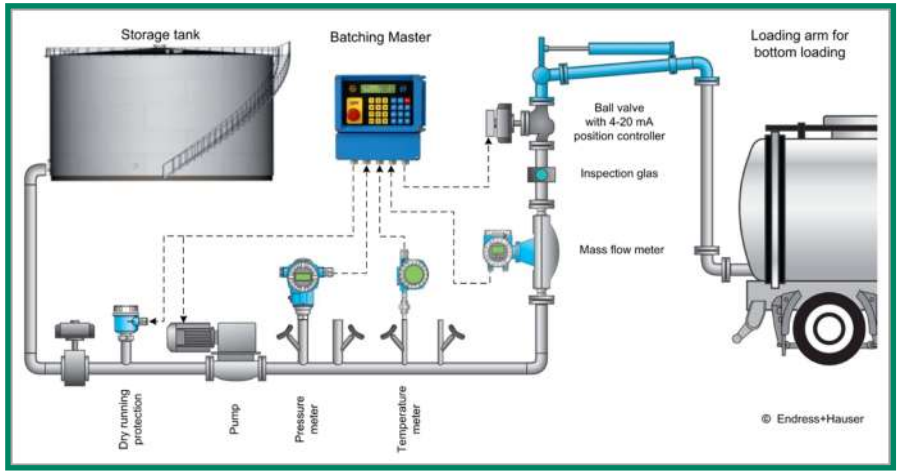
IBS BatchControl GmbH



Introduction

Agenda

1. Introduction
2. Intrinsically Safe Controller CTR 210i
3. Controller Applications
4. References, IBS Product Range and Contact Details

Introduction

IBS BatchControl GmbH

- Founded in 1985 in Kerpen (Germany)
- Development and production of intrinsically safe devices
- Acquisition by KROHNE in 1996
- System Integrator for Loading and Tank Farm Systems
- Management Buy-out in 2003
- In May 2014 move to Kall (Germany) into new Building

Intrinsically Safe Controller CTR 210i

IBS Batch Control GmbH

Intrinsically Safe Controller CTR 210i

IBS Batch Control GmbH

Intrinsically Safe Controller CTR 210i

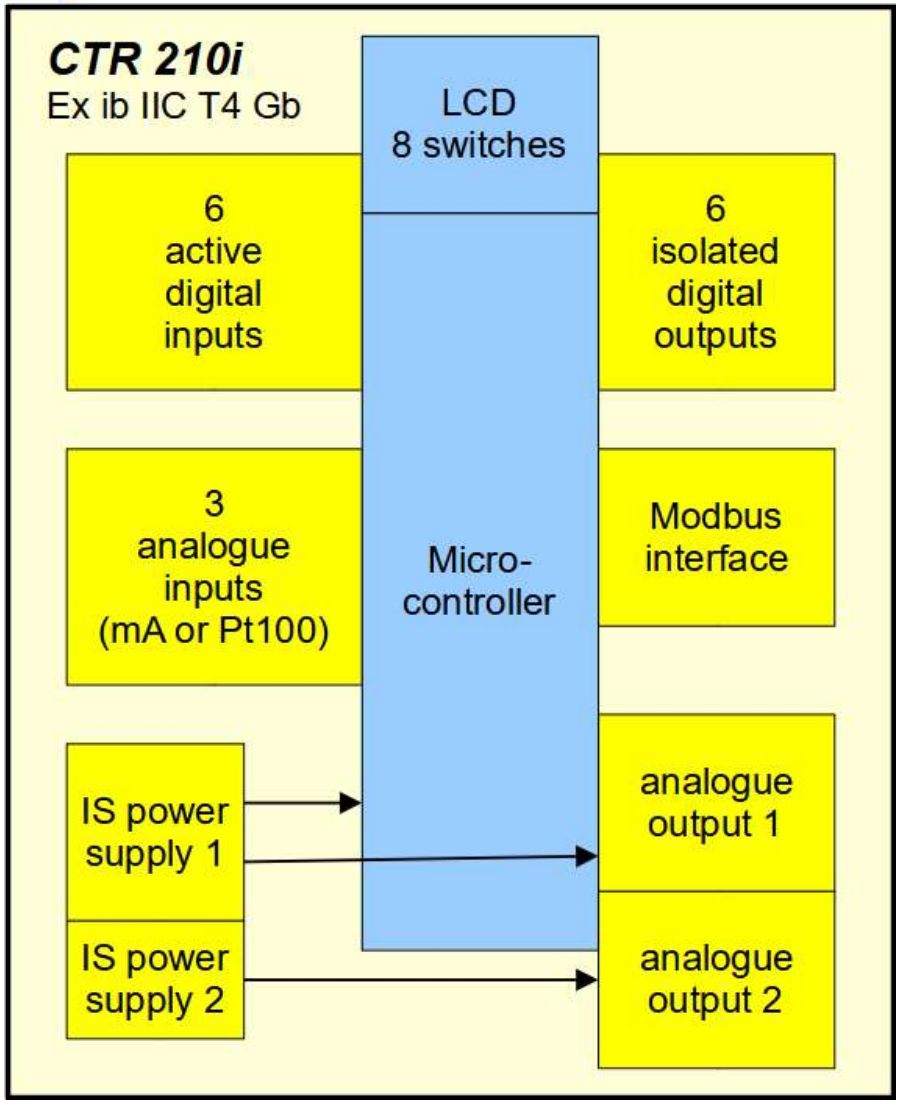
Technical data:

- DMT 02 ATEX E 148, Ex ib IIC T4
- For using in hazardous area zone 1
- Temperature range: -20°C to 60°C
- Panel mount housing, front IP65, 72 x 144 x 115 mm (W x H x D)
- Field housing, IP65 optional available, 113 x 173 x 205 mm (W x H x D)

Intrinsically Safe Controller CTR 210i

Technical data:

- Three analogue inputs 4 – 20 mA, passive
  (optional Pt100)
- Two analogue outputs: 4 – 20 mA, active
- Six passive digital outputs for alarms
- Six active digital inputs for switching functions
- Serial Interface with Modbus Protocol



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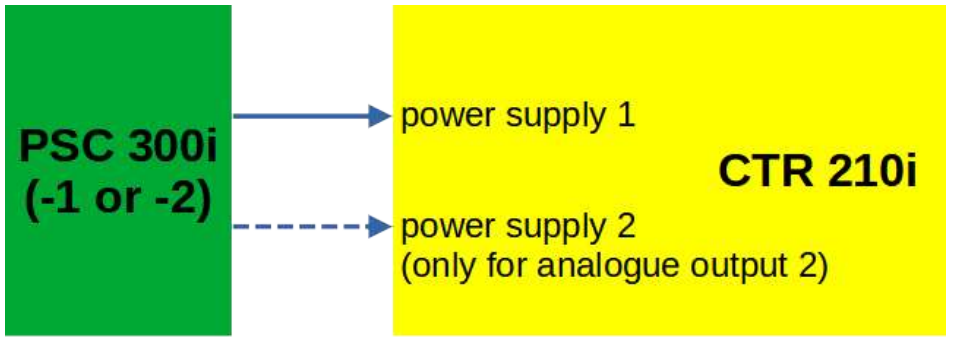
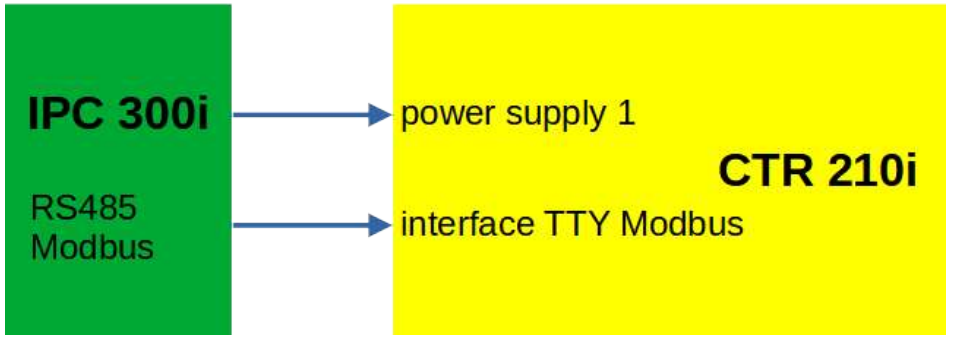
Power Supply and Data Interface

Intrinsically safe power supply module PSC300i mounted in safe area on DIN-Rail (1 or 2 channel version available, second channel for second analogue output if required)



Intrinsically safe power supply and interface module IPC300i mounted in safe area on DIN-Rail (single channel)

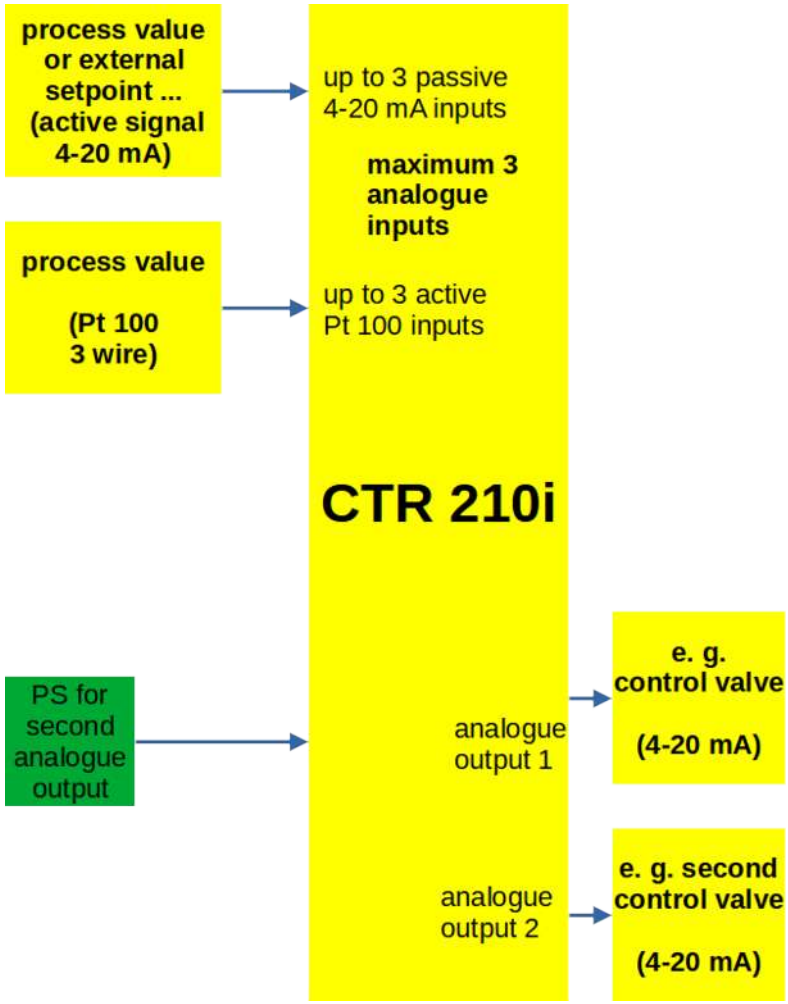


Power supply for IPC300i and PSC300i is 24VDC

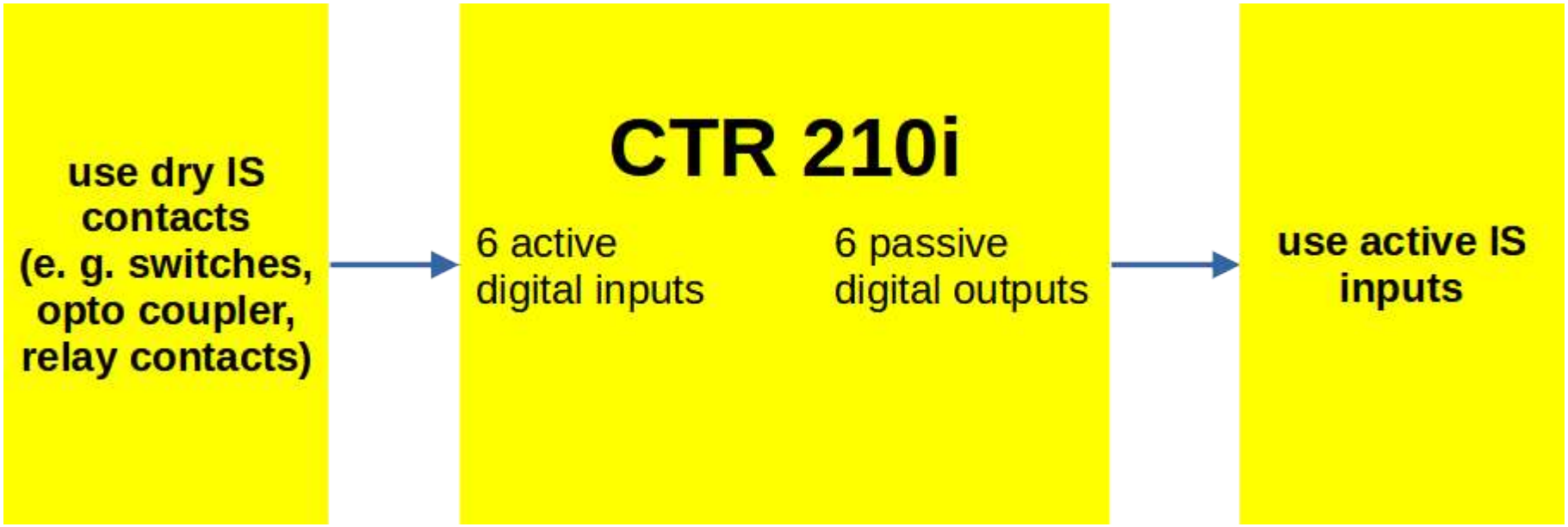
Analogue I/O

- Three analogue inputs,
  each either 4-20mA or Pt100,
  must be specified in ordering stage

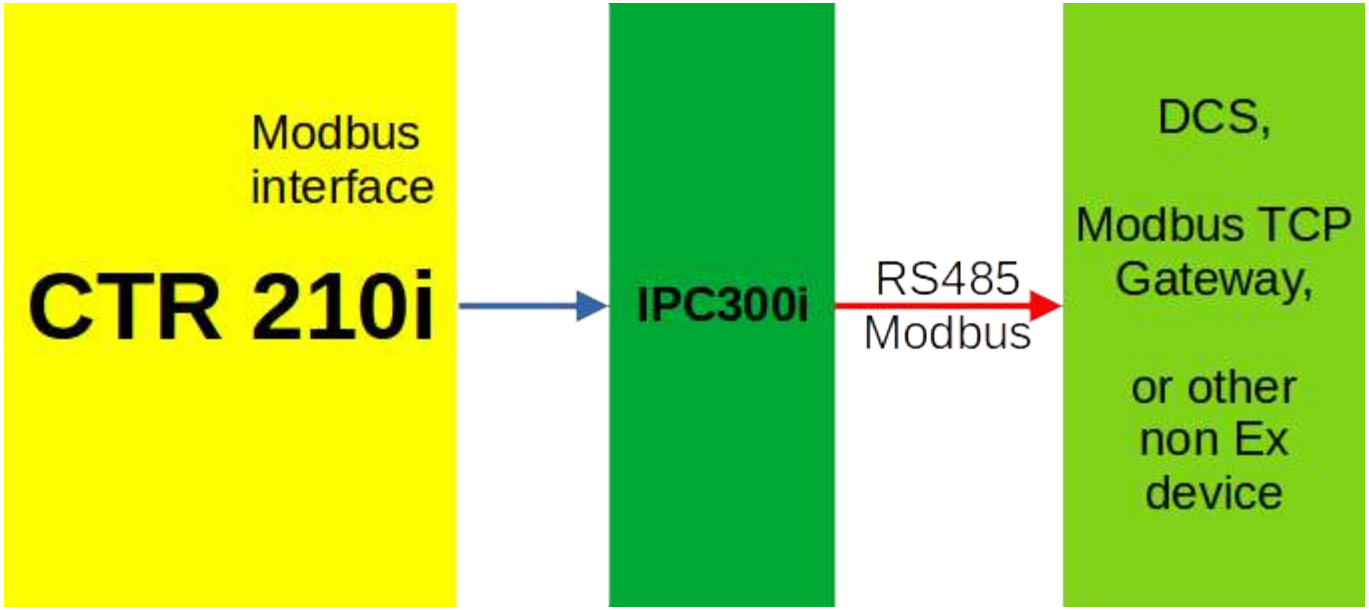
- Two analogue outputs
  4-20mA
  as process control outputs



Digital I/O

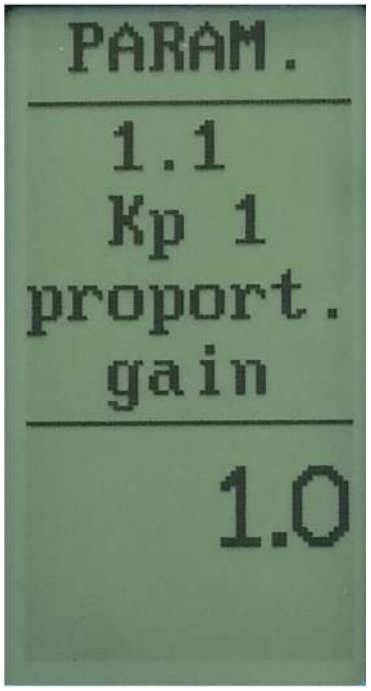

use dry IS contacts (e. g. switches, opto coupler, relay contacts)
CTR 210i
6 active digital inputs
6 passive digital outputs
use active IS inputs

Interface to DCS



Easy Configuration

- The controller is easy to configure, all settings are displayed in plain text and are labelled by menu items that can be read in the manual.



Control Functions

- Local Set Point Controller
- Remote Setpoint Controller
- Split-Range Controller
- Ratio Controller
- Difference Controller
- Two-channel Controller
- Cascade Controller
- Automatic Set Point Ramp / Programmer Function
- Manual/Automatic Station software
- Two-Position Controller
- Feed Forward Controller

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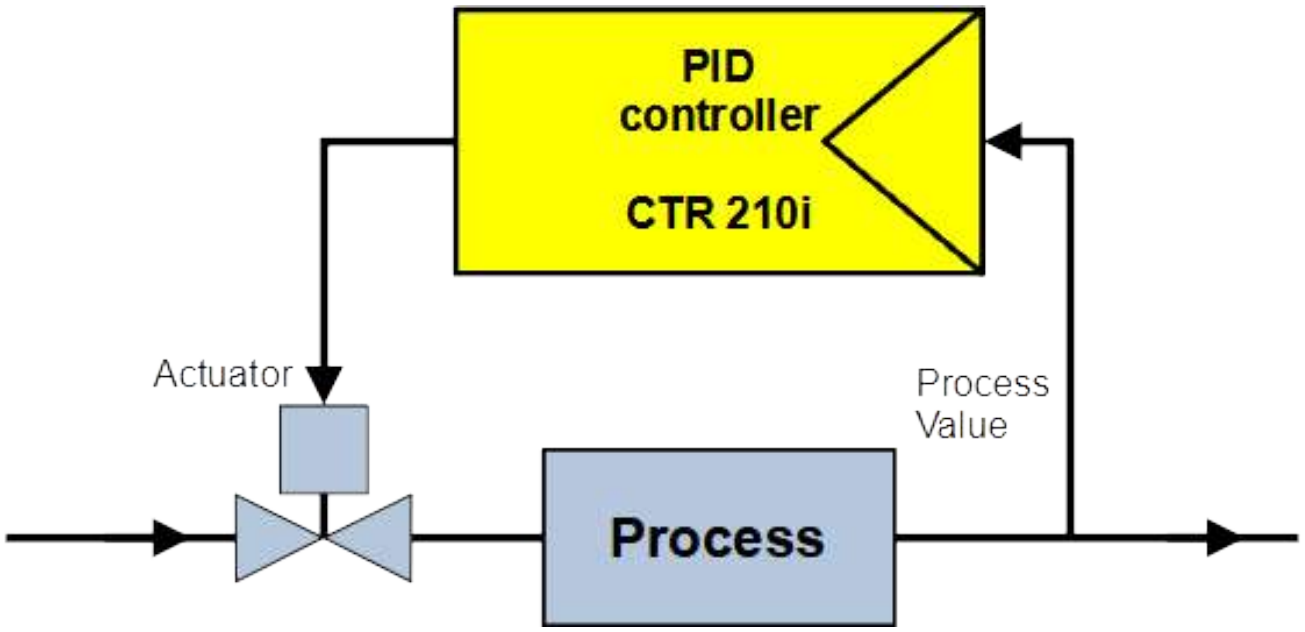
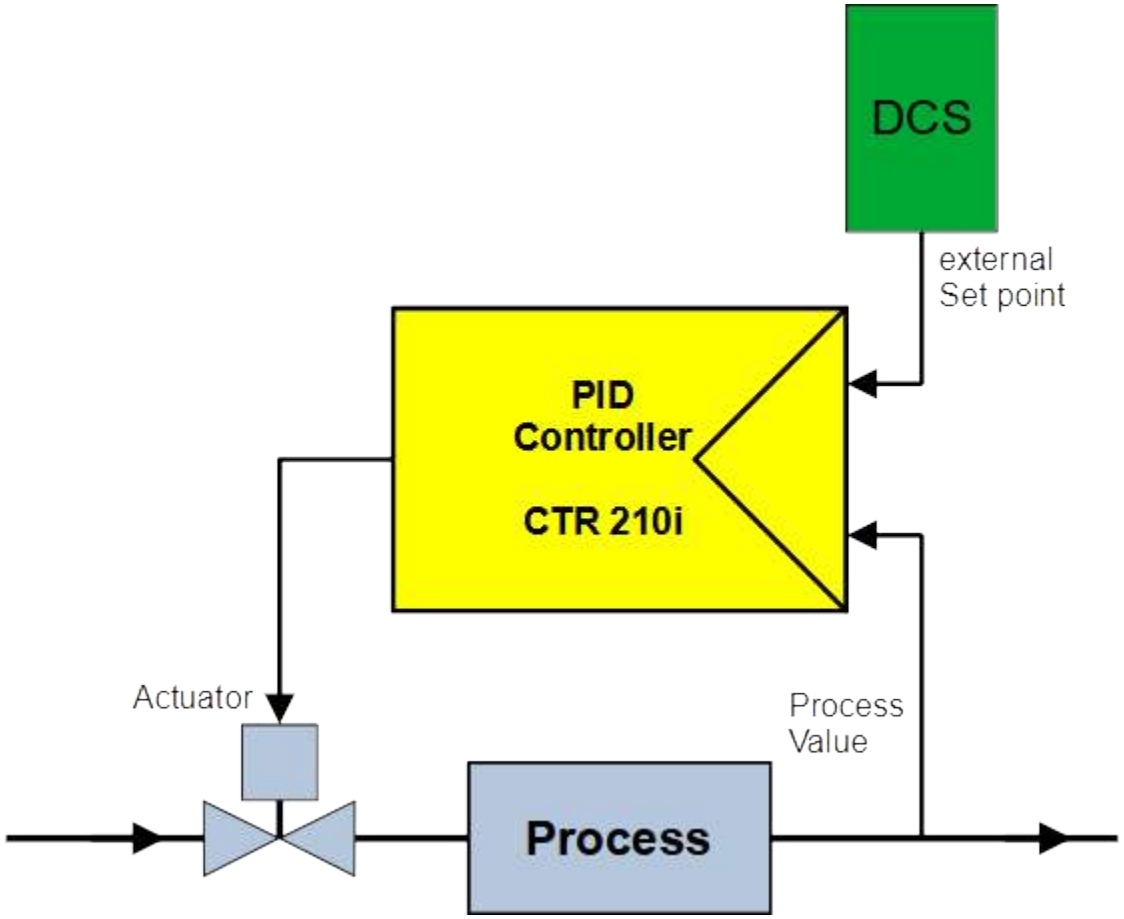
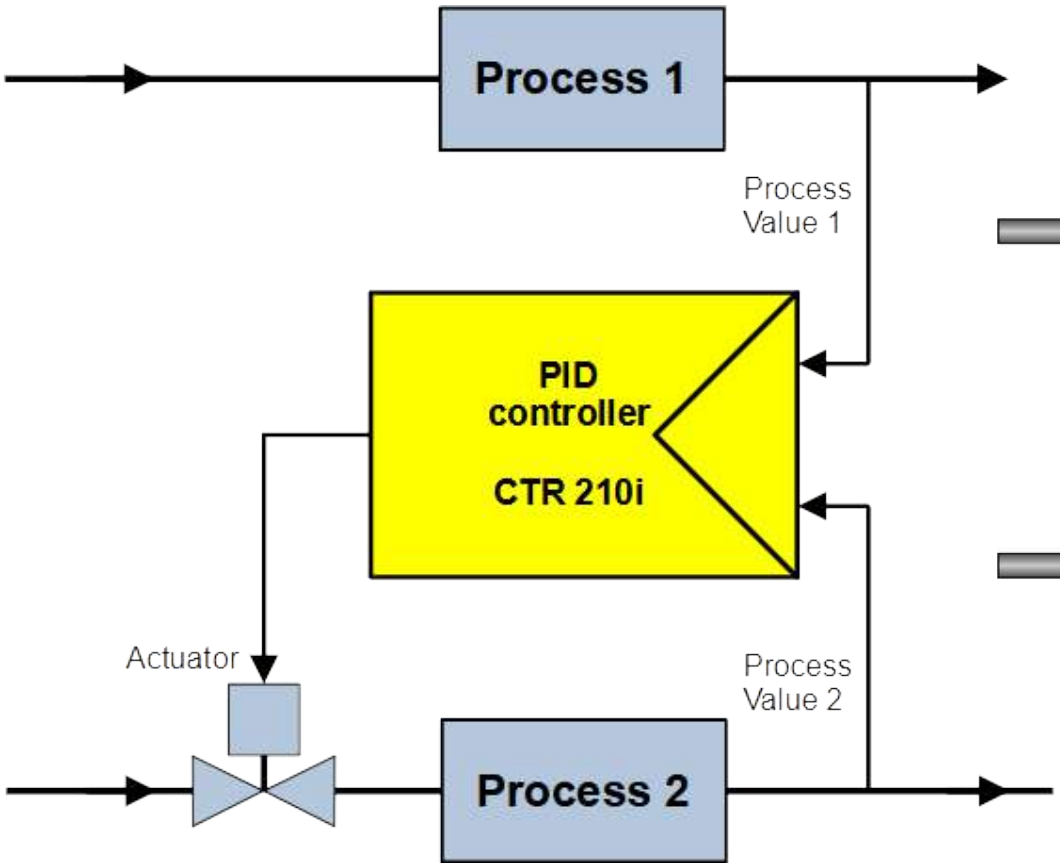
Local Set Point Controller

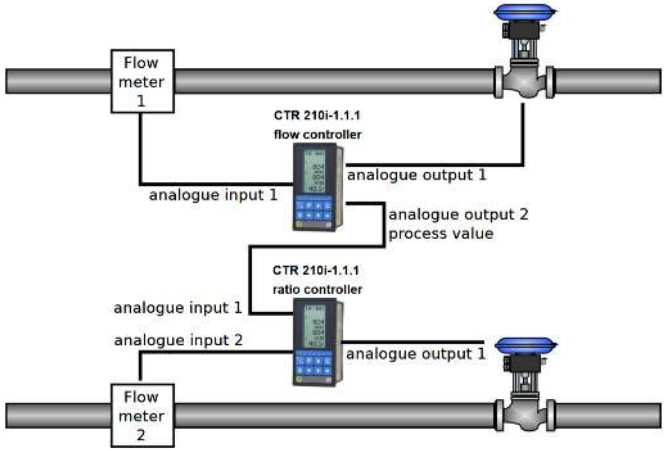


Remote Set Point Controller

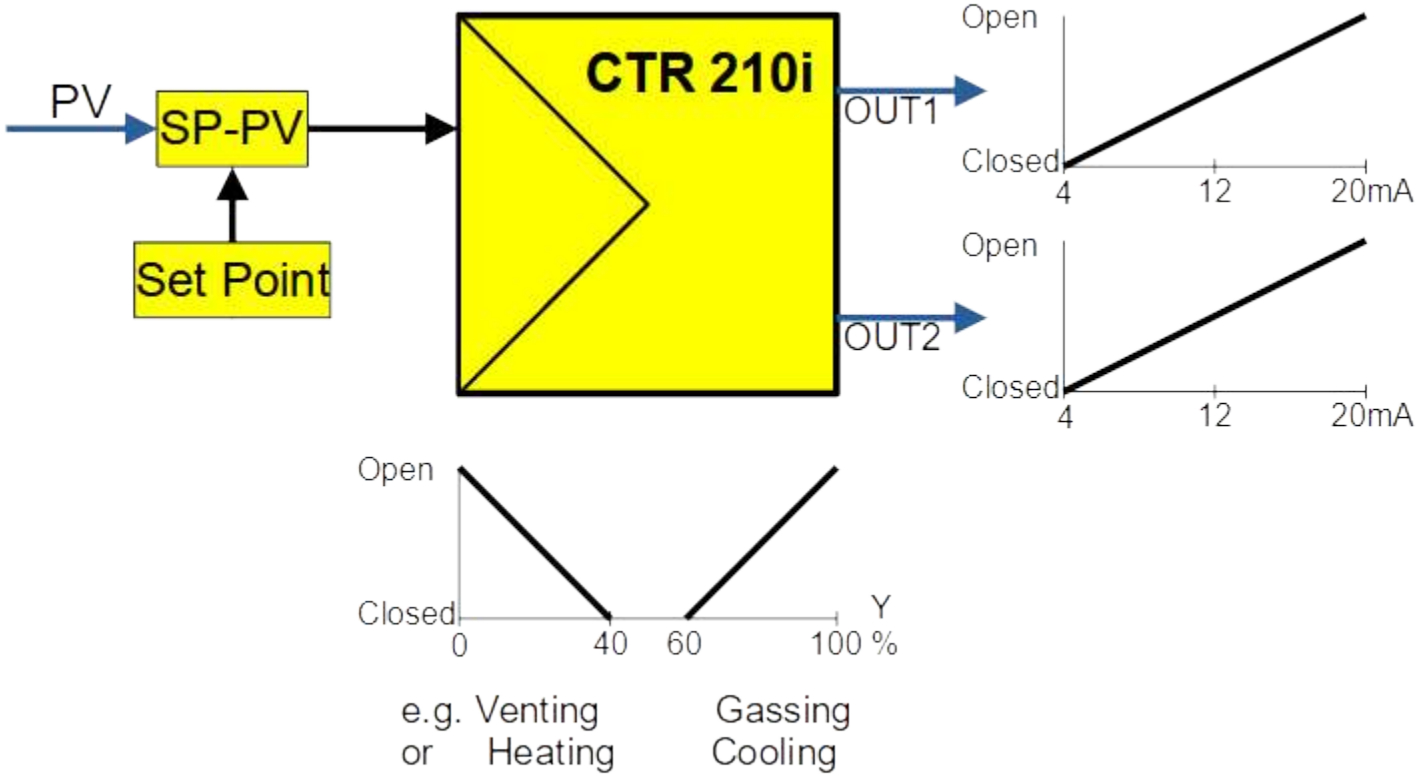


Ratio Controller

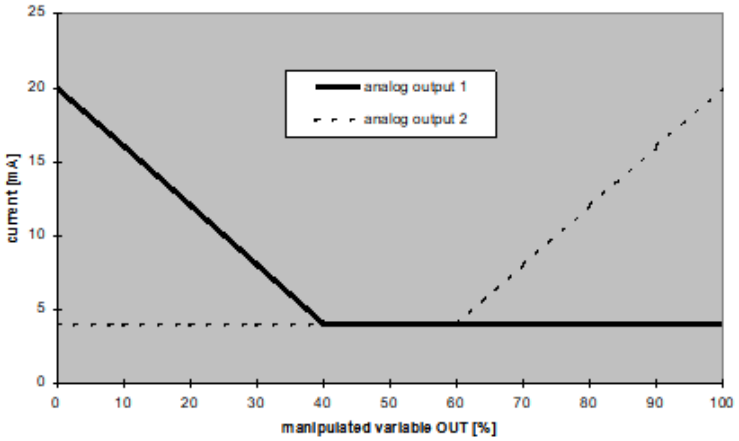


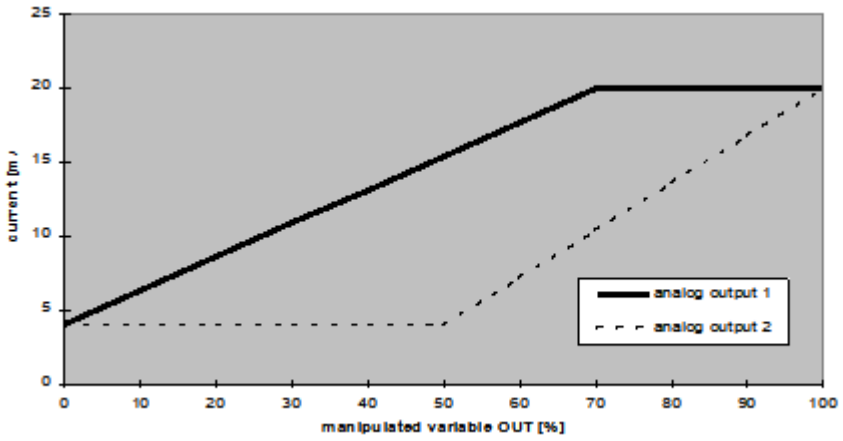


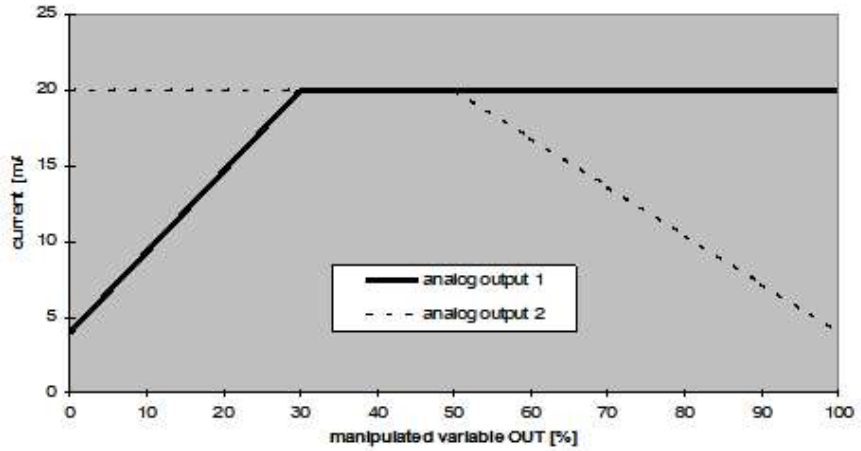
Split Range Controller



Split Range Controller

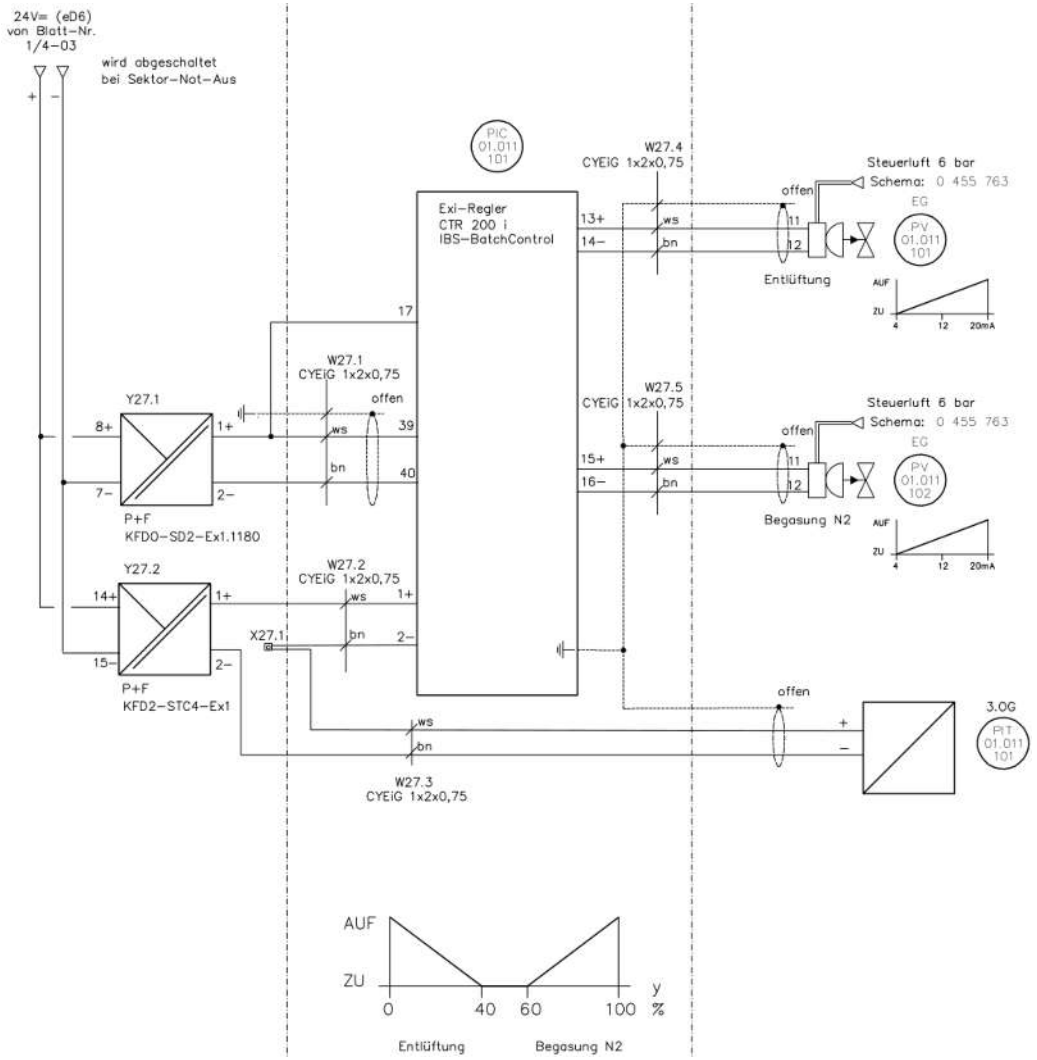






Split Range Controller Example

Example of how Roche in Basel solved the venting (0-40%) and the gassing control (N2 supply) in a controlled system with dead band.



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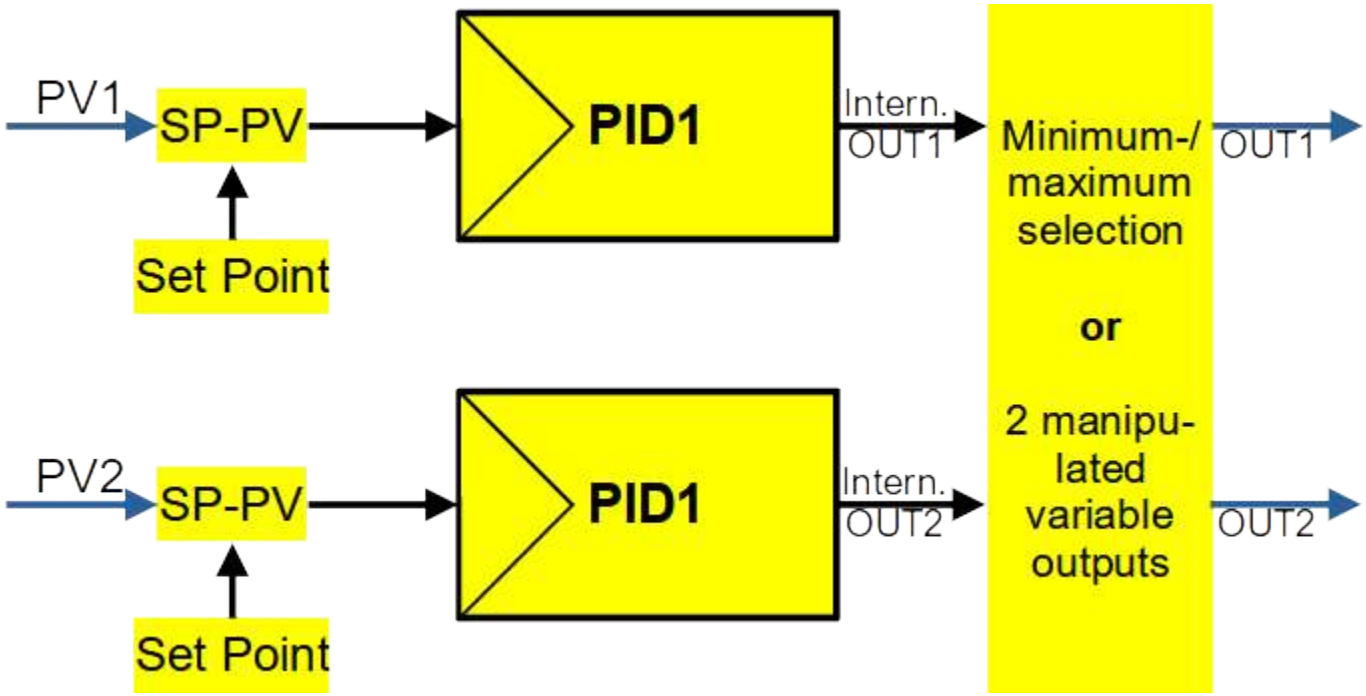
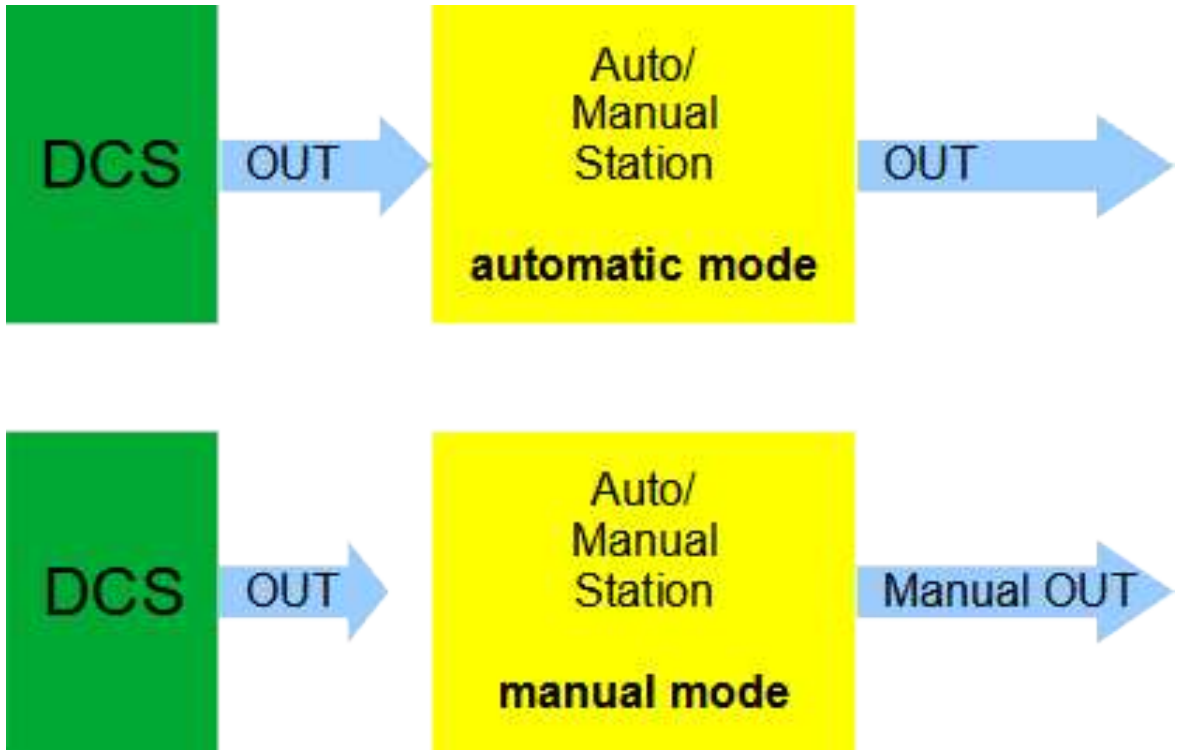
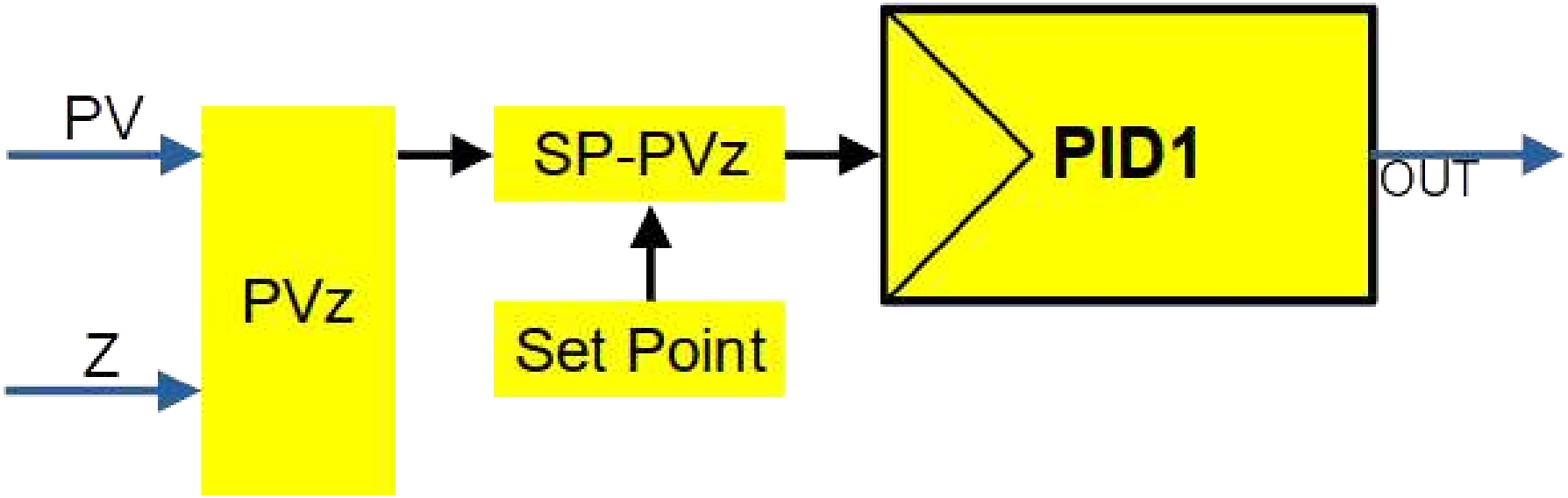
Double Loop Controller



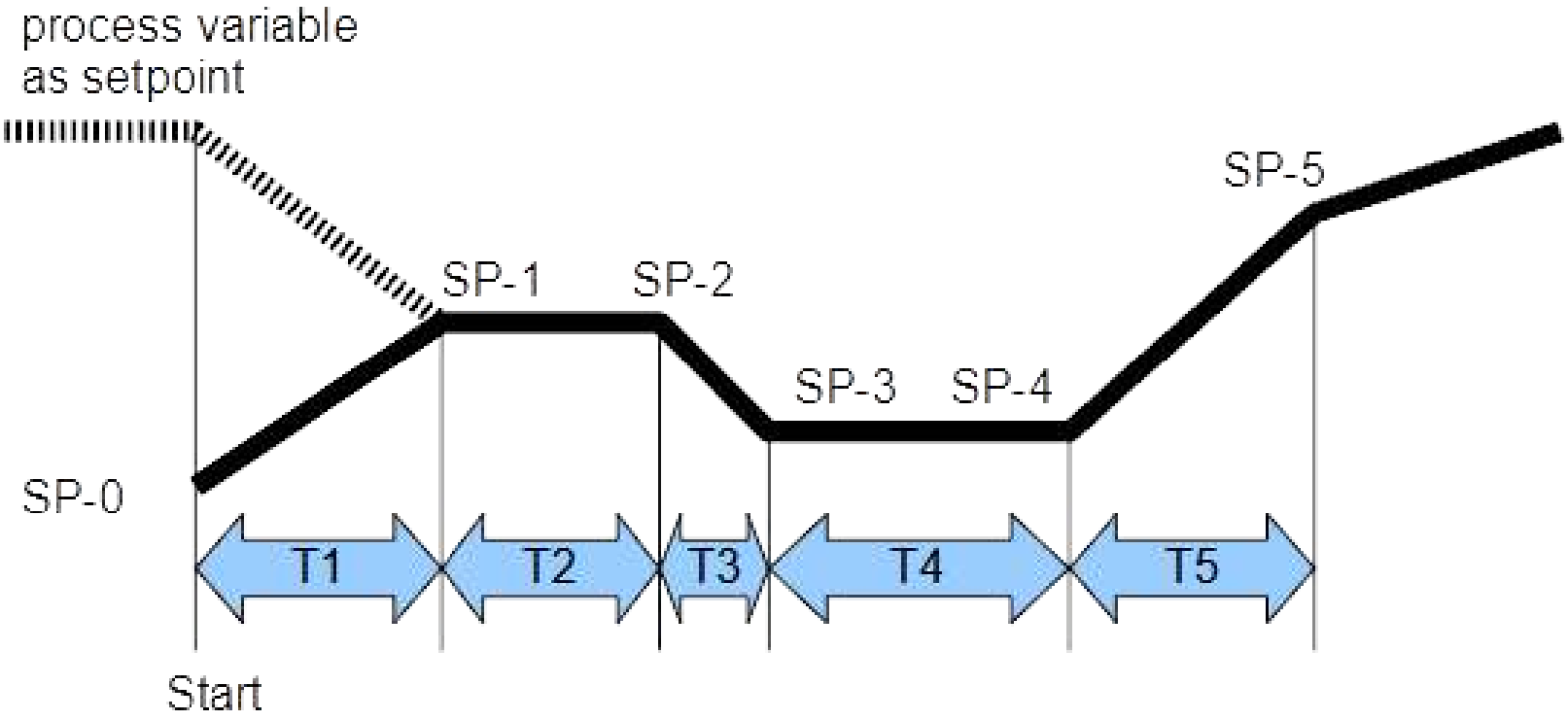
Auto/Manual Station



Feed Forward Control



Set Point Ramp Function



Reference List:

Actemium
Airbus
Basel
BASF
Bilfinger
Bayer
Basell
BP
Celanese
Clariant
DHC Chemie
Degussa
Endress + Hauser
Emerson
Evonik
ExxonMobil
GBF
Grillo
Gemlik
HCT
Iberfluid
Ineos
Kali+Salz
KANEX
Krohne Messtechnik
Lanxess
Lipoid
Merck
Mettler Toledo
Novartis
OQEMIQS
Pinnacle
Rain Carbon
Roche
Sanofi-Aventis
Saltigo
SKW
Shell
Total
Yokogawa
Wacker Chemie

IBS Product Range

Exi bargraph indicator

Exi PID controller

Exi Power suppy

Exi Batch controller

Flow-Computer

Contact

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