

# TLS-GD2

## Product Selection

Type	Contacts		Solenoid		Actuator Type	Cat. No.							
	Safety	Auxiliary	Contacts	Voltage		Conduit		Connector♣					
						M20	1/2 inch NPT Adaptor	12-Pin M23	8-Pin Micro (M12)Δ				
TLS-1 GD2 Power to Release	2 N.C.	1 N.O.	1 N.C. & 1 N.O.	24V AC/DC	–	440G-T27121	–	440G-T27233	440G-T2NBBPH-1R				
					GD2 Standard	440G-T27251	440G-T27169	440G-T27234	–				
					Fully flexible	440G-T27252	440G-T27171	440G-T27235	–				
				110V AC/DC	–	440G-T27124	–	–	–				
					GD2 Standard	440G-T27253	440G-T27172	–	–				
					Fully flexible	440G-T27254	440G-T27174	–	–				
				230V AC/DC	–	440G-T27123	–	–	–				
				TLS-2 GD2 Power to Lock	2 N.C.	1 N.O.	1 N.C. & 1 N.O.	24V AC/DC	–	440G-T27127	–	440G-T27239	440G-T2NBBPH-1L
									GD2 Standard	440G-T27255	440G-T27175	440G-T27240	–
Fully flexible	440G-T27256	440G-T27177	440G-T27241						–				
110V AC/DC	–	440G-T27132	–					–	–				
	GD2 Standard	440G-T27257	440G-T27178					–	–				
	Fully flexible	440G-T27258	440G-T27180					–	–				
230V AC/DC	–	440G-T27129	–					–	–				
TLS-3 GD2 Power to Release	2 N.C.	1 N.O.	2 N.C.					24V AC/DC	–	440G-T27134	–	440G-T27245	440G-T2NBBPH-2R
									GD2 Standard	440G-T27259	440G-T27181	440G-T27246	–
				Fully flexible	440G-T27260	440G-T27183	440G-T27247		–				
				110V AC/DC	–	440G-T27138	–	–	–				
					GD2 Standard	440G-T27261	440G-T27184	–	–				
					Fully Flex	440G-T27262	440G-T27186	–	–				
				230V AC/DC	–	440G-T27136	–	–	–				
				TLS-1 GD2 Power to Release with Escape Release	2 N.C.	1 N.O.	1 N.C. & 1 N.O.	24V AC/DC	–	440G-T21BNPM-1B	440G-T21BNPT-1B	440G-T21BNPL-1B	440G-T2NBNPH-1B
									GD2 Standard	440G-T21BGPM-1B	440G-T21BGPT-1B	440G-T21BGPL-1B	–
110V AC/DC	–	440G-T21BNPM-4B	440G-T21BNPT-4B					–	–				
	GD2 Standard	440G-T21BGPM-4B	440G-T21BGPT-4B					–	–				
230V AC/DC	–	440G-T21BNPM-2B	440G-T21BNPT-2B					440G-T21BNPL-2B	440G-T2NBNPH-2B				
	GD2 Standard	440G-T21BGPM-2B	440G-T21BGPT-2B					440G-T21BGPL-2B	–				
TLS-3 GD2 Power to Release with Escape Release	2 N.C.	1 N.O.	2 N.C.	24V AC/DC	–	440G-T21BNPM-5B	440G-T21BNPT-5B	–	–				
					GD2 Standard	440G-T21BGPM-5B	440G-T21BGPT-5B	–	–				
				110V AC/DC	–	440G-T21BNPM-5B	440G-T21BNPT-5B	–	–				

♣ For connector ratings, see page Safety Switches and Connectors.

Δ With an 8-pin micro connector, not all contacts are connected. See Typical Wiring Diagrams for wiring details.

## Recommended Logic Interfaces

Description	Safety Outputs	Auxiliary Outputs	Time Delay	Terminals	Reset Type	Power Supply	Cat. Page No.	Cat. No.
<b>Single-Function Safety Relays</b>								
MSR127RP	3 N.O.	1 N.C.	—	Removable (Screw)	Monitored Manual	24V AC/DC	MSR127RP/TP	440R-N23135
MSR127TP	3 N.O.	1 N.C.	—	Removable (Screw)	Auto./Manual	24V AC/DC	MSR127RP/TP	440R-N23132
MSR126T	2 N.O.	None	—	Fixed	Auto./Manual	24V AC/DC	MSR126R/T	440R-N23117
MSR30RT	2 N.O. Solid State	1 N.O. Solid State	—	Removable	Auto./Manual or Monitored Manual	24V DC	MSR30RT/RTP	440R-N23198
<b>Specialty Safety Relays</b>								
MSR178	3 N.O.	2 N.C.	0.5 s...30 min	Removable	Automatic	24V AC/DC, 115V AC or 230V AC	MSR178DP	440R-M23227
CU2	2 N.O.	1 N.C.	0.1 s...40 min	Fixed	—	24V AC/DC	CU2	440R-S07281
CU3	2 N.O.	1 N.C.	—	Fixed	Automatic/Manual	110V AC	CU3	440R-S35002
<b>Modular Safety Relays</b>								
MSR210P Base 2 N.C. only	2 N.O.	1 N.C. and 2 PNP Solid State	—	Removable	Auto./Manual or Monitored Manual	24V DC from the base unit	MSR210P	440R-H23176
MSR220P Input Module	—	—	—	Removable	—	24V DC	MSR220P	440R-H23178
MSR310P Base	MSR300 Series Output Modules	3 PNP Solid State	—	Removable	Auto./Manual Monitored Manual	24V DC	MSR310P	440R-W23219
MSR320P Input Module	—	2 PNP Solid State	—	Removable	—	24V DC from the base unit	MSR320P	440R-W23218

**Note:** For additional Safety Relays connectivity, see Safety Relays.  
For additional Safety I/O and Safety PLC connectivity, see Programmable Safety Solutions.  
For application and wiring diagrams, see Safety Applications and Wiring Diagrams.

## Connection Systems

Description	8-Pin Micro (M12)	12-Wire, 12-Pin M23	9-Wire, 12-Pin M23♣
Cordset	889D-F8AB-*	889M-F12AH-*	889M-F12X9AE-*
Patchcord	889D-F8ABDM-‡	889M-F12AHMU-§	—

\* Replace symbol with 2 (2 m), 5 (5 m), or 10 (10 m) for standard cable lengths.

‡ Replace symbol with 1 (1 m), 2 (2 m), 3 (3 m), 5 (5 m), or 10 (10 m) for standard cable lengths.

§ Replace symbol with 0M3, (0.3 m), 0M6 (0.6 m), 1 (1 m), 2 (2 m) or 3 (3 m) for standard lengths.

♣ The 9-wire cordset can be used only with the TLS3 versions.

**Note:** For additional information, see Safety Connection Systems.