SMARTPack²

Packaged air-conditioning unit

CKN-XHE2i: Reversible heat pump Air cooled

Roof Top

Capacity from 20 to 45 kW











- √ Full inverter
- √ High part load efficiency
- ✓ Extended working limit (-15°C in heating mode)
- ✓ Enhanced air filtration with low ventilation consumption
- √ Thermodynamic recovery
- ✓ Smart Freecooling and Defrosting management
- ✓ All component included on board for an enhanced installation
- ✓ Remote and centralized system monitoring through INTELLIAIR



Control keypad standard supplied. Main functions: unit on/off unit main information daily/weekly programming temperature set-point modification humidity set-point modification manual or automatic summer/winter switching

functions and features







installation







inverter



COOLING



recovery





commutated

Fan



expansion

valve



Airflow

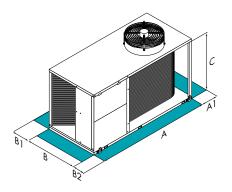






INTELLIAIR

dimensions and clearances



For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

Size	►► CKN-XHE2i		7.1	10.1	14.2
A - Length		mm	2250	2250	2610
B - Width		mm	1150	1150	1590
C - Height		mm	1210	1510	1660
A1		mm	1000	1000	1000
B1		mm	1000	1000	1000
B2		mm	1000	1000	1000
CAK/CBK	Operating weight	kg	464	576	818
CCK	Operating weight	kg	482	600	853

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

CAK Full recirculation (CAK)

CBK Recirculation and renewal air (CBK)

CCK Configuration with double fan section for recirculation, fresh and exhaust air



versions and configurations

CONFIGURATION:

CAK Configuration with single fan section for full recirculation **CBK** Configuration with single fan section for recirculation and fresh air ССК Configuration with double fan section for recirculation, fresh and exhaust

technical data					
Size	▶► CKN-X	HE2i	7.1	10.1	14.2
 Cooling capacity 	(1)	kW	20,2	30,0	45,2
Sensible capacity	(1)	kW	16,8	24,9	37,9
Compressor power input	(1)	kW	5,4	8,7	11,8
Cooling capacity (EN 14511:2022)	(9)	kW	19,0	28,4	42,1
EER (EN 14511:2022) (9) -		-	3,08	2,88	2,97
 Heating capacity 	(2)	kW	20,2	28,3	42,8
Compressor power input	(2)	kW	4,9	7,2	10,0
 Heating capacity (EN 14511:2022) 	(10)	kW	20,5	29,1	43,1
COP (EN 14511:2022)	(10)	-	3,26	3,25	3,28
Refrigeration circuits		Nr	1	1	1
No. of compressors		Nr	1	1	2
Type of compressors	(3)	-	ROT	SCROLL	ROT
Supply air flow rate		m³/h	4000	6000	9000
Type of supply fan	(4)	-	RAD/EC	RAD/EC	RAD/EC
Number of supply fans		Nr	1	1	1
Max. static pressure supply fan	(5)	Pa_	380	680	510
Type of exhaust fan	(4)	-	RAD/EC	RAD/EC	RAD/EC
Number of exhaust fans	(6)	Nr	1	1	1
Type of external fan	(4)		AX/EC	AX/EC	AX/EC
Standard power supply		V	400/3~/50 +N	400/3~/50 +N	400/3~/50 +N
Sound power level outside	(7)	dB(A)	83	85	88
Directive ErP (Energy Related F	Products)				
SEER - AVERAGE Climate	(8)		4,58	4,37	4,48
$\eta_{s,c}$ (8) %		180,2	171,9	176,2	
SCOP - AVERAGE Climate (8) -		3,22	3,20	3,27	
$\eta_{s,H}$	(8)	%	125,8	125,0	127,8

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21. Performance data are referred to operation with 30% of outdoor and exhaust air; (configuration CCK) (1) Ambient air at 27°C/19°C W.B. Entering external exchanger air temperature 35°C

- (2) Ambient temperature 20°C DB. Outside temperature 7°C DB/6°C WB (3) ROT = rotary compressor; SCROLL = scroll compressor
- (4) RAD = Radial fan; AX = Axial Fan; EC = Electronically Commutated
- (5) Net outside static pressure to win the outlet and intake onboard pressure drops
- (6) Configuration for outdoor air supply with exhaust and extraction; (only with CCK configuration)
- (7) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to EN 12101-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

 (8) Data calculated according to the EN 14825:2022
- (9) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 27°C D.B./19° CW.B.; outdoor temperature 35°C; EER according to EN 14511:2022
- (II) Capacity in total recirculation according to EN 451t;2022, indoor air temperature 20°C; outdoor temperature 7°C D.B./6° CW.B.; COP according to EN 1451t;2022

accessories

FCE	Enthalpy FREE-COOLING	EH10	6 kW electric heaters
PAQC	Air quality probe for CO ₂ rate check	EH12	9 kW electric heaters
PAQCV	Air quality sensor for CO ₂ and VOC rate check	EH15	13.5 kW electric heaters
SER	Outdoor air damper manually set (CBK version)	EH17	18 kW electric heaters
SERM	Outdoor air motorized on/off damper (CBK version)	EH20	24 kW electric heaters
SFCM	Modulating motorized free-cooling damper (available only with options: CCK)	CPHG	Hot gas re-heating coil
PCOSM	Constant supply airflow	HSE3	3 kg/h immersed electrodes steam humidifier
PVAR	Variable airflow	HSE5	5 kg/h immersed electrodes steam humidifier
GC01	Condensing gas heating module with modulating control 35 kW	HSE8	8 kg/h immersed electrodes steam humidifier
GC08	Condensing gas heating module with modulating control 44kW	AMRX	Rubber antivibration mounts
GC09	Condensing gas heating module with modulating control 65kW	UVC	UV-C germicidal lamps
GC10	Condensing gas heating module with modulating control 82kW	РСМО	Sandwich panels of the handling zone in M0 fire reaction class
PGFC	Finned coil protection grill	VENH	High static pressure fans
		CSOND	Temperature and humidity ambient control with built-in probes
PGCCH	Anti-hail protection grilles	CTT	Temperature control with thermostat
F7	High efficiency F7 air filter (ISO 16890 ePM1 55%)	PTAAX	Remote ambient air temperature sensor
F9	High efficiency F9 air filter (ISO 16890 ePM1 80%)	IOTX	IoT industrial module for cloud based interoperability & services
FES	Electronic filters (ISO 16890 ePM1 90%)	PTCO	Set up for shipping via container
PSAF	Differential pressure switch for dirty air filters	LBPF	Packed in a wooden box + fumigation
CHW2	Two-rows hot water coil		J
3WVM	3-way modulating valve		

Accessories whose code ends with "X" are supplied separately

For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.