

TAPESWITCH CONTROL UNIT TYPE PSSZ-4 INSTALLATION INSTRUCTIONS

Read the whole of the whole of these instructions before beginning installation.



The unit should be installed by persons familiar with these instructions and the safety guidance applicable in their particular country. These instructions must accompany the product throughout its working life and be available to any person carrying out installation, commissioning, maintenance or servicing of the product.

Tapeswitch pressure-sensitive safety systems are intended to protect operators working at or near dangerous equipment. They can only perform this function if they are correctly fitted and interfaced to suitable equipment. It is essential that the full contents of these instructions and all the authoritative documents referred to herein are fully understood before any attempt at installation is made. If in doubt contact Tapeswitch or your Tapeswitch distributor.

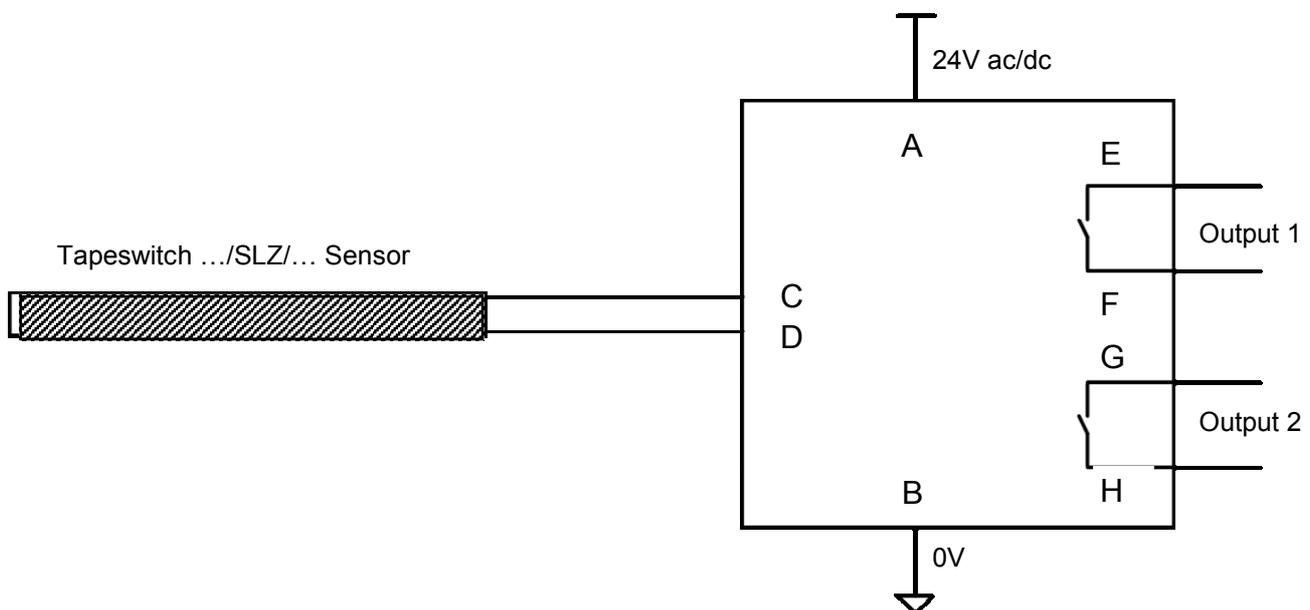
1. DESCRIPTION

Tapeswitch PSSZ-4 control units are designed to be used with Tapeswitch pressure-sensitive sensors that have the SLZ lead option to form part of a safety-related control system. They cannot be used with any other lead configuration.

The unit operates from a 24V ac/dc supply and provides 2 solid-state volt-free contacts, both of which are open when the sensor circuit is healthy and is not operated, closing upon activation or disconnection of the sensor.

4. SCHEMATIC

The sensor input is bi-directional and so the orientation of the connections to C and D is not important



2. SAFETY CONFIGURATION

The control unit uses category 3 architecture as described in EN13849-1. A single fault will not cause the loss of the safety function. However, the solid-state output relays are not internally monitored or cross-monitored and so the safety performance is specified as Performance Level PLc. Performance Level PLd for the entire Safety-Related Control System can still be achieved if the integrity of the output relays of the PSSZ-4 is externally checked by other equipment in the Safety-Related Control System.



The unit does not provide any restart interlock function to prevent re-initialisation of a machine when the clear condition of the sensor is restored.

THIS RESTART INTERLOCK MUST BE PROVIDED ELSEWHERE IN THE SAFETY-RELATED CONTROL SYSTEM

3. INDICATOR

When the power supply is connected a LED on top of the unit will be lit showing the status of the outputs as follows:

	Output 1	Output 2
Green	Open (OFF)	Open (OFF)
Red	Closed (ON)	Closed (ON)

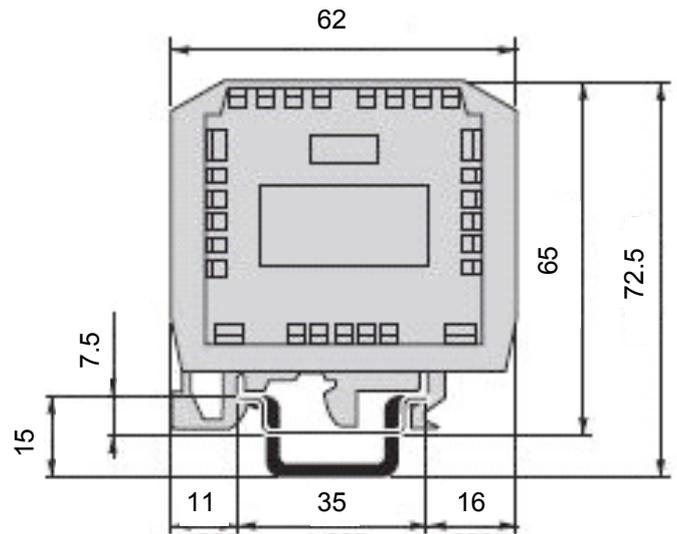
5. TECHNICAL SPECIFICATION

Supply voltage	24Vdc or ac50Hz / 60Hz
Supply tolerance	+10% -15%
Power consumption	<1VA
Operating temperature	0° to +50°C
Safety outputs: Device type Contact type/quantity Contact rating	Solid-state relay 2 x normally open 0.1A @ 24Vac/dc
Enclosure: Protection rating Terminal capacity Material	IP20 2 x 1.5mm ² Polyamide
System specification	EN ISO 13849-1:2008
Performance Level	PLc
Safety Architecture	Category 3
Diagnostic coverage	Low (60% to 90%)
Common cause failure analysis	Fulfilled
MTTFd	494 years



The enclosure has a protection rating of IP20. Ensure that in operation it is mounted in a cabinet or other enclosure that has a protection rating of at least IP54

7. DIMENSIONS



The supply voltage and output voltage of the PSSZ are designed to be nominally 24V.

UNDER NO CIRCUMSTANCES CONNECT HIGHER VOLTAGES, SUCH AS 110V OR 230V TO THE UNIT AS THIS WILL RESULT IN IRREPARABLE DAMAGE AND COULD RESULT IN PERSONS

6. CONNECTIONS



A	24V Supply
B	0V
C	} Sensor Input
D	
E	} Output 1
F	
G	} Output 2
H	