

ELECTRONIC BRAKES FOR AC MOTORS

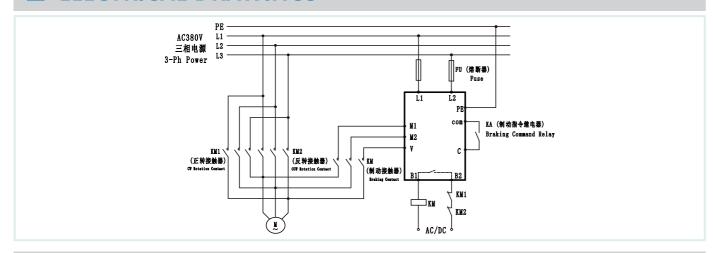
BROKEN TOOL DETECTOR



ELECTRICAL PARAMETERS

Model No. Applicable Motors Braking Current Input Voltage ZD-15 \leq 7.5KW \leq 22A \qquad AC380V±10% (AC220V to be Customized)

ELECTRICAL DRAWINGS



TERMINAL DESCRIPTION

B1、B2	Two normally open contacts of the brake's internal relay for controlling the brake contactor, capacity AC240V3ADC28V3A.
B3、B4	The two normally open contacts of the brake's internal relay can be backed up.
C、COM	Brake internal power supply, when the need for motor braking, external brake trigger signal control C and COM closed for more than 0.1 seconds to trigger the braking process.
L1、L2	Brake operating power input, usually AC380V (when AC220V is required, special order is required).
M1、M2	The brake current output terminals are connected to any two-phase leads of the motor through the two main contacts of the brake contactor.
V	The speed measurement input terminal is connected through the other main contact of the brake contactor to the other phase terminal of the motor except the one connected to M1 and M2.
PE	Ground wire terminal, need to be firmly grounded.
Braking Time	Used to set the braking time limit in the range of 1.5 to 9 seconds.
Braking Current	Used to set the braking current, range 7-22A, adjusted to match the motor.

SETTING INSTRUCTIONS

1.Braking time limit setting (blank for switch downward OFF)

스위치								섵	설정값	t						
—TIM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1									ON	ON	ON	ON	ON	ON	ON	ON
2					ON	ON	ON	ON					ON	ON	ON	ON
3			ON	ON			ON	ON			ON	ON			ON	ON
4		ON		ON		ON		ON		ON		ON		ON		ON
제동시한(S)	1.5	2	2. 5	3	3. 5	4	4.5	5	5. 5	6	6.5	7	7.5	8	8. 5	9

2.Brake current setting (blank for switch down OFF)

스위치								섵	정깂	:						
프퀴시	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5									ON							
6					ON	ON	ON	ON					ON	ON	ON	ON
7			ON	ON			ON	ON			ON	ON			ON	ON
8		ON		ON		ON		ON		ON		ON		ON		ON
제동전류(A)	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

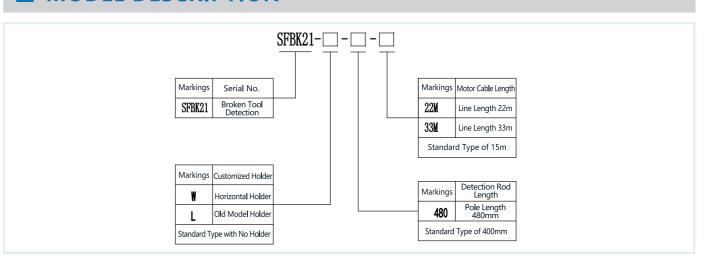
PRODUCT OVERVIEW

CNC machine tools in the process of automatic machining, due to high cutting intensity, high temperature, residual cutting, tool aging and other factors, may lead to tool wear or breakage, if you can not find the damage of the tool in time, it will cause major production and even safety accidents. This product can effectively detect the wear or breakage of the tool, and the whole inspection process is executed in the tool magazine, without taking up the processing time. It can be used for the detection of tools in disk-type tool magazine and chain-type tool magazine.

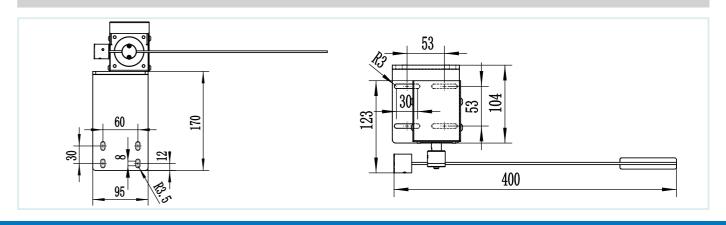




MODEL DESCRIPTION



OVERALL INSTALLATION DIMENSION DRAWING





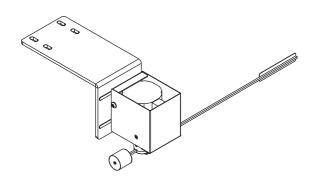
BROKEN TOOL DETECTOR

HIGH PRESSURE TSC SYSTEM

(Through spindle Coolant)



OVERALL EFFECT DIAGRAM



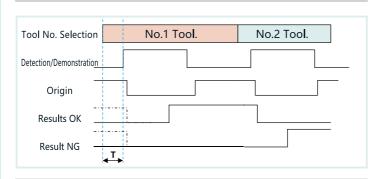
MACHINE INTERFACE SCHEMATIC

Broken Tool Detection Machine Tool PLC Controller Results OK Results OK Test result OK X*. * Result NG Result NG Test results NG Origin Impactor lever back to origin X*. * Origin Tool No.1 Tool No.1 Tool No.2 Tool No.2 Tool No.4 Tool No.4 Tool number decoding Tool No.8 (binary coding) Tool No.8 Tool No.16 Tool No.16 The number of tool Y*. * nagazine output poin Tool No.32 Tool No.32 number of tools to be Tool No.64 detected, up to 256 Y*. * Tool No.64 tools can be detected Tool No.128 Tool No.128 Detection Signal Output Y*.* for Detection for Demonstration Demonstration Signal Output Y*. *

MAIN TECHNICAL PARAMETERS

Serial Number	Item	Standard
1	Rated Power	220W
2	Controller Power Supply	24V DC±10%
3	Driver Power Supply	220V AC
4	Input & Output Levels	24V effective
5	Ambient Temperature for Operation	-10°C~+60°C
6	Protection Level	Detection device IP67
7	Detection Rod Length	400mm
8	Detection Angle	5°~150°
9	Detection times/life	10 million times
10	Single Detection Time	0.3-2 sec
11	Detection Accuracy	Adjustable up to 1mm
12	Detecting the strength of touching the tool	Adjustab l e
13	Detection of the direction of rotation of the rod	Adjustab l e
14	Mounting Holder	Adjustable Position

DETECTION/DEMONSTRATION TIMING CHART



DEMONSTRATION INSTRUCTIONS

Detect No. 1 tool, output result OK, detect No. 2 tool, output result NG.

The demonstration/detection signal needs to lag the tool number selection signal by at least time T50ms.

The output of the demonstration/detection signal needs to be greater than 50ms.

The CNC can check the status of OK or NG after the home position is in place.

PRODUCTS INTRODUCTION

Cutting workpiece will produce high temperature vapor, the water vapor on the surface of the workpiece will isolate the cutting fluid from adhering, resulting in less than 20% of the cooling effect of the workpiece or tool, the only way to achieve the most efficient cooling effect is to pressurize the cutting fluid to more than 30 bar, so that the cutting fluid can directly contact the workpiece and tool.

Advantages of Use

- 1. Reduce tool wear during cutting and machining, saving tool costs.
- ♦ 2. Improvement of iron filings generated by cutting, which is conducive to the introduction of automation.
- 3. The high-pressure center water discharge function effectively improves the drilling depth and cutting speed of the machine. It greatly improves the stability of cutting size during machine tool machining and increases the qualified rate of workpiece at the same time. Increase the feeding speed and cutting speed, increase the eating force, tap more productivity in production.
- 4. Fine filtration of the cartridge optimizes the cutting water quality and avoids the blockage of the circulating pipeline.
- 5. Reduce the risk of tool breakage, significantly reduce the local high temperature during machining, and extend tool life.

■ MSHC-30P20LT OUTLINE AND MOUNTING DIMENSIONS





