DGC-2020
Product Notes

Logic for Alternating the Selection
of a Redundant Starter Motor

Some engines are equipped with redundant starter motors. To reduce the wear and tear on a single starter, logic can be implemented to alternate between the starters. The logic also can provide for redundancy in the event that one of the starters fails. In such applications, it usually is desired to have the starters crank the engine on alternating crank cycles. In other words, on the first crank cycle starter #1 will crank the engine, on the second crank cycle starter #2 will crank the engine and on the next crank cycle starter #1 will crank the engine, and so on. The DGC-2020 allows the user to easily implement this usually difficult process for alternating between starter motors.

The diagram shown below is a DGC-2020 programmable logic scheme that can be added to the DGC-2020 via its BESTCOMS*Plus* PC software to easily implement this functionality.

This scheme uses the start input status input for initiating this sequence. It uses a variety of gates like the inverter or NOT gate, the AND gate and the Reset Priority latch. It also uses logic control relays to tie inputs and outputs of the various levels of logic back to one another. Please refer to the DGC-2020 instruction manual for detailed descriptions of the functionality of these gates and feature elements.
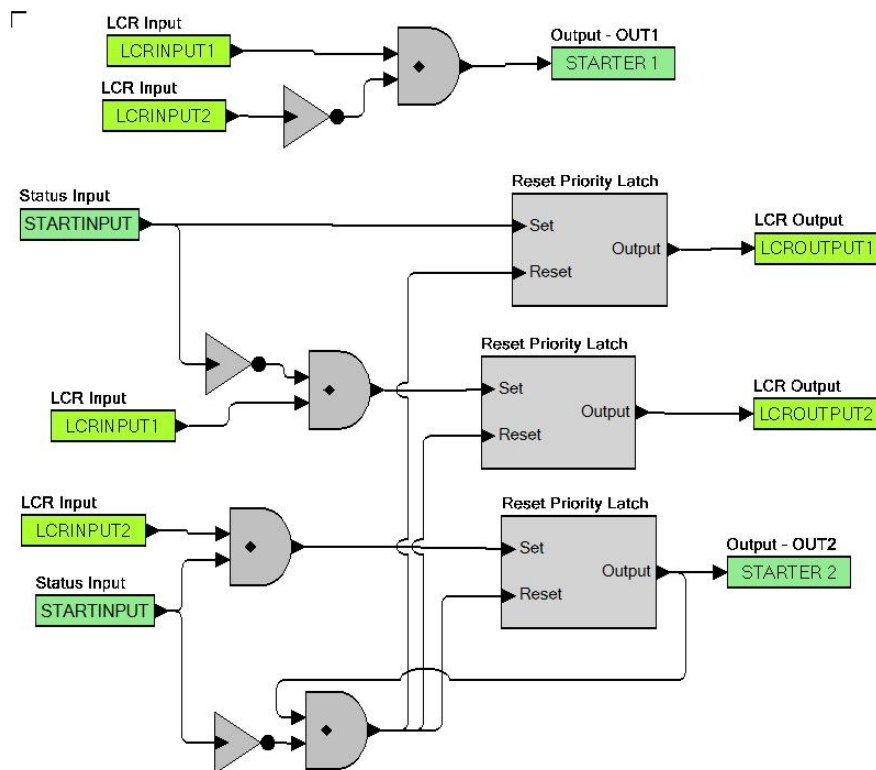

Figure 1: Programmable Logic Scheme for Alternate Starter Selection

For more information on the DGC-2020, consult the Basler factory at 618/654-2341 or visit **www.basler.com**.

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