

PROJECT DETAILS			
Project No	Revision	Date	Customer
16158	B	07 Sep 2022	Pulse Project Solutions Ltd.
Unit No	Project Reference	AHU Reference	Quantity
2	Free Trade	AHU 01	1
Supply Air Flow	Supply ESP	Extract Air Flow	Extract ESP
4.8 m³/s	300 Pa	4.8 m³/s	300 Pa

SPECIFIC FAN POWER				
AHU SFP kW/(m³/s)	Supply Absorbed (kW)	Extract Absorbed (kW)	Overall (kW)	Filter Condition
1.85	5.2	3.68	8.88	Clean

UNIT CONSTRUCTION		
Unit location	Roof Type	Panel External Sheet
External	50mm Apex Roof (>1700mm)	0.7mm Plastisol Goosewing Grey
Frame Material	Frame Profile	Panel Thickness/Insulation
Aluminium	50mm profile	FG50
Base Construction	Base Height	Panel Internal Steel
100 Galv 1.6 gauge	100 mm	0.9mm Galvanized Steel
Access Side	Unit Model	Leakage Class
Right	AHTW 1750-5050-FG-WP	L2
Flow Arrangement	Unit Arrangement	
Opposite	Double deck	

AHU OVERALL UNIT DIMENSIONS AND WEIGHT - Unit supplied in one section unless otherwise agreed			
Length	Width	Height	Weight (Per Unit)
4370 mm	2300 mm	2550 mm	2556 kg

SECTION DIMENSIONS AND WEIGHT - Unit supplied in one section unless otherwise agreed				
Section	Length	Width	* Height	Weight
A	875 mm	2300 mm	1200 mm	303 kg
B	800 mm	2300 mm	1200 mm	211 kg
C	495 mm	2300 mm	2400 mm	444 kg
D	1450 mm	2300 mm	1200 mm	641 kg
E	750 mm	2300 mm	1200 mm	207 kg
F	300 mm	2300 mm	1200 mm	77 kg
G	550 mm	2300 mm	1200 mm	118 kg
H	1125 mm	2300 mm	1200 mm	555 kg

* The above section heights do not include possible inclusions for base frames and roofs (if fitted)

* This unit includes a 100 mm base and a 50 mm roof

SECTION A - INLET SECTION						
Component	Air Flow	Mounting	Type	Orientation	Control	Fitted Extra
Damper	4.8 m³/s	Internal	Standard	Opposed	Motorisation by Others	80mm louvre

SECTION A - ELECTRIC HEATER							
Duty	Air Flow	Air On	Air Off	Voltage	No. Of Stages	Control	Material
60.00 kW	4.8 m³/s	-5.00 °C	5.00 °C	400	1	Single-Stage	Painted Steel

SECTION B - PANEL FILTER					
Type	Grade	Length	Withdrawal Method	Selected Condition	Spare
Panel Filter	G4 Pleated / ISO coarse >= 60%	50 mm	Side	Mean	None

ACCESSORIES

Manometer fitted

Removable Door

SECTION B - BAG FILTER					
Type	Grade	Length	Withdrawal Method	Selected Condition	Spare
Bag Filter	F7 / ISO ePM1 >= 50%	380 mm	Rear	Mean	None

ACCESSORIES

Manometer fitted

Hinged Access Door

SECTION C - THERMAL WHEEL HEAT RECOVERY

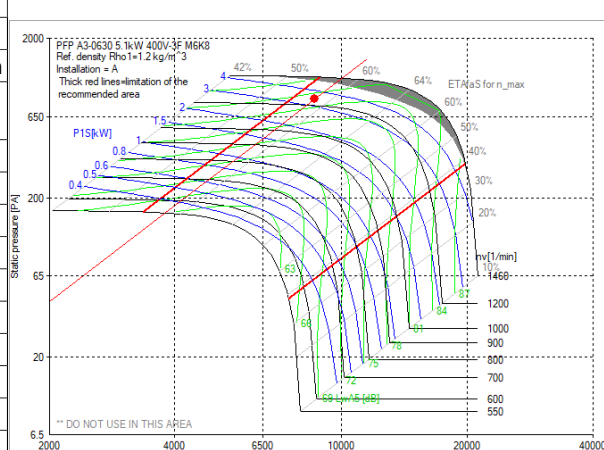
Type		Material		Wheel Type				Purge			
Heat Wheel Exchanger				0:All housing							
WINTER						SUMMER					
Duty	Eff	Fresh Air		Exhaust Air		Duty	Eff	Fresh Air		Exhaust Air	
kW	%	Air On	Air Off	Air On	Air Off	kW	%	Air On	Air Off	Air On	Air Off
76.03	73.7	5.00 °C	16.79 °C	21.00 °C	9.62 °C	-24.63	70.0	30.00 °C	25.80 °C	24.00 °C	28.21 °C

ACCESSORIES

Thermal Wheel Variable Speed

Removable Door

SECTION D - SUPPLY PLENUM FAN

Fan Type	Wheel Type		Drive Type					
Plenum	Backward Curve		Direct Drive					
Model	Impeller Diam.		Abs Power per fan					
PFP A3-0630 5.1kW 400V-3F M6K8	630 mm		3.43 kW					
Quantity	Duty % Per Fan		Poles					
2	Dual Fan (50%-50%)							
Air Flow Volume	Outlet Velocity		Motor Speed					
4.8 m³/s	5.3 m/s		1253 rpm					
Ext Static Pressure	Fan Speed		Power per motor					
300.00 Pa	1253 rpm		5.10 kW					
Unit Static Pressure	Static Efficiency		FLC per motor					
536.55 Pa	59.00 %		7.90 A					
Fan Static Pressure	VSD		Volts/Ph/Hz					
837 Pa	0 - 10v		380/3/50					
IE Classification	Operating Frequency							
WithFan	50.00 Hz							
Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz
Inlet (1)	91	93	87	75	72	69	70	67
Outlet (2)	91	93	86	84	80	75	69	67
(1) SWL INSIDE The Inlet Duct (dB)					(2) SWL INSIDE The Outlet Duct (dB)			

(1) SWL INSIDE The Inlet Duct (dB)

(2) SWL INSIDE The Outlet Duct (dB)

ACCESSORIES

Door guard will be provided.

Inlet flex connection will be provided.

EC fan no Inverter required, control via 0-10v signal.

Removable Door

SECTION E - ELECTRIC HEATER

Duty	Air Flow	Air On	Air Off	Voltage	No. Of Stages	Control	Material
25.00 kW	4.8 m³/s	16.80 °C	21.00 °C	400	1	Single-Stage	Painted Steel

SECTION E - OUTLET SECTION

Component	Air Flow	Mounting	Type	Orientation	Control	Fitted Extra
None	4.8 m³/s	None	Standard	Opposed	NA	None

SECTION F - INLET SECTION

Component	Air Flow	Mounting	Type	Orientation	Control	Fitted Extra
None	4.8 m³/s	None	Standard	Opposed	NA	None

SECTION F - PANEL FILTER

Type	Grade	Length	Withdrawal Method	Selected Condition	Spare
Panel Filter	G4 Pleated / ISO coarse >= 60%	50 mm	Side	Mean	None

ACCESSORIES

Manometer fitted

Removable Door

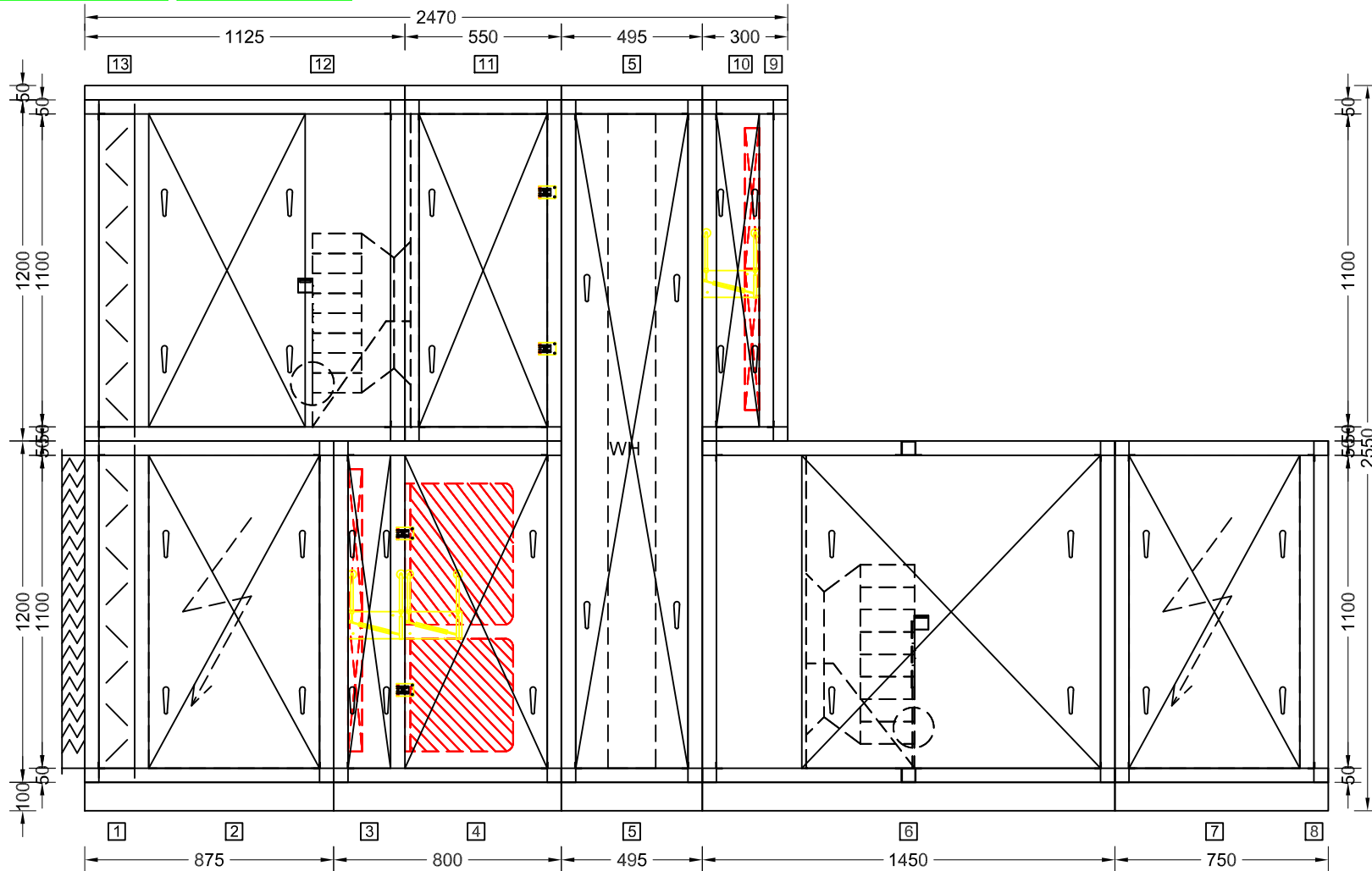
SECTION G - PLENUM

Dimension	450 mm	Type	Plenum Section
-----------	--------	------	----------------

SECTION H - EXTRACT PLENUM FAN

Fan Type	Wheel Type	Drive Type	
----------	------------	------------	--

IF IN DOUBT ASK! NOT TO SCALE



ELEVATION

Section A: Weight = 303Kgs

Components

- 1 Inlet Section
- 2 Electric Heat Coil

Section B: Weight = 211Kgs

Components

- 3 Panel Filter
- 4 Bag Filter

Section C: Weight = 444Kgs

Components

- 5 Heat Wheel

Section D: Weight = 641Kgs

Components

- 6 Plenum Fan

Section E: Weight = 207Kgs

Components

- 7 Electric Heat Coil
- 8 Outlet Section

Section F: Weight = 77Kgs

Components

- 9 Inlet Section
- 10 Panel Filter

Section G: Weight = 118Kgs

Components

- 11 Plenum

Section H: Weight = 555Kgs

Components

- 12 Plenum Fan
- 13 Outlet Section

This sketch is not a fabrication drawing. Once a purchase order is acknowledged, the fabrication drawing of the unit will be sent for your approval. Production wont start without your approval. Overall sizes & weight may vary.

Unit supplied in one section unless otherwise stated. Please check that the path to position is suitable for the overall size of the unit. If required we can revise our selection and offer the unit built and delivered in sections or in a flat pack form to be erected in-situ, with additional cost for site work.

CLIENT: Pulse Project Solutions Ltd.

Project: Free Trade

Quote No.:

DRAWN

CHECKED

DATE



(NORTHERN) LIMITED

Tel: (0161) 745 8888 / Fax: (0161) 925 9900

Email: sales@airhandlers.net

TITLE: AHU 01

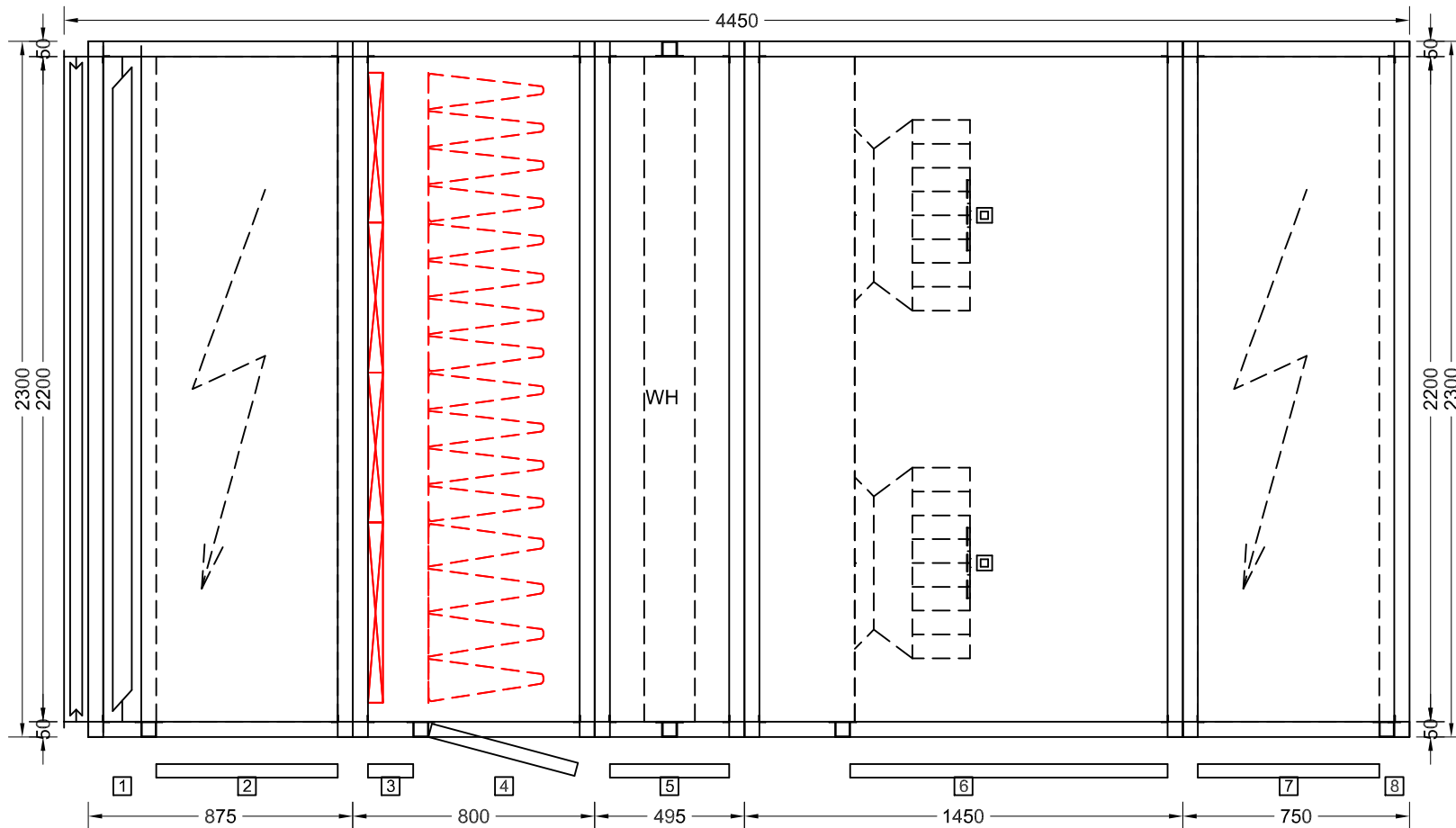
REFERENCE: AHTW 1750-5050-FG-WP

DWG. No. 16158-2-B

Air flow	4,8/4,8	m3/s
Quantity	1	Nos.

REV.	No.	Revision	Date

IF IN DOUBT ASK! NOT TO SCALE



PLAN LOWER DECK

Section A: Weight = 303Kgs

Components

- 1 Inlet Section
- 2 Electric Heat Coil

Section B: Weight = 211Kgs

Components

- 3 Panel Filter
- 4 Bag Filter

Section C: Weight = 444Kgs

Components

- 5 Heat Wheel

Section D: Weight = 641Kgs

Components

- 6 Plenum Fan

Section E: Weight = 207Kgs

Components

- 7 Electric Heat Coil
- 8 Outlet Section

Section F: Weight = 77Kgs

Components

- 9 Inlet Section
- 10 Panel Filter

Section G: Weight = 118Kgs

Components

- 11 Plenum

Section H: Weight = 555Kgs

Components

- 12 Plenum Fan
- 13 Outlet Section

This sketch is not a fabrication drawing. Once a purchase order is acknowledged, the fabrication drawing of the unit will be sent for your approval. Production won't start without your approval. Overall sizes & weight may vary.

Unit supplied in one section unless otherwise stated. Please check that the path to position is suitable for the overall size of the unit. If required we can revise our selection and offer the unit built and delivered in sections or in a flat pack form to be erected in-situ, with additional cost for site work.

CLIENT: Pulse Project Solutions Ltd.

Project: Free Trade

Quote No.:

DRAWN

CHECKED

DATE



(NORTHERN) LIMITED

Tel: (0161) 745 8888 / Fax: (0161) 925 9900

Email: sales@airhandlers.net

TITLE: AHU 01

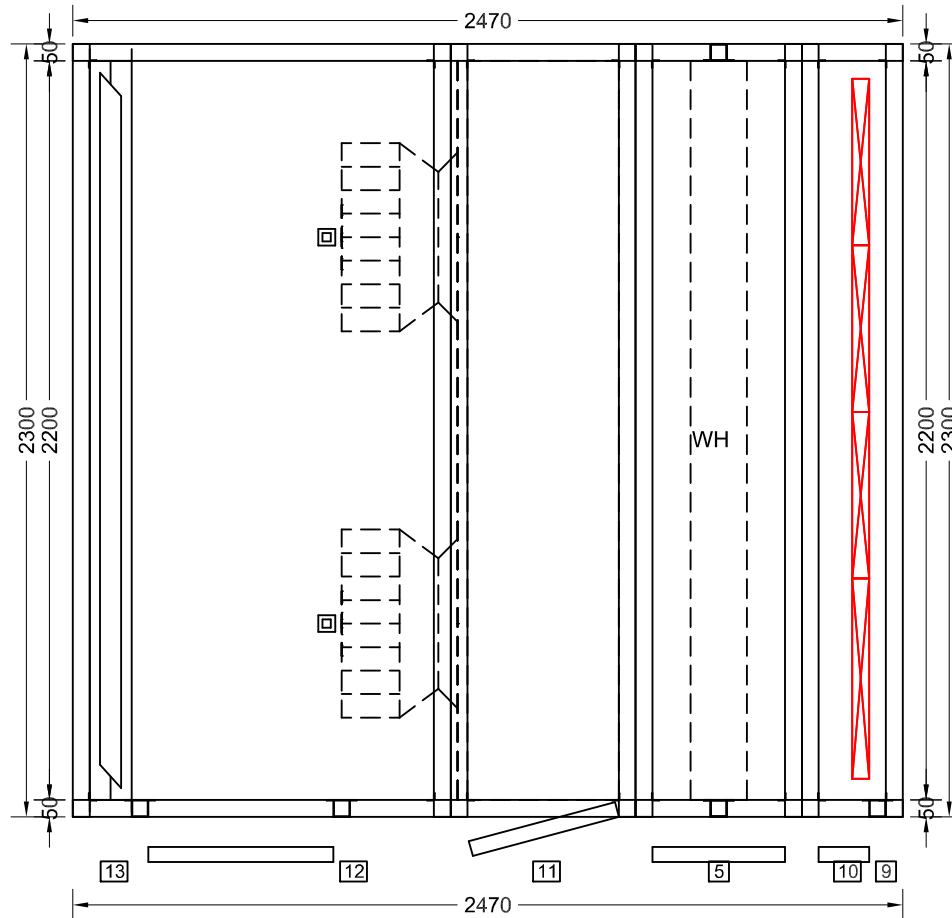
REFERENCE: AHTW 1750-5050-FG-WP

DWG. No. 16158-2-B

Air flow	4,8/4,8	m3/s
Quantity	1	Nos.

REV.	No.	Revision	Date

IF IN DOUBT ASK! NOT TO SCALE



PLAN UPPER DECK

Section A: Weight = 303Kgs

Components

- 1 Inlet Section
- 2 Electric Heat Coil

Section B: Weight = 211Kgs

Components

- 3 Panel Filter
- 4 Bag Filter

Section C: Weight = 444Kgs

Components

- 5 Heat Wheel

Section D: Weight = 641Kgs

Components

- 6 Plenum Fan

Section E: Weight = 207Kgs

Components

- 7 Electric Heat Coil
- 8 Outlet Section

Section F: Weight = 77Kgs

Components

- 9 Inlet Section
- 10 Panel Filter

Section G: Weight = 118Kgs

Components

- 11 Plenum

Section H: Weight = 555Kgs

Components

- 12 Plenum Fan
- 13 Outlet Section

This sketch is not a fabrication drawing. Once a purchase order is acknowledged, the fabrication drawing of the unit will be sent for your approval. Production won't start without your approval. Overall sizes & weight may vary.

Unit supplied in one section unless otherwise stated. Please check that the path to position is suitable for the overall size of the unit. If required we can revise our selection and offer the unit built and delivered in sections or in a flat pack form to be erected in-situ, with additional cost for site work.

CLIENT: Pulse Project Solutions Ltd.

Project: Free Trade

Quote No.:

DRAWN

CHECKED

DATE



(NORTHERN) LIMITED

Tel: (0161) 745 8888 / Fax: (0161) 925 9900

Email: sales@airhandlers.net

TITLE: AHU 01

REFERENCE: AHTW 1750-5050-FG-WP

DWG. No. 16158-2-B

Air flow	4,8/4,8	m3/s
Quantity	1	Nos.

REV.	No.	Revision	Date