

Check list for outdoor units commissioning





Customer:	Location: Date:
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Equipment Unit description: Feet Kit: Control cabinet: Expansion tank: Other options:	Serial numbers
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Reference information

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Customer representative:

Name:(Print)(Signature)

Position:(Print)

LU-VE Service engineer

Name:(Print)(Signature)

Position:(Print)

Date:



Commissioning completed:

Name (Customer)(Print)
(Signature)

Position:(Print)

Name (LU-VE).....(Print)
(Signature)

Position:(Print)

Document Revision no.

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SECTION A – VISUAL CHECK

	Check Mark		
	Yes/No	At witnessed Inspection	Remark
Absence of visible damages due to the unit handling			
All needed parts arrived on Site			
Instruction manual is on Site			
Coil surface is clean and without visible damages			
Presence of antivibration dampers (recommended)			
Presence of expansion joints piping (recommended)			

SECTION B – MECHANICAL CHECKS

	Check Mark		
	Yes/No	At witnessed Inspection	Remark
Fans protection grids are fixed			
Finned coil protection grids are fixed (*)			
Installation layout according to the "Installation manual"			
Pipeline Flange connections well supported and aligned with the radiator flanges			
Direction of fluid flow according to the labels/stickers In-Out			
Presence of venting and draining valves or automatic valves			
Check positioning of Vent Valve			
Check positioning Drain Valve			
Installation on steel structure (*)			

(*) if within scope of supply

**SECTION C – ELECTRICAL CHECKS
BEFORE STARTING MACHINE**

	Check Mark		
	Yes/No	At witnessed Inspection	Remark
Electrical wiring is according to the supplied scheme			
In case of power supply from Frequency Converter EMC Compliance (**) Sinusoidal filters are strongly recommended			
Check correct setpoint of the motor protections/circuit breakers			
Power supply voltage according to the unit datasheet/motor label			
In case of EC fans driven by customer check the correct input signal range			

*(**) EMC=Electromagnetic compatibility. Equipment items or systems dot not interfere with or prevent each other's correct operation through spurious emission and absorption of electromagnetic interference.*

SECTION D – STARTING Hydraulic circuit

	Check Mark		
	Yes/No	At witnessed Inspection	Remark
Fill the liquid circuit slowly to avoid “ <i>hammer effect</i> ”			
Vent air Liquid Cooler			
Run the pump(s) and re-check the venting			
Look for visible leakages			
Venting again after some hours (engine off)			

SECTION E – STARTING Fans

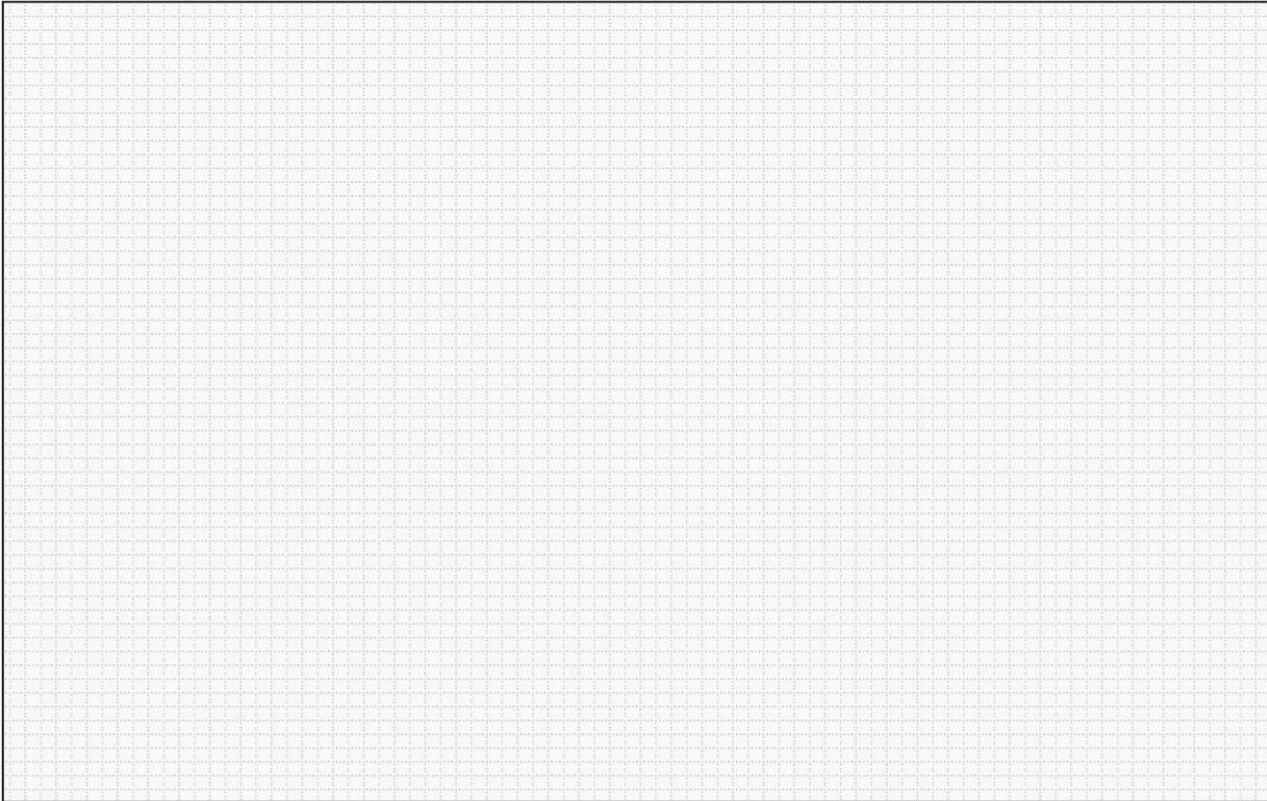
	Check Mark		
	Yes/No	At witnessed Inspection	Remark
Fan Impellers can rotate freely			
Put in operation at 100% one by one the fan motors and check if (***):			
- There are visible vibrations			
- Obstacles			
- Abnormal noise			
- Correct rotation direction			

(***) Check max number starts per hour <5, depending on the motor class (see fan technical datasheet)

SECTION F – OPTIONAL SUPPORT			
STRUCTURE			
Check Mark			
	Yes/No	At witnessed Inspection	Remark
Compare visual assembling with the drawing			
All parts are correctly Installed			
Indicate if:			
Profiles are installed correctly			
Vertical profiles are fixed on the concrete plat			
There are Visible defects			
Customer checked that bolts are well tight			
Ladder is fixed			
Handrails are fixed			



Sketch of the Installation/Plant and Support structure



Additional Notes:

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