

Legend:

Ducting

- Uninsulated supply air ducting

- Externally insulated supply air ducting

- Internally insulated supply air ducting

- Cladded supply air ducting

- Uninsulated return air ducting

- Externally insulated return air ducting

- Internally insulated return air ducting

- Cladded return air ducting

- Uninsulated fresh air ducting

- Externally insulated fresh air ducting

- Internally insulated fresh air ducting

- Cladded fresh air ducting

- Uninsulated extract air ducting

- Uninsulated black steel ducting

- Cladded black steel ducting

- Round ducting

- Spiral round ducting

- Uninsulated stainless steel ducting

Accessories

- Rectangular sound attenuator

- Round sound attenuator

- Round pod type sound attenuator

- Filter

- Balancing damper

- Opposed blade damper

- Motorized opposed blade damper

- Non return damper

- Cross talk sound attenuator

- Curtain type fusible link fire/smoke damper

- Blade type fusible link fire/smoke damper

- Blade type motorised fire/smoke damper

- Duct heater

- Venturi discharge with wire mesh screen

- Square cowl with wire mesh screen

- Round cowl with wire mesh screen

- Flexible connection

Terminals

- Rectangular diffuser (1 way blow)

- Rectangular diffuser (2 way blow)

- Rectangular diffuser (3 way blow)

- Rectangular diffuser (Plate)

- Rectangular diffuser (swirl)

- Rectangular diffuser (with plenum and spigot)

- Round diffuser (Plate)

- Round diffuser (Swirl)

- Variable twist diffuser

- Supply air grille

- Return air grille

- Fresh air grille

- Extract air grill

- Linear diffuser

- Disc valve

- Jet nozzle

- Transfer air grille

- Wall mounted return air grille

- Supply air grille

- Extract weather louvre

- Supply weather louvre

- Door grille

- Door undercut by 25mm

Fans

- Axial flow fan

- In line duct fan

- Tube fan

- Tube fan

- Ceiling mounted fan

- Window fan

- Wall fan

- Propeller fan

- Ceiling sweep fan

Plumbing

- Drain point by plumber

- Drain Stack

- Trap

- Full bore drain point

- Water Make-up point

- Condensate drain piping to slope to drain point

HVAC Electrical

- 3 phase Isolator

- Single phase Isolator

- Variable Speed Drive (VSD)

- Motor Control Centre (MCC)

- Ø50mm outlet box with Ø20mm conduit and draw wire mounted at 1750 AFPL for room sensor (1)

Piping

- Chilled water supply piping

- Chilled water return piping

- Condenser water supply piping

- Condenser water return piping

- Hot water supply piping

- Hot water return piping

- Drain piping

- Make-up water piping

- Flexible connection

- Refrigerant piping

- Chilled water tap-off point c/w ball valve and flexible hose and extra tap-off with plug

- Flexible coupling

- Blank end flange on chilled water supply piping

Sensors & Gauges

- Temperature sensor (plan)

- Temperature sensor (front view)

- Temperature sensor (side view)

- Thermometer (horizontal)

- Thermometer (vertical)

- Pressure gauge (front view)

- Pressure gauge (side view)

- Automatic air vent (side view)

- Automatic air vent (plan view)

Valves

- Butterfly valve (plan)

- Butterfly valve (section)

- Gate valve (plan)

- Gate valve (section)

- Globe valve (plan)

- Globe valve (section)

- Angle valve (plan)

- Angle valve (section)

- Non return valve

- Pressure reducing valve (plan)

- Pressure reducing valve (section)

- Balancing valve (plan)

- Balancing valve (section)

- Ball valve (plan)

- Ball valve (section)

- Two way valve (plan)

- Two way valve (section)

- Three way valve (plan)

- Three way valve (section)

- Strainer (plan)

- Strainer (section)

Units

- Ceiling mounted chilled water fan coil unit

- Midwall split type a/c unit

- Under ceiling split type a/c unit

- Cassette split type a/c unit

- Console unit

- Condensing unit

- Upblow chilled water fan coil unit

- Close control unit

Abbreviations

FB#

- Filter bank. Refer to schedule below for details

FAR

- Fans. Refer to schedule below for details

SAR

- Sound attenuator. Refer to schedule below for details

FD#

- Fire damper. Refer to schedule below for details

DAR

- Dampers. Refer to schedule below for details

CV

- Constant air volume terminal. Refer to schedule for details

VV

- Variable air volume terminal. Refer to schedule for details

WLR

- Weather louvre

SE

- Duct stop end

WMS

- Wire mesh screen

FOT

- Flat on top

FOB

- Flat on bottom

FB

- Full bore drain outlet

DP

- Drain point

CHWS

- Chilled water supply

CHWR

- Chilled water return

COWS

- Condenser water supply

COWR

- Condenser water return

VTO

- Valved tap-off for future connection

BD#

- Blade damper

MCC#

- Motor control centre

PCHWP#

- Primary chilled water pump

SCHWP#

- Secondary chilled water pump

PCWPR

- Primary condenser water pump

SCWPR

- Secondary condenser water pump

SUI#

- Split unit indoor

SUO#

- Split unit outdoor

CU#

- Console Unit

Sound Attenuators					
REF	Type	Nominal Size WxHxL / Dia x L	Air Volume l/s	Pressure Drop (Pa)	Quantity
SA01	POD	Ø 160 X 600	50l/s	5	2

Terminals						
REF	Type	Size LxW	AirVolume Max (l/s)	Duct Static Pressure Pa	Connection Size	Quantity
EG01	EGG CRATE	400x400	50	15	Ø200	1
SG01	SA GRILLE	400x400	50	15	Ø200	1
NOTES: 1) To be fitted with Balancing Damper 2) Grille to be hinged for replacement of filter media						

Fans							
REF	Type	Preliminary Size Selected mm x mm/ Ø	Air Volume l/s	Pressure Pressure Total (Pa)	Power Supply (V/ph/Hz)	Power Absorbed (kW)	Variable Speed
FT01	IN LINE	Ø160	50l/s	300	230/1/50	0.077	NO
WF01	WINDOW FAN	Ø150	30l/s	50	230/1/50	0.025	NO

Split Unit Schedule						
Code	Type	Air Volume l/s	Capacity Heating (kW) Cooling (kW) Reverse Cycle	Power Supply (V/ph/Hz)	Power Absorbed (kW)	Quantity
SUI-01	Midwall	340	4.6	230/1/50	2.3	1
SUO-01						1
NOTES: 1) Unit capacities rated for standard ISO Conditions						

ISSUED FOR INFORMATION

DM	A	03.02.2017	Issued for Information	DTC	JUB	DTC	-	ARCHITECT	07015-AE-23.101
D.O.	REV	DATE	** REVISION **	REV	BY	CHKD	BY	ALUTH	BY
DRG	REGISTR	-	-	AUTHORISED	FOR ESKOM BY	DATE			
DESIGN	APPROVED	03.02.2017	DTC	-		-			
KKS	APP	-	-						
DO	AUTH	03.02.2017	DTC						
CHKD	BY	03.02.2017	JUB						
DRAWN	BY	03.02.2017	DM						
SCALE		1:100							
MEDUPI POWER STATION WEIGH BRIDGE CONTROL BUILDING GROUND FLOOR HVAC SCHEDULE INFORMATION AND LEGEND									
08073 - AE - 800									
0.84/50890									
SHEET 1									
REV 0									

SIZE
GROOTTE A1