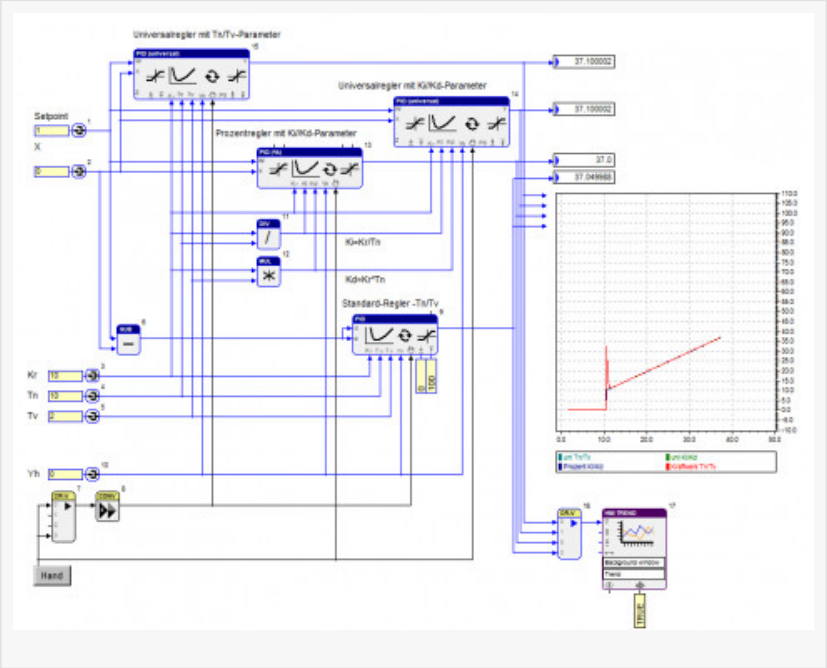
PACcubes: PID Controller in the IO terminal



MAGDEBURG, SAXONY-ANHALT, GERMANY, April 13, 2016 /EINPresswire.com/ -- With the PACcubes series, ProSign GmbH has developed an all-round system for automation and monitoring. The application for the controller is created with their in-house programming software PACstudio. In graphical programming, function blocks are used, which makes it easy for specialists from different subjects to start-off programming automation controllers. As not even one line programming code has to be written or read, technicians and engineers can implement their own ideas and visions in the controller with only having a small learning curve. Controllers can be implemented in the application over simple function blocks – without having too much programming effort.

PID controller Function block
Controlling and regulating devices are responsible for automatizing technical processes and they are there to increase comfort and simplify workflows. Fields of application go from temperature control in ovens to pressure control in compressors up to speed control in machines. The PID controller consists of a P-term, an I-term and a D-term (Proportional–Integral–Derivative Controller). In PACstudio, the PID controller is implemented over a single function block. The signals of the sensors and actuators, which are wired with the terminal, can directly be connected to the PID controller. The function bock is, just like all other function blocks in PACstudio, connected to all inputs and outputs by connection lines.

Advantages of a direct implementation of the PID controller in the IO termination
With PACcubes, decentralization is carried up to the IO termination or the sensor. The advantages of proceeding like that are enormous. Each PACcubes module is individually graphically programmable, which ensures a higher reusability of established software solutions and absence of feedback in each module. The application is split in several partial solutions, which makes it easier to understand them and controller resources can be used ideally (interrupt capability, timer, etc.). Fewer and more uncritical communication to the central module is aimed by directly implementing the functionality in the IO termination.

From the controller into the cloud
To create a decentral control unit in the course of Industry 4.0, the Programmable Automation Controller PACcubes station is implemented into the IBM Internet of Things Foundation cloud over MQTT function blocks. Data can be recorded in a local memory and/or a central data cloud. The devices of the PACcubes series are implemented in the cloud over the dashboard of the IBM Internet

of Things Foundation. They can hereby be surveilled and controlled. This platform provides a simple and clear user interface, from which devices can be added and managed with the least effort possible. That is how not only the connectivity amongst in-house devices is guaranteed, but also to devices of other companies.

About ProSign
The German software engineering company ProSign Process Design GmbH is developer of the graphical programming software iCon-L as well as all programs resulting from that software framework like miCon-L, test.con and the automation solution PACcubes. ProSign has many OEM partners with who they distribute controllers for different conditions and requirements with programming software which is exactly tailored to the controller.
For further information please visit:
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