CSRN-iY

20.2÷56.4

CLIVETPack³ⁱ

Packaged air-conditioning unit
CSRN-iY: Reversible heat pump
Air cooled
Roof Top
Capacity from 60 to 190 kW

✓ Refrigerant R32

✓ Full inverter

✓ Evolution of Energy recovery concept

✓ Energy recovery through enthalpy wheel

✓ Enhanced air filtration with low ventilation consumption

✓ Extended working limit (-15°C in heating mode)

✓ Reliability and increased efficiency ensured by double refrigerant circuit

✓ Remote and centralized system monitoring through INTELLIAIR

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Clivet participates in the ECP Programme
for "Rooftops". Check ongoing validity of certificate on:
www.eurovent-certification.com

ErP
compliant
ErP

functions and features

| Heat pump	Air cooled	Outdoor installation	R-32	FREE-COOLING	REVO trermodynamic recovery	Energy recovery through enthalpy wheel	Full inverter	ECOBREEZE	Electronically commutated Fan	Electronic expansion valve	Constant Airflow	Variable Airflow	Modbus	INTELLIAIR
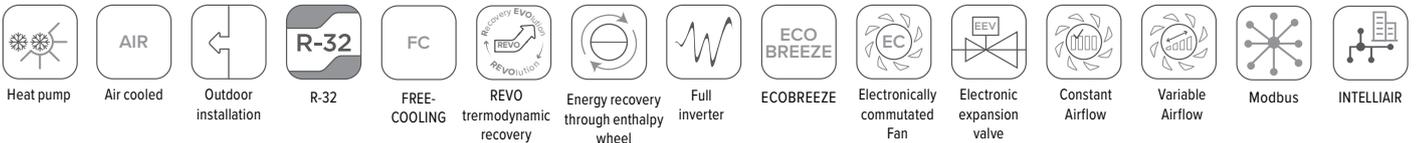
dimensions and clearances
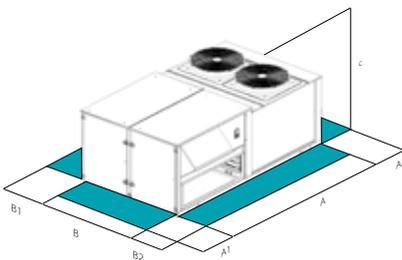
Size ▶▶ CSRN-iY			20.2	28.2	40.4	56.4
A - Length		mm	3190	3970	3970	5315
B - Width		mm	2300	2300	2300	2300
C - Height		mm	1480	1510	1910	1920
A1		mm	2000	2000	2000	2600
A2		mm	1500	1500	1500	1500
B1		mm	1500	1500	1500	1500
B2		mm	1500	1500	1500	1500
CAK	Operating weight	kg	1087	1187	1678	2296
CBK	Operating weight	kg	1087	1187	1678	2296
CBK-G	Operating weight	kg	1103	1203	1714	2345
CCK-REVO	Operating weight	kg	1158	1258	1744	2386

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 Configuration with single fan section for full recirculation
CBK Configuration with single fan section for recirculation and fresh air
CCK Configuration with double fan section for recirculation, fresh and exhaust air
CCK-REVO Configuration with double fan section with fresh air and REVO trermodynamic recovery

CAUTION!

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

CLIVET

versions and configurations

CONFIGURATION:

CAK Configuration with single fan section for full recirculation

CBK Configuration with single fan section for recirculation and fresh air

CBK-G Configuration with double fan section for recirculation, fresh and exhaust air

CCK-REVO Configuration with double fan section with fresh air and REVO thermodynamic recovery

technical data

Size		▶▶ CSRN-iY			20.2	28.2	40.4	56.4
CCK-REVO	◆ Cooling capacity	(1)	kW		65,9	87,6	129,0	174,0
CCK-REVO	Sensible capacity	(1)	kW		55,9	73,7	99,5	159,0
CCK-REVO	Compressor power input	(1)	kW		18,1	21,6	38,0	49,6
CCK-REVO	◆ Cooling capacity (EN 14511:2022)	(9)	kW		59,0	78,0	116,2	155,2
CCK-REVO	EER (EN 14511:2022)	(9)	-		2,86	2,88	2,67	2,73
CCK-REVO	◆ Heating capacity	(2)	kW		61,0	80,1	126,0	167,0
CCK-REVO	Compressor power input	(2)	kW		12,6	15,7	30,1	38,0
CCK-REVO	◆ Heating capacity (EN 14511:2022)	(10)	kW		58,0	76,8	119,7	162,3
CCK-REVO	COP (EN 14511:2022)	(10)	-		3,73	3,72	3,19	3,38
CCK-REVO	Refrigeration circuits		Nr		2	2	2	2
CCK-REVO	No. of compressors		Nr		2	2	4	4
CCK-REVO	Type of compressors	(3)	-		ROT	SCROLL	ROT	SCROLL
CCK-REVO	Supply air flow rate		m³/h		13000	17000	23000	32000
CCK-REVO	Type of supply fan	(4)	-		RAD/EC	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of supply fans		Nr		1	2	2	3
CCK-REVO	Max. static pressure supply fan	(5)	Pa		330	450	410	300
CCK-REVO	Type of exhaust fan	(4)	-		RAD/EC	RAD/EC	RAD/EC	RAD/EC
CCK-REVO	Number of exhaust fans	(6)	Nr		1	2	2	2
CCK-REVO	Type of external fan	(4)	-		AX/EC	AX/EC	AX/EC	AX/EC
CCK-REVO	Standard power supply		V		400/3~/50	400/3~/50	400/3~/50	400/3~/50
Sound power level outside		(7)	dB(A)		88	89	88	90
Directive ErP (Energy Related Products)								
SEER - AVERAGE Climate		(8)	-		4,92	4,72	4,85	4,56
$\eta_{S,C}$		(8)	%		193,8	185,8	191,0	179,4
SCOP - AVERAGE Climate		(8)	-		3,91	3,79	3,81	3,92
$\eta_{S,H}$		(8)	%		153,4	148,6	149,4	153,8

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.
Performances are referred to operation with 30% fresh and exhaust air with thermodynamic recovery REVO (CCK-REVO)
(1) Ambient air at 27°C/19°C W.B. Entering external exchanger air temperature 35°C D.B. / 24°C W.B.
(2) Ambient air at 20°C D.B. / 12°C W.B., Entering external exchanger air temperature 7°C D.B. / 6°C W.B.
(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) Only for double fan section configuration with fresh air and REVO thermodynamic recovery (CCK-REVO)

(7) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 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
(10) Capacity in total recirculation according to EN 14511:2022, indoor air temperature 20°C; outdoor temperature 7°C D.B./6°C W.B.; COP according to EN 14511:2022

accessories

FC Thermal FREE-COOLING (CBK-G, CCK-REVO version)
FCE Enthalpy FREE-COOLING (CBK-G, CCK-REVO version)
REVO REVO exhaust air thermodynamic energy recovery (CCK-REVO version)
CHW2 Two-rows hot water coil
CHWER Energy recovery from food refrigeration
3WVM 3-way modulating valve
2WVM 2-way modulating valve
EH12 9 kW electric heaters (size 20.2)
EH14 12 kW electric heaters (size 20.2-28.2)
EH17 18 kW electric heaters (size 20.2-28.2-40.4)
EH20 24 kW electric heaters (size 28.2-40.4-56.4)
EH24 36 kW electric heaters (size 40.4-56.4)
EH28 48 kW electric heaters (size 56.4)
GC01X Condensing gas heating module with modulating control 35 kW (size 20.2-28.2)
GC08X Condensing gas heating module with modulating control 44 kW (size 20.2-28.2)
GC09X Condensing gas heating module with modulating control 65 kW (size 20.2-28.2-40.4)
GC10X Condensing gas heating module with modulating control 82 kW (size 28.2-40.4-56.4)
GC11X Condensing gas heating module with modulating control 100 kW (size 28.2-40.4-56.4)
GC12X Condensing gas heating module with modulating control 130 kW (size 40.4-56.4)
GC13X Condensing gas heating module with modulating control 160 kW (size 56.4)
EWX Enthalpy wheel energy recovery module (CBK-G version)
AMRX Rubber antivibration mounts
AMRMX Rubber antivibration mounts for unit and gas module
AMRUVX Rubber antivibration mounts for unit and UV-C Lamps module
AMREWX Rubber antivibration mounts for unit and enthalpy wheel module
RCX Roof curb
PGFC Finned coil protection grill
PGCCH Anti-hail protection grilles
PCM0 Sandwich panels of the handling zone in M0 fire reaction class
CPHG Hot gas re-heating coil
M3 Downward air supply
M5 Upflow air supply
R3 Downward air return
SERM Outdoor air motorized on/off damper (CBK version)
SER Outdoor air damper manually set (CBK version)

SERMD Modulating motorized outdoor air damper (optional for CBK, standard for CCK and CCKP)
NSERG Gravity exhaust air damper: not required (CBK-G version)
VENH High static pressure fan
PVAR Variable airflow
PCOSM Constant supply airflow
PVARDP Variable airflow with pressure probe on the unit
PVMV 4-20mA signal for supply and exhaust air flow rate modulation
PAQC Air quality probe for CO_2 rate check (CBK, CBK-G, CCK-REVO version)
PAQCV Air quality sensor for CO_2 and VOC rate check (CBK, CBK-G, CCK-REVO version)
PPAQC External CO_2 signal management (CBK, CBK-G, CCK-REVO version)
F7 High efficiency F7 air filter (ISO 16890 ePM1 55%)
F9 High efficiency F9 air filter (ISO 16890 ePM1 80%)
FIFD Electronic filter with iFD technology (ISO 16890 ePM1 90%)
PSAF Differential pressure switch for dirty air filters
HSE3 3 kg/h immersed electrodes steam humidifier (size. 20.2-28.2)
HSE5 5 kg/h immersed electrodes steam humidifier (size. 20.2-28.2)
HSE8 8 kg/h immersed electrodes steam humidifier
HSE9 15 kg/h immersed electrodes steam humidifier
PUE External humidifier management with 0-10V signal
LTEMP1 Application for low outdoor temperature
EXFLOWC Application in spaces with forced air exhaust at variable flow and exhaust section (CCK-REVO version)
UVCX UV-C lamp module with germicidal effect
CTT Temperature control with thermostat
CSOND Temperature and humidity ambient control with built-in probes
MDMTX Management of ambient temperature probes
MDMTUX Management of ambient temperature and humidity probes
IOTX IoT industrial module for cloud based interoperability & services
DESM Smoke detector
CONTA2 Energy meter
CHMET Cooling and Heating Capacity Meter
DML Demand Limit
PTCO Set up for shipping via container

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.

Data contained in this document are not binding and may be changed by the Manufacturer without notice