Electromagnetic Safety Switch

Catalog Numbers 440G-EZS21STL05J, 440G-EZS21STL05H

AB QUALITY

Allen-Bradley

by **ROCKWELL AUTOMATION**

User Manual

Table 5 - System Connection of Variant with 1 x M12 Plug Connector, 8-pin

Attribute	Value
Voltage supply Local inputs and outputs	Convex, M12, 8-pin, A-coded (common plug connector for voltage supply and inputs and outputs)
Length of connecting cable	150 mm (5.91 in.)

Table 6 - Electrical

Attribute	Value
OSSD pairs	1
Rated impulse withstand voltage U_{imp}	1500V
Pollution degree	3 (external, according to EN 60947-1)
Power-up delay (after supply voltage applied) [1]	2.5 s
Supply voltage when an individual safety switch is connected	
Supply voltage V_v sensor	24V DC (19.2…28.8V) Class 2 supply
Supply voltage V_v magnet	24V DC (19.2…28.8V) Class 2 supply
Supply voltage when a cascade is connected	
Supply voltage V_v sensor	24V DC (22.8…28.8V) Class 2 supply
Supply voltage V_v magnet	24V DC (21.6…28.8V) Class 2 supply
Muting time when supply voltage is interrupted	4 ms
Rated insulation voltage Ui	32V DC
Cable capacitance	400 nF (for Out A and Out B)
Device fuse	0.6…1 A
Current consumption at 24V	
Locking device deactivated	50 mA
Locking device active	350 mA
Protection class	III (EN 61140/IEC 61140)
Response time [2]	≤50 ms [3]
Release time [4]	≤100 ms [3]
Risk time [5]	≤100 ms [3]

(1) Once the supply voltage has been switched on, the OSSDs are in the OFF state during the time delay before availability. The time that is specified applies to one sensor; in a cascade, 0.1 s must be added per sensor.
(2) Response time for moving the OSSDs into the OFF state when the actuator is removed from the response area or when the OSSD input signals go into the OFF state.
(3) In a cascade, the value is multiplied by the number of safety switches in the cascade.
(4) Response time for moving the OSSDs into the ON state when the sensor detects the actuator and the OSSD input signals are in the ON state.
(5) The risk time is the time that is required to detect internal and external faults. External errors affect the OSSDs (short-circuit to an OSSD and cross-circuit between the two OSSDs). At least one of the two OSSDs is safely switched off during the risk time.

Table 7 - Mechanical Data

Attribute	Value
Dimensions (W x H x D)	
Safety switch	120 x 60 x 38.5 mm (4.72 x 2.36 x 1.52 in.)
Actuator	120 x 60 x 20.5 mm (4.72 x 2.36 x 0.81 in.)
Material	
Sensor housing	Anodized aluminum
Actuator housing	Fiber-glass-reinforced PVC
Anchor plate	Nickel-plated steel
Weight	
Safety switch	510 g (18 oz)
Actuator	210 g (7.41 oz)