

UNI EN ISO 9001 QUALITY MANAGEMENT SYSTEM  
**MATERIALS/SUPPLIES APPROVAL** (art. 6 d.m. 7 marzo 2018, n.49)

Client	VDC MXP11 S.r.l.- Vicolo San Giovanni sul Muro 9, 20121 Milano (MI)
Construction Manager	Architetto Luciano Franchi
Work of	Costruzione Nuovo Data Center da 16 MW e Opere Infrastrutturali annesse
Project prepared by	DBA Pro – Piazza Roma 19 – 32045 Santo Stefano di Cadore (BL)
Building Permit/Construction Authorization	
Contractual Amount of Work €	68.340.000,00 €
Contract Agreement	Stipulato in data 15 Settembre 2022
Contractor	Bouygues E&S Italia S.p.A. - Via Stephenson, 73 – 20157 Milano.
Director of Works	Ing. Sacha Busetti

Project: MXP11  
 Document N°: MXP11-BYE-XX-XX-SP-M-0015  
 Revision: **C02**  
 Revision Date: 14-Dic-2023  
 Stage: WS5  
 Status: A1  
 Document Title: DM-DOAS-1

Revision History

Date	Revision	Status	Revised Sections	Description
10-May-2023	P01	S3	/	Internal revision
18-May-2023	P02	S4	/	FIRST ISSUE
29-Nov-2023	C01	A1	Pag. 1,2-6/19	EDIT DATA SHEETS
14-dic-2023	C02	A1	<b>Pag. 1- 6/19</b>	<b>EDIT DATA SHEETS</b>

- General Data (Enterprise section)

Materials/Supply Approval Sheet								
Data to be entered for cataloging and archiving - by the Enterprise								
Categoria	STR		ARC		MEP		VVF	
Verifica Necessaria	Strutturale		Architettonico		Meccanico Elettrico Idrico		Sicurezza Antincendio	
	SI	NO	SI	NO	SI	NO	SI	NO
Campionatura Richiesta	SI				NO			

Materials/Project supply	
Data taken from Project documents - by the Enterprise	
Description	DM-DOAS-1
Computation ID reference	N.A.
Drawing ID reference	N.A.
Special Specification ID reference	MXP11-RHD-DC-ZZ-DR-M-0714 Schematic MXP11-RHD-DC-XX-CA-M-0025 Supply MXP11-RHD-DC-XX-CA-M-0026 Return
Materials/Supply Proposed	
Data taken from construction documents - by the Enterprise	
Description	DM-DOAS-1 Supply m3/h 3.150 Pa = 200; Return m3/h 3.150 Pa =240
Product ID reference	ROCCHEGGIANI

Sampling Available	SI	NO
Business Cards	SI	NO
Data Sheets	SI	NO
DOP Declaration of Performance	SI	NO
CE Marking	SI	NO
Supplementary Reports	SI	NO
Specialist Evaluatios	SI	NO

Contractor Evaluations	
Proposal as project	SI NO

Cost variations	SI	NO
Stam/signature		

Attachments
Technical data sheet

Notes

- APPROVALS (Section Reserved for DL)

Specialist approvals				
A- APPROVATO B- APPROVATO CON NOTE – Ri Sottomissione NON NECESSARIA C- APPROVATO CON NOTE – Ri Sottomissione NECESSARIA D- NON APPROVATO				
Data to be entered by Specialist Consultants and/or Construction Management				
Fire Fighting Design	SI		NO	
Description				
Observations				
Type	A	B	C	D
Stamp/signature				
Dir. Lavori STR	SI		NO	
Description				
Observations				
Type	A	B	C	D

Stamp/signature				
Dir. Lav. ARC	SI		NO	
Description				
Observations				
Type	A	B	C	D
Stamp/signature				
Dir. Lav. MEP	SI		NO	
Description				
Observations				
Type	A	B	C	D
Stamp/signature				
<b>Approvazione Generale</b> E- APPROVATO F- APPROVATO CON NOTE – Ri Sottomissione NON NECESSARIA G- APPROVATO CON NOTE – Ri Sottomissione NECESSARIA H- NON APPROVATO				
DLG	SI		NO	
Description				
Observations				
Type	A	B	C	D
Stamp/signature				

Attachments

Notes

Offer	<b>UTA 21001082.17</b>	Position	<b>2.0</b>	<b>MPX11-DM-DOAS-01</b>
Project	<b>MXP11 Data Centre</b>			From date <b>14/12/2023</b>
				User:

Unit size	<b>CTA 12.7</b>	<b>C54TT</b>	Length [mm]	<b>6.650,0</b>	Net weight [kg]	<b>~2.212,00</b>
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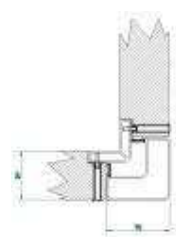
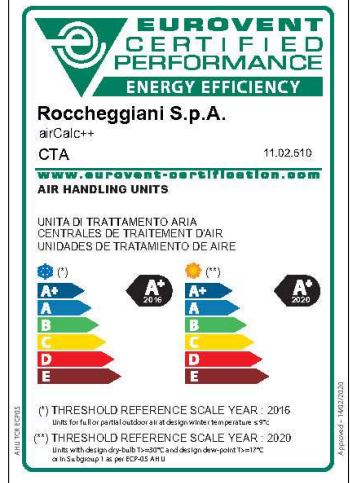
Panel inside	<b>Galvanized prepainted</b>	<b>0,80 mm</b>	Simil RAL 9002
Panel outside	<b>Galvanized prepainted</b>	<b>0,80 mm</b>	Simil RAL 9002
Panel inside bottom	<b>AISI 304</b>	<b>0,80 mm</b>	
Profiles	<b>Aluminium - Thermal Break</b>		
Guides	<b>AISI 304</b>		
Insulation	<b>Mineralwool</b>	Thickness	<b>54,0 mm</b>
Corners	<b>Nylon</b>		
Panel reaction to fire class due to UNI 9177: <b>0 (ZERO)</b>			

**Certified mechanical performances due to EN 1886:2007**

Mechanical stability	<b>D1(M)</b>
Casing leakage -400 Pa	<b>L1(M)</b>
Filter by-pass leakage	<b>F9</b>
Casing leakage +700 Pa	<b>L1(M)</b>

**Certified thermal performances of casing due to EN 1886:2007**

Thermal bridge class	<b>TB2</b>
Thermal transmittance class	<b>T2</b>

**EUROVENT CERTIFIED PERFORMANCE**  
ENERGY EFFICIENCY

**Roccheggiani S.p.A.**  
airCalc++  
CTA 11.02.510  
www.eurovent-certification.com  
AIR HANDLING UNITS

UNITA DI TRATTAMENTO ARIA  
CENTRALES DE TRAITEMENT D'AIR  
UNIDADES DE TRATAMIENTO DE AIRE

Energy efficiency scale: A+, A, B, C, D, E

(\*) THRESHOLD REFERENCE SCALE YEAR: 2016  
Units for full or partial outdoor air at design winter temperature  $s_{17}C$

(\*\*) THRESHOLD REFERENCE SCALE YEAR: 2020  
Units with design dry bulb  $T_{s17}C$  and design dew-point  $T_{s17}C$  or  $T_{s17}C$  as per EC842 AHU

Approved: 14/02/2023

Reference city **Milan**  
airCalc++ Vers. **P 4.2.0**

**Sound power levels [dB]**

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Total sound power level at the unit inlet [dB]	<b>66,0</b>	<b>60,0</b>	<b>71,0</b>	<b>66,0</b>	<b>59,0</b>	<b>56,0</b>	<b>52,0</b>	<b>49,0</b>	<b>67,2</b>
Total sound power level at the unit outlet [dB]	<b>71,0</b>	<b>65,0</b>	<b>76,0</b>	<b>72,0</b>	<b>73,0</b>	<b>72,0</b>	<b>69,0</b>	<b>66,0</b>	<b>78,3</b>
Break out airborne sound power [dB]	<b>48,0</b>	<b>46,0</b>	<b>55,0</b>	<b>48,0</b>	<b>48,0</b>	<b>48,0</b>	<b>34,0</b>	<b>27,0</b>	<b>53,5</b>

Internal frame material	<b>AISI 304</b>	Drain pan material	<b>AISI 304</b>
Dampers material	<b>Aluminium / Aluminium</b>	Drop eliminator material	<b>AISI 304 / PPTV</b>

**Main data:**

<u>Supply</u>	Airflow	<b>3.150 [m³/h]</b>	External static	<b>200 [Pa]</b>	Motor absorbed/nominal power	<b>1,220 /2,400 [kW]</b>
<u>Return</u>	Airflow	<b>3.150 [m³/h]</b>	External static	<b>240 [Pa]</b>	Motor absorbed/nominal power	<b>0,860 /2,400 [kW]</b>

Certification number	<b>11.02.510</b>	Specific fan power [W/(m³/s)]	<b>2.008</b>	<b>SFP4</b>
Model Box number	<b>Pr08/Zn08-54RW-TT</b>	Used lowest temp. [°C]	<b>-10,10</b>	
Type of unit	<b>External unit</b>	Recirculation [%]		
A.m.s.l. [m]	<b>0</b>	Air velocity [m/s]	<b>1,19</b>	
HRS Winter Thermal eff. (1:1) (dry)	<b>84,20</b> (EN 308)	Specific weight [kg/m³]	<b>1,20</b>	
HRS Summer Thermal eff. (1:1)	<b>81,2</b> (EN 308)	Factor Fs-Pref (wint./summ. cond.)	<b>0,76 / 0,64</b>	
HRS Summer Humidity eff. (1:1)	<b>80,40</b> (EN 308)	<i>Energy label class designed for wet conditions</i>		

Offer	<b>UTA 21001082.17</b>	Position	<b>2.0</b>	airCalc Vers.	<b>P 4.2.0</b>
Project	<b>MXP11 Data Centre</b>				<b>14/12/2023</b>
Position	<b>MPX11-DM-DOAS-01</b>				

<b>Supply air</b>					
Unit definition			Casing:		
Unit size	<b>CTA 12.7</b>	<b>C54TT</b>	Thickness	<b>54,0 mm</b>	<b>Mineralwool</b>
Airflow [m³/h]	<b>3.150</b>	Length [mm]	<b>6.650,0</b>	Panel inside	<b>Galvanized prepainted 0,80 mm</b>
Ext. pressure [Pa]	<b>200</b>	Width [mm]	<b>1.220,0</b>	Panel outside	<b>Galvanized prepainted 0,80 mm</b>
Tot. pressure [Pa]	<b>935</b>	Height [mm]	<b>770,0</b>	Panel inside bottom	<b>AISI 304 0,80 mm</b>
Air velocity [m/s]	<b>1,19</b>	Net weight [kg]	<b>~1.695,0</b>	Profiles	<b>Aluminium</b>
Class DIN EN 13053	<b>V1</b>			Guides	<b>AISI 304</b>
Thermal transmittance class		<b>T2</b>	Mechanical stability		<b>D1(M)</b>
Thermal bridge class		<b>TB2</b>	Filter by-pass leakage		<b>F9</b>
Casing leakage -400 Pa		<b>L1(M)</b>	Casing leakage +700 Pa		<b>L1(M)</b>

Filter		Supply air	<b>1.170,0 mm</b>	<b>4,16 m2</b>	<b>133 Pa</b>
Manufacture	<b>Roccheggiani</b>	Filter length [mm]	<b>535,0</b>		
Type	<b>V-BF-M5-535-S</b>	Filter surface [m2]	<b>4,50</b>		
Class (EN 779:2012)	<b>M5</b>	Cells pcs x size	<b>1 x V-BF-M5-535-S</b>	<b>490,0 x 592,0</b>	
Class (ISO 16890)	<b>ePM10 65%</b>				
Clean dP [Pa]	<b>79</b>				
Dirty dP [Pa]	<b>179</b>				
Applied dP [Pa]	<b>129</b>				
Airflow [m³/h]	<b>3.150</b>	<b>3,02 m/s</b>			
Filter handling	<b>Dirty air withdrawal</b>				
Material frame	<b>AISI 304</b>	Filter energy class			
Door with hinge and single lever		Dimensions [mm]	<b>500,0 x 630,0</b>		
<u>Damper:</u>		Dimensions [mm]	<b>780,0 x 510,0 x 125,0</b>		
Actuated by	<b>actuator</b>	Airflow [m³/h]	<b>3.150</b>	Frame	<b>Aluminium</b>
Qta. Levers	<b>1</b>	Air velocity [m/s]	<b>2,20</b>	Blades	<b>Aluminium</b>
torque [Nm]	<b>3,220</b>	Pressure drop [Pa]	<b>4</b>	Type	<b>DP1</b>
<u>Damper actuator</u>	<b>GMA161.1E</b>				
Quantity	<b>1</b>	Mode	<b>modulating</b>	Voltage [V]	<b>24</b>
Supplier	<b>Siemens</b>	torque [Nm]	<b>7,000</b>	Current [A]	<b>0,21</b>
				Protection	<b>IP54</b>
<u>Inspection window</u>	<b>Round</b>	Diameter [mm]	<b>200,0</b>		
<u>Lamp</u>	<b>PVC-STD Lamp</b>	Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A IP65</b>
		Wiring	<b>Yes</b>		
<b>1 Pcs</b>	<b>Differential pressure switch PS500 (0-500Pa)</b>				<b>-</b>
<b>1 Pcs</b>	<b>A2G-10 Differential Pressure Gauge 0-500 Pa</b>				<b>-</b>

Empty section		Supply air	<b>540,0 mm</b>	<b>1,78 m2</b>	<b>Pa</b>
Door with hinge and single lever		Dimensions [mm]	<b>500,0 x 630,0</b>		
<u>Inspection window</u>	<b>Round</b>	Diameter [mm]	<b>200,0</b>		
<u>Lamp</u>	<b>PVC-STD Lamp</b>	Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A IP65</b>
		Wiring	<b>Yes</b>		
<b>1 Pcs</b>	<b>FTK+ 270 VVS NTC10K Temperature and humidity probe (0-10V)</b>				

Offer	<b>UTA 21001082.17</b>		Position	<b>2.0</b>		airCalc Vers.	<b>P 4.2.0</b>	
Project	<b>MXP11 Data Centre</b>						<b>14/12/2023</b>	
Position	<b>MPX11-DM-DOAS-01</b>							
<b>Filter</b>			Supply air	<b>670,0 mm</b>	<b>2,23 m2</b>		<b>204 Pa</b>	
Manufacture	<b>Roccheggiani</b>		Filter length [mm]	<b>535,0</b>				
Type	<b>V-BF-F8-535-S</b>		Filter surface [m2]	<b>3,80</b>				
Class (EN 779:2012)	<b>F8</b>		Cells pcs x size	<b>1 x V-BF-F8-535-S</b>	<b>492,0 x 592,0</b>			
Class (ISO 16890)	<b>ePM1 70%</b>							
Clean dP [Pa]	<b>154</b>							
Dirty dP [Pa]	<b>254</b>							
Applied dP [Pa]	<b>204</b>							
Airflow [m³/h]	<b>3.150</b>	<b>3,00 m/s</b>						
Filter handling	<b>Dirty air withdrawal</b>							
Material frame	<b>AISI 304</b>		Filter energy class					
<b>1 Pcs</b>	<b>Differential pressure switch PS1500 (200-1000Pa)</b>							<b>-</b>
<b>1 Pcs</b>	<b>A2G-10 Differential Pressure Gauge 0-500 Pa</b>							<b>-</b>
<b>Empty section</b>			Supply air	<b>230,0 mm</b>	<b>0,5 m2</b>		<b>Pa</b>	
Door with hinge and single lever			Dimensions [mm]	<b>540,0 x 630,0</b>				
<u>Inspection window</u>	<b>Round</b>		Diameter [mm]	<b>200,0</b>				
<u>Lamp</u>	<b>PVC-STD Lamp</b>		Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A</b>	<b>IP65</b>	
			Wiring	<b>Yes</b>				
<b>Heat wheel in casing</b>			Supply air	<b>680,0 mm</b>	<b>2,74 m2</b>		<b>199 Pa</b>	
<b>EM1100x1100-1050V-016-2D000-BBPI-A</b>								
<u>Heating mode</u>			<u>Cooling mode</u>					
Supply [m³/h]	<b>3.150</b>		Supply [m³/h]	<b>3.150</b>				
Entering [°C]	<b>-10,10</b>	Humidity [%]	Entering [°C]	<b>37,90</b>	Humidity [%]		<b>55,9</b>	
Leaving [°C]	<b>17,00</b>	Humidity [%]	Leaving [°C]	<b>31,50</b>	Humidity [%]		<b>46,6</b>	
Pressure drop [Pa]	<b>157</b>		Pressure drop [Pa]	<b>188</b>				
Standard pressure drop (1.2 kg/m3) [Pa]	<b>162</b>		Standard pressure drop (1.2 kg/m3) [Pa]	<b>163</b>				
Exhaust [m³/h]	<b>3.150</b>		Exhaust [m³/h]	<b>3.150</b>				
Entering [°C]	<b>22,20</b>	Humidity [%]	Entering [°C]	<b>30,00</b>	Humidity [%]		<b>41,7</b>	
Leaving [°C]	<b>-4,90</b>	Humidity [%]	Leaving [°C]	<b>36,50</b>	Humidity [%]		<b>54,3</b>	
Pressure drop [Pa]	<b>162</b>		Pressure drop [Pa]	<b>187</b>				
Standard pressure drop (1.2 kg/m3) [Pa]	<b>162</b>		Standard pressure drop (1.2 kg/m3) [Pa]	<b>163</b>				
Tot. recovery capacity [kW]	<b>36,94</b>		Tot. recovery capacity [kW]	<b>34,00</b>				
Sens. recovery capacity [kW]	<b>28,65</b>		Sens. recovery capacity [kW]	<b>6,88</b>				
thermal efficiency [%]	<b>84</b>	(EN 308)	thermal efficiency [%]	<b>81,2</b>	(EN 308)			
Humidity efficiency [%]	<b>85</b>		Humidity efficiency [%]	<b>80,4</b>				
Energy efficiency class [%]	<b>H1</b>	(EN 13053)						
Energy efficiency [%]	<b>81,80</b>	(EN 13053)						
<u>control type</u>	<b>SSTD</b>	<b>Advance step drive</b>						
<u>Nominal data</u>								
Nominal power [kW]	<b>0,040</b>	nominal current [A]	<b>0,39</b>	nominal voltage [V]	<b>3x230</b>			
Pressure Door			Dimensions [mm]	<b>540,0 x 1.400,0</b>				
<u>Drain pan</u>	Quality	<b>AISI 304</b>	Drain connection	<b>1 1/4</b>				



Offer	<b>UTA 21001082.17</b>		Position	<b>2.0</b>	airCalc Vers.	<b>P 4.2.0</b>	
Project	<b>MXP11 Data Centre</b>					<b>14/12/2023</b>	
Position	<b>MPX11-DM-DOAS-01</b>						
<b>Circular air</b>			Supply air	<b>450,0 mm</b>	<b>0,94 m2</b>	<b>Pa</b>	
<u>Mixed air calculation 1</u>							
Recircle air [m³/h]	Temp. [°C]	Humidity [%]	Temperature mixed air [°C]		Humidity [%]		
Fresh air [m³/h]	Temp. [°C]	Humidity [%]					
<u>Mixed air calculation 2</u>							
Recircle air [m³/h]	Temp. [°C]	Humidity [%]	Temperature mixed air [°C]		Humidity [%]		
Fresh air [m³/h]	Temp. [°C]	Humidity [%]					
Removable panel			Dimensions [mm]	<b>360,0 x 630,0</b>			
<u>Inspection window</u>	<b>Round</b>		Diameter [mm]	<b>200,0</b>			
<u>Lamp</u>	<b>PVC-STD Lamp</b>		Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A</b>	<b>IP65</b>
			Wiring	Yes			

<b>Plug fan</b>			Supply air	<b>720,0 mm</b>	<b>2,23 m2</b>	<b>45 Pa</b>	
Fan	<b>GR31I-ZID.DC.CR</b>		Motor	<b>ECblue-IE5-50-116-0-2.4</b>		<b>IE5</b>	
Air volume [m³/h]	<b>3.150</b>		Protection	<b>IP55</b>			
External static [Pa]	<b>200</b>		Insulation class	<b>F</b>			
dynamic pressure [Pa]	<b>21</b>		Voltage	<b>3x400 V / 50 Hz</b>			
Add. dynamic pressure [Pa]	<b>45</b>		Power [kW]	<b>2,400</b>			
Total static pressure [Pa]	<b>870</b>		Speed [1/min]	<b>3.700</b>			
Total pressure [Pa]	<b>935</b>		System absorbed power [kW]	<b>1,220</b>			
Speed [1/min]	<b>2.905</b>		nominal current [A]	<b>2,85</b>			
efficiency %	<b>67</b>						
Supplier	<b>Ziehl-Abegg</b>						
Code	<b>ZAB-116889/A01-3/400/50</b>						
K-factor [m³/h]	<b>106</b>	$[\rho = 1,2 \text{ kg/m}^3]$	$(Q = k \sqrt{\Delta p})$	K-factor [adim]	<b>82</b>	$(Q = k \sqrt{\Delta p \frac{2}{\rho}})$	
Fan octave band sound power level (Lokt) [dB]			Control Signal (0-10V)		<b>7,90</b>		
Frq.[Hz]	63	125	250	500	1000	2000	4000 8000
Inlet	<b>68,0</b>	<b>63,0</b>	<b>75,0</b>	<b>71,0</b>	<b>65,0</b>	<b>63,0</b>	<b>60,0 58,0</b>
Outlet	<b>71,0</b>	<b>69,0</b>	<b>80,0</b>	<b>76,0</b>	<b>76,0</b>	<b>73,0</b>	<b>70,0</b>
			Specific fan power [W/(m3/s)]		<b>1.155 SFP2</b>		
<b>1 Pcs DPE2500 Flow LCD for airflow measurement</b>			<b>-</b>				
<b>1 set Tube for airflow measurement</b>			<b>-</b>				
Removable panel			Dimensions [mm]	<b>630,0 x 630,0</b>			
Opening	<b>L</b>		Dimensions [mm]	<b>280,0 x 280,0</b>			
<u>Inspection window</u>	<b>Round</b>		Diameter [mm]	<b>200,0</b>			
<u>Lamp</u>	<b>PVC-STD Lamp</b>		Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A</b>	<b>IP65</b>
			Wiring	Yes			

Offer	<b>UTA 21001082.17</b>		Position	<b>2.0</b>	airCalc Vers.	<b>P 4.2.0</b>	
Project	<b>MXP11 Data Centre</b>					<b>14/12/2023</b>	
Position	<b>MPX11-DM-DOAS-01</b>						
<b>Cooling coil</b>			Supply air	<b>450,0 mm</b>	<b>1,27 m2</b>	<b>81 Pa</b>	
<b>Evaporating coil</b>			Airflow [m³/h]		<b>3.150</b>	Medium type	
Air velocity [m/s]			Air in [°C]		<b>2,26</b>	<b>R410A</b>	
Air in [°C]			Humidity [%]		<b>33,50</b>	Evaporating temp. [°C]	
Air out [°C]			Humidity [%]		<b>12,90</b>	<b>7,00</b>	
Tot. capacity [kW]					<b>46,23</b>	Overheating [°C]	
Air press. Drop [Pa]					<b>81/60</b> (wet/dry)	<b>6,00</b>	
dp for energy eff. class [Pa]					<b>21</b>	SHR	
						<b>0,47</b>	
						Connection in [mm]	
						<b>28</b>	
						Connection out [mm]	
						<b>35</b>	
Heating mode			Air in [°C]			Condensing temp. [°C]	
Air out [°C]			Tot. capacity [kW]		<b>37,90</b>	<b>45,00</b>	
					<b>22,05</b>	hot gas temp. in [°C]	
						<b>70,00</b>	
						hot gas temp. out [°C]	
						<b>40,00</b>	
<b>25 x 21.65 5/16 - CR 19NT 6NR 815A 2.1P 28NC</b>							
Rows					<b>6</b>	<u>Materials:</u>	
nos. of refr.circuits					<b>2 circuits</b>	Fins	
Circuits					<b>28</b>	<b>Aluminium</b>	
Fin space [mm]					<b>2,10</b>	Pipes	
						<b>Copper</b>	
						Header	
						<b>Copper</b>	
						Frames	
						<b>AISI 304</b>	
						Fin protection	
						<b>-</b>	
<u>Drain pan</u>			Quality		<b>AISI 304</b>	Drain connection	
						<b>1 1/4</b>	
<b>1 Pcs AKF10+ NTC10k Temperature probe (-50/150°C)</b>					<b>-</b>		
<b>1 Pcs Technical cabinet TC</b>						Dimensions [m]	
panel thickness					<b>25 mm</b>	<b>1.74 x 1.678 x 0.8</b>	
Panel inside					<b>Galvanized steel</b>	Profiles	
Panel outside					<b>Galvanized prepainted</b>	<b>Aluminium</b>	
Panel inside bottom					<b>No</b>	Insulation	
						<b>Polyurethane foam</b>	
						With support pins	
						<b>Yes</b>	
						With baseframe	
						<b>No</b>	
<b>Anti frost frame</b>			Supply air		<b>220,0 mm</b>	<b>0,64 m2</b>	<b>Pa</b>
Removable panel						Dimensions [mm]	
						<b>180,0 x 630,0</b>	
<b>1 Pcs Technical cabinet connected to previous TC</b>					<b>-</b>		
<b>1 Pcs TF30 Antifreeze thermostat -10 to 10°C 3 m capillar</b>					<b>-</b>		
<b>Heating coil</b>			Supply air		<b>310,0 mm</b>	<b>0,96 m2</b>	<b>30 Pa</b>
Airflow [m³/h]			Air velocity [m/s]		<b>3.150</b>	Medium	
Air in [°C]			Humidity [%]		<b>2,08</b>	<b>Water</b>	
Air out [°C]			Humidity [%]		<b>1,00</b>	Med. Flow [l/s]	
Capacity [kW]					<b>60,0</b>	<b>0,4400</b>	
Air press. Drop [Pa]					<b>18,00</b>	Med. velocity [m/s]	
					<b>18,9</b>	<b>1,19</b>	
						Med. in [°C]	
						<b>45,00</b>	
						Med. out [°C]	
						<b>35,00</b>	
						Med. pres. drop [kPa]	
						<b>27,02</b>	
						WT Content [l]	
						<b>5,200</b>	
<b>Inox304-Al-Inox304 P40AC 2R-12T-875A-3.0pa 2C 3/4" ( .11- .6- 2)</b>							
RRows					<b>2</b>	<u>Materials:</u>	
Circuits					<b>2</b>	Fins	
Fin space [mm]					<b>3,00</b>	<b>Aluminium</b>	
Connection in					<b>0 3/4"</b>	Pipes	
Connection out					<b>0 3/4"</b>	<b>AISI 304</b>	
Number of exchanger H/W					<b>1 / 1</b>	Header	
						<b>AISI 304</b>	
						Frames	
						<b>AISI 304</b>	
						Fin protection	
						<b>-</b>	
<b>1 Pcs Technical cabinet connected to previous TC</b>					<b>-</b>		

Offer	<b>UTA 21001082.17</b>		Position	<b>2.0</b>		airCalc Vers.	<b>P 4.2.0</b>	
Project	<b>MXP11 Data Centre</b>						<b>14/12/2023</b>	
Position	<b>MPX11-DM-DOAS-01</b>							
<b>Steam humidification section</b>			Supply air	<b>760,0 mm</b>	<b>2,55 m2</b>	<b>19 Pa</b>		
Steam humidifier - steam distributor codes			<b>UR010HL004 - D061503000</b>					
nos. of distributors	<b>1</b>	Temperature in [°C]	<b>18,00</b>	Humidification [kg/h]	<b>8,00</b>			
lance length [mm]	<b>615,0</b>	Air On Relative humidity [%]	<b>23,3</b>	Nominal power [kW]	<b>7,400</b>			
		Air Off Relative humidity [%]	<b>40,0</b>	Voltage [V]	<b>3x400</b>			
<b>Steam pipe not supplied</b>								
Removable panel			Dimensions [mm]	<b>450,0 x 630,0</b>				
<b>Drain pan</b>			Quality <b>AISI 304</b>	Drain connection <b>1 1/4</b>				
<b>Drop eliminator</b>			Model <b>SE130</b>	Frame <b>AISI 304</b>	Fins <b>PPTV</b>	<b>19 Pa</b>		

<b>1 Pcs</b>	<b>Technical cabinet connected to previous TC</b>	<b>-</b>
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<b>Empty section</b>			Supply air	<b>450,0 mm</b>	<b>1,61 m2</b>	<b>4 Pa</b>		
Pressure Door			Dimensions [mm]	<b>360,0 x 630,0</b>				
<u>Damper:</u>			Dimensions [mm]	<b>780,0 x 510,0 x 125,0</b>				
Actuated by	<b>Axle</b>	Airflow [m³/h]	<b>3,150</b>	Frame	<b>Aluminium</b>			
Qta. Levers	<b>1</b>	Air velocity [m/s]	<b>2,20</b>	Blades	<b>Aluminium</b>			
torque [Nm]	<b>3,220</b>	Pressure drop [Pa]	<b>4</b>	Type	<b>DP1</b>			
<u>Damper actuator</u>			<b>GMA126.1E</b>					
Quantity	<b>1</b>	Mode	<b>on/off</b>	Voltage [V]	<b>24</b>			
Supplier	<b>Siemens</b>	torque [Nm]	<b>7,000</b>	Current [A]	<b>0,21</b>			
				Protection	<b>IP54</b>			
<u>Inspection window</u>			<b>Round</b>	Diameter [mm]	<b>200,0</b>			
<u>Lamp</u>			<b>PVC-STD Lamp</b>	Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A</b>	<b>IP65</b>
				Wiring	<b>Yes</b>			

<b>Noise calculation</b>										
sound power [dB]										
Frq. Hz	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]	
Inlet	<b>66,0</b>	<b>60,0</b>	<b>71,0</b>	<b>66,0</b>	<b>59,0</b>	<b>56,0</b>	<b>52,0</b>	<b>49,0</b>	<b>67,2</b>	
Outlet	<b>71,0</b>	<b>65,0</b>	<b>76,0</b>	<b>72,0</b>	<b>73,0</b>	<b>72,0</b>	<b>69,0</b>	<b>66,0</b>	<b>78,3</b>	
Casing	<b>48,0</b>	<b>46,0</b>	<b>55,0</b>	<b>48,0</b>	<b>48,0</b>	<b>48,0</b>	<b>34,0</b>	<b>27,0</b>	<b>53,5</b>	
sound pressure level [dB]										
Frq. Hz	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]	measuring point at <b>1 m</b> of distance
Inlet	<b>58,1</b>	<b>52,1</b>	<b>63,1</b>	<b>58,1</b>	<b>51,1</b>	<b>48,1</b>	<b>44,1</b>	<b>41,1</b>	<b>59,3</b>	
Outlet	<b>63,1</b>	<b>57,1</b>	<b>68,1</b>	<b>64,1</b>	<b>65,1</b>	<b>64,1</b>	<b>61,1</b>	<b>58,1</b>	<b>70,4</b>	
Casing	<b>40,1</b>	<b>38,1</b>	<b>47,1</b>	<b>40,1</b>	<b>40,1</b>	<b>40,1</b>	<b>26,1</b>	<b>19,1</b>	<b>45,6</b>	

Offer	<b>UTA 21001082.17</b>	Position	<b>2.0</b>	airCalc Vers.	<b>P 4.2.0</b>
Project	<b>MXP11 Data Centre</b>				<b>14/12/2023</b>
Position	<b>MPX11-DM-DOAS-01</b>				

<b>Exhaust air</b>					
Unit definition			Casing:		
Unit size	<b>CTA 12.7</b>	<b>C54TT</b>	Thickness	<b>54,0 mm</b>	<b>Mineralwool</b>
Airflow [m³/h]	<b>3.150</b>	Length [mm]	<b>4.500,0</b>	Panel inside	<b>Galvanized prepainted 0,80 mm</b>
Ext. pressure [Pa]	<b>240</b>	Width [mm]	<b>1.220,0</b>	Panel outside	<b>Galvanized prepainted 0,80 mm</b>
Tot. pressure [Pa]	<b>659</b>	Height [mm]	<b>770,0</b>	Panel inside bottom	<b>AISI 304 0,80 mm</b>
Air velocity [m/s]	<b>1,19</b>	Net weight [kg]	<b>~517,00</b>	Profiles	<b>Aluminium</b>
Class DIN EN 13053	<b>V1</b>			Guides	<b>AISI 304</b>
Thermal transmittance class		<b>T2</b>	Mechanical stability		<b>D1(M)</b>
Thermal bridge class		<b>TB2</b>	Filter by-pass leakage		<b>F9</b>
Casing leakage -400 Pa		<b>L1(M)</b>	Casing leakage +700 Pa		<b>L1(M)</b>

Filter		Exhaust air	<b>1.260,0 mm</b>	<b>4,56 m2</b>	<b>135 Pa</b>
Manufacture	<b>Roccheggiani</b>	Filter length [mm]	<b>535,0</b>		
Type	<b>V-BF-M5-535-S</b>	Filter surface [m2]	<b>4,50</b>		
Class (EN 779:2012)	<b>M5</b>	Cells pcs x size	<b>1 x V-BF-M5-535-S</b>	<b>490,0 x 592,0</b>	
Class (ISO 16890)	<b>ePM10 65%</b>				
Clean dP [Pa]	<b>79</b>				
Dirty dP [Pa]	<b>179</b>				
Applied dP [Pa]	<b>129</b>				
Airflow [m³/h]	<b>3.150</b>	<b>3,02 m/s</b>			
Filter handling	<b>Dirty air withdrawal</b>				
Material frame	<b>AISI 304</b>	Filter energy class			
Door with hinge and single lever		Dimensions [mm]	<b>540,0 x 630,0</b>		
<u>Damper:</u>		Dimensions [mm]	<b>780,0 x 410,0 x 125,0</b>		
Actuated by	<b>actuator</b>	Airflow [m³/h]	<b>3.150</b>	Frame	<b>Aluminium</b>
Qta. Levers	<b>1</b>	Air velocity [m/s]	<b>2,74</b>	Blades	<b>Aluminium</b>
torque [Nm]	<b>2,570</b>	Pressure drop [Pa]	<b>6</b>	Type	<b>DP1</b>
<u>Damper actuator</u>	<b>GMA126.1E</b>				
Quantity	<b>1</b>	Mode	<b>on/off</b>	Voltage [V]	<b>24</b>
Supplier	<b>Siemens</b>	torque [Nm]	<b>7,000</b>	Current [A]	<b>0,21</b>
				Protection	<b>IP54</b>
<u>Inspection window</u>	<b>Round</b>	Diameter [mm]	<b>200,0</b>		
<u>Lamp</u>	<b>PVC-STD Lamp</b>	Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A IP65</b>
		Wiring	<b>Yes</b>		
<b>1 Pcs</b>	<b>Differential pressure switch PS500 (0-500Pa)</b>		<b>-</b>		
<b>1 Pcs</b>	<b>A2G-10 Differential Pressure Gauge 0-500 Pa</b>		<b>-</b>		

Empty section		Exhaust air	<b>800,0 mm</b>	<b>2,69 m2</b>	<b>Pa</b>
<b>Electric panel</b>					
Empty section		Exhaust air	<b>130,0 mm</b>	<b>0,14 m2</b>	<b>Pa</b>

Offer	UTA 21001082.17		Position	2.0		airCalc Vers.	P 4.2.0	
Project	MXP11 Data Centre						14/12/2023	
Position	MPX11-DM-DOAS-01							
<b>Plug fan</b>			Exhaust air	<b>720,0 mm</b>	<b>2,23 m2</b>	<b>45 Pa</b>		
Fan	<b>GR31I-ZID.DC.CR</b>		Motor	<b>ECblue-IE5-50-116-0-2.4</b>		<b>IE5</b>		
Air volume [m³/h]	<b>3.150</b>		Protection	<b>IP55</b>				
External static [Pa]	<b>240</b>		Insulation class	<b>F</b>				
dynamic pressure [Pa]	<b>21</b>		Voltage	<b>3x400 V / 50 Hz</b>				
Add. dynamic pressure [Pa]	<b>45</b>		Power [kW]	<b>2,400</b>				
Total static pressure [Pa]	<b>594</b>		Speed [1/min]	<b>3.700</b>				
Total pressure [Pa]	<b>659</b>		System absorbed power [kW]	<b>0,860</b>				
Speed [1/min]	<b>2.579</b>		nominal current [A]	<b>2,85</b>				
efficiency %	<b>67</b>							
Supplier	<b>Ziehl-Abegg</b>							
Code	<b>ZAB-116889/A01-3/400/50</b>							
K-factor [m³/h]	<b>106</b>	[ $\rho = 1,2 \text{ kg/m}^3$ ]	( $Q = k \sqrt{\Delta p}$ )	K-factor [adim]	<b>82</b>	( $Q = k \sqrt{\Delta p \frac{2}{\rho}}$ )		
Fan octave band sound power level (Lokt) [dB]			Control Signal (0-10V)			<b>7,00</b>		
Frq.[Hz]	63	125	250	500	1000	2000	4000	8000
Inlet	<b>65,0</b>	<b>63,0</b>	<b>69,0</b>	<b>68,0</b>	<b>62,0</b>	<b>60,0</b>	<b>58,0</b>	<b>57,0</b>
Outlet	<b>67,0</b>	<b>67,0</b>	<b>75,0</b>	<b>73,0</b>	<b>74,0</b>	<b>73,0</b>	<b>69,0</b>	<b>67,0</b>
			Specific fan power [W/(m3/s)]			<b>853 SFP2</b>		
<b>1 set</b>	<b>Tube for airflow measurement</b>				<b>-</b>			
<b>1 Pcs</b>	<b>DPE2500 Flow LCD for airflow measurement</b>				<b>-</b>			
Removable panel			Dimensions [mm]	<b>630,0 x 630,0</b>				
Opening	<b>L</b>		Dimensions [mm]	<b>280,0 x 280,0</b>				
<u>Inspection window</u>	<b>Round</b>		Diameter [mm]	<b>200,0</b>				
<u>Lamp</u>	<b>PVC-STD Lamp</b>		Nominal data	<b>230 V</b>	<b>9 W</b>	<b>0,04 A</b>	<b>IP65</b>	
			Wiring	<b>Yes</b>				
<b>1 Pcs</b>	<b>FTK+ 270 VVS NTC10K Temperature and humidity probe (0-10V)</b>							

Offer	<b>UTA 21001082.17</b>		Position	<b>2.0</b>		airCalc Vers. P 4.2.0		
Project	<b>MXP11 Data Centre</b>							14/12/2023
Position	<b>MPX11-DM-DOAS-01</b>							
<b>Circular air</b>			Exhaust air	<b>450,0 mm</b>	<b>0,93 m2</b>	<b>15 Pa</b>		
<u>Mixed air calculation 1</u>								
Recircle air [m³/h]	Temp. [°C]	Humidity [%]	Temperature mixed air [°C]		Humidity [%]			
Fresh air [m³/h]	Temp. [°C]	Humidity [%]						
<u>Mixed air calculation 2</u>								
Recircle air [m³/h]	Temp. [°C]	Humidity [%]	Temperature mixed air [°C]		Humidity [%]			
Fresh air [m³/h]	Temp. [°C]	Humidity [%]						
Removable panel			Dimensions [mm]		<b>360,0 x 630,0</b>			
<u>Damper:</u>			Dimensions [mm]		<b>980,0 x 210,0 x 125,0</b>			
Actuated by	<b>actuator</b>	Airflow [m³/h]	<b>3,150</b>	Frame	<b>Aluminium</b>			
Qta. Levers	<b>1</b>	Air velocity [m/s]	<b>4,25</b>	Blades	<b>Aluminium</b>			
torque [Nm]	<b>1,620</b>	Pressure drop [Pa]	<b>15</b>	Type	<b>DP1</b>			
<u>Damper actuator</u>			<b>GDB161.1E</b>					
Quantity	<b>1</b>	Mode	<b>modulating</b>	Voltage [V]	<b>24</b>			
Supplier	<b>Siemens</b>	torque [Nm]	<b>5,000</b>	Current [A]	<b>0,09</b>			
				Protection	<b>IP54</b>			
<u>Inspection window</u>			<b>Round</b>		Diameter [mm]		<b>200,0</b>	
<u>Lamp</u>			<b>PVC-STD Lamp</b>		Nominal data	<b>230 V</b>	<b>9 W</b>	
				Wiring	<b>Yes</b>			

<b>Heat wheel in casing</b>			Exhaust air	<b>680,0 mm</b>	<b>2,74 m2</b>	<b>198 Pa</b>	
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<b>Empty section</b>			Exhaust air	<b>460,0 mm</b>	<b>1,55 m2</b>	<b>6 Pa</b>	
Removable panel			Dimensions [mm]		<b>320,0 x 630,0</b>		
<u>Damper:</u>			Dimensions [mm]		<b>780,0 x 410,0 x 125,0</b>		
Actuated by	<b>actuator</b>	Airflow [m³/h]	<b>3,150</b>	Frame	<b>Aluminium</b>		
Qta. Levers	<b>1</b>	Air velocity [m/s]	<b>2,74</b>	Blades	<b>Aluminium</b>		
torque [Nm]	<b>2,570</b>	Pressure drop [Pa]	<b>6</b>	Type	<b>DP1</b>		
<u>Damper actuator</u>			<b>GMA161.1E</b>				
Quantity	<b>1</b>	Mode	<b>modulating</b>	Voltage [V]	<b>24</b>		
Supplier	<b>Siemens</b>	torque [Nm]	<b>7,000</b>	Current [A]	<b>0,21</b>		
				Protection	<b>IP54</b>		
<u>Inspection window</u>			<b>Round</b>		Diameter [mm]		<b>200,0</b>
<u>Lamp</u>			<b>PVC-STD Lamp</b>		Nominal data	<b>230 V</b>	<b>9 W</b>
				Wiring	<b>Yes</b>		

Offer	<b>UTA 21001082.17</b>	Position	<b>2.0</b>	airCalc Vers.	<b>P 4.2.0</b>
Project	<b>MXP11 Data Centre</b>				<b>14/12/2023</b>
Position	<b>MPX11-DM-DOAS-01</b>				

### Noise calculation

sound power [dB]				
Frq. Hz	63 125 250 500 1000 2000 4000 8000   Sum [dB(A)]			
Inlet	<b>65,0 63,0 69,0 68,0 62,0 60,0 58,0 57,0   69,2</b>			
Outlet	<b>65,0 64,0 71,0 68,0 68,0 66,0 61,0 58,0   72,7</b>			
Casing	<b>44,0 44,0 50,0 45,0 46,0 45,0 30,0 24,0   50,5</b>			
sound pressure level [dB]				
Frq. Hz	63 125 250 500 1000 2000 4000 8000   Sum [dB(A)]	measuring point at	1 m	of distance
Inlet	<b>57,1 55,1 61,1 60,1 54,1 52,1 50,1 49,1   61,3</b>			
Outlet	<b>57,1 56,1 63,1 60,1 60,1 58,1 53,1 50,1   64,8</b>			
Casing	<b>36,1 36,1 42,1 37,1 38,1 37,1 22,1 16,1   42,6</b>			

<u>Baseframe</u>	<b>BF140</b>	Material	<b>Galvanized steel</b>	Thickness	<b>2,0 mm</b>
Lifting holes [mm]	<b>56,0</b>	Height [mm]	<b>140,0</b>	Welded	<b>No</b>

1 set **Roof** **Galvanized prepainted**

1 Pcs **2 x U-8ME2E8 (VRF Eco-i Eco-eXtreme outdoor unit) - High energy efficiency variable refrigerant flow (vrf) heat pump outdoor unit, Eco-i Eco-eXtreme series, equipped with DC Inverter regulation, with the following main technical characteristics:**

- COP = 5.13
- EER = 4.78
- Inverter bi-compressor system
- Very low standard sound level: 60 dB(A)
- Muted mode
- Winter operation up to -25°C.
- Summer operation up to +52°C
- VET system for managing the delivery temperature of the internal unit
- Demand control function for limiting peak consumption as standard
- Nominal cooling capacity: 2 x 22.4 kW
- Nominal thermal capacity: 2 x 25.0 kW
- 380 Volt electrical power supply.

**PAW-280MAH2 : Advanced series AHU kit for VRF**  
**Advanced type direct expansion AHU management kit for batteries with a nominal capacity of up to 56 kW.**  
The kit, suitable for combination with VRF variable refrigerant flow systems, is composed of an LEV electronic expansion valve, thermistors, IP 65 plastic box containing the control part and no. 1 electronic control with LCD display model CZ-RTC4. The control logic includes the cold draft prevention function, the modulation of the set point according to the external temperature, and the possibility of external demand control management via 0-10V signal

1 Pcs **KRT00SMD.000A Rilevatore di fumo** -

### Delivery sections

no.	Width	Height	Length	Net weight
1	1.220,0	770,0	2.190,0	260,00
2	1.220,0	770,0	1.170,0	182,00
3	1.220,0	770,0	460,0	75,00
4	1.220,0	770,0	2.610,0	527,00
5	1.220,0	1.540,0	680,0	285,00
6	1.220,0	770,0	1.170,0	254,00
7	1.220,0	770,0	2.190,0	629,00

**Regulation 1253:14**

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Calculation valid	<b>Yes</b>
ErP Ready 2016	<b>Yes</b>
ErP Ready note 2016	<b>-</b>
ErP Ready 2018	<b>Yes</b>
ErP Ready note 2018	<b>-</b>
Specific fan power internal [W/(m3/s)]	<b>897</b>
effective electric power input [kW]	<b>2,080</b>
type of heat recovery system	<b>other HRS</b>
thermal efficiency [%]	<b>84,20</b>
directional unit type	<b>BVU - NRVU</b>
Motor and drive type	<b>variable speed</b>
external leakage rate at +400 Pa [%]	<b>4,49</b>
external leakage rate at -400 Pa [%]	<b>3,54</b>
internal leakage rate at 200 Pa [%]	<b>1,50</b>



**Roccheggiani S.p.A.**

Via I° Maggio, 10  
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Tel.: 071 / 730023

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Offer **UTA 21001082.17**  
From date **14/12/2023**  
Project **MXP11 Data Centre**  
Position **2.0**  
LV-Position  
Quantity **1**  
Print data **14/12/2023**  
User

[www.roccheggiani.it](http://www.roccheggiani.it)  
[ahu@roccheggiani.it](mailto:ahu@roccheggiani.it)

### Regulation list

#### Electric panel

- n. 1 Power and regulation electrical panel. Power supply 400V/3F+N/50Hz  
Start and stop signal. Indication of dirty filters. Motor save protection.  
Performance of logical engineering of regulation and drafting of wiring diagrams  
AHU Calibration and functional factory testing included

#### Control type External/ambient air

Temperature and humidity control

#### Control type Supply air

Temperature and humidity control  
Freeze protection thermostat  
Saturation temperature probe

#### Control type Return air

Temperature and humidity control

#### Additional options

Room terminal with display, supplied not mounted  
Coil valves and actuators included  
Hydraulic assemblies and accessories included

#### Start-up on site

Included, by specialized technicians

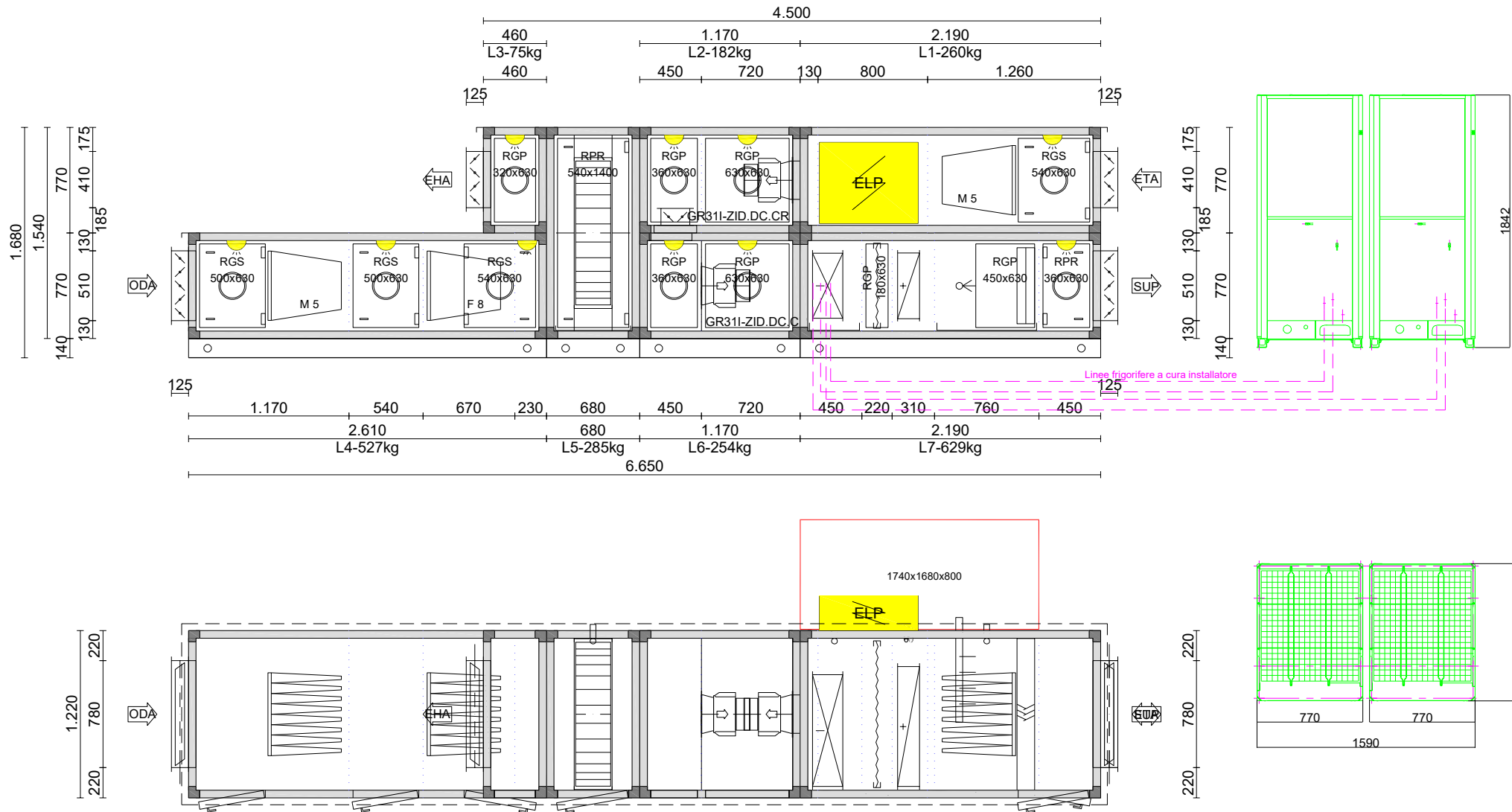
Offer **UTA 21001082.17**  
 Project **MXP11 Data Centre**  
 Position **2.0**  
 Description **MPX11-DM-DOAS-01**

airCalc Vers. P 4.2.0

From date **14/12/2023**

List of material mounted on board

Pos.	QTA	Code	Description
1	1	COM_CTD	Power and regulation electrical panel. Power supply 400V/3F+N/50Hz. Start and stop signal. Dirty filters indication.
2	1	C.PCO	C.PCO Controller
3	1	C.PCO-CON	Removable connector kit for C.PCO
4	1	SKIT1000.0001	PGN1000F01 + PGN100FRM1 Display for panel mounting, connectable to the pCO by means of a cable with telephone connector
5	1	PGN1000W00	pGD__1__ LCD, 132x64 pixels
6	1	TCONN6J000	"T" connector for local network
7	1	AKF10+ NTC10k Carel 250.06	Temperature probe (-50/150°C)
8	1	FTK + 270 VVS NTC10k	Temperature and humidity probe (0-10V)
9	1	FTK + 270 VVS NTC10k	Temperature and humidity probe (0-10V)
10	1	TF30	Antifreeze thermostat -10 to 10°C 3 m capillar
11	1	A2G-10	Differential pressure gauge 0-500 Pa
12	1	A2G-10	Differential pressure gauge 0-500 Pa
13	1	A2G-10	Differential pressure gauge 0-500 Pa
14	1	PS 500	Differential pressure switch 0-500 Pa
15	1	PS 500	Differential pressure switch 0-500 Pa
16	1	PS 1500	Differential pressure switch 200-1000 Pa
17	1	GMA161.1E	Damper actuator, modulating, with spring return
18	1	GMA161.1E	Damper actuator, modulating, with spring return
19	1	GMA126.1E	Damper actuator, on-off, with spring return
20	1	GMA126.1E	Damper actuator, on-off, with spring return
21	1	GDB161.1E	Damper actuator, modulating, without spring return
22	1	DPE2500	Controller for differential pressure/airflow, 0-2500 Pa
23	1	DPE2500	Controller for differential pressure/airflow, 0-2500 Pa



Preliminary drawing

<b>SUPPLY</b>	CTA 12.7	C54TT	<b>EXHAUST</b>	CTA 12.7	C54TT	<b>CLIENTE-CUSTOMER:</b>	Bouygues E&S InTec Italia S.p.A.	<b>REV.0 DATA-DATE:</b>	User:
Airflow	m <sup>3</sup> /h	3.150	Airflow	m <sup>3</sup> /h	3.150	<b>CANTIERE-CONSTRUCTION.:</b>	MXP11 Data Centre	<b>POS.-ID:</b>	
Ext. pressure	Pa	200	Ext. pressure	Pa	240	<b>RIFERIMENTO-REF.:</b>	MPX11-DM-DOAS-01		2.0
Tot. pressure	Pa	935	Tot. pressure	Pa	659	<b>OGGETTO-OBJECT:</b>	CTA 12.7	<b>TIPO-TYPE:</b>	
Motorpower	kW 1x	2,400	Motorpower	kW 1x	2,400	<b>ROCCHEGGIANI.</b>	ROCCHEGGIANI S.p.A. Via 1° maggio, 50021 Camerano (AN) Italy	<b>PROJET-ID.:</b>	UTA 21001082.17
Power supply		400V/3/50Hz	Power supply		400V/3/50Hz	<b>scale:</b>	xx.xx	<b>TOLL.:</b>	UNI.EN22768-V
PHW-heating	kW	18,05	Energy rec	kW	36,94 / 34,00	<b>scale:</b>	xx.xx	<b>TOLL.:</b>	UNI.EN22768-V
DX-cooling	kW	46,23				<b>DESIGNO-DRAW.:</b>			
Energy rec	kW	36,94 / 34,00				DISEGNO DI PROPRIETA' DELLA ROCCHEGGIANI SPA - RIPRODUZIONE E DIFFUSIONE VIETATA AI TERMINI DI LEGGE THE DESIGN AND DRAWINGS ARE PROPERTY OF ROCCHEGGIANI SPA-UNAUTHORIZED USE/COPY OR ANY FORM OF MODIFICATION IS STRICTLY PROHIBITED			
Humidification	kg/h	8,00							