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Subject: G120XA cavitation protection

Introduction:

This paper introduces the use condition and configuration of G120XA cavitation protection.

Problem:

Cavitation effect refers to the large bubbles generated on the impeller surface, which will affect the flow of the pipeline or cause the pressure drop of the pump. Cavitation protection is when the cavitation effect occurs, the inverter will produce fault or heat to inform user to clean the fan surface.

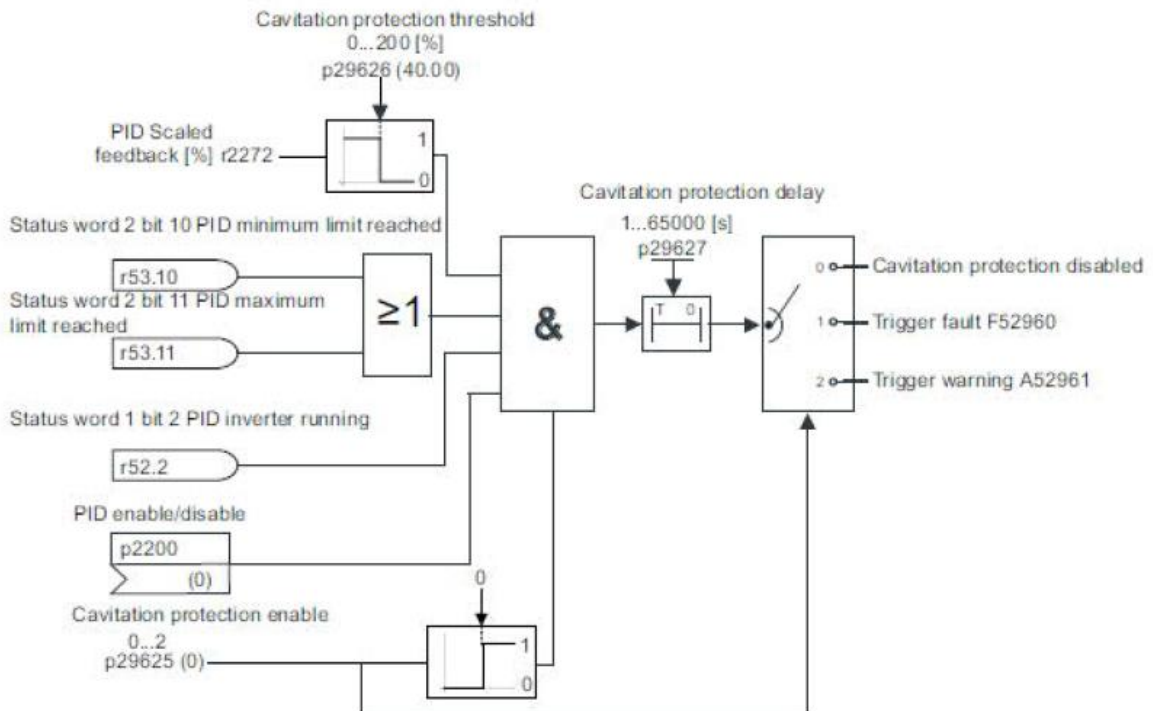
Answer:

Cavitation protection requires users to use sensors to monitor the actual flow or pressure value, and feedback to the inverter. The enabling value of cavitation protection p29625 should not be "0". If p29625 = 0, cavitation protection is not activated; If p29625 = 1, cavitation damage triggers F52960 fault; If p29625 = 2, cavitation damage triggers A52961 warning.

If p29625 = 1 or 2, the inverter should meet the following conditions to start cavitation protection:

- Set p29625 cavitation protection threshold according to experience (this value is lower than normal actual flow or pressure). P29626 is the percentage of feedback output that triggered an error or warning. r2272 is the proportion of the actual value of the process controller. If the maximum mileage of the pressure sensor is 20mA/25bar and the actual sensor value is 12mA/12.5bar, r2272 is 50%. If $r2272 < p29626$, after setting delay time p29627, cavitation protection can be triggered. The delay time range is 1~65500s.
- State r53.10 (reaching PID minimum limit) or r53.11 (reaching PD maximum limit) should be "1" to trigger cavitation protection.
- r52.2 (inverter PD running) status is "1", triggering cavitation protection.
- p2200 PID enable is set to "1" to trigger cavitation protection.

Function description



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Keywords (for SIOS search):
G120XA cavitation protection