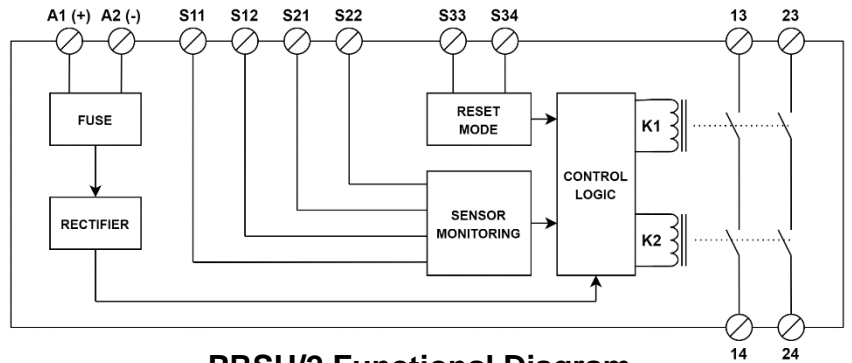




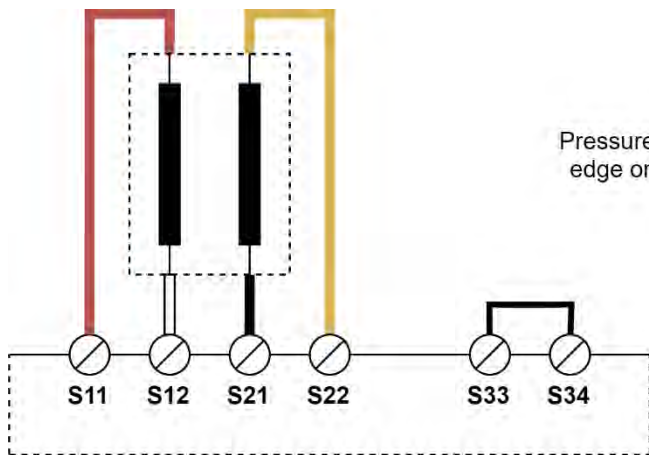
## Information Sheet: PRSU/2 Safety Interface Controller

**TAPESWITCH CORP.**  
100 Schmitt Boulevard  
Farmingdale  
New York 11735  
Phone: 800-234-8273  
Fax: 631-630-0454  
info@tapeswitch.com  
www.tapeswitch.com

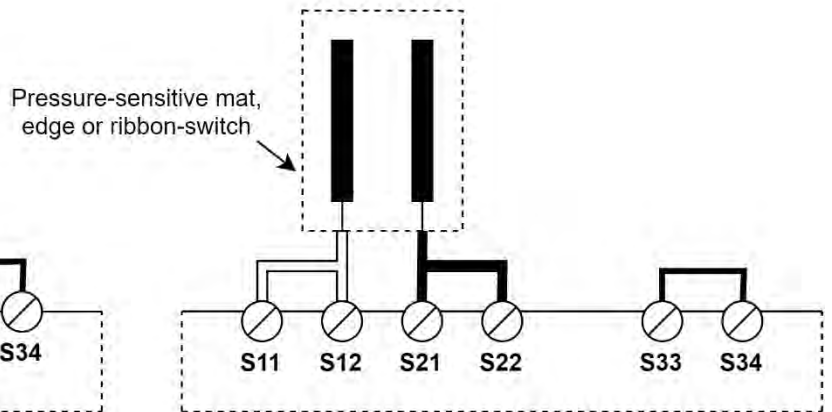


**PRSU/2 Functional Diagram**

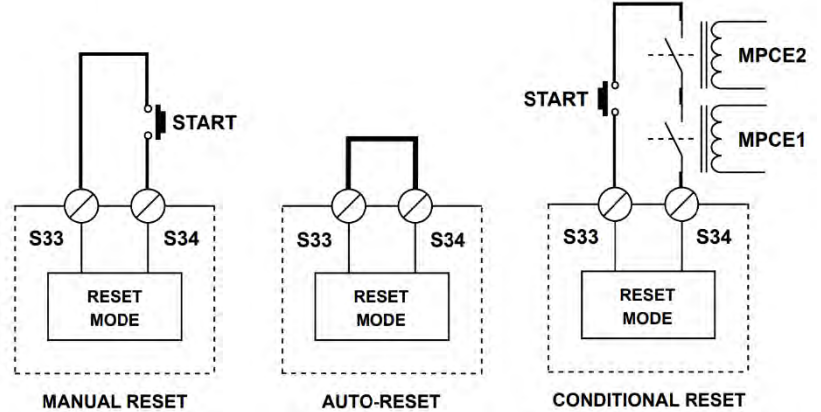
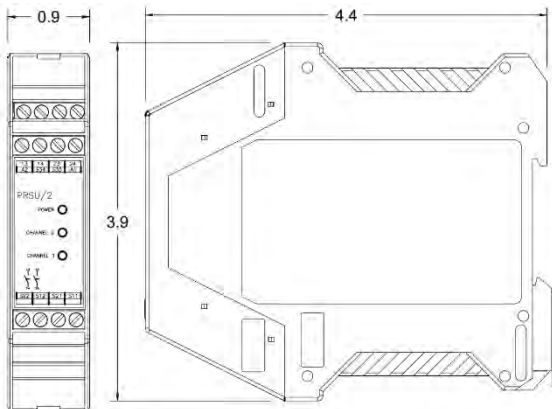
The PRSU/2 Safety Interface Controller is compatible and intended for use with Tapeswitch pressure-sensitive safety edges, mats and ribbon switches. Safety Category 3 and PLe per “EN ISO 13849-1” are achievable if a four-wire fail-safe configuration is used (see below). If instead a 2-Wire configuration is used, Safety Category 1 is achievable. For additional information, please reference the [latest version of the PRSU/2 Manual](#) at Tapeswitch.com.



**Fail-Safe (4-Wire) Configuration**



**Non-Safety (2-Wire) Configuration**





## Technical Data

<b>Electrical data</b>	
Supply Voltage $U_V$	<b>PRSU/2</b> 24V <sub>DC</sub> Or 24V <sub>AC</sub>
Voltage Range	$U_V \pm 10\%$
Frequency	48Hz (min) to 62Hz (max)
Power Consumption (typ.)	+24V <sub>DC</sub> : 2,5W, 24V <sub>AC</sub> : 2,5VA
<b>4-Wire Safety Switches</b>	
Maximum Short Circuit Resistance	$\leq 5 \Omega$
Maximum Signal Wires Resistance	$\leq 1 \Omega$
<b>Conductor Data</b>	
Conductor Connection	2 x 1.5 mm <sup>2</sup> solid wire 2 x 1.5 mm <sup>2</sup> stranded wire-end ferrule
Max. Conductor Length (input circuit)	<b>UL: Use 60/75°C copper wire only!</b> 2 x 100m (Single channel) 4 x 100m (Dual channel)
Conductor Cross-Section	1.5 mm <sup>2</sup>
Capacitance/cable length	150 nF/km (maximum)
Reference Temperature	+ 25°C
<b>Contact Data</b>	
Contact Allocation	2 N.O. safety
Contact Type	Relay positive guided
Contact Material	AgSnO <sub>2</sub> or comparable material
Switching Voltage	250V <sub>AC</sub> , 24V <sub>DC</sub>
Max. Switch/Relay Current	6A (individual), 13.8A (combined)
Min. Switching Current	10mA
Max. Switching Capability (per relay)	AC 15 3 A
DIN EN 60947-5-1	DC 13 3 A
Max. Switching Capacity	1500 VA (resistive load)
Mechanical Lifetime	10 <sup>7</sup> switching cycles
Creeping Distance and Clearance	-EN 50178 at pollution grade 2, over voltage category 3 /250V -Basis isolation: over voltage category 3 / 250 V
Contact Security	NO contact: 6.3A brief or 4A inert
Short Circuit Withstand (IEC60947-5-1)	NO-contacts: 10A
Weld Free Protection at $I_{psc} \geq 1kA$ SCPD (Short Circuit Protection Device) (Fuse links), size D01 acc IEC IEC60269-1; IEC60269-3-1; VDE036-T301	
Restarting Readiness Time (minimum switch off time the inputs)	0.5 s
Delay on De-energisation	24V DC: < 30 ms, 24V AC: < 70ms
<b>Mechanical Data</b>	
Housing Material	Polyamide PA 6.6
Dimensions (W x H x D)	22.5mm x 114.5mm x 99mm
Fastening	Click-fastening for DIN-Rail
Humidity	95% 0-50°C
Torque Setting for Connection Terminals	0.5 Nm (min), 0.6 Nm (max) <b>UL: Overtorquing may cause enclosure breakage</b>
Weight with Terminals	Max. 185g
Storage	In dry areas
<b>Environmental data</b>	
Operating Temperature	-25°C ... +55°C ( UL:...+40°C)
Terminal Type	IP 20
Housing Type	IP 40
Shock Resistance of N.O Contacts	5g, 33Hz
<b>Certifications</b>	
Tested I.A.W.	EN ISO 13849-1
Achieved Level/Category	Performance Level e, Cat. 4
DC	99% (high)
CCF	Achieved
MTTF <sub>D</sub>	69 years (high)
PFH <sub>D</sub>	$3,8 \cdot 10^{-8}$ 1/h