Downloadable document - things to know when commissioning an Ecodan

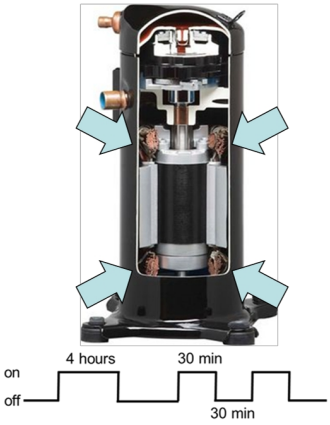
Before you start - Power the outdoor unit

At power on, warm up mode operates 4 hours & stops 30mins

Unit applies low frequency, low current power to the compressor

We recommend getting the unit wired asap to avoid any delays during commissioning

If the outdoor unit is powered but not connected to the FTC, this process can start without triggering operation

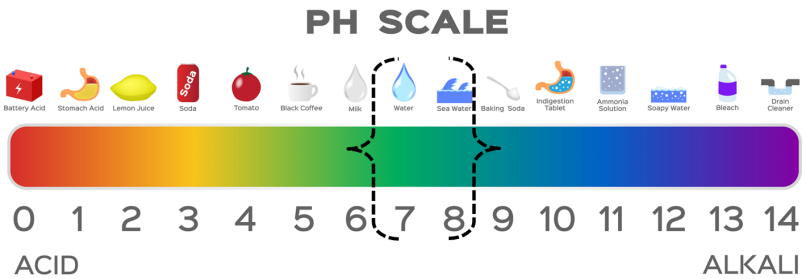


Minimum system water volume

Ecodan specification		Pipe length vs rqd. volume		
Model	Minimum water volume Inc. 5L indoor unit	22mm Copper pipe (0.33 l/m)	28mm Copper pipe (0.55 l/m)	35mm Copper pipe (0.84 l/m)
PUZ-WM50VHA	7L – 2L	2L = 6m	2L = 4m	2L = 2.5m
PUZ-WM60VAA	9L – 4L	4L = 12m	4L = 7m	4L = 5m
PUZ-WM85VAA	12L – 7L	NA	7L = 13m	7L = 8m
PUZ-WM112VAA	16L – 11L	NA	11L = 20m	11L = 13m
PUZ-HWM140(V-Y)HA	20L – 15L	NA	15L = 27m	15L = 18m

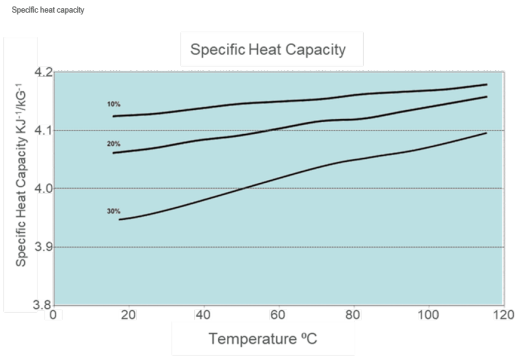
Water Quality

The water in a system should be clean and with a pH value of **6.5-8.0.**
The following are the maximum values;
Iron/manganese : 0.5 mg/L
Calcium : 100 mg/L
Chlorine : 100 mg/L



Commissioning procedure & startup tips - cont'd

Adding Glycol



Concentration	10%	20%	30%
Frost protection	- 4ºC	- 9ºC	- 14ºC

When filling a system from new with Glycol, the quantity to be added must be pre-mixed and tested to the correct frost protection level

It is recommended to mix the quantity at room temperature to ensure a good quality, even blend with water

It is important to ensure the system is not overdosed with glycol

Too much glycol can lead to a poor energy transfer as the properties of water's heat carrying capacity could be affected

25% glycol to 75% water giving a -12ºC frost protection level is what we recommend

Outlined commissioning steps

Check flow and return connections
Check orientation of pumps, filters and flow meters
Open all isolating valves
Check air charge in expansion vessels (1.3 bar)
Fill & Pressurise primary circuit to 1.5 bar
Release air from the system, on completion top up system
Check for leaks
Test the system
Complete documentation and handover in line with MCS

To see this cheat sheet and its attached documents, please visit
https://mitsubishielectricuk.360learning.com/course/play/5f8479a240660a0b47c85ab8