



## 3PR

Complete Real-Time
Cooling System Control



Achieve optimal cooling system performance with this revolutionary technology – customized for your needs.

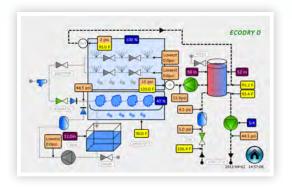
For the first time ever, you can now get a complete overview of your entire Ecodry and/or Heavygel central chiller system in real time.





## Full Operating Schematics

Build your system – only installed features will be monitored and visible for each system.



## See everything at-a-glance

- Pressures
- Temperatures
- Coolant levels

## **Color-coded indicators**

- Colors indicate device status
- Green = open/active
- Gray = closed/inactive

### Alarms

 Monitor every system function for faults

## Reactive System Performance

Monitor functions and operational control over time.

# ECODRY PERFORMANCE Fan Set Spread 100 xi Mini, (on row 1) 100 yr rpm Hax, (on row 1) 100 yr rpm Hax, (on row 2) 100 yr rpm Hax, (on row 2)

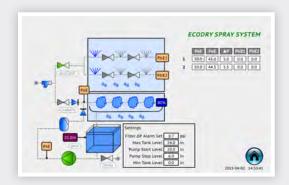
## **Full operating parameters**

- Next generation technology
- Monitor energy consumption for system devices
- Examine oscillating performance over time for functions like Ecodry spray system operation

## Monitor performance to set point

 Observe system functions over time versus operating conditions, such as ambient temperatures for Ecodry systems

## Spray and Water Recovery Operation



Check the entire Ecodry spray and optional water recovery systems for proper operation.

## Allows you to check:



Spray levels of the adiabatic chamber or the booster system



Recovery tank level and filter pressure drop for the available water recovery system



Pressure readings for the adiabatic booster spray system to verify valve functions when operating in full spray mode

Alarm and warnings are either default or set by Frigel technicians at time of start-up.

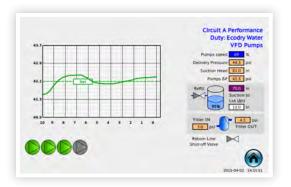
## Pump Performance

Get real-time pump performance data for your Ecodry and/or Heavygel central cooling system.

**Multiple pump status –** indicates which process pumps are active

**Reservoir level –** shows precise reservoir level for protection against pump cavitation

**Hydraulic system operating characteristics** – displays pump system pressures (VFD or on/off) and system ΔP



**System filter status** – monitors filter pressure drop and indicates when cleaning is required

**Return line shutoff valve function** – activates (closes) when system shuts down to prevent reservoir overflow

## Alarms and Service

Take the guesswork out of troubleshooting and speed up service time with quick, accurate information.



- Pinpoint the EXACT location of a fault
- Locate Ecodry, Heavygel central chiller or hydraulic system faults or even, for example, the precise row and number for a fan fault
- Easy to understand instructions in multiple languages to clearly identify alarm conditions and troubleshooting recommendations

## Preventative Maintenance

Take pre-emptive measures to avoid "run to failure" mode. 3PR guides you along the way.



## PROVEN *Advantages*



Trusted by topperforming companies worldwide. As your needs continue to evolve, we continue to improve on our industry-leading central cooling technology to support your success.

## Let's Discuss Your Application

Contact the Frigel team today to get the world's most efficient cooling – optimized for your needs.



## www.frigel.com



## **Communications**

The 3PR system control panel gives you the ability to connect to a higher building-wide monitoring system via Modbus RTU over Ethernet TCP/IP network.

This system is also designed to give remote, real-time monitoring capabilities to Frigel's global service technicians at all times.

By overseeing system performance, we will help you prevent downtime and speed up required service.





## **GLOBAL HEADQUARTERS**

## Frigel Firenze S.p.A.

Scandicci (Fl), Italy

- P +39 055 72209 20
- **E** sales.italia@frigel.com
- E sales.emea@frigel.com

## Frigel Custom Cooling Solutions s.r.l.

Ronco Briantino (MB), Italy P +39 039 53000 22 **E** info.ccs@frigel.com

## **Frigel North America**

East Dundee (Chicago), IL USA **P** +1 847 540 0160

**E** sales.fna@frigel.com

## Frigel Latino América Ltda

Iracemápolis (Sao Paolo), Brazil P +55 19 3010 1900 **E** sales.fla@frigel.com

## Frigel Intelligent Energy Solutions S.r.l.

Gallarate (Milan), Italy P +39 033 17846 49 E energysaving@frigel.com

## **Frigel Asia Pacific**

Bang Pakong (Bangkok), Thailand **P** +66 3857 7799

**E** sales.fap@frigel.com

## Frigel Australia Pty Ltd

Braeside Victoria, Australia P +613 9587 8047

E sales.fau@frigel.com

## Frigel GmbH

Rheinfelden, Germany +49 7623 748 7245 E sales.gmbh@frigel.com