

Bill of Material

Catalog Number	Description	Quantity
800F-1YP8	800F 1-hole Enclosure E-Stop Station, Plastic, PG, Twist-to-Release 60 mm, Non-illuminated, 1 N.O./2 N.C.	1
440R-S12R2	Guardmaster Safety Relay, 1 Dual Channel Universal Input, 1 N.C. Solid State Auxiliary Outputs	1
440R-D22R2	Guardmaster Safety Relay, 2 Dual Channel Universal Inputs, 1 N.C. Solid State Auxiliary Outputs	1
440J-N21TNPM-NP	Switch with Jog Button	1
440J-A01N	Mounting bracket suitable for one actuator mounted on to switch (includes four flat head screws and one Resistorx bit)	1
440J-A02N	Mounting bracket suitable for single enabling switch and single safety switch	1
440K-T11460	Tongue Switch - Trojan 5 & 6: Contacts(Safety and Aux): 2 N.C., 2 N.O., MBB Preference: Make Before Break, Actuator: No Actuator, Model Type: GD2 Front Entry, Conduit Entry: M20 Conduit	1
440G-A27011	GD2 Standard Actuator (only for GD2 model)	1
440K-MT55083	Tongue Switch - MT-GD2: Contacts (Safety and Aux): 2 N.C., 2 N.O., MBB Preference: Make Before Break, Actuator: No Actuator, Model Type: Latch Release, Conduit Entry: M20 Conduit	1
855EE-G24L5	Control Tower Stack Light, Pre-assembled, 25 cm Pole Mount with Cap, Gray Housing, 24V AC/DC Full Voltage, Amber Flashing LED	1
800FM-U2F3E4MX11	800F 2-position Momentary Multi-function- Rd. Metal (IP66, 4, IP65), Pos. A- Green Flush PB, Pos. C- Red Ext. PB, Metal Latch Mount, 1 N.O. Contact(s), 1 N.C. Contact(s), Standard, Standard Pack (qty. 1)	1
100S-C09EJ23BC	MCS 100S-C Safety Contactor, 9 A, 24V DC (with Electrical Coil), Bifuracated Contact	2

Setup and Wiring

For detailed information on installing and wiring, refer to the product manuals listed in the [Additional Resources](#).

System Overview

The pulsed outputs of the GSR SI (terminals S11 and S21) are run separately through the two E-Stop contacts to input terminals S12 and S22 respectively. This enables the GSR SI to detect loose wire, short to 24V, short to GND, welded contact and cross channel faults.

The pulsed outputs of the GSR DI (terminals S11 and S21) are run separately through the two 440K-T11118 safety contacts to input terminals S12 and S22 respectively. This enables the GSR DI to detect loose wire, short to 24V, short to GND, a welded contact and cross channel faults.

The pulsed outputs of the GSR DI (terminals S11 and S21) are run separately through the two 440K-MT55083 contacts and the enabling switch contacts to input terminals S32 and S42 respectively. This enables the GSR DI to detect loose wire, short to 24V, short to GND and cross channel faults. A welded contact on one device could be masked by the other device.