

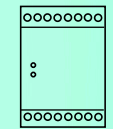


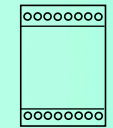


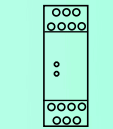


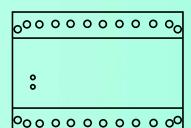


# Safety Control Modules for Emergency Stop Circuits




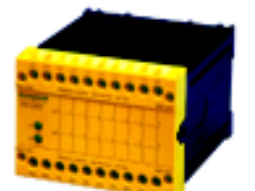
TYPICAL APPLICATIONS	APPROVALS	DIMENSIONS	Category per EN 954-1			
			Input channels	Safety contacts	Auxiliary contacts	Switching Capacity
<b>Single Channel Emergency Stop Module</b> <ul style="list-style-type: none"> <li>E-Stop circuits up to Category 2 (EN 954-1)</li> <li>Sliding door protection</li> <li>Conveyors / transfer lines</li> </ul>	<p>According to the Machinery Directive: 98/37/EC and IEC/EN 60204</p> <p>Suitable for interfaces up to <b>CATEGORY 2</b> per EN 954-1</p>	<p>Front view</p> <p>22,5 mm x 121 mm x 84 mm / 0.89 in x 4.77 in x 3.31 in</p>	2	1	3 NO 1 NC	4 A
<b>Single Channel Emergency Stop Module</b> <ul style="list-style-type: none"> <li>E-Stop circuits up to Category 2 (EN 954-1)</li> <li>Sliding door protection</li> <li>Conveyors / transfer lines</li> </ul>	<p>According to the Machinery Directive: 98/37/EC and IEC/EN 60204</p> <p>Suitable for interfaces up to <b>CATEGORY 2</b> per EN 954-1</p>	<p>Front view</p> <p>45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in</p>	2	1	2 NO	10 A
<b>Dual Channel Emergency Stop Module</b> <ul style="list-style-type: none"> <li>E-Stop circuits up to Category 4 (EN 954-1)</li> <li>Door protection</li> <li>Conveyor / transfer lines</li> </ul>	<p>According to the Machinery Directive: 98/37/EC and IEC/EN 60204</p> <p>Suitable for interfaces up to <b>CATEGORY 4</b> per EN 954-1</p>	<p>Front view</p> <p>22,5 mm x 118 mm x 84 mm / 0.89 in x 4.65 in x 3.31 in</p>	4	2	2 NO 1 NC	7 A
<b>Dual Channel Emergency Stop Module</b> <ul style="list-style-type: none"> <li>E-Stop circuits up to Category 4 (EN 954-1)</li> <li>Door protection</li> <li>Conveyor / transfer lines</li> </ul>	<p>According to the Machinery Directive: 98/37/EC and IEC/EN 60204</p> <p>Suitable for interfaces up to <b>CATEGORY 4</b> per EN 954-1</p>	<p>Front view</p> <p>45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in</p>	4	2	3 NO 1 NC	10 A
<b>Dual Channel Emergency Stop Module</b> <ul style="list-style-type: none"> <li>E-Stop circuits up to Category 4 (EN 954-1)</li> <li>Door protection</li> <li>Conveyor / transfer lines</li> </ul>	<p>According to the Machinery Directive: 98/37/EC and IEC/EN 60204</p> <p>Suitable for interfaces up to <b>CATEGORY 4</b> per EN 954-1</p>	<p>Front view</p> <p>100 mm x 121 mm x 74 mm / 3.93 in x 4.76 in x 2.91 in</p>	4	2	6 NO 1 NC	10 A

Response time	Automatic restart	Manual restart	Restart P/B monitoring	FSD monitoring	Power status indicator	Outputs status indicator	Cross-fault detection	Typical electrical lifespan (number of operations)	Sealing	Voltages	Removable strips	DIN rail mounting	Product Name	Image
35 ms	■	■	■	■	■	■	■	10 <sup>6</sup>	IP 20	24 Vdc	■	■	FF-SRS5924	
35 ms	■	■	■	■	■	■	■	10 <sup>6</sup>	IP 20	24 Vdc 120 Vac 230 Vac	■	■	FF-SRS5934	
15 ms	■	■	■	■	■	■	■	0,75 x 10 <sup>6</sup>	IP 20	24 Vac/dc	■	■	FF-SRS5925	
25 ms	■	■	■	■	■	■	■	10 <sup>6</sup>	IP 20	24 Vdc 120 Vac 230 Vac	■	■	FF-SRS5935	
30 ms	■	■	■	■	■	■	■	10 <sup>6</sup>	IP 20	120 Vac 24 Vdc 230 Vac	■	■	FF-SRS5988	

# Safety Control Modules for Machine Interfacing

TYPICAL APPLICATIONS	APPROVALS	DIMENSIONS	Category per EN 954-1			
			Input channels	Safety contacts	Switching capacity	
<b>Two Hand Control</b> <ul style="list-style-type: none"> <li>Interfaces up to Category 1 (EN 954-1)</li> <li>Category IIIA (EN 574)</li> <li>Hand injury protection e.g. due to dangerous machine movement</li> <li>Robotics</li> <li>Pick and place machines</li> </ul>	 According to Machinery Directive 98/37/EC and IEC/EN 60204 	Front view  45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	1	2	2 NO	10 A
<b>Safety Door Monitor</b> <ul style="list-style-type: none"> <li>Interfaces up to Category 4 (EN 954-1)</li> <li>Monitors the status of limit switches on a safety door</li> </ul>	 According to Machinery Directive 98/37/EC and IEC/EN 60204 	Front view  45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	4	2	2 NO	10 A
<b>Extension Module</b> <ul style="list-style-type: none"> <li>Interfaces up to Category 4 (EN 954-1)</li> <li>Contact multiplication:               <ul style="list-style-type: none"> <li>safety control modules</li> <li>safety light curtains with relay outputs</li> <li>other safety devices</li> </ul> </li> </ul>	 According to Machinery Directive 98/37/EC and IEC/EN 60204 	Front view  22.5 mm x 121 mm x 74 mm / 0.89 in x 4.77 in x 2.91 in	③ 1	2	4 NO 1 NC	5 A
<b>Extension Module</b> <ul style="list-style-type: none"> <li>Interfaces up to Category 4 (EN 954-1)</li> <li>Contact multiplication:               <ul style="list-style-type: none"> <li>safety control modules</li> <li>safety light curtains with relay outputs</li> <li>other safety devices</li> </ul> </li> </ul>	 According to Machinery Directive 98/37/EC and IEC/EN 60204 	Front view  100 mm x 121 mm x 74 mm / 3.94 in x 4.76 in x 2.91 in	③ 1	2	7 NO 1 NC	10 A

③ The overall safety category depends on the category of the main safety control module, therefore a higher safety category may be reached.

Response time	Automatic restart	FSD monitoring	Power status indicator	Outputs status indicator	Cross-fault detection	Typical electrical lifespan (number of operations)	Simultaneity of 2 input channels	Sealing	Voltages	Removable terminal strips	DIN rail mount	
30 ms	■	■	■	■	10 <sup>6</sup>	0.5 s		IP 20	24 Vdc	■	■	FF-SR25980 
30 ms	■	■		■	10 <sup>6</sup>	3 s		IP 20	24 Vdc 120 Vac 230 Vac	■	■	FF-SRD5985 
35 ms			■	■	10 <sup>6</sup>			IP 20	24 Vac/dc	■	■	FF-SRE59292 
15 ms			■	■	10 <sup>6</sup>			IP 20	24 Vac/dc 120 Vac 230 Vac	■	■	FF-SRE3081 



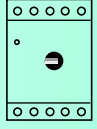

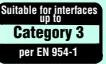
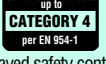
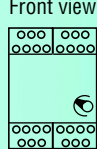


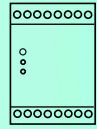


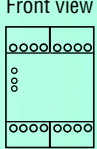
FF-SR25980

FF-SRD5985

FF-SRE59292

FF-SRE3081

# Safety Control Modules for Machine Interfacing

TYPICAL APPLICATIONS	APPROVALS	DIMENSIONS	Category per EN 954-1			
			Input channels	Safety contacts	Switching capacity	
<b>Time Delay Module</b> <ul style="list-style-type: none"> <li>Time delay before disconnection of safety interface circuits</li> </ul>	 According to Machinery Directive 98/37/EC and IEC/EN 60204 	Front view  45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	③ 1	1 or 2	1 NO 1 NC	8 A
<b>Emergency Stop Module with Timer</b> <ul style="list-style-type: none"> <li>Time delay before disconnection of safety interface circuits</li> <li>Door protection: delayed opening of an interlocked protective gate</li> </ul>	 (Pending) According to Machinery Directive 98/37/EC and IEC/EN 60204  (direct safety contacts)  (delayed safety contacts)	Front view  45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	④ 4 ⑤ 3	2	2 NO 1 NC	5 A ④ ⑤
<b>Standstill Monitor</b> <ul style="list-style-type: none"> <li>Standstill detection of induction motors</li> <li>Used to unlock a safety door guarding a rotating machine only when the hazardous movement is stopped</li> <li>Used to activate an emergency brake when a e-stop signal is received and while the motion is still present.</li> </ul>	 	Front view  45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	③ 1	1	2 NO 2 NC	8 A
<b>Standstill and Low Speed Monitor</b> <ul style="list-style-type: none"> <li>Standstill monitor / low speed monitor for any kind of rotating devices</li> <li>Used to unlock a safety door guarding a rotating machine only when the hazardous movement is stopped</li> <li>Used to activate an emergency brake when an e-stop signal is received and while the motion is still present</li> </ul>	 (Pending) According to Machinery Directive 98/37/CE and IEC/EN 60204 	Front view  45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	③ 3	2	2 NO 1 NC	4 A

③ The overall safety category depends on the category of the main safety control module, therefore a higher safety category may be reached. ④ Direct contacts ⑤ Delayed contacts

Response time	Automatic restart	Manual restart	Start P/B monitoring	FSD monitoring	Power status indicator	Stopped motor indicator	Outputs status indicator	Cross-fault detection	Typical electrical lifespan (Number of operations)	Simultaneity of 2 input channels	Sealing	Voltages	Removable terminal strips	DIN rail mounting
								3 x 10 <sup>6</sup>	IP 20	24 Vdc 120 Vac 230 Vac				FF-SRT
15 ms ⑥								10 <sup>6</sup>	IP 20	24 Vac/dc				FF-SRST
2 s								10 <sup>6</sup>	IP 20	24 Vdc 120 Vac 230 Vac				FF-SR05936
3,2 ms / 8,3 s								10 <sup>6</sup>	0,5 s IP 20	24 Vac/dc 120 Vac 230 Vac				FF-SR05932

⑥ Broken wire detection in measuring inputs

FF-SRT

FF-SRST

FF-SR05936

FF-SR05932

## Safety Control Modules to be used with ESPE equipment

TYPICAL APPLICATIONS	APPROVALS	DIMENSIONS	Category per EN 954-1				
			Input channels	ESPE static outputs compatibility	Safety contacts	Switching current	Equipment
<b>Dual channel control module</b> (for ESPE with static safety outputs)  <i>Compatible with Honeywell ESPE FF-SYA, FF-SG, FF-SLG Series</i>		Front view   22,5 mm x 118 mm x 84 mm / 0.89 in x 4.65 in x 3.31 in	4	2	■	2 NO 1 NC	7 A
<b>Dual channel control module</b> (for ESPE with static safety outputs)  <i>Compatible with Honeywell ESPE FF-SYA, FF-SG, FF-SLG Series</i>		Front view   45 mm x 121 mm x 74 mm / 1.77 in x 4.76 in x 2.91 in	4	2	■	⑦ 2 NO 1 NC	6 A
<b>Dual channel control module</b> (for ESPE with static safety outputs)  <i>Compatible with Honeywell ESPE FF-SYA, FF-SG, FF-SLG Series</i>		Front view   45 mm x 118 mm x 84 mm / 1.77 in x 4.64 in x 3.30 in	4	2	■	3 NO 1 NC	6 A





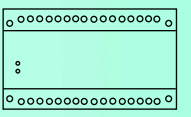




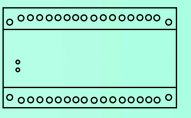




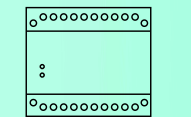
⑦ Single, not internally redundant contacts

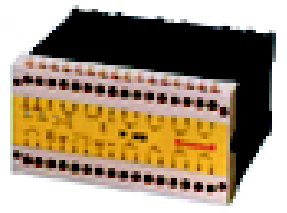

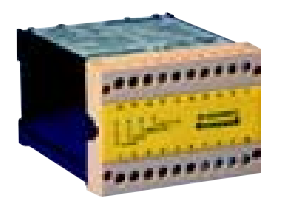
Response time	Automatic restart	Manual restart	Start P/B monitoring	FSD monitoring	Power status monitoring	Inputs status indicator	Outputs status indicator	Restart indicator	Cross-fault conditions in	Typical electrical lifespan (Number of operations)	Sealing	Voltages	Removable terminal strips	DIN rail mounting	Model
15 ms	■	■	■	■	■	■	■	Ⓢ	7,5 x 10 <sup>6</sup>	IP 20	24 Vdc	■	■	FF-SRL59252	
15 ms	■	■	■	■	■	■	■	Ⓢ	10 <sup>6</sup>	30 ms	IP 20	24 Vdc	■	■	FF-SRS59392
15 ms	■	■	■	■	■	■	■	Ⓢ	10 <sup>6</sup>		IP 20	24 Vdc	■	■	FF-SRL59192

Ⓢ Cross-fault detection between inputs must be performed by the connected ESPE (Electrosensitive Protective Equipment).

FF-SRL59252  
FF-SRS59392  
FF-SRL59192

# Safety Control Modules to be used with ESPE equipment

	APPROVALS	DIMENSIONS	Category per EN 954-1	Input channels	ESPE static outputs compatibility	Safety contacts	Switching current	Switching voltage
<b>Category 4 Muting for Conveyor or Machine Applications</b>  <i>Compatible with any Honeywell Type 3 or Type 4 electro-sensitive protective equipment</i>	    	<p>Front view</p>   152 mm x 118 mm x 73 mm / 5.98 in x 4.64 in x 2.87 in	4	2	■	2 PNP	0.5 A	24 Vdc
<b>Category 2 Muting for Conveyor or Machine Applications</b>  <i>Compatible with FF-SLC and FF-SLB Series ONLY</i>	    	<p>Front view</p>   152 mm x 118 mm x 73 mm / 5.98 in x 4.64 in x H 2.87 in	2	1		2 NO 1 NC	2 A	125 Vac
<b>Category 2 interface control module</b>  <i>Compatible with FF-SLC and FF-SLB Series ONLY</i>	    	<p>Front view</p>   110 mm x 118 mm x 73 mm / 4.33 in x 4.64 in x H 2.87 in	2	1		2 NO 1 NC	2 A	125 Vac

	Response time	Automatic restart	Manual restart	FSD monitoring	Override function	Test input	Power status indicator/output	Muting indicator/output	Outputs status indicators/outputs	Restart indicator/output	Failure condition indicator/output	Cross-fault detection	Typical electrical lifespan	Simultaneity of start muting inputs	Voltages	Removable terminal strips	DIN rail mounting
FF-SRM100P2	5 ms	■	■	■	■	■	■	■	■	■	■	∞ (static output)	1 to 8 s	24 Vdc	■	■	
FF-SLM200R2	15 ms	■	■	■	■	■	■	■	■	■	■	4 s	24 Vdc	■	■		
FF-SLU100T2	15 ms	■	■	■	■	■	■	■	■	■	■	4 s	24 Vdc	■	■		

FF-SRM100P2  
FF-SLM200R2  
FF-SLU100T2