ConDoc

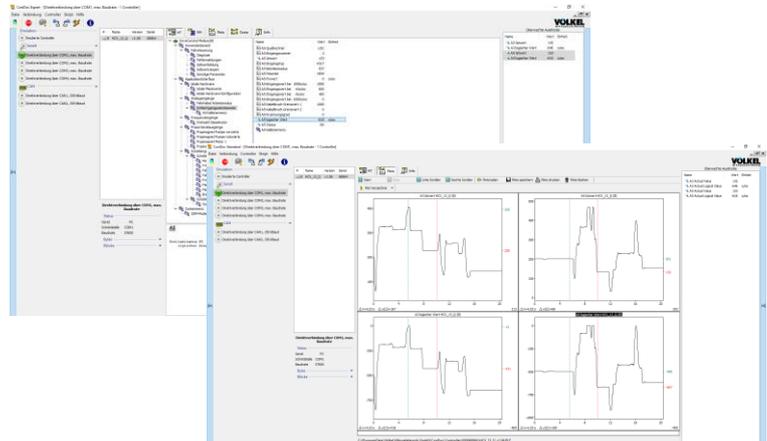## Control & Document – PC-Software

The PC software ConDoc – **Con**trol&**Doc**ument® is a high-performance diagnosis and service program which can be used universally for all Völkel controllers. It supports parameterisation, serves to analyse and document the control behaviour pattern and functions both as a stationary item and via a modem (remote diagnosis). Service costs and idle periods in case of disturbances can be reduced by using ConDoc. The program is easy to operate using its clear Windows menu structure and the online help. Knowledge of programming is not required. To start the menu, connect the controller to the PC via the RS232 serial interface or CAN.

ConDoc is a terminal program which reads the data directly from the controllers and displays them in an ordered data structure. Each controller is equipped with standard values which serve as a basis for the individual settings.

Technical specifications

Required PC equipment – minimum requirements:

▶ PC with operating system Windows 10 or higher

▶ VGA-screen, 1024×768 pixels

▶ Interfaces: dependent on controller type RS232 and/or CAN (supporting the matching USB-converter)

▶ Wi-Fi for registration and remote diagnoses via modem

▶ Languages available: German / English (adjustable at runtime)

Functions

Parameterisation of a controller before and during	The user navigates and changes parameters using the mouse or the keyboard. The effects of "online" settings can be observed immediately. This enables a targeted and fast procedure.
Saving and loading the controller configuration in files	With simple data backup, the precisely defined values are available for documentation and are reproducible. Reloading the stored file to the same or a different identical controller ensures congruence of the data and short commissioning times.
Display of the operating parameters of a controller	The data is displayed as figures and as a diagram according to its time sequence. The diagrams can be saved, reloaded and printed out.
Emulating a controller	For service purposes, it is also possible to create a controller configuration "offline" without the existing hardware and to load it to the real controller at a later stage.
Execution of automated processes (script files / ActiveX servers)	Advantageous when setting parameters for serial devices: several controllers with the same configuration can be loaded on push of a button.
Remote diagnosis	Direct connection from the controller to the PC is replaced by a telephone connection over modems at both ends. GSM modems enable also remote maintenance of mobile machines.
Software-Update	With the ConDoc, a software update can be installed on most controllers.

ConDoc screen

Once the connection to the controller has been established, the menu window pops up. The left-hand side shows the controller menu tree structure; the selected level is marked. On the right-hand side the associated parameters and variables with the current values and units are displayed in plain text. Detailed information, assigned sub-menus and help texts can be faded in and can be viewed thus at one glance.

Diagnosis using y-t-diagrams

ConDoc's outstanding feature is that it does more than enabling parameter setting of a controller whilst in operation. The program visualises the effects on the machine control behaviour pattern in diagrams and it permits controlling the values simultaneously within a determined period of time.

For diagnosis purposes, the user can record time related any controller data required, also several variables simultaneously in y-t diagrams (so-called "plots") similar to when using an oscilloscope. It can determine time intervals and measurement value differences in the diagrams. Moreover, it can save and print diagrams while recording and analyse them later.

Product variants

ConDoc is available in different versions:

Standard version	The standard version offers the complete standard functionality of the program, i.e. parameters can be changed, saved and loaded; scripts can be executed.
Light version	With the light version, the user can view the current values of parameters and variables. Changes to the parameters cannot be made directly online. However, parameter files can be loaded from the controller and into the controller. Scripts are also fully executed.
ActiveX-Server version	The ActiveX-Server version comes with another program (the ConDocServer), which provides a COM interface (Component Object Model). This is a software interface that allows processes to be programmed in different programming languages (e.g. Visual Basic, LabView, etc.).
MyConDoc	The MyConDoc variant requires a menu file that defines the parameters which can be read and changed by the user. This menu file can be created with a ConDoc in the full version. So the end user could just see selected variables and parameters that have been selected by the machine manufacturer. The machine manufacturer just creates the menu file and forwards it to the end customer. With a full version of the ConDoc, all parameters are still accessible.