

# **Troubleshooting**

# **G9SE Series**

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# **G9SE-201 Troubleshooting**

When G9SE detects a fault, LED indicators blink to show the information of the fault.

When PWR indicator blinks, check and take needed measures referring to the following table. And then apply supply voltage to G9SE.

	Indicator	Expected causes	Check points and measures to take
PWR and IN1 blink	G9SE N2 -201 OUT 24VDC  Blinking Blinking	Failures involving the wiring of Safety input 1.     Failures of the parts of the circuits of Safety input 1.	Check the wiring to T11 and T12.     Replace with a new product.
PWR and IN2 blink	OMRON PWR Blinking  Blinking  Blinking  Blinking  Blinking	Failures involving the wiring of Safety input 2.     Failures of the parts of the circuits of Safety input 2.	Check the wiring to T21 and T22.     Replace with a new product.
Safety inputs: ON-state PWR blinks, IN1 and IN2 light up	OMRON PWR Blinking IN1 G9SE IN2 -201 OUT 24VDC	Failures involving the wiring of Feedback/ Reset input.     Failures of the parts of the circuits of Feedback/Reset input.	Check the wiring to T31, T32, and T33.     Replace with a new product.
Safety inputs: OFF-state PWR blinks, IN1 and IN2 do not light up	OMRON PWR Blinking  IN1  G9SE IN2  -201  OUT  24VDC		
PWR and OUT blink	OMRON PWR Blinking  IN1  G9SE IN2  -201  OUT  Blinking  24VDC	Failures of the parts or relays of the circuits of Safety Output.	1) Replace with a new product.

	Indicator	Expected causes	Check points and measures to take
PWR blinks, all indicators except PWR blink	OMRON PWR Blinking  Blinking  Blinking  Blinking  Blinking  Blinking  24VDC	Supply voltage outside the rated value.	Check the supply voltage to G9SE.
PWR blinks, all indicators except PWR do not light up	OMRON PWR Blinking  Sti IN1  G9SE IN2  -201  OUT  24VDC	By excessive electro-magnetic disturbance.     Failures of the parts of internal circuits.	Check the disturbance level around G9SE and its related system.     Replace with a new product.

When indicators other than PWR indicator blink while PWR indicator lights up, check and take needed measures referring to the following table. After removing the fault, turn both safety inputs to OFF state.

	Indicator	Expected causes	Check points and measures to take
Safety input 1 and 2: ON-state PWR lights up, IN1 and IN2 blink	OMRON PWR Lit  S1  IN1  G9SE IN2  -201  OUT  24VDC	Mismatch between Safety input 1 and Safety input 2. (OFF timing)	Check the wiring from safety input devices to G9SE. Or check the inputs sequence of safety input devices.
Safety input 1: ON-state PWR lights up, IN1 blinks, IN2 does not light up	OMRON PWR Lit Blinking ONOT IN1 OUT 24VDC		
Safety input 2: ON-state PWR lights up, IN1 does not light up, IN2 blinks	OMRON PWR Lit  IN1  G9SE IN2  -201  OUT  24VDC		

# **G9SE-401 Troubleshooting**

When G9SE detects a fault, LED indicators blink to show the information of the fault.

When PWR indicator blinks, check and take needed measures referring to the following table. And then apply supply voltage to G9SE.

	Indicator	Expected causes	Check points and measures to take
PWR and IN1 blink	OMRON Sti  IN1  G9SE -401  OUT  24VDC	Failures involving the wiring of Safety input 1.      Failures of the parts of the circuits of Safety input 1.	Check the wiring to T11 and T12.     Replace with a new product.
PWR and IN2 blink	OMRON SI  PWR Blinking IN1  G9SE -401 OUT  24VDC	Failures involving the wiring of Safety input 2.     Failures of the parts of the circuits of Safety input 2.	Check the wiring to T21 and T22.     Replace with a new product.
Safety inputs: ON-state PWR blinks, IN1 and IN2 light up	OMRON SH  Blinking  IN1  G9SE -401  OUT  24VDC	Failures involving the wiring of Feedback/ Reset input.     Failures of the parts of the circuits of Feedback/Reset input.	Check the wiring to T31, T32, and T33.     Replace with a new product.
Safety inputs: OFF-state PWR blinks, IN1 and IN2 do not light up	OMRON  Blinking  IN1  G9SE  -401  24VDC  OUT		
PWR and OUT blink	OMRON S1    Description   Desc	Failures of the parts or relays of the circuits of Safety Output.	1) Replace with a new product.

	Indicator	Expected causes	Check points and measures to take
PWR blinks, all indicators except PWR blink	G9SE -401 OUT Blinking	Supply voltage outside the rated value.	Check the supply voltage to G9SE.
PWR blinks, all indicators except PWR do not light up	OMRON PWR Blinking IN1 G9SE -401 OUT 24VDC	By excessive electro-magnetic disturbance.     Failures of the parts of internal circuits.	Check the disturbance level around G9SE and its related system.     Replace with a new product.

When indicators other than PWR indicator blink while PWR indicator lights up, check and take needed measures referring to the following table. After removing the fault, turn both safety inputs to OFF state.

	Indicator	Expected causes	Check points and measures to take
Safety input 1 and 2: ON-state PWR lights up, IN1 and IN2 blink	OMRON Sti IN1 G9SE -401 OUT	Mismatch between Safety input 1 and Safety input 2. (OFF timing)	Check the wiring from safety input devices to G9SE. Or check the inputs sequence of safety input devices.
Safety input 1: ON-state PWR lights up, IN1 blinks, IN2 does not light up	OMRON PWR Lit Blinking S9SE -401 OUT 24VDC		
Safety input 2: ON-state PWR lights up, IN1 does not light up, IN2 blinks	PWR Lit Not lit  G9SE 1N2 -401 OUT		

# **G9SE-221-T**□ Troubleshooting

When G9SE detects a fault, LED indicators blink to show the information of the fault.

When PWR indicator blinks, check and take needed measures referring to the following table. And then apply supply voltage to G9SE.

	Indicator	Expected causes	Check points and measures to take
PWR and IN1 blink	OFF. 54 3 2.5 2 Blinking	<ol> <li>Failures involving the wiring of Safety input 1.</li> <li>Failures of the parts of the circuits of Safety input 1.</li> </ol>	Check the wiring to T11 and T12.     Replace with a new product.
PWR and IN2 blink	OMRON	Failures involving the wiring of Safety input 2.     Failures of the parts of the circuits of Safety input 2.	Check the wiring to T21 and T22.     Replace with a new product.
Safety inputs: ON-state PWR blinks, IN1 and IN2 light up	G9SE -221-T05   DUT   24VDC   O.2   O.4   O.6   O.5   O.5   O.5   O.8   O.5   O.5   O.8   O.5   O.5	Failures involving the wiring of Feedback/ Reset input.     Failures of the parts of the circuits of Feedback/Reset input.	<ol> <li>Check the wiring to T31, T32, and T33.</li> <li>Replace with a new product.</li> </ol>
Safety inputs: OFF-state PWR blinks, IN1 and IN2 do not light up	OMRON PWR Blinking  Sti IN 1  G9SE IN 2  -221-T05 OUT  24VDC O.6  0.2  0.4  0.6  0.8  OFF- 54  0.8  OFF- 54  0.8  OFF- 54  0.8  OFF- 54  1.5		
PWR, OUT1 and OUT2 blink	OFF- 5 4 0.6 DELAY 3 2.5 2 1.5	Failures of the parts or relays of the circuits of Safety Output.	1) Replace with a new product.

	Indicator	Expected causes	Check points and measures to take
PWR and OUT2 blink	OIRON PWR Blinking    IN 1	Mismatch of the two Off-delay Time Preset Switches.	Check both of the two Off-delay Time Preset Switches.
PWR blinks, all indicators except PWR blink	OMRON PWR Blinking IN 1  G9SE -221-T05 OUT 24VDC  0.2 0.4 0.6 0 0.8 OFF- DELAY 3 2.5 2	Supply voltage outside the rated value.	1) Check the supply voltage to G9SE.
PWR blinks, all indicators except PWR do not light up	G9SE IN 2 Not lit 24VDC OUT 24VDC OUT 0.2 0.4 0.6 0.8 OFF- 5 1.5 DELAY 3.2 5.2 1.5	By excessive electro-magnetic disturbance.     Failures of the parts of internal circuits.	Check the disturbance level around G9SE and its related system.     Replace with a new product.

When indicators other than PWR indicator blink while PWR indicator lights up, check and take needed measures referring to the following table. After removing the fault, turn both safety inputs to OFF state.

	Indicator	Expected causes	Check points and measures to take
Safety input 1 and 2: ON-state PWR lights up, IN1 and IN2 blink	OMRON PWR Lit  S1  IN 1  IN 1  G9SE  -221-T05  OUT  24VDC  0.2  0.4  0.6  0.7  0.8  OFF-  5  0.8  OFF-  5  1.5	Mismatch between Safety input 1 and Safety input 2. (OFF timing)	Check the wiring from safety input devices to G9SE. Or check the inputs sequence of safety input devices.
Safety input 1: ON-state PWR lights up, IN1 blinks, IN2 does not light up	G9SE IN 2 Blinking  G9SE OUT  24VDC OUT  0.2 0.4 0.6 0 0.8  OFF- 54 7 1.5  DELAY 3 2.5 2		
Safety input 2: ON-state PWR lights up, IN1 does not light up, IN2 blinks	OMRON PWR Lit  Still IN 1 Not lit  G9SE IN 2 Blinking  -221-T05 OUT 24VDC  0.2 0.4 0.6 0.8 OFF. 54 0.8 DELAY 3 2.5 2		

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