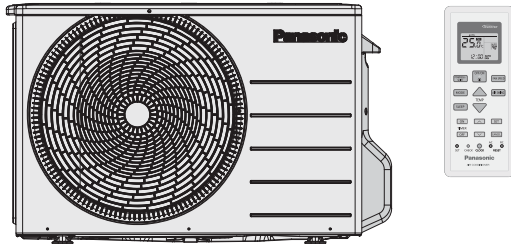


Service Manual

Air Conditioner



Indoor Unit
CS-TZ20TKEW-1
CS-TZ25TKEW-1
CS-TZ35TKEW-1

Outdoor Unit
CU-TZ20TKE-1
CU-TZ25TKE-1
CU-TZ35TKE-1


Destination
Europe
Turkey

Please file and use this manual together with the service manual for Model No. CU-2RE15SBE, CU-2RE18SBE, CU-3RE18SBE, CU-2TZ41TBE, CU-2TZ50TBE, CU-3TZ52TBE, Order No. PAPAMY1601016CE, PAPAMY1802045CE, PAPAMY1802091CE.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

PRECAUTION OF LOW TEMPERATURE

In order to avoid frostbite, be assured of no refrigerant leakage during the installation or repairing of refrigerant circuit.

CAUTION

R32 REFRIGERANT – This Air Conditioner contains and operates with refrigerant R32.

THIS PRODUCT MUST ONLY BE INSTALLED OR SERVICED BY QUALIFIED PERSONNEL.

Refer to Commonwealth, State, Territory and local legislation, regulations, codes, installation & operation manuals, before the installation, maintenance and/or service of this product.

Indoor		Model	CS-TZ35TKEW-1			
		POS (EAN)	5025232874620			
Outdoor		Model	CU-TZ35TKE-1			
		POS (EAN)	5025232874804			
Performance Test Condition		EUROVENT				
Power Supply		Phase, Hz	Single, 50			
		V	230			
		Min.	Mid.	Max.		
Cooling	Capacity		kW	0.85	3.50	3.90
			BTU/h	2900	11900	13300
			kcal/h	730	3010	3350
	Running Current		A	-	4.30	-
	Input Power		W	255	980	1.16k
	Annual Consumption			-	490	-
	EER CLASS			-	A	-
	EER		W/W	3.33	3.57	3.36
			BTU/hW	11.37	12.14	11.47
			kcal/hW	2.86	3.07	2.89
	ErP	Pdesign		kW	3.5	
		SEER		(W/W)	6.7	
		Annual Consumption		kWh	183	
		Class			A++	
	Power Factor		%	-	99	-
	Indoor Noise (H / L / QLo)		dB-A	42 / 30 / 20		
			Power Level dB	58 / - / -		
Outdoor Noise (H / L / QLo)		dB-A	48 / - / -			
		Power Level dB	63 / - / -			
Heating	Capacity		kW	0.80	4.00	5.10
			BTU/h	2730	13600	17400
			kcal/h	690	3440	4390
	Running Current		A	-	4.35	-
	Input Power		W	200	990	1.38k
	COP CLASS			-	A	-
	COP		W/W	4.00	4.04	3.70
			BTU/hW	13.65	13.74	12.61
			kcal/hW	3.45	3.47	3.18
	ErP	Pdesign		kW	2.8	
		Tbivalent		°C	-10	
		SCOP		(W/W)	4.6	
		Annual Consumption		kWh	852	
		Class			A++	
	Power Factor		%	-	99	-
	Indoor Noise (H / L / QLo)		dB-A	42 / 33 / 22		
			Power Level dB	58 / - / -		
Outdoor Noise (H / L / QLo)		dB-A	50 / - / -			
		Power Level dB	65 / - / -			
Low Temp. : Capacity (kW) / I.Power (W) / COP		3.70 / 1.22k / 3.03				
Extr Low Temp. : Capacity (kW) / I.Power (W) / COP		3.30 / 1.31k / 2.52				
Max Current (A) / Max Input Power (W)		6.3 / 1.38k				
Starting Current (A)		4.35				

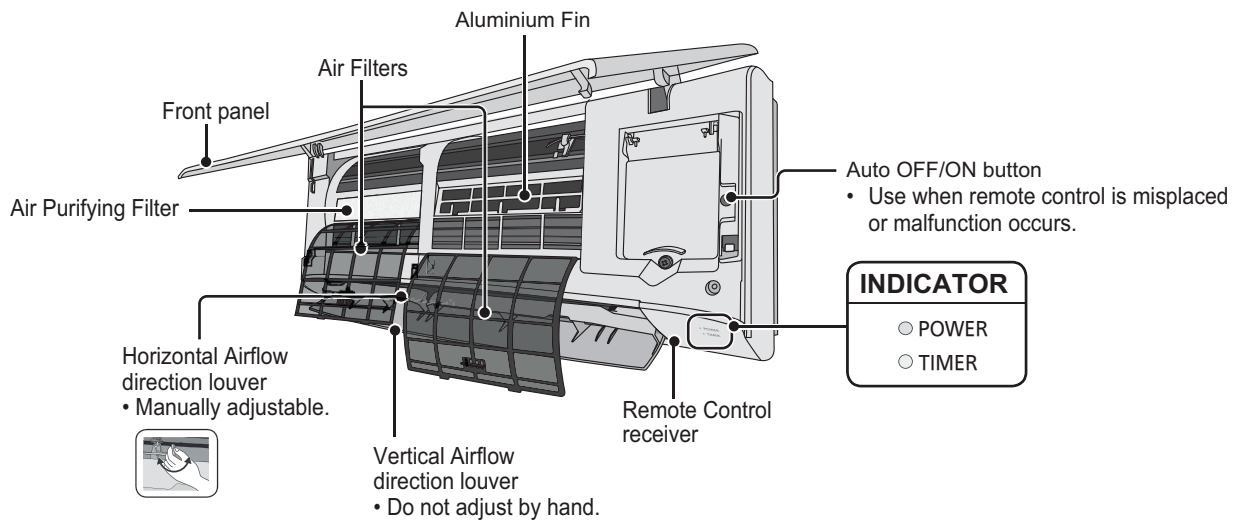
Indoor		Model		CS-TZ35TKEW-1	
		POS (EAN)		5025232874620	
Outdoor		Model		CU-TZ35TKE-1	
		POS (EAN)		5025232874804	
Compressor	Type		Hermetic Motor / Rotary		
	Motor Type		Brushless (6-poles)		
	Output Power		W	700	
Indoor Fan	Type		Cross-flow Fan		
	Material		ASG20K1		
	Motor Type		DC (8-poles)		
	Input Power		W	47.3	
	Output Power		W	30	
	Speed	QLo	Cool	rpm	650
			Heat	rpm	720
		Lo	Cool	rpm	900
			Heat	rpm	1030
		Me	Cool	rpm	1100
			Heat	rpm	1210
		Hi	Cool	rpm	1300
			Heat	rpm	1390
		SHi	Cool	rpm	1350
			Heat	rpm	1440
Outdoor Fan		Type		Propeller Fan	
		Material		PP	
	Motor Type		DC (8-poles)		
	Input Power		W	-	
	Output Power		W	40	
	Speed	Hi	Cool	rpm	830
			Heat	rpm	860
Moisture Removal		L/h (Pt/h)	2.0 (4.2)		
Indoor Airflow	QLo	Cool	m ³ /min (ft ³ /min) (L/s)	5.12 (181)	
		Heat	m ³ /min (ft ³ /min) (L/s)	5.79 (204)	
	Lo	Cool	m ³ /min (ft ³ /min) (L/s)	7.50 (265)	
		Heat	m ³ /min (ft ³ /min) (L/s)	8.73 (308)	
	Me	Cool	m ³ /min (ft ³ /min) (L/s)	9.40 (332)	
		Heat	m ³ /min (ft ³ /min) (L/s)	10.44 (369)	
	Hi	Cool	m ³ /min (ft ³ /min) (L/s)	11.3 (400)	
		Heat	m ³ /min (ft ³ /min) (L/s)	12.1 (425)	
	SHi	Cool	m ³ /min (ft ³ /min) (L/s)	11.77 (416)	
		Heat	m ³ /min (ft ³ /min) (L/s)	12.63 (446)	
Outdoor Airflow	Hi	Cool	m ³ /min (ft ³ /min) (L/s)	29.1 (1025)	
		Heat	m ³ /min (ft ³ /min) (L/s)	30.2 (1065)	
Refrigerant Cycle	Control Device		Expansion Valve		
	Refrigerant Oil		cm ³	FW50S (320)	
	Refrigerant Type		g (oz)	R32, 820 (28.9)	
F-Gas	GWP		675		
	CO2eq (ton) (Precharged Amount / Maximum Amount)		0.554 / 0.604		

Indoor			Model	CS-TZ35TKEW-1	
			POS (EAN)	5025232874620	
Outdoor			Model	CU-TZ35TKE-1	
			POS (EAN)	5025232874804	
Dimension	Unit	Height (I/D / O/D)	mm (inch)	290 (11-7/16) / 542 (21-11/32)	
		Width (I/D / O/D)	mm (inch)	799 (31-15/32) / 780 (30-23/32)	
		Depth (I/D / O/D)	mm (inch)	197 (7-25/32) / 289 (11-13/32)	
Weight	Net (I/D / O/D)		kg (lb)	8 (18) / 33 (73)	
Piping	Pipe Diameter (Liquid / Gas)		mm (inch)	6.35 (1/4) / 9.52 (3/8)	
	Standard Length		m (ft)	5.0 (16.4)	
	Length Range (min – max)		m (ft)	3 (9.8) ~ 15 (49.2)	
	I/D & O/D Height Different		m (ft)	15.0 (49.2)	
	Additional Gas Amount		g/m (oz/ft)	10 (0.1)	
	Length for Additional Gas		m (ft)	7.5 (24.6)	
Drain Hose	Inner Diameter		mm	16.7	
	Length		mm	650	
Indoor Heat Exchanger	Fin Material			Aluminium (Pre Coat)	
	Fin Type			Slit Fin	
	Row × Stage × FPI			2 × 15 × 21	
	Size (W × H × L)		mm	610 × 315 × 25.4	
Outdoor Heat Exchanger	Fin Material			Aluminium	
	Fin Type			Corrugated Fin	
	Row × Stage × FPI			2 × 24 × 19	
	Size (W × H × L)		mm	36.4 × 504 × 824.2:793.7	
Air Filter	Material			Polypropelene	
	Type			One-touch	
Power Supply				Outdoor	
Power Supply Cord				Nil	
Thermostat				Electronic Contol	
Protection Device				Electronic Contol	
				Dry Bulb	Wet Bulb
Indoor Operation Range	Cooling	Maximum °C (°F)	32 (89.6)	23 (73.4)	
		Minimum °C (°F)	16 (60.8)	11 (51.8)	
	Heating	Maximum °C (°F)	30 (86.0)	-	
		Minimum °C (°F)	16 (60.8)	-	
Outdoor Operation Range	Cooling	Maximum °C (°F)	43 (109.4)	26 (78.8)	
		Minimum °C (°F)	-10 (14.0)	-	
	Heating	Maximum °C (°F)	24 (75.2)	18 (64.4)	
		Minimum °C (°F)	-15 (5.0)	-16 (3.2)	

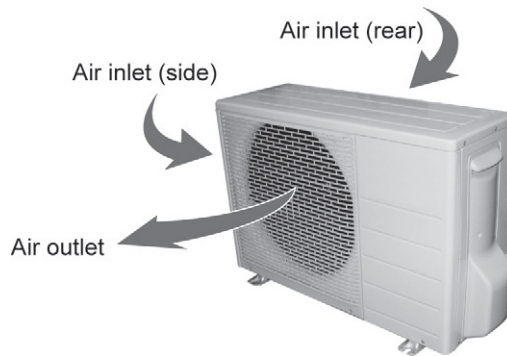
- Cooling capacities are based on indoor temperature of 27°C Dry Bulb (80.6°F Dry Bulb), 19.0°C Wet Bulb (66.2°F Wet Bulb) and outdoor air temperature of 35°C DRY BULB (95°F Dry Bulb), 24°C Wet Bulb (75.2°F Wet Bulb)
- Heating capacities are based on indoor temperature of 20°C Dry Bulb (68°F Dry Bulb) and outdoor air temperature of 7°C Dry Bulb (44.6°F Dry Bulb), 6°C Wet Bulb (42.8°F Wet Bulb)
- Heating low temperature capacity, Input Power and COP measured at 230 V, indoor temperature 20°C, outdoor 2/1°C
- Heating extreme low temperature capacity, Input Power and COP measured at 230 V, indoor temperature 20°C, outdoor -7/-8°C
- Standby power consumption ≤10.0w (when switched OFF by remote control, except under self protection control).
- Specifications are subjected to change without prior notice for further improvement.

5. Location of Controls and Components

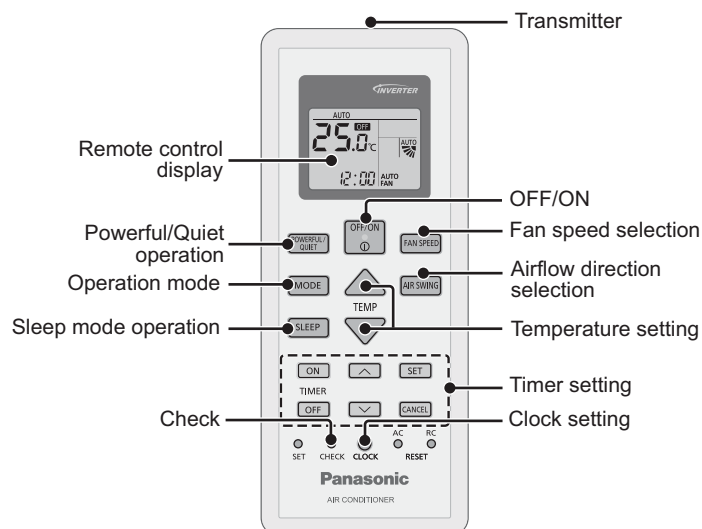
5.1 Indoor Unit



5.2 Outdoor Unit



5.3 Remote Control



6.2 Outdoor Unit

