

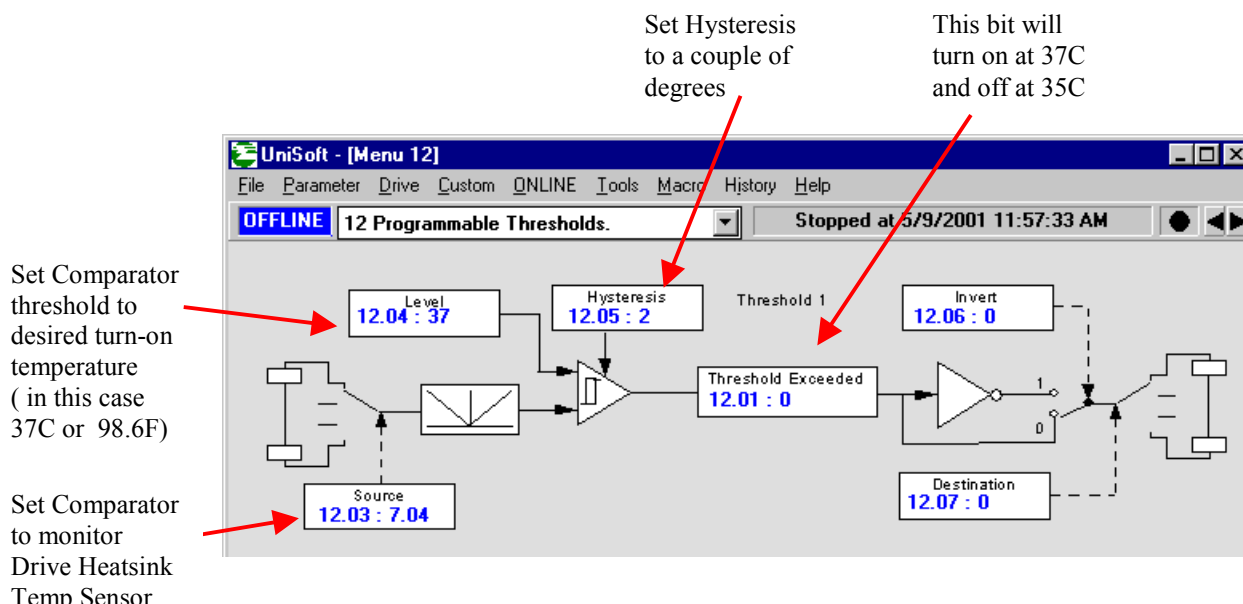
The Application Note is pertinent to the Unidrive Family

External Blower Filter Optimization & Energy Economy

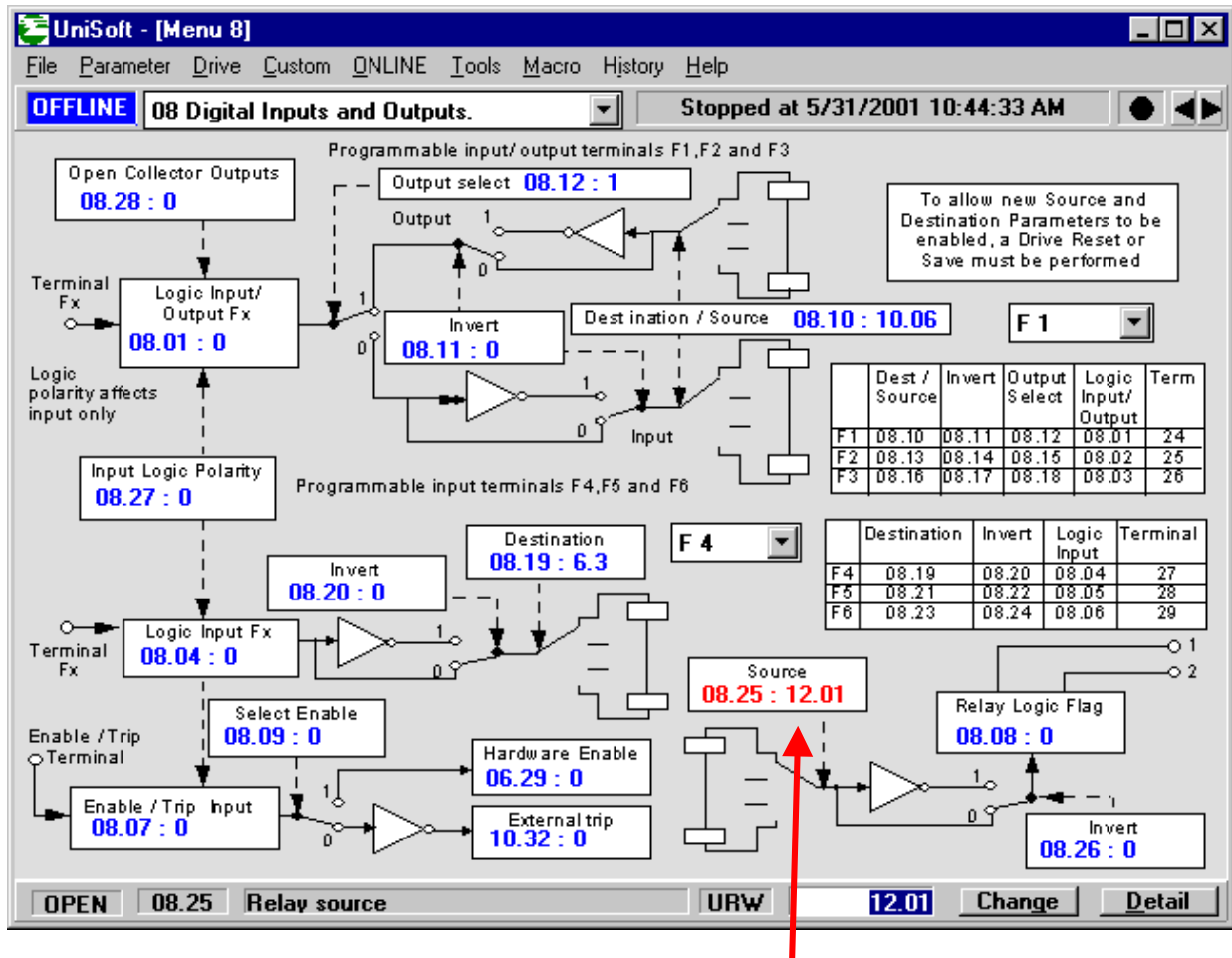
I've always been a firm believer that product ideas are driven from customer wishes. During a retrofit review, I asked the customer if he had any wishes for functions that he would like to see in his new system that the old system didn't have. He thought for a moment and said, ***"You know, when power is first applied to the system, the cabinet blowers come on and the cabinet isn't the slightest bit warm. All it is doing is clogging up the filters and wasting energy at this point."*** (As he was saying this I thought -Come to think of it, the same is true for the motor blower too"- but he didn't ask how to do that !). He asked, ***"Is there anything in that Unidrive that could help in this regard ?"***

As it turns out, the Unidrive has an internal temperature sensor for the Heat Sink. Cabinet cooling air really only needs to be circulated if that heat sink temperature exceeds a certain setting. This temperature can be observed at parameter #7.04 in the Unidrive as degrees Celcius.

One could use one of the built-in free standing Comparators located in Menu 12 to compare this temperature against a User adjustable setpoint. When the heatsink temperature exceeds this setpoint, an output could be created to turn on the cabinet fan asking for additional cool air circulation.



The Threshold Exceeded bit (parameter #12.01) can be used by one of the programmable outputs to control a relay that provides power to the cabinet circulating fan.



For instance, one could assign the programmable relay on the Unidrive to bit #12.01 which would provide a dry relay contact (pins 1 & 2) with a 115vac rating suitable for a typical cabinet fan load.

Status Relay	
Contact Voltage Rating:	250V AC resistive, transients limited 125V AC resistive, transients unlimited
Contact current rating:	5A resistive, 1A inductive
Contact Isolation:	3kV
Default function is 'Drive Healthy'.	

Questions ?? Ask the Author:

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