

Trojan 5 and 6 Universal Tongue Interlock Switches

The Trojan™ 5 and 6 Universal Tongue Interlock Switches have the following features:

- Strong and versatile, can be used in most applications
- Self-ejecting tamper resistant actuator, only operates when mounted to the guard (not with GD2 models)
- Four possible actuator entry points, easy to install
- GD2 style available for difficult applications



Specifications

Attribute	Value			
Safety Ratings				
Standards	ISO 14119, IEC 60947-5-1			
Safety Classification	Type 2 Interlocking Device per ISO 14119			
Functional Safety Data	Visit http://literature.rockwellautomation.com/idc/groups/literature/documents/sr/safety-sr001_-en-e.pdf			
Certifications	c-UL-us Listed, TÜV Certified, and CE Marked for all applicable directives www.rockwellautomation.com/certification/overview.page			
Outputs				
Safety Contacts ⁽¹⁾ Direct Opening Action	3 N.C.	2 N.C.	2 N.C.	
Auxiliary Contacts	1 N.O.	2 N.O.	1 N.O.	
Thermal Current/ <i>I_{th}</i>	10 A			
Rated Insulation Voltage (Ui)	500V			
Switching Current @ Voltage	3 mA @ 18V DC, min			
Utilization Category: Trojan 5 Switch				
A300/AC-15 (Ue)	240V	120V		
A300/AC-15 (Ie)	3 A	6 A		
DC-13 (Ue)	24V	24V		
DC-13 (Ie)	2 A			
Utilization Category: Trojan 6 Switch				
A600/AC-15 (Ue)	600V	500V	240V	120V
A600/AC-15 (Ie)	1.2 A	1.4 A	3 A	6 A
DC-13 (Ue)	24V			
DC-13 (Ie)	2 A			
Operating Characteristics				
Break contact Force				
Trojan 5 switch	12 N (2.7 lbf) & 30 N (6.75 lbf)			
Trojan 6 switch	20 N (4.5 lbf)			
Actuation Speed	160 mm (6.29 in.)/s, max			
Actuation Frequency	2 cycles/s, max			
Operating Radius	175 mm (6.89 in.) [60 mm (2.36 in.) with flexible actuator], min			
Mechanical Life	1,000,000 operations			
Environmental				
Enclosure Type Rating	IP67			
Operating Temperature	-20...+80 °C (-4...+176 °F)			

Attribute	Value
Physical Characteristics	
Housing Material	UL approved glass-filled PBT
Actuator Material	Stainless Steel
Weight [g (lb)]	160 (0.35)
Color	Red

(1) The safety contacts are described as normally closed (N.C.) for example, with the guard closed, actuator in place (where relevant) and the machine able to be started.

Product Selection

Table 36 - Trojan 5 Switch

Type	Contact			Actuator Type	Cat. No.						
	Safety	Auxiliary	Action		M20 Conduit		Connector ⁽¹⁾				
					M20	1/2 inch NPT Adapter	Connect to Distribution Box 4-pin Micro (M12)	Connect to ArmorBlock Guard I/O 5-pin Micro (M12) ⁽²⁾			
Trojan 5 Standard Switch	2 N.C.	1 N.O.	BBM	Standard	440K-T11090	440K-T11202	440K-T11205	—			
				Guide/semi-flexible	440K-T11110	440K-T11203	440K-T11206	—			
				Guide/fully flexible	440K-T11467	440K-T11204	440K-T11207	440K-T2NNBPS			
				—	440K-T11089	—	440K-T11129	—			
			BBM Gold Contacts	Standard	440K-T11085	—	—	—			
				—	—	—	—	—			
			MBB	Standard	440K-T11118	440K-T11208	440K-T11224	—			
				Guide/semi-flexible	440K-T11123	440K-T11209	440K-T11363	—			
				Guide/fully flexible	440K-T11468	440K-T11210	440K-T11364	—			
				—	440K-T11146	440K-T11469	440K-T11365	—			
			Trojan 5 GD2 Switch	2 N.C.	1 N.O.	BBM	GD2 standard	440K-T11336	440K-T11211	440K-T11366	440K-T2NNGPS-NG
							Guide/semi-flexible	440K-T11337	440K-T11212	440K-T11367	—
Guide/fully flexible	440K-T11338	440K-T11213					440K-T11368	—			
—	440K-T11147	—					440K-T11226	—			
MBB	GD2 standard	440K-T11339				440K-T11470	440K-T11369	—			
	Guide/semi-flexible	440K-T11340				440K-T11471	440K-T11370	—			
	Guide/fully flexible	440K-T11341				440K-T11472	440K-T11371	—			
	—	440K-T11167				—	440K-T11372	—			
Trojan 5 30 N Switch	2 N.C.	1 N.O.				BBM	Standard	440K-T11333	440K-T91024	440K-T11492	—
							—	—	—	—	—

(1) For connector ratings, see [Table 33](#) on [page 84](#).

(2) With a 5-pin micro (M12) connector, not all contacts are connected. See [Typical Wiring Diagrams](#) on [page 101](#) for wiring details.

Table 37 - Trojan 6 Switch

Type	Contact			Actuator Type	Cat. No.		
	Safety	Auxiliary	Action		M20 Conduit		Connector ⁽¹⁾
					M20	1/2 inch NPT Adapter	8-pin Micro (M12) ⁽²⁾
Trojan 6 Switch	3 N.C.	1 N.O.	BBM	Standard	440K-T11171	440K-T11435	—
				—	440K-T11449	440K-T11408	—
	2 N.C.	2 N.O.	BBM	Standard	440K-T11174	440K-T11438	—
				—	440K-T11452	440K-T11416	440K-W21BNPH
			MBB	—	440K-T11453	440K-T11454	440K-W21MNPB
Trojan 6 GD2 Switch	3 N.C.	1 N.O.	BBM	GD2 Standard	440K-T11418	440K-T11466	—
				—	440K-T11188	440K-T11444	—
			MBB	—	440K-T11456	440K-T11457	—
	2 N.C.	2 N.O.	BBM	GD2 Standard	440K-T11445	440K-T11425	—
				—	440K-T11459	440K-T11433	440K-W21BNPH-NG
			MBB	—	440K-T11460	440K-T11461	440K-W21MNPB-NG

(1) For connector ratings, see [Table 33](#) on [page 84](#).

(2) With an 8-pin micro (M12) connector, not all contacts are connected. See [Typical Wiring Diagrams](#) on [page 101](#) for wiring details.

Table 38 - Connection Systems

Description	Cat. No.		
	Trojan 5 Switch		Trojan 6 Switch
	5-pin Micro (M12)	6-pin Micro (M12)	8-pin Micro (M12)
Cordset	—	889R-F6ECA-x ⁽¹⁾	889D-F8AB-x ⁽¹⁾
Patchcord	889D-F5ACDM-x ⁽¹⁾	889R-F6ECRM-y ⁽²⁾	889D-F8ABDM-y ⁽²⁾
Distribution Box	—	898R-F68MT-A5	—
Shorting Plug	—	898R-P61MU-RM	—
T-Port	—	—	—

(1) Replace x with 2 [2 m (6.56 ft)], 5 [5 m (16.4 ft)], or 10 [10 m (32.8 ft)] for standard cable lengths.

(2) Replace y with 1 [1 m (3.28 ft)], 2 [2 m], 3 [3 m (9.8 ft)], 5 [5 m], or 10 [10 m] for standard cable lengths.