

Basic-Device for Emergency-Stop-Monitoring

- Stop-Category 0 and 1 acc. EN 60204-1
- Applications up to Category 4 acc. EN 954-1
- Applications up to SIL_{CL} 3 acc. EN 62061
- Adjustable Off-delay-time until 300 s
- 1- or 2-channel wiring
- With or without cross monitoring
- Up to 6 safety contacts (3 undelayed, 3 delayed)
- Up to 2 auxiliary contacts (1 undelayed, 1 delayed)
- Manual or automatic start
- External device monitoring (EDM)
- Compact housing



Uses

- Protection of persons and machines
- Emergency-Stop-Monitoring
- Safety Door-Monitoring
- Safe Stop of drive controls (Stop category 1, EN 60204-1)

Function

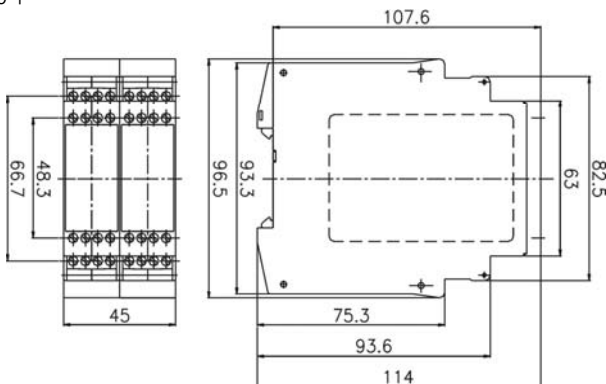
This device is a two-channel safety switching device for emergency stop applications with self-monitoring on each ON-OFF cycle. It conforms to EN 60204-1 and is equipped with positively driven relays. After supply voltage has been connected to terminals A1/A2 and the safety inputs closed, operating the reset button closes the enabling current paths (manual start). When the safety inputs are opened/de-excited the enabling current paths will open.

Notes

- The safety category according to EN 954 - 1 also depends from the external circuit, the choice of the control station and is location on the machine.
- To multiply the enabling current paths, the expansion units or external contactive elements with positively driven contacts can be used.
- The devices must be installed in a cabinet with a protection class of at least IP 54.

Dimension

S10-1



Head Office:
Wieland Electric GmbH
Brennerstraße 10 – 14
D – 96052 Bamberg

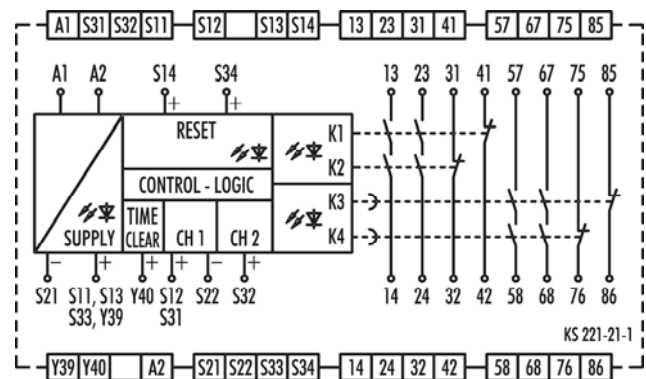
Sales and Marketing Center:
Wieland Electric GmbH
Benzstraße 9
D – 96052 Bamberg

Phone +49 (951) 9324 - 0
Fax +49 (951) 9324 - 198
www.wieland-electric.com
www.gesis-network.com
info@wieland-electric.com

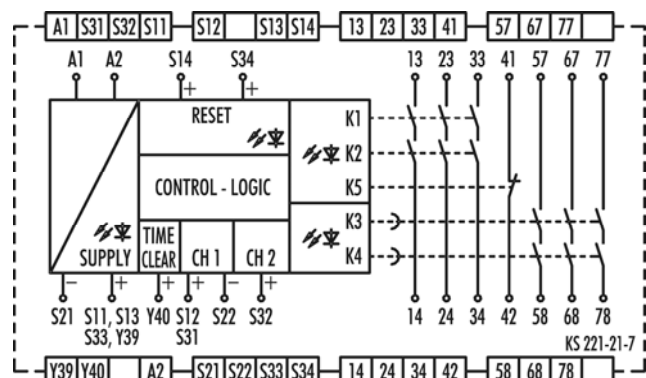
Subject to chance!

Connection Diagram

SNV 4074SL



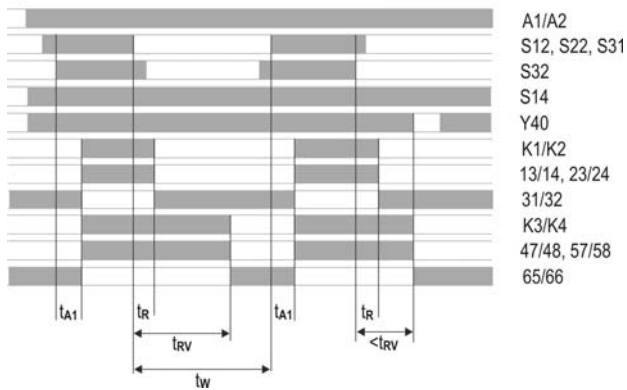
SNV 4076SL



Function Diagram SNV 4074SL

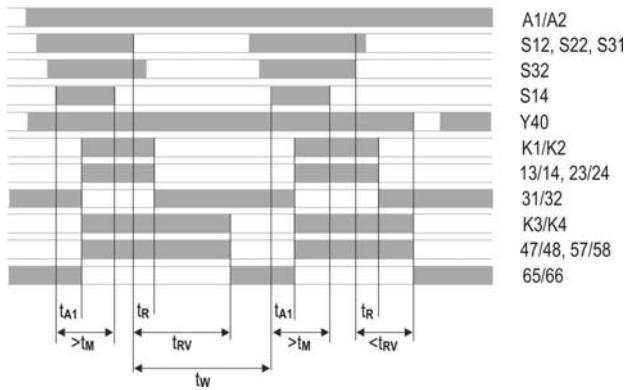
Automatic Reset

FD 221-15-11



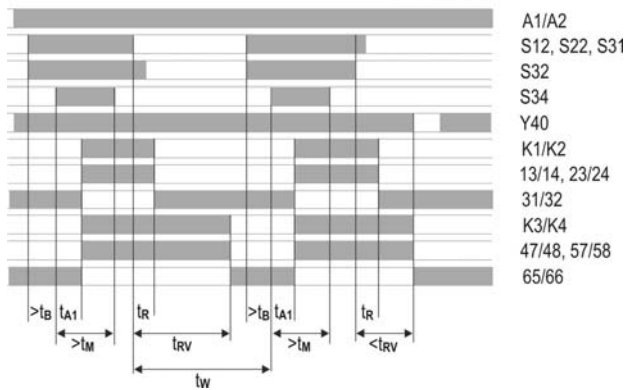
Manual Reset

FD 221-15-12



Manual, monitored Reset

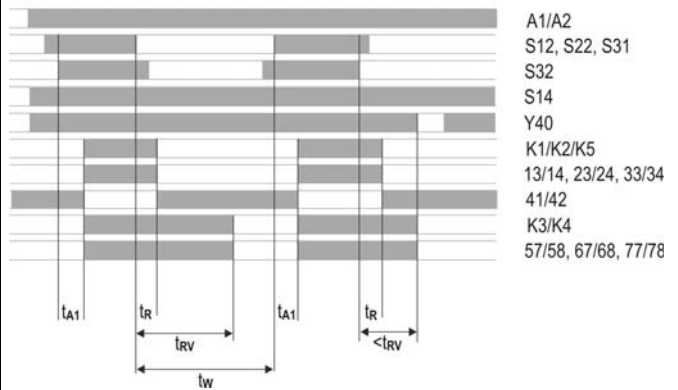
FD 221-15-13



Function Diagramm SNV 4076SL

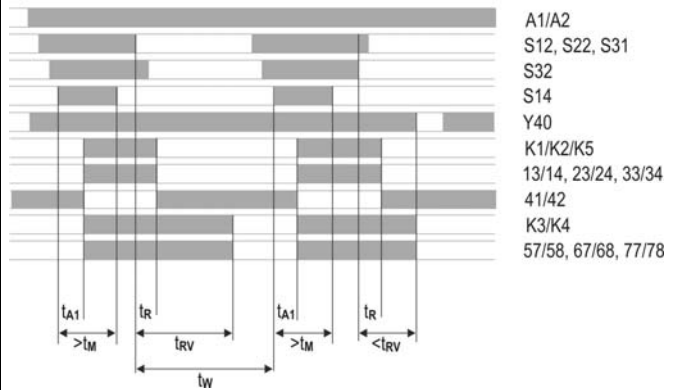
Automatic Reset

FD 221-15-21



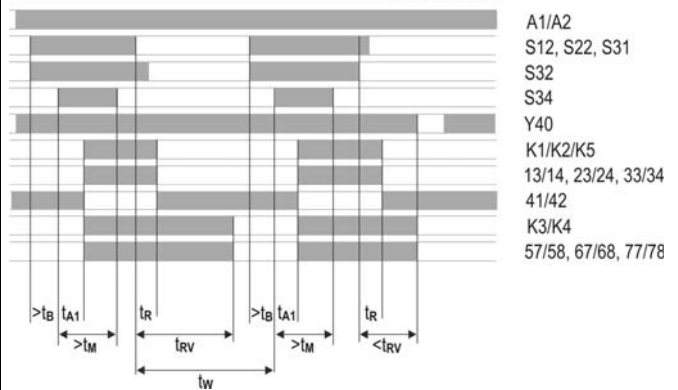
Manual Reset

FD 221-15-22



Manual, monitored Reset

FD 221-15-23



Head Office:
Wieland Electric GmbH
Brennerstraße 10 – 14
D – 96052 Bamberg

Sales and Marketing Center:
Wieland Electric GmbH
Benzstraße 9
D – 96052 Bamberg

Phone +49 (951) 9324 - 0
Fax +49 (951) 9324 - 198
www.wieland-electric.com
www.gesis-network.com
info@wieland-electric.com

Subject to chance!

Technical Data		SNV 407xSL / SNV 407xSL-A / SNV 407xSL-C
Function nach EN 60204-1		Emergency-Stop-Device
Function Display		4 LED (green), 1 LED (red)
Function Diagram	SNV 4074SL SNV 4076SL	FD 0221-15-11, FD 221-15-12, FD 0221-15-13 FD 0221-15-21, FD 221-15-22, FD 0221-15-23
Off-delay-time (t_{RV}), adjustable by rotary switch		0,1 / 0,2 / 0,3 / 0,4 / 0,5 / 0,8 / 1,0 / 1,5 / 2,0 / 3,0 0 / 2,0 / 4,0 / 6,0 / 8,0 / 10 / 15 / 20 / 25 / 30 0 / 20 / 40 / 60 / 80 / 100 / 150 / 200 / 250 / 300
Supply circuit		
Rated voltage		DC 24 V / AC 115 - 230 V
Rated power-consumption AC/DC 24V-Device		2,8 W
Rated power-consumption AC-Device		3,5 W / 7,6 VA
Residual ripple U_{ss}		2,4 V
Rated frequency		50 – 60 Hz
Operating range		0,85 – 1,1 x U_N
Control circuit		
Isolation between A1, A2 and control circuit		Yes, AC-Device
Max. impedance of contactors (1-channel input, at rated voltage)		< 70 Ω
Input voltage S12/S52, S14, S32, S34, S52, Y2, Y40	Low High	-5 V to +5 V +15 V to +30 V
Rated- / peak-current Inputs S12/S22, S14, S32, S34, S52, Y2, Y40		3 / 15 mA
Response time t_{A1}		200 ms
Standby time t_B		300 ms
Release time t_R		< 35 ms
Operating time t_M		> 150 ms
Recovery time t_W		250 ms
Output circuit		
Contacts	SNV 4074SL SNV 4076SL	2 NO (undelayed), 2 NC (undelayed) 2 NO (delayed), 2 NC (delayed) 3 NO (undelayed), 1 NC (undelayed) 3 NO (delayed)
Contact type		Forcebly guided
Contact material		Ag-Alloy
Rated switching voltage U_N		AC 230 V
Max. rated current I_n per contact		6 A
Max. rated current I^2 of all contacts (at 1,1 x U_N)	DC 24 V-Device AC-Device	70 A ² ($T_A = + 45$ °C) bzw. 40 A ² ($T_A = + 55$ °C) 55 A ² ($T_A = + 45$ °C) bzw. 25 A ² ($T_A = + 55$ °C)
Application category acc. EN 60947-5-1		AC-15: U_e 230 V AC, I_e 5 A DC-13: U_e 24 V DC, I_e 5 A
Short-circuit protection, fast		6 A (slow-acting fuse)
Mechanical life-cycle		10^7
General Data		
Creepage and clearance between circuits		acc. EN 60664-1
Rated surge voltage		4 kV
Overvoltage category		III
Contamination level (outside / inside)		3 / 2
Rated voltage		300 V AC
Test-voltage U_{eff} 50 Hz		2 kV
Protection degree acc. DIN EN 60529 (housing/terminals)		IP 40 / IP 20
Ambient temperature T_A , working range		-25 - +55 °C
Screw-terminals		
Cross sections fine-wired/single-wired or fine-wired with ferrule acc. DIN 46228		2 x 0,2 – 0,75 mm ² / 1 x 0,2 – 2,5 mm ² 2 x 0,25 – 0,5 mm ² / 1 x 0,25 – 2,5 mm ²
Spring-force-terminals		
Cross sections fine-wired/single-wired or fine-wired with ferrule acc. DIN 46228		2 x 0,2 – 1,5 mm ² 2 x 0,25 – 1,5 mm ² (AWG 24-16)
Stud torque max.		0,5 – 0,6 Nm
Weight (DC 24 V-Device / AC-Device)		0,35 / 0,40 kg
Approbations (in preparation)		TÜV, cULus
Standards		EN 62061, EN 954-1, prEN ISO 13849-1, EN 50156-1



Head Office:
Wieland Electric GmbH
Brennerstraße 10 – 14
D – 96052 Bamberg

Sales and Marketing Center:
Wieland Electric GmbH
Benzstraße 9
D – 96052 Bamberg

Phone +49 (951) 9324 - 0
Fax +49 (951) 9324 - 198
www.wieland-electric.com
www.gesis-network.com
info@wieland-electric.com

Subject to chance!

Type Overview / Ordering numbers					
Type	Voltage	Dimension	Terminals	Ordering Number	PU
SNV 4074SL, 3s	DC 24 V	S10-1	Screw-terminals fixed	R1.188.2120.0	1
SNV 4074SL, 30s	DC 24 V	S10-1	Screw-terminals fixed	R1.188.2130.0	1
SNV 4074SL, 300s	DC 24 V	S10-1	Screw-terminals fixed	R1.188.2140.0	1
SNV 4074SL-A, 3s	DC 24 V	S10-2	Screw-terminals pluggable	R1.188.2150.0	1
SNV 4074SL-A, 30s	DC 24 V	S10-2	Screw-terminals pluggable	R1.188.2160.0	1
SNV 4074SL-A, 300s	DC 24 V	S10-2	Screw-terminals pluggable	R1.188.2170.0	1
SNV 4074SL-C, 3s	DC 24 V	S10-3	Spring-force-terminals pluggable	R1.188.2180.0	1
SNV 4074SL-C, 30s	DC 24 V	S10-3	Spring-force-terminals pluggable	R1.188.2190.0	1
SNV 4074SL-C, 300s	DC 24 V	S10-3	Spring-force-terminals pluggable	R1.188.2200.0	1
SNV 4074SL, 3s	AC 115 - 230 V	S10-1	Screw-terminals fixed	R1.188.2300.0	1
SNV 4074SL, 30s	AC 115 - 230 V	S10-1	Screw-terminals fixed	R1.188.2310.0	1
SNV 4074SL, 300s	AC 115 - 230 V	S10-1	Screw-terminals fixed	R1.188.2320.0	1
SNV 4074SL-A, 3s	AC 115 - 230 V	S10-2	Screw-terminals pluggable	R1.188.2330.0	1
SNV 4074SL-A, 30s	AC 115 - 230 V	S10-2	Screw-terminals pluggable	R1.188.2340.0	1
SNV 4074SL-A, 300s	AC 115 - 230 V	S10-2	Screw-terminals pluggable	R1.188.2350.0	1
SNV 4074SL-C, 3s	AC 115 - 230 V	S10-3	Spring-force-terminals pluggable	R1.188.2360.0	1
SNV 4074SL-C, 30s	AC 115 - 230 V	S10-3	Spring-force-terminals pluggable	R1.188.2370.0	1
SNV 4074SL-C, 300s	AC 115 - 230 V	S10-3	Spring-force-terminals pluggable	R1.188.2380.0	1
SNV 4076SL, 3s	DC 24 V	S10-1	Screw-terminals fixed	R1.188.2030.0	1
SNV 4076SL, 30s	DC 24 V	S10-1	Screw-terminals fixed	R1.188.2040.0	1
SNV 4076SL, 300s	DC 24 V	S10-1	Screw-terminals fixed	R1.188.2050.0	1
SNV 4076SL-A, 3s	DC 24 V	S10-2	Screw-terminals pluggable	R1.188.2060.0	1
SNV 4076SL-A, 30s	DC 24 V	S10-2	Screw-terminals pluggable	R1.188.2070.0	1
SNV 4076SL-A, 300s	DC 24 V	S10-2	Screw-terminals pluggable	R1.188.2080.0	1
SNV 4076SL-C, 3s	DC 24 V	S10-3	Spring-force-terminals pluggable	R1.188.2090.0	1
SNV 4076SL-C, 30s	DC 24 V	S10-3	Spring-force-terminals pluggable	R1.188.2100.0	1
SNV 4076SL-C, 300s	DC 24 V	S10-3	Spring-force-terminals pluggable	R1.188.2110.0	1
SNV 4076SL, 3s	AC 115 - 230 V	S10-1	Screw-terminals fixed	R1.188.2210.0	1
SNV 4076SL, 30s	AC 115 - 230 V	S10-1	Screw-terminals fixed	R1.188.2220.0	1
SNV 4076SL, 300s	AC 115 - 230 V	S10-1	Screw-terminals fixed	R1.188.2230.0	1
SNV 4076SL-A, 3s	AC 115 - 230 V	S10-2	Screw-terminals pluggable	R1.188.2240.0	1
SNV 4076SL-A, 30s	AC 115 - 230 V	S10-2	Screw-terminals pluggable	R1.188.2250.0	1
SNV 4076SL-A, 300s	AC 115 - 230 V	S10-2	Screw-terminals pluggable	R1.188.2260.0	1
SNV 4076SL-C, 3s	AC 115 - 230 V	S10-3	Spring-force-terminals pluggable	R1.188.2270.0	1
SNV 4076SL-C, 30s	AC 115 - 230 V	S10-3	Spring-force-terminals pluggable	R1.188.2280.0	1
SNV 4076SL-C, 300s	AC 115 - 230 V	S10-3	Spring-force-terminals pluggable	R1.188.2290.0	1



Head Office:
Wieland Electric GmbH
Brennerstraße 10 – 14
D – 96052 Bamberg

Sales and Marketing Center:
Wieland Electric GmbH
Benzstraße 9
D – 96052 Bamberg

Phone +49 (951) 9324 - 0
Fax +49 (951) 9324 - 198
www.wieland-electric.com
www.gesis-network.com
info@wieland-electric.com

Subject to chance!