

CMS Surface Flushing gas system

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EP-DT
Detector Technologies

Gas System location

Main building

Access through 3579 R-J03



SXA5 action panel

3579 1-C08



Cleanroom 1

3579 R-K14



Cleanroom 2

3579 R-C10



ETL facility

3579 1-C08



How to access the control system

See documentation here:

<https://confluence.cern.ch/display/ICKB/GCS+Remote+Access+Procedures>

The gas system is called **CMS-CDS** (Cold Detector Surface) and it is visible on from the CMS Gas Control System panel

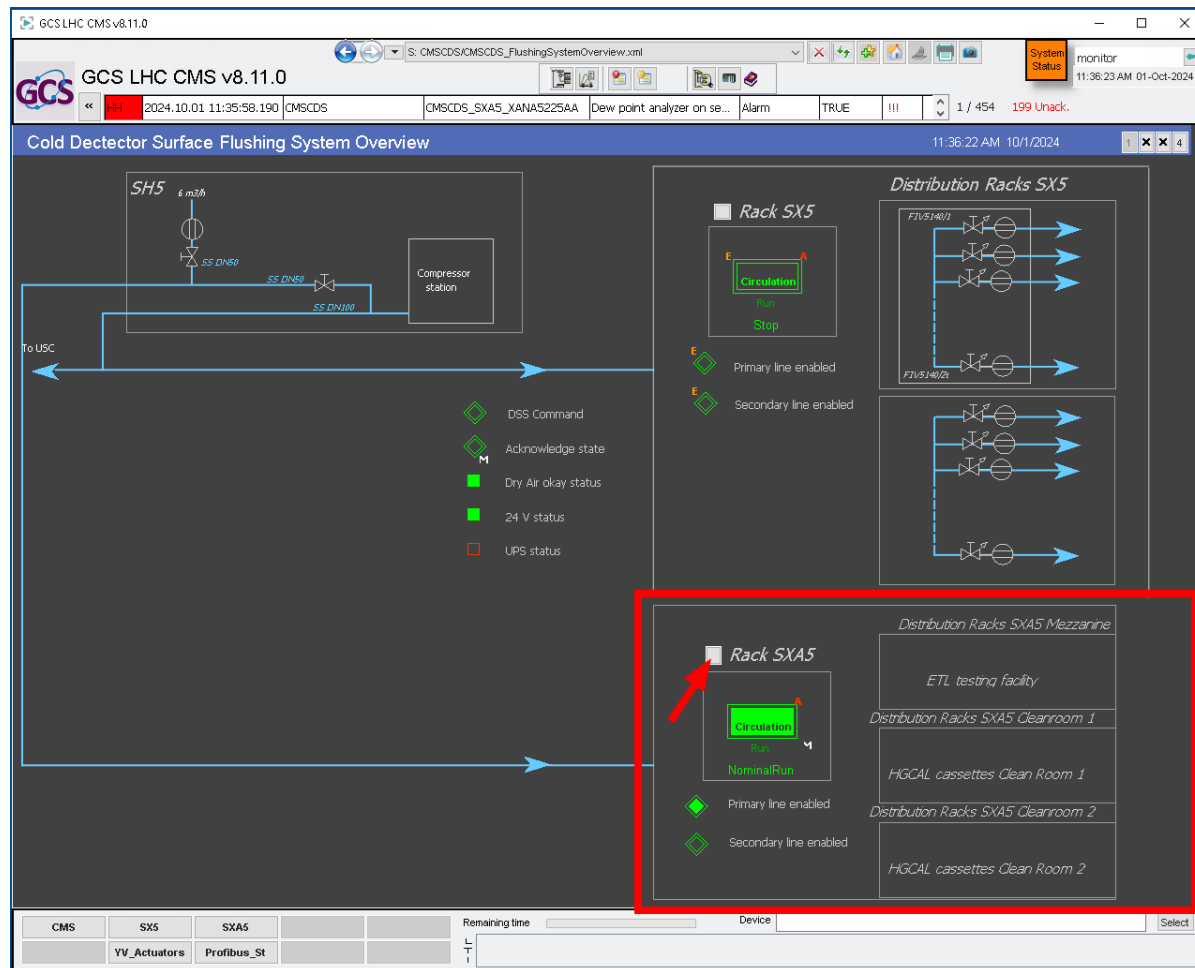
Click on the gray square button to enter in the control system

The screenshot displays the GCS LHC CMS v8.11.0 interface. The main panel is titled "CMS Gas Systems" and contains several sub-panels for different gas systems: DT, RPC, CSC, FGR, CF4 Re, GEM, AUX, and N2 ID Flushing. Each sub-panel shows a status indicator (e.g., "Run") and a "Detailed status" button. A red box highlights the "CDS" sub-panel, which is currently in a "Circulation" state. A red arrow points to a gray square button in the top right corner of the CDS sub-panel, which is used to enter the control system. Below the main panel is a 3D model of the detector and a table for "CSAM Alarms".

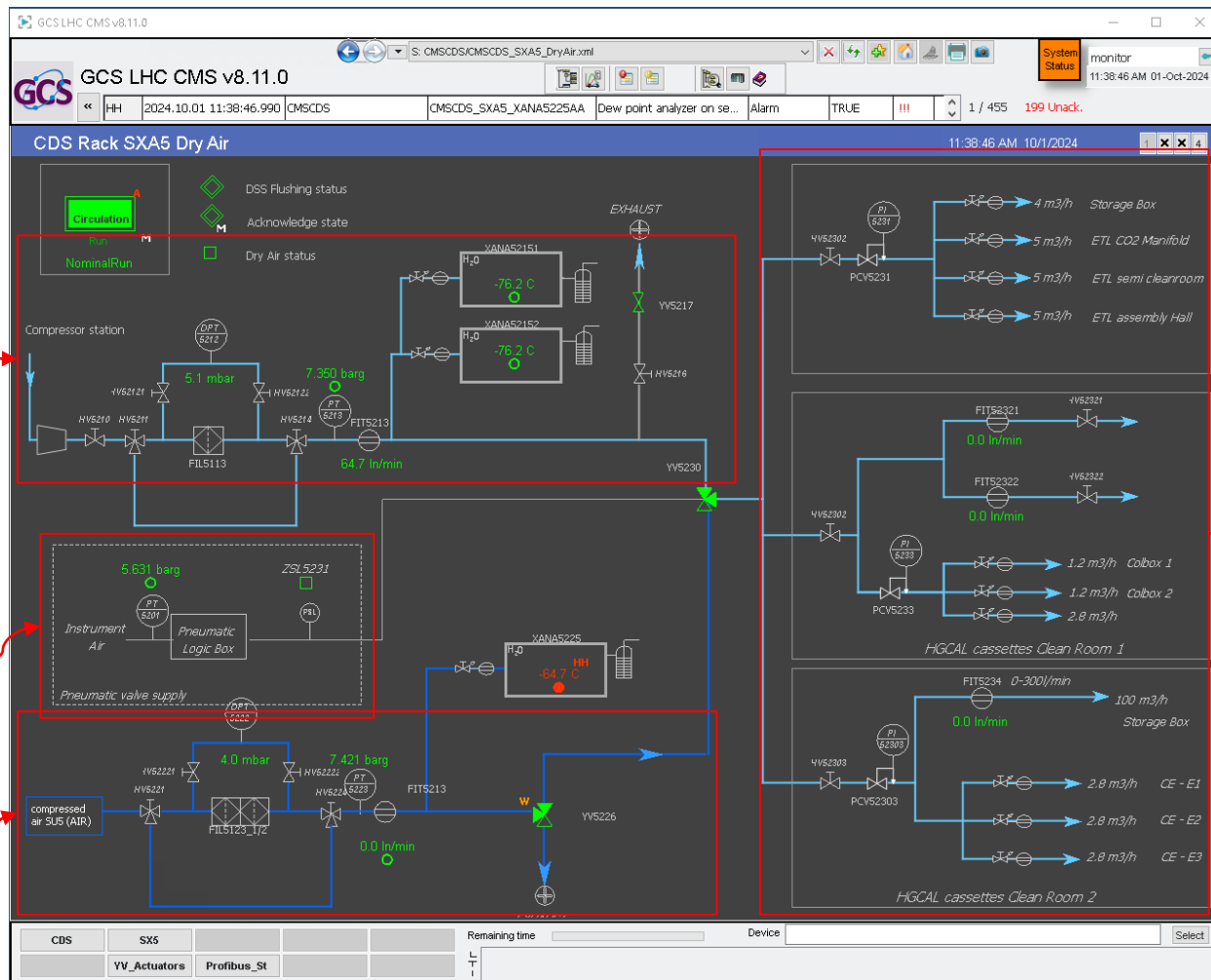
Flushing units

SX5 → not ready yet

SXA5 → operational



SXA5



Primary supply

Mechanical backup
switch box

Backup supply

Distribution

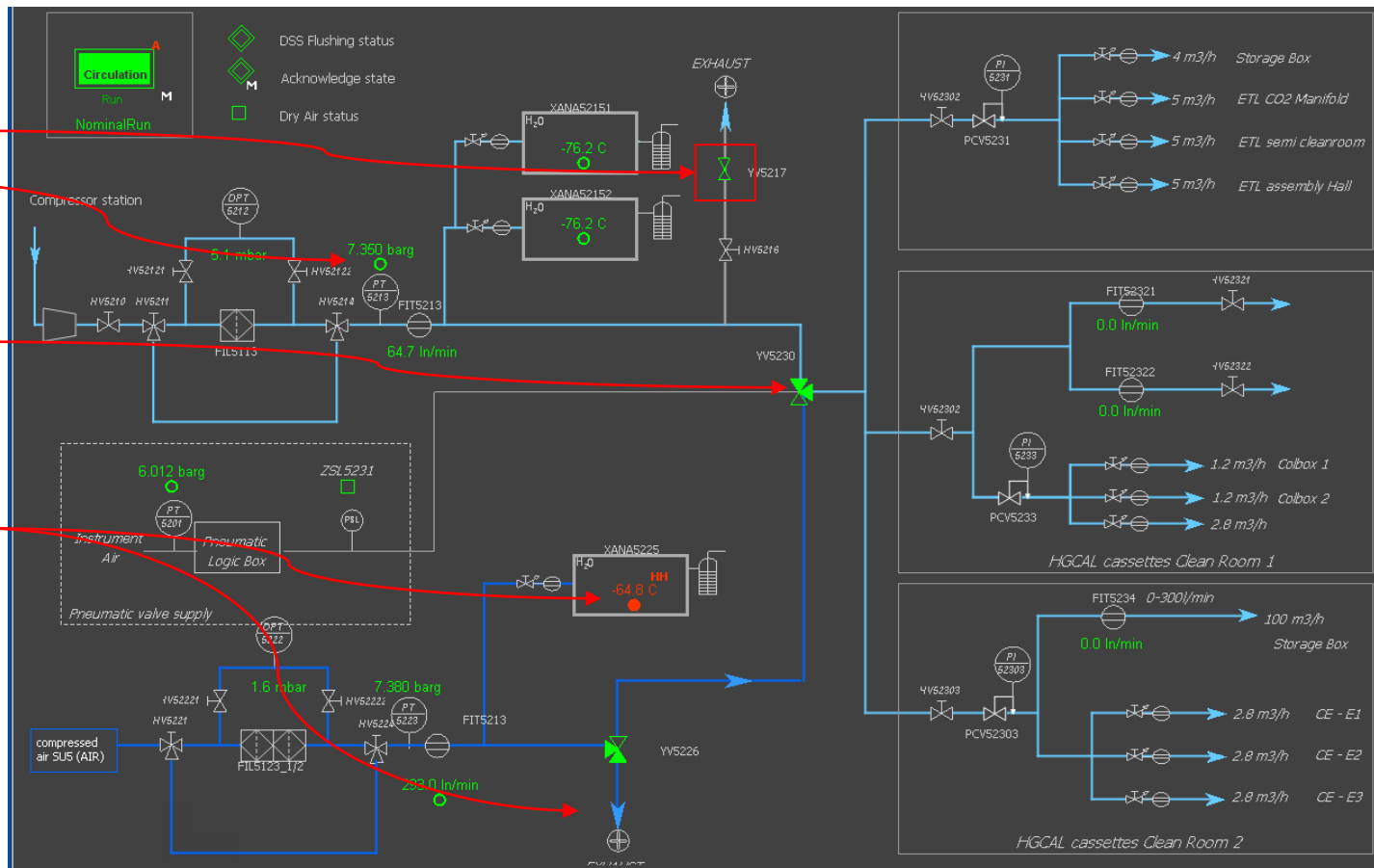
SXA5 logic

For more details, see FA EDMS [3019794](#)

Opens if one XANA525 is in alarm or system in overpressure

Switch is mechanical (pneumatic logic box) if pressure < 3 barg or controlled if humidity is too high

Valve switched by the system if humidity is too high



SXA5 logic

For more details, see FA EDMS [3019794](#)

From **OverPress**, **Backup**, **BackupVent** to **NominalRun** the action must be acknowledge by switching on the button

