SVC 0---Sensorless Vector Control mode 0

Suitable in applications which need low frequency, big torque for high accuracy of rotating speed and torque control. Relative to mode 1, it is more suitable for the applications which need small power. It's almost same as SVC 1. For small power, when you are using SVC 1, then maybe it will have not good high-performance, so at this case, you can try to use SVC 0 , this is just for special trying. You can ignore it usually.

SVC 1---Sensorless Vector Control mode 1

Suitable in high performance cases with the advantage of high accuracy of rotating speed and torque. This mode can be used at most of torque control application, so that's why we set it as default value before factory. We suggest that the customer to use SVC 1 in high-performance torque control in most of torque applications. It's almost same as the SVC 0, SVC 0 is a little different from SVC1 about software algorithm.

SVC1 is used for normal application which is requiring high accuracy of rotating speed and torque control.

SVPWM control---

Suitable in applications which do not need high control accuracy, such as the load of fan and pump. One inverter can drive multiple motors. This is for easy light load application.As you mentioned that, it is used for Normal Duty such as pumps and fans. You can take it as V/F control.

So to sum up, there are below tips for your reference:

1、V/F for PM and IM, suggest to use SVC0 for PM.

2、SVC0 for PM and IM, but SVC1 for IM only.

3、SVC0 is real current type vector, but SVC1 is voltage type vector. So current loop control parameters are used for SVC0 only, it’s not suitable for SVC1.

4、SVC0 is faster than SVC1 for torque dynamic response.

5、 SVC0 is more sensitive to motor parameters, compare with SVC1. But SVC1 is more stable.

6、Control Performance and Stability of Weak Magnetic Field. SVC1 is better than SVC0.

7、In some IM fields with higher requirements for torque control, SVC0 is more effective.

8、For controlling smaller motors, SVC0 is stable than SVC1.

9、GD20 cann't support PM, but we applied SVC0's part algorithm into GD20 as SVC0.