# 1. Two-pipe air-to-water heat pump plant

## 1.1. [NOT\_EQUALS TYP HEAT\_ONLY] Cooling plant

### 1.1.1. Cooling plant enable

The plant is enabled when it has been disabled for at least the duration dtRun (900 s, adjustable) and:

* Number of plant requests > number of ignored requests nReqIgn (0, adjustable), and
* Outdoor air temperature > outdoor air lockout temperature TOutLck ([UNITS [15°C] [59°F]], adjustable), and
* The enable schedule is active.

The plant is disabled when it has been enabled for at least the duration dtRun (900 s, adjustable) and:

* Number of plant requests ≤ number of ignored requests nReqIgn (0, adjustable) for at least the duration dtReq (180 s, adjustable), or
* Outdoor air temperature < outdoor air lockout temperature TOutLck ([UNITS [15°C] [59°F]], adjustable) minus hysteresis dTOutLck, or
* The plant enable schedule is inactive.

## 1.2. [NOT\_EQUALS TYP COOL\_ONLY] Heating plant

### 1.2.1. Heating plant enable

The plant is enabled when it has been disabled for at least the duration dtRun (900 s, adjustable) and:

* Number of plant requests > number of ignored requests nReqIgn (0, adjustable), and
* Outdoor air temperature < outdoor air lockout temperature TOutLck ([UNITS [15°C] [64°F]], adjustable), and
* The enable schedule is active.

The plant is disabled when it has been enabled for at least the duration dtRun (900 s, adjustable) and:

* Number of plant requests ≤ number of ignored requests nReqIgn (0, adjustable) for at least the duration dtReq (180 s, adjustable), or
* Outdoor air temperature > outdoor air lockout temperature TOutLck ([UNITS [15°C] [59°F]], adjustable) plus hysteresis dTOutLck, or
* The plant enable schedule is inactive.