



MECHANICAL EQUIPMENT SCHEDULES

UoW - Technium 1

UW3396-GED-T1-ZZ-SH-M-0001

ISSUE	P01	PREPARED BY	JO
STATUS	For Comment	CHECKED BY	HT
DATE	16/03/2026	APPROVED BY	



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HEAT PUMPS (ASHP)

P01

For Comment

16/03/2026

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HT

Reference	#	ASHP 1.1	ASHP 1.2			
Location		External Plant Space	External Plant Space			
Refrigerant		R290	R290			
Circuit No / compressor No	qty.	1 / 1	1 / 1			
Compressor speed control		variable speed (VSD)	variable speed (VSD)			
Capacity Control	%	25-100%	25-100%			
Source heat transfer fluid		Air	Air			
Load heat transfer fluid		Water	Water			
Heating capacity	kW	13.2	13.2			
COP		2.34	2.34			
EST / LST	°C (dB)	-4	-4			
ELT / LLT	°C	50/45	50/45			
Cooling capacity	kW					
EER						
EST / LST	°C (dB)					
ELT / LLT	°C					
Min operating outdoor air temp.	°C	-25	-25			
Max operating outdoor air temp.	°C	46	46			
Compressor power supply	V/Hz/Ph	400/50/3	400/50/3			
Max absorbed current	A	29.5	29.5			
Max inrush current	A					
Maximum power input	kW	6.02	6.02			
Dimensions L x W x H	mm	1330x528x1051	1330x528x1051			
Operational weight	kg	180	180			
Sound Pressure Level at 1m	dBA	33	33			
Manufacturer (equal or approved)		Clivet	Clivet			
Model		Edge Pro WiSAN-PMP 1S 8.1	Edge Pro WiSAN-PMP 1S 8.1			

Remarks



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BUFFER VESSELS

P01

For Comment

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Reference	#	BV01			
System		LTHW Heating			
Application		heating			
Shell material		carbon steel			
Maximum Operating Pressure	bar	3bar			
Cladding material		PVC			
RAL colour					
Condensation control		vapour barrier			
Insulation thickness	mm	80			
Insulation thermal conductivity	W/mK				
Standing heat loss @ design temp.	kWh/24hrs				
Capacity	Litres	300			
Design fluid temperature	°C	50			
Process connections	qty.	4			
Process connection min. size	mm	50			
Instrumentation connections		see drawing			
Dimensions L x H	mm	550x1590			
Manufacturer (equal or approved)		Flamco			
Model		Flextherm PS 300			

Remarks



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HWS STORAGE CYLINDERS

P01

For Comment

16/03/2026

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Reference	#	DHWC 01			
Served buildings' areas		Whole Building			
Cylinder location		GF Plantroom			
Vented/unvented		vented			
Direct/Indirect		direct			
Maximum Operating Pressure	bar				
Shell material		stainless steel			
Cladding material		PVC			
RAL colour					
Insulation thermal conductivity	W/mK				
Standing heat loss	kWh/24hrs				
Capacity	Litres	180			
HWS storage temperature	°C	60			
Heat exchanger		internal coil			
Heating capacity	kW	15			
Entering/leaving LTHW	°C	60/55			
Immersion electric heater-1 capacity	kW				
Immersion electric heater-2 capacity	kW				
Immersion heater Sheath material		IncoLoy			
Power supply	V/Hz/Ph	400/50/3			
Dimensions L x W x H	mm				
Manufacturer (equal or approved)		TBC			
Model		TBC			

Remarks



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CIRCULATION PUMPS

Reference	#	P1.1	P2.1	P3.1		
Circuit		LTHW Secondary Side	DHW Circulation	UFH manifold		
Pump type		in-line, glandless	in-line, glandless	in-line, glandless		
Double/single head		double-head	single-head	single-head		
Duty/assist/standby		duty/standby	duty	duty		
Pumped fluid		water	water	water		
Min fluid design temperature	°C	-10	2	-10		
Max fluid design temperature	°C	110	110	110		
Duty flow rate	L/sec	0.65				
Pressure loss	kPa	120				
Electrical supply	V/Hz/Ph	230/50/1	230/50/1	230/50/1		
Pump Motor		c/w Inverter drive	Single speed	Single speed		
Rated Power	kW	0.61	0.035	0.75		
Max Current	A	2.75	0.23	0.68		
Network communication with BMS						
Energy Efficiency Index (EEI)		0.18		0.19		
Motor Efficiency Rating						
Pipe connections		flanged	flanged	flanged		
Pressure rating	bar	PN10	PN10	PN10		
Connection size	DN	40	15	25		
Manufacturer (equal or approved)		Grundfos	Grundfos	Grundfos		
Model		Magna3 D 40-150 F	UPS 15-50 N 130	ALPHA2 GO 25-75 130		

Remarks

Pressure losses are indicative only at this stage

P2.1 & P3.1 are to be replaced on a like for like basis