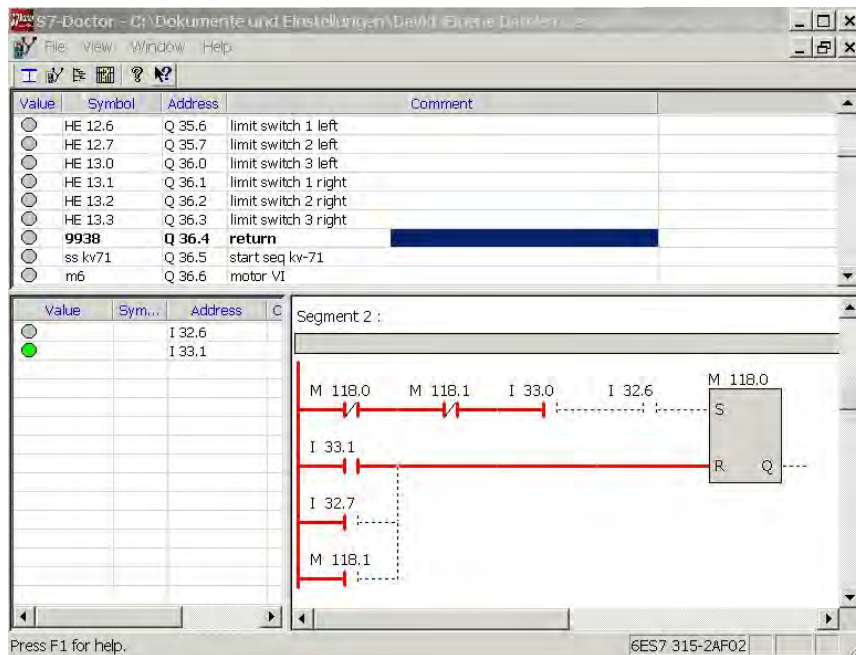


SS/ S7 Doctor – The Tool for practitioners

The S5/7 Doctor enables a fully automated troubleshooting for running PLC programs. Compared to the conventional debugging, the S7 Doctor autonomously takes over the upcoming tasks during debugging and identifies the cause for the malfunction in plain language. In contrast to general diagnostic tools, a special modification of the PLC program is not necessary.

Scenario

You have been called to a machine stop in a factory. An engine of this machine cannot be controlled. You recognize that the limit switch, which controls this engine, is not set. What is the reason for this? What causes this malfunction?



The proceeding up to now:

You have to connect a programming device, on which the project is saved as source code including the accompanying commentary. In addition, the version of the project on your device has to comply with the version of the program on the machine. Since the program is normally written by the machine manufacturer, you probably do not have detailed knowledge about it. Pressed by time, you have to get familiarised with the sequences of the program. With a lot of effort, you have to find the defective input in going through the cross-reference list and the block status. Oftentimes, you have to search many blocks, which makes it very difficult to retain an overview. As a result of your efforts, you finally recognize that a certain input, which is controlled by a limit switch, is not set. Afterwards, you inspect this limit switch and notice, that it is broken and has to be replaced. This whole procedure cost you a lot of valuable time.

Future proceeding:

Troubleshooting with the S5/S7 Doctor: You connect a PC or a notebook with the S5/S7 Doctor installed on it to the PLC. You start the S5/S7 Doctor, which provides you with a list of all limit switches available on this machine. You choose the corresponding switch from this list, which should control the engine. You ask the S5/S7 Doctor, why this limit switch cannot be controlled. After only a few minutes, the S7 Doctor will detect the corresponding input. You replace the broken limit switch. **And done!**