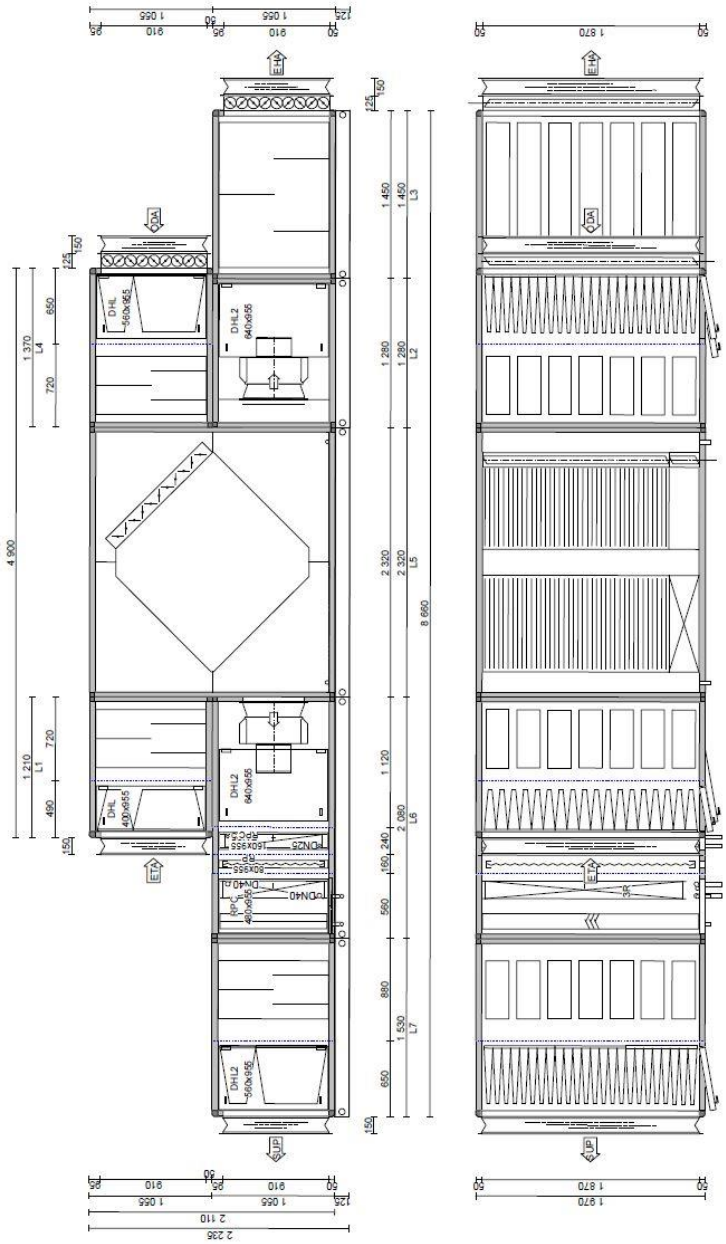
Tip				
Certificates	**ISO 9001 & CE**			
			2016	2018
Thermal efficiency	**75,60 %**	min	**67 %**	**73 %**
SFPint	**876**	Max	**1 158**	**878**
ErP			**Yes**	**Yes**

Execution	**Standard**
Type of unit	**Indoor Unit**
Energy efficiency cla	**B1**

KA HSI-6/3-D-L-50

Airflow	**15 000 m³/h**	Airflow	**15 000 m³/h**	Weight:	**3 325,00 kg**
Ext. pressure	**500 Pa**	Ext. pressure	**500 Pa**		
Tot. pressure	**1 240 Pa**	Tot. pressure	**967 Pa**		
Motorpower	**2x5,700 kW**	Motorpower	**2x3,450 kW**		
Power supply	**400V/3/50Hz**	Power supply	**400V/3/50Hz**		
PHW-heating	**26,68 kW**	Energy rec	**153,63 / 22,72 kW**		
PCW-cooling	**44,36 kW**				
Energy rec	**153,63 / 22,72 kW**				



Supply air

Unit size	**KA 6/3**	Quantity	**1**
Airflow [m³/h]	**15 000**	Length [mm]	**7 300,0**
Ext. pressure [Pa]	**500**	Width [mm]	**1 970,0**
Tot. pressure [Pa]	**1 240**	Height [mm]	**1 055,0**
Airspeed [m/s]	**2,33**	Weight [kg]	**2 176,00**
Airspeed class	**V5**		

panel thickness **50,0 mm** Insulation **Mineral wool 100kg/** Panel inside **Magnelis - 0,80 mm** Panel outside **Magnelis - 0,80 mm**

Panel inside bottom **Magnelis - 0,80 mm**

Guide rails **Magnelis**

Profiles **Aluminium-TB**

Filter	**650,0 mm**	**3,93 m2**	**147,00 kg**	**133 Pa**

Type	**KS65-500**	Bag length [mm]	**500,0**
Class	**M6 - ePM10 70%**	Filter surface [m2]	**21,15**
Airflow [m³/h]	**15 000**	Cells pcs x size [mm]	**3** x **592,0** x **592,0**
Clean dP [Pa]	**56**		**3** x **592,0** x **287,0**
Dirty dP [Pa]	**200**		

Door with hinge and lever — Dimensions [mm **560,0 x 955,0**

Damper: Dimensions [mm] **1 870,0 x 910,0 x 125,0**

Actuated by	**actuator**	torque [Nm]	**6,370**	Pressure drop [Pa]	**5**
Qta. Levers	**1**	air velocity [m/s]	**2,45**	Type	**Arosio 125**

Flexible canvas **GI** Temp. [°C] **80,0** Dimensions [mm] **1 870,0 x 910,0 x 150,0**

Sound attenuator	**720,0 mm**	**4,36 m2**	**190,00 kg**	**46 Pa**

Splitter Type	**DK200/7x947x500**		Frq [Hz]	63	125	250	500	1.000	2.000	4.000	8.000
Air volume [m³/h]	**15 000**	slot width [mm] **67,0**	Abs [dB]	**2,0**	**6,0**	**15,0**	**17,0**	**21,0**	**18,0**	**13,0**	**11,0**

Plate exchanger - diagonal	**2 320,0 mm**	**18,93 m2**	**769,00 kg**	**197 Pa**

Heating mode	**PCF-I-3-180-1602-B-258-A**			**Cooling mode**	**PCF-I-3-180-1602-B-258-A**		
Supply air [m³/h]	**15 000**	Pressure drop [Pa]	**197**	Supply air [m³/h]	**15 000**	Pressure drop [Pa]	**197**
Entering [°C]	**-13,00**	Humidity [%]	**90,0**	Entering [°C]	**32,00**	Humidity [%]	**42,0**
Leaving [°C]	**17,70**	Humidity [%]	**9,0**	Leaving [°C]	**27,50**	Humidity [%]	**55,0**
Exhaust [m³/h]	**15 000**	Pressure drop [Pa]	**197**	Exhaust [m³/h]	**15 000**	Pressure drop [Pa]	**197**
Entering [°C]	**24,00**	Humidity [%]	**35,0**	Entering [°C]	**26,00**	Humidity [%]	**50,0**
Leaving [°C]	**1,10**	Humidity [%]	**100,0**	Leaving [°C]	**30,50**	Humidity [%]	**39,0**
Bypass	**Bypass da**			Bypass	**Bypass damper**		
efficiency [%]	**82,9** Class		**H2**	efficiency [%]	**75,2**		
Recovery capacity [kW]	**153,63**			Recovery capacity [kW	**22,72**		

Drain pan Quality **STST** Drain connection **1 1/4 "**

Damper: Type **Bypass-dampe** **Arosio 125L**

width 1 [mm] **1 602,0** Height [mm] **1 139,0** Actuated by **actuator** torque [Nm] **8,780**

width 2 [mm] **258,0**

2 Pcs **Siphon**

Plug fan	**1 120,0 mm**	**6,78 m2**	**352,00 kg**	**Pa**

Fan	**2x K3G500-PB33-01**	Motor	**2xM3G150IF**
Air volume [m³/h]	**15 000**	Protection	**IP54**
External press [Pa]	**500**	Insulation class	**F**
Speed [1/m]	**1 969**	Power [kW]	**2x5,700**
Sound power [dB]	**0,0**	Speed +-2% [1/m]	**2 250**
Tot. pres. [Pa]	**1 240**	Current +-5% [A]	**2x9,00**
Absorbed system power [	**2x 3,905**	Supply	**3x400 / 50**
efficiency %	**64,23**	Efficiency class	**IE4/EC**

Fan octave band sound power level Lokt.

Okt. Frq. Hz	63	125	250	500	1.000	2.000	4.000	8.000
Inlet	**71,1**	**83,0**	**80,6**	**74,8**	**77,3**	**77,5**	**75,2**	**71,0**
Outlet	**73,0**	**84,0**	**81,0**	**82,0**	**87,9**	**83,7**	**78,9**	**75,2**

working point [Hz]

max. frequence [Hz]

specific fan power [w/(m3/s)] **1 874** **SFP4**

Temperature increase [°K] **1,6**

Door with hinge and lever - overpressure — Dimensions [mm **640,0 x 955,0**

Opening **L** — Dimensions [mm] **525,0 x 525,0**

Opening **L** — Dimensions [mm] **525,0 x 525,0**

Heating coil	**240,0 mm**	**1,45 m2**	**86,00 kg**	**17 Pa**

Airflow [m³/h]	**15 000**	Medium	**Water**
air velocity [m/s]	**2,94**	Med. Flow [l/s]	**0,6480**
Air in [°C]	**14,70**	Med. in [°C]	**65,00**
Air out [°C]	**20,00**	Med. out [°C]	**55,00**
Air press. Drop [Pa]	**17**	Med. pres. dro ɔ [kPa]	**9,15**
Capacity [kW]	**26,68**	Content [l]	**6,000**

HW 16 6030V3.2 14T1690 1R 4C3X1 CuAl V2 25Fe 3960Fz110 40.11.12 KGH-00- N - - -

		Fins	**AL/-**
		RRows	**CU**
RRows	**1**	Header	**FEL**
Fin space [mm]	**3,2**	Frames	**GI**
Connection in	**DN 1 0/0** Connection out **DN 1 0/0**		

Pump is not included

Removable panel for coils — Dimensions [mm **160,0 x 955,0**

Anti frost frame	**160,0 mm**	**0,97 m2**	**44,00 kg**	**Pa**

Removable panel — Dimensions [mm **80,0 x 955,0**

systemair

Project **TOP TOWER (TT Trige** Offer **4453-A-19-KS** Position **AHU 02** From date **23.11.2019**

Obchodní plochy A

Cooling coil	**560,0 mm**	**3,38 m2**	**209,00 kg**	**76 Pa**

Airflow [m³/h]	**15 000**	Medium	**Water**

air velocity [m/s]	**2,83**			Med. Flow [l/s]	**1,7630**
Air in [°C]	**32,00**	Humidity [%]	**42,0**	Med. in [°C]	**8,00**
Air out [°C]	**24,00**	Humidity [%]	**65,0**	Med. out [°C]	**14,00**
total capacity [kW]	**44,36**			Med. pres. drop [kPa]	**22,10**
Sens. capacity [kW]	**40,36**			SHR	**0,91**
Air press. Drop [Pa]	**59**			Content [l]	**21,000**

CW 12 3329S3.2 26T1700 3R 14C5X1 CuAl V2 40Cu 2550Fz150 35.11.12 KGH-00- N - - -		Fins	**AL/-**
		RRows	**CU**
RRows **3**		Header	**CU**
Fin space [mm] **3,2**		Frames	**GI**
Connection in **DN 1 1/2**	Connection out **DN 1 1/2**		

Pump is not included

Removable panel for coils — Dimensions [mm **480,0 x 955,0**

Drain pan Quality **STST** — Drain connection **1 1/4 "**

Drip eliminator Model **DPS** — Frame **ALP** — Fins **PPTV** **17 Pa**

2 Pcs **Siphon**

Sound attenuator	**880,0 mm**	**5,32 m2**	**236,00 kg**	**46 Pa**

Splitter Type	**DK200/7x947x500**		Frq [Hz]	63	125	250	500	1.000	2.000	4.000	8.000
Air volume [m³/h]	**15 000**	slot width [mm] **67,0**	Abs [dB]	**2,0**	**6,0**	**15,0**	**17,0**	**21,0**	**18,0**	**13,0**	**11,0**

Filter	**650,0 mm**	**3,93 m2**	**143,00 kg**	**157 Pa**

Type	**KS85-500**	Bag length [mm]	**500,0**
Class	**F7 - ePM2.5 70%**	Filter surface [m2]	**21,15**
Airflow [m³/h]	**15 000**	Cells pcs x size [mm]	**3** x **592,0** x **592,0**
Clean dP [Pa]	**113**		**3** x **592,0** x **287,0**
Dirty dP [Pa]	**200**		

Door with hinge and lever - overpressure — Dimensions [mm **560,0 x 955,0**

Flexible canvas **GI** Temp. [°C] **80,0** Dimensions [mm] **1 870,0 x 910,0 x 150,0**

noise calculation

sound power [dB]

SumFrq. Hz	63	125	250	500	1000	2000	4000	8000	[dB(A)]	
Inlet	**68,1**	**72,0**	**48,6**	**45,8**	**39,3**	**38,0**	**40,7**	**36,5**	**56,7**	
Outlet	**69,0**	**72,0**	**49,0**	**55,0**	**48,9**	**43,2**	**42,4**	**40,7**	**58,5**	
Casing	**64,0**	**74,0**	**70,8**	**74,2**	**74,0**	**56,2**	**45,7**	**36,4**	**76,1**	sound

pressure level [dB]

SumFrq. Hz	63	125	250	500	1000	2000	4000	8000	[dB(A)]	
Inlet	**54,1**	**58,0**	**34,6**	**31,8**	**25,3**	**24,0**	**26,7**	**22,5**	**42,7**	
Outlet	**55,0**	**58,0**	**35,0**	**41,0**	**34,9**	**29,2**	**28,4**	**26,7**	**44,5**	
Casing	**43,4**	**53,4**	**50,2**	**53,6**	**53,4**	**35,6**	**25,1**	**15,8**	**55,5**	Measuring point distance **2 m**

Exhaust air

Unit size	**KA 6/3**	Quantity	**1**	panel thickness **50,0 mm**	Insulation **Mineral wool**
Airflow [m³/h]	**15 000**	Length [mm]	**6 260,0**	**100kg/** Panel inside	**Magnelis - 0,80 mm** Panel outside
Ext. pressure [Pa]	**500**	Width [mm]	**1 970,0**	**Magnelis - 0,80 mm** Panel inside bottom	
Tot. pressure [Pa]	**967**	Height [mm]	**1 055,0**	**Magnelis - 0,80 mm**	
Airspeed [m/s]	**2,33**	Weight [kg]	**1 152,00**	Guide rails	**Magnelis**
Airspeed class	**V5**			Profiles	**Aluminium-TB**

Filter	**490,0 mm**	**2,97 m2**	**116,00 kg**	**97 Pa**

Type	**FP50-360**	Bag length [mm]	**360,0**
Class	**M5 - ePM10 50%**	Filter surface [m2]	**11,70**
Airflow [m³/h]	**15 000**	Cells pcs x size [mm]	**3** x **592,0** x **592,0**
Clean dP [Pa]	**43**		**3** x **592,0** x **287,0**
Dirty dP [Pa]	**150**		

Door with hinge and lever — Dimensions [mm **400,0 x 955,0**

Flexible canvas **GI** Temp. [°C] **80,0** Dimensions [mm] **1 870,0 x 910,0 x 150,0**

Sound attenuator	**720,0 mm**	**4,36 m2**	**187,00 kg**	**46 Pa**

Splitter Type	**DK200/7x947x500**	Frq [Hz]	63 125 250 500 1.000 2.000 4.000 8.000
Air volume [m³/h]	**15 000** slot width [mm] **67,0**	Abs [dB]	**2,0 6,0 15,0 17,0 21,0 18,0 13,0 11,0**

Plate exchanger - diagonal	**2 320,0 mm**	**18,93 m2**	**769,00 kg**	**197 Pa**

Plug fan	**1 280,0 mm**	**7,74 m2**	**371,00 kg**	**Pa**

Fan	**2x K3G500-PA23-71**	Motor	**2xM3G150FF**
Air volume [m³/h]	**15 000**	Protection	**IP54**
External press [Pa]	**500**	Insulation class	**F**
Speed [1/m]	**1 789**	Power [kW]	**2x3,450**
Sound power [dB]	**0,0**	Speed +-2% [1/m]	**1 910**
Tot. pres. [Pa]	**967**	Current +-5% [A]	**2x5,30**
Absorbed system power [	**2x 2,963**	Supply	**3x400 / 50**
efficiency %	**65,46**	Efficiency class	**IE4/EC**

Fan octave band sound power level Lokt.

Okt. Frq. Hz	63	125	250	500	1.000	2.000	4.000	8.000
Inlet	**68,3**	**80,8**	**77,3**	**72,0**	**74,4**	**73,8**	**74,4**	**67,5**
Outlet	**71,5**	**81,0**	**78,5**	**79,2**	**80,7**	**79,2**	**77,6**	**71,9**

working point [Hz]

max. frequence [Hz]

specific fan power [w/(m3/s)] **1 422** **SFP3**

Temperature increase [°K] **1,2**

Door with hinge and lever - overpressure — Dimensions [mm **640,0 x 955,0**

Opening **L** — Dimensions [mm] **525,0 x 525,0**

Opening **L** — Dimensions [mm] **525,0 x 525,0**

Sound attenuator	**1 450,0 mm**	**8,78 m2**	**478,00 kg**	**59 Pa**

Splitter Type	**DK200/7x947x1250**	Frq [Hz]	63 125 250 500 1.000 2.000 4.000 8.000
Air volume [m³/h]	**15 000** slot width [mm] **67,0**	Abs [dB]	**5,0 14,0 36,0 40,0 44,0 40,0 28,0 22,0**

Damper: Dimensions [mm] **1 870,0 x 910,0 x 125,0**

Actuated by	**actuator**	torque [Nm]	**6,370**	Pressure drop [Pa]	**5**
Qta. Levers	**1**	air velocity [m/s]	**2,45**	Type	**Arosio 125**

Flexible canvas	**GI**	Temp. [°C]	**80,0**	Dimensions [mm]	**1 870,0 x 910,0 x 150,0**

systemair

Project **TOP TOWER (TT Trige** Offer **4453-A-19-KS**
Position **AHU 02** From date **23.11.2019**
Obchodní plochy A

noise calculation

sound power [dB]

Sum	Frq. Hz	63	125	250	500	1000	2000	4000	8000	
	Inlet	**65,3**	**69,8**	**45,3**	**43,0**	**36,4**	**34,3**	**39,9**	**33,0**	**54,4**
	Outlet	**69,5**	**70,0**	**45,5**	**42,2**	**39,7**	**42,2**	**52,6**	**52,9**	**58,4**
	Casing	**62,5**	**71,0**	**68,3**	**71,4**	**66,8**	**51,7**	**44,4**	**33,1**	**71,1**

[dB(A)]

sound pressure level [dB]

Sum	Frq. Hz	63	125	250	500	1000	2000	4000	8000	
	Inlet	**51,3**	**55,8**	**31,3**	**29,0**	**22,4**	**20,3**	**25,9**	**19,0**	**40,4**
	Outlet	**55,5**	**56,0**	**31,5**	**28,2**	**25,7**	**28,2**	**38,6**	**38,9**	**44,4**
	Casing	**41,9**	**50,4**	**47,7**	**50,8**	**46,2**	**31,1**	**23,8**	**12,5**	**50,5**

[dB(A)] Measuring point distance **2 m**

Baseframe **S125** Material **GI** isolated **No**
Height [mm] **125,0** Welded **No**

Thermal break

Delivery sections

no.	Width	Height	Length	Weight
1	**1 970,0**	**1 055,0**	**1 210,0**	**303,00**
2	**1 970,0**	**1 055,0**	**1 280,0**	**371,00**
3	**1 970,0**	**1 055,0**	**1 450,0**	**478,00**
4	**1 970,0**	**1 055,0**	**1 370,0**	**337,00**
5	**1 970,0**	**2 110,0**	**2 320,0**	**769,00**
6	**1 970,0**	**1 055,0**	**2 080,0**	**691,00**
7	**1 970,0**	**1 055,0**	**1 530,0**	**379,00**

Ecodesign Information

Non Residental Unit EU1253

ErP Ready 2016	**Yes**
ErP Ready note 2016	**-**
ErP Ready 2018	**Yes**
ErP Ready note 2018	**-**
Specific fan power internal [W/(m3/s)]	**876**
Maximal SFPint 2016 [W/(m3/s)]	**1 158**
Maximal SFPint 2018 [W/(m3/s)]	**878**
Effective electric power input [kW]	**13,736**
Control unit input power [kW]	
Reference flow rate [m³/h]	**15 000**
Thermal efficiency [%]	**75,60**
Type of heat recovery system	**other HRS**
Minimal thermal efficiency ErP 2016 [%]	**67**
Minimal thermal efficiency ErP 2018 [%]	**73**
Motor and drive type	**variable speed**
Directional unit type	**BVU bidirectional ventilation unit**
Face velocity at design flow rate [m/s]	**2,33**
External leakage rate at +400 Pa [%]	**0,13**
External leakage rate at -400 Pa [%]	**0,13**
Internal leakage rate at 200 Pa [%]	**2,00**
Internal pressure drop of ventilation components [Pa]	**550**
External pressure drop [Pa]	**1 000**
Internal pressure drop of non-ventilation components [Pa]	**521**
Efficiency bonus E 2016 [W/(m3/s)]	**258**
Efficiency bonus E 2018 [W/(m3/s)]	**78**
Correction factor F 2016 [W/(m3/s)]	
Correction factor F 2018 [W/(m3/s)]	
Efficiency base configuration U1 [%]	**62,53**
Internal pressure drop of ventilation components U1 [Pa]	**310**
External pressure drop U1 [Pa]	**500**
Internal pressure drop of non-ventilation components U1 [Pa]	**362**
Efficiency base configuration U2 [%]	**63,21**
Internal pressure drop of ventilation components U2 [Pa]	**240**
External pressure drop U2 [Pa]	**500**
Internal pressure drop of non-ventilation components U2 [Pa]	**159**