

DISCLAIMERS

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- Fan Unit shown in profile, numbers of fans is presented in the technical documentation.

REV	REVISION TYPE	DATE	SIGN
PHASE	-		

QUANTUM INDUSTRIES
LB4 Series - docking principle
Q48LB4

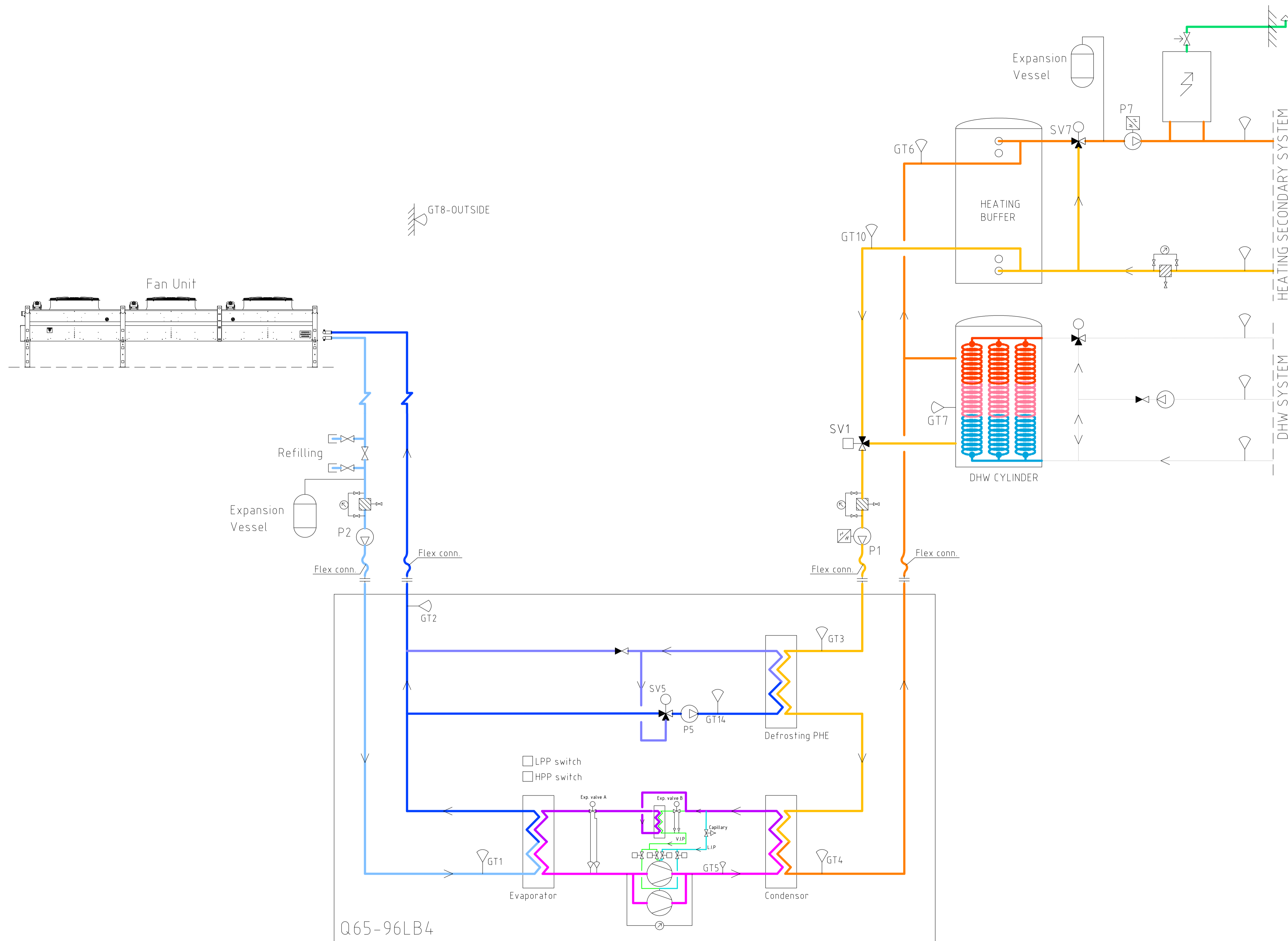



A	XXX	phone XXX-XXX	fax XXX-XXX
K	XXX	phone XXX-XXX	fax XXX-XXX
E	XXX	phone XXX-XXX	fax XXX-XXX
V	XXX	phone XXX-XXX	fax XXX-XXX
SPR	XXX	phone XXX-XXX	fax XXX-XXX
BR	XXX	phone XXX-XXX	fax XXX-XXX
M	XXX	phone XXX-XXX	fax XXX-XXX

Pw	PIPEWORK	phone +44(0)7860867646	fax -
PROJECT NUMBER	DRAWN BY	MANAGED BY	
-	J.E.		
DATE	APPROVED BY		
2023-09-25			
Quantum Industries			
LB4 series - docking principle			
Q48LB4			
SCALE	DRAWING NUMBER	REV	
-	Q-48-LB4-6-001		

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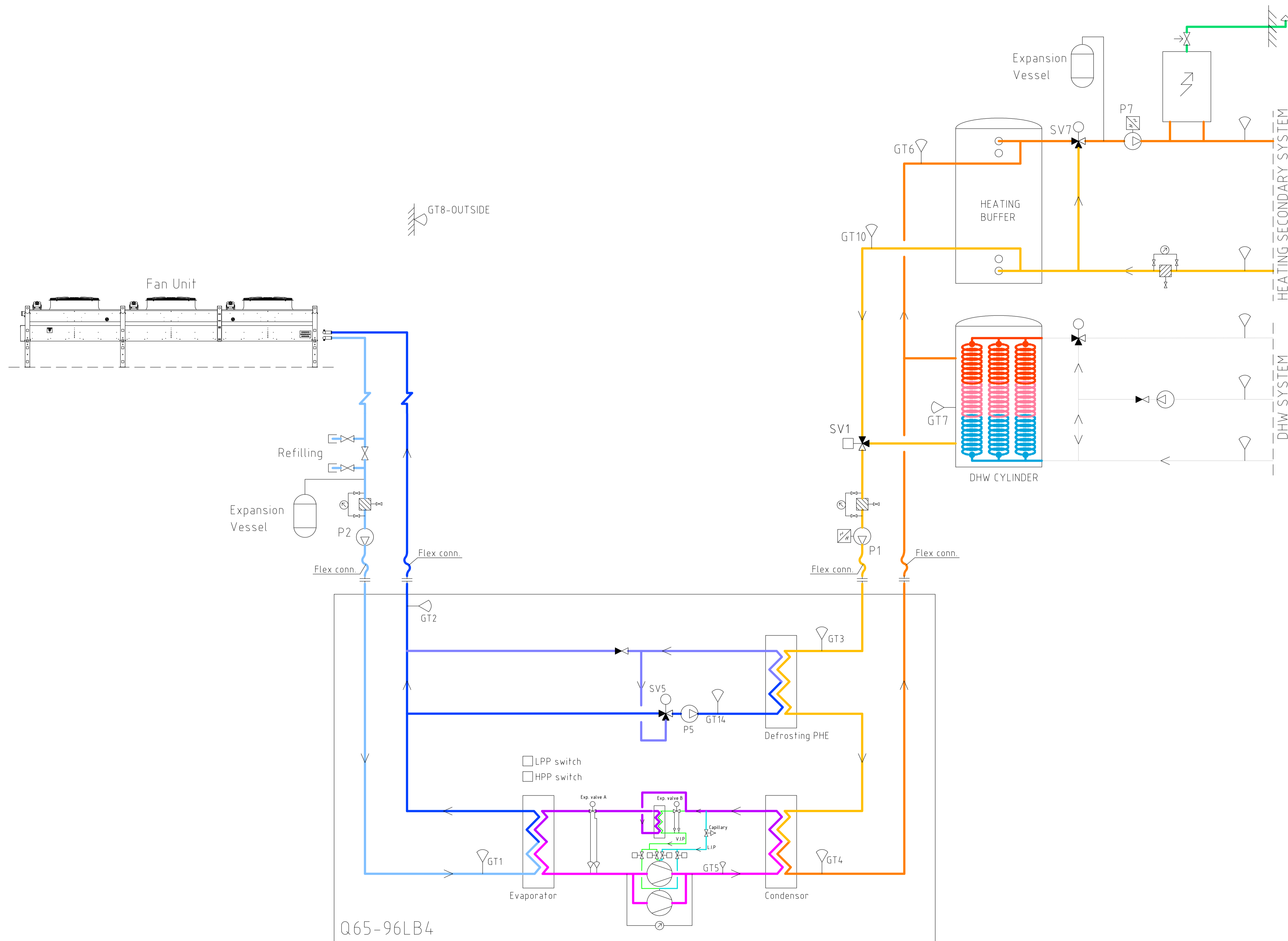
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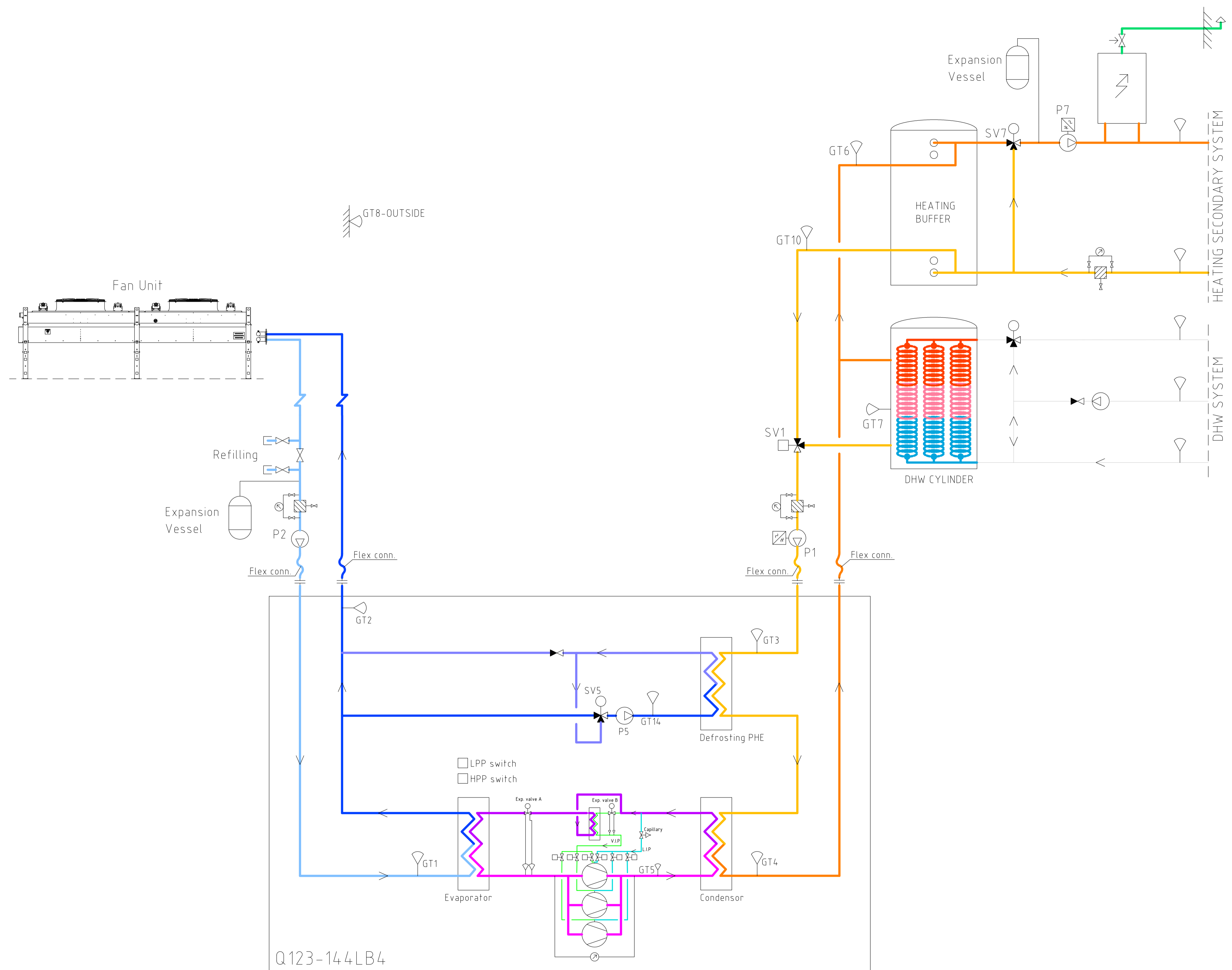
REV	REVISION TYPE	DATE	SIGN
PHASE	-		
QUANTUM INDUSTRIES LB4 Series - docking principle Q65-96LB4			
 QUANTUM HEAT PUMPS FOR SUSTAINABLE CITIES			
A	XXX	phone XXX-XXX	fax XXX-XXX
K	XXX	phone XXX-XXX	fax XXX-XXX
E	XXX	phone XXX-XXX	fax XXX-XXX
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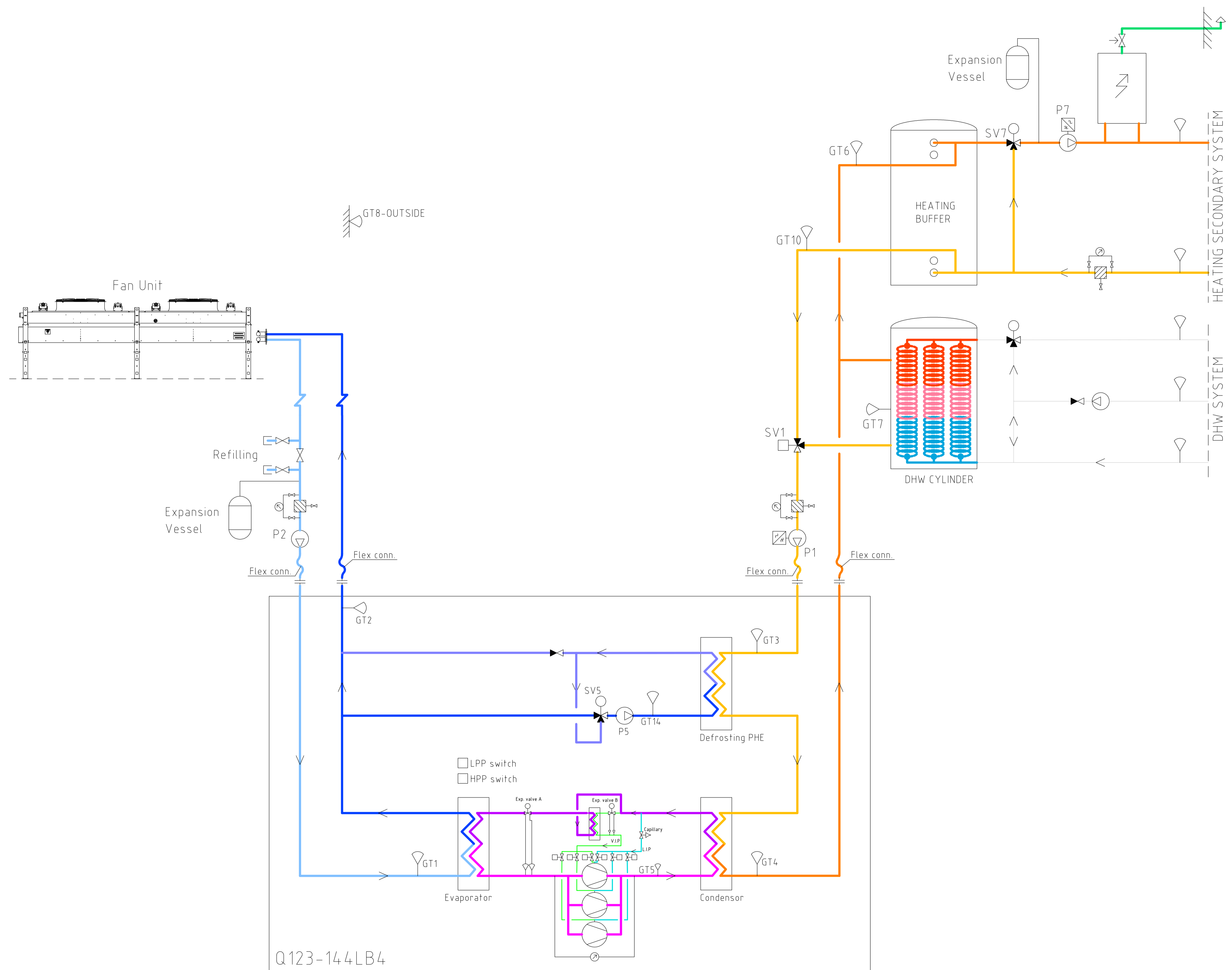


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A	XXX	phone XXX-XXX	fax XXX-XXX
K	XXX	phone XXX-XXX	fax XXX-XXX
E	XXX	phone XXX-XXX	fax XXX-XXX
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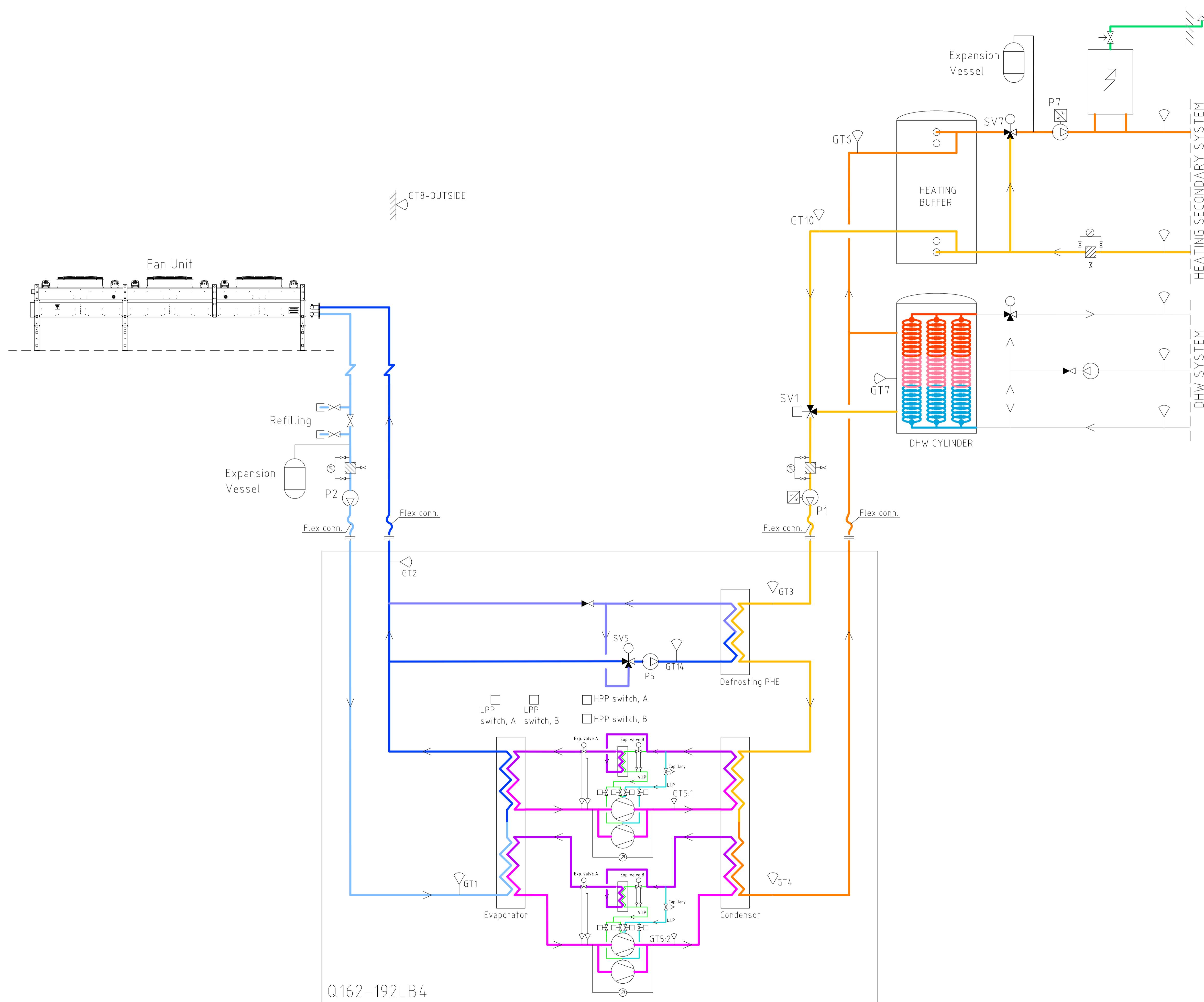
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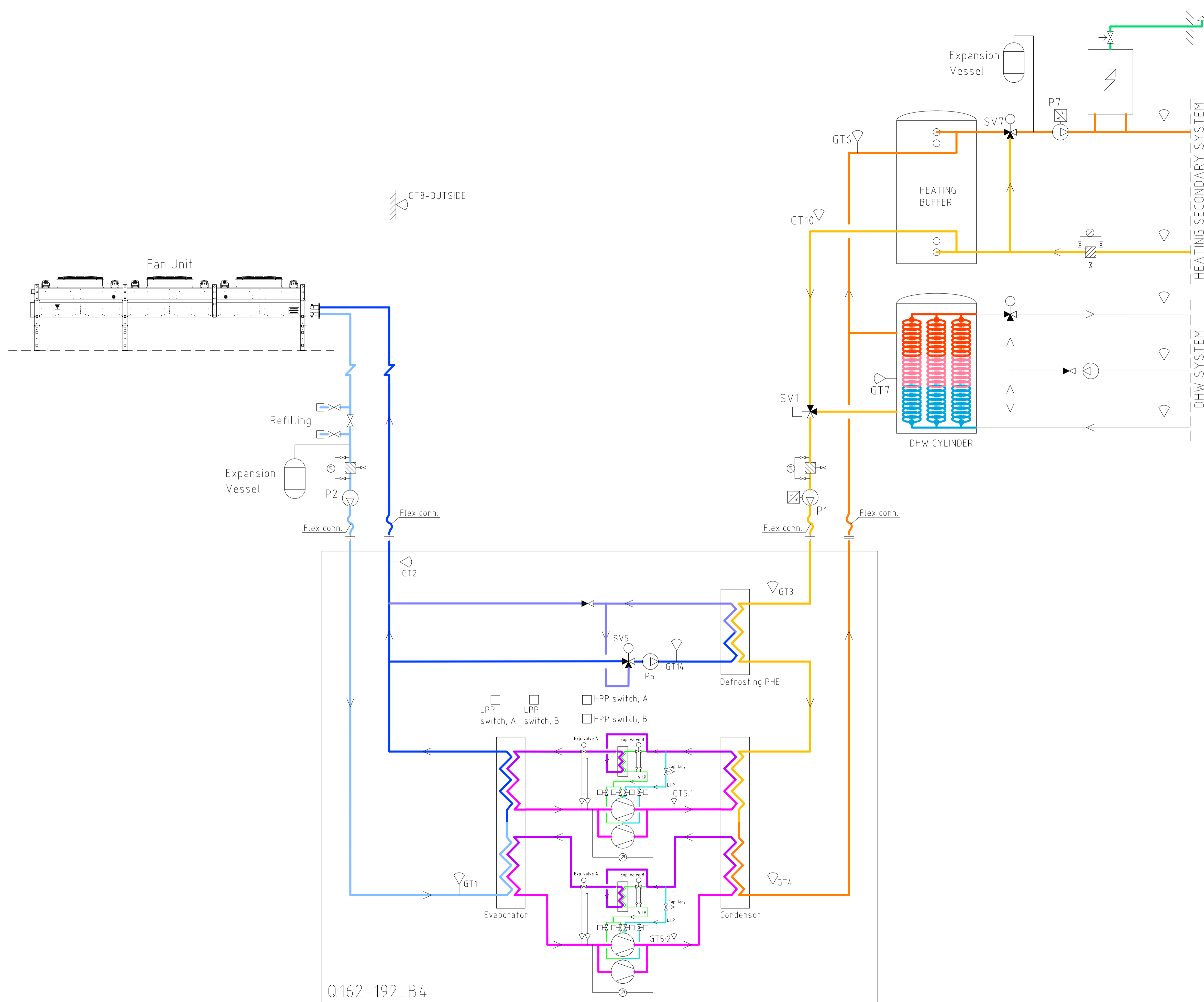
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 QUANTUM HEAT PUMPS FOR SUSTAINABLE CITIES			
A	XXX	phone XXX-XXX	fax XXX-XXX
K	XXX	phone XXX-XXX	fax XXX-XXX
E	XXX	phone XXX-XXX	fax XXX-XXX
V	XXX	phone XXX-XXX	fax XXX-XXX
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Q162-192LB4			
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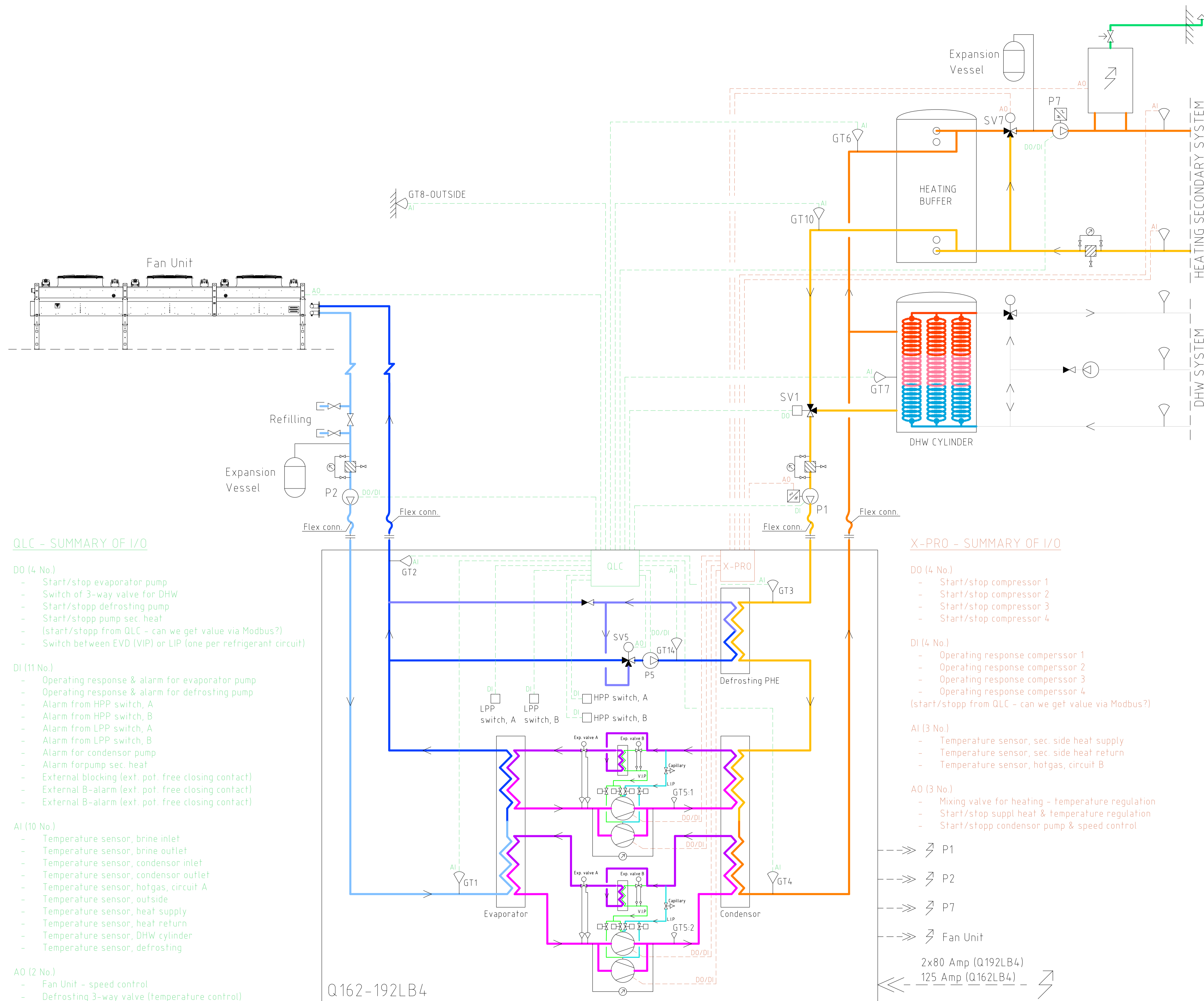


Q162-192LB4

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QLC - SUMMARY OF I/O

- DO (4 No.)**
- Start/stop evaporator pump
 - Switch of 3-way valve for DHW
 - Start/stopp defrosting pump
 - Start/stopp pump sec. heat
 - (start/stopp from QLC - can we get value via Modbus?)
 - Switch between EVD (VIP) or LIP (one per refrigerant circuit)

- DI (11 No.)**
- Operating response & alarm for evaporator pump
 - Operating response & alarm for defrosting pump
 - Alarm from HPP switch, A
 - Alarm from HPP switch, B
 - Alarm from LPP switch, A
 - Alarm from LPP switch, B
 - Alarm for condensor pump
 - Alarm for pump sec. heat
 - External blocking (ext. pot. free closing contact)
 - External B-alarm (ext. pot. free closing contact)
 - External B-alarm (ext. pot. free closing contact)

- AI (10 No.)**
- Temperature sensor, brine inlet
 - Temperature sensor, brine outlet
 - Temperature sensor, condensor inlet
 - Temperature sensor, condensor outlet
 - Temperature sensor, hotgas, circuit A
 - Temperature sensor, outside
 - Temperature sensor, heat supply
 - Temperature sensor, heat return
 - Temperature sensor, DHW cylinder
 - Temperature sensor, defrosting

- A0 (2 No.)**
- Fan Unit - speed control
 - Defrosting 3-way valve (temperature control)

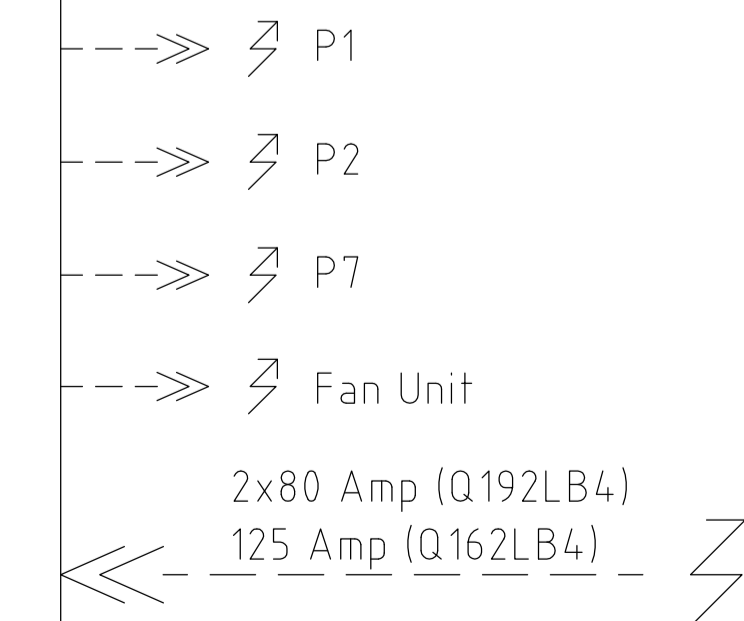
X-PRO - SUMMARY OF I/O

- DO (4 No.)**
- Start/stop compressor 1
 - Start/stop compressor 2
 - Start/stop compressor 3
 - Start/stop compressor 4

- DI (4 No.)**
- Operating response compessor 1
 - Operating response compessor 2
 - Operating response compessor 3
 - Operating response compessor 4
- (start/stopp from QLC - can we get value via Modbus?)

- AI (3 No.)**
- Temperature sensor, sec. side heat supply
 - Temperature sensor, sec. side heat return
 - Temperature sensor, hotgas, circuit B

- A0 (3 No.)**
- Mixing valve for heating - temperature regulation
 - Start/stop suppl heat & temperature regulation
 - Start/stopp condensor pump & speed control



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SCALE	DRAWING NUMBER	REV	
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