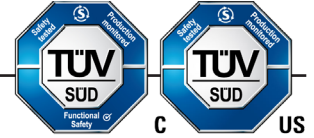


## Operating Instructions: Emergency Stop Element



Core Elements

Description	TEC, TED, TEW, TEV, TET, TEM, TEP, TEI, TES
<p>Emergency stop element, version available with either a monitoring contact or illumination.</p> <ul style="list-style-type: none"> <li>• 2 positively driven force break Normally Closed contacts (uses none of the I/O pins).</li> <li>• Monitored version also has 1 output signal and this uses 1 output pin.</li> <li>• Illuminated version also has 1 input signal and this uses 1 input pin (it is illuminated by the controlling PLC, not by the action of pressing the E-Stop).</li> <li>• It is not possible for an E-Stop to be both Monitored and Illuminated.</li> <li>• E-Stop is always mounted at the top of any control elements, and below solenoid / head / safety switches / locks.</li> <li>• TEM &amp; TEI E-Stops can be positioned at the bottom of the stack if required.</li> <li>• TED/C/W/V contacts are wired in series with another element in the stack e.g. TSS, to reduce pin requirements.</li> <li>• TET/M/P/I/S contacts are wired separately to all other elements in the stack.</li> <li>• TES is black version of TET. A Black Mushroom pushbutton is used to initiate a stop function.</li> </ul>	<p>TES is black version of TET</p>

Technical Specification	
Housing Materials	Painted die cast aluminium
Colour	Red, Yellow & Dark Grey / Black
Ingress Protection	IP65*
Ambient Temperature	-25°C to 40°C (-13°F to 104°F)
Environment	Indoor use only
Operating Life	50,000 cycles
B10	65,000 cycles
B10d	130,000 cycles
Switches Conformance	IEC 60947-5-1
Switching Principle	Positive Break
Switching Current	1mA MIN / 100mA MAX
Switching Voltage	24V
*IP protection is to the tGard stack that this module attaches to, when correctly fitted according to installation and maintenance instructions.	

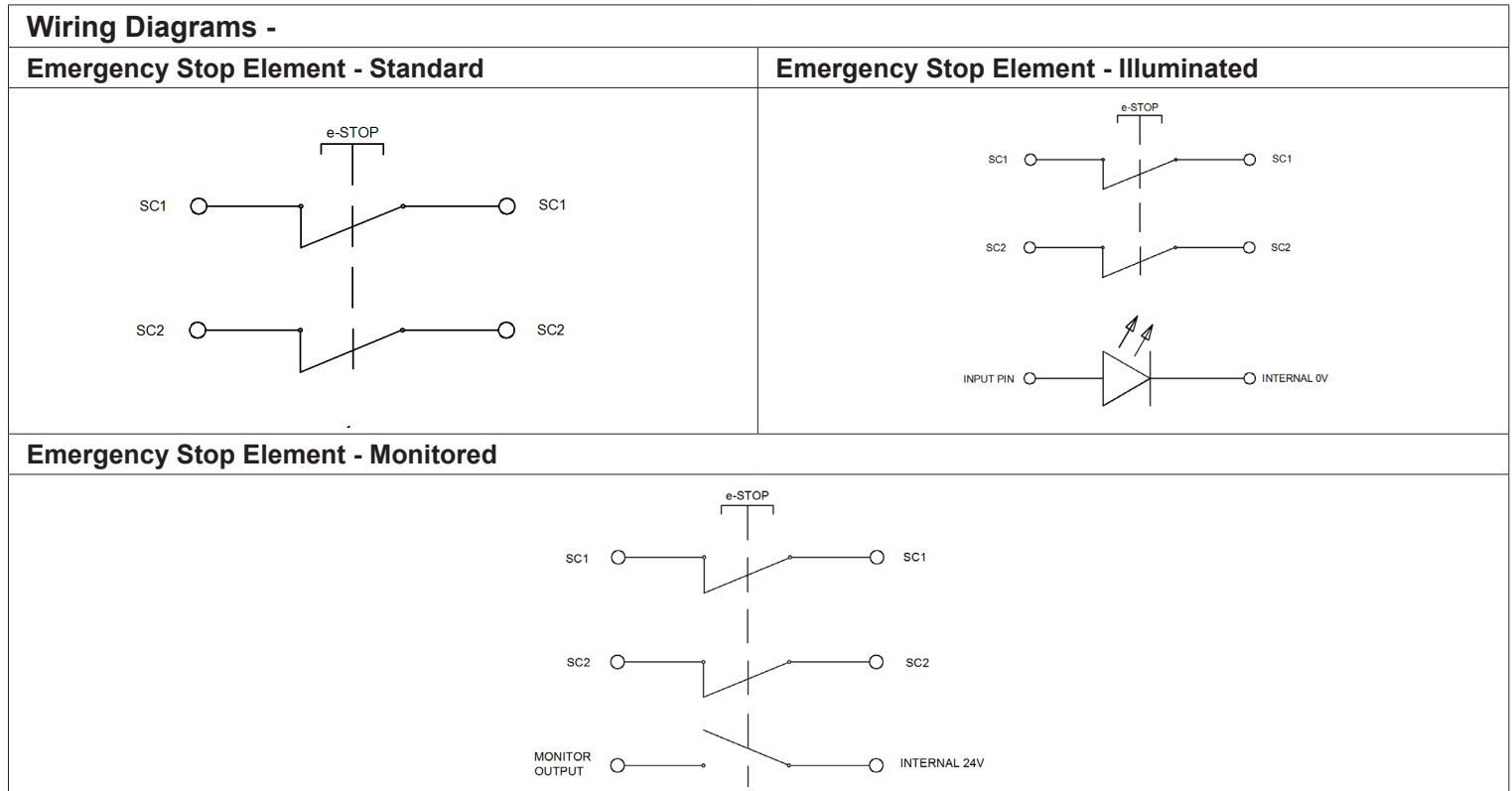
Safety Data	
Standards	EN13850
Approvals	TÜV SÜD for Europe, Canada & USA
B10	65,000 cycles
<b>Note:</b> The safety-related parts of the control system or subsystems which perform the emergency stop function shall comply with the relevant requirements of ISO-13849-1 and/or IEC 62061.	

tGard Emergency Stop Safety Functions		Part No.
Safety Function 1	Provides E-Stop function	TEC / TED / TEW / TEV / TET / TEM / TEP / TEI / TES

# Operating Instructions: Emergency Stop Element

Emergency Stop Part Number Options				
Part No.	Reset	Illuminated	Monitored	Wiring
TEC	Twist	-	-	Series
TED	Twist	-	Yes	Series
TEW	Pull	-	-	Series
TEV	Twist	Yes	-	Series
TET	Twist	-	-	Separate
TEM	Twist	-	Yes	Separate
TEP	Pull	-	-	Separate
TEI	Twist	Yes	-	Separate
TES	Twist	-	-	Separate

Electrical Guidance			
Part No.	Inputs	Outputs	Elements Operate on the Safety Circuits
TEC	0	0	Series
TED	0	1	Series
TEW	0	0	Series
TEV	1	0	Series
TET	0	0	Separate
TEM	0	1	Separate
TEP	0	0	Separate
TEI	1	0	Separate
TES	0	0	Separate



# Operating Instructions: Emergency Stop Element

Dimensional Drawing - TEC, TED, TEW, TEV, TET, TEM, TEP, TEI, TES

