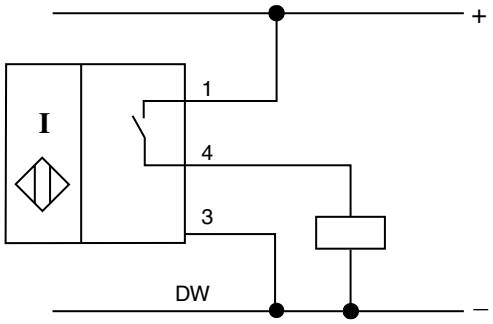
Speed Monitors

Speed monitors are inductive proximity switches in which both the damping status and the act of exceeding or falling short of a reference frequency is signalled. The reference frequency is adjusted via a built-in potentiometer. If the actual frequency f_{act} measured by the proximity switch is smaller than f_{nom}, the output is switched off. If the measured actual frequency f_{act} is greater than f_{nom}, the output is closed (switched on).

This mode of operation has the advantage of reducing the reaction time to the lowest possible value, i.e. $1/f_{act}$.



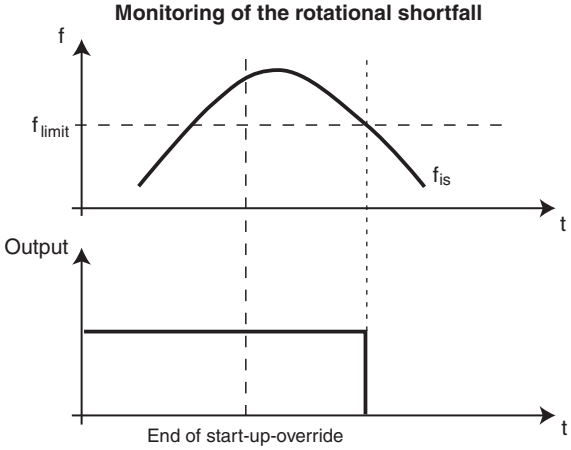
Normally closed for $f_{act} > f_{nom}$

The speed monitor is available for the following frequency and rotational speed ranges:

0.1 Hz ... 1 Hz, i.e. 6 min^{-1} ...60 min^{-1},
1 Hz ... 10 Hz, i.e. 60 min^{-1} ...600 min^{-1},
10 Hz ...100 Hz, i.e. 600 min^{-1} ...6000 min^{-1}.

The speed monitors are equipped with a start-up override: once the operating voltage is applied, the output is switched on for the duration of the start-up override.

Monitoring of the rotational shortfall



Monitoring of the rotational overspeed