

# SIRIUS 3RK3 Modular Safety System

## General data

### Application

The 3RK3 modular safety system can be used for all safety-oriented requirements in the manufacturing industry and offers the following safety functions:

	Symbol	MSS Basic	MSS Advanced
<b>Monitoring functions</b>			
<b>Universal monitoring</b> Evaluation of binary signals from single-channel and two-channel sensors		--	✓
<b>EMERGENCY-STOP</b> Evaluation of EMERGENCY-STOP devices with positive-opening contacts		✓	✓
<b>Switching mats</b> Evaluation of switching mats with NC contacts and/or crossover monitoring		✓	✓
<b>Protective door monitoring</b> Evaluation of protective door signals and/or protective flap signals		✓	✓
<b>Protective door interlocking</b> Evaluation of protective doors with interlock and of the actuation/release of this interlock		--	✓
<b>Approval switches</b> Evaluation of OK buttons with NO contact		✓	✓
<b>Two-hand operator controls</b> Evaluation of two-hand operator controls		✓	✓
<b>BWS monitoring</b> Evaluation of non-contact protective devices, e.g. light curtains and laser scanners		✓	✓
<b>Muting</b> Temporary bridging of non-contact protective devices, 2/4 sensors in parallel, 4 sensors in sequence		--	✓
<b>Operating mode selector switches</b> Evaluation of operating mode selector switches with NO contacts		✓	✓
<b>Monitoring of AS-i (AS-i 2F-DI)</b> Logic element for monitoring of AS-i input slaves		--	✓
<b>Logic operation functions</b>			
<b>AND</b>		✓	✓
<b>OR</b>		✓	✓
<b>XOR</b>		✓	✓
<b>NAND</b>		✓	✓

	Symbol	MSS Basic	MSS Advanced
<b>Logic Operation Functions (continued)</b>			
<b>NOR</b>		✓	✓
<b>Negation</b>		✓	✓
<b>Flip-flop</b>		✓	✓
<b>Counting functions</b>			
<b>Counter 0 -&gt; 1</b>		✓	✓
<b>Counter 1 -&gt; 0</b>		✓	✓
<b>Counter 0 -&gt; 1/1 -&gt; 0</b>		✓	✓
<b>Time functions</b>			
<b>With ON-delay</b>		✓	✓
<b>Passing make contact</b>		✓	✓
<b>With OFF-delay</b>		✓	✓
<b>Clock-pulsing</b>		✓	✓
<b>Start functions</b>			
<b>Monitored start</b>		✓	✓
<b>Manual start</b>		✓	✓
<b>Output functions</b>			
<b>Standard output</b>		✓	✓
<b>F output</b>		✓	✓
<b>AS-i output function</b>		--	✓
<b>Status functions</b>			
<b>Element status</b>		--	✓