)	Nominal (Min - Max)	W/W	3,97 (3,78 - 3,43) A	4,07 (4,10 - 3,57) A	3,74 (4,00 - 3,54) A	3,65 (4,00 - 3,29) A	3,63 (2,88 - 3,36) A	3,38 (2,88 - 3,10) C
SCOP		W/W	4,00 A+	4,10 A+	4,10 A+	3,80 <b>A</b>	4,10 A+	4,00 A
Pdesign at -10°C		kW	1,9	2,4	2,8	3,6	4,0	4,6
Input power heating	Nominal (Min - Max)	kW	0,68 (0,19 - 1,05)	0,81 (0,20 - 1,15)	1,07 (0,20 - 1,44)	1,37 (0,20 - 2,07)	1,60 (0,34 - 2,32)	2,13 (0,34 - 2,74)
Annual electricity consumptio	n (heating) 2)	kWh/a	665	820	956	1.326	1.366	1.610
Indoor Unit			CS-TE20TKEW	CS-TE25TKEW	CS-TE35TKEW	CS-TE42TKEW	CS-TE50TKEW	CS-TE60TKEW
Air volume	Cooling / Heating	m³/min	10,0 / 10,9	10,9 / 11,6	11,8 / 12,5	12,3 / 12,9	19,9 / 20,8	17,9 / 18,9
Moisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8	3,9
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 25 / 20	40 / 26 / 20	42 / 30 / 20	44 / 31 / 29	44 / 37 / 34	45 / 37 / 30
200110 hissons .	Heating (Hi / Lo / Q-Lo)	dB(A)	38 / 26 / 22	40 / 27 / 22	42 / 33 / 22	44 / 35 / 28	44 / 37 / 34	45 / 37 / 30
Dimensions / Net weight	H x W x D	mm / kg	290 x 799 x 197 / 8	290 x 1.120 x 244 / 12	290 x 1.120 x 244 / —			
Outdoor Unit			CU-TE20TKE	CU-TE25TKE	CU-TE35TKE	CU-TE42TKE	CU-TE50TKE	CU-TE60TKE
Power source		V	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	16
Connection (indoor/outdoor)		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5
Air volume	Cooling / Heating	m³/min	31,2 / 29,7	30,0 / 28,9	28,7 / 30,4	33,6 / 34,0	39,2 / 37,9	50,2 / 50,2
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	46 / 47	47 / 48	48 / 50	49 / 51	48 / 49	49 / 49
Dimensions 4) / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 27	542 x 780 x 289 / 32	619 x 824 x 299 / 32	619 x 824 x 299 / 34	695 x 875 x 320 / 67
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevatio	n difference (in/out)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 20 / 15	3 ~ 30 / 20
Pipe length for additional gas	/ Additional gas amount	m / g/m	7,5 / 15	7,5 / 15	7,5 / 20	7,5 / 20	7,5 / 20	10,0 / 30
Operating range	Cooling Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
uperacing range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control
PAW-IR-WIFI-1	IR Wifi interface for Internet control

Accessories	
CZ-RD514C	Wired remote controller for wall type
CZ-CAPRA1	H Generation interface to ECOi control integration

1] EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2] The annual energy consumption is calculated in accordance with the ErP directive. 3] The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. Q-Lo: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for TE50/60). 4) Add 70mm for piping port. \* Tentative values

















Optional wired



Rating Conditions: Cooling Indoor 27°C DB / 19°C WB. Cooling Outdoor 35°C DB / 24°C WB. Heating Indoor 20°C DB. Heating Outdoor 7°C DB / 6°C WB. [DB: Dry Bulb; WB: Wet Bulb]
Specifications subject to chance without notice. For detailed information about ErP. please visit our websites www.aircon.panasonic.eu or www.ofc.panasonic.eu.

# WALL MOUNTED KE TYPE STANDARD **INVERTER • R410A GAS**



#### New KE series inverter powerful and efficient.



#### **Technical focus**

- NEW! New design
- PM2,5 Filter to create clean and comfort indoor quality
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R22 pipings
- Long connection distance
- Wired control (Optional)
- Smartphone control (Optional)



Kit*			KIT-KE25-TKE	KIT-KE35-TKE	KIT-KE50-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 3,90)	5,00 (0,98 - 5,40)
EER 1)	Nominal (Min - Max)	W/W	3,57 (3,40 - 3,26) A	3,12 (3,33 - 3,00) B	2,98 (3,44 - 2,86) C
SEER		W/W	6,20 A++	6,10 A	6,20 A++
Pdesign (cooling)		kW	2,5	3,4	5,0
Input power cooling	Nominal (Min - Max)	kW	0,70 (0,25 - 0,92)	1,09 (0,26 - 1,30)	1,68 (0,29 - 1,89)
Annual electricity consump	tion (cooling) <sup>2)</sup>	kWh/a	350	545	840
Heating capacity	Nominal (Min - Max)	kW	3,15 (0,80 - 3,60)	3,84 (0,80 - 4,40)	5,40 (0,98 - 7,50)
Heating capacity at -7°C		kW	2,14	2,60	4,58
COP 1)	Nominal (Min - Max)	W/W	3,99 (4,10 - 3,43) A	3,66 (4,10 - 3,41) A	3,38 (2,80 - 3,04) C
SCOP		W/W	3,80 A	3,80 ◀▲	3,90 ◀▲
Pdesign at -10°C		kW	1,9	2,4	4,0
Input power heating	Nominal (Min - Max)	kW	0,79 (0,20 - 1,05)	1,05 (0,20 - 1,29)	1,60 (0,35 - 2,47)
Annual electricity consumpt	tion (heating) <sup>2)</sup>	kWh/a	700	884	1.436
Indoor Unit			CS-KE25TKE	CS-KE35TKE	CS-KE50TKE
Power source		V	230	230	230
Recommended fuse		A	16	16	16
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5
Air volume	Cooling / Heating	m³/min	10,3 / 11,0	10,7 / 11,2	11,6 / 12,5
Moisture removal volume		L/h	1,5	2,0	2,8
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 26 / 20	38 / 30 / 20	44 / 37 / 34
200110 hiezzaie 2	Heating (Hi / Lo / Q-Lo)	dB(A)	37 / 27 / 24	38 / 33 / 25	44 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	290 x 850 x 199 / 8	290 x 850 x 199 / 8	290 x 870 x 214 / 9
Outdoor Unit			CU-KE25TKE	CU-KE35TKE	CU-KE50TKE
Air volume	Cooling / Heating	m³/min	30,5 / 30,5	31,1 / 31,1	32,7 / 32,7
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	48 / 49	48 / 50	48 / 49
Dimensions 4 / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 29	619 x 824 x 299 / 38
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevat	tion difference (in/out) 5)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15
Pipe length for additional g	as / Additional gas amount	m / g/m	7,5 / 15	7,5 / 20	7,5 / 20
Operating range	Cooling Min ~ Max	°C	+5 ~ +43	+5 ~ +43	+5 ~ +43
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories					
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control				
PAW-IR-WIFI-1	IR Wifi interface for Internet control				

Accessories	
CZ-RD514C	Wired remote controller for wall type
CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. Q-Lo: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for KE50) 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. \* Tentative data.





































# **WALL MOUNTED BE TYPE STANDARD INVERTER • R410A GAS**



#### New BE series inverter powerful and efficient.



#### Technical focus

- **NEW!** New design
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R22 pipings
- Long connection distance
- Wired control (Optional)
- Smartphone control (Optional)



Kit*			KIT-BE25-TKE	KIT-BE35-TKE	KIT-BE50-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 3,90)	5,00 (0,98 - 5,40)
EER 1)	Nominal (Min - Max)	W/W	3,52 (3,40 - 3,23) A	3,06 (3,33 - 2,95) B	2,94 (3,44 - 2,83) C
SEER		W/W	5,80 < A+	5,60 < A+	5,90 A+
Pdesign (cooling)		kW	2,5	3,4	5,0
Input power cooling	Nominal (Min - Max)	kW	0,71 (0,25 - 0,93)	1,11 (0,26 - 1,32)	1,70 (0,29 - 1,91)
Annual electricity consumpt	tion (cooling) <sup>2)</sup>	kWh/a	355	555	850
Heating capacity	Nominal (Min - Max)	kW	3,15 (0,80 - 3,60)	3,84 (0,80 - 4,40)	5,40 (0,98 - 7,50)
Heating capacity at -7°C		kW	2,14	2,60	4,58
COP 1)	Nominal (Min - Max)	W/W	4,04 (4,10 - 3,46) A	3,69 (4,10 - 3,44) A	3,40 (2,80 - 3,05) C
SCOP		W/W	4,00 A+	4,00 A+	4,00 A+
Pdesign at -10°C		kW	1,9	2,4	4,0
Input power heating	Nominal (Min - Max)	kW	0,80 (0,20 - 1,04)	1,04 (0,20 - 1,28)	1,59 (0,35 - 2,46)
Annual electricity consumpt	tion (heating) <sup>2)</sup>	kWh/a	665	840	1.400
Indoor Unit			CS-BE25TKE	CS-BE35TKE	CS-BE50TKE
Power source		V	230	230	230
Recommended fuse		A	16	16	16
Connection indoor / outdoor	,	mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5
Air volume	Cooling / Heating	m³/min	10,3 / 11,0	10,7 / 11,2	11,6 / 12,5
Moisture removal volume		L/h	1,5	2,0	2,8
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 26 / 20	38 / 30 / 20	44 / 37 / 34
onnin hiesenie .	Heating (Hi / Lo / Q-Lo)	dB(A)	37 / 27 / 24	38 / 33 / 25	44 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	290 x 850 x 199 / 8	290 x 850 x 199 / 8	290 x 870 x 214 / 9
Outdoor Unit			CU-BE25TKE	CU-BE35TKE	CU-BE50TKE
Air volume	Cooling / Heating	m³/min	30,5 / 30,5	31,1 / 31,1	32,7 / 32,7
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	48 / 49	48 / 50	48 / 49
Dimensions 4) / Net weight	HxWxD	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 29	619 x 824 x 299 / 38
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevat	tion difference (in/out) 5)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15
Pipe length for additional ga	as / Additional gas amount	m / g/m	7,5 / 15	7,5 / 20	7,5 / 20
Operating range	Cooling Min ~ Max	°C	+5 ~ +43	+5 ~ +43	+5 ~ +43
oherarilià tallàs	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories		Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control	CZ-RD514C	Wired remote controller for wall type
PAW-IR-WIFI-1	IR Wifi interface for Internet control	CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 0-Lo: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for BE50) 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. \* Tentative data.











Ontional wired remote















# WALL MOUNTED DE TYPE STANDARD **INVERTER • R410A GAS**

# NEW TECHNOLOGY

#### New DE Inverter models are powerful and efficient.



#### Technical focus

- NEW! New design
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R22 pipings
- Long connection distance
- Wired control (Optional)
- Smartphone control (Optional)



Kit*			KIT-DE25-TKE	KIT-DE35-TKE	KIT-DE50-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 3,90)	5,00 (0,98 - 5,40)
EER 1)	Nominal (Min - Max)	W/W	3,52 (3,40 - 3,23) A	3,06 (3,33 - 2,95) B	2,94 (3,44 - 2,83) C
SEER		W/W	5,80 A+	5,60 A+	5,90 A+
Pdesign (cooling)		kW	2,5	3,4	5,0
Input power cooling	Nominal (Min - Max)	kW	0,71 (0,25 - 0,93)	1,11 (0,26 - 1,32)	1,70 (0,29 - 1,91)
Annual electricity consumption	on (cooling) <sup>2)</sup>	kWh/a	355	555	850
Heating capacity	Nominal (Min - Max)	kW	3,15 (0,80 - 3,60)	3,84 (0,80 - 4,40)	5,40 (0,98 - 7,50)
Heating capacity at -7°C		kW	2,14	2,60	4,58
COP 1)	Nominal (Min - Max)	W/W	4,04 (4,10 - 3,46) A	3,69 (4,10 - 3,44) A	3,40 (2,80 - 3,05) C
SCOP		W/W	4,00 A+	4,00 A+	4,00 A+
Pdesign at -10°C		kW	1,9	2,4	4,0
Input power heating	Nominal (Min - Max)	kW	0,78 (0,20 - 1,04)	1,04 (0,20 - 1,28)	1,59 (0,35 - 2,46)
Annual electricity consumption	on (heating) <sup>2)</sup>	kWh/a	665	840	1.400
Indoor Unit			CS-DE25TKE	CS-DE35TKE	CS-DE50TKE
Power source		V	230	230	230
Recommended fuse		A	16	16	16
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5
Air volume	Cooling / Heating	m³/min	10,3 / 11,0	10,7 / 11,2	11,6 / 12,5
Moisture removal volume		L/h	1,5	2,0	2,8
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 26 / 20	38 / 30 / 20	44 / 37 / 34
200110 biessale .	Heating (Hi / Lo / Q-Lo)	dB(A)	37 / 27 / 24	38 / 33 / 25	44 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	290 x 850 x 199 / 8	290 x 850 x 199 / 8	290 x 870 x 214 / 9
Outdoor Unit			CU-DE25TKE	CU-DE35TKE	CU-DE50TKE
Air volume	Cooling / Heating	m³/min	30,5 / 30,5	31,1 / 31,1	32,7 / 32,7
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	48 / 49	48 / 50	48 / 49
Dimensions 4 / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 29	619 x 824 x 299 / 38
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevation	n difference (in/out) 5)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15
Pipe length for additional gas	/ Additional gas amount	m / g/m	7,5 / 15	7,5 / 20	7,5 / 20
Operating range	Cooling Min ~ Max	°C	+5 ~ +43	+5 ~ +43	+5 ~ +43
uperaung range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control
PAW-IR-WIFI-1	IR Wifi interface for Internet control

Accessories		
CZ-RD514C	Wired remote controller for wall type	
CZ-CAPRA1	H Generation interface to ECOi control integration	

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 0-Lo: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed for DE50) 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. \* Tentative data.













Optional wired remote

















# WALL MOUNTED UZ TYPE STANDARD **INVERTER • R32 GAS**



#### New UZ series inverter powerful and efficient.



#### Technical focus

- **NEW!** New design
- R32 gas environmental friendly
- PM2,5 Filter to create clean and comfort indoor quality
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R22 pipings
- Long connection distance
- Wired control (Optional)
- Smartphone control (Optional)



Kit*			KIT-UZ9-SKE	KIT-UZ12-SKE	KIT-UZ18-SKE	KIT-UZ60-TKE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 3,90)	5,00 (0,98 - 5,40)	6,25 (0,98 - 7,10)
EER 1)	Nominal (Min - Max)	W/W	3,68 (3,40 - 3,33) A	3,18 (3,33 - 3,05) B	3,03 (3,44 - 2,90) B	3,24 (3,50 - 2,96) A
SEER		W/W	6,20 A++	6,10 A++	6,50 A++	6,20 A++
Pdesign (cooling)		kW	2,5	3,4	5,0	6,3
Input power cooling	Nominal (Min - Max)	kW	0,68 (0,25 - 0,90)	1,07 (0,26 - 1,28)	1,65 (0,29 - 1,86)	1,93 (0,28 - 2,40)
Annual electricity consumpt	tion (cooling) <sup>2)</sup>	kWh/a	340	535	825	965
Heating capacity	Nominal (Min - Max)	kW	3,15 (0,80 - 3,60)	3,84 (0,80 - 4,40)	5,40 (0,98 - 7,50)	6,80 (0,98 - 8,50)
Heating capacity at -7°C		kW	2,14	2,60	4,58	5,24
COP 1)	Nominal (Min - Max)	W/W	4,04 (4,10 - 3,46) A	3,66 (4,10 - 3,41) A	3,42 (2,80 - 3,06) B	3,51 (2,88 - 3,11) B
SCOP		W/W	3,80 <b>A</b>	3,80 < A	3,90 <b>A</b>	3,90 🔺
Pdesign at -10°C		kW	1,9	2,4	4,0	4,6
Input power heating	Nominal (Min - Max)	kW	0,78 (0,20 - 1,04)	1,05 (0,20 - 1,29)	1,58 (0,35 - 2,45)	1,94 (0,34 - 2,73)
Annual electricity consumpt	tion (heating) <sup>2)</sup>	kWh/a	700	884	1.436	1.651
Indoor Unit			CS-UZ9SKE	CS-UZ12SKE	CS-UZ18SKE	CS-UZ60TKE
Power source		V	230	230	230	230
Recommended fuse	Recommended fuse A		16	16	16	_
Connection indoor / outdoor	ſ	mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 2,5	_
Air volume	Cooling / Heating	m³/min	10,3 / 11,0	10,7 / 11,2	11,3 / 12,0	16,9 / 18,7
Moisture removal volume		L/h	1,5	2,0	2,8	3,5
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 26 / 20	38 / 30 / 20	44 / 37 / 34	45 / 37 / 31
Sonia hiesenie	Heating (Hi / Lo / Q-Lo)	dB(A)	37 / 27 / 24	38 / 33 / 25	44 / 37 / 34	45 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	290 x 850 x 199 / 8	290 x 850 x 199 / 8	290 x 870 x 214 / 9	290 x 1.070 x 240 / 12
Outdoor Unit			CU-UZ9SKE	CU-UZ12SKE	CU-UZ18SKE	CU-UZ60TKE
Air volume	Cooling / Heating	m³/min	31,2 / 31,2	31,1 / 31,1	34,4 / 34,0	42,6 / 41,5
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	48 / 49	48 / 50	48 / 49	49 / 49
Dimensions 4) / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 27	619 x 824 x 299 / 38	695 x 875 x 320 / 43
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevat	tion difference (in/out)	m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 30 / 15
Pipe length for additional ga	as / Additional gas amount	m / g/m	7,5 / 10	7,5 / 10	7,5 / 15	7,5 / 15
R32 Refrigerant amount		kg	0,58	0,67	1,14	1,15
Operating range	Cooling Min ~ Max	°C	+5 ~ +43	+5 ~ +43	+5 ~ +43	+5 ~ +43
Operating range	Heating Min ~ Max	O°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

	modeling i iiii i idx	0	10 - 24	10 - 24	10 - 24	10 . 54
Accessories				Accessories		
PA-AC-WIFI-1	-WIFI-1 Full bidirectional Wifi interface for Internet control			CZ-RD514C	Wired remote controller for wall t	уре
PAW-IR-WIFI-1	IFI-1 IR Wifi interface for Internet control			CZ-CAPRA1	H Generation interface to ECOi coi	ntrol integration

1] EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 0-Lo: The lowest fan speed. Lo: The second lowest fan speed (the lowest fan speed of UZ18/60) 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.

















Optional wired controller

53

Rating Conditions: Cooling Indoor 27°C DB / 19°C WIB. Cooling Outdoor 35°C DB / 24°C WIB. Heating Indoor 20°C DB. Heating Outdoor 7°C DB / 6°C WIB. (DB: Dry Bulb; WB: Wet Bulb) Specifications subject to change without notice. For detailed information about ErP, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

# WALL MOUNTED PZ TYPE STANDARD **INVERTER • R32 GAS**



#### New PZ Inverter models are powerful and efficient.



#### **Technical focus**

- NEW! New design
- R32 gas environmental friendly
- Super Quiet! Only 20dB(A)
- High energy savings
- This units can be installed on R410A and R22 pipings
- Long connection distance
- Wired control (Optional)
- Smartphone control (Optional)

Kit		KIT-PZ25-TKE	KIT-PZ35-TKE	KIT-PZ50-TKE	
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 3,90)	5,00 (0,98 - 5,40)
EER 1)	Nominal (Min - Max)	W/W	3,62 (3,40 - 3,30) A	3,09 (3,33 - 3,00) B	2,98 (3,44 - 2,86) C
SEER		W/W	5,80 A+	5,60 A+	6,00 👫
Pdesign (cooling)		kW	2,5	3,4	5,0
Input power cooling	Nominal (Min - Max)	kW	0,69 (0,25 - 0,91)	1,10 (0,26 - 1,30)	1,68 (0,29 - 1,89)
Annual electricity consumption	n (cooling) 2)	kWh/a	151	213	292
Heating capacity	Nominal (Min - Max)	kW	3,15 (0,80 - 3,60)	3,84 (0,80 - 4,40)	5,40 (0,98 - 7,50)
Heating capacity at -7°C		kW	2,14	2,60	4,58
COP 1)	Nominal (Min - Max)	W/W	4,09 (4,10 - 3,50) A	3,69 (4,10 - 3,46) A	3,44 (2,80 - 3,07) B
SCOP		W/W	4,10 A+	4,10 A+	4,00 <b>A</b> +
Pdesign at -10°C		kW	1,9	2,4	4,0
Input power heating	Nominal (Min - Max)	kW	0,77 (0,20 - 1,03)	1,04 (0,20 - 1,27)	1,57 (0,35 - 2,44)
Annual electricity consumption	n (heating) <sup>2)</sup>	kWh/a	649	820	1.366
Indoor Unit	Indoor Unit		CS-PZ25TKE	CS-PZ35TKE	CS-PZ50TKE
Power source		V	230	230	230
Recommended fuse		A	16	16	16
Connection indoor / outdoor		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5
Air volume	Cooling / Heating	m³/min	10,3 / 11,0	10,7 / 11,2	11,6 / 12,5
Moisture removal volume		L/h	1,5	2,0	2,8
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	37 / 26 / 20	38 / 30 / 20	44 / 37 / 34
Judiu pressure	Heating (Hi / Lo / Q-Lo)	dB(A)	37 / 27 / 24	38 / 33 / 25	44 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	290 x 850 x 199 / 8	290 x 850 x 199 / 8	290 x 870 x 214 / 9
Outdoor Unit			CU-PZ25TKE	CU-PZ35TKE	CU-PZ50TKE
Air volume	Cooling / Heating	m³/min	30,5 / 30,5	31,1 / 31,1	32,7 / 32,7
Sound pressure 31	Cooling / Heating (Hi)	dB(A)	48 / 49	48 / 50	48 / 49
Dimensions 4 / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 26	542 x 780 x 289 / 27	619 x 824 x 299 / 38
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevation		m	3 ~ 15 / 15	3 ~ 15 / 15	3 ~ 15 / 15
Pipe length for additional gas	/ Additional gas amount	m / g/m	7,5 / 10	7,5 / 10	7,5 / 15
R32 Refrigerant amount		kg	0,58	0,67	1,14
Operating range	Cooling Min ~ Max	°C	+5 ~ +43	+5 ~ +43	+5 ~ +43
	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
PA-AC-WIFI-1	Full bidirectional Wifi interface for Internet control
PAW-IR-WIFI-1	IR Wifi interface for Internet control

Accessories	
CZ-RD514C	Wired remote controller for wall type
CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1 meter in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. Q-Lo: The lowest fan speed. Lo: The second lowest fan speed. 4) Add 70mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.

















Ontional wired remote



## WALL MOUNTED PROFESSIONAL **INVERTER -20°C • R410A GAS**

#### Complete line-up with high efficiency even at -20°C

This Wall Mounted air conditioner is especially designed for professional applications such as computer rooms where cooling inside the room is necessary even when the outside temperature is low. Furthermore this air conditioner has an automatic changeover system, in order to maintain the inside temperature even when sharp outside temperature changes occur.



#### Technical focus

- This units can be installed on R22 pipingss
- Designed for 24h/7d a week operation
- Highly efficient even at -20°C
- High durability rolling bearings
- Additional piping sensors to prevent freezing

Kit			KIT-E9-PKEA	KIT-E12-PKEA	KIT-E15-PKEA	KIT-E18-PKEA
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,50 (0,85 - 4,00)	4,20 (0,98 - 5,00)	5,00 (0,98 - 6,00)
EER 1)	Nominal (Min - Max)	W/W	4,85 (4,23 - 5,00) A	4,02 (3,57 - 5,00) A	3,50 (3,50 - 3,16) A	3,47 (3,50 - 3,02) A
Cooling capacity at -10°C	/ -20°C	kW	2,63 / 2,61	3,69 / 3,66	5,04 / 4,06	6,00 / 5,82
EER at -10°C / -20°C		W/W	7,19 / 6,71	5,96 / 5,56	6,01 / 4,39	6,00 / 5,39
SEER 2)		W/W	7,10 < A++	6,70 < A++-	6,30 < A++	6,90 A++
Pdesign		kW	2,5	3,5	4,2	5,0
Input power cooling	Nominal (Min - Max)	kW	0,52 (0,17 - 0,71)	0,87 (0,17 - 1,12)	1,20 (0,28 - 1,58)	1,44 (0,28 - 1,99)
Annual electricity consum	ption (cooling) <sup>3)</sup>	kWh/a	123	183	233	254
Heating capacity	Nominal (Min - Max)	kW	3,40 (0,85 - 5,40)	4,00 (0,85 - 6,60)	5,40 (0,98 - 7,10)	5,80 (0,98 - 8,00)
Heating capacity at -7°C 4	]	kW	3,33	4,07	4,10	4,98
COP 1)	Nominal (Min - Max)	W/W	4,86 (4,12 - 5,15) A	4,35 (3,63 - 5,15) A	3,75 (2,88 - 3,24) A	3,82 (2,88 - 3,11) A
SCOP 5)		W/W	4,40 A+	4,10 A+	3,90 <b>▲</b>	4,20 <b>▲</b> +
Pdesign at -10°C		kW	2,8	3,6	3,6	4,4
Input power heating	Nominal (Min - Max)	kW	0,70 (0,17 - 1,31)	0,92 (0,17 - 1,82)	1,44 (0,34 - 2,19)	1,52 (0,34 - 2,57)
Annual electricity consum	ption (heating) <sup>3)</sup>	kWh/a	891	1.229	1.292	1.467
Indoor Unit			CS-E9PKEA	CS-E12PKEA	CS-E15PKEA	CS-E18PKEA
Power source		V	230	230	230	230
Recommended fuse		A	16	16	16	16
Connection indoor / outdoo	Dr	mm	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5
Air Volume	Cooling / Heating	m³/min	13,3 / 14,6	13,6 / 14,7	14,1 / 15,0	17,9 / 19,3
Moisture removal volume		L/h	1,5	2,0	2,4	2,8
Sound pressure 6)	Cooling — Heating (Hi / Lo / S-Lo)	dB(A)	39 / 26 / 23 — 40 / 27 / 24	42 / 29 / 26 — 42 / 33 / 29	43 / 32 / 29 — 43 / 35 / 29	44 / 37 / 34 — 44 / 37 / 34
Dimensions / Net weight	H x W x D	mm / kg	295 x 870 x 255 / 10	295 x 870 x 255 / 10	295 x 870 x 255 / 10	295 x 1.070 x 255 / 13
Outdoor Unit			CU-E9PKEA	CU-E12PKEA	CU-E15PKEA	CU-E18PKEA
Sound pressure 6)	Cooling / Heating (Hi)	dB(A)	46 / 47	48 / 50	46 / 46	47 / 47
Dimensions 7] / Net weight	H x W x D	mm / kg	622 x 824 x 299 / 36	622 x 824 x 299 / 36	695 x 875 x 320 / 45	695 x 875 x 320 / 46
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Eleva	ation difference (in/out) <sup>8)</sup>	m	3 ~ 15 / 5	3 ~ 15 / 5	3 ~ 15 / 15	3 ~ 20 / 15
Pipe length for additional	gas / Additional gas amount	m / g/m	7,5 / 20	7,5 / 20	7,5 / 20	7,5 / 20
Operating range	Cooling / Heating Min ~ Max	°C	-20 ~ +43 / -15 ~ +24	-20 ~ +43 / -15 ~ +24	-20 ~ +43 / -15 ~ +24	-20 ~ +43 / -15 ~ +24

Accessories	
PAW-GRDSTD40	Outdoor elevation platform
PAW-WTRAY	Tray for condenser water compatible with base ground support

Accessories	
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-SERVER-PKEA	PCB for installation in server rooms with security
CZ-CAPRA1	H Generation interface to ECOi control integration

Rating Conditions for cooling capacity at low temperature: Cooling Indoor 2°°C DB / 19°C WB. Cooling Outdoor 0°C DB / -10°C WB. 1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2) SEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit SEER-a[EER25]+b[EER50]+c[EER75]+d[EER00] where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively, a, b, c and d are values assigned for an office type. These values are given as a=0,2, b=0,36, c=0,32 and d=0,03. The internal temperatures are taken at 27°C DB and 19°C WB. 3) The annual consumption (ErP) is calculated by formula determined by ErP regulation. 4) Heating capacity is calculated including defrost factor correction. 5] SCOP is calculated in base Eurowent IPLV for SBEM with U1 indoor unit including defrost correction factor. 6) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1,5m from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 7) Add 70mm for piping port. 8) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A.

























# MORE FOR YOUR HOME



# FLOOR CONSOLE TYPE INVERTER+

## • R410A GAS



Console designed for discreet integration on walls, and for high performance, specifically in heat mode even when the outside temperature is as low as -15°C.

Double airflow for improved comfort and temperature dispersion: through the top for an efficient cooling mode, through the bottom for quick heating.

#### Technical focus

- This units can be installed on R22 pipingss
- More efficient than ever for improved energy consumption and higher savings
- Heating mode down to -15°C with high efficiency
- Double airflow for better efficiency
- Powerful mode for quick temperature setting
- R410A refrigerant gas

Kit			KIT-E9-PFE	KIT-E12-PFE	KIT-E18-PFE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,50 (0,85 - 3,80)	5,00 (0,98 - 5,60)
EER 1)		W/W	4,50 A	3,72 A	3,25 A
SEER		W/W	6,10 A++	5,80 A+	6,20 A++
Pdesign (cooling)		kW	2,50	3,50	5,00
Input power cooling		kW	0,56	0,94	1,54
Annual electricity consumption	on (cooling) <sup>2)</sup>	kWh/a	143	211	282
leating capacity	Nominal (Min - Max)	kW	3,40 (0,85 - 5,00)	4,00 (0,85 - 6,00)	5,80 (0,98 - 7,10)
leating capacity at -7°C		kW	2,35	2,86	3,87
COP 1)		W/W	4,20 A	4,00 A	3,63 A
SCOP		W/W	3,80 🗛	3,80 < A	3,90 < A
Pdesign at -10°C		kW	2,7	3,2	4,4
nput power heating		kW	0,81	1,00	1,60
Annual electricity consumption	on (heating) <sup>2)</sup>	kWh/a	995	1.179	1.579
ndoor Unit			CS-E9GFEW	CS-E12GFEW	CS-E18GFEW
lecommended fuse		A	16	16	16
Connection		mm <sup>2</sup>	3 x 1,5	3 x 1,5	3 x 2,5
ir volume	Cooling / Heating	m³/min	9,3 / 9,6	9,5 / 10,0	11,0 / 13,0
foisture removal volume		L/h	1,4	2,0	2,8
Sound pressure 3)	Cooling (Hi / Lo / Q-Lo)	dB(A)	38 / 27 / 23	39 / 28 / 24	44 / 36 / 32
onin hissons .	Heating (Hi / Lo / Q-Lo)	dB(A)	38 / 27 / 23	39 / 27 / 23	46 / 36 / 32
limensions / Net weight	H x W x D	mm / kg	600 x 700 x 210 / 14	600 x 700 x 210 / 14	600 x 700 x 210 / 14
Outdoor Unit			CU-E9PFE	CU-E12PFE	CU-E18PFE
ower source		V	230	230	230
Cound pressure 3)	Cooling / Heating (Hi)	dB(A)	46 / 47	48 / 50	47 / 48
Dimensions 4) / Net weight	H x W x D	mm / kg	542 x 780 x 289 / 33	619 x 824 x 299 / 34	695 x 875 x 320 / 46
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevatio	on difference (in/out)	m	3 ~ 15 / 5	3 ~ 15 / 5	3 ~ 20 / 15
Pipe length for additional gas	s / Additional gas amount	m / g/m	7,5 / 20	7,5 / 20	7,5 / 20
Inorating range	Cooling Min ~ Max	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories
PAW-IR-WIFI-1 IR Wifi interface for Internet control

1] EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2] The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure level of the units shows the value measured of a position 1 metre in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70mm for piping port.























## **4 WAY 60x60 CASSETTE STANDARD INVERTER • R410A GAS**



Specially designed for offices, retail and restaurant applications, this cassette fits perfectly into 60x60 or 70x70 ceiling grids.

Featuring the best efficiency in its category (heating and cooling up to -10°C, this new cassette in 9 and 12kW versions can also be connected to KNX, Modbus, EnOcean interfaces for easy integration with your BMS systems. Interfaces have dry contacts (ON/OFF, error message) to enable easy integration.

With the new IntesisHome interface, you can also control the cassette from your smartphone and internet very easily!

Fit Panasonic's Cassette Type, and start to save all year round!

#### **Technical focus**

- · Cassettes can be controlled by IntesisHome, KNX, EnOcean and Modbus
- This units can be installed on R22 pipingss
- Designed for easy installation in the standard European 60x60 ceiling
- Operation down to -10°C in cooling and heating modes
- Piping length up to 30m
- Maximum elevation difference up to 20m
- Ultra compact outdoor units for easy installation
- High pressure selector in case of high ceilings (higher than 2,7m)
- Drain pump included (maximum 750mm high)
- · Air fresh entry available on the cassette

Cooling paperly   Nominal (Min - Max)   NW   2,50 (0,85 - 2,001   3,40 (1,85 - 4,001   5,00 (1,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,801   5,90 (9,90 - 5,90   5,90 (9,90 - 5,90   5,90 (9,90   5,90 (9,90   5,90   5,90 (9,90   5,90 (9,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90   5,90 (9,90   5,90	KIT			KIT-E9-PB4EA	KIT-E12-PB4EA	KIT-E18-RB4EA	KIT-E21-RB4EA
SEER	Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 4,00)	5,00 (0,90 - 5,80)	5,90 (0,90 - 6,30)
Pdesign (cooling)   Nominal (Min - Max)	EER 1)	Nominal (Min - Max)	W/W	4,55 (3,54 - 4,05) A	3,82 (3,54 - 3,33) A	3,13 (3,53 - 2,97) B	2,88 (3,53 - 2,86) C
Input power cooling   Nominal (Min - Max)   MW   0,55 (0,24 - 0,74)   0.89 (0,24 - 1,20)   1.60 (0,25 - 1,95)   2,05 (0,26 - 2,20)   Annual elettricity consumption (cooling)   Nominal (Min - Max)   MW   3,20 (0,85 - 4,80)   4,50 (0,85 - 5,60)   5,60 (0,90 - 7,10)   7,00 (0,90 - 8,00)   Heating capacity at -7°C   MW   2,60   3,00   SCOP   MW   4,00 (3.70 - 3,56)   A   3,17 (3,7 - 2,80)   D   3,01 (3,46 - 2,92)   D   2,86 (3,46 - 2,84)   D   SCOP   MW   4,00 (4.00 - 1,00)   Mominal (Min - Max)   MW   4,00 (4.00 - 1,00)   Mominal (Min - Max)   MW   4,00 (4.00 - 1,00)   Mominal (Min - Max)   MW   4,00 (4.00 - 1,00)   Mominal (Min - Max)   MW   4,00 (4.00 - 1,00)   Mominal (Min - Max)   MW   2,70   3,00   3,80   4,10 (4.00 - 1,00)   Mominal (Min - Max)   MW   0,80 (0,23 - 1,35)   1,42 (0,23 - 2,00)   1,86 (0,26 - 2,43)   2,45 (0,26 - 2,82)   Annual elettricity consumption (heating)   Mominal (Min - Max)   MW   9,45   1,105   1,296   1,366   Modern Unit   Mominal (Min - Max)   MW   9,45   1,105   1,296   1,366   Modern Unit   Mominal (Min - Max)   MWh/a   9,45   1,105   1,296   1,366   Modern Unit   Mominal (Min - Max)   MWh/a   9,45   1,105   1,296   1,366   Modern Unit   Mominal (Min - Max)   MWh/a   9,45   1,105   1,296   1,290	SEER		W/W	5,80 <a+< td=""><td>5,60 <a+< td=""><td>5,80 <b>△</b>A+</td><td>5,60 A+</td></a+<></td></a+<>	5,60 <a+< td=""><td>5,80 <b>△</b>A+</td><td>5,60 A+</td></a+<>	5,80 <b>△</b> A+	5,60 A+
Annual electricity consumption (cooling) <sup>21</sup>	Pdesign (cooling)		kW	2,50	3,40	5,00	5,90
Heating capacity   Nominal (Min - Max)   MW   3,20 (0,85 - 4,80)   4,50 (0,85 - 5,60)   5,60 (0,90 - 7,10)   7,00 (0,90 - 8,00)	Input power cooling	Nominal (Min - Max)	kW	0,55 (0,24 - 0,74)	0,89 (0,24 - 1,20)	1,60 (0,26 - 1,95)	2,05 (0,26 - 2,20)
Heating capacity at -7°C	Annual electricity consumption	on (cooling) <sup>2)</sup>	kWh/a	151	213	302	369
COP   Nominal (Min - Max)   W/W   4,00 (370 - 3,56) A   3,17 (3,7 - 2,80) D   3,01 (3,46 - 2,92) D   2,86 (3,46 - 2,84) D	Heating capacity	Nominal (Min - Max)	kW	3,20 (0,85 - 4,80)	4,50 (0,85 - 5,60)	5,60 (0,90 - 7,10)	7,00 (0,90 - 8,00)
SCOP   W/W   4,00			kW	2,60	3,00		
Pdesign at -10°C	COP 1)	Nominal (Min - Max)		4,00 (3,70 - 3,56) A	3,17 (3,7 - 2,80) D	3,01 (3,46 - 2,92) D	
Input power heating   Nominal (Min - Max)   kW   0.80 (0.23 - 1,35)   1.42 (0.23 - 2,00)   1.86 (0.26 - 2,43)   2.45 (0.26 - 2,82)	SCOP			4,00 A-	3,80 ◀▲	4,10 <b>△</b> A•	4,10 <b>A</b> +
Annual electricity consumption   Ineating   21	Pdesign at -10°C		kW	2,70	3,00	3,80	4,00
Note	Input power heating	Nominal (Min - Max)			1,42 (0,23 - 2,00)	1,86 (0,26 - 2,43)	2,45 (0,26 - 2,82)
Power source   V   230	Annual electricity consumption	on (heating) <sup>2)</sup>	kWh/a	945	1.105	1.298	1.366
Recommended fuse	Indoor Unit			***************************************		CS-E18RB4EAW	
Connection	Power source		V				
Air volume	Recommended fuse		A				
Moisture removal volume	Connection						
Cooling (Hi / Lo / O-Lo)   dB(A)   34 / 26 / 23   34 / 26 / 23   37 / 28 / 25   38 / 29 / 26   42 / 33 / 30		Cooling / Heating					
Heating (Hi / Lo / O-Lo)   dB(A)   35 / 28 / 25   35 / 28 / 25   38 / 29 / 26   43 / 34 / 31	Moisture removal volume			,	,	,	.,.
Heating Hif / Lo / U-Loj   dB A   35 / 28 / 25   35 / 28 / 25   38 / 29 / 26   43 / 34 / 31	Sound proceure 3					. , . , .	, ,
Net weight         Indoor / Panel         kg         18 / 2.5         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         25         3 / 20 / 45         49 / 80         28 / 87 × 320 / 47         47 / 48         49 / 50         28 / 87 × 320 / 47         49 / 80 × 875 × 320 / 47         695 × 875 × 320 / 45         695 × 875 × 320 / 45         695 × 875 × 320 / 45         695 × 875	Oddila pressure	Heating (Hi / Lo / Q-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	38 / 29 / 26	43 / 34 / 31
Outdoor Unit         CU-E1PB4EA         CU-E1PB4EA         CU-E1BBEA         CU-E1BBEA           Sound pressure 3         Cooling / Heating (Hi)         dB(A)         45 / 46         45 / 47         47 / 48         49 / 50           Dimensions 4 / Net weight         H x W x D         mm / kg         622 x 824 x 299 / 36         695 x 875 x 320 / 45         695 x 875 x 320 / 47         695 x 875 x 320 / 47           Piping connections         Liquid pipe / Gas pipe         Inch (mm)         11/4 (6,35) / 3/8 (9,52)         11/4 (6,35) / 3/8 (9,52)         11/4 (6,35) / 1/2 (12,70)         11/4 (6,35) / 1/2 (12,70)           Piping length range / Elevation difference (in/out)         m         3 - 20 / 15         3 - 20 / 15         3 - 30 / 20         3 - 30 / 20           Pipe length for additional gas / Additional gas amount         m / g/m         10 / 20         10 / 20         10 / 20         10 / 20           Oneration range         Cooling Min - Max         °C         -10 - +43         -10 - +43         -10 - +43         -10 - +43         -10 - +43	Dimensions (H x W x D)						
Sound pressure 31         Cooling / Heating (Hi)         dB(A)         45 / 46         45 / 47         47 / 48         49 / 50           Dimensions 41 / Net weight         H x W x D         mm / kg         622 x 824 x 299 / 36         695 x 875 x 320 / 45         695 x 875 x 320 / 47         695 x 875 x 320 / 47           Piping connections         Liquid pipe / Gas pipe         Inch (mm)         1/4 (6,35) / 38 (9,52)         1/4 (6,35) / 38 (9,52)         1/4 (6,35) / 1/2 (12,70)         1/4 (6,35) / 1/2 (12,70)           Piping length range / Elevation difference (in/out)         m         3 - 20 / 15         3 - 20 / 15         3 - 30 / 20         3 - 30 / 20           Pipe length for additional gas / Additional gas amount         m / g/m         10 / 20         10 / 20         10 / 20         10 / 20           Oneration range         Cooling Min ~ Max         °C         -10 - +43         -10 - +43         -10 - +43         -10 - +43		Indoor / Panel	kg		- 7 7		
Dimensions <sup>d</sup> / Net weight         H x W x D         mm / kg         622 x 824 x 299 / 36         695 x 875 x 320 / 45         695 x 875 x 320 / 47         695 x 875 x 320 / 47           Piping connections         Liquid pipe / Gas pipe         Inch (mm)         1/4 (6,35) / 38 (9,52)         1/4 (6,35) / 1/2 (12,70)         1/4 (6,35) / 1/2 (12,70)           Piping length range / Elevation difference (in/out)         m         3 - 20 / 15         3 - 20 / 15         3 - 30 / 20         3 - 30 / 20           Pipe length for additional gas / Additional gas amount         m / g/m         10 / 20         10 / 20         10 / 20         10 / 20           Oneration range         Cooling Min ~ Max         °C         -10 - +43         -10 - +43         -10 - +43         -10 - +43	Outdoor Unit						
Piping connections         Liquid pipe / Gas pipe         Inch (mm)         1/4 (6,35) / 3/8 (9,52)         1/4 (6,35) / 3/8 (9,52)         1/4 (6,35) / 1/2 (12,70)         1/4 (6,35) / 1/2 (12,70)           Piping length range / Elevation difference (in/out)         m         3 - 20 / 15         3 - 20 / 15         3 - 30 / 20         3 - 30 / 20           Pipe length for additional gas / Additional gas amount         m / g/m         10 / 20         10 / 20         10 / 20         10 / 20           Oneration range         Cooling Min - Max         °C         -10 - +43         -10 - +43         -10 - +43         -10 - +43					101 11		
Piping length range / Elevation difference (in/out)         m         3 - 20 / 15         3 - 20 / 15         3 - 30 / 20         3 - 30 / 20           Pipe length for additional gas / Additional gas amount         m / g/m         10 / 20         10 / 20         10 / 20         10 / 20           Onerating range         Cooling Min - Max         °C         -10 - +43         -10 - +43         -10 - +43         -10 - +43							
Pipe length for additional gas / Additional gas amount         m / g/m         10 / 20         10 / 20         10 / 20         10 / 20           Onerating range         Cooling Min - Max         °C         -10 - +43         -10 - +43         -10 - +43         -10 - +43			Inch (mm)				
Operating range   Cooling Min - Max   °C   -10 - +43   -10 - +43   -10 - +43   -10 - +43							
Ingrating range	Pipe length for additional gas	s / Additional gas amount		10 / 20	10 / 20	10 / 20	10 / 20
Heating Min ~ Max	Onerating range			-10 ~ +43		-10 ~ +43	
	operating range	Heating Min ~ Max	l°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

Accessories PA-AC-WIFI-Full bidirectional Wifi interface for Internet control IR Wifi interface for Internet control PAW-IR-WIFI-1

CZ-RD514C Wired remote controller for wall type CZ-CAPRA1 H Generation interface to ECOi control integration

11 EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 21 The annual energy consumption is calculated in accordance with the ErP directive. 31 The Sound pressure level of the units shows the value measured of a position 1 metre in front of the main body and 1,5m below the ceiling in the centre of the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70mm for piping port



























Designed for homes, offices, retail and restaurants, this duct is ideal for small rooms where the air conditioning and the heating should be nicely integrated and where high comfort and efficiency is needed.

The 9 and 12kW duct can also be connected to KNX, Modbus, EnOcean interfaces for easy integration with your BMS systems. This interfaces have dry contacts (ON/OFF, error message) for easy integration. With the new IntesisHome interface, you can control the Duct also from your smartphone and internet very easily!

#### Technical focus

- Duct type can be controlled by IntesisHome, KNX, EnOcean and Modbus
- This units can be installed on R22 pipingss
- Eco mode for 20% energy saving
- Extremely compact indoor units without losing static pressure (only 235mm high)
- Weekly timer, 42 settings per week
- Easy check mode for failure detection
- Drain pump included (maximum 200mm)

KIT			KIT-E9-PD3EA	KIT-E12-QD3EA	KIT-E18-RD3EA
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 4,00)	5,10 (0,90 - 5,70)
EER 1)		W/W	4,24 (3,54 - 3,95) A	3,86 (3,54 - 3,45) A	3,19 (3,53 - 3,13) B
SEER		W/W	5,80 < A+	5,60 <b>A</b>	5,80 🛧
Pdesign (cooling)		kW	2,50	3,40	5,10
Input power cooling	Nominal (Min - Max)	kW	0,59 (0,24 - 0,76)	0,88 (0,24 - 1,16)	1,60 (0,26 - 1,82)
Annual electricity consumpt	tion (cooling) <sup>2)</sup>	kWh/a	151	213	308
Heating capacity	Nominal (Min - Max)	kW	3,20 (0,85 - 4,60)	4,00 (0,85 - 5,10)	6,10 (0,90 - 7,10)
Heating capacity at -7°C		kW	2,60	3,00	4,30
COP 1)		W/W	3,72 (3,7 - 3,33) A	3,54 (3,7 - 3,29) B	3,33 (3,46 - 3,26) C
SCOP		W/W	4,20 < A+	3,80 A	3,90 A
Pdesign at -10°C		kW	2,60	2,90	4,00
Input power heating	Nominal (Min - Max)	kW	0,86 (0,23 - 1,38)	1,13 (0,23 - 1,55)	1,83 (0,26 - 2,18)
Annual electricity consumpt	tion (heating) <sup>2)</sup>	kWh/a	867	1.068	1.436
Indoor Unit			CS-E9PD3EA	CS-E12QD3EAW	CS-E18RD3EAW
Power source		V	230	230	230
Recommended fuse		A	16	16	16
Connection		mm <sup>2</sup>	4 x 1,5 to 2,5	4 x 1,5 to 2,5	4 x 1,5 to 2,5
External static pressure 3)	S-Hi / Hi / Me / Lo	Pa	N/A	N/A	N/A
Air volume	Cooling / Heating	m³/min	6,9 / 8,1	9,3 / 10,4	15,3 / 15,3
Moisture removal volume		L/h	1,50	2,30	2,80
Sound pressure 4)	Cooling (Hi / Lo / Q-Lo)	dB(A)	33 / 27 / 24	34 / 27 / 24	41 / 30 / 27
200110 biessaie .	Heating (Hi / Lo / Q-Lo)	dB(A)	35 / 28 / 25	36 / 28 / 25	41 / 32 / 29
Dimensions	H x W x D	mm	235 x 750 x 370	235 x 750 x 370	200 x 750 x 640
Net weight		kg	17	17	19
Outdoor Unit			CU-E9PD3EA	CU-E12QD3EA	CU-E18RBEA
Sound pressure 4	Cooling / Heating (Hi)	dB(A)	47 / 47	47 / 48	47 / 48
Dimensions 5)	H x W x D	mm	622 x 824 x 299	695 x 875 x 320	695 x 875 x 320
Net weight		kg	36	45	47
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)
Piping length range / Elevat		m	3 ~ 20 / 15	3 ~ 20 / 15	3 ~ 30 / 20
Pipe length for additional ga	as / Additional gas amount	m	7,5 / 20	7,5 / 20	10 / 20
Operating range	Cooling Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
operacing range	Heating Min ~ Max	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24

Accessories PA-AC-WIFI-1 Full bidirectional Wifi interface for Internet control IR Wifi interface for Internet control

Accessories	
CZ-CAPRA1	H Generation interface to ECOi control integration

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The specification listed on the table indicates values under the condition of 29 Pa (3,0 mmAq) which are applied for factory default setting. Change switch on PCB from Hi to Shi to have more than 6,0 mmAq. 4) The Sound pressure level of the units shows the value measured of a position of 1,5m below the unit with 1 m duct on the suction side and 2 m duct on the discharge side. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Add 100 mm for indoor unit or 70mm for outdoor unit for piping port.















Rating Conditions: Cooling Indoor 27°C DB / 19°C WB. Cooling Outdoor 35°C DB / 24°C WB. Heating Indoor 20°C DB. Heating Outdoor 7°C DB / 6°C WB. (DB: Dry Bulb; WB: Wet Bulb)

# MULTI SPLIT SYSTEM



#### Panasonic offers widest range in Multi split systems

3 types of Multi split range from 3,5 to 10kW for 5 indoor units with one outdoor unit.

New Multi Z with R32	Multi E with R410A	Multi RE Compact Style
Full flexibility up to 10kW and up to 5 ports with wide range of indoor units including high performance Etherea indoor units, reaching up to A+++/A++ and using new generation refrigerant R32	Full flexibility up to 10kW and up to 5 ports with wide range of indoor units including high performance Etherea indoor units, reaching up to A++/A+	From 4,4 to 5,2kW for wall Compact Style unit (TZ/TE), reaches A++/A+

							Indoor units		
Line up	Refrigerant	Capacities	Indoor Unit ports	Efficiency up to	Etherea	Compact Style	Duct	Cassette	Floor Console
Multi Z	R32	8 units (3,5 ~ 10kW)	2~5	A+++/A++	Yes	Yes	Yes	Yes	
Multi E	R410A	8 units (3,5 ~ 10kW)	2~5	A++/A+	Yes	Yes	Yes	Yes	Yes
Multi RE	R410A	3 units (4,4 ~ 5,2kW)	2~3	A++/A+		Yes			

#### Multi split systems

Day & Night	Simultaneous
Ideal for 2 day and night areas. Simultaneous use possible.	When indoor units are most time working at same time.



#### Why a Multi Split is better than several separate split units

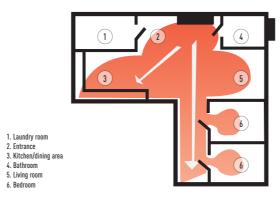
#### Up to 5 indoor units with a single outdoor unit

- Just one compact outdoor unit
- Increased comfort in the house since every room has its own indoor unit for heating

#### Solution with single split

4. Bathroom

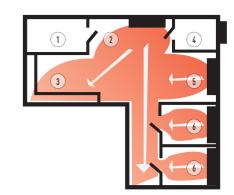
One indoor unit is connected to one outdoor unit. The indoor unit is placed in the main hallway and heats the entire house. Certain rooms may not be perfectly heated, which causes inadequate comfort.



- Much more powerful than a single split
- More efficient since the units are always operating at full capacity
- You can connect all types of indoor units, such as wall types and consoles, depending on what suits your house best

#### Solution with Multi Split

With one outdoor unit, you can connect up to five indoor units. There is one indoor unit per room or area. It gives an extreme increase in comfort levels. On the roof, there is only one outdoor unit.



## FREE MULTI SYSTEM Z • R32 GAS













Outdoor Unit Free Multi S	ystem Z • R32 GAS*									
System Capacity (Min - M	lax Indoor Cooling Capacity No	minal)	3,2 to 5,7kW	3,2 to 6,0kW	3,2 to 7,7kW	4,5 to 9,5kW	4,5 to 11,2kW	4,5 to 11,5kW	4,5 to 13,6kW	4,5 to 17,5kW
Unit			CU-2Z35TBE	CU-2Z41TBE	CU-2Z50TBE	CU-3Z52TBE	CU-3Z68TBE	CU-4Z68TBE	CU-4Z80TBE	CU-5Z90TBE
Cooling capacity	Nominal (Min - Max)	kW	3,50 (1,50 - 4,50)	4,10 (1,50 - 5,20)	5,00 (1,50 - 5,40)	5,20 (1,90-7,20)	6,80 (1,90 - 8,00)	6,80 (1,90 - 8,80)	8,00 (3,00 - 9,20)	10,00 (2,90 - 11,50)
EER 1)	Nominal (Min - Max)	W/W	4,86 (6,00 - 4,09) A	4,56 (6,00 - 3,80) A	4,24 (5,00 - 3,62) A	4,95 A	3,66 (7,04 - 3,38) A	4,39 (5,59 - 3,56) A	4,04 (5,66 - 3,21) A	3,5 (5,27 - 2,98) A
SEER		W/W	8,50 A+++	8,50 A+++	8,50 A+++	8,50 A+++	8,00 A++	8,00 A++	7,00 A++	6,50 A++
Pdesign (cooling)		kW	3,5	4,1	5,0	5,2	6,8	6,8	8,0	10,0
Input power cooling	Nominal (Min - Max)	kW	0,72 (0,25 - 1,10)	0,90 (0,25 - 1,37)	1,18 (0,25 - 1,49)	1,09 (0,36 - 2,18)	1,86 (0,27 - 2,37)	1,55 (0,34 - 2,47)	1,98 (0,53 - 2,87)	2,86 (0,55 - 3,86)
Annual electricity consumpt	tion (cooling) <sup>2)</sup>	kWh/a	144	169	206	214	298	298	_	_
Heating capacity	Nominal (Min - Max)	kW	4,20 (1,10 - 5,60)	4,60 (1,10 - 7,00)	5,60 (1,10 - 7,20)	6,80 (1,60-8,30)	8,50 (3,30 - 10,40)	8,50 (3,00 - 10,60)	9,40 (4,20 - 10,60)	12,00 (3,40 - 14,50)
Heating capacity at -7°C		kW	_	_	_	3,95	4,45	4,45	_	_
COP 1)	Nominal (Min - Max)	W/W	4,88 (5,24 - 4,18) A	4,79 (5,24 - 3,91) A	4,63 (5,24 - 4,00) A	4,72 A	3,95 (5,32 - 3,64) A	4,47 (5,17 - 3,96) A	4,52 (6,00 - 3,46) A	4,20 (6,42 - 3,42) A
SCOP		W/W	4,60 A++	4,60 A++	4,60 A++	4,20 A+	4,20 A+	4,20 A+	4,00 A+	4,00 A+
Pdesign at -10°C		kW	3,2	3,5	4,2	5,0	5,2	5,8	8,0	10,0
Input power heating	Nominal (Min - Max)	kW	0,86 (0,21 - 1,34)	0,96 (0,21 - 1,79)	1,21 (0,21 - 1,80)	1,47 (3,20 - 2,17)	2,15 (0,62 - 2,86)	1,90 (0,58 - 2,68)	2,08 (0,70 - 3,06)	2,86 (0,53 - 4,24)
Annual electricity consumption (heating) 2)		kWh/a	974	1.065	1.278	1.667	1.733	1.933	_	_
Current	Cooling / Heating	A	3,35 / 4,00	4,15 / 4,45	5,35 / 5,50	5,00 / 6,70	8,40 / 9,70	7,00 / 8,60	_	_
Power source		V	230	230	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20	20	25
Recommended power cable		mm <sup>2</sup>	2,5	2,5	2,5	2,5	2,5	2,5	2,5	3,5
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	48 / 50	48 / 50	50 / 52	47 / 48	51 / 52	49 / 50	_	
Dimensions 4	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	619 x 824 x 299	795 x 875 x 320	795 x 875 x 320	795 x 875 x 320	999 x 940 x 340	999 x 940 x 340
Net weight		kg	39	39	39	71	71	72	80	81
Piping connections	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
r iping connections	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
Elevation difference (in/out)		m	10	10	10	15	15	15	15	15
Piping length total	Min ~ Max	m	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 50	3 ~ 60	3 ~ 60	_	
Piping length to one unit	Min ~ Max	m	3 ~ 20	3 ~ 20	3 ~ 20	3 ~ 25	3 ~ 25	3 ~ 25	3 ~ 25	3 ~ 25
Pipe length for additional g	as / Additional gas amount	m / g/m	20 / 15	20 / 15	20 / 15	30 / 20	30 / 20	30 / 20	_	_
Operating range	Cooling Min ~ Max	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 or 95mm for piping port. Minimum quantity of connection: 2 indoor units. \* Tentative data.

#### Possible outdoor / indoor units combinations • R32 GAS

	Eth	erea	Sil	ver					Eti	here	a Pu	re W	/hite	e Ma	tt		Wa	all M	oun	ted '	TZ Co	mpa	ct S	tyle	Lov	v Sta	rtic F	res	sure	Hid	e Aw	ay	4 V	Vay 6	0x6	O Ca	sset	te	
									dro a																										5 0		•	1	
	16	20	25	35	42	50	60	71	16	20	25	35	42	2 50	) 6	0 71	16	20	25	35	42	50	60	71	16	20	25	35	42	50	60	71	16	20	25	35	42	50	60 7
CU-2Z35TBE // 3,2 - 5,7kW // 2 Rooms		V	V	V					V	V	V	V					V	V	V	~							~	V							V	V			
CU-2Z41TBE // 3,2 - 6,0kW // 2 Rooms		V	V	V					V	V	V	V					V	V	V	V							V	V							V	V	Г		
CU-2Z50TBE // 3,2 - 7,7kW // 2 Rooms		V	V	V	1	1	1		V	V	V	V	~	1	1		V	V	V	V	V	V					V	V		1					V	V		<b>1</b>	
CU-3Z52TBE // 4,5 - 9,5kW // 3 Rooms		V	V	V	1	1	1		~	V	-	V	~	1	1		V	V	V	V	V	V					V	V		1					V	V		<b>1</b>	
CU-3Z68TBE // 4,5 - 11,2kW // 3 Rooms		V	V	V	1	1	1		V	V	-	V	~	1	1		V	V	V	V	V	V	<b>1</b>				V	V		1					V	V	Г	<b>1</b>	<b>1</b>
CU-4Z68TBE // 4,5 - 11,5kW // 4 Rooms		V	V	~	~	~	1		V	V	-	V	~	1	1		V	V	V	V	V	V	<b>1</b>				V	V		1					V	V		<b>1</b>	<b>1</b>
CU-4Z80TBE // 4,5 - 13,6kW // 4 Rooms		V	V	~	~	~	1		~	V	-	V	~	1	1	~	~	V	~	~	V	V	V1	1			V	V		1					V	V	Г	<b>1</b>	<b>1</b>
CU-5Z90TBE // 4,5 - 17,5kW // 5 Rooms		V	V	~	~	1	1	Т	1	V	-	V	~	1	1	V	V	V	V	V	V	V	<b>1</b>	1			V	V		1					V	V		<b>1</b>	<b>1</b>

1) A CZ-MA1P pipe reducer is needed on the 42 and 50, a CZ-MA2P pipe expander is needed on the 60 and CZ-MA3P pipe reducer on the 71.

Outdoor Multi combination model		Accessory
CS-MZ16TKE / CS-MZ16TKE CS-XZ20TKEW / CS-Z20TKEW / CS-TZ20TKEW / CS-TE20TKEW CS-XZ25TKEW / CS-Z25TKEW / CS-TZ25TKEW / CS-TE25TKEW / CS-E9PD3EA / CS-E9PB4EA CS-XZ35TKEW / CS-Z35TKEW / CS-TZ35TKEW / CS-TZ35TKEW / CS-E12DB4EA	CU-2Z35TBE / CU-2Z41TBE / CU-2Z50TBE / CU-3Z52TBE / CU-3Z68TBE / CU-4Z68TBE / CU-4Z80TBE / CU-5Z90TBE	_
CS-Z42TKEW / CS-E150KEW / CS-T242TKEW / CS-TE42TKEW CS-XZ50TKEW / CS-Z50TKEW / CS-TZ50TKEW / CS-TE50TKEW / CS-E18RD3EAW / CS-E18RB4EAW	CU-3Z52TBE / CU-3Z68TBE / CU-4Z68TBE / CU-4Z80TBE / CU-5Z90TBE	CZ-MA1P
CS-E21RB4EAW	CU-4Z68TBE / CU-4Z80TBE / CU-5Z90TBE	CZ-MA2P
CS-Z71TKEW / CS-TZ71TKES	CU-4Z80TBE / CU-5Z90TBE	CZ-MA3P



CZ-MA1P is to be used to reduce the connection size on the indoor unit from 1/2" to 3/8". CZ-MA2P is to be used to increase the connection size on the outdoor unit from  $3/8^\circ$  to  $1/2^\circ$ . CZ-MA3P is to be used to reduce the connection size on the indoor unit from 5/8" to 1/2".



98					-7	M 1700(A	HUMIDITY CONTROL	- 7		BMS
=	INTERNET CONT	TROL: Optional.	ECONAVI	• nanoe	AEROWINGS	SUPER QUIET	MILD DRY	AEROWINGS	INTERNET CONTROL	CONNECTIVIT
	2,5kW	3,	2kW		4,0kW		5,0kW		7,1k\	W
(EW	CS-XZ25TKEW	CS-XZ	35TKEW		_		CS-XZ50TK	EW	_	
EW	CS-Z25TKEW	CS-Z	35TKEW	CS	-Z42TKEW	1	CS-Z50TKE	W	CS-Z71T	KEW
20	2,50 / 2.150	3,20	/ 2.750	4,	00 / 3.440		5,00 / 4.30	00	7,10 / 6	105
50	3,60 / 3.010	4,50	/ 3.870	5,	60 / 4.820		6,80 / 5.85	50	8,60 / 7	.395
	4 x 1,5	4	x 1,5		4 x 1,5		4 x 1,5		_	
19	39 / 25 / 19	42 /	28 / 19	4	3 / 31 / 25		44 / 37 / 3	80	47 / 38	/ 30
4.0	14 107 140	10.1	00 / 40		0 105 100		11 100 10		17.100	100

EUIEIEd			I,OKVV	Z,UKVV	Z,JKVV	J,ZKVV	4,UKVV	J,UKVV	/,IKVV
Indoor Unit Silver			_	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ35TKEW	_	CS-XZ50TKEW	_
Indoor Unit Pure White	Matt		CS-MZ16TKE	CS-Z20TKEW	CS-Z25TKEW	CS-Z35TKEW	CS-Z42TKEW	CS-Z50TKEW	CS-Z71TKEW
Cooling capacity		kW / kCal/h	1,60 / 1.380	2,00 / 1.720	2,50 / 2.150	3,20 / 2.750	4,00 / 3.440	5,00 / 4.300	7,10 / 6105
Heating capacity		kW / kCal/h	2,60 / 2.240	3,20 / 2.750	3,60 / 3.010	4,50 / 3.870	5,60 / 4.820	6,80 / 5.850	8,60 / 7.395
Connection		mm <sup>2</sup>	4 x 1,5	4 x 1,5	_				
Sound pressure <sup>1</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 29 / 23	37 / 24 / 19	39 / 25 / 19	42 / 28 / 19	43 / 31 / 25	44 / 37 / 30	47 / 38 / 30
200110 hiszznis.	Heating (Hi / Lo / S-Lo)	dB(A)	39 / 29 / 23	38 / 25 / 19	41 / 27 / 19	43 / 33 / 19	43 / 35 / 29	44 / 37 / 30	47 / 38 / 30
Dimensions / Net weight	H x W x D	mm / kg	295 x 919 x 194 / 9	295 x 919 x 194 / 9	295 x 919 x 194 / 10	295 x 919 x 194 / 10	295 x 919 x 194 / 10	299 x 1.120 x 236 / 10	299 x 1.120 x 236 / —
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	_

Piping connections | Liquid pipe / Gas pipe | Inch (mm) | 1/4 (6.35) / 3/8 (9.52) | 1/4 (6.35) / 3/8 (9.52) | 1/4 (6.35) / 3/8 (9.52) | 1/4 (6.35) / 3/8 (9.52) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.70) | 1/4 (6.35) / 1/2 (12.



				120		INTERNET CONT	PALS FILTER	SUPER QUIET AEROWINGS	INTERNET CONTROL CONNECTIVITY
				INTERNET CONT	NOL. Optional.				
		1,6kW	2,0kW	2,5kW	3,2kW	4,0kW	5,0kW	6,0kW	7,1kW
		CS-MTZ16TKE*	CS-TZ20TKEW*	CS-TZ25TKEW*	CS-TZ35TKEW*	CS-TZ42TKEW*	CS-TZ50TKEW**	CS-TZ60TKEW***	CS-TZ71TKES
	kW / kCal/h	1,60 / 1.380	2,00 / 1.720	2,50 / 2.150	3,20 / 2.750	4,00 / 3.440	5,00 / 4.300	7,00 / 6.580	7,10 / 6105
	kW / kCal/h	2,60 / 2.240	3,20 / 2.750	3,60 / 3.010	4,50 / 3.870	5,60 / 4.820	6,80 / 5.850	8,70 / 8.260	8,60 / 7.395
	mm <sup>2</sup>	4 x 1,5	4 x 1,5	_					
	dB(A)	_	37 / 25 / 20	40 / 26 / 20	42 / 30 / 20	44 / 31 / 29	44 / 37 / 34	45 / 37 / 30	47 / 38 / 35
)	dB(A)	-	38 / 26 / 23	40 / 27 / 24	42 / 33 / 25	44 / 35 / 28	44 / 37 / 34	45 / 37 / 30	47 / 38 / 35
	mm / kg	290 x 799 x 197 / 8	302 x 1.102 x 244 / 12	302 x 1.102 x 244 / -	302 x 1.102 x 244 /				

<sup>\*</sup> Available in February 2017.\*\* Available in March 2017.\*\*\* Available in April 2017.

Cooling (Hi / Lo / S-Lo) dB(A)

Heating (Hi / Lo / S-Lo) dB(A)



Wall Mounted TZ Compact Style

Dimensions / Net weight H x W x D

Cooling capacity

Heating capacity

Sound pressure<sup>1</sup>

Connection

INTERNET CONTROL READY and EASY CONTROL by BMS: Opti

Low Static Pressure Hig	de Away		2,5kW	3,2kW	5,0kW
Indoor			CS-E9PD3EA	CS-E12QD3EAW	CS-E18RD3EAW
Cooling capacity		kW / kCal/h	2,50 / 2.150	3,40 / 2.920	5,10
Heating capacity		kW / kCal/h	3,20 / 2.752	4,00 / 3.440	6,10
Connection		mm <sup>2</sup>	4 x 1,5 to 2,5	4 x 1,5 to 2,5	4 x 1,5 to 2,5
Cound processed	Cooling (Hi / Lo / S-Lo)	dB(A)	33 / 27 / 24	34 / 27 / 24	41 / 30 / 27
Sound pressure <sup>1</sup>	Heating (Hi / Lo / S-Lo)	dB(A)	35 / 28 / 25	36 / 28 / 25	41 / 32 / 29
Dimensions / Net weight	H x W x D	mm / kg	235 x 750 x 370 / 17	235 x 750 x 370 / 17	200 x 750 x 640 / 19
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)





INTERNET CONTROL READY and EASY CONTROL by BMS: On



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			,-			
4 Way 60x60 Cassette			2,5kW	3,2kW	5,0kW	6,0kW
Indoor / Panel			CS-E9PB4EA / CZ-BT20E	CS-E12PB4EA / CZ-BT20E	CS-E18RB4EAW / CZ-BT20E	CS-E21RB4EAW / CZ-BT20E
Cooling capacity		kW / kCal/h	2,50 / 2.150	3,40 / 2.920	5,00 / 4.300	5,90 / 5.070
Heating capacity		kW / kCal/h	3,20 / 2.752	4,50 / 3.870	5,60 / 4.820	7,00 / 6.020
Connection		mm <sup>2</sup>	4 x 1,5 to 2,5	4 x 1,5 to 2,5	4 x 1,5 to 2,5	4 x 1,5 to 2,5
Cound processed	Cooling (Hi / Lo / S-Lo)	dB(A)	34 / 26 / 23	34 / 26 / 23	37 / 28 / 25	42 / 33 / 30
Sound pressure <sup>1</sup>	Heating (Hi / Lo / S-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	38 / 29 / 26	43 / 34 / 31
Dimensions / Net weight	Indoor H x W x D	mm / kg	260 x 575 x 575 / 18	260 x 575 x 575 / 18	260 x 575 x 575 / 18	260 x 575 x 575 / 18
DITTERISTORS / NET WEIGHT	Panel H x W x D	mm / kg	51 x 700 x 700 / 2,5	51 x 700 x 700 / 2,5	51 x 700 x 700 / 2,5	51 x 700 x 700 / 2,5
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)

<sup>1)</sup> The Sound pressure of the units shows the value measured of a position 1m in front of the main body. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 2) The specification listed on the table indicates values under the condition of 29 Pa [3,0 mmAq] which are applied for factory default setting. Change switch on PCB from Hi to S-Hi to have more than 6,0 mmAq.

#### FREE MULTI SYSTEM E • R410A GAS















Outdoor Unit Free Multi S	ystem E • R410A GAS									
System Capacity (Min - M	ax Indoor Cooling Capacity No	minal)	3,2 to 5,7kW	3,2 to 5,7kW	3,2 to 7,5kW	4,5 to 9,0kW	4,5 to 11,0kW	4,5 to 11,0kW	4,5 to 13,6kW	4,5 to 17,5kW
Unit			CU-2E12SBE	CU-2E15SBE	CU-2E18SBE	CU-3E18PBE	CU-3E23SBE	CU-4E23PBE	CU-4E27PBE	CU-5E34PBE
Cooling capacity	Nominal (Min - Max)	kW	3,60 (1,50 - 4,50)	4,50 (1,50 - 5,20)	5,20 (1,50 - 5,40)	5,20 (1,80 - 7,30)	6,80 (1,90 - 8,00)	6,80 (1,90 - 8,00)	8,00 (3,00 - 9,20)	10,00 (2,90 - 11,50)
EER 1)		W/W	4,50 (6,00 - 4,09)	3,66 (6,00 - 3,42)	3,42 (6,00 - 3,42)	4,33 (5,00 - 3,24)	3,56 (7,04 - 3,38)	4,05 (5,59 - 3,56)	4,04 (5,66 - 3,21) A	3,5 (5,27 - 2,98) A
SEER		W/W	6,50 A++	6,50 A++	6,50 A++	7,00 A++	7,00 A++	7,00 A++	7,00 A++	6,50 A++
Pdesign (cooling)		kW	3,6	4,5	5,2	5,2	6,8	6,8	8,0	10,0
Input power cooling	Nominal (Min - Max)	kW	0,80 (0,25 - 1,10)	1,23 (0,25 - 1,52)	1,52 (0,25 - 1,58)	1,27 (0,36 - 2,25)	1,91 (0,27 - 2,37)	1,68 (0,34 - 2,47)	1,98 (0,53 - 2,87)	2,86 (0,55 - 3,86)
Annual electricity consumpt	ion (cooling) 2)	kWh/a	194	242	280	260	955	340	400	538
Heating capacity	Nominal (Min - Max)	kW	4,40 (1,10 - 5,60)	5,40 (1,10 - 7,00)	5,60 (1,10 - 7,20)	6,80 (1,60 - 8,30)	8,50 (3,30 - 10,40)	8,50 (3,00 - 10,40)	9,40 (4,20 - 10,60)	12,00 (3,40 - 14,50)
Heating capacity at -7°C		kW	3,54	3,54	3,65	4,90	6,05	6,05	7,08	8,85
COP 1)		W/W	4,63 (5,24 - 4,41)	4,62 (5,24 - 4,19)	4,63 (5,24 - 4,24)	4,69 (3,93 - 5,00)	4,07 (5,32 - 3,74)	4,47 (4,08 - 5,17)	4,52 (6,00 - 3,46) A	4,20 (6,42 - 3,42) A
SCOP		W/W	4,00 A+	4,00 A+	4,00 A+	4,00 A+				
Pdesign at -10°C		kW	4,0	4,0	4,2	4,8	5,2	5,5	8,0	10,0
Input power heating	Nominal (Min - Max)	kW	0,95 (0,21 - 1,27)	1,17 (0,21 - 1,67)	1,21 (0,21 - 1,70)	1,41 (0,32 - 2,18)	2,09 (0,62 - 2,78)	1,85 (0,58 - 2,60)	2,08 (0,70 - 3,06)	2,86 (0,53 - 4,24)
Annual electricity consumpt	ion (heating) 2)	kWh/a	1.400	1.400	1.470	1.680	1.820	1.925	2.800	3.500
Current	Cooling / Heating	A	3,75 / 4,20	5,75 / 5,20	7,10 / 5,35	5,30 / 6,70	8,40 / 9,60	7,50 / 8,80	9,40 / 9,80	13,20 / 13,40
Power source		V	230	230	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20	20	25
Recommended power cable	section	mm <sup>2</sup>	2,5	2,5	2,5	2,5	2,5	2,5	2,5	3,5
Sound pressure 3)	Cooling / Heating (Hi)	dB(A)	47 / 49	47 / 49	49 / 51	46 / 47	50 / 51	50 / 51	51 / 52	53 / 54
Dimensions 4)	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	619 x 824 x 229	795 x 875 x 320	795 x 875 x 320	795 x 875 x 320	999 x 940 x 340	999 x 940 x 340
Net weight		kg	39	39	39	71	71	72	80	81
Dining connections	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Piping connections	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
Elevation difference (in/out)	Max	m	10	10	10	15	15	15	15	15
Piping length total	Min ~ Max	m	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 50	- ~ 60	- ~ 60	- ~ 80	- ~ 80
Piping length to one unit	Min ~ Max	m	3 ~ 20	3 ~ 20	3 ~ 20	3 ~ 25	3 ~ 25	3 ~ 25	3 ~ 25	3 ~ 25
Pipe length for additional ga	as / Additional gas amount	m / g/m	20 / 15	20 / 15	20 / 15	30 / 20	30 / 20	30 / 20	45 / 20	45 / 20
Operating range	Cooling Min ~ Max	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Operating range	Heating Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC. 2) The annual energy consumption is calculated in accordance with the ErP directive. 3) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 or 95mm for piping port.

#### Possible outdoor / indoor units combinations • R410A GAS

	Et	Etherea Silver Eth								Wall Mounted TZ / TE Compact Style									- 1	Low Static Pressure Hide Away					le	4 Way 60x60 Cassette																		
	16	20	25	35	42	50	60 7	1 1	6 2	20 2	25 3	15 4	2 5	0 60	71	16	20	25	35	42	50	60	71	16	20 2	5 3	5 4	2 50	60	71	16	20 2	5 3	35 4	2 5	D 61	0 71	1 16	20	25	35	42 5	0 60	71
CU-2E12SBE // 3,2 - 5,7kW // 2 Rooms		V	~	~				·	/	/	/ 6	/				~	V	V	V						·	1	-					·	/ 6	/	T	Т	Т	Т	Г	V	V	T	Т	Г
CU-2E15SBE // 3,2 - 5,7kW // 2 Rooms		V	~	~	П			·	/	1	1	/			T	~	V	V	V						·	10	-					·	/ 6	/	T	Т	Т	Т	Т	V	V	Т	Т	Т
CU-2E18SBE // 3,2 - 7,5kW // 2 Rooms		V	~	~	<b>1</b>	<b>/</b> 1		·	/	1	/	1	<b>1</b> 1	<b>/</b> 1		V	~	V	~	V	V				·	1	-	V	1			·	/ 6	/	V	•	Т		Т	V	V	v	-	Г
CU-3E18PBE // 4,5 - 9,0kW // 3 Rooms		V	~	~	<b>V</b> 1	<b>/</b> 1		·	/	1	1	1	11 v	<b>/</b> 1		V	V	V	V	V	V				·	1	-	V	1			·	/ 6	/	V	,		Т		V	V	v	-	Г
CU-3E23SBE // 4,5 - 11,0kW // 3 Rooms		V	~	~	<b>V</b> 1	<b>/</b> 1			/	1	/ 6	1	11 v	<b>/</b> 1		V	V	V	V	V	V	<b>1</b>				10	-	V	1			·	/ 6	/	V		Т	Т	Т	V	V	v	1	1
CU-4E23PBE // 4,5 - 11,0kW // 4 Rooms		V	~	~	<b>V</b> 1	<b>/</b> 1			/	1	/ 6	1	11 v	<b>/</b> 1		V	V	V	V	V	V	<b>1</b>				10	-	V	1			·	٠,	/	V	•	Т	Т	Т	V	V	v	1	T
CU-4E27PBE // 4,5 - 13,6kW // 4 Rooms		V	~	~	<b>V</b> 1	<b>/</b> 1	T		/	1	/ 6	1	11 v	<b>/</b> 1	V	~	V	V	V	V	V	<b>1</b>	<b>1</b>			10	-	V	1	$\exists$	T	·	/ 6	/	V	,	T	T	Т	V	V	v	1	1
CU-5E34PBE // 4,5 - 17,5kW // 5 Rooms		V	V	V	1	1	$\top$	·	/	/	/ 6	1	11	<b>/</b> 1	V	V	V	V	V	V	V	<b>1</b>	<b>1</b>		·	10	-	~	1	$\exists$		·	/ 6	/	V	,	Т		Т	V	V	v	1	1

1) A CZ-MA1P pipe reducer is needed on the 42 and 50, a CZ-MA2P pipe expander is needed on the 60 and CZ-MA3P pipe reducer on the 71.

Outdoor Multi combination model		Accessory
CS-MZ16TKE / CS-MZ16TKE CS-XZ20TKEW / CS-Z20TKEW / CS-TZ20TKEW / CS-TE20TKEW CS-XZ25TKEW / CS-Z25TKEW / CS-TZ25TKEW / CS-TE25TKEW / CS-E9PD3EA / CS-E9PB4EA CS-XZ35TKEW / CS-Z35TKEW / CS-TZ35TKEW / CS-TZ35TKEW / CS-E12DB4EA	CU-2E12SBE / CU-2E15SBE / CU-2E18SBE / CU-3E18PBE / CU-3E23SBE / CU-4E23PBE / CU-4E27PBE / CU-5E34PBE	_
CS-Z42TKEW / CS-E150KEW / CS-T242TKEW / CS-TE42TKEW CS-XZ50TKEW / CS-Z50TKEW / CS-TZ50TKEW / CS-TE50TKEW / CS-E18RB4EAW	CU-3E18PBE / CU-3E23SBE / CU-4E23PBE / CU-4E27PBE / CU-5E34PBE	CZ-MA1P
CS-E21RB4EAW	CU-4E23PBE / CU-4E27PBE / CU-5E34PBE	CZ-MA2P
CS-Z71TKEW / CS-TZ71TKES	CU-4E27PBE / CU-5E34PBE	CZ-MA3P



C7-MA1P is to be used to reduce the connection size on the indoor unit from 1/2" to 3/8". CZ-MA2P is to be used to increase the connection size on the outdoor unit from  $3/8^\circ$  to  $1/2^\circ$ . CZ-MA3P is to be used to reduce the connection size on the indoor unit from 5/8" to 1/2".





Connection 4 x 1,5  $39/29/23 - 39/29/23 \\ 37/24/19 - 38/25/19 \\ 39/25/19 - 41/27/19 \\ 42/28/19 - 43/33/19 \\ 43/31/25 - 43/35/29 \\ 44/37/30 - 44/37/30 \\ 47/38/30 - 47/38/30$ Cooling — Heating (Hi / Lo / S-Lo) dB(A) Sound pressure<sup>1</sup> Dimensions / Net weight H x W x D mm/kg 295 x 919 x 194/9 295 x 919 x 194/10 295 x 919 x 194/10 295 x 919 x 194/10 299 x 1.120 x 236/10 299 x 1.120 x 236/10 | Inch (mm) | 1/4 (6,35) / 3/8 (9,52) | 1/4 (6,35) / 3/8 (9,52) | 1/4 (6,35) / 3/8 (9,52) | 1/4 (6,35) / 3/8 (9,52) | 1/4 (6,35) / 3/8 (9,52) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / Piping connections Liquid pipe / Gas pipe

CS-Z20TKEW

2.00 / 1.720

3,20 / 2.750

2.0kW

4 x 1,5



Wall Mounted TZ / TE Compact Style

Indoor Unit Silver

Cooling capacity

Heating capacity

Indoor Unit TZ

Indoor Unit TE

Cooling capacity

Heating capacity

Connection

Indoor Unit Pure White Matt



1.6kW

4 x 1,5

CS-MZ16TKE

1.60 / 1.380

2,60 / 2.240

kW / kCal/h

kW / kCal/h

kW / kCal/h



2,5kW

2,50 / 2.150

4 x 1,5



INTERNET CONTROL: Options 3,2kW 4,0kW 5,0kW 6.0kW CS-TZ25TKEW\* CS-TZ25TKEW\* CS-TZ25TKEW\* CS-TZ35TKEW\* CS-TZ42TKEW\* CS-TZ50TKEW\*\* CS-TZ60TKEW\*\*\* CS-TZ60TKEW\*\*\* CS-TZ71TKES CS-TE20TKEW\*\* | CS-TE25TKEW\*\* | CS-TE35TKEW\*\* | CS-TE42TKEW\*\* | CS-TE50TKEW\*\*\* | CS-TE60TKEW\*\*\* 3,20 / 2.750 4,00 / 3.440 5,00 / 4.300 kW / kCaV/h 2,60 / 2.240 3,20 / 2.750 3,60 / 3.010 4,50 / 3.870 5,60 / 4.820 6,80 / 5.850 8,70 / 8.260 8,60 / 7.395 4 x 1,5 4 x 1,5 4 x 1,5

37/25/20-38/26/23 40/26/20-40/27/24 42/30/20-42/33/25 44/31/29-44/35/28 44/37/34-44/37/34 45/37/30-45/37/30 47/38/35-47/38/35 Cooling — Heating (Hi / Lo / S-Lo) dB(A) Sound pressure<sup>1</sup> Dimensions / Net weight | H x W x D TZ / TE mm / kg | 290 x 799 x 197 / 8 | 290 x 799 x Inch (mm) 1/4 (6,35) / 3/8 (9,52) 1/4 (6,35) / 3/8 (9,52) 1/4 (6,35) / 3/8 (9,52) 1/4 (6,35) / 3/8 (9,52) 1/4 (6,35) / 1/2 (12,70) 1/4 (6,35) 1/2 (12,70) 1/4 (6,35) 1/2 (12,70) 1/4 (6,35) 1/2 (12,70 Piping connections Liquid pipe / Gas pipe

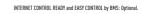
\* Available in February 2017.\*\* Available in March 2017.\*\*\* Available in April 2017.





Floor Console			2,8kW	3,2kW	5,0kW
Indoor			CS-E9GFEW	CS-E12GFEW	CS-E18GFEW
Cooling capacity		kW / kCal/h	2,80 / 2.410	3,20 / 2.750	5,00 / 4.300
Heating capacity		kW / kCal/h	4,00 / 3.440	4,50 / 3.870	6,80 / 5.850
Connection		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5
Sound pressure <sup>1</sup>	Cooling — Heating (Hi / Lo / S-Lo)	dB(A)	38 / 27 / 23 — 38 / 27 / 23	39 / 28 / 24 — 39 / 27 / 23	44 / 36 / 32 — 46 / 36 / 32
Dimensions / Net weight	HxWxD	mm / kg	600 x 700 x 210 / 14	600 x 700 x 210 / 14	600 x 700 x 210 / 14
Pining connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 1/2 (12.70)



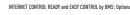




Low Static Pressure Hide Away		2,5kW	3,2kW	5,0kW
Indoor		CS-E9PD3EA	CS-E12QD3EAW	CS-E18RD3EAW
Cooling capacity	kW / kCal/h	2,50 / 2.150	3,40 / 2.920	5,10
Heating capacity	kW / kCal/h	3,20 / 2.752	4,00 / 3.440	6,10
Connection	mm <sup>2</sup>	4 x 1,5 to 2,5	4 x 1,5 to 2,5	4 x 1,5 to 2,5
Sound pressure <sup>1</sup> Cooling — Heating (Hi / Lo / S-Lo)	dB(A)	33 / 27 / 24 — 35 / 28 / 25	34 / 27 / 24 — 36 / 28 / 25	41 / 30 / 27 — 41 / 32 / 29
Dimensions / Net weight   H x W x D	mm / kg	235 x 750 x 370 / 17	235 x 750 x 370 / 17	200 x 750 x 640 / 19
Piping connections Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)









4 Way 60x60 Cassette			2,5kW	3,2kW	5,0kW	6,0kW
ndoor / Panel			CS-E9PB4EA / CZ-BT20E	CS-E12PB4EA / CZ-BT20E	CS-E18RB4EAW / CZ-BT20E	CS-E21RB4EAW / CZ-BT20E
Cooling capacity		kW / kCal/h	2,50 / 2.150	3,40 / 2.920	5,00 / 4.300	5,90 / 5.070
Heating capacity		kW / kCal/h	3,20 / 2.752	4,50 / 3.870	5,60 / 4.820	7,00 / 6.020
Connection		mm <sup>2</sup>	4 x 1,5 to 2,5			
Sound pressure <sup>1</sup>	Cooling — Heating (Hi / Lo / S-Lo)	dB(A)	34 / 26 / 23 — 35 / 28 / 25	34 / 26 / 23 — 35 / 28 / 25	37 / 28 / 25 — 38 / 29 / 26	42 / 33 / 30 — 43 / 34 / 31
Dimensions / Net weight	Indoor (Panel) H x W x D	mm / kg	260 x 575 x 575 / 18 (51 x 700 x 700 / 2,5)	260 x 575 x 575 / 18 (51 x 700 x 700 / 2,5)	260 x 575 x 575 / 18 (51 x 700 x 700 / 2,5)	260 x 575 x 575 / 18 (51 x 700 x 700 / 2,5)
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)

<sup>1)</sup> The Sound pressure of the units shows the value measured of a position 1m in front of the main body. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 2) The specification listed on the table indicates values under the condition of 29 Pa (3,0 mmAq) which are applied for factory default setting. Change switch on PCB from Hi to S-Hi to have more than 6,0 mmAq.

# FREE MULTI SYSTEM RE • R410A GAS



CU-3RE18SBE	

	A++	4,80 SCOP	TINVERT		ay	-15°C HEATING MODE	R22 💮 RATIDA R22 RENEWAL	5 YEARS WHITE THE STATE OF THE		
3,2	2 to 7,5kW			4,5 to 9,0kW						
CU	-2RE18SBE					CU-3RE18	SBE			
4,80	(1,50 - 5,0)	0)		5,20 (1,80 - 7,30)						
6	.50 A++					7.00 <b>A</b>	**			

Outdoor Unit Free Multi Systen	n RE • R410A GAS		3,2 to 5,7kW	3,2 to 7,5kW	4,5 to 9,0kW
			CU-2RE15SBE	CU-2RE18SBE	CU-3RE18SBE
Cooling capacity	Nominal (Min - Max)	kW	4,40 (1,50 - 4,80)	4,80 (1,50 - 5,00)	5,20 (1,80 - 7,30)
SEER		W/W	6,50 A++	6,50 A++	7,00 A++
Pdesign (cooling)		kW	4,4	4,8	5,2
Annual electricity consumption (co	ooling) 1)	kWh/a	237	258	260
Heating capacity	Nominal (Min - Max)	kW	4,80 (1,10 - 6,50)	5,20 (1,10 - 6,70)	6,80 (1,60 - 8,30)
SCOP		W/W	4,00 <b>A</b> +	4,00 <b>A</b> +	4,00 A+
Pdesign at -10°C		kW	3,6	3,8	4,8
Annual electricity consumption (ho	eating) <sup>1)</sup>	kWh/a	1.260	1.330	1.680
Sound pressure 2)	Cooling / Heating (Hi)	dB(A)	47 / 49	49 / 51	46 / 47
Dimensions 3 / Net weight	H x W x D	mm / kg	619 x 824 x 299 / 39	619 x 824 x 299 / 39	795 x 875 x 320 / 71
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)
Elevation difference (in/out)		m	10	10	15
Piping length total / to one unit	Min ~ Max	m	30 / 3 ~ 20	30 / 3 ~ 20	50 / 3 ~ 25
Pipe length for additional gas / Additional gas amount m / g/m			20 / 15	20 / 15	30 / 20
Operating range   Cooling / Heating Min ~ Max   °C			+16 ~ +43 / -10 ~ +24	+16 ~ +43 / -10 ~ +24	+16 ~ +43 / -10 ~ +24

<sup>1)</sup> The annual energy consumption is calculated in accordance with the ErP directive. 2) The Sound pressure of the units shows the value measured of a position 1m in front of the main body and 0,8m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 3) Add 70 or 95mm for piping port. Minimum quantity of connection: 2 indoor units.

#### Possible outdoor / indoor units combinations • R410A GAS

	Wall Mounted T	Wall Mounted TZ Compact Style						Wall Mounted TE Compact Style				
	16	20	25	35	42	16	20	25	35	42		
CU-2RE15SBE // 3,2 - 5,7kW // 2 Rooms	~	~	~	V			~	~	~			
CU-2RE18SBE // 3,2 - 7,5kW // 2 Rooms	V	~	~	V	~		~	~	~	~		
CU-3RE18SBE // 4,5 - 9,0kW // 3 Rooms	V	~	~	V	~		~	~	V	~		

17)					INTERNE	I CONTROL: Optional. PMQ.5 RUTER SUPER OWET	A) COMMETTIVITY  AGROWAGES WITHOUT CONTROL  COMMETTIVITY	
Wall Mounted TZ / TE C	Compact Style		1,6kW	2,0kW	2,5kW	3,2kW	4,0kW	
Indoor Unit TZ			CS-MTZ16TKE*	CS-TZ20TKEW*	CS-TZ25TKEW*	CS-TZ35TKEW*	CS-TZ42TKEW*	
Indoor Unit TE	Indoor Unit TE			CS-TE20TKEW**	CS-TE25TKEW**	CS-TE35TKEW**	CS-TE42TKEW**	
Cooling capacity		kW / kCal/h	1,60 / 1.380	2,00 / 1.720	2,50 / 2.150 3,20 / 2.750		4,00 / 3.440	
Heating capacity	kW / kCal/h		2,60 / 2.240	3,20 / 2.750	3,60 / 3.010	4,50 / 3.870	5,60 / 4.820	
Connection		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	
Cound processes	Cooling (Hi / Lo / S-Lo)	dB(A)	_	37 / 25 / 20	40 / 26 / 20	42 / 30 / 20	44 / 31 / 29	
Sound pressure <sup>1</sup>	Heating (Hi / Lo / S-Lo)	dB(A)	_	38 / 26 / 23	40 / 27 / 24	42 / 33 / 25	44 / 35 / 28	
Dimensions / Net weight	H x W x D TZ / TE	mm / kg	290 x 799 x 197 / 8	290 x 799 x 197 / 8	290 x 799 x 197 / 8	290 x 799 x 197 / 8	290 x 799 x 197 / 8	
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 3/8 (9,52)	1/4 (6,35) / 1/2 (12,70)	

<sup>\*</sup> Available in February 2017.\*\* Available in March 2017.



# **MULTI SPLIT**











#### Etherea Multi Split Inverter+ • R32 GAS

				Day & Night					Simultaneous			
Rooms			2 Rooms			3 Rooms		2 Rooms			3 Rooms	
Kit Silver		KIT-2XZ2525-TE	E KIT-2XZ2035-TBE	KIT-2XZ2535-TBE	KIT-3XZ202035-TBE	KIT-3XZ252535-TBE	KIT-2XZ2525-TKE	KIT-2XZ2035-TKE	KIT-2XZ2535-TKE	KIT-3XZ202035-TKE	KIT-3XZ252535-TK	
		CS-XZ25TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ25TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	
Indoor Unit Silver		CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	
					CS-XZ20TKEW	CS-XZ25TKEW				CS-XZ20TKEW	CS-XZ25TKEW	
Kit Pure White Ma	att	KIT-2Z2525-TB	KIT-2Z2035-TBE	KIT-2Z2535-TBE	KIT-3Z202035-TBE	KIT-3Z252535-TBE	KIT-2Z2525-TKE	KIT-2Z2035-TKE	KIT-2Z2535-TKE	KIT-3Z202035-TKE	KIT-3Z252535-TKI	
		CS-Z25TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z25TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	
Indoor Unit Pure \	White Matt	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	
					CS-Z20TKEW	CS-Z25TKEW				CS-Z20TKEW	CS-Z25TKEW	
Outdoor Unit		CU-2Z41TBE	CU-2Z41TBE	CU-2Z41TBE	CU-3Z52TBE	CU-3Z52TBE	CU-2Z50TBE	CU-2Z50TBE	CU-2Z50TBE	CU-3Z68TBE	CU-3Z68TBE	
Cooling capacity	Nominal (Min - Max) kW	2,50 (1,10 - 3,50	4,10 (1,50 - 5,20)	4,10 (1,50 - 5,20)	5,20 (1,90 - 7,20)	5,20 (1,90 - 7,20)	5,00 (1,50 - 5,40)	5,00 (1,50 - 5,40)	5,00 (1,50 - 5,40)	6,80 (1,90 - 8,00)	6,80 (1,90 - 8,00)	
EER	W/	7 3,73 A	4,56 A	4,56 A	4,95 A	4,95 A	4,24 A	4,24 A	4,24 A	3,66 A	3,66 A	
SEER	W	N					8,50 A+++					
Heating capacity	Nominal (Min - Max) kW	3,60 (0,70 - 5,50	) 4,60 (1,10 - 7,00)	4,60 (1,10 - 7,00)	6,80 (1,60 - 8,30)	6,80 (1,60 - 8,30)	5,60 (1,10 - 7,20)	5,40 (1,10 - 7,20)	5,40 (1,10 - 7,20)	8,50 (3,30 - 10,4)	8,50 (3,30 - 10,4)	
COP	W/	V 3,50 B	4,84 A	4,84 A	4,72 A	4,72 A	4,63 A	4,63 A	4,63 A	3,95 A	3,95 A	
SCOP	W	N					4,60 A++					
Indoor dimensions	H x W x D mr	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	295 x 919 x 194	
Indoor net weight	kg	10	10 (9 for Z20)	10	10 (9 for Z20)	10	10	10 (9 for Z20)	10	10 (9 for Z20)	10	













#### Etherea Multi Split Inverter+ • R410A GAS

					Day & Night			Simultaneous					
Rooms			2 Rooms			3 Ro	3 Rooms		2 Rooms			3 Rooms	
Kit Silver			KIT-2XE2525-SBE	KIT-2XE2035-SBE	KIT-2XE2535-SBE	KIT-3XE202035-PBE	KIT-3XE252535-PBE	KIT-2XE2525-SKE	KIT-2XE2035-SKE	KIT-2XE2535-SKE	KIT-3XE202035-SKE	KIT-3XE252535-SKE	
			CS-XZ25TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ25TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	CS-XZ35TKEW	
Indoor Unit Silver			CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	CS-XZ20TKEW	CS-XZ25TKEW	
						CS-XZ20TKEW	CS-XZ25TKEW				CS-XZ20TKEW	CS-XZ25TKEW	
Kit Pure White Ma	tt		KIT-2E2525-SBE	KIT-2E2035-SBE	KIT-2E2535-SBE	KIT-3E202035-PBE	KIT-3E252535-PBE	KIT-2E2525-SKE	KIT-2E2035-SKE	KIT-2E2535-SKE	KIT-3E202035-SKE	KIT-3E252535-SKE	
			CS-Z25TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z25TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	CS-Z35TKEW	
Indoor Unit Pure V	Vhite Matt		CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	CS-Z20TKEW	CS-Z25TKEW	
						CS-Z20TKEW	CS-Z25TKEW				CS-Z20TKEW	CS-Z25TKEW	
Outdoor Unit			CU-2E15SBE	CU-2E15SBE	CU-2E15SBE	CU-3E18PBE	CU-3E18PBE	CU-2E18SBE	CU-2E18SBE	CU-2E18SBE	CU-3E23SBE	CU-3E23SBE	
Cooling capacity	Nominal (Min - Max)	kW	4,50 (1,50 - 5,20)	4,50 (1,50 - 5,20)	4,50 (1,50 - 5,20)	5,20 (1,90 - 7,20)	5,20 (1,90 - 7,20)	5,00 (1,50 - 5,20)	5,20 (1,50 - 5,40)	5,20 (1,50 - 5,40)	6,80 (1,90 - 8,00)	6,80 (1,90 - 8,00)	
EER		W/W	3,66 A	3,66 <b>A</b>	3,66 A	4,48 A	4,48 A	3,47 <b>A</b>	3,42 A	3,42 <b>A</b>	3,56 A	3,56 <b>A</b>	
Heating capacity	Nominal (Min - Max)	kW	5,40 (1,10 - 7,00)	5,40 (1,10 - 7,00)	5,40 (1,10 - 7,00)	6,80 (1,60 - 8,30)	6,80 (1,60 - 8,30)	5,60 (1,10 - 7,20)	5,60 (1,10 - 7,20)	5,60 (1,10 - 7,20)	8,50 (3,30 - 10,40)	8,50 (3,30 - 10,40)	
COP		W/W	4,62 A	4,62 A	4,62 A	4,79 <b>A</b>	4,79 <b>A</b>	4,63 <b>A</b>	4,63 A	4,63 A	4,09 <b>A</b>	4,09 <b>A</b>	
Indoor dimensions	H x W x D	mm	295 x 919 x 194	295 x 919 x 194									
Indoor net weight		kg	10	10 (9 for Z20)	10	10 (9 for Z20)	10	10	10 (9 for Z20)	10	10 (9 for Z20)	10	













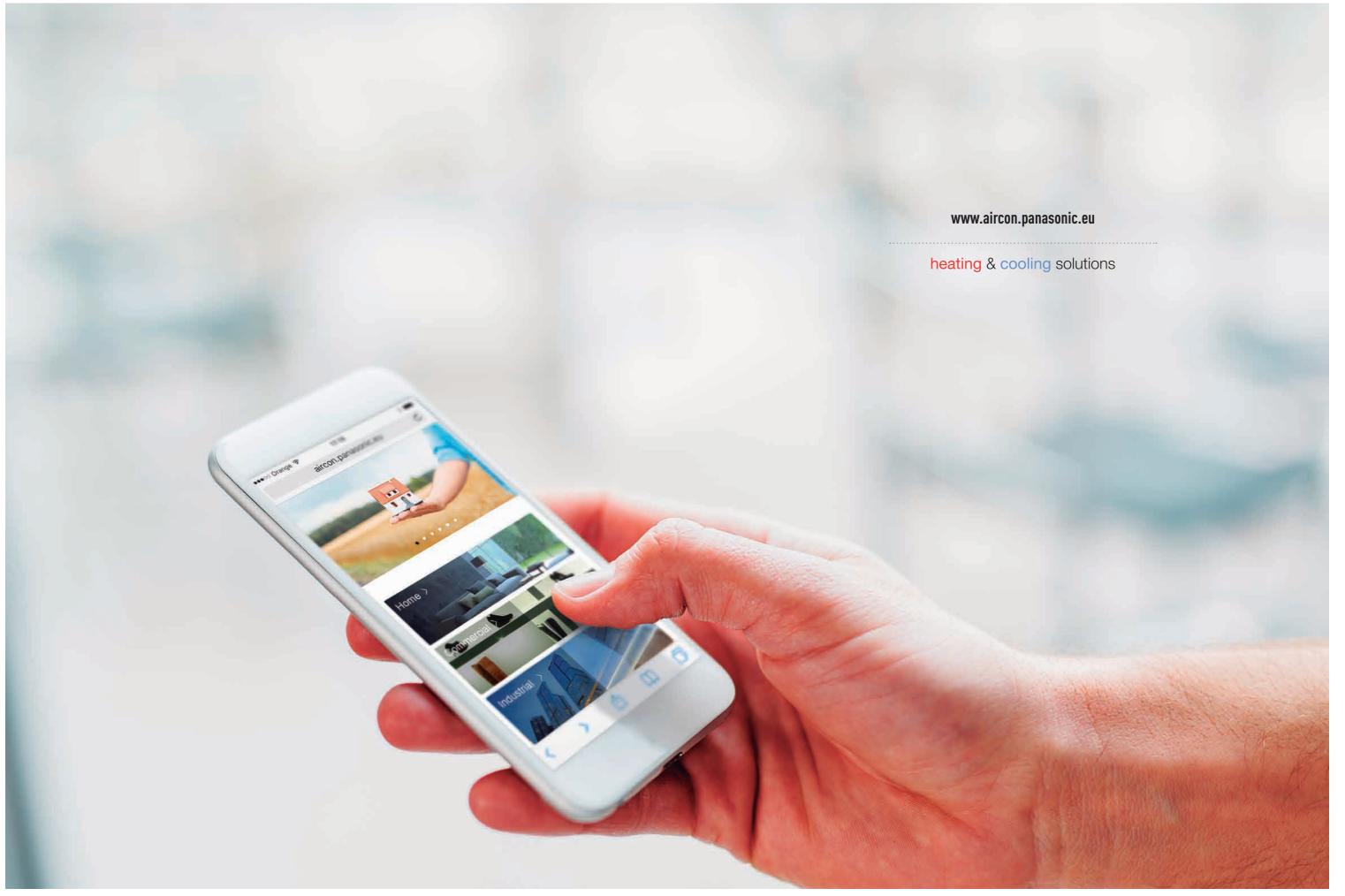


#### Multi Split TZ Compact Style • R410A GAS

					Day & Night		Simultaneous			
Rooms				2 Rooms		3 Ro	oms		2 Rooms	
Kit			KIT-2RE2525-SBE	KIT-2RE2035-SBE	KIT-2RE2535-SBE	KIT-3RE202035-PBE	KIT-3RE252535-PBE	KIT-2RE2525-SKE	KIT-2RE2035-SKE	KIT-2RE2535-SKE
			CS-TZ25TKEW	CS-TZ35TKEW	CS-TZ35TKEW	CS-TZ35TKEW	CS-TZ35TKEW	CS-TZ25TKEW	CS-TZ35TKEW	CS-TZ35TKEW
Indoor Unit			CS-TZ25TKEW	CS-TZ20TKEW	CS-TZ25TKEW	CS-TZ20TKEW	CS-TZ25TKEW	CS-TZ25TKEW	CS-TZ20TKEW	CS-TZ25TKEW
						CS-TZ20TKEW	CS-TZ25TKEW			
Outdoor Unit			CU-2RE15SBE	CU-2RE15SBE	CU-2RE15SBE	CU-3RE18SBE	CU-3RE18SBE	CU-2RE18SBE	CU-2RE18SBE	CU-2RE18SBE
Cooling capacity	Nominal (Min - Max)	kW	4,40 (1,50 - 4,80)	4,40 (1,50 - 4,80)	4,40 (1,50 - 4,80)	5,20 (1,90 - 7,20)	5,20 (1,90 - 7,20)	4,80 (1,50 - 5,00)	4,80 (1,50 - 4,90)	4,80 (1,50 - 5,00)
EER		W/W	3,38 🔻	3,38 A	3,38 🔺	3,80 <b>A</b>	3,80 🔼	3,22 <b>A</b>	3,22 <b>A</b>	3,22 <b>A</b>
Heating capacity	Nominal (Min - Max)	kW	4,80 (1,10 - 6,50)	4,80 (1,10 - 6,50)	4,80 (1,10 - 6,50)	6,80 (1,60 - 8,30)	6,80 (1,60 - 8,30)	5,20 (1,10 - 6,70)	5,20 (1,10 - 6,70)	5,20 (1,10 - 6,70)
COP		W/W	4,00 <b>A</b>	4,00 <b>A</b>	4,00 <b>A</b>	4,17 <b>A</b>	4,17 <b>A</b>	4,00 <b>A</b>	4,00 <b>A</b>	4,00 <b>A</b>
Indoor dimensions	H x W x D	mm	290 x 799 x 192							
Indoor net weight		kq	9	9	9	9	9	9	9	9

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U	damage and deterioration in safety due to usage of the other refrigerant.  The outdoor units in this catalogue contains fluorinated greenhouse gases with a GWP higher than 150.

Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the