

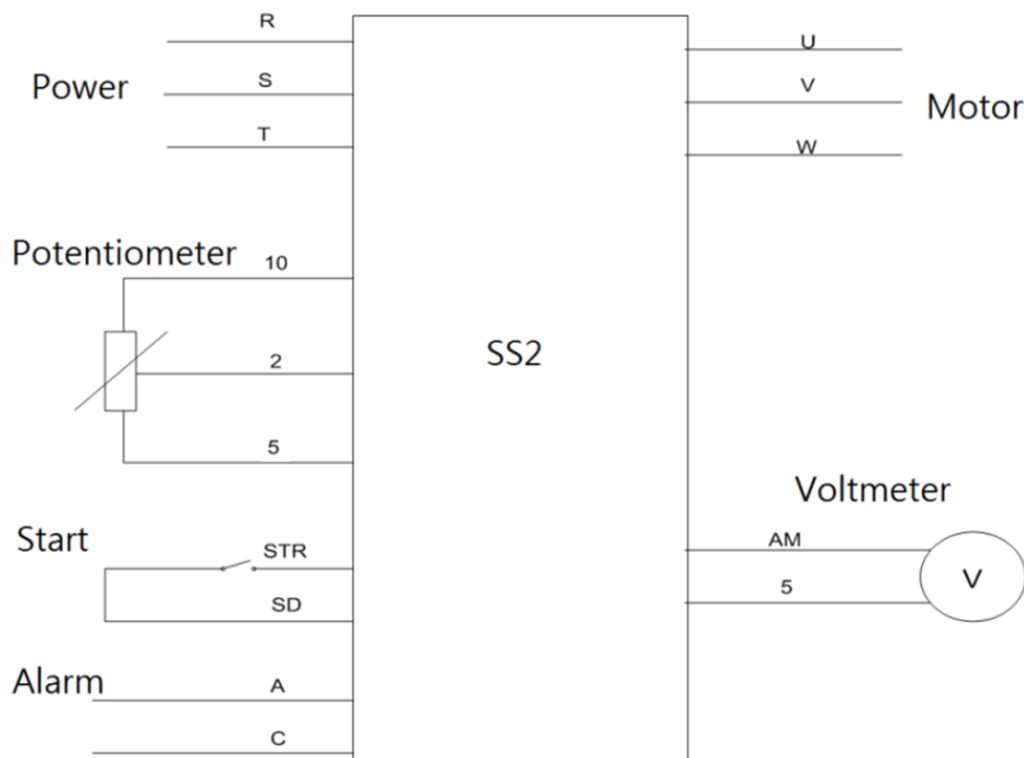
SS2 and SF-G on a grinder



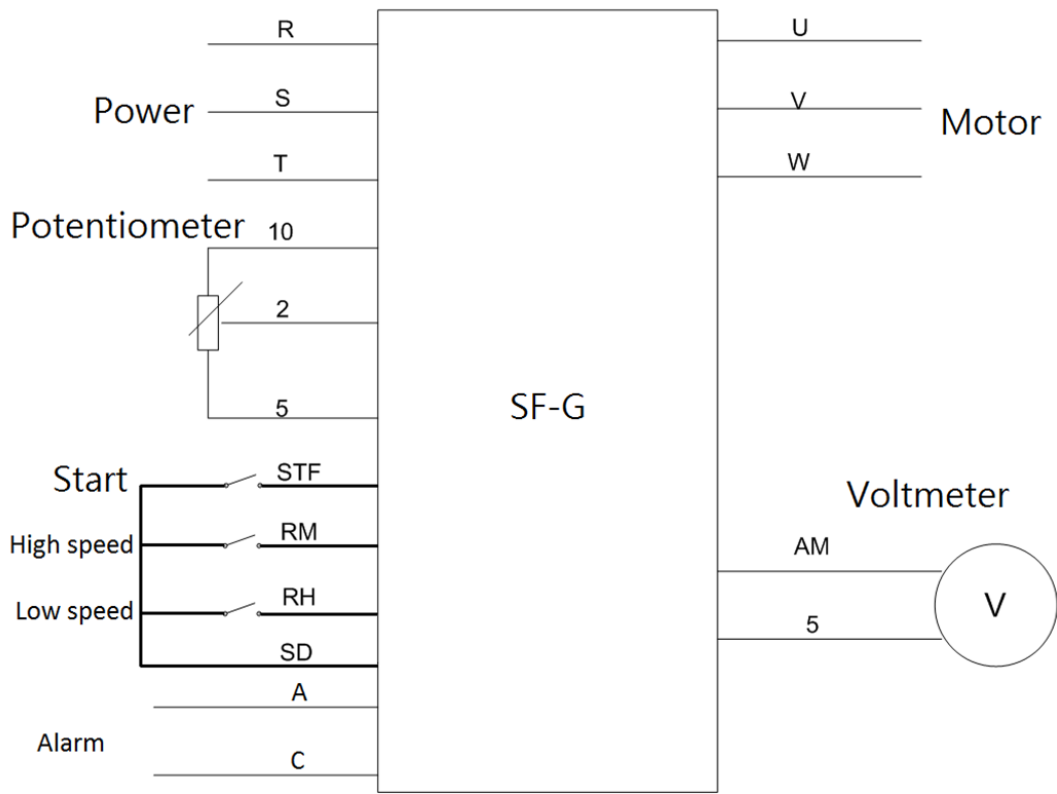
Requirements:

1. Two inverters, one for grind bits and one for platform spinning, we chose 3.7KW SS2 and 11KW SF-G.
2. SS2: A potentiometer to change frequency. An analog voltmeter to show current voltage, an alarm signal.
3. SF-G: A potentiometer and a push button to change frequency, low speed 0~30Hz, high speed 0~50Hz. An analog voltmeter to show current voltage, an alarm signal.

Wiring diagram:



The potentiometer is linked to **10** and **2** terminal which the frequency change function is built in. We chose the reverse STR button for start for the position of the motor, this can also be done by switching two of **U/V/W** power lines. The voltmeter function is built in on terminal **5 AM**.



The high speed low speed switch is built in on terminal **RH RM**, which is set in **P.5 P.6**.

Photo:

Parameters changed:

SS2

| Number | Name | Setting range | Default value | Set value |
|--------|-------------------------|--------------------------------------|---------------|-----------|
| P.30 | Brake function | 0:regeneration rate 3%,P.70 canceled | 0 | 1 |
| | | 1:regeneration rate P.70 % | | |
| P.70 | Regeneration rate | 0~60% | 0 | 18% |
| P.19 | Base voltage | 0~1000V,99999 | 99999 | 380V |
| P.79 | Operation mode | 0~8 | 0 | 2 |
| P.54 | FM/AM terminal function | 0~5 | 0 | 5 |

We increased the brake to 18% for more efficient decelerating. And set **P54** to 5 which output analog signal via frequency.

SF-G

| Number | Name | Setting range | Default value | Set value |
|--------|--|--------------------|---------------|-----------|
| P.5 | Second speed(High) | 0~400Hz | 30Hz | 50Hz |
| P.6 | Third speed(low) | 0~400Hz | 10Hz | 30Hz |
| P.54 | FM/ AM terminal function | 0~5 | 0 | 5 |
| P.240 | Extra frequency option | 0~4 | 0 | 3 |
| P.79 | Operation mode | 0~8 | 0 | 2 |
| P.73 | Input voltage range | 0(0~5V) , 1(0~10V) | 0 | 1 |
| P.19 | Base voltage | 0~1000V,99999 | 99999 | 380 |
| P.194 | 2-5 minimum input signal frequency reference | 0~60Hz | 0Hz | 0Hz |
| P.195 | 2-5 Maximum input signal frequency reference | 0~400Hz | 50Hz/60Hz | 50Hz |

Beyond setting the high and low frequency, we set parameter **P.240** to 3 which change the operating frequency to main frequency **minus** 2-5 signal. Then after setting the **P.194** **P.195** signal reference, when turning the potentiometer, it range from 0~50Hz.