Over-current alarm message during scanning (and not during welding)

The overcurrent happens because when generator is scanning - it will pass through the serial resonance where transducer has a very low impedance. SCANNING procedure is organized to be on the lowest possible output voltage for the generator and transducer (by reducing the PWM on the gates of power transistors), but in some cases this could be still too high for certain loads, and the generator stops with overcurrent to protect the power transistors. Good advice: If transducer operates on 20 kHz, increase the start frequency to 21 kHz, and increase its SPAN value to 2 kHz. This way the generator will pass through the resonance faster and not display an overcurrent.

HOT START Function

There is a HOT START function, which can be switched ON and OFF (see the picture below). This function works as follows: When we start the generator - it starts from the selected F-start selected by operator (after scanning) with generator LabVIEW software, and goes down searching for the operating resonant frequency. When the generator stops - it will memorize the last operating frequency, and next time it will start very close to it (+100 Hz up), to reach already found resonant operating frequency faster (this means we apply HOT START). This function is for loads that are increasing temperature during operation, and consequently, the resonant or operating frequency will change a lot. Note that if the generator is not switched ON after the last operation for more than 10 seconds - next start frequency will be again moved the initial F-start (which was first time selected by LabVIEW software).