WDAN-iK4 MF

220.2÷420.2

HYDRONIC

SCREWLINE^4-I MF

Polyvalent reversible heat pump
Air cooled
Outdoor installation
Capacity from 522 to 989 kW

Screw INVERTER

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps". The products concerned feature on the website www.eurovent-certification.com

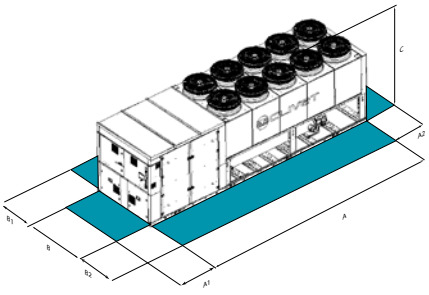
ErP compliant ErP

- ✓ Screw compressors with inverter technology and EC Axialfans type
- ✓ Polyvalent technology configurable for 4-pipe
- ✓ Double independent circuits for high reliability
- ✓ Refrigerant R513A - GWP = 631
- ✓ High full load and seasonal efficiency (Excellence version) for all 3 acoustic versions
- ✓ Domestic hot water up to 60°C, low water temperature down to -8°C
- ✓ Modular operation management, up to 7 units in cascade
- ✓ Integrated hot side and cold side hydronic assemblies

functions and features

Heat pump · Air cooled · Outdoor installation · R-513A · Semi-hermetic Twin-screw · Full Inverter · Electronic expansion valve · ECOBREEZE · HydroPack · Intelliplant

dimensions and clearances



Size ▸▸ WDAN-iK4 MF		220.2	240.2	260.2	280.2	320.2	340.2	420.2
A - Length	mm	7756	7756	8725	9700	10680	10755	10755
B - Width	mm	2228	2228	2228	2228	2228	2228	2228
C - Height	mm	2538	2538	2538	2538	2538	2538	2538
A1	mm	1500	1500	1500	1500	1500	1500	1500
A2	mm	700	700	700	700	700	700	700
B1	mm	1200	1200	1200	1200	1200	1200	1200
B2	mm	1200	1200	1200	1200	1200	1200	1200
Operating weight	kg	7869	7869	9197	9708	10207	10516	11875

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.

CAUTION!

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

versions and configurations

VERSION:

EXC Excellence (Standard)

ENERGY RECOVERY:

R Total energy recovery (Standard)

ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)
LN Silenced acoustic configuration
EN Super-silenced acoustic configuration

CONFIGURATION:

4T Configuration for 4-pipe system

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

LOW TEMPERATURE:

- Low temperature: not required (Standard)
B Water low temperature

technical data

Size		▸▸ WDAN-iK4 MF		220.2	240.2	260.2	280.2	320.2	340.2	420.2
Cooling 100% - Heating 0%										
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	522	544	574	633	721	792	989
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	183	193	190	206	240	266	351
SC-EXC	EER (EN 14511:2022)	(1)	-	2,85	2,82	3,02	3,07	3,01	2,98	2,82
SC-EXC	SEER	(6)	-	5,10	5,08	5,08	5,17	5,12	5,05	5,05
SC-EXC	$\eta_{s,c}$	(6)	%	200,8	200,1	200,1	203,7	201,7	198,8	198,9
Cooling 0% - Heating 100%										
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW	504	509	538	632	697	777	908
SC-EXC	Total power input (EN 14511:2022)	(2)	kW	163	165	168	205	229	252	300
SC-EXC	COP (EN 14511:2022)	(2)	-	3,09	3,09	3,20	3,09	3,05	3,08	3,03
Cooling 100% - Heating 100%										
SC-EXC	Cooling capacity (EN 14511:2022)	(3)	kW	522	544	574	633	718	791	989
SC-EXC	Heating capacity (EN 14511:2022)	(3)	kW	668	695	728	805	917	1013	1266
SC-EXC	Total power input (EN 14511:2022)	(3)	kW	162	169	173	192	222	248	309
SC-EXC	TER (EN 14511:2022)	(4)	-	7,33	7,35	7,54	7,48	7,36	7,28	7,30
SC-EXC	Refrigeration circuits		Nr				2			
SC-EXC	No. of compressors		Nr				2			
SC-EXC	Type of compressors		-				SCREW INVERTER			
SC-EXC	Refrigerant		-				R-513A			
SC-EXC	Standard power supply		V				400/3~/50			
SC-EXC	Sound power level	(5)	dB(A)	97	97	99	99	101	100	101
LN-EXC	Sound power level	(5)	dB(A)	90	91	91	92	92	92	94
EN-EXC	Sound power level	(5)	dB(A)	86	86	88	88	89	89	88
Directive ErP (Energy Related Products)										
SC-EXC	SCOP - AVERAGE Climate - W35	(6)	-	4,03	4,03	4,12	-	-	-	-
SC-EXC	$\eta_{s,H}$	(6)	%	158	158	162	-	-	-	-

(1) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Entering external exchanger air temperature = 35°C
(2) Data compliant to Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C; Entering external exchanger air temperature = 7°C D.B./6°C W.B.
(3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = */7°C; Hot side water temperature = */45°C
(4) TER = (Cooling capacity + Heating capacity) / (Total power input)
(5) 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
(6) Data calculated according to the EN 14825:2018 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

accessories

SPC1 Set-point compensation with 4-20 mA
SCP4 Set-point compensation with 0-10 V
SPC2 Set-point compensation with outdoor air temperature probe
IVFCDT Variable flow rate control heating side by inverter according to the temperature differential
IVFHDT Variable flow-rate control on hot use side by inverter based on the temperature difference
IVFCDTS Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFHDTS Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFCDTF Variable flow rate control cooling side by inverter according to the temperature differential with a flow meter
IVFHDTF Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
CONTA3 M-bus total electricity meter
CONTA4 Total electricity meters and m-bus pump group
IFWX Steel mesh strainer on the water side
CSVX Couple of manually operated shut-off valves
AMMX Spring antivibration mounts
AMMSX Anti-seismic spring antivibration mounts
RCMRX Remote control via microprocessor control
PSX Mains power supply
CMSC9 Serial communication module for Modbus supervisor
CMSC10 Serial communication module for LonWorks supervisor
CMSC11 Serial communication module for BACnet-IP supervisor
RPRI Refrigerant leak detector in the casing
FMCHX Cooling and heating side flow meters
RE-25 Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
ECS ECOSHARE function for the automatic management of a group of units
FC2 EMC filtering to reduce conducted compressor emissions
PGFC Finned coil protection grill
PGCCH Anti-hail protection grilles
RDVS Switching valve with dual safety valves
CCCA Copper / aluminium condenser coil with acrylic lining
CCCA1 Condenser coil with Aluminium Energy Guard DCC treatment
1+1PMHSV Hydropack heating side with 1 + 1 inverter pump
2PMHSV Hydropack cooling side with 2 inverter pumps
1+1PMHS Hydropack heating side with 1 + 1 on-off pump
2PMHS Hydropack heating side with 2 on-off pumps
1+1PMCSV Hydropack cooling side with 1 + 1 inverter pump
2PMCSV Hydropack heating side with 2 inverter pumps
1+1PMCS Hydropack cooling side with 1 + 1 on-off pump
2PMCS Hydropack cooling side with 2 on-off pumps
MISTER1 Indirect energy meter through pressure drops and unit probes temperature differential
MISTER2 Direct energy meter by flow rate and temperature differential with unit probes (available only with options: FMCHX)
MISTER3 Direct energy meter via m-bus (available only with options: FMCHX)
IOTX IoT industrial module for cloud based interoperability & services

Valid from: January 2025 - REF. DG25A901GB-00

Accessories whose code ends with "X" are supplied separately