

## WALL MOUNTED PROFESSIONAL INVERTER -20°C



### 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 pipings
- 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 <sup>1)</sup>	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	Nominal	kW	2,63	3,69	5,04	6,00			
EER at -10°C	Nominal	W/W	7,19	5,96	6,01	6,00			
Cooling capacity at -20°C	Nominal	kW	2,61	3,66	4,06	5,82			
EER at -20°C	Nominal	W/W	6,71	5,56	4,39	5,39			
SEER <sup>2)</sup>	Nominal	W/W	7,10 <b>A++</b>	6,70 <b>A++</b>	6,30 <b>A++</b>	6,90 <b>A++</b>			
Pdesign		kW	2,5	3,5	4,2	5,0			
Power input cooling	Nominal (Min - Max)	kW	0,515 (0,170 - 0,710)	0,870 (0,170 - 1,120)	1,200 (0,280 - 1,580)	1,440 (0,280 - 1,990)			
Annual electricity consumption (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 <sup>4)</sup>	Nominal	kW	3,33	4,07	4,10	4,98			
COP <sup>5)</sup>	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 <sup>5)</sup>	Nominal	W/W	4,40 <b>A+</b>	4,10 <b>A+</b>	3,90 <b>A</b>	4,20 <b>A+</b>			
Pdesign at -10 °C		kW	2,8	3,6	3,6	4,4			
Power input heating	Nominal (Min - Max)	kW	0,700 (0,165 - 1,310)	0,920 (0,165 - 1,820)	1,440 (0,340 - 2,190)	1,520 (0,340 - 2,570)			
Annual electricity consumption (heating) <sup>3)</sup>		kWh/a	891	1.229	1.292	1.467			
<b>Indoor Unit</b>			<b>CS-E9PKEA</b>	<b>CS-E12PKEA</b>	<b>CS-E15PKEA</b>	<b>CS-E18PKEA</b>			
Power source		V	230	230	230	230			
Recommended fuse		A	16	16	16	16			
Connection indoor / outdoor		mm	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5			
Air Volume	Cooling / Heating	m <sup>3</sup> /h	798 / 876	816 / 882	846 / 900	1.074 / 1.158			
Moisture removal volume		l/h	1,5	2,0	2,4	2,8			
Sound pressure level <sup>6)</sup>	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 <sup>7)</sup> / 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			
<b>Outdoor Unit</b>			<b>CU-E9PKEA</b>	<b>CU-E12PKEA</b>	<b>CU-E15PKEA</b>	<b>CU-E18PKEA</b>			
Sound pressure level <sup>6)</sup>	Cooling / Heating (Hi)	dB(A)	46 / 47	48 / 50	46 / 46	47 / 47			
Dimensions <sup>7)</sup> / 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 / Elevation 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			
<b>Accessories</b>									
PAW-GRDSTD40	Outdoor elevation platform								
PAW-WTRAY	Tray for condenser water compatible with base ground support								
<b>Accessories</b>									
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 (available in June 2016)								

Rating Conditions for cooling capacity at low temperature: Cooling Indoor 27°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(EER100) 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 Eurovent 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.



A++  
7,10 SEER

A+  
4,40 SCOP

INVERTER+

R2 ROTARY  
COMPRESSOR

23dB(A)  
SUPER QUIET

-20°C  
COOLING MODE

-15°C  
HEATING MODE

R22  
R410A  
R22 RENEWAL

INTEGRATION P-LINE

INTERNET CONTROL

BMS  
CONNECTIVITY

SEER and SCOP: For KIT-E9-PKEA. SUPER QUIET: For KIT-E9-PKEA. INTERNET CONTROL and INTEGRATION P-LINE: Optional.