

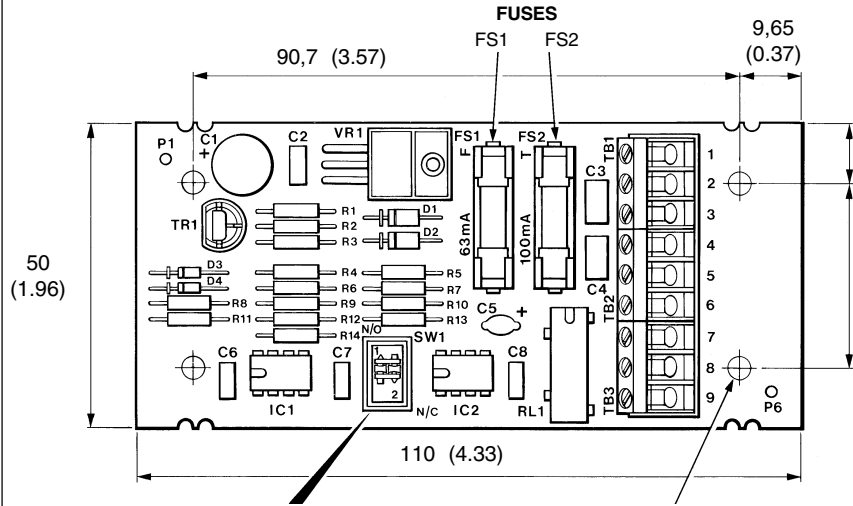
# SSR convertor for TS20 and HPA

The SSR convertor converts OCT electrical output, to voltage free SSR output.

## Installation

dimensions mm (in)

Renishaw recommend that for the best EMC performance the SSR convertor should be mounted within the machine control cabinet. Take care to avoid potential sources of interference, such as three phase transformers, motor controllers and wiring taking high currents.



**SWITCH SW1**  
Normally open (N/O)  
or  
Normally closed (N/C)

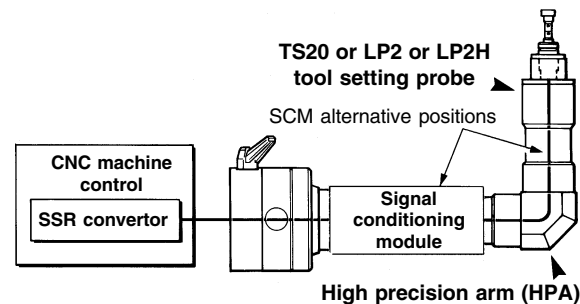
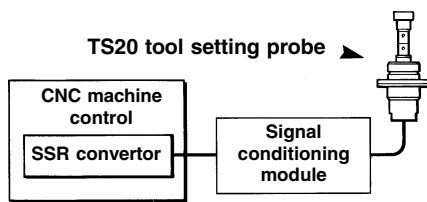
Four holes Ø4 (0.16)  
for stand off feet

### TERMINAL CONNECTIONS

Pin	Description
1	Probe inhibit (active low)
2	Screen
3	+ve supply 10-30V D.C.
4	Probe (red)
5	0V supply & probe (blue)
6	SSR output
7	SSR output
8	Not connected
9	Probe inhibit (active high)

### MAXIMUM HEIGHT

With stand off feet 25 (0.98).  
Select either screw stand off or self adhesive stand off supplied.



## APPLICATIONS

1. TS20 probe with signal conditioning module.
2. High precision arm (HPA) with TS20 probe or LP2 probe and signal conditioning module.

## CONTROL SYSTEMS

The SSR contacts can be NORMALLY OPEN or NORMALLY CLOSED, to suit a wide range of control systems.

## POWER SUPPLY

The SSR convertor can draw its supply from the CNC machine 10 - 30V dc and presents a load of up to 50mA. Alternatively a Renishaw PSU3 power supply unit supplies power, when a 24V supply is not available from the machine control.

### INPUT

<b>Supply voltage</b>	10 to 30V DC.
<b>Supply current drawn</b>	50mA maximum.
<b>Supply protection</b>	100mA (T) anti-surge fuse (FS2).

### OUTPUT

<b>SSR contacts</b>	Maximum current ±40mA peak. Maximum voltage ±50V peak.
<b>Contact protection</b>	63mA (F) quick blow fuse (FS1).
<b>Inversion of SSR contacts</b>	Switch SW1 - Position 1 N/O. Position 2 N/C.

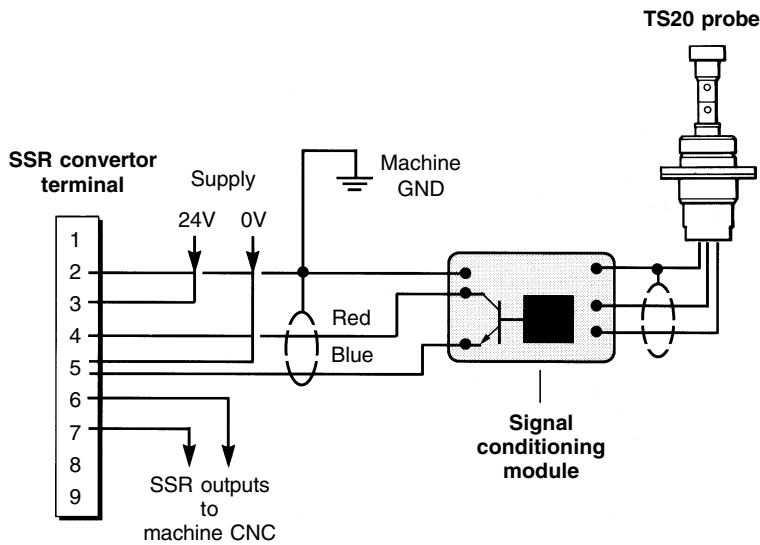
### ENVIRONMENT

Storage temperature range  
-10° to 70°C (14° to 158°F).  
Operating temperature range  
5° to 50°C (41° to 122°F).

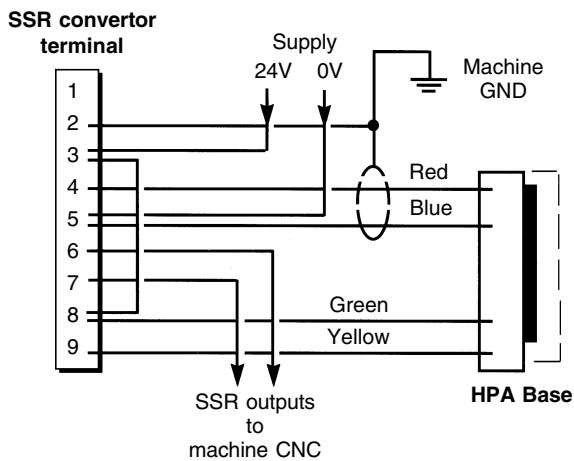
# RENISHAW

## DATA SHEET

## RECOMMENDED WIRING FOR TS20 PROBE



## RECOMMENDED WIRING FOR HPA



In the above example the SSR is INHIBITED when the HPA protective cover is fitted. (Following removal of HPA arm from base).

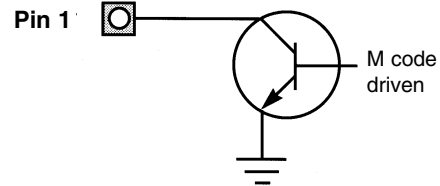
## PROBE INHIBITS

PROBE INHIBITS ARE OPTIONAL, BUT RECOMMENDED FOR INSTALLATIONS USING TWO PROBES.

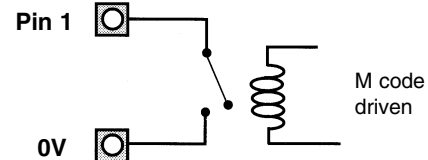
### PIN 1 - ACTIVE LOW

SSR output inhibited (fixed in probe seated state), when pin 1 connected to 0V.

EITHER

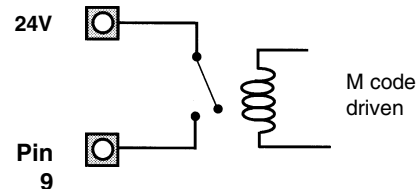


OR



### PIN 9 - ACTIVE HIGH

SSR output inhibited (fixed in probe seated state), when pin 9 connected to 24V.



## Parts List - Please quote the Part No. when ordering equipment

Type	Part No.	Description
SSR convertor	A-2023-0010	SSR convertor kit complete with four M4 support studs + nuts, and four adhesive feet.
Fuse FS1	P-FS02-0063	63mA (F) quick blow fuse (one spare fuse is supplied with kit A-2023-0010).
Fuse FS2	P-FS01-0100	100mA (T) anti-surge fuse (one spare fuse is supplied with kit A-2023-0010).
TS20 probe	—	See Data Sheet <b>H-2000-2110</b> TS20 probe.
HPA	—	See Data Sheet <b>H-2000-2115</b> High precision arm.

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