PACi NX adaptive ducted unit - PF3

The adaptive ducted units provide better flexibility with both installation possibilities, horizontal and vertical. The powerful external static pressure, maximum 150 Pa.

nanoe™ X

SEE PRODUCT SPECIFICATIONS

1 Highly flexible installation

2 installation possibilities (horizontal / vertical).

2 High seasonal performance with slim body

Maximum SEER: 7,4 A++ [1] / SCOP: 4,7 A++ [2].

1) For 10,0 kW model. 2) For 7,1 kW model.

3 Comfort operation

- Super Quiet operation, minimum 22 dB(A)*
- Optimized IAQ solutions for different target objectives. nanoe™ X and the BION air pollutant filter (optional)

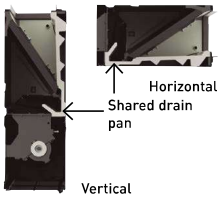
* 3,6 kW model and when operating with external static pressure 50 Pa in low fan mode.

2 installation possibilities (horizontal / vertical)

Vertical installation is available.
External static pressure 150 Pa, sufficient for remotely installing units away from the rooms.

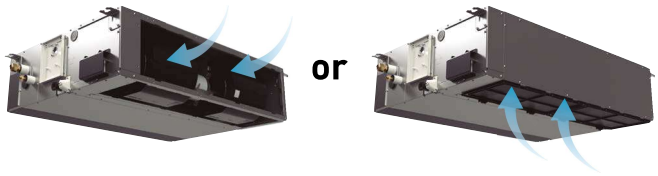
Improved drain pan design

Just one drain pan for both horizontal and vertical installations. No need to modify the unit.



Selectable inlet air position

Inlet air position may be adjusted by means of a removable panel, to allow rear or bottom entry, depending on the duct installation.



Maximum efficiency

Energy class [1] and seasonal efficiency value ($\eta_{s,c}$ / $\eta_{s,h}$) [2]								
	kW	3,6	5,0	6,0	7,1	10,0	12,5	14,0
Elite	❄	A++	A++	A++	A++	A++	281,7%	275,9%
	☀	A+	A+	A++	A++	A+	170,0%	171,0%
Standard	❄	A+	A++	A++	A++	A++	257,4%	252,2%
	☀	A+	A+	A++	A+	A	142,6%	140,6%

1) Energy label scale from A+++ to D for models below 12,0 kW (EU regulation 626/2011). 2) $\eta_{s,c}$ / $\eta_{s,h}$ values for models above 12,0 kW (EN 14825).

Compact body

- Only 250 mm high
- Light units from 25 to 39 kg

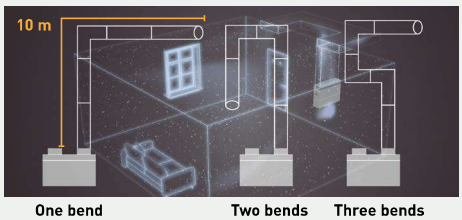
Conventional model	Adaptive ducted
33 kg	**30 kg**
290 mm	**250 mm**

Adaptive ducted

Better indoor air quality with nanoe™ X

The performance of nanoe™ X technology is maintained, even with 10 m long ducts*.
The effect of improved air quality is sufficient to allow for numerous duct shapes to fit the application.

* Panasonic internal survey.

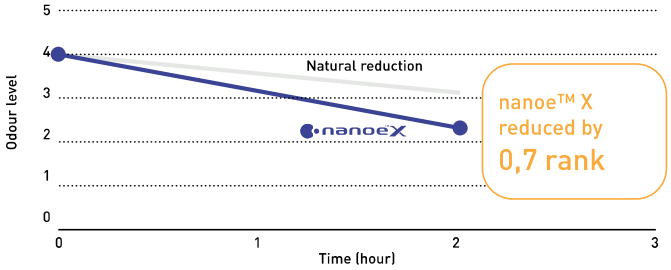


As the experiments demonstrate, up to a duct length of 10 m, effectiveness of nanoe™ X is maintained even if the duct is bended 3 times.

nanoe™ X effect against odour proven in large space

In a room of 139 m², tobacco odour is reduced by a factor of 0,7 when compared to natural reduction over a period of 2 hours.

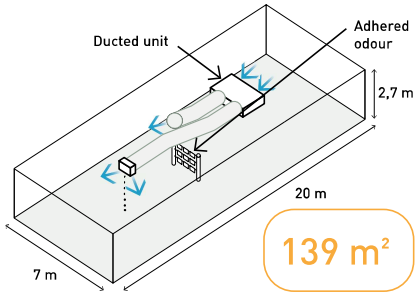
Tobacco deodorisation ratio.



Test ambient.

3rd party international testing institute KAKEN [1] conducted the performance experiment of Adaptive ducted equipped with nanoe X Generator Mark 2 device removing tobacco odour.

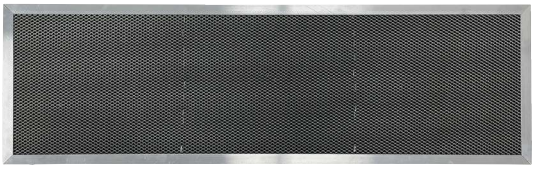
1) KAKEN TEST CENTER General Incorporated Foundation in Japan, international testing institute.



BION air pollutant filter (optional)

Collaborating with BION, experts in filtration equipment, a new molecular filtration is available to improve indoor air quality.

BION
MEDIA INSIDE

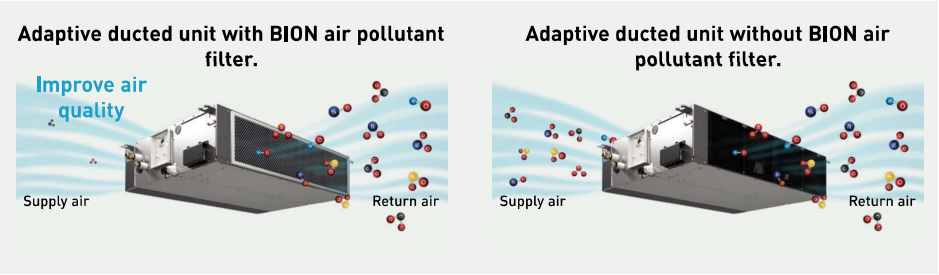


The efficiency of nitrogen dioxide (NO_2) removal can reach 99,5%*

* Measured by ASTM6646 international standards. Efficiency reaches 99,5% within 4,8 seconds of contact time with the media bed (FAM filter). ** The performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. BION air pollutant filter is not medical device, local regulations on building design must be followed. Test results conducted under controlled laboratory conditions. Performance of BION air pollutant filter might differ in real life environment.

BION air pollutant filter traps and reduces certain types of harmful pollutant gases, listed below

- Nitrogen oxides (NO_x)
- Ozone (O_3)
- Sulfur dioxide (SO_2)
- Formaldehyde (HCHO)
- Volatile organic compounds (VOCs)



The BION air pollutant filter is an ideal solution for improving indoor air quality in urban areas.

Air pollution in urban areas in Europe

It is reported that in 2021, a significant portion of the Europe's urban population has been exposed to high levels of key air pollutants*.

- 75% of the urban population was exposed to NO_2 concentrations above 10 µg/m³
- 94% were exposed to concentrations of O_3 above 60 µg/m³

* The "Europe's Air Quality Status 2023" report (EEA, 2023) assesses levels of air pollutants measured in ambient air across Europe (> 2000 locations) for the years 2021 and 2022. It compares them against both EU standards as set out in the Ambient Air Quality Directives and the 2021 WHO Air Quality Guidelines.

Share of the Europe's urban population exposed to air pollutant concentrations above EU standards and WHO guidelines in 2021, as referenced in the EEA 2023.

Why outdoor air pollution matters to IAQ?

Poor indoor air quality is associated with outdoor air pollutants such as car exhaust and factory fumes, and the two are closely linked. A significant portion of human exposure to air pollution occurs when they are indoors.

Different objectives, different IAQ solutions

In today's world, we are concerned about wellbeing and the air we breathe. And technology exists to ensure improved indoor air quality. With the introduction of the BION air pollutant filter, Panasonic offers IAQ solutions optimized for various target objectives.

IAQ Solution	nanoe™ X	BION air pollutant filter
Objectives	Inhibit particles such as pollutants, certain types of viruses, and bacteria to clean and deodorise	Inhibit gases such as nitrogen oxides (NO_x), ozone (O_3), sulfur dioxide (SO_2), formaldehyde (HCHO) and volatile organic compounds (VOCs)
Technology	Hydroxyl radicals contained in water	Molecular filtration
Filtering mechanism	Physical capture of particles	Adsorption and absorption
Availability	Built into all air-to-air indoor units as a standard	Optional accessory for the adaptive ducted unit (PF3/MF3)

BION air pollutant filter*	PAW-APF800F	PAW-APF1000F	PAW-APF1400F
Compatible adaptive ducted unit	S-3650PF3E	S-6071PF3E	S-1014PF3E

* The filter cartridge and filter casing are included in the package.

PACi NX Series Elite adaptive ducted unit - PF3 · R32

Adaptive ducted unit - PF3.
2 installation possibilities (horizontal / vertical) with high ESP 150Pa allows flexible installation.

nanoe™ X as a standard.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PF3ZH5	KIT-50PF3ZH5	KIT-60PF3ZH5	KIT-71PF3ZH45	KIT-100PF3ZH45	KIT-125PF3ZH45	KIT-140PF3ZH45
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nom (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	5,7 (1,2 - 6,3)	6,8 (2,2 - 7,8)	9,5 (3,1 - 11,4)	12,1 (3,2 - 13,6)	13,4 (3,3 - 15,3)
EER [1]	Nom (Min - Max)	W/W	4,24 (3,57 - 5,45)	3,42 (3,11 - 5,45)	3,68 (3,15 - 5,45)	3,74 (2,41 - 5,64)	4,09 (2,82 - 5,08)	3,53 (3,00 - 5,00)	3,38 (2,59 - 4,18)
SEER / $\eta_{s,c}$ [2]			**6,8 A++**	**6,1 A++**	**7,1 A++**	**7,1 A++**	**7,4 A++**	**281,7%**	**275,9%**
Pdesign		kW	3,6	5,0	5,7	6,8	9,5	12,1	13,4
Input power	Nom (Min - Max)	kW	0,85 (0,22 - 1,12)	1,46 (0,22 - 1,80)	1,55 (0,22 - 2,00)	1,82 (0,39 - 3,24)	3,23 (0,61 - 4,04)	3,43 (0,64 - 4,54)	3,96 (0,79 - 5,90)
Annual energy consumption [3]		kWh/a	185	287	281	332	447	—	—
Heating capacity	Nom (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	7,5 (2,0 - 9,0)	10,8 (3,1 - 13,5)	13,5 (3,2 - 15,4)	15,5 (3,3 - 17,4)
Heating capacity at -15 °C [4]	Max	kW	3,2	4,1	5,1	7,5	11,5	12,9	14,5
COP [1]	Nom (Min - Max)	W/W	4,17 (3,23 - 5,45)	3,61 (2,97 - 5,45)	3,74 (3,33 - 5,45)	4,03 (3,16 - 5,41)	3,88 (3,07 - 5,25)	3,46 (3,06 - 5,16)	3,33 (3,14 - 4,29)
SCOP / $\eta_{s,h}$ [2]			**4,5 A+**	**4,2 A+**	**4,4 A+**	**4,7 A++**	**4,3 A+**	**165,0%**	**162,6%**
Pdesign at -10 °C		kW	3,6	4,0	4,7	4,7	7,8	9,3	9,5
Input power	Nom (Min - Max)	kW	0,96 (0,22 - 1,55)	1,55 (0,22 - 2,19)	1,87 (0,22 - 2,40)	1,86 (0,37 - 2,85)	2,78 (0,59 - 4,40)	3,90 (0,62 - 5,04)	4,65 (0,77 - 5,55)
Annual energy consumption [3]		kWh/a	1120	1333	1495	1393	2540	—	—
Indoor unit			**S-3650PF3E**	**S-3650PF3E**	**S-6071PF3E**	**S-6071PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [5]	Nom (Min - Max)	Pa	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	14,0 / 13,0 / 10,0	16,0 / 15,0 / 12,0	21,0 / 19,0 / 15,0	21,0 / 19,0 / 15,0	20,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	0,9	1,9	1,7	2,7	3,2	4,1	4,9
Sound pressure [6]	Hi / Med / Lo	dB(A)	30 / 27 / 22	34 / 30 / 25	30 / 26 / 23	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 50 / 45	57 / 53 / 48	53 / 49 / 46	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	25	25	30	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH4E5**	**U-100PZH4E5**	**U-125PZH4E5**	**U-140PZH4E5**
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,20 - 4,00 - 3,85	6,90 - 6,60 - 6,35	7,25 - 6,95 - 6,65	9,20 - 8,80 - 8,45	11,50 - 11,00 - 10,50	16,80 - 16,00 - 15,40	19,40 - 18,50 - 17,70
	Heat	A	4,70 - 4,50 - 4,30	7,35 - 7,00 - 6,75	8,65 - 8,30 - 7,95	9,40 - 9,00 - 8,60	13,60 - 13,10 - 12,60	19,10 - 18,20 - 17,50	22,70 - 21,70 - 20,80
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	42	42	43	66	84	86	86
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [7]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [8]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [9]		m	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +52	-20 [10] ~ +52	-20 [10] ~ +52	-20 [10] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

- 2 installation possibilities (horizontal / vertical)
- Maximum external static pressure: 150 Pa
- Selectable inlet air position (rear / bottom entry)
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included
- nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
- BION air pollutant filter for certain types of pollutants, such as nitrogen dioxide (NO_2), nitrogen oxides (NO_X) and Ozone (O_3) (optional)
- Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®

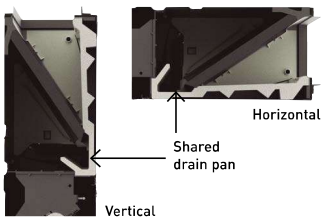
* The performance of nanoe™ X air can be expected even by 10 m long duct by Panasonic internal survey.

2 installation possibilities (horizontal / vertical)

Vertical installation is available. External static pressure 150 Pa, sufficient for remotely installing units away from the rooms.

Improved drain pan design

Just one drain pan for both horizontal and vertical installations. No need to modify the unit.



CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/ BL/BLW2

CONEX wired remote controller, black. CZ-RTC6/BL/ BLW2

Infrared remote controller. CZ-RWS3 + CZ-RWRC3

Econavi sensor. CZ-CENSC1

			Three phase			
			7,1 kW	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			**KIT-71PF3ZH48**	**KIT-100PF3ZH48**	**KIT-125PF3ZH48**	**KIT-140PF3ZH48**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	6,8 (2,2 - 7,8)	9,5 (3,1 - 11,4)	12,1 (3,2 - 13,6)	13,4 (3,3 - 15,3)
EER [1]	Nominal (Min - Max)	W/W	3,74 (2,41 - 5,64)	4,09 (2,82 - 5,08)	3,53 (3,00 - 5,00)	3,38 (2,59 - 4,18)
SEER / $\eta_{s,c}$ [2]			**7,1 A++**	**7,4 A++**	**281,0%**	**275,2%**
Pdesign		kW	6,8	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	1,82 (0,39 - 3,24)	2,32 (0,61 - 4,04)	3,43 (0,64 - 4,54)	3,96 (0,79 - 5,90)
Annual energy consumption [3]		kWh/a	332	447	—	—
Heating capacity	Nominal (Min - Max)	kW	7,5 (2,0 - 9,0)	10,8 (3,1 - 13,5)	13,5 (3,2 - 15,4)	15,5 (3,3 - 17,4)
Heating capacity at -15 °C [4]	Max	kW	7,5	11,5	12,9	14,5
COP [1]	Nominal (Min - Max)	W/W	4,03 (3,16 - 5,41)	3,88 (3,07 - 5,25)	3,46 (3,06 - 5,16)	3,33 (3,14 - 4,29)
SCOP / $\eta_{s,h}$ [2]			**4,7 A++**	**4,3 A+**	**165,0%**	**162,6%**
Pdesign at -10 °C		kW	4,7	7,8	9,3	9,5
Input power	Nominal (Min - Max)	kW	1,86 (0,37 - 2,85)	2,78 (0,59 - 4,40)	3,90 (0,62 - 5,04)	4,65 (0,77 - 5,55)
Annual energy consumption [3]		kWh/a	1394	2540	—	—
Indoor unit			**S-6071PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [5]	Nominal (Min - Max)	Pa	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m^3/min	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	2,7	3,2	4,1	4,9
Sound pressure [6]	Hi / Med / Lo	dB(A)	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-71PZH4E8**	**U-100PZH4E8**	**U-125PZH4E8**	**U-140PZH4E8**
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	3,05 - 2,90 - 2,80	3,85 - 3,70 - 3,50	5,65 - 5,40 - 5,20	6,55 - 6,20 - 6,00
	Heat	A	3,15 - 3,00 - 2,90	4,65 - 4,40 - 4,20	6,50 - 6,20 - 5,95	7,75 - 7,40 - 7,05
Air flow	Cool / Heat	m^3/min	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	66	82	84	84
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [9]		m	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30
Additional gas amount		g/m	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-20 [10] ~ +52	-20 [10] ~ +52	-20 [10] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

1) EER and COP calculation is based in accordance to EN 14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The value is based on the interpolation. 5) Medium external static pressure setting from factory. 6) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 7) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 8) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 9) Outdoor unit located lower / outdoor unit located higher. 10) Pipe length up to 30 m. * Recommended fuse for the indoor 3 A. ** Above values are in the case of standard installation(horizontal installation in the celling, rear side air intake) and nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver
CZ-CAPWFC2	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E
PAW-APF800F	BION air pollutant filter for S-3650PF3E
PAW-APF1000F	BION air pollutant filter for S-6071PF3E
PAW-APF1400F	BION air pollutant filter for S-1014PF3E

SEER and SCOP: For S-6071PF3E + U-71PZH4E5. SUPER QUIET: For S-3650PF3E + U-36PZH3E5. INTERNET CONTROL: Optional.

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 change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PACi NX Series Standard adaptive ducted unit - PF3 · R32

Adaptive ducted unit - PF3.
2 installation possibilities (horizontal / vertical) with high ESP 150Pa allows flexible installation.

nanoe™ X as a standard.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			**KIT-36PF3Z5**	**KIT-50PF3Z5**	**KIT-60PF3Z5**	**KIT-71PF3Z5**	**KIT-100PF3Z5**	**KIT-125PF3Z5**	**KIT-140PF3Z5**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nom (Min - Max)	kW	3,4 (1,5 - 4,0)	5,0 (1,5 - 5,3)	5,7 (2,0 - 6,3)	6,8 (2,6 - 7,7)	9,5 (3,0 - 11,4)	12,1 (3,2 - 13,5)	13,4 (3,3 - 15,0)
EER [1]	Nom (Min - Max)	W/W	3,78 (3,51 - 5,00)	2,78 (2,76 - 4,63)	3,54 (2,63 - 5,88)	3,18 (2,69 - 4,56)	3,57 (2,36 - 5,08)	3,40 (2,76 - 5,08)	3,16 (2,56 - 5,08)
SEER / $\eta_{s,c}$ [2]			**6,0 A+**	**6,5 A++**	**6,4 A++**	**6,0 A+**	**6,6 A++**	**257,4%**	**252,2%**
Pdesign		kW	3,4	5,0	5,7	6,8	9,5	12,1	13,4
Input power	Nom (Min - Max)	kW	0,90 (0,30 - 1,14)	1,80 (0,32 - 1,92)	1,61 (0,34 - 2,40)	2,14 (0,57 - 2,86)	2,66 (0,59 - 4,84)	3,56 (0,63 - 4,90)	4,24 (0,65 - 5,86)
Annual energy consumption [3]		kWh/a	198	267	310	391	502	—	—
Heating capacity	Nom (Min - Max)	kW	3,4 (1,5 - 4,6)	5,0 (1,5 - 5,9)	5,7 (1,8 - 7,0)	6,8 (2,1 - 8,1)	9,5 (3,0 - 13,5)	12,1 (3,3 - 15,0)	13,4 (3,4 - 16,0)
Heating capacity at -15 °C [4]	Max	kW	2,6	3,5	4,7	4,8	8,0	10,5	10,8
COP [1]	Nom (Min - Max)	W/W	4,15 (3,51 - 5,36)	3,62 (3,06 - 5,36)	4,04 (2,82 - 6,21)	4,00 (3,03 - 5,68)	4,09 (3,00 - 5,08)	3,56 (3,16 - 5,24)	3,76 (3,03 - 5,23)
SCOP / $\eta_{s,h}$ [2]			**4,0 A+**	**4,0 A+**	**4,4 A+**	**4,1 A+**	**3,9 A**	**142,6%**	**140,6%**
Pdesign at -10 °C		kW	2,4	3,8	4,4	4,7	7,8	9,3	9,5
Input power	Nom (Min - Max)	kW	0,82 (0,28 - 1,31)	1,38 (0,28 - 1,73)	1,41 (0,29 - 2,48)	1,70 (0,37 - 2,67)	2,32 (0,59 - 4,50)	3,40 (0,63 - 4,74)	3,56 (0,65 - 5,28)
Annual energy consumption [3]		kWh/a	839	1303	1376	1591	2795	—	—
Indoor unit			**S-3650PF3E**	**S-3650PF3E**	**S-6071PF3E**	**S-6071PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [5]	Nom (Min - Max)	Pa	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	14,0 / 13,0 / 10,0	16,0 / 15,0 / 12,0	21,0 / 19,0 / 15,0	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	0,9	1,9	1,7	2,7	3,2	4,1	4,9
Sound pressure [6]	Hi / Med / Lo	dB(A)	30 / 27 / 22	34 / 30 / 25	30 / 26 / 23	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 50 / 45	57 / 53 / 48	53 / 49 / 46	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	25	25	30	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZ3E5**	**U-50PZ3E5**	**U-60PZ3E5A**	**U-71PZ3E5A**	**U-100PZ3E5**	**U-125PZ3E5**	**U-140PZ3E5**
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,15-4,00-3,85	8,35-8,00-7,65	7,45-7,15-6,85	9,95-9,50-9,10	13,30-12,70-12,20	17,20-16,40-15,80	20,50-19,60-18,8
	Heat	A	3,85-3,70-3,50	6,45-6,20-5,95	6,55-6,25-6,00	7,90-7,55-7,25	11,60-11,10-10,60	16,40-15,70-15,00	17,20-16,40-15,80
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Piping diameter	Liquid	Inch (mm)	1/4 (Ø6,35)	1/4 (Ø6,35)	1/4 (Ø6,35) [7]	1/4 (Ø6,35) [7]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (Ø12,7)	1/2 (Ø12,7)	1/2 (Ø12,7) [8]	5/8 (Ø15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 - 15	3 - 20	3 - 40	3 - 40	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [9]		m	15 / 15	15 / 15	15 / 30	20 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

- 2 installation possibilities (horizontal / vertical)
- Maximum external static pressure: 150 Pa
- Selectable inlet air position (rear / bottom entry)
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included
- nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
- BION air pollutant filter for certain types of pollutants, such as nitrogen dioxide (NO_2), nitrogen oxides (NO_X) and Ozone (O_3) (optional)
- Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®

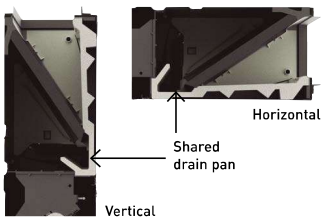
* The performance of nanoe™ X air can be expected even by 10 m long duct by Panasonic internal survey.

2 installation possibilities (horizontal / vertical)

Vertical installation is available. External static pressure 150 Pa, sufficient for remotely installing units away from the rooms.

Improved drain pan design

Just one drain pan for both horizontal and vertical installations. No need to modify the unit.



CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION



Optional:

CONEX wired remote controller, white. CZ-RTC6W/ BL/BLW2

CONEX wired remote controller, black. CZ-RTC6/BL/ BLW2

Infrared remote controller. CZ-RWS3 + CZ-RWRC3

Econavi sensor. CZ-CENSC1

			Three phase		
			10,0 kW	**12,5 kW**	**14,0 kW**
Kit			**KIT-100PF3Z8**	**KIT-125PF3Z8**	**KIT-140PF3Z8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	9,5 (3,0 - 11,4)	12,1 (3,2 - 13,5)	13,4 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,57 (2,36 - 5,08)	3,40 (2,76 - 5,08)	3,16 (2,56 - 5,08)
SEER / $\eta_{s,c}$ [2]			**6,5 A++**	**256,2%**	**251,4%**
Pdesign		kW	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	2,66 (0,59 - 4,84)	3,56 (0,63 - 4,90)	4,24 (0,65 - 5,86)
Annual energy consumption [3]		kWh/a	508	—	—
Heating capacity	Nominal (Min - Max)	kW	9,5 (3,0 - 13,5)	12,1 (3,3 - 15,0)	13,4 (3,4 - 16,0)
Heating capacity at -15 °C [4]	Max	kW	8,0	10,5	10,8
COP [1]	Nominal (Min - Max)	W/W	4,09 (3,00 - 5,08)	3,56 (3,16 - 5,24)	3,76 (3,03 - 5,23)
SCOP / $\eta_{s,h}$ [2]			**3,9 A**	**142,6%**	**140,6%**
Pdesign at -10 °C		kW	7,8	9,3	9,5
Input power	Nominal (Min - Max)	kW	2,32 (0,59 - 4,50)	3,40 (0,63 - 4,74)	3,56 (0,65 - 5,28)
Annual energy consumption [3]		kWh/a	2795	—	—
Indoor unit			**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [5]	Nominal (Min - Max)	Pa	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m^3/min	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	3,2	4,1	4,9
Sound pressure [6]	Hi / Med / Lo	dB(A)	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2
Outdoor unit			**U-100PZ3E8**	**U-125PZ3E8**	**U-140PZ3E8**
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,45 - 4,20 - 4,05	5,75 - 5,45 - 5,25	6,85 - 6,50 - 6,30
	Heat	A	3,85 - 3,70 - 3,55	5,50 - 5,20 - 5,05	5,75 - 5,45 - 5,25
Air flow	Cool / Heat	m^3/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [9]		m	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN 14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The value is based on the interpolation. 5) Medium external static pressure setting from factory. 6) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 7) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 8) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 9) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of standard installation(horizontal installation in the celling, rear side air intake) and nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver
CZ-CAPWFC2	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E
PAW-APF800F	BION air pollutant filter for S-3650PF3E
PAW-APF1000F	BION air pollutant filter for S-6071PF3E
PAW-APF1400F	BION air pollutant filter for S-1014PF3E

SEER: For S-1014PF3E + U-100PZ3E5. SCOP: For S-6071PF3E + U-60PZ3E5A. SUPER QUIET: For S-3650PF3E + U-36PZ3E5. INTERNET CONTROL: Optional.

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 change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.