Order

Order number		Date
		24.02.2025

Customer	Project / Commission	Pos./Unit
XXX	Green Steel	

Responsible in yr. com	Your reference	Responsible in our com

The unit at a glance

Types of air	Supply- and extract air
Size (SUP/ETA)	KG Top 2015
Unit variant	TE
Arrangement	On top of each other
Installation	Outdoor installation (weatherproof)
Execution	Standard
Surface treatment of the housing	Galvanised
Heat recovery	Plate heat exchanger

	Supply air	Exhaust air
Air volume flow	10000 m³/h 2,78 m³/s	10000 m³/h 2,78 m³/s
Pressure / Pressure drop external	200 Pa	200 Pa
Air velocity (class in accordance to DIN EN 13053)	2,5 m/s (V5)	2,5 m/s (V5)
Baseframe	not included	
Casing design	Double walled, insulation 50 mm Mineral wool,A1(incombustible in acc. to EN 13501-1), thermal conductivity = 0,03 W/mK	
Maximum power consumption fans	Supply air: 10 A + Exhaust air: 6,7 A = 16,7 A	
Maximum power input fans	Supply air: 6,5 KW + Exhaust air: 4,4 KW = 10,9 KW	
cumulative filtration efficiency (supply air)	ISO ePM1 94%	
Characteristic values	in accordance to DIN EN 1886: T2, TB 3, D1, L1, F9;	

CE

The summary information on this side provide an overview and emphasise important characteristics, which may in some cases be applicable only to parts of the entire device. The detailed design and equipment of the individual functional elements are described under "technical data". Greyed out and crossed out symbols mark available options not selected by the customer.

Order number	Date
	24.02.2025

Supply air

(1) Filter ISO ePM1 50%

EN ISO 16890	ISO ePM1 50%	
Initial resistance	94	Pa
Selection resistance	144	Pa
Final pressure difference	194	Pa
Energy consumption (Eurovent 4/21: not certified)	1161	kWh
Filter surface	19,1	m²
Damper class 2 in accordance to DIN EN 1751, Q external, 917 x 1222 / 7 Nm troque / Damper shaft for actuator 15 x 15 mm To avoid damage of damper, use actuator with torque max. 20 Nm only!		
Pressure drop	4	Pa

Bag filter F7
Slide-in frame with clamping lever, Filter pull-out
Differential pressure switch A2G-40 40 - 600 Pa, mounted, for filter monitoring
Cable inlet with traction relief up to 15 kW, mounted, Druckschalter
Inspection door, Door fixing device - snap lever

(2) Sound attenuator type 11

Selection resistance							57 Pa
Insertion attenuation							
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4 dB	8 dB	18 dB	21 dB	23 dB	17 dB	13 dB	14 dB

type 11 baffles, Sound attenuator with glass fibre fleece lamination type 11
Sound attenuator baffles removable for baffle width 230 mm

(3) Empty section 509

Inspection door, Door fixing device - snap lever

(4) KGXD vertical HL II

Outdoor air pre-heating (heat recovery)		
Fresh air temperature	-14,0	°C
Rel. humidity of fresh air	0	%
Exhaust air temperature	24,0	°C
Relative humidity of exhaust air	60,0	%
Data related to outdoor air temperature		
Lowest outdoor air temperature	-20,0	°C
Supply air temperature	9,1	°C
Relative humidity of supply air	0	%
Temperature transfer grade dry (EN 308)	51	%
Heat recovery figure	61	%
Heating capacity	77,6	kW
Condensate	43,0	kg/h
Vitiated air temperature	9,9	°C

Pressure drop supply air (Standard density rho 1,2)	215	Pa
Pressure drop extract air (Standard density rho 1,2)	215	Pa
Pressure drop (drop sep.)	31	Pa
electric power consumption due to pressure drop	1,99	kW
Performance figure	17,50	
Energy efficiency	48	%
Heat recovery class in accordance to EN 13053/2020	H6	
max. leakage rate	0,25	%
Heat supply grade (ascertained in accordance to the formula of the passive house institute)	59	%
type	2981361	

Section dismountable

2 x Drain pan 1308 KGT

2 x Condensate drain: DN32, 1 1/4 Inch

Heat exchang., KGXD with bypass

Bypass damper class 2 in accordace to DIN 1751 / 7 Nm troque / Damper shaft for actuator 15 x 15 mm
To avoid damage of damper, use actuator with torque max. 20 Nm only!

Droplet separator, Plastic-drop eliminator (PP), T 400

Slide in rails

Inspection door, Door fixing device - snap lever

(5) Evaporator section

Heat exchanger type	DV/28/1027/4R/14K/2.6Cu,12x0.70/Al-L1	
Connection (intake/outlet)	2x B 22.6.7 - 22 mm	
Splitting	50 % / 50 % verzahnt	
Air-on temperature	32	°C
Relative humidity	40,0	%
Air-off temperature	20	°C
Relative humidity	76,3	%
Capacity (latent)	6,31	kW
Capacity (sensitive)	41,37	kW
Capacity (total)	47,68	kW
Evaporation temperature	6	°C
Refrigerant	R410A	
Mass flow	1175,06	kg/h
Pressure drop (drop sep.)	31	Pa
Air pressure drop (dry)	107	Pa
Pressure drop medium	94,5	kPa
Air velocity	3,22	m/s
Content	11,6	l
Air density	1,2	kg/m³
type	0	

Capacitor		
Heat exchanger type	DV/28/1027/4R/14K/2.6Cu,12x0.70/Al-L1	
Connection (intake/outlet)	2x B 22.6.7 - 22 mm	
Splitting	50 % / 50 % verzahnt	
Air intake temperature	9,1	°C
Air outlet temperature	20	°C

Capacity (total)	36,69	kW
Condensation temperature	50	°C
Medium	R410A	
Medium pressure drop	43,4	kPa
Air velocity	3,22	m/s
Content	11,6	l

2 x Slide in rails
Droplet separator, Plastic-drop eliminator (PP), T 400
Drain pan 1306 KGT
Condensate drain: DN32, 1 1/4 Inch

Designation	Projektbezogenes Register
Special number	135985

(6) Empty section 407

Inspection door, Door fixing device - snap lever

(7) Fan, Impeller with EC Motor

Air volume	10000	m³/h
External pressure	200	Pa
Pressure drop fan unit	6	Pa
Internal pressure	830	Pa
Dynamic pressure	55	Pa
Total pressure	1091	Pa
Fan type	VMC560-6,50/400EC-2370	
Fan speed	1998	1/min
max. fan speed	2370	1/min
Total efficiency	73,9	%
Motor-current consumption	6,61	A
Max. Motor-current	10,00	A
Max. Motor-capacity	6,50	kW
Motor - voltage	3*400	V
Control voltage	8,09	V
K-value	381	
Energy efficiency class	complies with IE5	
absorbed effective electrical power PM	**4,10**	**kW**
effective power absorbed at P_SFP conditions	3,70	kW
SFP (Specific fan power)	1,33	kW/(m³/s)
	0,370	W/(m³/h)
Type	2140012	
SFP class (EN 16798-3)	SFP3	
P-class (EN 13053) Pm ref: 5,83 kW	P1	
Air density	1,2	kg/m³

Octave band middle frequnce(Hz)	63	125	250	500	1000	2000	4000	8000	Sum
Lw(A) suction side	45	67	65	71	72	72	72	64	78
Lw(A) pressure side	49	70	67	76	80	78	75	66	84

Airvolume measuring-tube connected to gauge connection

Isolator mounted and wired, AR 6/7,5
Inspection door, Inspection door pressure side, Door fixing device - snap lever

(8) Sound attenuator type 13

Selection resistance						57	Pa
Insertion attenuation							
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
7 dB	13 dB	29 dB	30 dB	36 dB	25 dB	18 dB	18 dB

type 13 baffles, Sound attenuator with glass fibre fleece lamination type 13
Sound attenuator baffles removable for baffle width 230 mm

(9) Filter ISO ePM1 85%

EN ISO 16890	ISO ePM1 85%	
Initial resistance	165	Pa
Selection resistance	215	Pa
Final pressure difference	265	Pa
Energy consumption (Eurovent 4/21: not certified)	3081	kWh
Filter surface	16,18	m²

filter bag F9 (energy optimized)
Slide-in frame with clamping lever, Filter pull-out
Without connection accessory (open - dimensioned)
Differential pressure switch A2G-40 40 - 600 Pa, mounted, for filter monitoring
Cable inlet with traction relief up to 15 kW, mounted, Druckschalter
Inspection door, Inspection door pressure side, Door fixing device - snap lever

Exhaust air

(4) KGXD vertical HL II

Technical data see supply air

(10) Filter ISO ePM10 60%

EN ISO 16890	ISO ePM10 60%	
Initial resistance	55	Pa
Selection resistance	105	Pa
Final pressure difference	155	Pa
Energy consumption (Eurovent 4/21: not certified)	739	kWh
Filter surface	15,04	m²

Filter bag M5
Slide-in frame with clamping lever, Filter pull-out
Drain pan 1304 KGT discharge left
Condensate drain: DN32, 1 1/4 Inch
Without connection accessory (open - dimensioned)
Inspection door, Door fixing device - snap lever

(11) Sound attenuator type 13

Selection resistance						57	Pa
Insertion attenuation							
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
7 dB	13 dB	29 dB	30 dB	36 dB	25 dB	18 dB	18 dB

type 13 baffles, Sound attenuator with glass fibre fleece lamination type 13
Sound attenuator baffles removable for baffle width 230 mm

(12) Empty section 509

Inspection door, Door fixing device - snap lever

(13) Fan, Impeller with EC Motor

Air volume	10000	m³/h
External pressure	200	Pa
Pressure drop fan unit	6	Pa
Internal pressure	469	Pa
Dynamic pressure	55	Pa
Total pressure	730	Pa
Fan type	VMC560-4,40/400EC-2080	
Fan speed	1724	1/min
max. fan speed	2080	1/min
Total efficiency	77,0	%
Motor-current consumption	4,08	A
Max. Motor-current	6,70	A
Max. Motor-capacity	4,40	kW
Motor - voltage	3*400	V
Control voltage	7,95	V
K-value	381	
Energy efficiency class	complies with IE5	
absorbed effective electrical power PM	**2,63**	**kW**
effective power absorbed at P_SFP conditions	2,45	kW
SFP (Specific fan power)	0,88	kW/(m³/s)
	0,245	W/(m³/h)
Type	2140011	
SFP class (EN 16798-3)	SFP3	
P-class (EN 13053) Pm ref: 3,91 kW	P1	
Air density	1,2	kg/m³

Octave band middle frequnce(Hz)	63	125	250	500	1000	2000	4000	8000	Sum
Lw(A) suction side	42	58	61	67	69	70	71	60	76
Lw(A) pressure side	45	60	61	73	76	75	73	63	81

Airvolume measuring-tube connected to gauge connection
Buildup terminal box with isolator mounted and wired, AR 4/5,5
Inspection door, Inspection door pressure side, Door fixing device - snap lever

(14) Empty section 407

Order number	Date
	24.02.2025

Inspection door, Inspection door pressure side, Door fixing device - snap lever

(15) Sound attenuator type 12

Selection resistance							57 Pa
Insertion attenuation							
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
5 dB	10 dB	22 dB	24 dB	28 dB	21 dB	15 dB	15 dB
Damper class 2 in accordance to DIN EN 1751, Q external, 917 x 1222 / 7 Nm troque / Damper shaft for actuator 15 x 15 mm To avoid damage of damper, use actuator with torque max. 20 Nm only!							
Pressure drop							4 Pa

type 12 baffles, Sound attenuator with glass fibre fleece lamination type 12

Sound attenuator baffles removable for baffle width 230 mm

Außenliegende Klappen auf Kundenwunsch. Isolierung außenliegender Klappen bauseits erforderlich!

Summary of accessory

2 Airvolume measuring-tube connected to gauge connection
2 Cable inlet with traction relief up to 15 kW, mounted, Druckschalter
2 Differential pressure switch A2G-40 40 - 600 Pa, mounted, for filter monitoring
10 Door fixing device - snap lever
2 Inspection door
1 Inspection door
7 Inspection door
1 Section dismountable

Further accessory

5 Cable inlet with traction relief up to 15 kW, loose

Notes

Electric equipment will be pre-assembled and prepared for wiring.
Functional elements need to be dis- and reassembled at site for being taken into the building
All external cable ducts (isolators, wiring boxes, light switches ...) executed UV resistant with stain relief!
Außenliegende Klappen auf Kundenwunsch. Isolierung außenliegender Klappen bauseits erforderlich!

Zusätzliche Netto Netto Preise:

Art. Nr.	Designation	net/net
GREEN STEEL Buchungsoption	Green Steel: CO2 - savings for your selection: 2696 kg CO2 equivalent Material balancing production A1-A2 in accordance with EN 15804 life cycle phases: - Green Steel: 4176 kg CO2 equivalent - Standard steel: 6872 kg CO2 equivalent	637,00 EUR

Art. Nr.: Green Steel
The "Green Steel" booking option means, that a "Low Emission Steel" is used in the manufacturing process of the galvanised steel components of the air handling units in accordance with a so-called "Book&Claim process". The ‘Low Emission Steel’ we use is a steel that is produced from at least 75% recycled scrap in an electric arc furnace using electricity from 100% renewable energy sources. Further technical details of the "Green Steel" we use can be found in our supplier´s data sheet. This and further explanations can also be found in the FAQs (wolf.eu/gsfaq-en).
For technical production reasons, it is currently not possible to ensure with reasonable effort that every air handling unit you order and receive is actually manufactured with "Green Steel". In accordance with our "Book&Claim" procedure, we therefore use the calculated proportion of the "Green Steel" booked by you, that may not be used for an AHU ordered by you and delivered to you, elsewhere in the production of AHUs within a period of six months from receipt of the order confirmation. Further details on our “Book&Claim procedure” can be found in the explanations in the FAQs

(www.wolf.eu/gsfaq. The CO2 rating of the Green Steel option ordered by you for your AHU can be found in the section “Art. No. Green Steel” according to EN 15804 A1-A2 in this offer.
Based on our current state of knowledge this unit is not subject to the scope of EU regulation 1253/2014, as it will be used for the following function: Exhaust air from commercial kitchen via extractor hood or ceiling extractor