

K8AK-AW Current Monitoring Relays

Quick Link

R635

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Ultra-Slim 22.5 mm Single Phase Overcurrent and Undercurrent Monitoring Relays

K8AK-AW designed to protect single-phase applications from overcurrent and undercurrent conditions.

- Startup lock time and operating time can be independently set
- Monitor output status via LED indicators
- Two independent SPDT (5 A @ 240 VAC) contacts
- Can be configured for manual or automatic reset
- Dimensions: 90 H x 22.5 W x 100 D mm



X

Ordering Information

Setting Range	Supply Voltage	Output	Model
2 to 20 mA	24 VAC/VDC	2 – SPDT relay, 5 A @ 250 VAC	K8AK-AW1 24VAC/DC
10 to 100 mA 50 to 500 mA	100 to 240 VAC		K8AK-AW1 100-240VAC
0.1 to 1 A AC/DC	24 VAC/VDC		K8AK-AW2 24VAC/DC
0.5 to 5 A AC/DC	100 to 240 VAC		K8AK-AW2 100-240VAC
10 to 100 mA AC*	24 VAC/VDC		K8AK-AW3 24VAC/DC
20 to 200 mA AC*	100 to 240 VAC		K8AK-AW3 100-240VAC

*K8AK-AW3 is designed to be used in combination with OMRON K8AC-CT200L Current Transformer (CT). (Direct input is not possible)

K8AK-PA/PM/PW Phase Monitoring Relays

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Ultra-Slim 3-Phase Voltage Monitoring Relays

K8AK-P series can monitor a 3-phase (3-wire or 4-wire) system on a global basis.

- Monitor 3-phase voltage asymmetry (K8AK-PA)
- Monitor overvoltage, undervoltage, phase sequences and phase loss (K8AK-PM)
- Monitor overvoltages and undervoltages (K8AK-PW)
- K8AK-PA features one SPDT (5 A @ 250 VAC, resistive loads)
- K8AK-PM and -PW feature two independent SPDT (5 A @ 250 VAC, resistive loads) relays which allows for separate outputs for overvoltage and undervoltage detection
- Easy to configure global power specifications which can be configured by adjusting external DIP switches
- Output relay can be configured between normally open and normally closed contacts
- Monitor output status from LED indicators mounted on front of K8AK-P units



Ordering Information

Description	Features	3-Phase, 3-Wire	3-Phase, 4-Wire	Output	Model
3-Phase asymmetry, phase sequence, phase loss	Asymmetry Rate and Operation time settings, Power Indicator, Relays status indicator, Alarm Indicator	200, 220, 230, 240 VAC	115, 0127, 133, 138 VAC	SPDT Relay (5 A @ 250 VAC)	K8AK-PA1
		380, 400, 415, 480 VAC	220, 230, 240, 277 VAC		K8AK-PA2
3-Phase undervoltage, overvoltage, phase sequence, phase loss	Overvoltage, Undervoltage and Operation Time settings, Relay Indicator, Alarm Indicator, Power Indicator	200, 220, 230, 240 VAC	115, 0127, 133, 138 VAC	2 independent SPDT Relays (5 A @ 250 VAC)	K8AK-PM1
		380, 400, 415, 480 VAC	220, 230, 240, 277 VAC		K8AK-PM2
3-Phase undervoltage, overvoltage	Overvoltage, Undervoltage and Operation Time settings, Relay Indicator, Alarm Indicator, Power Indicator	200, 220, 230, 240 VAC	115, 0127, 133, 138 VAC	2 independent SPDT Relays (5 A @ 250 VAC)	K8AK-PW1
		380, 400, 415, 480 VAC	220, 230, 240, 277 VAC		K8AK-PW2

K8AK-PH and K8DS-PH

Phase Monitoring Relays

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Ultra-Slim 3-Phase Phase-sequence and Phase-loss Relays

K8AK-PH and K8DS-PH are designed to protect three-phase applications from transient phase-sequence and phase-loss.

- Capable to distinguish between positive phases, reversed phases, and phase loss when unit is energized (K8DS-PH)
- Capable of detecting phase loss when motor is in operating condition
- SPDT relay (5 A @ 240 VAC, resistive loads)
- Output and relay status can be monitored using LED indicators
- K8AK-PH slim 22.5 mm width
- K8DS-PH slim 17.5 mm width



X

Ordering Information

Description	Features	Rated Input Voltages	Relay Output	Mounting Dimensions	Model
3-Phase phase sequence, phase loss	Power Indicator, Relay Indicator	200 to 480 VAC	5 A @ 250 VAC (resistive load)	100 x 22.5 x 90 mm	K8AK-PH1
3-Phase phase sequence, phase loss	Power Indicator, Relay Indicator	200 to 480 VAC	5 A @ 250 VAC (resistive load)	100 x 17.5 x 90 mm	K8DS-PH1

K8AK-TH Temperature Monitoring Relays

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Space Saving, Ultra Slim 22.5 mm Temperature Monitoring Relays

Prevent equipment against damage from excessive temperature increases.

- Universal-input support for thermocouple and RTD sensors
- Set Value Protection - prohibits changes to set values of the temperature monitoring relay
- Wide range of functions: alarm mode (upper and lower limit), enable/disable latch, selectable temperature setting: degrees Fahrenheit or Celsius
- Simple rotary and DIP switch settings
- Alarm status identification with LED indicator



Specifications

- Temperature sensor inputs:
 - K8AK-TH11S - Thermocouple Types K, J, T, E; Platinum RTD Pt100
 - K8AK-TH12S - Thermocouple Types K, J, T, E, B, R, S, PLII
- Relay capacity: 3 A @ 250 VAC or 30 VDC (resistive load)
- DIN track mounting
- Dimensions: 90 H x 22.5 W x 100 D mm

Ordering Information

Description	Features	Relay Output	Model
Temperature range 0 to 999° C/F	Thermocouple/RTD inputs, 1° C/F setting unit	SPDT 3 A @ 250 VAC (resistive load)	K8AK-TH11S 100-240VAC
			K8AK-TH11S 24VAC/DC
Temperature Range 0 to 1800° C, 0 to 3200° F	Thermocouple/RTD inputs, 10° C/F setting unit		K8AK-TH12S 100-240VAC
			K8AK-TH12S 24VAC/DC

K8AK-LS Liquid Level Controller

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Ultra-Slim 22.5 mm Liquid Level Controller

Protect equipment against damage from unforeseen spills and leaks.

- Reliable, floatless level control for automatic water supply and drainage in industrial facilities and equipment
- Adjustable sensitivity for conductive liquids ranging from distilled water, city water, well water, industrial water, sea water and sewage with specific resistance from 10 to 100 kΩ impedance
- Delay timer to prevent relay contact chatter from waves
- Relay status identification with LED indicator



- Relay capacity: 5 A @ 250 VAC or 30 VDC (resistive load)
- Timer setting: 0.1 to 10 s
- DIN track mounting
- Dimensions: 90 H x 22.5 W x 100 D mm

Ordering Information-Floatless, Conductive Level Controller

Features	Input Voltage	Output	Model
3-electrode system for water supply or drainage control; order electrodes, holders and sockets separately. Adjustable operating resistance sensitivity.	24 VAC/VDC	SPDT 5 A @ 250 VAC/30 VDC	K8AK-LS 24VAC/DC
	100 to 240 VAC		K8AK-LS 100-240VAC

Accessories-Electrode Rods

Application	Model
Purified water service, industrial water, and sewage	F03-60-SUS304
Purified water service, industrial water, sewage, and weak alkaline solutions	F03-60-SUS316

Accessories-Electrode Holders, Covers, Separator

Application	Model
For 3 pole electrode (For general-purpose use such as water supply lines and purified water)	PS-3S
For 4 pole electrode (For general-purpose use such as water supply lines and purified water)	PS-4S
For 35 pole electrode (For general-purpose use such as water supply lines and purified water)	PS-5S
Areas with limited space	PS-31 SUS304 300 mm
Liquids with low resistance	BF-1
When mounting accuracy is required	BF-3/5
Resistance to high-temperature or high-pressure liquids	BS-1
Resistance against corrosion	BS-1T
Long distance installations from liquid	PH-1/2
Protective Cover (Electrode Holders for PS series)	F03-11
Mounting Piece (Electrode Holder for PS series)	F03-12
One Pole Separator	F03-14 1P
Three Pole Separator	F03-14 3P
Five Pole Separator	F03-14 5P

K7L-AT50 Liquid Leak Detector

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X423

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Protect your Process Equipment from Liquid Spills and Leaks

- Detects liquid leaks by monitoring the resistance between conductive sensing bands
- Four selectable sensing ranges for liquids with impedance high as 50 MΩ
- Ideal for all grades of water, ammonia (NH₃), hydrogen peroxide (H₂O₂), hydrochloric acid (HCl), phosphoric acid (H₃PO₄), fluorine (F) and isopropyl alcohol (IPA)
- Track-mount sockets and plug-in sensor amplifier simplify installation and maintenance



Liquid Leakage Sensor

Description	Input signal	Output signal	Dimensions (mm)	Supply voltage	Model
Liquid Leakage Sensor Amplifier	0 to 50 MΩ impedance	NPN open collector, 100 mA at 30 VDC	28.8 H x 12.8 W x 46 D	24 VDC	K7L-AT50

Sensing Bands

Description	Specification and appearance	Model
Sensing band, 1 m length	Sheath: polyethylene; Core: 316 stainless steel; 8 W x 1.7 H mm	F03-16PE-1M
Sensing band, 2 m length		F03-16PE-2M
Sensing band, 5 m length		F03-16PE-5M
Sensing band, 10 m length		F03-16PE-10M
Sensing band, 25 m length		F03-16PE-25M
Sensing band, 50 m length		F03-16PE-50M
Adhesive backed sensing band mounting bracket; 30 per pack	Material: Polyethylene; 13 L x 32 W x 3 H mm	F03-26PES
Screw mount sensing band bracket with two M3.5 dia. hole; 30 per pack	Material: Polyethylene; 13 L x 32 W x 3 H mm	F03-26PEN
Terminal block; 10 per pack	17 H x 29.1 W x 25 D mm Connects Sensing Band to Wiring Cable for sensor amplifier	F03-20
Socket with finger-protection	85.5 H x 16 W x 61 D mm Mounts sensor amplifier to DIN rail	P2RF-08-E
Socket	71.5 H x 19.5 W x 54 D mm Mounts sensor amplifier to DIN rail	P2RF-08

Electromechanical & Solid State Relays

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SOLID STATE RELAYS

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Panel Mounted

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Socket Mounted

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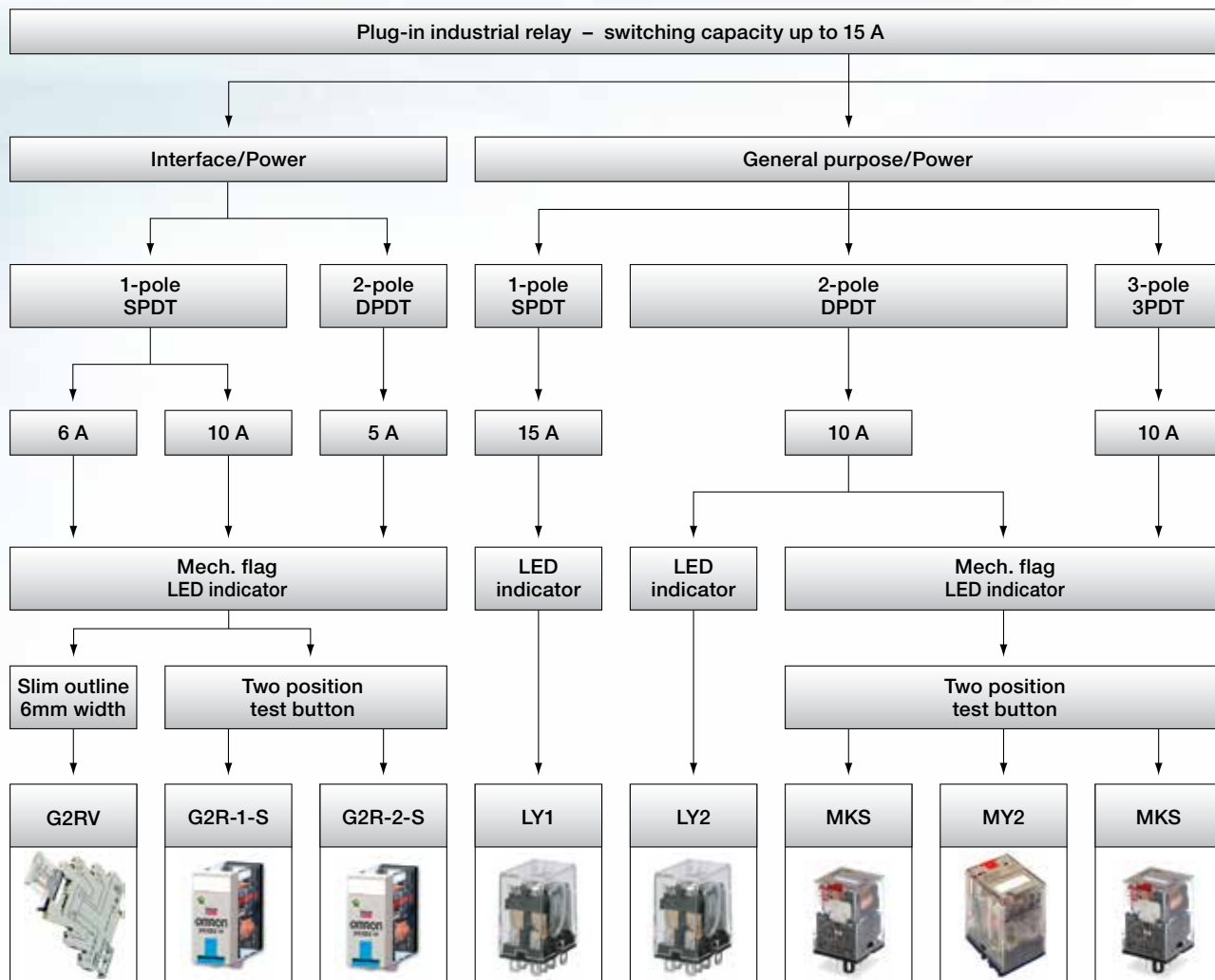
Electromechanical Relays

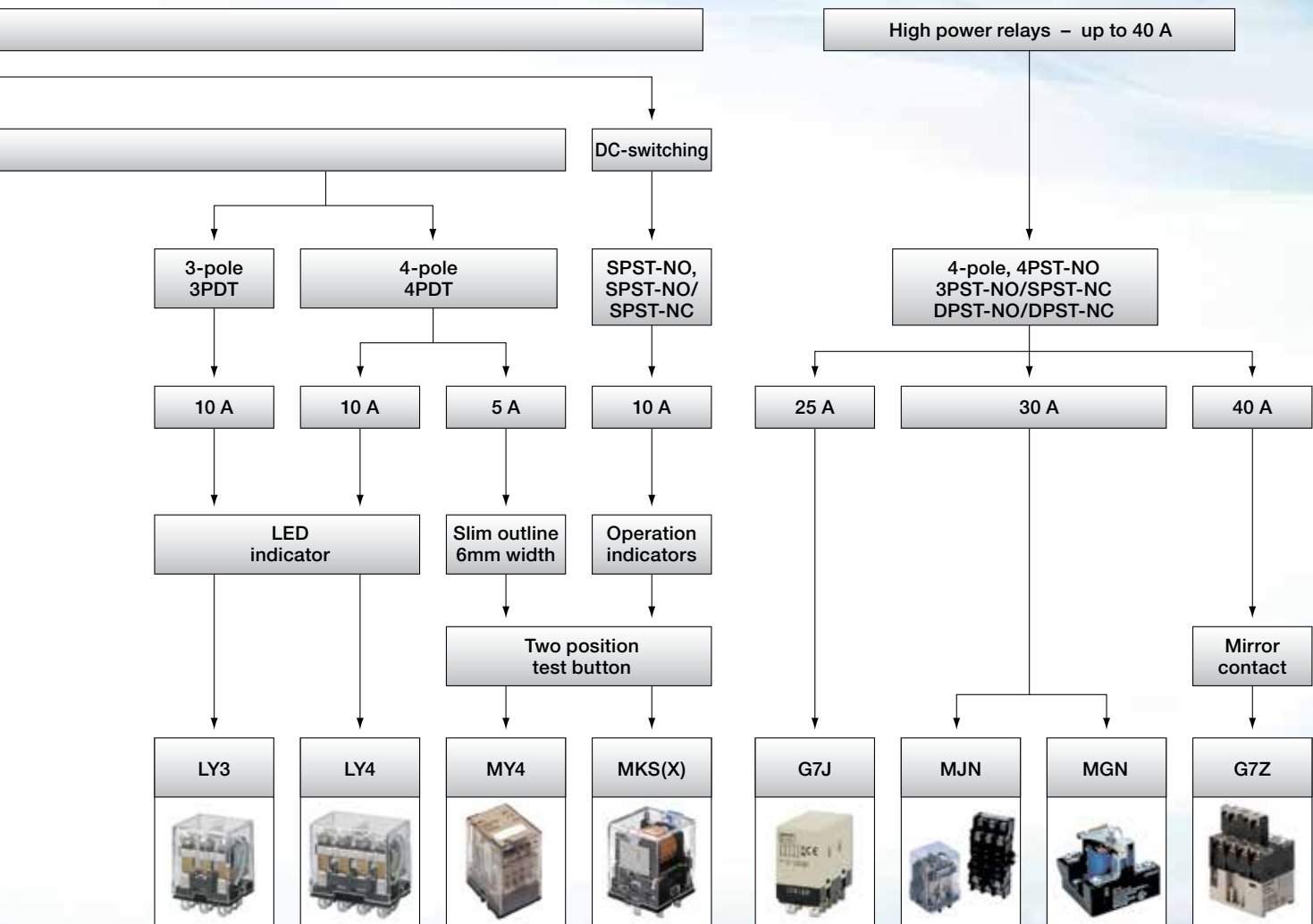
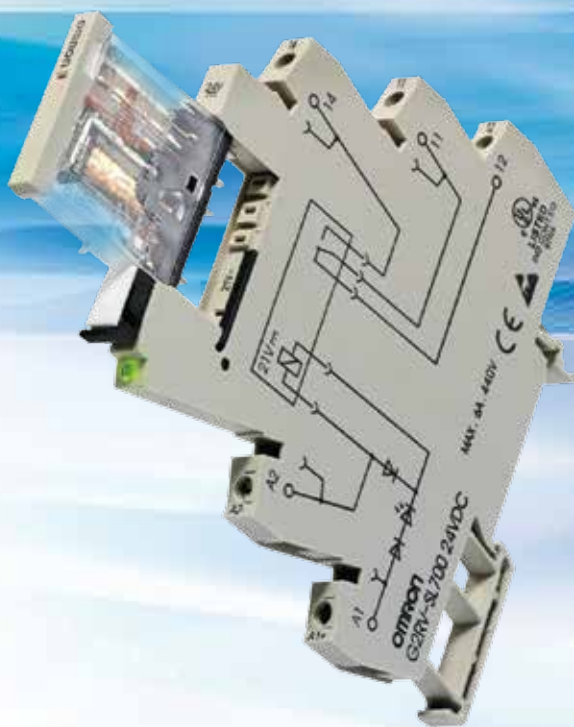
NONBENDABLE!

G2RV-SL500 – Reduce wiring time by using push-in technology and cross bars




With the G2RV-SL500 series, only two steps are required to achieve a reliable connection between wire and terminal. Just remove the isolation and push in the wire. Cross bars make your life even easier, as they can be tailored by breaking pins away to meet your configuration requirements.

- No tools required
- Fits stranded wires (with ferrules) 0.5 - 2.5 mm²
- Fits solid wires 0.5 - 4.0 mm²








Selection Table

Category		Interface/Power			General purpose/Power		
							
Selection criteria	Family	G2RV	G2R□-S		MY		
	1-pole	■	■	–	–	–	–
	2-pole	–	–	■	■	–	–
	3-pole	–	–	–	–	–	–
	4-pole	–	–	–	–	■	■
	Contact configuration	SPDT	SPDT	DPDT	DPDT	4PDT	4PDT bifurcated
	Max. switching current	6 A	10 A	5 A	10 A	5 A	5 A
	Min. switching current	1 mA at 100 VDC	100 mA at 5 VDC	10 mA at 5 VDC	1 mA at 5 VDC	1 mA at 1 VDC	0.1 mA at 1 VDC
	Gold clad/plate	□	–	□	–	■	■
	Width max. (Relay only)	6.2 mm	13.0 mm	13.0 mm	21.5 mm	21.5 mm	21.5 mm
Features	LED indication	■	□	□	□	□	□
	Mechanical flag	■	■	■	■	■	■
	Push-to-test button	–	–	–	–	–	–
	Two position test button	–	□	□	□	□	□
	Label	□	□	□	□	□	□
	Diode (DC coil)	■	□	□	□	□	□
	Varistor (AC coil)	–	–	–	–	–	–
	RC circuit (AC coil)	■	–	–	□	□	□
	Socket mounting	□	□	□	□	□	□
	Flange mounting	–	□	□	□	□	□
PCB mounting	–	□	□	□	□	□	
Wiring to socket	Screw	□	□	□	□	□	□
	Rise-up clamp	□	□	□	□	□	□
	Screw-less clamp	□	□	□	□	□	□




■ Standard □ Available – No/not available

Electromechanical Relays

Category		General purpose/Power									
											
Selection criteria	Family	LY					MKS		MKS(X)		
	1-pole	■	–	–	–	–	–	–	■	–	
	2-pole	–	■	■	–	–	■	–	–	■	
	3-pole	–	–	–	■	–	–	■	–	–	
	4-pole	–	–	–	–	■	–	–	–	–	
	Contact configuration	SPDT	DPDT	DPDT bifurcated	3PDT	4PDT	DPDT	3PDT	SPST-NO	SPST-NO/SPST-NC	
	Max. switching current	15 A	10 A	7 A	10 A	10 A	10 A	10 A	10 A, 220 VDC; 15 A, 250 VAC	5 A, 220 VDC; 15 A, 250 VAC	
	Min. switching current	100 mA at 5 VDC	100 mA at 5 VDC	10 mA at 5 VDC	100 mA at 5 VDC	100 mA at 5 VDC	10 mA at 1 VDC	10 mA at 1 VDC	10 mA at 24 VDC	10 mA at 24 VDC	
	Gold clad/plate	–	–	■	–	–	–	–	–	–	
	Width max. (Relay only)	21.5 mm	21.5 mm	21.5 mm	31.5 mm	41.5 mm	34.5 mm	34.5 mm	34.5 mm	34.5 mm	
Features	LED indication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Mechanical flag	–	–	–	–	–	■	■	–	–	
	Push-to-test button	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	–	–	–	–	
	Two position test button	–	–	–	–	–	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Label	–	–	–	–	–	<input type="checkbox"/>	<input type="checkbox"/>	–	–	
	Diode (DC coil)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Varistor (AC coil)	–	–	–	–	–	<input type="checkbox"/>	<input type="checkbox"/>	–	–	
	RC circuit (AC coil)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Optional for socket	Optional for socket	
	Socket mounting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Flange mounting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	–	–	–	–	
	PCB mounting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	–	–	–	–	
Wiring to socket	Screw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Rise-up clamp	–	–	–	–	–	<input type="checkbox"/>	<input type="checkbox"/>	–	–	
	Screw-less clamp	–	–	–	–	–	–	–	–	–	

■ Standard □ Available – No/not available

Electromechanical Relays

Category		High power						General purpose/Power			High power		
													
Selection criteria	Family	G7J			G7Z			MJN			MGN		
	1-pole	–	–	–	–	–	–	■	–	–	■	–	–
	2-pole	–	–	–	–	–	–	–	■	–	–	■	■
	3-pole	–	–	–	–	–	–	–	–	■	–	–	–
	4-pole	■	■	■	■	■	■	SPDT	DPST DPDT	3PDT	SPST	DPST	DPDT
	Contact configuration	4PST-NO	3PST-NO/ SPST-NC	DPST-NO/ DPST-NC	4PST-NO	3PST-NO/ SPST-NC	DPST-NO/ DPST-NC	10 A	30 A	10 A	30 A	30 A	30 A
	Max. switching current	25 A	25 A	25 A	40 A	40 A	40 A	38.7 mm	38.7 mm	38.7 mm	63.5 mm	63.5 mm	84.3 mm
	Min. permissible load	100 mA at 24 VDC	100 mA at 24 VDC	100 mA at 24 VDC	2 A at 24 VDC	2 A at 24 VDC	2 A at 24 VDC	□	□	□	–	–	–
	Auxiliary contact block Mirror contact	–	–	–	■	■	■	–	–	–	–	–	–
	Momentary test button	–	–	–	–	–	–	□	□	□	–	–	–
Relay terminal	Screw	□	□	□	■	■	■	□	□	□	■	■	■
	Quick-connect	□	□	□	–	–	–	□	□	□	–	–	–
	PCB terminals	□	□	□	–	–	–	–	–	–	–	–	–
Mounting	Screw	–	–	–	■	■	■	–	–	–	■	■	■
	DIN rail	–	–	–	■	■	■	□	□	□	–	–	–
	Bracket (screw)	□	□	□	–	–	–	–	–	–	–	–	–
	Flange (screw)	–	–	–	–	–	–	□	□	□	–	–	–

■ Standard □ Available – No/not available

Sockets & Accessories

Relay Type	DIN rail mount socket		Back connecting socket			
			Quick Connect/Solder Terminal		PCB Terminal	
	Socket	Hold down clip	Socket	Hold down clip	Socket	Hold down clip
G2R-1-S	P2RF-05 P2RF-05-E P2RF-05-S	— — P2CM-S	P2R-05A	—	P2R-057P P2R-05P	— —
G2R-2-S	P2RF-08 P2RF-08-E P2RF-08-S	— — P2CM-S	P2R-08A	—	P2R-057P P2R-08P	— —
LY1, LY2	PTF08A PTF08A-E	PYC-A1 *3 PYC-A1 *3	PT08	PYC-P *4	PT08-0	PYC-P *4
LY3	PTF11A	PYC-A1 *3	PT11	PYC-P *4	PT11-0	PYC-P *4
LY4	PTF14A PTF14A-E	PYC-A1 *3 PYC-A1 *3	PT14	PYC-P *4	PT14-0	PYC-P *4
MJN without mounting flange	PTF11PC	PYMJN-S	PTF11QDC	PYMJN-PCB	PTFPCB	PYMJN-PCB
MKK	PF113A	PFC-A1	PL11	PLC	PLE11-0	PLC-10
MKS2P	PF083A PF083A-E PF083A-D	PFC-A1 PFC-A1 —	—	—	—	—
MKS3P	PF113A PF113A-E PF113A-D	PFC-A1 PFC-A1 —	—	—	—	—
MKS(X)	P7MF-06 P7MF-06-D	PYC-A2 PYC-A2	—	—	P7M-06P	PYC-A2
MY2(S) without Latching lever	PYF08A-E PYF08A-N PYF08S	PYC-A1 PYC-A1 PYCM-08S	PY08 PY08-Y1	—	PY08-02	PYC-P or PYC-P2
MY2(S) with Latching lever	PYF08A-E PYF08A-N PYF08S	PYC-E1 PYC-E1 PYCM-08S	PY08	PYC-P2	PY08-02	PYC-P2
MY4(S)	PYF14A-E PYF14A-N PYF14S	PYC-A1 PYC-A1 PYCM-14S	PY14 PY14-Y1	PYC-P or PYC-P2 -	PY14-02	PYC-P or PYC-P2
MY2K	PYF14A-E	PYC-A1	PY14	PYC-P	PY14-02	PYC-P
MY4(Z)H	PYF14A-E	PYC-A1	—	—	—	—
MJN	PTF11PC PTF21PC	PYMJN-S	PTF11QDC	PYMNB-PCB	PTFPCB	PYMNB-PCB

Note: 1. -E and -N models are finger-protect construction. Round terminals cannot be used. Use Y-shaped terminals.
 2. -S or S types are screwless terminal styles.
 3. RC circuit type need to use Y92H-3 hold down clips.
 4. Push button type need to use PYC-P2, RC circuit need to use PYC-1 hold down clips.

Relay Type	Mounting	Adaptor	Front connecting socket
	Bracket	Track Mount/Panel Mount	Track Mount/Panel Mount
G7J-(All)	R99-04-FOR-G5F	—	—

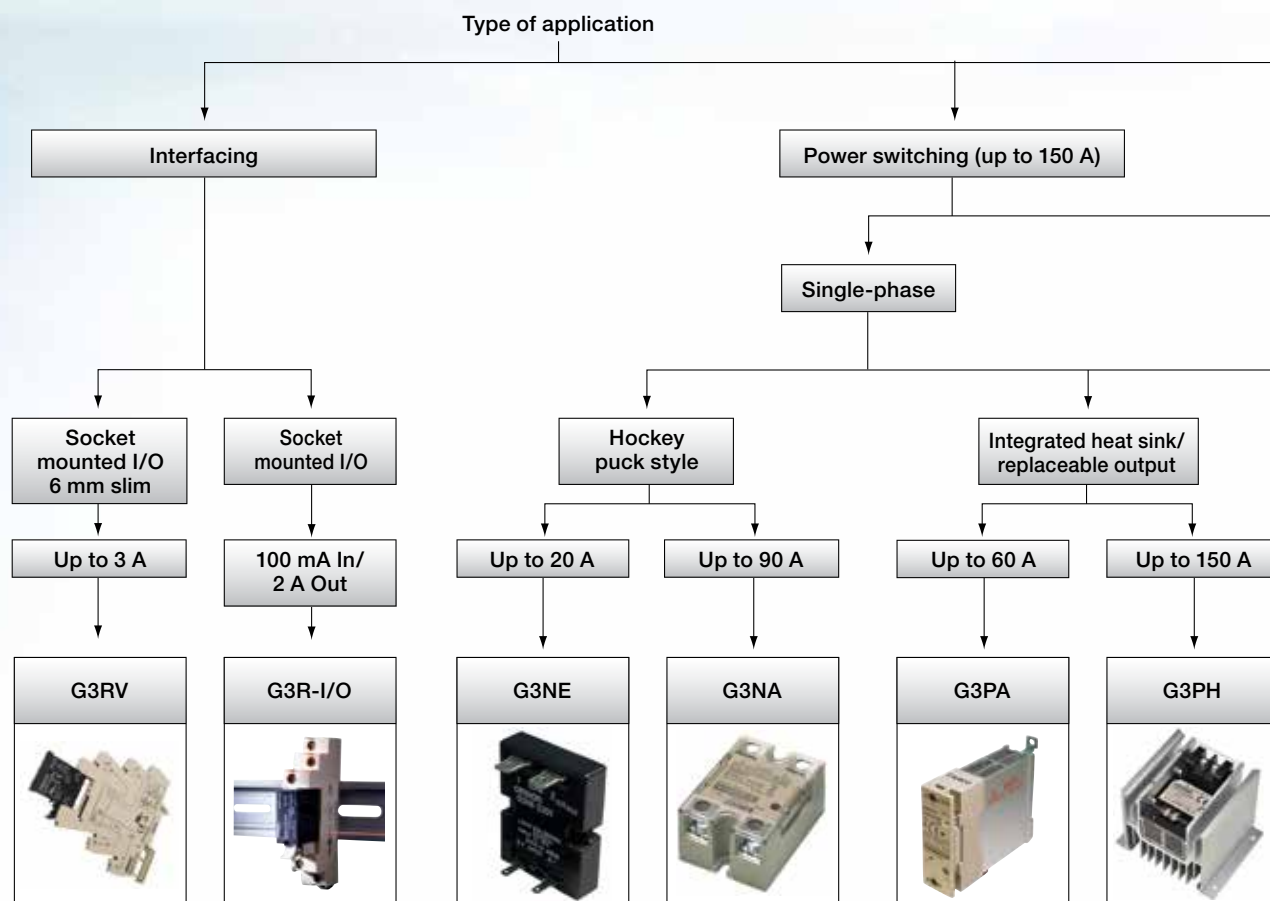
Solid State Relays

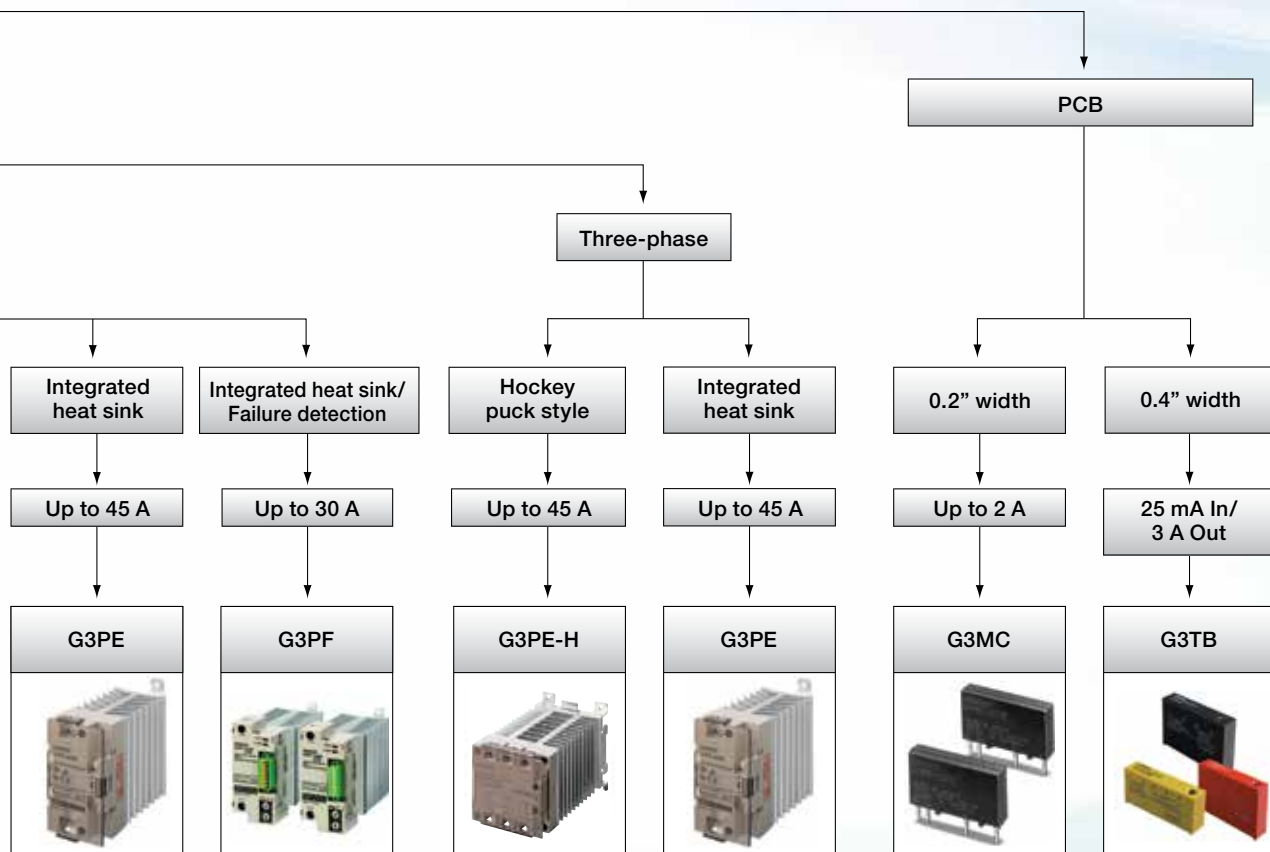
VARIOUS KINDS OF SOLID STATE RELAYS

G3□ series – Reliable interfacing and power switching




Omron offers Solid State Relays (SSRs) in a wide variety of output currents and voltages to handle frequently cycling loads. Control-panel mount types with built-in heat-sink (G3PE) and without (G3NA) are ideal for power switching. Compact SSRs for I/O Interfacing include ultra-slim G3RV and G3R.

- Industrial 6 mm ‘slim’ SSR which is G2RV compatible (G3RV)
- G2RS compatible high-speed interface solutions (G3R-I/O)
- G3NA with 5-90 A output current, G3PE up to 45 A
- Output voltages up to 660 VAC / 200 VDC available on G3NA
- Effectively absorbing of external surge thanks to the built-in varistor/surge pass circuit









Selection Table

Category		Socket mounted			Panel mounted
					
Model		G3RV	G3R-I/O		G3NE
			Input Module	Output Module	
Application	Signal Switching	■	■	□	–
	Heater Control	□	–	□	■
	Motor Control	□	–	□	■
Load Voltage/ current Rating	A	Max. current rating 2 A (AC) 3 A (DC)	100 mA (DC)	2 A (AC, DC)	20 A (AC)
	VAC	200 V Range	75 to 264 V	–	75 to 264 V
		400 V Range	–	–	–
		600 V Range	–	–	–
VDC	DC Output Range	3 to 26.4	4 to 32 V	4 to 60 V 40 to 200 V	–
Input Voltage	DC	■	■	■	■
	AC	■	■	–	–
Features	Built-in Heat Sink	–	–	–	–
	Zero-cross Circuit	□	–	□	□
	Built-in Varistor	–	–	–	■
	LED Indicator	■	■	■	–
	Protective Cover	–	–	–	–
Mounting	DIN-Rail	■	–	–	□
	Panel	–	–	–	■
	Socket (DIN, Panel)	■	■	■	■
	PCB	N/A	N/A	N/A	■
Safety Standards	UL Recognized	■	■	■	■
	UL Listed	■	–	–	–
	CSA	■	■	■	■
	CE	■	■	■	■
	TÜV	■	■	■	■
	VDE	–	–	–	–




■ Standard □ Available – No/not available

Solid State Relays

Category		Panel mounted					
							
Model		G3NA	G3PA	G3PH	G3PE		
					1-phase	3-phase	
Application	Signal Switching	–	–	–	–	–	
	Heater Control	■	■	■	■	■	
	Motor Control	■	□	–	–	–	
Load Voltage/ current Rating	A	90 A (AC) 10 A (DC)	60 A (AC)	150 A (AC)	45 A (AC)	45 A (AC)	
	VAC	200 V Range	19 to 264 V	19 to 264 V	75 to 264 V	75 to 264 V	75 to 264 V
		400 V Range	180 to 528 V	150 to 440 V 180 to 528 V	180 to 528 V	180 to 528 V	180 to 528 V
		600 V Range	360 to 660 V	–	–	–	–
VDC	DC Output Range	4 to 220 V	–	–	–	–	
Input Voltage	DC	–	■	■	■	■	
	AC	■	□ by using G32A-B	□ by using G32A-B	□ by using G32A-B	□ by using G32A-B	
Features	Built-in Heat Sink	–	■	■	■	■	
	Zero-cross Circuit	■	□	□	□	■	
	Built-in Varistor	■	■	■	■	■	
	LED Indicator	■	■	■	■	■	
	Protective Cover	■	■	■	■	■	
	Replaceable Power Cartridge	–	■	■	–	–	
Mounting	DIN-Rail	□	■	–	■	□	
	Panel	■	■	■	■	■	
	Socket (DIN, Panel)	–	–	–	–	–	
	PCB	–	–	–	–	–	
Safety Standards	UL Recognized	■	■	cULus	■	■	
	UL Listed	–	–	–	–	–	
	CSA	■	■	cULus	■	■	
	CE	■	■	■	■	■	
	TÜV	■	–	■	■	■	
	VDE	–	■	–	–	–	

■ Standard □ Available – No/not available

Selection Table

Category		Panel mounted	PCB mounted			
						
Model		G3PF	G3MC	G3TB		
				Input Module	Output Module	
Application	Signal Switching	–	□	■	□	
	Heater Control	■	□	–	□	
	Motor Control	–	□	–	□	
Load Voltage/ current Rating	A	Max. current rating	35 A (AC)	2 A (AC)	25 mA	3 A (AC)
	VAC	200 V Range	75 to 264 V	75 to 132 V 75 to 264 V	–	75 to 264 V
		400 V Range	180 to 528 V	–	–	–
		600 V Range	–	–	–	–
VDC	DC Output Range	–	–	4 to 32 V	4 to 60 V 40 to 200 V	
Input Voltage	DC	■	■	■	■	
	AC	□ by using G32A-B	–	■	–	
Features	Built-in Heat Sink	■	–	–	–	
	Zero-cross Circuit	■	■	□	□	
	Non-Zero-cross Circuit	–	■	□	□	
	Built-in Varistor	■	–	–	–	
	LED Indicator	■	–	■	□	
	Protective Cover	■	–	–	–	
	Alarm Output	■	–	–	–	
	Built-in Failure Detection	■	–	–	–	
	SSR Open Circuits Detection	■	–	–	–	
	SSR Short Circuit Detections	■	–	–	–	
Mounting	DIN-Rail	■	–	–	–	
	Panel	■	–	–	–	
	Socket (DIN, Panel)	–	–	–	–	
	PCB	–	■	■	■	
Safety Standards	UL Recognized	□	■	■	■	
	UL Listed	–	–	–	–	
	CSA	■	■	■	■	
	CE	■	–	–	–	
	TÜV	■	–	–	–	
	VDE	–	■	–	–	

■ Standard □ Available – No/not available

G2RV Industrial Plug-in Relay

Quick Link

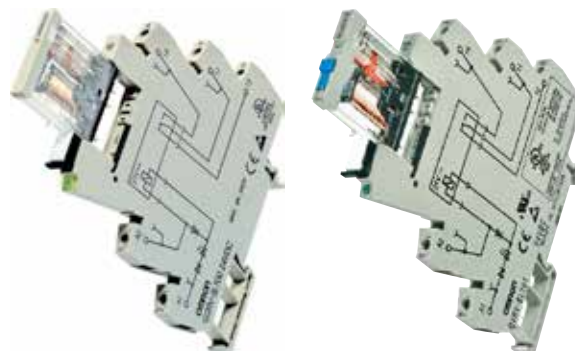
R226

omron247.com

General Purpose Plug-in Ultra Slim Relay Switching 6 A @ 250 VAC

The G2RV is an ultra-slim 6 mm wide DIN mount relay-socket unit with maintenance friendly features.

- Mechanical indicator and socket LED provide quick verification relay is functioning
- Large terminal-receptacle area: 20 to 14 AWG
- Electrical Life of 100K Cycles lasting performance
- Interface and cable accessories allow PLC control of G2RV Relays
- Cross (Bus) bars provide a quick and easy way to connect multiple G2RV Relays together
- RoHS Compliant; Relay-Socket models cULus Listed; VDE, CE, and cULus approved



- For PLC input control use gold plated contact versions with suffix "-AP"

Ordering Information

Rated resistive load	Contact form	Socket terminals	LED indicator on socket	Coil voltage	Model
6 A @ 250 VAC	SPDT	Push-in	Yes	110 VAC	G2RV-SL500 AC110
				24 VDC	G2RV-SL500 DC24(DC21)
6 A @ 250 VAC	SPDT	Screw	Yes	24 VAC/24 VDC	G2RV-SL700 AC/DC24
				110 VAC	G2RV-SL700 AC110
				230 VAC	G2RV-SL700 AC230
				12 VDC	G2RV-SL700 DC12(DC11)
				24 VDC	G2RV-SL700 DC24(DC21)

Note: Model number contains relay and socket.

G2RV with Mechanical Flag

Standard Type with test switch					
Rated resistive load	Contact form	Socket terminals	LED indicator on socket	Coil voltage	Model
6 A	SPDT	Screw	Yes	24 VDC	G2RV-SL701 24 VDC
				24 VAC/VDC	G2RV-SL701 24 VAC/VDC
		Push-in		24 VDC	G2RV-SL501 24 VDC
				24 VAC/VDC	G2RV-SL501 24 VAC/VDC
Standard Type with gold plating contacts					
50mA	SPDT	Screw	Yes	12 VDC	G2RV-SL700-AP DC12
				24 VDC	G2RV-SL700-AP DC24
				24 VAC/VDC	G2RV-SL700-AP AC/DC24
				48 VAC/VDC	G2RV-SL700-AP AC/DC48
				110 VAC	G2RV-SL700-AP AC110
				230 VAC	G2RV-SL700-AP AC230
		Push-in		12 VDC	G2RV-SL500-AP DC12
				24 VDC	G2RV-SL500-AP DC24
				24 VAC/VDC	G2RV-SL500-AP AC/DC24
				48 VAC/VDC	G2RV-SL500-AP AC/DC48
				110 VAC	G2RV-SL500-AP AC110
				230 VAC	G2RV-SL500-AP AC230

G2RV Input Modules with Slide Switch

Rated resistive load	Contact form	Socket terminals	LED indicator on socket	Coil voltage	Model
6 A @ 250 VAC	SPDT	Push-in	Yes	12 VDC	G2RV-SL500-AP DC12
				24 VDC	G2RV-SL500-AP DC24
				24 VAC/VDC	G2RV-SL500-APAC/DC24
				48 VAC/VDC	G2RV-SL500-AP AC/DC48
				110 VAC	G2RV-SL500-AP AC110
				230 VAC	G2RV-SL500-AP AC230
6 A @ 250 VAC	SPDT	Screw	Yes	12 VDC	G2RV-SL700-AP DC12
				24 VDC	G2RV-SL700-AP DC24
				24 VAC/VDC	G2RV-SL700-APAC/DC24
				48 VAC/VDC	G2RV-SL700-AP AC/DC48
				110 VAC	G2RV-SL700-AP AC110
				230 VAC	G2RV-SL700-AP AC230

G2R□-S Industrial Plug-in Relay

Quick Link

R225

omron247.com

Slim and Space-saving Plug-in Relay

The G2R□-S is a maintenance-friendly 5 A - 10 A 1/2 inch wide general purpose relay.

- Mechanical indicator comes standard allowing user to verify contact operation
- Space saving 16 mm wide DIN mount socket
- Finger safe G2R□-S socket
- Energy efficient DC coil (530 mW consumption)
- RoHS Compliant; UL, CSA, CE, and VDE Approved



Ordering Information

Rated resistive load	Contact form	Terminal type	LED indicator	Diode	Two position test button	Coil voltage	Model
10 A @ 250 VAC	SPDT	Plug-in	No	No	No	120 VAC	G2R-1-S AC120 (S)
10 A @ 250 VAC	SPDT	Plug-in	No	No	No	24 VDC	G2R-1-S DC24 (S)
10 A @ 250 VAC	SPDT	Plug-in	Yes	No	No	120 VAC	G2R-1-SN AC120 (S)
10 A @ 250 VAC	SPDT	Plug-in	Yes	Yes	No	24 VDC	G2R-1-SND DC24 (S)
10 A @ 250 VAC	SPDT	Plug-in	Yes	Yes	Yes	24 VDC	G2R-1-SNDI DC24 (S)
5 A @ 250 VAC	DPDT	Plug-in	No	No	No	24 VDC	G2R-2-S DC24 (S)
5 A @ 250 VAC	DPDT	Plug-in	Yes	No	No	120 VAC	G2R-2-SN AC120 (S)
5 A @ 250 VAC	DPDT	Plug-in	Yes	Yes	No	24 VDC	G2R-2-SND DC24 (S)
5 A @ 250 VAC	DPDT	Plug-in	Yes	Yes	Yes	24 VDC	G2R-2-SNDI DC24 (S)
5 A @ 250 VAC	DPDT	Plug-in	Yes	No	Yes	120 VAC	G2R-2-SNI AC120 (S)

Note: Corresponding sockets can be found on page Y-vii.

MY Industrial Plug-in Relay

Quick Link

R223

omron247.com

Miniature General Purpose Relay

The MY is a multi-pole long life general purpose relay ideal for various applications.

- DPDT models: 500K electrical life cycles; 4PDT models: 200K (100K bifurcated) at Rated Load
- MY2K Latching relays: Great option for reduced energy consumption
- MY4Z bifurcated models can switch loads under 1 mA at 1 VDC; great for PLC Control
- RoHS Compliant; UL, CSA, CE, VDE, SEV, IMQ and Lloyd Approved



Ordering Information

MY

Quick Link R223 omron247.com

Factory rated resistive load	Contact Form	Mounting Style	Bifurcated model	LED indicator	LED indicator/Lockable test button	Diode	Coil voltage	Model
5 A @ 250 VAC	DPDT	Socket	No	Yes	No	No	24 VDC	MY2N DC24(S)
5 A @ 250 VAC	DPDT	Socket	No	Yes	No	No	24 VAC	MY2N AC24(S)
5 A @ 250 VAC	DPDT	Socket	No	Yes	No	No	110/120 VAC	MY2N AC110/120(S)
5 A @ 250 VAC	DPDT	Socket	No	Yes	No	No	220/240 VAC	MY2N AC220/240(S)
5 A @ 250 VAC	DPDT	Socket	No	No	Yes	Yes	24 VDC	MY2N-D2 DC24(S)
5 A @ 250 VAC	DPDT	Socket	No	No	Yes	No	12 VDC	MY2IN DC12(S)
5 A @ 250 VAC	DPDT	Socket	No	No	Yes	No	24 VDC	MY2IN DC24(S)
5 A @ 250 VAC	DPDT	Socket	No	No	Yes	No	24 VAC	MY2IN AC24(S)
5 A @ 250 VAC	DPDT	Socket	No	No	Yes	No	110/120 VAC	MY2IN AC110/120(S)
5 A @ 250 VAC	DPDT	Socket	No	No	Yes	No	110/120 VAC	MY2IN AC220/240(S)
3 A @ 250 VAC	4PDT	Socket	No	Yes	No	No	24 VAC	MY4N AC24(S)
3 A @ 250 VAC	4PDT	Socket	No	Yes	No	No	110/120 VAC	MY4N AC110/120(S)
3 A @ 250 VAC	4PDT	Socket	No	No	Yes	No	12 VDC	MY4N DC12(S)
3 A @ 250 VAC	4PDT	Socket	No	No	Yes	No	24 VAC	MY4IN AC24(S)
3 A @ 250 VAC	4PDT	Socket	No	No	Yes	No	24 VDC	MY4IN DC24(S)
3 A @ 250 VAC	4PDT	Socket	No	No	Yes	No	110/120 VAC	MY4IN AC110/120(S)
3 A @ 250 VAC	4PDT	Socket	No	No	Yes	No	110/120 VAC	MY4IN AC220/240(S)
3 A @ 250 VAC	4PDT	Socket	No	Yes	No	No	24 VDC	MY4N-D2 DC24(S)
3 A @ 250 VAC	4PDT	Socket	Yes	Yes	Yes	No	24 VDC	MY4ZIN DC24(S)
3 A @ 250 VAC	4PDT	Socket	Yes	Yes	No	No	110/120 VAC	MY4ZIN AC110/120(S)
3 A @ 250 VAC	4PDT	PCB	No	No	No	No	12 VDC	MY4-02 DC12

Note: Corresponding sockets can be found on page Y-vii.

MYK

Quick Link R238 omron247.com

Factory rated resistive load	Contact form	Terminal type	Bifurcated model	Two position test button	LED indicator	Diode	Coil voltage	Model
3 A @ 250 VAC	DPDT	Plug-in	No	No	No	No	120 VAC	MY2K-US AC120*

*This model is a latching relay.

LY Industrial Plug-in Relay

Quick Link

R224

omron247.com

Long Life General Purpose Relay with HP Rating Ideal for HVAC and Appliance Market

The LY is a reliable multi-pole general purpose relay with Plug-in, Quick Connect and PCB Terminals.

- 500K electrical life DPDT models; 200K for SPDT, 3PDT, and 4PDT models at rated load
- HP rating ideal for Appliances and HVAC Systems
- RoHS Compliant; CE, UL, CSA, SEV, VDE and TÜV Approved



Ordering Information

Rated resistive	Contact form	Mounting Style	UL horsepower	LED indicator	Diode	Coil voltage	Model
15 A @ 110 VAC	SPDT	Socket	0.5 HP @120 VAC	No	No	12 VDC	LY1 DC12
15 A @ 110 VAC	SPDT	Socket	0.5 HP @120 VAC	No	No	24 VDC	LY1 DC24
15 A @ 110 VAC	SPDT	Socket	0.5 HP @120 VAC	No	No	24 VAC	LY1 AC24
15 A @ 110 VAC	SPDT	Socket	0.5 HP @120 VAC	No	No	110/120 VAC	LY1 AC110/120
15 A @ 110 VAC	SPDT	Flange	0.5 HP @120 VAC	No	No	24 VDC	LY1F DC24
10 A @ 110 VAC	DPDT	Socket	0.5 HP @120 VAC	No	No	12 VDC	LY2 DC12
10 A @ 110 VAC	DPDT	Socket	0.5 HP @120 VAC	No	No	24 VDC	LY2 DC24
10 A @ 110 VAC	DPDT	Socket	0.5 HP @120 VAC	No	No	24 VAC	LY2 AC24
10 A @ 110 VAC	DPDT	Socket	0.5 HP @120 VAC	No	No	110/120 VAC	LY2 AC110/120
10 A @ 110 VAC	DPDT	Socket	0.5 HP @120 VAC	Yes	Yes	110/120 VAC	LY2N AC110/120
10 A @ 110 VAC	DPDT	PCB	0.5 HP @120 VAC	No	No	12 VDC	LY2-0 DC12
10 A @ 110 VAC	DPDT	Socket	0.5 HP @120 VAC	No	No	110/120 VAC	LY2-0 AC110/120
10 A @ 110 VAC	3PDT	Socket	0.5 HP @ 240 VAC	No	No	12 VDC	LY3 DC12
10 A @ 110 VAC	3PDT	Socket	0.5 HP @ 240 VAC	No	No	24 VDC	LY3 DC24
10 A @ 110 VAC	3PDT	Socket	0.5 HP @ 240 VAC	No	No	24 VAC	LY3 AC24
10 A @ 110 VAC	3PDT	Socket	0.5 HP @ 240 VAC	No	No	110/120 VAC	LY3 AC110/120
10 A @ 110 VAC	4PDT	Socket	0.5 HP @ 240 VAC	No	No	12 VDC	LY4 DC12
10 A @ 110 VAC	4PDT	Socket	0.5 HP @ 240 VAC	No	No	24 VDC	LY4 DC24
10 A @ 110 VAC	4PDT	Socket	0.5 HP @ 240 VAC	No	No	24 VAC	LY4 AC24
10 A @ 110 VAC	4PDT	Socket	0.5 HP @ 240 VAC	No	No	110/120 VAC	LY4 AC110/120

Note: Corresponding sockets can be found on page Y-vii.

MKS Industrial Plug-in Relay

Quick Link

R235

omron247.com

General Purpose Relay with Octal Base, Latching Test Button

Two- and three-pole socket mount relays with UL Rated 10 A resistive Load @ 250 VAC/ 30 VDC, and 100K cycles.

- Mechanical indicator comes standard, allowing user to verify contact operation
- Manual and latched position testing possible when using MKS Test Button Models
- LED indicator models come with white name plate ideal for marking key notes
- RoHS Compliant; cULus Recognized; CE, and TÜV Approved



- Various internal connection for MRO purpose: Standard type (-5), non-Standard type (-2 or blank)

Ordering Information

Rated resistive Load (NO Contact)	Contact Form	Mounting Style	Mechanical indicator	Mechanical indicator/LED indicator	Mechanical indicator/LED indicator/Push-to-test button	Coil voltage	Model
10 A @ 250 VAC/30 VDC	DPDT	Socket	Yes	No	No	12 VDC	MKS2P DC12
10 A @ 250 VAC/30 VDC	DPDT	Socket	Yes	No	No	24 VDC	MKS2P DC24
10 A @ 250 VAC/30 VDC	DPDT	Socket	Yes	No	No	24 VAC	MKS2P AC24
10 A @ 250 VAC/30 VDC	DPDT	Socket	Yes	No	No	120 VAC	MKS2P AC120
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	Yes	No	12 VDC	MKS2PN DC12
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	Yes	No	24 VDC	MKS2PN DC24
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	Yes	No	24 VAC	MKS2PN AC24
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	Yes	No	120 VAC	MKS2PN AC120
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	No	Yes	12 VDC	MKS2PIN DC12
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	No	Yes	24 VDC	MKS2PIN DC24
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	No	Yes	24 VAC	MKS2PIN AC24
10 A @ 250 VAC/30 VDC	DPDT	Socket	No	No	Yes	120 VAC	MKS2PIN AC120
10 A @ 250 VAC/30 VDC	3PDT	Socket	Yes	No	No	12 VDC	MKS3P-5 DC12
10 A @ 250 VAC/30 VDC	3PDT	Socket	Yes	No	No	24 VDC	MKS3P-5 DC24
10 A @ 250 VAC/30 VDC	3PDT	Socket	Yes	No	No	24 VAC	MKS3P-5 AC24
10 A @ 250 VAC/30 VDC	3PDT	Socket	Yes	No	No	120 VAC	MKS3P-5 AC120
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	Yes	No	12 VDC	MKS3PI-5 DC12
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	Yes	No	24 VDC	MKS3PI-5 DC24
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	Yes	No	24 VAC	MKS3PI-5 AC24
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	Yes	No	120 VAC	MKS3PI-5 AC120
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	No	Yes	12 VDC	MKS3PIN-5 DC12
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	No	Yes	24 VDC	MKS3PIN-5 DC24
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	No	Yes	24 VAC	MKS3PIN-5 AC24
10 A @ 250 VAC/30 VDC	3PDT	Socket	No	No	Yes	120 VAC	MKS3PIN-5 AC120

Note: Corresponding sockets can be found on page Y-vii.

MJN Industrial Plug-in Relay

Quick Link

R232

omron247.com

Multi-Pole 10-30 A General Purpose Relay with 600 VAC Maximum Switching Voltage

The MJN is an SPDT, DPDT, and 3PDT general purpose relay ideal for motor applications.

- UL and CSA Recognized as motor controllers up to 600 VAC
- 10 A models have UL 1/3 HP @ 120 VAC
- Rugged power divider offers 3/16" clearance and 3/8" creepage
- MJN models have max. 15 A @ 600 VAC load rating
- MJN capable of switching 277 VAC loads
- 10 A DPDT latching models available; a good option for reducing power consumption.



Ordering Information

Rated resistive Load (NO Contact)	Contact Form	Mounting Style	Latching Model	LED indicator	Test Button	Coil Voltage	Model
10 A @ 240 VAC/28 VDC	SPDT	Socket	No	No	No	12 VDC	MJN1C DC12
10 A @ 240 VAC/28 VDC	SPDT	Socket	No	No	No	24 VDC	MJN1C DC24
10 A @ 240 VAC/28 VDC	SPDT	Socket	No	No	No	24 VAC	MJN1C AC24
10 A @ 240 VAC/28 VDC	SPDT	Socket	No	No	No	120 VAC	MJN1C AC120
10 A @ 240 VAC/28 VDC	SPDT	Flange	No	No	No	12 VDC	MJN1CF DC12
30 A @ 28 VDC	SPDT	Flange	No	No	No	120 VAC	MJN1Z-E-RP AC120
10 A @ 240 VAC/28 VDC	DPDT	Socket	No	No	No	12 VDC	MJN2C DC12
10 A @ 240 VAC/28 VDC	DPDT	Socket	No	No	No	24 VDC	MJN2C DC24
10 A @ 240 VAC/28 VDC	DPDT	Socket	No	No	No	24 VAC	MJN2C AC24
10 A @ 240 VAC/28 VDC	DPDT	Socket	No	No	No	120 VAC	MJN2C AC120
10 A @ 240 VAC/28 VDC	DPDT	Socket	No	No	No	110 VDC	MJN2C DC110
20 A @ 277 VAC/28 VDC	DPDT	Flange	No	No	No	120 VAC	MJN2C-E AC120
10 A @ 240 VAC/28 VDC	DPDT	Flange	No	No	No	24 VAC	MJN2CF AC24
10 A @ 240 VAC/28 VDC	DPDT	Flange	Yes	No	No	120 VAC	MJN2CK AC120
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	No	No	12 VDC	MJN3C DC12
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	No	No	24 VDC	MJN3C DC24
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	No	No	24 VAC	MJN3C AC24
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	No	No	120 VAC	MJN3C AC120
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	Yes	Yes	120 VAC	MJN3C-IN AC120
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	Yes	No	24 VDC	MJN3C-N DC24
10 A @ 240 VAC/28 VDC	3PDT	Socket	No	Yes	No	110 VDC	MJN3C-N DC110

Note: Corresponding sockets can be found on page Y-vii.

MKS-X DC Plug-in Relay

Quick Link

R234

omron247.com

Plug-in Relay with High Switching Capacity (10 A@ 220 VDC)

- MKS-X Socket Mount Relays are at least 4 mm shorter versus main competitors
- Manual and latched position testing possible when using MKS-X Test Button Models
- Wide range of coil voltages available
- RoHS Compliant; cULus Recognized; CE, and TÜV Approved



Ordering Information

Rated resistive load (NO Contact)	Contact form	Terminal type	Two position test button	LED indicator	Coil voltage	Model
15 A @ 250 VAC	SPST-NO	Plug-In	Yes	Yes	120 VAC	MKS1TIN-10 AC120
10 A @ 220 VDC	SPST-NO	Plug-In	No	No	240 VAC	MKS1XT-10 AC240
10 A @ 220 VDC	SPST-NO	Plug-In	No	No	24 VDC	MKS1XT-10 DC24
10 A @ 220 VDC	SPST-NO	Plug-In	Yes	No	120 VAC	MKS1XTI-10 AC120
10 A @ 220 VDC	SPST-NO	Plug-In	Yes	No	24 VDC	MKS1XTI-10 DC24
10 A @ 220 VDC	SPST-NO	Plug-In	Yes	Yes	24 VDC	MKS1XTIN-10 DC24
10 A @ 220 VDC	SPST-NO	Plug-In	No	Yes	24 VDC	MKS1XTN-10 AC24
5 A @ 220 VDC	SPST-NO + SPST-NC	Plug-In	No	No	24 VDC	MKS2XT-11 DC24
5 A @ 220 VDC	SPST-NO + SPST-NC	Plug-In	Yes	Yes	120 VAC	MKS2XTIN-11 AC120

Note: Corresponding sockets can be found on page Y-vii.

G7J Industrial High Power Relay

Quick Link

R233

omron247.com

Multi-Pole Relay for Heavy Duty Load

The G7J is a multi-pole relay ideal for switching motors, compressors, and pump controls.

- UL 3 HP @ 277 VAC (NO contact)
- UL 3-phase rating of 5 HP @ 277 VAC
- UL general use rating of 25 A @ 240 VAC
- UL 1.5 kW @ 120 VAC Tungsten Rating (NO contact)
- RoHS Compliant; UL, CSA, CE and VDE Approved



Ordering Information

Rated resistive load (NO Contact)	Contact form	Terminal type	Coil voltage	Model
25 A @ 220 VAC	DPST-NO, DPST-NC	Screw	200/240 VAC	G7J-2A2B-B-W1 AC200/240
25 A @ 220 VAC	DPST-NO, DPST-NC	Screw	24 VDC	G7J-2A2B-B-W1 DC24
25 A @ 220 VAC	DPST-NO, DPST-NC	Quick-Connect	100/120 VAC	G7J-2A2B-T-W1 AC100/120
25 A @ 220 VAC	3PST-NO, SPST-NC	Screw	24 VDC	G7J-3A1B-BZ DC24
25 A @ 220 VAC	3PST-NO, SPST-NC	Screw	100/120 VAC	G7J-3A1B-W1 AC100/120
25 A @ 220 VAC	4PST-NO	Screw	100/120 VAC	G7J-4A-B-W1 AC100/120
25 A @ 220 VAC	4PST-NO	Screw	200/240 VAC	G7J-4A-B-W1 AC200/240
25 A @ 220 VAC	4PST-NO	Screw	24 VDC	G7J-4A-B-W1 DC24

Note: For Metal mounting Bracket, add "-W1" to the Part Number before the Coil voltage suffix.

G7Z Industrial High Power Relay

Quick Link

R228

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Multi-Pole High Power Relay

The G7Z can switch Contactor Range (40 A @ 440 VAC) and contribute to space saving.

- 40% less volume versus typical IEC 50 A contactor—great for limited space panels
- 3.7 W approximate power consumption about 50% lower than typical IEC 50 A contactor
- 4PST-NO models can carry up to 160 A by wiring all 4 NO Contacts in parallel
- Ideal applications are: solar energy systems, robotic equipment, and grinding machines
- Auxiliary contacts can switch loads under 10 mA @ 5 VDC = controllable by PLC
- RoHS Compliant; CE, cULus, TÜV and CCC Approved



Ordering Information

Rated resistive load (NO Contact)	AC inductive load rating (NO Contact)	Contact form	Auxiliary Contact	Coil voltage	Model
40 A @ 440 VAC	22 A @ 440 VAC	DPST-NO, DPST-NC	-	24 VDC	G7Z-2A2B DC24
40 A @ 440 VAC	22 A @ 440 VAC	DPST-NO, DPST-NC	DPST-NC	24 VDC	G7Z-2A2B-02Z DC24
40 A @ 440 VAC	22 A @ 440 VAC	DPST-NO, DPST-NC	SPST-NO/SPST-NC	24 VDC	G7Z-2A2B-11Z DC24
40 A @ 440 VAC	22 A @ 440 VAC	3PST-NO, SPST-NC	SPST-NO/SPST-NC	24 VDC	G7Z-3A1B-11Z DC24
40 A @ 440 VAC	22 A @ 440 VAC	4PST-NO	DPST-NC	24 VDC	G7Z-4A-02Z DC24
40 A @ 440 VAC	22 A @ 440 VAC	4PST-NO	SPST-NO/SPST-NC	24 VDC	G7Z-4A-11Z DC24
40 A @ 440 VAC	22 A @ 440 VAC	4PST-NO	DPST-NO	24 VDC	G7Z-4A-20Z DC24

MGN Industrial High Power Relay

Quick Link

R229

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Heavy-Duty General Purpose Relay with Class F Coil Insulation

The MGN is a rugged general purpose relay with high maximum operating temperature—great for heavy duty HVAC and Motor Loads.

- UL rating of 30 A @ 240 VAC/28 VDC and 20 A @ 600 VAC
- UL Ballast rating of 3.6 kW @ 120 VAC
- -45°C to +115°C DC coil operating temperature
- Short Circuit Current Rating (SCCR) of 5 kA @ 600 VAC
- Magnetic blow-out models switch up to 20 A @ 125 VDC (resistive)
- cULus Listed



Ordering Information

Rated resistive load	Contact form	Terminal type	Size in inches (L x W x H)	UL horsepower rating	Coil voltage	Model
30 A @ 240 VAC	SPDT	Screw	2.5 x 2.5 x 2.2	1.5 HP @ 120 VAC	24 VAC	MGN1C-AC24
30 A @ 240 VAC	SPDT	Screw	2.5 x 2.5 x 2.2	1.5 HP @ 120 VAC	120 VAC	MGN1C-AC120
30 A @ 240 VAC	DPST-NO	Screw	2.5 x 2.5 x 2.2	1.5 HP @ 120 VAC	120 VAC	MGN2A-AC120
30 A @ 240 VAC	DPST-NO	Screw	2.5 x 2.5 x 2.2	1.5 HP @ 120 VAC	24 VDC	MGN2A-DC24
30 A @ 240 VAC	DPDT	Screw	3.4 x 2.5 x 2.4	1.5 HP @ 120 VAC	120 VAC	MGN2C-AC120
30 A @ 240 VAC	DPDT	Screw	3.4 x 2.5 x 2.4	1.5 HP @ 120 VAC	12 VDC	MGN2C-DC12
30 A @ 240 VAC	DPDT	Screw	3.4 x 2.5 x 2.4	1.5 HP @ 120 VAC	24 VDC	MGN2C-DC24
20 A @ 125 VAC	DPDT	Screw	3.4 x 2.5 x 2.4	1.5 HP @ 120 VAC	24 VDC	MGN2CM-DC24

G3NE Solid State Relays

Quick Link

R429

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Compact 5-20 A Panel Mount Solid State Relay

The G3NE is a space-saving solid state relay which can switch 5 A, 10 A, or 20 A load @ 100-240 VAC.



- G3NE Relays have 65% less volume versus standard "hockey puck" SSRs
- Fast wiring possible using quick-connect input and output terminals
- Different size quick connect terminals prevent miss wiring: Input terminals require #110/Output terminals require #250
- Built in varistor prevents surges to protect output loads
- RoHS Compliant; "-US" Models have UL, CSA, and TÜV Approval



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Mounting	Model
5 VDC	100 to 240 VAC	0.1 to 5 A	48 x 38 x 12	Yes	Panel	G3NE-205T-US DC5
12 VDC	100 to 240 VAC	0.1 to 5 A	48 x 38 x 12	Yes	Panel	G3NE-205T-US DC12
24 VDC	100 to 240 VAC	0.1 to 5 A	48 x 38 x 12	Yes	Panel	G3NE-205T-US DC24
5 VDC	100 to 240 VAC	0.1 to 10 A	48 x 38 x 12	Yes	Panel	G3NE-210T-US DC5
12 VDC	100 to 240 VAC	0.1 to 10 A	48 x 38 x 12	Yes	Panel	G3NE-210T-US DC12
24 VDC	100 to 240 VAC	0.1 to 10 A	48 x 38 x 12	Yes	Panel	G3NE-210T-US DC24
5 VDC	100 to 240 VAC	0.1 to 10 A	48 x 38 x 12	Yes	Panel	G3NE-210T-2-US DC5
5 VDC	100 to 240 VAC	0.1 to 20 A	48 x 38 x 12	Yes	Panel	G3NE-220T-US DC5
12 VDC	100 to 240 VAC	0.1 to 20 A	48 x 38 x 12	Yes	Panel	G3NE-220T-US DC12
24 VDC	100 to 240 VAC	0.1 to 20 A	48 x 38 x 12	Yes	Panel	G3NE-220T-US DC24

G3NA Solid State Relays

Quick Link

R422

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The Reliable Choice for "Hockey Puck Style" Solid State Relay. Available in a wide range of Load Current (5 A to 90 A) and Load Voltage (max. 660 VAC)

All G3NAs feature industry standard mounting holes for usability and versatility (optional heat sink is available). LED provides quick verification of G3NA operational status.

- Minimize surge and input noise by utilizing AC load models with zero cross
- Included plastic cover provides finger protection for workers' safety
- Built in varistor prevents surges to protect output loads
- All models have UL and CSA Approval: "UTU" models also have TÜV Approval. RoHS compliant.



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Mounting	Model
5 to 24 VDC	24 to 240 VAC	0.1 to 5 A	58 x 43 x 30	Yes	Panel	G3NA-205B DC5-24
100 to 120 VAC	24 to 240 VAC	0.1 to 10 A	58 x 43 x 30	Yes	Panel	G3NA-210B AC100-120
5 to 24 VDC	24 to 240 VAC	0.1 to 10 A	58 x 43 x 30	Yes	Panel	G3NA-210B DC5-24
5 to 24 VDC	24 to 240 VAC	0.1 to 10 A	58 x 43 x 30	Yes	Panel	G3NA-210B-UTU DC5-24
100 to 120 VAC	24 to 240 VAC	0.1 to 20 A	58 x 43 x 30	Yes	Panel	G3NA-220B AC100-120
5 to 24 VDC	24 to 240 VAC	0.1 to 20 A	58 x 43 x 30	Yes	Panel	G3NA-220B DC5-24
5 to 24 VDC	24 to 240 VAC	0.1 to 40 A	58 x 43 x 30	Yes	Panel	G3NA-240B DC5-24
5 to 24 VDC	200 to 480 VAC	0.2 to 40 A	58 x 43 x 30	Yes	Panel	G3NA-440B-2 DC5-24
100 to 240 VAC	24 to 240 VAC	1.0 to 75 A	58 x 43 x 30	Yes	Panel	G3NA-275B-UTU-2 AC100-240
5 to 24 VDC	24 to 240 VAC	1.0 to 90 A	58 x 43 x 30	Yes	Panel	G3NA-290B-UTU-2 DC5-24
5 to 24 VDC	5 to 200 VDC	0.1 to 10 A	58 x 43 x 27	No	Panel	G3NA-D210B DC5-24
5 to 24 VDC	400 to 600 VAC	0.5 to 50 A	58 x 43 x 30	Yes	Panel	G3NA-650B DC5-24

G3PH Solid State Relay with Built-in Heat Sink

Quick Link

R438

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High Power Solid State Relay with Heat Sink, Features Replaceable Output Power Cartridge

Applicable Load: 75 or 150 A @ 240 or 480 VAC

- Models available with zero crossing and non-zero crossing
- Conforms to cULus standards and EN standards (TÜV certification)



Ordering Information

Insulation method	Operation indicator	Zero cross function	Applicable output load	Rated input voltage	Model
Photocoupler	Yes (yellow)	Yes	75 A, 100 to 240 VAC	5 to 24 VDC	G3PH-2075B DC5-24
				100 to 240 VAC	G3PH-2075B AC100-240
			150 A, 100 to 240 VAC	5 to 24 VDC	G3PH-2150B DC5-24
				100 to 240 VAC	G3PH-2150B AC100-240
		No	75 A, 100 to 240 VAC	5 to 24 VDC	G3PH-2075BL DC5-24
				5 to 24 VDC	G3PH-2150BL DC5-24
			150 A, 100 to 240 VAC	5 to 24 VDC	G3PH-5075B DC5-24
				100 to 240 VAC	G3PH-5075B AC100-240
		Yes	75 A, 180 to 480 VAC	5 to 24 VDC	G3PH-5150B DC5-24
				100 to 240 VAC	G3PH-5150B AC100-240
			150 A, 180 to 480 VAC	5 to 24 VDC	G3PH-5075BL DC5-24
				5 to 24 VDC	G3PH-5150BL DC5-24

G3PA Solid State Relay with Built-in Heat Sink

Quick Link

R423

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Solid State Relay with Built-in Heat Sink and Replaceable Power Cartridge

The G3PA is a DIN rail mounted Solid State Relay which can switch 10 - 60 A Loads.

- Quick and easy DIN rail mounting
- High Insulation voltage between input and output with 4,000 VAC
- Side-by-side mounting of 3 relays possible with G3PA linking terminals
- Reduce replacement cost and wiring time by using G3PA power cartridges
- 3 phase switching with G3PAs possible with G32A-D accessory cartridge
- RoHS Compliant; All G3PA models are certified by UL and CSA. "-VD" models are certified by UL, CSA and VDE



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Mounting	Model
24 VAC	24 to 240 VAC	0.1 to 10 A	100 x 27 x 100	Yes	DIN/panel	G3PA-210B-VD AC24
5 to 24 VDC	24 to 240 VAC	0.1 to 10 A	100 x 27 x 100	Yes	DIN/panel	G3PA-210B-VD DC5-24
5 to 24 VDC	24 to 240 VAC	0.1 to 10 A	100 x 27 x 100	No	DIN/panel	G3PA-210BL-VD DC5-24
5 to 24 VDC	24 to 240 VAC	0.1 to 10 A	100 x 37 x 100	Yes	DIN/panel	G3PA-220B-VD DC5-24
5 to 24 VDC	24 to 240 VAC	0.5 to 40 A	100 x 47 x 100	Yes	DIN/panel	G3PA-240B-VD DC5-24
5 to 24 VDC	24 to 240 VAC	0.5 to 60 A	110 x 100 x 100	Yes	DIN/panel	G3PA-260B-VD DC5-24
12 to 24 VDC	180 to 400 VAC	0.5 to 20 A	100 x 37 x 100	Yes	DIN/panel	G3PA-420B-VD DC12-24
12 to 24 VDC	180 to 400 VAC	0.5 to 30 A	100 x 47 x 100	Yes	DIN/panel	G3PA-430B-VD DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 30 A	100 x 47 x 100	Yes	DIN/panel	G3PA-430B-VD-2 DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 50 A	110 x 100 x 100	Yes	DIN/panel	G3PA-450B-VD-2 DC12-24

G3PE Solid State Relay with Built-in Heat Sink

Quick Link

R425

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Compact, Slim-profile SSRs with Built-in Heat Sink

The G3PE is capable of suppressing transient voltages (min. 30 kV).

- Quick and easy DIN rail mounting.
- 3-phase types are also available (G3PE-□□□B-3H type)
- Single-phase 15 A and 25 A models occupy less than 1” of DIN track width
- Side-by-side mounting of eight relays possible for single phase models
- Minimize surge and input noise by utilizing zero cross models
- All models are RoHS Compliant and have UL, CSA, CE, and TÜV Approvals



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Number of poles	Model
12 to 24 VDC	100 to 240 VAC	0.1 to 15 A	100 x 22.5 x 100	Yes	1	G3PE-215B DC12-24
12 to 24 VDC	100 to 240 VAC	0.1 to 15 A	100 x 22.5 x 100	Yes	1	G3PE-225B DC12-24
12 to 24 VDC	100 to 240 VAC	0.5 to 35 A	100 x 44.5 x 100	Yes	1	G3PE-235B DC12-24
12 to 24 VDC	100 to 240 VAC	0.5 to 45 A	100 x 44.5 x 100	Yes	1	G3PE-245B DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 15 A	100 x 80 x 155	Yes	3	G3PE-515B-3N DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 25 A	100 x 80 x 155	Yes	2	G3PE-525B-2N DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 25 A	120 x 80 x 155	Yes	3	G3PE-525B-3N DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 35 A	120 x 80 x 155	Yes	2	G3PE-535B-2N DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 35 A	140 x 80 x 155	Yes	3	G3PE-535B-3N DC12-24
12 to 24 VDC	200 to 480 VAC	0.5 to 45 A	140 x 110 x 155	Yes	3	G3PE-545B-3N DC12-24
12 to 24 VDC	100 to 240 VAC	0.5 to 45 A	80 x 80 x 35	Yes	3	G3PE-245B-3H DC12-24

* G3PE-□□□B-3H type is not built-in heat sink type.

G3PF Solid State Relay

Quick Link

R447

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Built-in Current Transformer with Heater Burnout and Relay Failure Detection

Can handle up to 35 A @ 240 VAC with up to 2 alarm outputs when failure occurs.

- Current transformer is built into the SSR, therefore eliminating unnecessary CT wiring
- Heater burnout detection for single-phase or three-phase heaters
- Built-in CT can detect SSR short circuit failures
- Alarm indicator shows if a heater burnout or SSR short-circuit failure has occurred
- Rotary switches can be used to easily set the heater burnout detection level



Ordering Information

Input terminal model	Zero cross function	Alarm output	Applicable load	Model
M3 terminals	Yes	1 output (Heater Burnout Detection, SSR short-circuit Failure Detection, Common)	2 to 25 A @ 100 to 240 VAC	G3PF-225B DC24
			2 to 35 A @ 100 to 240 VAC	G3PF-235B DC24
Screwless clamp terminals		2 outputs (Heater Burnout Detection, SSR Short-circuit Failure Detection)	2 to 35 A @ 100 to 240 VAC	G3PF-235B-CTB DC24
Compact slotted screw terminals			2 to 35 A @ 100 to 240 VAC	G9PF-235B-STB DC24

G3RV 6 mm Solid State Relays

Quick Link

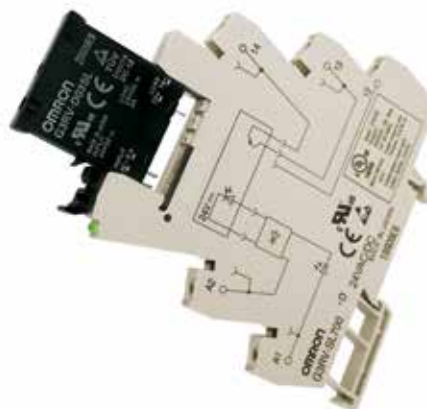
R427

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Solid State Plug-in Ultra-Slim Relay

The G3RV is an ultra-slim 6 mm wide solid state relay in a DIN mount relay-socket unit with maintenance-friendly features.

- LED indicator allows verification of current flow of input
- Large plug-in terminal ensures reliable connection
- PLC interface and cable accessories are available
- Easily connect multiple G3RV Relays together with cross bars
- RoHS Compliant; cULus Listed, CE and TÜV Approval
- G3RV Class I Division 2 meets requirements: Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations



Ordering Information

Terminal wiring connection	Input voltage	Load voltage	Load current	Zero cross	Model
Push-in	230 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-A AC230
	24 VDC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-A DC24
	230 VAC	5 to 24 VDC	100 µA to 3 A	-	G3RV-SL500-D AC230
	24 VDC	5 to 24 VDC	100 µA to 3 A	-	G3RV-SL500-D DC24
Screw	110 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A AC110
	230 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A AC230
	24 VDC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A DC24
	110 VAC	100 to 240 VAC	0.1 to 2 A	No	G3RV-SL700-AL AC110
	110 VAC	5 to 24 VDC	100 µA to 3 A	-	G3RV-SL700-D AC110
	24 VDC	5 to 24 VDC	100 µA to 3 A	-	G3RV-SL700-D DC24

Note: Model number contains relay and socket.

G3RV Class 1 Division 2 meets requirements: Groups A,B,C and D

Terminal wiring connection	Input voltage	Load voltage	Load current	Zero cross	Model	
Push-in	12 VDC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-A-C1D2 DC12	
	24 VDC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-A-C1D2 DC24	
	110 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-A-C1D2 AC110	
	230 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-A-C1D2 AC230	
	12 VDC	5 to 24 VDC	100 µ to 3A	-	G3RV-SL500-D-C1D2 DC12	
	24 VDC	5 to 24 VDC	100 µ to 3A	-	G3RV-SL500-D-C1D2 DC24	
	110 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-D-C1D2 AC110	
	230 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-D-C1D2 AC230	
	12 VDC	5 to 24 VDC	100 µ to 3A	-	G3RV-SL500-AL-C1D2 DC12	
	24 VDC	5 to 24 VDC	100 µ to 3A	-	G3RV-SL500-AL-C1D2 DC24	
	110 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-AL-C1D2 AC110	
	230 VAC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL500-AL-C1D2 AC230	
	Screw	12 VDC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A-C1D2 DC12
		24 VDC	100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A-C1D2 DC24
110 VAC		100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A-C1D2 AC110	
230 VAC		100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-A-C1D2 AC230	
12 VDC		5 to 24 VDC	100 µ to 3A	-	G3RV-SL700-D-C1D2 DC12	
24 VDC		5 to 24 VDC	100 µ to 3A	-	G3RV-SL700-D-C1D2 DC24	
110 VAC		100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-D-C1D2 AC110	
230 VAC		100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-D-C1D2 AC230	
12 VDC		5 to 24 VDC	100 µ to 3A	-	G3RV-SL700-AL-C1D2 DC12	
24 VDC		5 to 24 VDC	100 µ to 3A	-	G3RV-SL700-AL-C1D2 DC24	
110 VAC		100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-AL-C1D2 AC110	
230 VAC		100 to 240 VAC	0.1 to 2 A	Yes	G3RV-SL700-AL-C1D2 AC230	

G3R-I/O Solid State Relays

Quick Link

R428

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Space Saving Input/Output Socket Mounted Solid State Relay

The G3R-I/O is a high isolation solid state relay ideal for PLC applications.

- High Insulation voltage between input and output with 4,000 VAC
- Process high-speed inputs using G3R-IDZR models: 0.1 ms max. On/Off time
- Applicable load up to 2 A @ 240 VAC with AC output models
- LED indicator allows verification of current flow of input
- Terminal arrangement equivalent with G2RS relay (socket: P2R series)
- RoHS Compliant; All G3R-I/O have UL and CSA approval, "-UTU" models have UL, CSA and TÜV approval



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Mounting	Model
5 VDC	4 to 32 VDC	0.1 to 100 mA	29 x 13 x 28	No	Socket	G3R-IDZR1SN DC5
12 to 24 VDC	4 to 32 VDC	0.1 to 100 mA	29 x 13 x 28	No	Socket	G3R-IDZR1SN DC12-24
5 to 24 VDC	100 to 240 VAC	0.05 to 2 A	29 x 13 x 28	Yes	Socket	G3R-OA202SZN DC5-24
5 to 24 VDC	100 to 240 VAC	0.05 to 2 A	29 x 13 x 28	Yes	Socket	G3R-OA202SZN-UTU DC5-24
5 to 24 VDC	48 to 200 VDC	0.01 to 1.5 A	29 x 13 x 28	No	Socket	G3R-OD201SN DC5-24
5 to 24 VDC	5 to 48 VDC	0.01 to 2 A	29 x 13 x 28	No	Socket	G3R-ODX02SN DC5-24
5 to 24 VDC	5 to 48 VDC	0.01 to 2 A	29 x 13 x 28	No	Socket	G3R-ODX02SN-UTU DC5-24

Note: Corresponding sockets can be found on page Y-vii.

G3MC PCB Solid State Relays

Quick Link

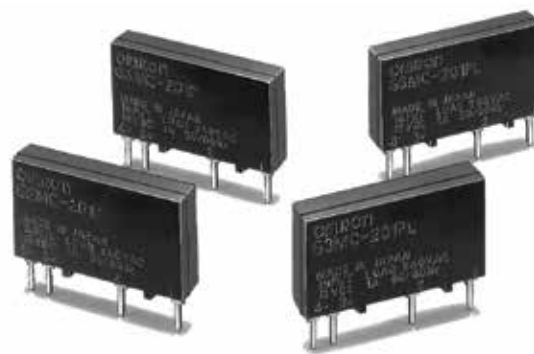
R432

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Ultra-Slim PCB Solid State Relays with Reinforced Insulation

PCB mount DC input and AC output SSR.

- 4.5 mm thin design for high-density PCB applications
- DC input and AC output for applicable load of 1 A (at 40°C) and 2 A (at 25°C)
- High Insulation voltage between input and output with 3,000 VAC for "-1" model
- RoHS Compliant; All G3MC models have UL, CSA approval and "-VD" models have additional VDE approval



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Insulation (input/output)	Model
5 VDC	100 to 120 VAC	0.1 to 1 A	24.5 x 4.5 x 13.5	Yes	2500 VAC	G3MC-101P DC5
5 VDC	100 to 120 VAC	0.1 to 1 A	24.5 x 4.5 x 13.5	Yes	2500 VAC	G3MC-101P-VD DC5
5 VDC	100 to 240 VAC	0.1 to 2 A	24.5 x 4.5 x 20.5	Yes	2500 VAC	G3MC-202P-VD DC5
24 VDC	100 to 240 VAC	0.1 to 2 A	24.5 x 4.5 x 20.5	Yes	3000 VAC	G3MC-202P-VD-1 DC24
5 VDC	100 to 240 VAC	0.1 to 2 A	24.5 x 4.5 x 20.5	No	2500 VAC	G3MC-202PL-VD DC5
12 VDC	100 to 240 VAC	0.1 to 2 A	24.5 x 4.5 x 20.5	No	2500 VAC	G3MC-202PL-VD DC12

G3TB PCB Solid State Relays

Quick Link

R435

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Input/Output Color-Coded PCB Solid-State Relays with LED Indicator Models

The G3TB is a PCB mount Input/Output solid state relay with width (10 mm width).

- High Insulation voltage between input and output with 4,000 VAC
- Easy to identify (black: AC output, Yellow: AC Input, Red: DC output, White: DC input)
- RoHS Compliant; "-US" Models have UL and CSA Approval



Ordering Information

Input voltage	Load voltage	Load current	Size in mm L x W x H	Zero cross	Relay color	Model
100 to 240 VAC	4 to 32 VDC	25 mA max.	44 x 10 x 21	No	Yellow	G3TB-IAZR02P-US AC100-240
4 to 24 VDC	4 to 32 VDC	25 mA max.	44 x 10 x 21	-	White	G3TB-IDZR02P-US DC5-24
5 to 24 VDC	100 to 240 VAC	0.05 to 3 A	44 x 10 x 31	Yes	Black	G3TB-OA203PZ-US DC5-24
4 to 24 VDC	5 to 48 VDC	0.01 to 3 A	44 x 10 x 31	-	Red	G3TB-ODX03PM-US DC4-24

Pushbuttons & Indicators

OMRON

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A165K	Keyed selector switches	Z-8
M16/	Pilot lights	Z-9
M165	IP65 Pilot lights	
M2BJ	Panel-mounted buzzer	Z-10
30 mm dia. non-lighted, pushbutton switches		
ZAP	Pushbutton switches	Z-10

Z

Pushbutton Switches

OMRON OFFERS A BROAD RANGE OF PUSHBUTTON SWITCHES

ADVANTAGES FOR PANEL BUILDERS

Omron's pushbutton and selector switches, and pilot lights support control panel designs with shallow mounting depths. They deliver time-saving, easy installation that reduces project labor cost. Panel builders can reduce component ordering expenses by specifying multiple Omron industrial controls.

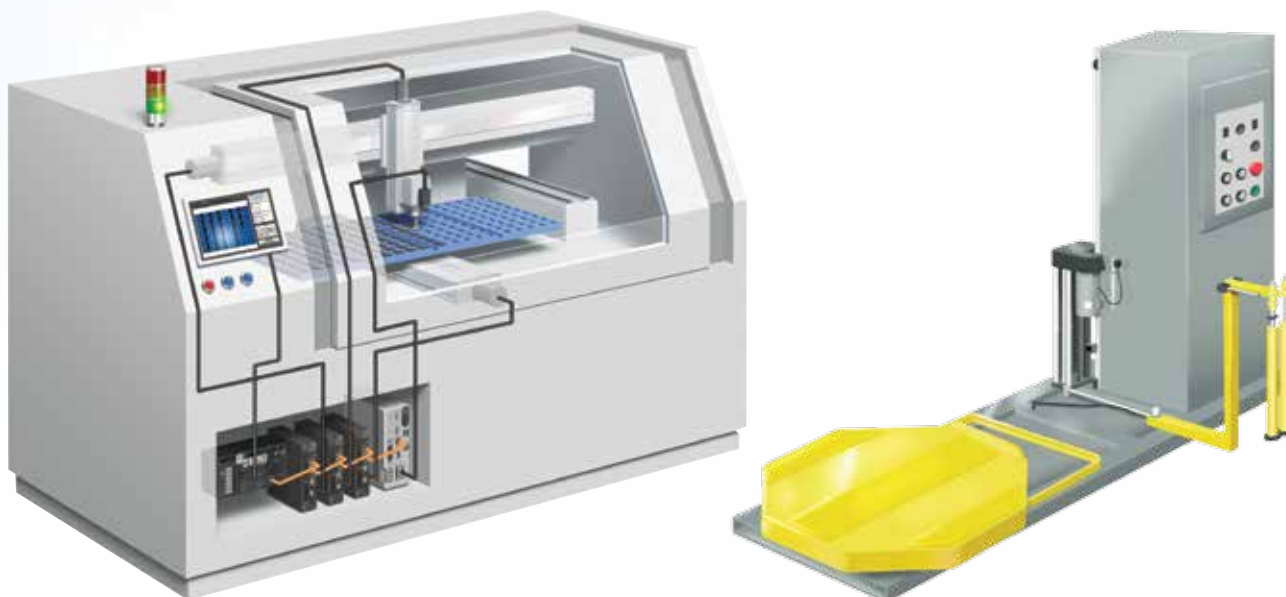
- 16, 22 and 30 mm diameters
- Wide range of shapes and colors
- Contact configurations for most applications



- Continuous illumination on pilot lights and lighted pushbutton switches
- Momentary and alternate switch action
- Keyed and knob selector switches
- Metal or plastic bezels available








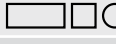



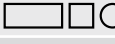


TYPICAL APPLICATIONS

- Packaging equipment
- Food & beverage production
- Semiconductor manufacturing machines



















Selection Table

Category		Pushbutton switch				Indicator		Buzzer	
									
Selection criteria	Model	A16/A165	A22R	A3U	ZAP	M16/M165	M22R	M2JB-B	
	Mounting	Nut-mounting							
	Size	16 mm	22 mm	22 mm	30 mm	16 mm	22 mm	16 mm	
	Shape								
Pushbutton color	LED-lighted	Red	■	■	■	—	■	■	—
		Yellow	■	■	■	—	■	■	—
		Pure yellow	■	—	—	—	■	—	—
		Green	■	■	■	—	■	■	—
		White	■	■	■	—	■	■	—
		Blue	■	■	■	—	■	■	—
		Black	■	■	■	■	—	—	■
	Non-lighted	Red	■	■	■	■	—	—	—
		Yellow	■	■	■	■	—	—	—
		Green	■	■	■	■	—	—	—
		White	■	■	■	■	—	—	—
		Blue	■	■	■	■	—	—	—
		Black	■	■	■	■	—	—	—
		Black	■	■	■	■	—	—	■
Features	Momentary operation	■	■	■	■	—	—	—	
	Self-holding	■	■	—	—	—	—	—	
	2-position selector	—	—	—	—	—	—	—	
	3-position selector	—	—	—	—	—	—	—	
	Number of contacts	1 or 2	1 or 2	1 or 2	1 or 2	—	—	—	
	IP rating	IP40/IP65	IP65	IP40	—	IP40/IP65	IP65	IP40	
	Legend plate	■	■	■	—	■	■	—	
	Switch ratings (Resistive load)	• 5 A, 125 VAC • 3 A, 250 VAC • 3 A, 30 VDC	• 3 A, 240 VAC	• 0.1 A, 30 VDC	• 15 A, 250 VAC • 0.5 A, 125 VDC	—	—	—	
Terminals	Solder	■	—	—	—	■	—	■	
	PCB	■	—	—	—	■	—	—	
	Screw-less clamp	■	—	—	—	■	—	—	
	Screw	—	■	—	■	—	■	—	
	Connector	—	—	■	—	—	—	—	
LED Operating voltage	5 VDC	■	—	■	—	■	—	—	
	6 VDC	—	■	—	—	—	■	—	
	12 VDC	■	■	■	—	■	■	—	
	24 VDC	■	■	■	—	■	■	—	
	110 VAC	■	—	—	—	■	—	—	
	220 VAC	■	■	—	—	■	■	—	
Form	SPDT	■	—	■	■	—	—	—	
	DPDT	■	—	■	■	—	—	—	
	SPST-NO	—	■	—	—	—	—	—	
	SPST-NC	—	■	—	—	—	—	—	
	SPST-NO + SPST-NC	—	■	—	—	—	—	—	
	DPST-NO	—	■	—	—	—	—	—	
	DPST-NC	—	■	—	—	—	—	—	

■ Standard □ Available — No/not available

Pushbutton Switches

Category		Selector switch							
									
Selection criteria	Model	A165W	A165S	A165K	A22RW	A22RS	A3US	A22RK	
	Mounting							Nut-mounting	
	Size	16 mm	16 mm	16 mm	22 mm	22 mm	22 mm	22 mm	
	Shape								
Pushbutton color	LED-lighted	Red	■	-	-	■	-	-	-
		Yellow	■	-	-	■	-	-	-
		Pure yellow	-	-	-	-	-	-	-
		Green	■	-	-	■	-	-	-
		White	-	-	-	-	-	-	-
		Blue	-	-	-	■	-	-	-
	Non-lighted	Red	-	-	-	-	-	-	-
		Yellow	-	-	-	-	-	-	-
		Green	-	-	-	-	-	-	-
		White	-	-	-	-	-	-	-
		Blue	-	-	-	-	-	-	-
		Black	-	■	■	-	■	■	■
	Features	Momentary operation	-	-	-	-	-	-	-
		Self-holding	-	-	-	-	-	-	-
2-position selector		■	■	■	■	-	■	■	
3-position selector		■	■	■	■	-	-	■	
Number of contacts		1 or 2	1 or 2	1 or 2	1 or 2	-	1	1 or 2	
IP rating		IP65	IP65	IP65	IP65	IP65	IP40	IP65	
Legend plate	-	-	-	-	■	-	-		
Switch ratings (Resistive load)		• 5 A, 125 VAC • 3 A, 250 VAC • 3 A, 30 VDC	• 5 A, 125 VAC • 3 A, 250 VAC • 3 A, 30 VDC	• 5 A, 125 VAC • 3 A, 250 VAC • 3 A, 30 VDC	• 3 A, 240 VAC	• 3 A, 240 VAC	• 0.1 A, 30 VDC	• 3 A, 240 VAC	
Terminals	Solder	■	■	■	-	-	-	-	
	PCB	■	■	■	-	-	-	-	
	Screw-less clamp	■	■	■	-	-	-	-	
	Screw	-	-	-	■	■	-	■	
	Connector	-	-	-	-	-	■	-	
LED Operating voltage	5 VDC	■	-	-	-	-	-	-	
	6 VDC	-	-	-	■	-	-	-	
	12 VDC	■	-	-	■	-	-	-	
	24 VDC	■	-	-	■	-	-	-	
	110 VAC	■	-	-	-	-	-	-	
	220 VAC	■	-	-	■	-	-	-	
Form	SPDT	■	■	■	-	-	■	-	
	DPDT	■	■	■	-	-	-	-	
	SPST-NO	-	-	-	■	■	-	■	
	SPST-NC	-	-	-	■	■	-	■	
	SPST-NO + SPST-NC	-	-	-	■	■	-	■	
	DPST-NO	-	-	-	■	■	-	■	
	DPST-NC	-	-	-	■	■	-	■	

■ Standard □ Available - No/not available

Z

M22R Series Pilot Lights

Quick Link
P645
omron247.com

22 mm Dia. Pilot Lights

- Pilot lights indicate status of machinery and processes on control panels
- Bright LED light source is easy to read under most lighting conditions
- Easy mounting and removal of socket unit
- Short mounting depth, less than 40.5 mm below panel



Specifications

- Current consumption:
20 mA @ 12 V AC/DC ±5%
20 mA @ 24 V AC/DC ±5%
- Enclosure rating: IP65

Pilot lights		Model
Round flat pilot light ● ● ● ● ● 		M22R

• LED Lamp Ratings		
Model	Operating Voltage	Current Consumption
M22R-E*-12A	AC/DC 12 V ± 5%	20 mA
M22R-E*-24A	AC/DC 24 V ± 5%	20 mA
M22R-E*-T1	AC120 V (110 to 130 V)	20 mA
M22R-E*-T2	AC200 V (190 to 230 V)	20 mA

A22R/A22RL Series Pushbutton Switches

Quick Link

P642

omron247.com

22 mm Dia. Lighted and Non-Lighted Pushbutton Switches

- Robust and aesthetic design
- Shiny metal bezel
- Smooth rounded edges
- Short mounting depth, less than 46.8 mm below panel



Specifications

- Rated load: 3 A at 240 VAC
- Enclosure rating: IP65
- Rated durability service life:
 - Mechanical:
 - 3,000,000 operations - Momentary switch
 - 300,000 operations - Alternate switch
 - Electrical: 500,000 operations



Non-Lighted		Model
Round flat 		A22R-F
Round projection 		A22R-T

Lighted		Model
Lighted round flat 		A22RL-F
Lighted round projection 		A22RL-T

• LED Lamp Ratings		
Model	Operating Voltage	Current Consumption
A22R-6A	AC/DC 6 V ± 5%	20 mA
A22R-12A	AC/DC 12 V ± 5%	20 mA
A22R-24A	AC/DC 24 V ± 5%	20 mA
• Voltage reduction unit (for LED lamp)		
Model	Operating Voltage	Current Consumption
A22R**-T1	AC120 V (110 to 130 V)	20 mA
A22R**-T2	AC200 V (190 to 230 V)	20 mA

A22RS/A22RW Series Selector Switches

Quick Link
P643
omron247.com

22 mm Dia. Lighted and Non-Lighted Selector Switches

- 2- and 3-position switches with manual or automatic reset to meet panel building needs
- New “super-bright” LED used in all lighted models
- Short mounting depth, less than 46.8 mm below panel
- “Snap-in” switch unit for quick and easy tool-free assembly
- Shiny metal bezel



Specifications

- Rated load: 3 A at 240 VAC
- Enclosure rating: IP65
- Rated durability service life:
 - Mechanical: 300,000 operations
 - Electrical: 500,000 operations

Non-Lighted		Model
Non-lighted selector switch		A22RS

Lighted		Model
Lighted selector switch		A22RW

A22RK Series Keyed Selector Switches

Quick Link
P644
omron247.com

22 mm Dia. Keyed Non-Lighted Selector Switches

- Design in extra security with keyed selector switches; only authorized operators are allowed to change settings using the key
- 2- and 3-position switches with manual or automatic reset to meet panel building needs
- Short mounting depth, less than 46.8 mm below panel
- “Snap-in” switch unit for quick and easy tool-free assembly
- Shiny metal bezel



Specifications

- Rated load: 3 A at 240 VAC
- Enclosure rating: IP65
- Rated durability service life:
 - Mechanical: 300,000 operations
 - Electrical: 500,000 operations

Keyed		Model
Keyed selector switch		A22RK

A3U Series Pushbutton and Selector Switches

Quick Link

P646

omron247.com

22 mm Dia. Flat-type Lighted and Non-Lighted Pushbutton Switches and Selector Switch

Easy connector enables less assembly and less wiring.





- 50 mm body length
- Easy one push to connect the Operation and Switch units



Specifications

- Rated load: 0.1 A @ 30 VDC
- Rated durability service life:
 - Mechanical:
 - 1,000,000 operations - Pushbutton switches
 - 250,000 operations - Selector switch
 - Electrical:
 - 200,000 operations - Pushbutton switches
 - 1000,000 operations - Selector switch
- Enclosure: IP40



Pushbutton switches		Model
Lighted 		A3U
Non-lighted 		A3UL

Selector switch		Model
Non-lighted 		A3US

Z

A16/A165 Series Pushbutton Switches

Quick Link

P632

omron247.com

16 mm Dia. Lighted and Non-Lighted Pushbutton Switches

- Wide range of options to match most panel building needs
- Protection: IP65 oil-resistant models (A165) and standard IP40 models (A16)
- Lighting: Non-lighted (A16 and A165) and lighted (A16L and A165L)
- New “ultra-bright” LED used in all lighted models
- Short mounting depth, less than 28.5 mm below panel



- “Snap-in” switch unit for quick and easy tool-free assembly
- RoHS compliant

Specifications

- Rated load (SPDT, DPDT):
 - 5 A at 125 VAC, 3 A at 250 VAC (NO & NC)
 - 3 A at 30 VDC
- Operating force:
 - SPDT 2.45N/DPDT:4.41N(IP40); SPDT:2.94N/DPDT4.91 N (IP65)
- Rated durability service life:
 - Mechanical: Momentary operation: 2,000,000 operations min.; Alternating operation: 200,000 operations min.
 - Electrical: 100,000 operations min.
- Approvals:
 - UL: UL508, File No. E41515
 - cUL: CSA C22 No. 14
 - TÜV: EN60947-5-1:2004
 - CCC: GB14048.5

Round Projection		Model
Lighted ● ● ● ● ● ●		A16L-T, A165L-T
Non-Lighted ● ● ● ● ● ●		A16-T, A165-T
Lighted, 110 VAC transformer ● ● ● ● ● ●		A16L-T-T1, A165L-T-T1
Lighted, 220 VAC transformer ● ● ● ● ● ●		A16L-T-T2, A165L-T-T2

Rectangular		Model
Unlit, 2-way guard ● ● ● ● ● ●		A16-J, A165-J
Lit, 2-way guard ● ● ● ● ● ●		A16L-J, A165L-J
Lighted rectangular 2-way guard 110 VAC transformer ● ● ● ● ● ●		A16L-J-T1, A165L-J-T1
Lighted rectangular 2-way guard, 220 VAC transformer ● ● ● ● ● ●		A16L-J-T2, A165L-J-T2

Square		Model
Unlit, 2-way guard ● ● ● ● ● ●		A16-A, A165-A
Lit, 2-way guard ● ● ● ● ● ●		A16L-A, A165L-A
Lighted square 2-way guard, 110 VAC transformer ● ● ● ● ● ●		A16L-A-T1, A165L-A-T1
Lighted square 2-way guard, 220 VAC transformer ● ● ● ● ● ●		A16L-A-T2, A165L-A-T2

A165S/W Series Selector Switches

Quick Link

P634

omron247.com

16 mm Dia. Lighted and Non-Lighted Selector Switches

- Knob-style selector switches provide users a reliable way to start or choose between machine operations
- 2- and 3-position switches with manual or automatic reset to meet panel building needs
- IP65-rated for oil resistance
- Lighting: Non-lighted (A165S) and lighted (A165W)
- New “ultra-bright” LED used in all lighted models
- Short mounting depth, less than 28.5 mm below panel
- “Snap-in” switch unit for quick and easy tool-free assembly






- RoHS compliant
- Use optional legend plates to identify the selections

Specifications

- Rated load (SPDT, DPDT):
 - 5 A at 125 VAC, 3 A at 250 VAC (NO & NC)
 - 3 A at 30 VDC
- Operating force:
 - SPDT/DPDT: 0.1 Nm
- Rated durability service life:
 - Mechanical: 250,000 operations min.
 - Electrical: 100,000 operations min.
- Approvals:
 - UL: UL508, File No. E41515
 - cUL: CSA C22 No. 14
 - TÜV: EN60947-5-1:2004
 - CCC: GB14048.5

Non-lighted		Model
Square base selector switch ●		A165S-A
Rectangular base selector switch ●		A165S-J
Round base selector switch ●		A165S-T

Lighted		Model
Lighted square base selector switch ● ● ●		A165W-A
Lighted rectangular base selector switch ● ● ●		A165W-J
Lighted round base selector switch ● ● ●		A165W-T

Z

A165K Series Keyed Selector Switches

Quick Link

P635

omron247.com




16 mm Dia. Keyed Selector Switches

- Design in extra security with keyed selector switches; only authorized operators are allowed to change settings using the key
- 2- and 3-position switches with manual or automatic reset to meet panel building needs
- IP65-rated for oil resistance
- Short mounting depth, less than 28.5 mm below panel
- “Snap-in” switch unit for quick and easy tool-free assembly
- RoHS compliant
- Use optional legend plates to identify the selections



Specifications

- Rated load (SPDT, DPDT):
 - 5 A at 125 VAC, 3 A at 250 VAC (NO & NC)
 - 3 A at 30 VDC
- Operating force:
 - SPDT/DPDT: 0.1 Nm
- Rated durability service life:
 - Mechanical: 250,000 operations min.
 - Electrical: 100,000 operations min.
- Approvals:
 - UL: UL508, File No. E41515
 - cUL: CSA C22 No. 14
 - TÜV: EN60947-5-1:2004
 - CCC: GB14048.5

Keyed switches		Model
Square base keyed selector switch ●		A165K-A
Rectangular base keyed selector switch ●		A165K-J
Round base keyed selector switch ●		A165K-T

M16/M165 Series Pilot Lights

Quick Link

P636

omron247.com

16 mm Dia. Pilot Lights

- Pilot lights indicate status of machinery and processes on control panels
- Bright LED light source is easy to read under most lighting conditions
- Easy mounting and removal of socket unit
- Standard IP40 and oil-resistant IP65 models
- Short mounting depth, less than 28.5 mm below panel
- RoHS compliant
- Use optional legend plates to identify indicators



Specifications

- Current consumption:
 - 8 mA @ 5 VDC ±5%
 - 8 mA @12 VAC/VDC ±5%
 - 8 mA @ 24 VAC/VDC ±5%
 - 8 mA @ 110 VAC/VDC
 - 8 mA @ 220 VAC/VDC
- Approvals:
 - UL: UL508, File No. E76675
 - cUL: CSA C22 No. 14

Keyed switches		Model
Square pilot light 		M16-A, M165-A
Rectangular pilot light 		M16-J, M165-J
Round pilot light 		M16-T, M165-T

Z

M2BJ Series Buzzers

Quick Link
P637
omron247.com

16 mm Dia. Panel-Mounted Buzzers



- Intermittent or continuous sound selected by jumper setting
- Complements the A16 range of Pushbuttons, Selector Switches and Key Switches
- RoHS compliant
- LEDs incorporated on high-sound model indicators



Specifications:

Current consumption:

- Standard sound types:
 - DC: 7 mA max.
 - AC: 20 mA max.
- High-sound (includes LED) types:
 - DC: 50 mA max.
 - AC: 100 mA max.

Buzzers		Model
Standard sound buzzer		M2BJ-B
High volume sound buzzer		M2BJ-BH

ZAP Series Non-lighted Pushbutton Switches

Quick Link
P654
omron247.com

30 mm Dia. Non-lighted Pushbutton Switches

- Using a Basic Switch enables direct switching of large-capacity loads
- Shock-absorbing structure of Operation unit protects the Switch
- IP65 rated pushbutton structure enables use in dusty locations and resists oil and water splashes
- Pushbuttons are available in three shapes and six colors



Specifications

- Rated load: 15 A at 250 VAC, 0.5 A at 125 VDC
- Electrical durability: 500,000 operations minimum

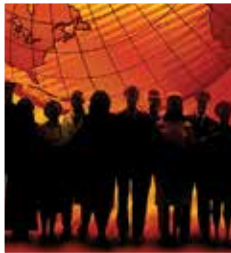
Shape of Operation Unit	Output	Operation Unit Color					
		Blue (-A)	Black (-B)	Green (-G)	Red (-R)	White (-W)	Yellow (-Y)
36 dia chrome bezel, 25 dia button	1	ZAP-A	ZAP-B	ZAP-G	ZAP-R	ZAP-W	ZAP-Y
	2	2ZAP-A	2ZAP-B	2ZAP-G	2ZAP-R	2ZAP-W	2ZAP-Y
36 dia chrome bezel, 25 dia button	1	ZAP-1A	ZAP-1B	ZAP-1G	ZAP-1R	ZAP-1W	ZAP-1Y
	2	2ZAP-1A	2ZAP-1B	2ZAP-1G	2ZAP-1R	2ZAP-1W	2ZAP-1Y
36 dia chrome bezel, 40 dia button	1	ZAP-2A	ZAP-2B	ZAP-2G	ZAP-2R	ZAP-2W	ZAP-2Y
	2	2ZAP-2A	2ZAP-2B	2ZAP-2G	2ZAP-2R	2ZAP-2W	2ZAP-2Y

Machine & Process Safeguarding

MAKING SAFETY SIMPLE — OMRON'S CONCEPT FOR THE FUTURE

Today, forward-thinking manufacturers clearly realize the new role of increased safety on the factory floor.

- Recently adopted international safety standards have shifted the way systems are evaluated.
- Safety is a corporate responsibility, not an obstruction to productivity.
- Safety is essential to increased productivity and profitability.



“The modern user of safety products demands a new vision.”

Poised at the leading-edge of safety solutions worldwide, Omron's STI safety products focus on making safety work.

We are aware of the many demands of automation safeguarding. Consequently, our automation safety products meet or exceed local and international safety standards.

Omron is committed to providing safeguarding solutions that meet your needs for safety and productivity. We design and engineer our products by listening to and working closely with our customers and authorized distributors. We also provide you with:

- Experienced assistance
- Expert guidance in application, integration and maintenance
- World-class support through Omron's global network of 250 sales locations in 65 countries

Machine and Process Safeguarding

ENHANCED WORKER SAFETY

1 Safety Light Curtains

The MS4800 and F3SJ models are simple to install, and available in a wide selection of protected heights and resolutions.

See page AA-i.



2 Safety Laser Scanners

Our OS32C is a very compact safety laser scanner. It has 70 zone configurations for complex guarding parameters. Safety coverage up to 4 m at 270 degrees.

See page BB-i.



New Industry First!
EtherNet/IP capable of status and measurement data reporting.

3 Safety Interlock Switches

Tamper resistant switches enhance mechanical guarding methods.

- Guardlocking switches
- Hinge pin switches
- Non-contact switches
- Limit switches
- Tongue switches
- Explosion-proof versions

See page EE-i.

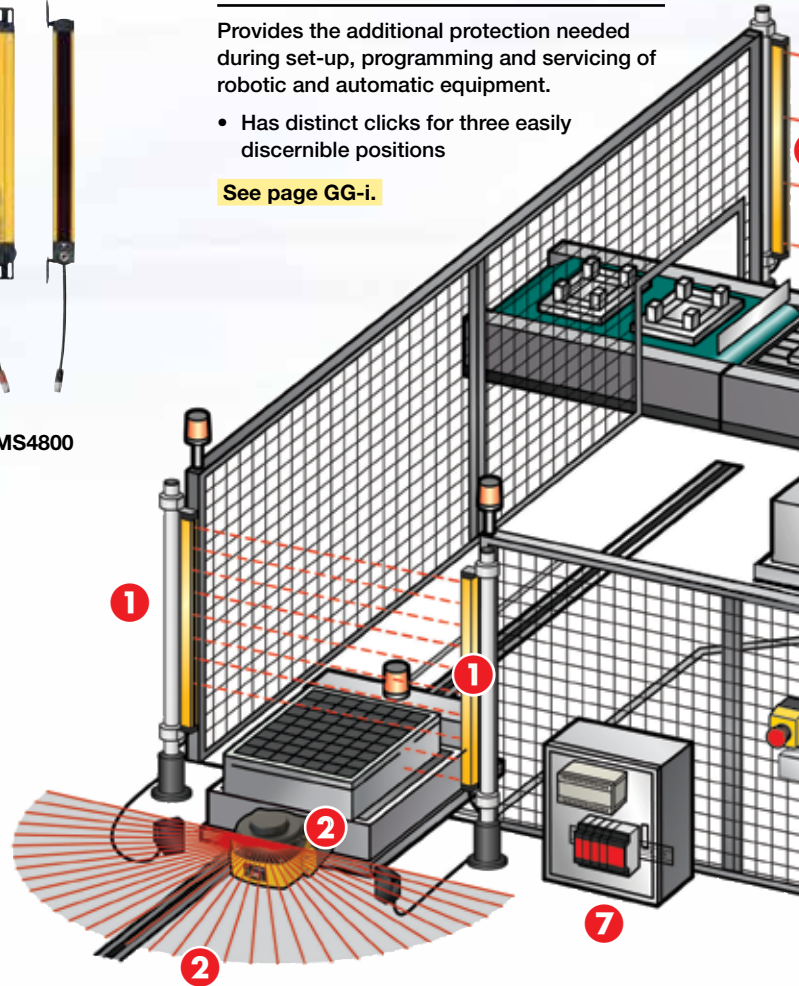


8 Enabling Switches

Provides the additional protection needed during set-up, programming and servicing of robotic and automatic equipment.

- Has distinct clicks for three easily discernible positions

See page GG-i.



7 Safety Programmable Controllers

7 Safety Monitoring Relays

The G9SP stand-alone programmable safety controller for mid-sized applications supports direct connection to safety mats and non-contact switches. The NE1A DeviceNet safety network controller is well-suited for large complex applications, while safety monitoring relays are ideal for ensuring control reliability in smaller applications.

- Multiple input versions
- Delayed outputs
- Two-hand control
- Stop motion sensing

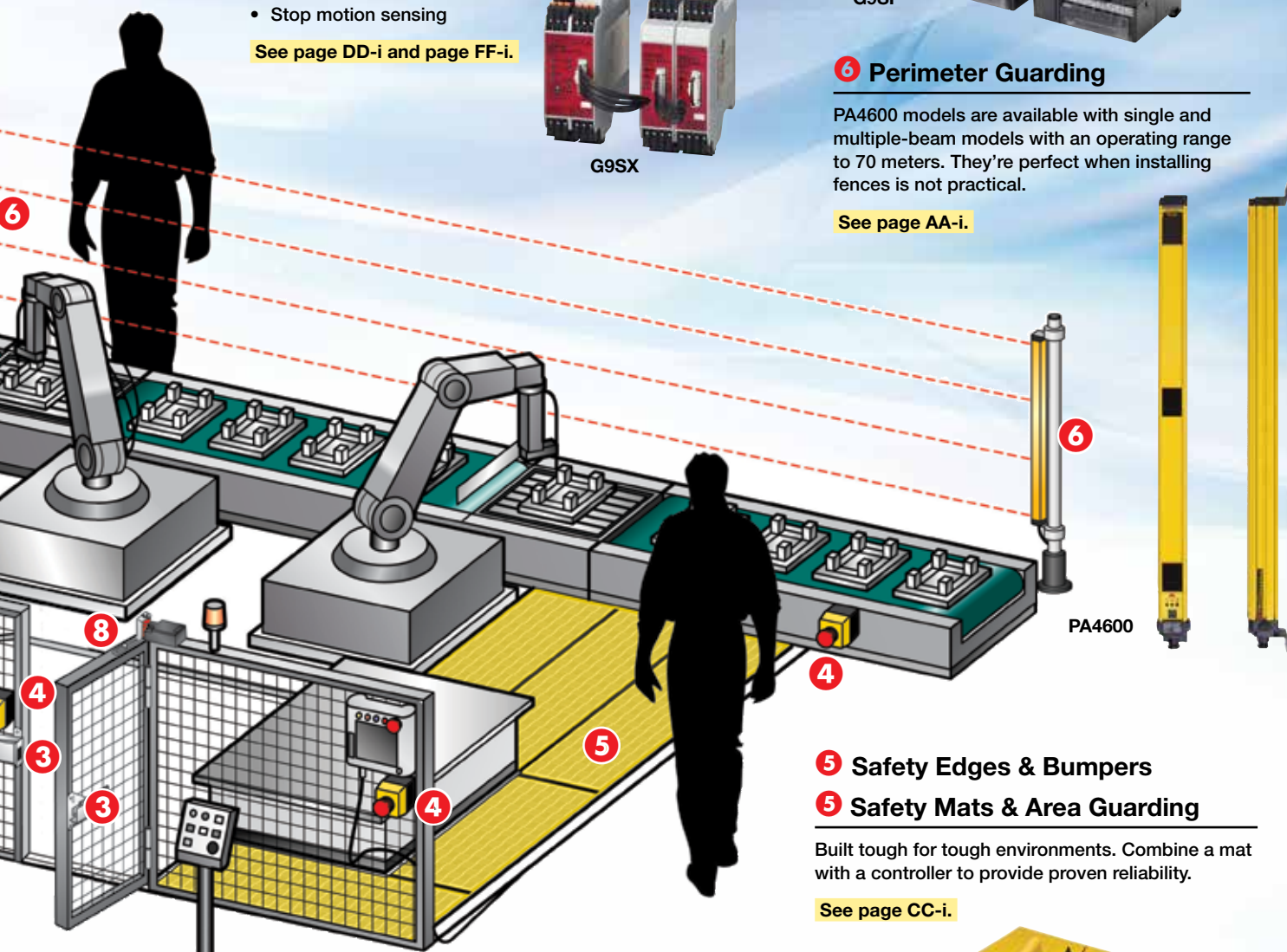
See page DD-i and page FF-i.



6 Perimeter Guarding

PA4600 models are available with single and multiple-beam models with an operating range to 70 meters. They're perfect when installing fences is not practical.

See page AA-i.



6

PA4600

5 Safety Edges & Bumpers

5 Safety Mats & Area Guarding

Built tough for tough environments. Combine a mat with a controller to provide proven reliability.

See page CC-i.

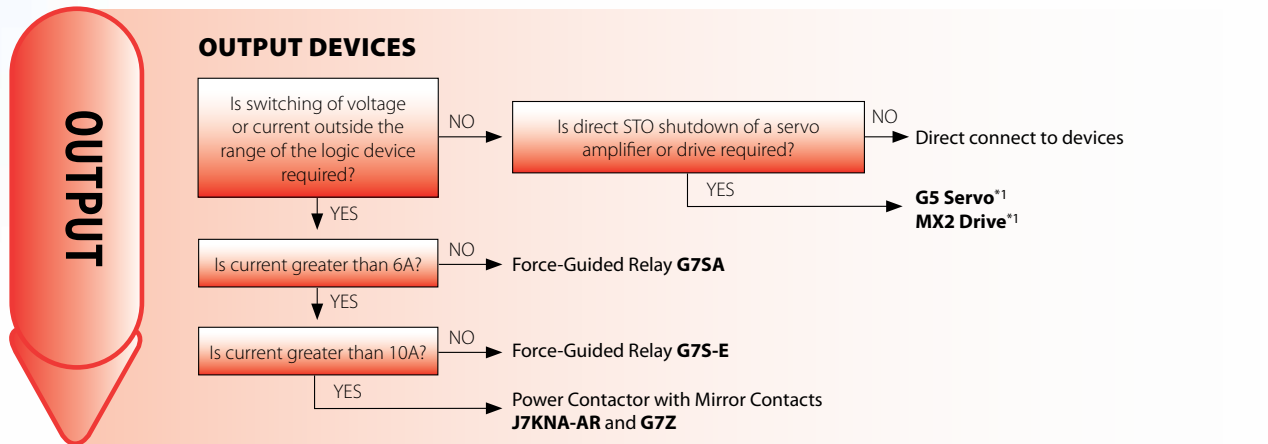
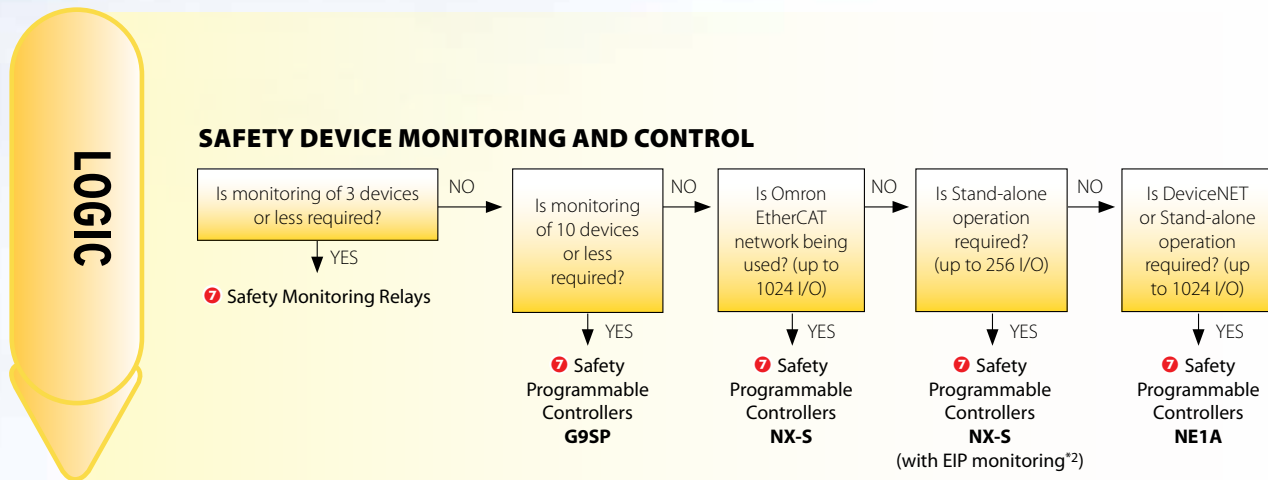
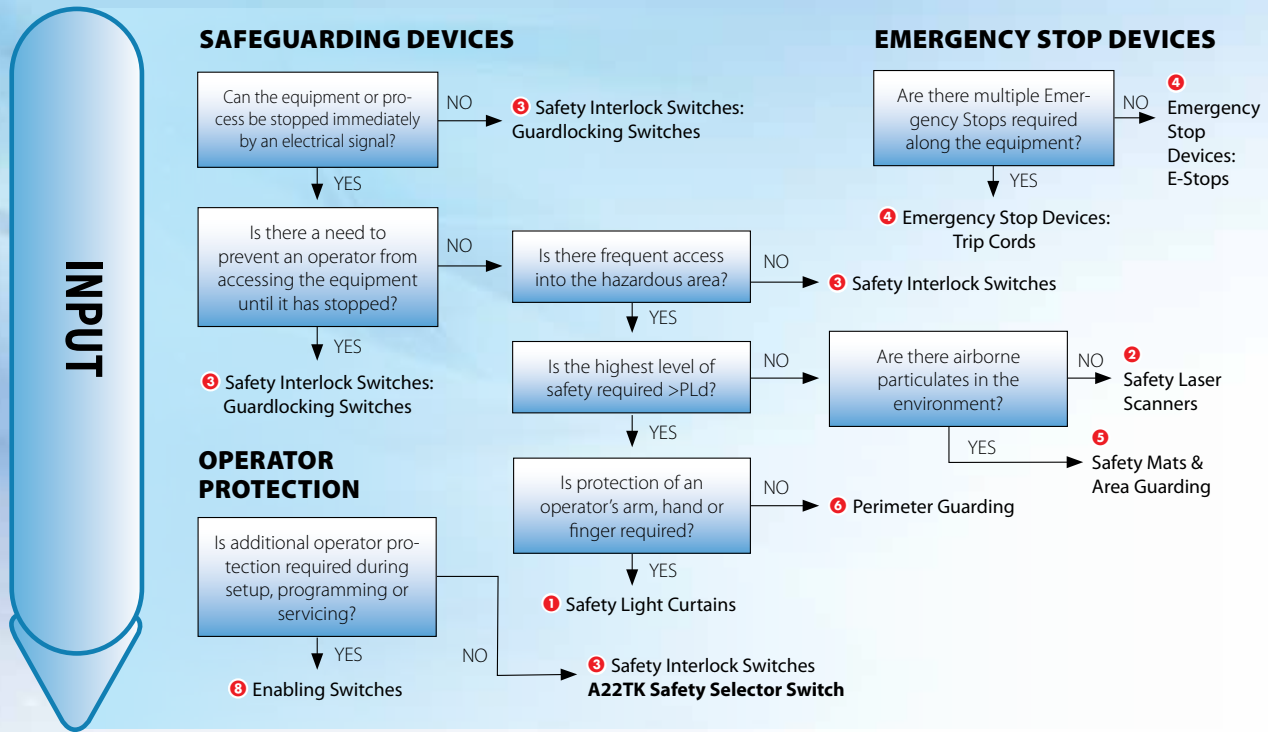
4 Emergency Stop Devices

- Enclosed and panel-mounted models available with key-operated reset.
- Combination rope and push button actuated emergency stop switches.
- Heavy duty housing offering rope spans to 200 meters

See page FF-i.



Machine & Process Safeguarding



*1 Please refer to www.omron247.com for more information about servos and drives with integrated safety

*2 Available Early 2015

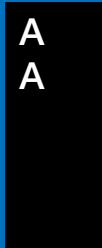
* Please refer to www.omron247.com or to the Machine & Process Safeguarding Solution Selection Guide for additional information and product selections.

Safety Light Curtains & Perimeter Access Guarding



Contents

Type 4 Light Curtains		
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F3SG-RA Advanced Safety Light Curtains

Quick Link

S642

omron247.com

Global Multilingual Light Curtain offers safety in 8 languages

Advanced Safety Light Curtain in rugged, IP67 rates housing

- Built-in muting; requires no external muting controller
- Resolution: 14 mm (finger protection) and 30 mm (Hand protection) models
- Scan QR code with smart phone for local language support and troubleshooting guide
- All models designed for global use; PNP/ NPN output selection DIP switch



Ordering Information

Model	Description
F3SG-4RA0240-14	F3SG-4RA, 14MM RESOLUTION, 240 PROTECTIVE HEIGHT
F3SG-4RA0400-14	F3SG-4RA, 14MM RESOLUTION, 400 PROTECTIVE HEIGHT
F3SG-4RA0560-14	F3SG-4RA, 14MM RESOLUTION, 560 PROTECTIVE HEIGHT
F3SG-4RA0720-14	F3SG-4RA, 14MM RESOLUTION, 720 PROTECTIVE HEIGHT
F3SG-4RA0880-14	F3SG-4RA, 14MM RESOLUTION, 880 PROTECTIVE HEIGHT
F3SG-4RA1200-14	F3SG-4RA, 14MM RESOLUTION, 1200 PROTECTIVE HEIGHT
F3SG-4RA1680-14	F3SG-4RA, 14MM RESOLUTION, 1680 PROTECTIVE HEIGHT
F3SG-4RA0270-30	F3SG-4RA, 30MM RESOLUTION, 270 PROTECTIVE HEIGHT
F3SG-4RA0430-30	F3SG-4RA, 30MM RESOLUTION, 430 PROTECTIVE HEIGHT
F3SG-4RA0590-30	F3SG-4RA, 30MM RESOLUTION, 590 PROTECTIVE HEIGHT
F3SG-4RA0750-30	F3SG-4RA, 30MM RESOLUTION, 750 PROTECTIVE HEIGHT
F3SG-4RA0910-30	F3SG-4RA, 30MM RESOLUTION, 910 PROTECTIVE HEIGHT
F3SG-4RA1230-30	F3SG-4RA, 30MM RESOLUTION, 1230 PROTECTIVE HEIGHT
F3SG-4RA1550-30	F3SG-4RA, 30MM RESOLUTION, 1550 PROTECTIVE HEIGHT
F3SG-4RA1790-30	F3SG-4RA, 30MM RESOLUTION, 1790 PROTECTIVE HEIGHT
F39-LGA	F3SG-4RA STANDARD ADJUSTABLE BRACKET
F39-LP	F3SG-4RA MUTING LAMP
F39-JG10A-L	F3SG-4RA, SINGLE ENDED CABLE FOR TX,10M
F39-JG3B-L	F3SG-4RA, DOUBLE ENDED CABLE FOR TX,3M
F39-JG7B-L	F3SG-4RA, DOUBLE ENDED CABLE FOR TX,7M
F39-JG10B-L	F3SG-4RA, DOUBLE ENDED CABLE FOR TX,10M
F39-JG10A-D	F3SG-4RA, SINGLE ENDED CABLE FOR RX,10M
F39-JG3B-D	F3SG-4RA, DOUBLE ENDED CABLE FOR RX,3M
F39-JG5B-D	F3SG-4RA, DOUBLE ENDED CABLE FOR RX,5M
F39-JG10B-D	F3SG-4RA, DOUBLE ENDED CABLE FOR RX,10M

MS4800 Safety Light Curtain

Quick Link

S633

omron247.com

MiniSafe® Light Curtains

- Resolutions: 14 mm (0.55 in.), 20 mm (0.79 in.), 30 mm (1.18 in.), and 40 mm (1.57 in.)
- Ranges: 7 m (23 ft.) for 14 mm resolution systems; and 20 m (65 ft.) for 20, 30 and 40 mm resolution systems
- Protected Heights: 280 to 2120 mm (11 to 83.5 in.)
- Compact size: 50 x 38 mm (2 x 1.5 in.)
- “Two-box” design – no separate control box; no cable between transmitter and receiver
- Individual Beam Indicators
- Quick and easy fixed blanking programming option “SB1”
- Simple cascading models



Ordering Information

Model	Part Number	Description
MS4800S-20-0320	70230-1180	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 320 PROTECTED HEIGHT
MS4800S-20-0440	70230-1183	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 440 PROTECTED HEIGHT
MS4800S-20-0600	70230-1187	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 600 PROTECTED HEIGHT
MS4800S-20-0760	70230-1191	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 760 PROTECTED HEIGHT
MS4800S-20-0920	70230-1195	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 920 PROTECTED HEIGHT
MS4800S-20-1080	70230-1199	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 1080 PROTECTED HEIGHT
MS4800S-20-1200	70230-1202	MS4800 SYSTEM, STANDARD, 20MM RESOLUTION, 1200 PROTECTED HEIGHT
MS4800S-30-0440	70230-1222	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 440 PROTECTED HEIGHT
MS4800S-30-0600	70230-1226	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 600 PROTECTED HEIGHT
MS4800S-30-0720	70230-1229	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 720 PROTECTED HEIGHT
MS4800S-30-0760	70230-1230	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 760 PROTECTED HEIGHT
MS4800S-30-0840	70230-1232	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 840 PROTECTED HEIGHT
MS4800S-30-0920	70230-1234	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 920 PROTECTED HEIGHT
MS4800S-30-1040	70230-1237	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 1040 PROTECTED HEIGHT
MS4800S-30-1200	70230-1241	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 1200 PROTECTED HEIGHT
MS4800S-30-1400	70230-1246	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 1400 PROTECTED HEIGHT
MS4800S-30-1520	70230-1249	MS4800 SYSTEM, STANDARD, 30MM RESOLUTION, 1520 PROTECTED HEIGHT
MS4800-CBLRX-10M	40451-0100	MS4800 SPARE RECEIVER CABLE, 10M
MS4800-CBLRX-15M	40451-0150	MS4800 SPARE RECEIVER CABLE, 15M
MS4800-CBLRX-30M	40451-0300	MS4800 SPARE RECEIVER CABLE, 30M
MS4800-CBLTX-10M	40452-0100	MS4800 SPARE TRANSMITTER CABLE, 10M
MS4800-CBLTX-15M	40452-0150	MS4800 SPARE TRANSMITTER CABLE, 15M
MS4800-CBLTX-30M	40452-0300	MS4800 SPARE TRANSMITTER CABLE, 30M

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F3SJ-A Safety Light Curtains

Quick Link

S634

omron247.com

“Advanced” Safety Light Curtains

- Resolution: 14 mm (0.55 in.), 20 mm (0.79 in.), 25 mm (1.01 in.) 30 mm (1.18 in.), or 55 mm (2.17 in.)
- Range: 7 m (23 ft.) or 9 m (29.5 ft.) dependent on minimum object resolution and protected height
- Protected heights: 14 mm protected heights from 245 to 1631 mm (9.6 to 64 in.), 20 mm, 25 mm and 30 mm protected heights from 245 to 2495 mm (9.6 to 98 in.), 55 mm from 270 to 2470 mm (10.6 to 97 in.)
- Very compact size – 30 x 24 mm (1.18 x 0.94 in.)
- Cascaded designs possible – 4 segments, up to 400 beams
- Partial muting and position detection muting
- Cross-talk prevention



Ordering Information

Model	Part Number	Description
F3SJ-A0245P20	40560-2001	F3SJ-A SYSTEM, 20MM RESOLUTION, 245 PROTECTIVE HEIGHT
F3SJ-A0245P30	40560-3001	F3SJ-A SYSTEM, 30MM RESOLUTION, 245 PROTECTIVE HEIGHT
F3SJ-A0305P20	40560-2003	F3SJ-A SYSTEM, 20MM RESOLUTION, 305 PROTECTIVE HEIGHT
F3SJ-A0320P30	40560-3004	F3SJ-A SYSTEM, 30MM RESOLUTION, 320 PROTECTIVE HEIGHT
F3SJ-A0395P30	40560-3007	F3SJ-A SYSTEM, 30MM RESOLUTION, 395 PROTECTIVE HEIGHT
F3SJ-A0455P20	40560-2008	F3SJ-A SYSTEM, 20MM RESOLUTION, 455 PROTECTIVE HEIGHT
F3SJ-A0470P30	40560-3010	F3SJ-A SYSTEM, 30MM RESOLUTION, 470 PROTECTIVE HEIGHT
F3SJ-A0605P20	40560-2013	F3SJ-A SYSTEM, 20MM RESOLUTION, 605 PROTECTIVE HEIGHT
F3SJ-A0620P30	40560-3016	F3SJ-A SYSTEM, 30MM RESOLUTION, 620 PROTECTIVE HEIGHT
F3SJ-A0695P30	40560-3019	F3SJ-A SYSTEM, 30MM RESOLUTION, 695 PROTECTIVE HEIGHT
F3SJ-A0755P20	40560-2018	F3SJ-A SYSTEM, 20MM RESOLUTION, 755 PROTECTIVE HEIGHT
F3SJ-A0770P30	40560-3022	F3SJ-A SYSTEM, 30MM RESOLUTION, 770 PROTECTIVE HEIGHT
F3SJ-A0870P30	40560-3026	F3SJ-A SYSTEM, 30MM RESOLUTION, 870 PROTECTIVE HEIGHT
F3SJ-A0905P20	40560-2023	F3SJ-A SYSTEM, 20MM RESOLUTION, 905 PROTECTIVE HEIGHT
F3SJ-A0920P30	40560-3028	F3SJ-A SYSTEM, 30MM RESOLUTION, 920 PROTECTIVE HEIGHT
F3SJ-A1025P20	40560-2027	F3SJ-A SYSTEM, 20MM RESOLUTION, 1025 PROTECTIVE HEIGHT
F3SJ-A1045P30	40560-3033	F3SJ-A SYSTEM, 30MM RESOLUTION, 1045 PROTECTIVE HEIGHT
F3SJ-A1220P30	40560-3040	F3SJ-A SYSTEM, 30MM RESOLUTION, 1220 PROTECTIVE HEIGHT
F3SJ-A1495P30	40560-3045	F3SJ-A SYSTEM, 30MM RESOLUTION, 1495 PROTECTIVE HEIGHT
F39-CN6	11033-0007	F3SJ-A KEY CAP FOR MUTING
F39-LJ1	11033-0008	F3SJ-A MOUNTING BRACKETS, STANDARD MOUNTING
F39-LJ2	11033-0009	F3SJ-A MOUNTING BRACKETS, FLAT SIDE MOUNTING
F39-LJ3	11033-0010	F3SJ-A MOUNTING BRACKETS, FREE-LOCATION MOUNTING
F39-GWUM	11033-0155	F3SJ-A SD-MANAGER SETTING SUPPORT SOFTWARE
F39-TC5P01	11033-0180	F3SJ-A CONNECTOR TERMINAL BOX WITH MUTING SENSOR OUTPUT MODE (PNP)
F39-TC5P02	11033-0181	F3SJ-A CONNECTOR TERMINAL BOX WITH OVERRIDE MODE (PNP)
F39-CN8	11033-0184	F3SJ-A SHORT-CIRCUIT CONNECTOR
F39-JC3A	11034-1001	F3SJ-A CONNECTOR CABLE, SINGLE-ENDED, 3M, PAIR
F39-JC7A	11034-1002	F3SJ-A CONNECTOR CABLE, SINGLE-ENDED, 7M, PAIR
F39-JC10A	11034-1003	F3SJ-A CONNECTOR CABLE, SINGLE-ENDED, 10M, PAIR
F39-JC15A	11034-1004	F3SJ-A CONNECTOR CABLE, SINGLE-ENDED, 15M, PAIR
F39-JC20A	11034-1071	F3SJ-A CONNECTOR CABLE, SINGLE-ENDED, 20M, PAIR
F3SP-B1P	11042-6001	F3SJ-A/B CONTROL UNIT

F3SJ-B Safety Light Curtains

Quick Link

S645

omron247.com

“Basic” Safety Light Curtains

- Fast and easy installation
- Resolution: 25 mm (1.01 in.)
- Range: 7 m (23 ft.)
- Protected heights: 185 to 2065 mm (7.28 to 81.26 in.)
- Very compact size: 30 x 30 mm (1.18 x 1.18 in.)
- Cascaded designs possible – 3 segments
- Simple muting
- Cross-talk prevention



Ordering Information

Model	Part Number	Description
F3SJ-B0185P25	11037-7001	F3SJ-B SYSTEM, 25MM RESOLUTION, 185 MM PROTECTED HEIGHT
F3SJ-B0305P25	11037-7003	F3SJ-B SYSTEM, 25MM RESOLUTION, 305 MM PROTECTED HEIGHT
F3SJ-B0465P25	11037-7005	F3SJ-B SYSTEM, 25MM RESOLUTION, 465 MM PROTECTED HEIGHT
F3SJ-B0625P25	11037-7007	F3SJ-B SYSTEM, 25MM RESOLUTION, 625 MM PROTECTED HEIGHT
F3SJ-B0785P25	11037-7009	F3SJ-B SYSTEM, 25MM RESOLUTION, 785 MM PROTECTED HEIGHT
F3SJ-B0945P25	11037-7011	F3SJ-B SYSTEM, 25MM RESOLUTION, 945 MM PROTECTED HEIGHT
F3SJ-B1105P25	11037-7013	F3SJ-B SYSTEM, 25MM RESOLUTION, 1105 MM PROTECTED HEIGHT
F3SJ-B1265P25	11037-0015	F3SJ-B SYSTEM, 25MM RESOLUTION, 1265 MM PROTECTED HEIGHT
F3SJ-B1505P25	11037-0018	F3SJ-B SYSTEM, 25MM RESOLUTION, 1505 MM PROTECTED HEIGHT
F3SP-B1P	11042-6001	F3SJ-A/B CONTROL UNIT
F39-JD3A	11077-1003	F3SJ-B CONNECTOR CABLE, SINGLE-ENDED, 3M, PAIR
F39-JD7A	11077-1004	F3SJ-B CONNECTOR CABLE, SINGLE-ENDED, 7M, PAIR
F39-JD10A	11077-1005	F3SJ-B CONNECTOR CABLE, SINGLE-ENDED, 10M, PAIR
F39-JD15A	11077-1006	F3SJ-B CONNECTOR CABLE, SINGLE-ENDED, 15M, PAIR
F39-JD20A	11077-1007	F3SJ-B CONNECTOR CABLE, SINGLE-ENDED, 20M, PAIR
F39-JDR5B	11077-1008	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 0.5M, PAIR
F39-JD1B	11077-1009	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 1M, PAIR
F39-JD3B	11077-1010	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 3M, PAIR
F39-JD5B	11077-1011	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 5M, PAIR
F39-JD7B	11077-1012	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 7M, PAIR
F39-JD10B	11077-1013	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 10M, PAIR
F39-JD15B	11077-1014	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 15M, PAIR
F39-JD20B	11077-1015	F3SJ-B CONNECTOR CABLE, DOUBLE-ENDED, 20M, PAIR
F39-LJB1	11083-0001	F3SJ-E/B TOP/BOTTOM BRACKET, INCLUDES 4 PCS
F39-LJB4	11083-0007	F3SJ-E/B COMPATIBLE MOUNTING BRACKET, USE WHEN REPLACING F3SJ-A OR F3SN, INCLUDES 4 PCS
F39-CN10	11083-1001	F3SJ-B MUTING KEY CAP
F39-JBR2W	11083-1002	F3SJ-B CONNECTION CABLE FOR EXTENSION, 0.2M

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F3SJ-E Safety Light Curtains

Quick Link

S646

omron247.com

“Easy” Safety Light Curtains

- Fast and easy installation
- Resolution: 25 mm (1.01 in.)
- Range: 7 m (23 ft.)
- Protected heights: 185 to 1105 mm (7.28 to 43.50 in.)
- Very compact size: 30 x 30 mm (1.18 x 1.18 in.)
- Cross-talk prevention
- 3 m integrated cables



Ordering Information

Model	Part Number	Description
F3SJ-E0185P25	11082-7001	F3SJ-E SYSTEM, 25MM RESOLUTION, 185 MM PROTECTED HEIGHT
F3SJ-E0305P25	11082-7003	F3SJ-E SYSTEM, 25MM RESOLUTION, 305 MM PROTECTED HEIGHT
F3SJ-E0465P25	11082-7005	F3SJ-E SYSTEM, 25MM RESOLUTION, 465 MM PROTECTED HEIGHT
F3SJ-E0625P25	11082-7007	F3SJ-E SYSTEM, 25MM RESOLUTION, 625 MM PROTECTED HEIGHT
F3SJ-E0785P25	11082-7009	F3SJ-E SYSTEM, 25MM RESOLUTION, 785 MM PROTECTED HEIGHT
F3SJ-E0945P25	11082-7011	F3SJ-E SYSTEM, 25MM RESOLUTION, 945 MM PROTECTED HEIGHT
F3SJ-E1105P25	11082-7013	F3SJ-E SYSTEM, 25MM RESOLUTION, 1105 MM PROTECTED HEIGHT
F39-LJB1	11083-0001	F3SJ-E/B TOP/BOTTOM BRACKET, INCLUDES 4 PCS
F39-LJB4	11083-0007	F3SJ-E/B COMPATIBLE MOUNTING BRACKET, USE WHEN REPLACING F3SJ-A OR F3SN, INCLUDES 4 PCS

RM-1 Resource Module

Quick Link

S922

omron247.com

Resource Module — Converts Solid-State Outputs to Force-Guided Relay Outputs

- Converts the solid-state safety outputs of one STI safety device to electromechanical force-guided safety relay outputs
- Compatible with MS4800, F3SJ, PA4600 and OS32C
- 55 mm DIN enclosure with removable terminal blocks
- CE approved



File No. LR90200-34

Ordering Information

Model	Part Number	Description
RM-1	43763-0010	RM-1, 24VDC, DIN-RAIL MOUNT

RM-2, -2AC & 2-AC-IP Resource Module

Quick Link

S923

omron247.com

Resource Module — Converts Solid-State Outputs to Force-Guided Relay Outputs

- Converts the solid-state safety and auxiliary outputs of one STI safety device to electromechanical force-guided safety relay outputs
- Available for DC or AC input power
- Provides connection points for all safety device functions including MPCE monitoring and 24 VDC power
- Compatible with MS4800, F3SJ, PA4600 and OS32C
- Enclosures —
RM-2: 100 mm DIN, IP20
RM-2AC: 150 mm DIN, IP20
RM-2AC-IP: metal chassis, IP65



File No. LR90200-34

- CE approved
- Removable terminal blocks

Ordering Information

Model	Part Number	Description
RM-2	43776-0010	RM-2, 24VDC, DIN-RAIL MOUNT
RM-2AC	40344-0010	RM-2AC, 100-240VAC, DIN-RAIL MOUNT
RM-2AC-IP	40525-0010	RM-2AC-IP, 100-240VAC, METAL CHASSIS

RM-3 Resource Module

Quick Link

S924

omron247.com

Resource Module — Mute Module

- Type 4 safety product, when used in combination with a Type 4 safety light curtain
- Provides muting controls for up to two light curtains
- Diagnostic display
- Solid-state safety outputs
- 100 mm DIN box enclosure
- Removable terminal blocks
- DeviceNet option
- Compatible with MS4800, F3SJ, PA4600 and OS32C

Input Signals

- Input Power +24 VDC
- Two independent channels, each channel is comprised of one light curtain and up to four mute sensors
- Start
- EDM (MPCE monitoring)
- Mute enable

Output Signals

- Two independent PNP safety outputs
- NPN & PNP auxiliary outputs
- Mute lamp drivers (2)
- Mute auxiliary (NPN)
- Mute armed (NPN)



Indicators

- Diagnostic display
- Machine Run
- Machine Stop
- Interlock
- OSSD input active (light curtains)
- Sensor input active (sensors)
- Mute Enable active

Ordering Information

Model	Part Number	Description
RM-3	43983-0010	RM-3, MUTE MODULE, 24VDC, DIN-RAIL MOUNT

RM-X Resource Module

Quick Link

S927

omron247.com

Resource Module — Converts Solid-State Outputs to Force-Guided Relay Outputs

- Converts the solid-state safety outputs of one STI safety device to electromechanical force-guided safety relay outputs
- Compatible with MS4800, F3SJ, PA4600 and OS32C
- CE approved
- 22.5 mm DIN enclosure



Ordering Information

Model	Part Number	Description
RM-X	40152-0010	RM-X, RELAY EXPANSION MODULE

PA4600 Perimeter Access Guarding Device

Quick Link

S647

omron247.com

Perimeter Access Guarding Device

- 1 to 6 beams available
- Operating range of 70 m
- Compact size — 46 x 55 mm (1.81 x 2.17 in.)
- Simple “two-box” design — no separate control box required
- Individual Beam Indicators



Ordering Information

Model	Part Number	Description
PA46-1-000-Q2-NO1-PN	70170-1045	PA4600 SYSTEM, 1 BEAM, M-12 QD, NO1, PNP
PA46-2-600-Q2-NO1-PN	70170-1042	PA4600 SYSTEM, 2 BEAMS, 600MM SPACING, QD, NO1, PNP
PA46-3-400-Q2-NO1-PN	70170-1039	PA4600 SYSTEM, 3 BEAMS, 400MM SPACING, QD, NO1, PNP
CBL-LCRX-10M	40552-0100	PA4600 RECEIVER CABLE, 10M
CBL-LCRX-15M	40552-0150	PA4600 RECEIVER CABLE, 15M
CBL-LCRX-30M	40552-0300	PA4600 RECEIVER CABLE, 30M
CBL-LCTX-10M	40553-0100	PA4600 TRANSMITTER CABLE, 10M
CBL-LCTX-15M	40553-0150	PA4600 TRANSMITTER CABLE, 15M
CBL-LCTX-30M	40553-0300	PA4600 TRANSMITTER CABLE, 30M

AA

Safety Light Curtains & Perimeter Access Guarding



Safety Laser Scanner

OMRON

Contents

Safety Laser Scanner

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В

OS32C Safety Laser Scanner

Quick Link

S224

omron247.com

Compact Safety Area Laser Scanner

EtherNet/IP Capable for Status and Measurement Data Reporting

- Compact size (104.5 mm height), power efficient (5 W) and light weight (1.3 kg) for longer AGV battery life
- Versions with 3M and 4M safety zones available
- Configuration memory block, no need to reprogram after sensor replacement, minimal down time
- Configurable minimum object resolution of 30, 40, 50 or 70 mm, for hand and arm detection applications
- 8 individual sector indicators and LED indicators, determine scanner status at a glance



EtherNet/IP™
conformance tested



- Type 3 Safety Laser Scanner complies with IEC61496-1/-3
- Performance Level d and category 3 (ISO13849-1)

Ordering Information

Model	Part Number	Description
OS32C-BP	40589-0011	SYSTEM WITH BACK CABLE ENTRY, ETHERNET, 3M
OS32C-BP-DM	40589-0013	SYSTEM WITH BACK CABLE ENTRY, ETHERNET/IP, 3M, MEASUREMENT
OS32C-SP1	40589-0021	SYSTEM WITH SIDE CABLE ENTRY, ETHERNET, 3M
OS32C-SP1-DM	40589-0023	SYSTEM WITH SIDE CABLE ENTRY, ETHERNET/IP, 3M, MEASUREMENT
OS32C-BP-4M	40588-0011	SYSTEM WITH BACK CABLE ENTRY, ETHERNET, 4M
OS32C-SP1-4M	40588-0021	SYSTEM WITH BACK CABLE ENTRY, ETHERNET, 4M
OS32C-BP-DM-4M	40588-0013	SYSTEM WITH BACK CABLE ENTRY, ETHERNET/IP, 4M, MEASUREMENT
OS32C-SP1-DM-4M	40588-0023	SYSTEM WITH BACK CABLE ENTRY, ETHERNET/IP, 4M, MEASUREMENT
WIN-CLN-KT	40387-0020	WINDOW CLEANING KIT
OS32C-BKT1	40634-0010	MOUNTING BRACKET, BOTTOM/SIDE
OS32C-BKT2	40635-0010	MOUNTING BRACKET, XY AXIS ROTATION
OS32C-BKT4	40636-0010	MOUNTING BRACKET, PROTECTIVE COVER FOR WINDOW
OS32C-MT	40637-0010	MOUNTING STAND
OS32C-HDT	40638-0010	MOUNTING STAND HARDWARE KIT
OS32C-BKT3	40648-0010	MOUNTING BRACKET,SIMPLE
OS32C-CBL-03M	40649-0030	POWER CABLE, 3M
OS32C-CBL-10M	40649-0100	POWER CABLE, 10M
OS32C-CBL-20M	40649-0200	POWER CABLE, 20M
OS32C-CBL-30M	40649-0300	POWER CABLE, 30M
OS32C-ECBL-02M	40650-0020	ETHERNET CABLE, 2M
OS32C-ECBL-05M	40650-0050	ETHERNET CABLE, 5M
OS32C-ECBL-15M	40650-0150	ETHERNET CABLE, 15M
OS32C-SN	40651-0011	SPARE I/O SENSOR BLOCK WITHOUT I/O BLOCK
OS32C-SN-DM	40651-0013	SPARE I/O SENSOR BLOCK WITHOUT I/O BLOCK FOR DM VERSION
OS32C-CBBP	40652-0010	SPARE I/O BLOCK WITH BACK CABLE ACCESS
OS32C-CBSP1	40652-0020	SPARE I/O BLOCK WITH LEFT SIDE CABLE ACCESS
OS32C-WIN-KT	40653-0010	SPARE REPLACEMENT SCAN WINDOW
OS32C-ADAPT-OS31	40668-0010	TO OS3101 ADAPTOR CABLE

Programmable Safety Controllers **OMRON**

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Programmable Safety Controllers

NX-S Programmable Safety Controllers and I/O

Quick Link

H253

omron247.com

Safety over EtherCAT Integration of Safety into Machine Automation Enables Simple, Flexible System Configuration

- EN ISO13849-1 (PLe/Safety Category 4), IEC 61508 (SIL3) certified.
- One connection using Safety over EtherCAT (FSoE)* protocol enables flexible configuration by mixing the Safety Units with standard NX I/O.
- Hardware and safety circuits can be configured using the Sysmac Studio



Features

- Integrated safety into machine automation possible by connecting with the NX-series EtherCAT coupler.
- The Safety CPU Unit controls up to 128 Safety I/O Units.
- 4 or 8 points per Safety Input Unit. The 2-point Safety Input Unit can be directly connected with OMRON Non-contact Switches and Single beam Sensors.
- 2 or 4 points per Safety Output Unit. The 2-point Safety Output Unit is characterized by large output breaking current of 2.0 A.
- The Safety Units can be freely allocated in any combination with standard NX I/O.
- Compliant with IEC61131-3.
- NEW! Now available for use with the NX EtherNet/IP coupler for stand-alone operation with monitoring by any EtherNet/IP master device.

Ordering Information

Model	Description
NX-SIH400 VER 1.1	NX SAFETY I/O, 4 IN, SPECIALTY
NX-SOD400	NX SAFETY I/O, 4 OUT, 0.5A
NX-SID800	NX SAFETY I/O, 8 IN, STANDARD
NX-SOH200	NX SAFETY I/O, 2 OUT, 2A
NX-SL3300 VER 1.1	CPU-512K, 32 SAFETY CONNECTIONS, 256 I/O MAX.
NX-SL3500	CPU-2048K, 128 SAFETY CONNECTIONS, 1024 I/O MAX.

*Safety over EtherCAT (FsoE): The open protocol Safety over EtherCAT (abbreviated with FSoE “FailSafe over EtherCAT” defines a safety related communication layer for EtherCAT. Safety over EtherCAT meets the requirements of IEC 61508 SIL 3 and enables the transfer of safe and standard information on the same communication system without limitations with regard to transfer speed and cycle time.

Sysmac is a trademark or registered trademark of OMRON Corporation in Japan and other countries for OMRON factory automation products. EtherCAT® is a registered trademark of Beckhoff Automation GmbH for their patented technology.

G9SP Programmable Safety Controllers

Quick Link

S356

omron247.com

Compact Standalone Programmable Safety Controllers for small and mid-sized machinery

- Easy programming for complex safety control
- Three types of CPU with different I/O size to suit the application
- Four types of Expansion I/O Units for hard-wired diagnosis or standard non-safety signals
- Clear diagnosis and monitoring via Ethernet (Omron FINS protocol), EtherNet/IP, or serial (RS-232) connection
- Supports direct connection with non-contact switches and safety mats
- Easy design, verification, standardization and reuse of safety control by unique programming software
- ISO 13849-1(PLe), IEC61508(SIL3) certified



Ordering Information

Model	Part Number	Description
CM-EIP-1	82611-0010	G9SP ETHERNET/IP OPTION BOARD
G9SP-N10D	11080-0002	G9SP BASE MODEL, CONTROLLER, 10 SAFETY INPUTS, 6 TEST OUTPUTS, 16 SAFETY OUTPUTS
G9SP-N10S	11080-0001	G9SP BASE MODEL, CONTROLLER, 10 SAFETY INPUTS, 4 TEST OUTPUTS, 4 SAFETY OUTPUTS
G9SP-N20S	11080-0003	G9SP BASE MODEL, CONTROLLER, 20 SAFETY INPUTS, 6 TEST OUTPUTS, 8 SAFETY OUTPUTS
WS02-G9SP01-V1	11080-1001	G9SP SOFTWARE CONFIGURATOR

NE1A Programmable Safety Controllers

Quick Link

S322

omron247.com

DeviceNet Safety Network Controllers

- NE1A Series helps to reduce wiring within a safety network and delivers a high degree of flexibility.
- NE1A-SCPU01-V1 provides 16 built-in safety inputs and 8 built-in safety outputs.
- NE1A-SCPU02 provides 40 built-in safety inputs and 8 built-in safety outputs.
- For lines with various levels of distributed safety devices up to 64 controllers can be connected to the network.
- Complicated safety systems are greatly simplified with 23 safety-certified function blocks and easy Drag and drop hardware configuration.
- Monitor the safety system from standard controllers across the network.
- EN 954-1/ISO13849-1 CAT4 and IEC 61508 SIL3 certification.



Ordering Information

Model	Part Number	Description
NE1A-SCPU01-V1 VER 2.0	11061-0004	NE1A BASE MODEL, 16 INPUTS, 8 OUTPUTS
NE1A-SCPU02 VER 2.0	11061-0005	NE1A BASE MODEL, 40 INPUTS, 8 OUTPUTS

DST1 Safety I/O Terminals

Quick Link

S328

omron247.com

Distributed Safety I/O Terminals that reduce wiring

- Distributed safety terminals that reduce wiring
- Lineup includes four models to accommodate various I/O types and number of I/O points
- Monitor the safety system from standard controllers across the network
- EN 954-1/ISO13849-1 CAT4 and IEC 61508 SIL3 certification
- The DST1-XD0808SL-1 supports logic operation functions for high-speed processing in applications requiring partial stopping of the safety system.



Ordering Information

Model	Part Number	Description
DST1-ID12SL-1	11062-6001	DST1 BASE MODEL, 12 SAFETY INPUTS, 4 TEST OUTPUTS
DST1-MD16SL-1	11062-6002	DST1 BASE MODEL, 8 SAFETY INPUTS, 8 SAFETY OUTPUTS, 4 TEST OUTPUTS
DST1-MRD08SL-1	11062-6003	DST1 BASE MODEL, 4 SAFETY INPUTS, 4 SAFETY OUTPUTS, 4 TEST OUTPUTS

Safety Mats, Edges & Bumpers



Contents

Safety Mats		
UMQ	Quick-disconnect Universal Safety Mat	DD-1
MC	Safety Mat Controllers	DD-2
Safety Edges & Bumpers		
SGE & SCS	Safety Edges	DD-3
SCSF	Safety Bumpers	DD-3
SCC	Safety Edge Controllers	DD-4

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D

Safety Mats, Edges & Bumpers

UMQ Series Safety Mats & Area Guarding

Quick Link

S822

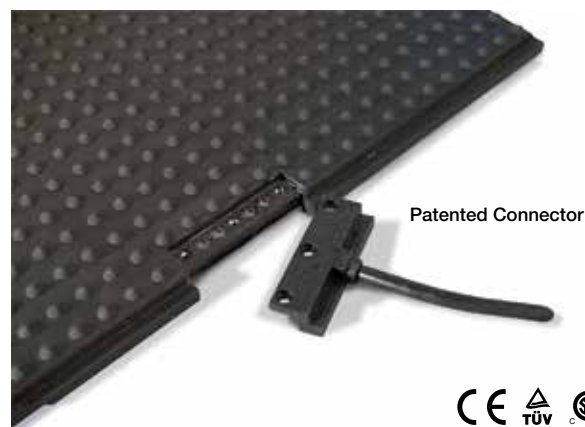
omron247.com

Quick-Disconnect Universal Safety Mat System

Heavy-Duty Four-Wire Presence Sensing Mats with Removable Cable, Category 3 Controllers and Perimeter Trim

System

When UMQ series mats are combined with an MC3, MC4 or MC6 controller (with complete diagnostics), the result is a system that meets the standard EN 1760-1:1998 and is entitled to display the CE mark. See below for an overview of the various components.



D
D

Ordering Information

Other custom sizes and configurations available.
Please use the Quick Link code above for ordering information.

Model	Part Number	Description
UMQ-1260-A	70220-1002	UMQ UNIVERSAL BLACK MAT - 12 X 60 IN
UMQ-1872-A	70220-1010	UMQ UNIVERSAL BLACK MAT - 18 X 72 IN
UMQ-2412-A	70220-1011	UMQ UNIVERSAL BLACK MAT - 24 X 12 IN
UMQ-2418-A	70220-1012	UMQ UNIVERSAL BLACK MAT - 24 X 18 IN
UMQ-2424-A	70220-1013	UMQ UNIVERSAL BLACK MAT - 24 X 24 IN
UMQ-2460-A	70220-1015	UMQ UNIVERSAL BLACK MAT - 24 X 60 IN
UMQ-2472-A	70220-1017	UMQ UNIVERSAL BLACK MAT - 24 X 72 IN
UMQ-3030-A	70220-1021	UMQ UNIVERSAL BLACK MAT - 30 X 30 IN
UMQ-3060-A	70220-1023	UMQ UNIVERSAL BLACK MAT - 30 X 60 IN
UMQ-3072-A	70220-1025	UMQ UNIVERSAL BLACK MAT - 30 X 72 IN
UMQ-3612-A	70220-1026	UMQ UNIVERSAL BLACK MAT - 36 X 12 IN
UMQ-3624-A	70220-1028	UMQ UNIVERSAL BLACK MAT - 36 X 24 IN
UMQ-3636-A	70220-1030	UMQ UNIVERSAL BLACK MAT - 36 X 36 IN
UMQ-3654-A	70220-1031	UMQ UNIVERSAL BLACK MAT - 36 X 54 IN
UMQ-3660-A	70220-1032	UMQ UNIVERSAL BLACK MAT - 36 X 60 IN
UMQ-3672-A	70220-1034	UMQ UNIVERSAL BLACK MAT - 36 X 72 IN
UMQ-4224-A	70220-1037	UMQ UNIVERSAL BLACK MAT - 42 X 24 IN
UMQ-4236-A	70220-1039	UMQ UNIVERSAL BLACK MAT - 42 X 36 IN
UMQ-4254-A	70220-1041	UMQ UNIVERSAL BLACK MAT - 42 X 54 IN
UMQ-4260-A	70220-1042	UMQ UNIVERSAL BLACK MAT - 42 X 60 IN
UMQ-4824-A	70220-1047	UMQ UNIVERSAL BLACK MAT - 48 X 24 IN
UMQ-4836-A	70220-1049	UMQ UNIVERSAL BLACK MAT - 48 X 36 IN
UMQ-4848-A	70220-1051	UMQ UNIVERSAL BLACK MAT - 48 X 48 IN
UMQ-4866-A	70220-1054	UMQ UNIVERSAL BLACK MAT - 48 X 66 IN
UMQ-4872-A	70220-1055	UMQ UNIVERSAL BLACK MAT - 48 X 72 IN
UMQ5 CABLE	19251-0050	5M QUICK-DISCONNECT CABLE
UMQ10 CABLE	19251-0100	10M QUICK-DISCONNECT CABLE

MC Controllers

Safety Mats & Area Guarding

Quick Link

S823

omron247.com

MC3, MC4 and MC6 Series Safety Mat Controllers

The MC Series safety mat controllers are used in conjunction with a four-wire, normally open, safety mat where perimeter guarding is required. These control reliable controllers send a stop signal to the guarded machine when an object of sufficient weight is detected on the active mat area.

The MC Series controllers, when combined with a four-wire UM or UMQ series mat, provide access guarding and improved productivity. The work area is fully visible and accessible.

The controller meets the requirement of EN 1760-1:1998, EN 13849-1, ANSI/RIA 15.06-1999 (R2009), ANSI B11.19-2010, OSHA 1910-217C. CSA and UL508.



MC6

- Universal power input
- Up to 6 mat zone inputs
- Six mat zone status indicator LEDs
- Select from Automatic Start, Start/Restart Interlock or Start Interlock operating modes
- MPCE monitoring

- Remote access to reset functions
- 2-digit numeric display for fault diagnostics
- Surface mount, lockable metal enclosure

Options

- Lid-mounted reset key switch
- Quick disconnect for incoming power and relay outputs
- Quick disconnects up to 6 mat zone inputs
- Solid-state safety output module
- Safety relay output module

Ordering Information

Model	Part Number	Description
MC3	43767-0010	MC3 MAT CONTROLLER
MC4-0004	43815-0004	MC4 MAT CONTROLLER, 24VDC, 4 CONNECTORS
MC4-0010	43815-0010	MC4 MAT CONTROLLER, 100-240VAC, 0 CONNECTORS
MC4-0011	43815-0011	MC4 MAT CONTROLLER, 100-240VAC, 1 CONNECTOR
MC4-0012	43815-0012	MC4 MAT CONTROLLER, 100-240VAC, 2 CONNECTORS
MC4-0013	43815-0013	MC4 MAT CONTROLLER, 100-240VAC, 3 CONNECTORS
MC4-0014	43815-0014	MC4 MAT CONTROLLER, 100-240VAC, 4 CONNECTORS
MC6AC-0016	43938-0016	MC6 MAT CONTROLLER, AC 6 CONNECTORS
MC6DC-0012	43939-0012	MC6 MAT CONTROLLER, DC, 2 CONNECTORS
MC6DC-0016	43939-0016	MC6 MAT CONTROLLER, DC, 6 CONNECTORS

SGE & SCS Series Safety Edges

Quick Link

S824

omron247.com

Safety Edges (SGE & SCS Series Profiles)

- Profile materials NBR (SCS series only), EPDM or TPE
- Available in six sizes for SGE Series and two sizes for SCS Series



Applicable Controllers

- SCC-1224 Single-Channel Controller
- SCC-1224ND Single-Channel Controller
- SCC-2124 Dual-Channel Controller
- SCC-2224 Dual-Channel Controller



CE

Ordering Information

All edges are custom. Please use the Quick Link code above for ordering information.

DD

SCSF Safety Bumpers

Quick Link

S826

omron247.com

Safety Bumpers

- Foam rubber covered in polyurethane, mounted on an aluminum base
- Available in lengths up to 3000 mm;
Standard sizes:
53 mm x 100 mm
100 mm x 200 mm
150 mm x 300 mm
200 mm x 400 mm



CE

Ordering Information

All edges are custom. Please use the Quick Link code above for ordering information.

SCC Safety Edge Controllers

Quick Link

S827

omron247.com

Single and Dual-Channel Safety Edge Controllers for use with All Safety Edges and Safety Bumpers



- Power requirements
 - 120 VAC or 24 VDC is acceptable for the SCC-1224 single channel units
 - 24 VDC is acceptable for SCC-2124/2224 dual channel units
- Inputs
 - Single channel units accept a single two-wire edge or bumper system
 - Dual channel units accept 1 or 2 two-wire edge or bumper systems
- Outputs
 - Single channel units have two safety outputs and one auxiliary output for signaling
 - Dual channel units have either 1 or 2 safety outputs, and either 1 or 2 auxiliary outputs with DIP switch selection for input channel relationship
- External Device Monitoring –EDM is provided on all units with a N/C loop between Z1 and Z2
- Monitored Reset Modes
 - Monitored manual reset mode that requires closure of the reset circuit followed by opening of the circuit is available on all units
 - Automatic reset mode that occurs upon closure of the reset circuit is available on all units
- Delayed Auxiliary Output – Delayed opening of the auxiliary output for reversal of a door or gate may be selected on all units except SCC1224ND

Ordering Information

Model	Part Number	Description
SCC-1224	43872-0020	SCS EDGE CONTROLLER, AUX CONTACT MOMENTARILY CLOSES WHEN ACTIVATED
SCC-1224ND	43872-0021	SCS EDGE CONTROLLER, AUX CONTACT REMAINS CLOSED WHEN ACTIVATED

Safety Switches

OMRON

Contents

Tongue Interlock Switches		
D4NS	Safety-Door Switch	EE-2
T5009 & T5009-6	Universal Tongue-Operated Safety Interlock Switch	EE-3
T4012	Universal Tongue-Operated Safety Interlock Switch	EE-4
T4016	Heavy-Duty Metal-Body Safety Interlock Switch	EE-5
T2008	Small Tongue-Operated Safety Interlock Switch	EE-6
D4GS-N	Slim Safety Door Switches with IP67 Rating	EE-7
Guardlocking Interlock Switches		
D4SL-N	Super Small Class 6-Contact Guard Lock Safety-Door Switch	EE-8
D4NL	Guard Lock Safety-Door Switch	EE-9
TL4019	Guard Lock Safety-Door Switch	EE-10
TL4024	Guard Lock Safety-Door Switch	EE-11
D4JL	Guard Lock Safety-Door Switch	EE-12
Non-Contact Interlock Switches		
CM	Most Diverse and Flexible Line of Coded Magnetic Safety Interlock Switches and Controllers	EE-13
MA	Magnetically Actuated Safety Interlock Switches	EE-14
D40Z/ D40A/ G9SX-NS	Compact Non-contact Door Switch/Flexible Safety Unit	EE-15
MA-S	Stainless Steel Magnetically Actuated Safety Interlock Switches and Actuators	EE-16
MFS	Stainless Steel Magnetically Actuated Safety Interlock Switches and Actuators	EE-17
Hinge Pin Interlock Switches		
D4NH	Safety-door Hinge Switch	EE-18

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D4NS Safety Interlock Switches

Quick Link

S244

omron247.com

Safety-Door Switch

- Multi-contact, labor-saving, environment-friendly, next-generation safety-door switch
- Lineup includes three contact models with 2NC/1NO and 3NC contact forms and MBB models in addition to the previous contact forms 1NC/1NO, and 2NC
- M12-connector models are available, saving on labor and simplifying replacement.
- Standardized gold-clad contacts provide high contact reliability. Applicable to both standard loads and microloads.
- Variety of metallic heads available



Ordering Information

Model	Part Number	Description
D4NS-4CF-NPT	11027-0098	D4NS BASE MODEL, 2NC+1NO, M20+NPT
D4NS-4DF-NPT	11027-0099	D4NS BASE MODEL, 3NC, M20+NPT
D4NS-4BF-NPT	11027-0101	D4NS BASE MODEL, 2NC, M20+NPT
D4NS-4AF-NPT	11027-0104	D4NS BASE MODEL, 1NC+1NO, M20+NPT
D4DS-K1	11018-0011	D4NS, D4NL OPERATION KEY, HORIZONTAL MOUNTING
D4DS-K2	11018-0012	D4NS, D4NL OPERATION KEY, VERTICAL MOUNTING
D4DS-K3	11018-0013	D4NS, D4NL OPERATION KEY, ADJUSTABLE MOUNTING (HORIZONTAL)
D4DS-K5	11018-1005	D4NS, D4NL OPERATION KEY, ADJUSTABLE MOUNTING (HORIZONTAL/VERTICAL)

T5009 & T5009-6 Safety Interlock Switches

Quick Link

S249

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Universal Tongue-Operated Safety Interlock Switch

- Strong and versatile—the compact size of the strong, glass-filled polyester housing and metal reinforced cam allows this popular switch to be used in most applications
- NEMA 6 enclosure enables these switches to withstand water washdown cleaning
- Rotatable head gives four possible actuator entry points for versatile installation. A blanking plug is supplied for the unused entry
- Small swing radius allows use on doors with a swing radius as small as 2.5 in. when using the optional flexible actuators
- Hi-Hold models reduce nuisance rips and allow the switch to also serve as the gate catch without the need to mount any additional hardware
- 4 contact poles provide 2 poles for dual channel safety monitoring and 2 additional poles for status monitoring



Conforms to EN1088, EN292, EN60947-5-1, EN60204-1
UL and C-UL listed

- Optional connector makes installation easy
- Optional stainless steel head is available

Ordering Information

Model	Part Number	Description
T5009-021F1M	44501-0120	T5009 BASE MODEL, FLX1 2N/C+1NO BBM, 3 X M20/NPT
T5009-021SM	44501-0110	T5009 BASE MODEL, 2NC+1NO BBM, STD ACTUATOR, 3 X M20/NPT
T5009-6040N	44501-1045	T5009-6 BASE MODEL, 4NC BBM, 3 X 1/2 NPT
SM01-MCK40	44501-0740	T5009 CATCH KIT
SA01-S	44501-0750	T5009 REPLACEMENT STANDARD ACTUATOR
SA01-STD	44501-0755	T5009 STANDARD SPARE ACTUATOR, PLASTIC HEADED SWITCHES
SA01-FLX1	44501-0760	T5009 FLEX 1 SPARE ACTUATOR, PLASTIC OR STAINLESS STEEL HEADED SWITCHES
SA01-FLX2	44501-0765	T5009 FLEX 2 SPARE ACTUATOR, PLASTIC OR STAINLESS STEEL HEADED SWITCHES
SA01-F2	44501-0780	T5009, T5007 REPLACEMENT FLEXIBLE 2 ACTUATOR WITH GUIDE
SA19-F1	44519-0710	T5009, TL8012, TL5012, T5007, T4011 REPLACEMENT FLEXIBLE ACTUATOR WITH GUIDE
SLD26-01	44526-0801	T5009, T4011, T5007, TL8012-S SWITCH LOCKING DEVICE

T4012 Safety Interlock Switches

Quick Link

S252

omron247.com

Universal Tongue-Operated Safety Interlock Switch

- Strong and versatile—the compact size of the strong, glass-filled thermoplastic housing allows this switch to be used in most applications
- NEMA 6 enclosure enables these switches to withstand water washdown cleaning
- Rotatable head gives eight possible actuator entry points for versatile installation. A blanking plug is supplied for the unused entry.
- Long life—these switches, with their stainless steel actuators, are designed for a minimum of two million actuations
- Available in 2 or 4 contact pole versions. The 4 contact pole version provides 2 poles for dual channel safety monitoring and 2 additional poles for status monitoring.
- An optional stainless steel guide is available for demanding applications



Conforms to EN1088, EN292, EN60947-5-1, EN60204-1
UL and C-UL listed, BG approved

Ordering Information

Model	Part Number	Description
T4012-011	44538-2010	T4012 BASE MODEL, 1N/C+1N/O, M20
T4012-020	44538-2020	T4012 BASE MODEL, 2N/C, M20
T4012-020TM	44538-0120	T4012 BASE MODEL, 2N/C, M20/NPT ADAPTER
T4012-022	44538-2040	T4012 BASE MODEL, 2N/C+2N/O, M20
T4012-022TM	44538-0140	T4012 BASE MODEL, 2N/C+2N/O, M20/NPT ADAPTER
T4012-031	44538-2030	T4012 BASE MODEL, 3N/C+1N/O, M20
T4012-031TM	44538-0130	T4012 BASE MODEL, 3N/C+1 N/O, M20/NPT ADAPTER
SRH34-90	44534-0790	T4012 REPLACEMENT HEAD
SBRL34-P70	44534-8070	T4012 PLASTIC SLIDE BOLT FOR RIGHT OR LEFT HAND DOOR
SBR34-MR30	44534-8130	T4012 BOLT FOR RIGHT-HUNG DOOR (YELLOW METAL)
SBL34-MR40	44534-8140	T4012 BOLT FOR LEFT-HUNG DOOR (YELLOW METAL)

T4016 Safety Interlock Switches

Quick Link

S253

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Heavy-Duty Metal-Body Safety Interlock Switch

- Rugged enclosure—the all metal housing and stainless steel actuator of the T4016 makes it suitable for harsh environments
- NEMA 6/IP67 enclosure enables these switches to withstand water washdown cleaning.
- Rotatable head gives eight possible actuator entry points for versatile installation. A blanking plug is supplied for the unused entry.
- Long life—these switches, with their stainless steel actuators, are designed for a minimum of two million actuations
- A variety of 4 contact pole versions provides 2 poles for dual channel safety monitoring and 2 additional poles for status monitoring



Ordering Information

Model	Part Number	Description
T4016-031SM	44539-0010	T4016 BASE MODEL,3NC+1NO, 90 ACTUATOR, 3 X 0.5 INCH NPT CONDUIT OPENINGS
T4016-031TM	44539-0110	T4016 BASE MODEL,3NC+1NO, FLAT ACTUATOR, 3 X 0.5 INCH NPT CONDUIT OPENINGS
T4016-031F1M	44539-0210	T4016 BASE MODEL, 3NC+1NO, FLEX 1 ACTUATOR, 3 X 0.5 INCH NPT CONDUIT OPENINGS
T4016-031	44539-2010	T4016 BASE MODEL, 3N/C+1N/O, 3 X 0.5 INCH NPT CONDUIT OPENINGS
SAG-SS80	44534-0780	T4016 STAINLESS STEEL ALIGNMENT GUIDE
SA35-TRB	44535-0700	T4016 REPLACEMENT FLAT ACTUATOR RB
SA35-SRB	44535-0710	T4016 REPLACEMENT 90-DEGREE ACTUATOR RB
SBR-M00	44535-8000	T4016 BRACKET WITH HANDLE FOR RIGHT-HUNG DOOR (YELLOW)
SBL-M00	44535-8010	T4016 BRACKET WITH HANDLE FOR LEFT-HUNG DOOR (YELLOW)

T2008 Safety Interlock Switches

Quick Link

S254

omron247.com

Small Tongue-Operated Safety Interlock Switch

- Small size—these switches are ideal for guarding applications with space restrictions. Fits on 1 inch square tubing.
- NEMA 6 (IP67) enclosure enables these switches to withstand water washdown cleaning
- Rotatable head gives eight possible actuator entry points for versatile installation. A blanking plug is supplied for the unused entry.
- Long life—these switches, with their stainless steel actuators, are designed for a minimum of one million actuations
- Available with two contact poles. Contact configurations of 1 N/O and 1 N/C or 2 N/C are available to meet requirements of dual channel safety monitoring
- An optional stainless steel guide is available for demanding applications



Conforms to EN1088, EN292, EN60947-5-1, EN60204-1
UL and C-UL listed

Ordering Information

Model	Part Number	Description
T2008-11SM	44540-0010	T2008 BASE MODEL, 1 N/C+1 N/O, M16, 90 ACT'R+ADAPTER
T2008-02SM	44540-0020	T2008 BASE MODEL, 2 N/C, M16, 90 ACT'R+ADAPTER

D4GS-N Safety Interlock Switches

Quick Link

S237

omron247.com

Slim Safety Door Switches with IP67 Rating

- Slim design with a width of only 17 mm (three-contact models)
- Reversible design allowing either front or rear mounting
- Built-in Switches with two- or three-terminal contact construction are available
- Operation Key with rubber mounting hole to absorb vibration and shock
- IP67 degree of protection



Ordering Information

Model	Part Number	Description
D4GS-N1R-5	11021-0023	D4GS-N BASE MODEL, 1NC+1NO, HORIZONTAL, 5M CABLE
D4GS-N2R	11021-0025	D4GS-N BASE MODEL, 2NC, HORIZONTAL, 1M CABLE
D4GS-N2T	11021-0026	D4GS-N BASE MODEL, 2NC, VERTICAL, 1M CABLE
D4GS-N2R-5	11021-0031	D4GS-N BASE MODEL, 2NC, HORIZONTAL, 5M CABLE
D4GS-N3R-3	11021-0035	D4GS-N BASE MODEL, 2NC+1NO, HORIZONTAL, 3M CABLE
D4GS-N3R-5	11021-0037	D4GS-N BASE MODEL, 2NC+1NO, HORIZONTAL, 5M CABLE
D4GS-N4R	11021-0039	D4GS-N BASE MODEL, 3NC, HORIZONTAL, 1M CABLE
D4GS-NK1	11021-0045	D4GS-N OPERATION KEY, HORIZONTAL MOUNTING
D4GS-NK2	11021-0046	D4GS-N OPERATION KEY, VERTICAL MOUNTING
D4GS-NK4	11021-0047	D4GS-N OPERATION KEY, ADJUSTABLE MOUNTING (VERTICAL)

D4SL-N Safety Interlock Switches

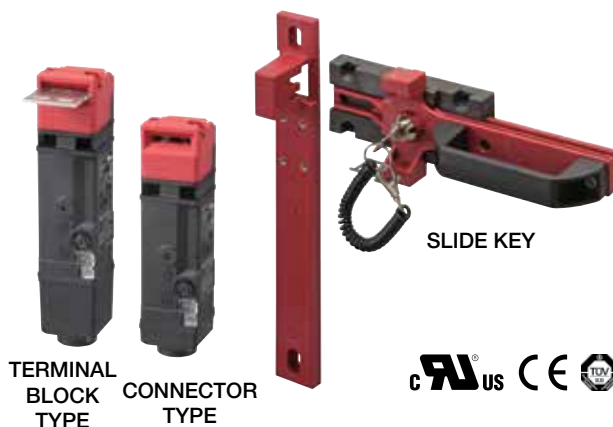
Quick Link

S245

omron247.com

Super Small Class 6-Contact Guard Lock Safety-Door Switch

- Wiring time is reduced with two types of wiring methods capable of one-touch attachment and removal
- A wide variety of built-in switches can be used for various devices. (4-, 5-, and 6-contact models are available)
- Key holding force of 1,300 N
- It is possible to change the key insertion point without detaching the head
- Drive solenoids directly from the controller
- Lockout slide key prevents workers from becoming trapped inside the hazardous area.



- The vertical door switch can be easily mounted on 40 x 40 mm aluminum frames.
- Plastic material makes the key suitable for lightweight doors.

Ordering Information

Model	Part Number	Description
D4SL-N3HFG-DN	11079-2158	D4SL-N BASE MODEL, SOLENOID LOCK, 3NC+2NC, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N2NFG-D4N	11079-2200	D4SL-N BASE MODEL, SOLENOID LOCK, 2NC/1NO+2NC/1NO, G 1/2 CONDUIT, PLASTIC HEAD
D4SL-N3NFA-D	11079-2225	D4SL-N BASE MODEL, SOLENOID RELEASE, 2NC/1NO+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N3NFA-DN	11079-2226	D4SL-N BASE MODEL, SOLENOID RELEASE, 2NC/1NO+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N3NFA-D4	11079-2227	D4SL-N BASE MODEL, SOLENOID RELEASE, 2NC/1NO+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N3NFG-D	11079-2229	D4SL-N BASE MODEL, SOLENOID LOCK, 2NC/1NO+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N3NFG-DN	11079-2230	D4SL-N BASE MODEL, SOLENOID LOCK, 2NC/1NO+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N3NFG-D4	11079-2231	D4SL-N BASE MODEL, SOLENOID LOCK, 2NC/1NO+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-N3QFA-D	11079-2241	D4SL-N BASE MODEL, SOLENOID RELEASE, 3NC+2NC/1NO, M20 CONDUIT WITH M20-TO-NPT ADAPTER, PLASTIC HEAD
D4SL-NK1	11079-3001	D4SL-N OPERATION KEY, HORIZONTAL
D4SL-NK2	11079-3002	D4SL-N OPERATION KEY, VERTICAL
D4SL-NK3	11079-3003	D4SL-N OPERATION KEY, ADJUSTABLE (HORIZONTAL)
D4SL-NK1S	11079-3004	D4SL-N OPERATION KEY, HORIZONTAL MOUNTING (SHORT)
D4SL-NK1G	11079-3005	D4SL-N OPERATION KEY, HORIZONTAL (RUBBER BUSHING)
D4SL-NK2G	11079-3006	D4SL-N OPERATION KEY, VERTICAL (RUBBER BUSHING)
D4SL-NSK10-LK	11079-4001	D4SL-N SLIDE KEY
D4SL-CN3	11079-0106	D4SL CONNECTOR CABLE, 3M
D4SL-CN5	11079-0107	D4SL CONNECTOR CABLE, 5M

D4NL Safety Interlock Switches

Quick Link

S243

omron247.com

Guard Lock Safety-Door Switch

- Best-selling guard lock safety-door switch available in several compact, multi-contact models
- Selectable Operation Key insertion direction and adjustable mounting ensure installation flexibility
- Built-in switches with multiple-contact construction are available
- Key holding force of 1,300 N minimum
- Can be used for either standard loads or microloads
- Lineup includes models with a conduit size of M20
- IP67 degree of protection
- Variety of metallic heads available



Ordering Information

Model	Part Number	Description
D4NL-4EFA-B-NPT	11025-0174	D4NL BASE MODEL, M20, 2NC/1NO+1NC/1NO, PLASTIC, MECHANICAL LOCK, NPT
D4NL-4EFG-B-NPT	11025-0176	D4NL BASE MODEL, M20, 2NC/1NO+1NC/1NO, PLASTIC, 24VDC SOLENOID LOCK, NPT
D4NL-4FFA-B-NPT	11025-0178	D4NL BASE MODEL, M20, 2NC/1NO+2NC, PLASTIC, MECHANICAL LOCK, NPT
D4NL-4FFG-B-NPT	11025-0180	D4NL BASE MODEL, M20, 2NC/1NO+2NC, PLASTIC, 24VDC SOLENOID LOCK, NPT
D4NL-4EDA-B4-NPT	11025-0189	D4NL BASE MODEL, M20, 2NC/1NO+1NC/1NO, METAL, MECHANICAL LOCK, SPECIAL RELEASE KEY, NPT
D4NL-4GDA-B4-NPT	11025-0190	D4NL BASE MODEL, M20, 3NC+1NC/1NO, METAL, MECHANICAL LOCK, SPECIAL RELEASE KEY, NPT
D4NL-4EDG-B4-NPT	11025-0191	D4NL BASE MODEL, M20, 2NC/1NO+1NC/1NO, METAL, 24VDC SOLENOID LOCK, SPECIAL RELEASE KEY, NPT
D4NL-4GDG-B4-NPT	11025-0192	D4NL BASE MODEL, M20, 3NC+1NC/1NO, METAL, 24VDC SOLENOID LOCK, SPECIAL RELEASE KEY, NPT
D4NL-4GDA-B4S-NPT	11025-0336	D4NL BASE MODEL, M20, 3NC+1NC/1NO, METAL, MECHANICAL LOCK, SPECIAL RELEASE KEY, FRONT KEY, NPT
D4DS-K1	11018-0011	D4NL, D4NS OPERATION KEY, HORIZONTAL MOUNTING
D4DS-K2	11018-0012	D4NL, D4NS OPERATION KEY, VERTICAL MOUNTING
D4DS-K3	11018-0013	D4NL, D4NS OPERATION KEY, ADJUSTABLE MOUNTING (HORIZONTAL)
D4DS-K5	11018-1005	D4NL, D4NS OPERATION KEY, ADJUSTABLE MOUNTING (HORIZONTAL/VERTICAL)
D4NL-RK	11025-9001	D4NL SPECIAL RELEASE KEY

E
E

TL4019 Safety Interlock Switches

Quick Link

S256

omron247.com

Safety Interlock Switch with Guard Door Locking

- High locking force of 1,200 N (270 lb.) locks guard door shut until machine is safe to enter
- IP67 (NEMA 6) enclosure enables the TL4019 to withstand water washdown
- Door and lock monitoring—the TL4019 has a total of 4 contacts: 2 N/C safety + 1 contact for door position monitoring + 1 contact for lock monitoring



Conforms to EN1088, EN60947-5-1, EN292, EN60204-1
UL and C-UL listed, BG approved

Ordering Information

Model	Part Number	Description
TL4019-10241TM	44534-0010	TL4019 (FLAT ACTUATOR), 24VAC/DC, 2N/C+2 N/O, 3XM20 W/NPT ADAPTER
TL4019-20241TM	44534-0030	TL4019 (FLAT ACTUATOR), 24VAC/DC, 2 N/C+2 N/O, 3XM20 W/NPT ADAPTER
TL4019-30241TM	44534-0050	TL4019 (FLAT ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20 W/NPT ADAPTER
TL4019-30242TM	44534-0070	TL4019 (FLAT ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/C, 3XM20 W/NPT ADAPTER
TL4019-10241F1M	44534-0310	TL4019 (FLEX1 ACTUATOR), 24VAC/DC, 2 N/C+2 N/O, 3XM20 W/NPT ADAPTER
TL4019-30242F1M	44534-0370	TL4019 (FLEX1 ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/C, 3XM20 W/NPT ADAPTER
TL4019-40241TM	44534-0410	TL4019 (FLAT ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20 W/NPT ADAPTER
TL4019-40242TM	44534-0430	TL4019 (FLAT ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/C, 3XM20 W/NPT ADAPTER
TL4019-40241SM	44534-0510	TL4019 (90-DEGREE ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20 W/NPT ADAPTER
TL4019-50241SM	44534-0570	TL4019 (90-DEGREE ACTUATOR), 24VAC/DC, 1 N/C+1N/C+1N/O, 3XM20 W/NPT ADAPTER
TL4019-40241F1M	44534-1710	TL4019 (FLEX1 ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20 W/NPT ADAPTER
TL4019-40242F1M	44534-1730	TL4019 (FLEX1 ACTUATOR), 24VAC/DC, 2 N/C+1N/O+1N/C, 3XM20 W/NPT ADAPTER
TL4019-10241	44534-2010	TL4019 BASE MODEL, 24VAC/DC, 2N/C+2 N/O, 3XM20 (SWITCH ONLY)
TL4019-20241	44534-2030	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+2 N/O, 3XM20 (SWITCH ONLY)
TL4019-30241	44534-2050	TL4019 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20 (SWITCH ONLY)
TL4019-31101	44534-2060	TL4019 BASE MODEL, 110 VAC, 2 N/C+1N/O+1N/O, 3XM20 (SWITCH ONLY)
TL4019-30242	44534-2070	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+1N/O+1N/C, 3XM20 (SWITCH ONLY)
TL4019-30243	44534-2090	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+1N/C+1N/O, 3XM20 (SWITCH ONLY)
TL4019-40241	44534-2110	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20 (SWITCH ONLY)
TL4019-41101	44534-2120	TL4019 BASE MODEL, 110 VAC, 2 N/C+1N/O+1N/O, 3XM20 (SWITCH ONLY)
TL4019-40242	44534-2130	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+1N/O+1N/C, 3XM20 (SWITCH ONLY)
TL4019-40243	44534-2150	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+1N/C+1N/O, 3XM20 (SWITCH ONLY)
TL4019-50241	44534-2170	TL4019 BASE MODEL, 24VAC/DC, 1 N/C+1N/C+1N/O, 3XM20 (SWITCH ONLY)
TL4019-30241RR	44534-3050	TL4019 BASE MODEL, 24VAC/DC, 2 N/C+1N/O+1N/O, 3XM20
SA34-T	44534-0700	TL4019 REPLACEMENT FLAT ACTUATOR
SA34-TOT	44534-0701	TL4019 REPLACEMENT FLAT ACTUATOR OT
SA34-5	44534-0710	TL4019 REPLACEMENT 90-DEGREE ACTUATOR
SA34-F2	44534-0720	TL4019 REPLACEMENT FLEX 2 ACTUATOR
SA34-F2OT	44534-0721	TL4019 REPLACEMENT FLEX 2 ACTUATOR OT
SA34-F1	44534-0730	TL4019 REPLACEMENT FLEX 1 ACTUATOR
SA34-F1OT	44534-0731	TL4019 REPLACEMENT FLEX 1 ACTUATOR OT
SA34-TRB	44534-0740	TL4019 REPLACEMENT FLAT ACTUATOR RB
SA34-TRBOT	44534-0741	TL4019 REPLACEMENT FLAT ACTUATOR OTRB
SA34-SRB	44534-0750	TL4019 REPLACEMENT 90-DEGREE ACTUATOR RB
SM34-LED61	44534-0761	TL4019 LED LID KIT
SM34-KLR02	44534-0802	TL4019 KEY LOCK RELEASE (2 KEYS INCLUDED)
SBLK34-R50	44534-8050	TL4019 SLIDE BOLT INTERIOR LEVER KIT (USE WITH REAR RELEASE SLIDE BOLTS ONLY)
SBRH-R60	44534-8060	TL4019 REAR RELEASE T-HANDLE

TL4024 Safety Interlock Switches

Quick Link

S257

omron247.com

Safety Interlock Switch with Guard Door Locking

- High locking force of 1,500 N (337 lb.) locks guard door shut until machine is safe to enter
- IP67 (NEMA 6) enclosure withstands water washdown
- Door and lock monitoring—the TL4024 has a total of 4 contacts: 2 N/C safety + 1 contact for door position monitoring + 1 contact for lock monitoring
- Unlocking is possible with a back load on the door to satisfy the demands of high cycle time applications
- Narrow profile enables mounting to 2 in. square tubing or in applications with space restrictions
- Rotatable head—the rotatable head provides 8 actuator entry positions to satisfy most installation requirements
- Optional key release—this option on power-to-unlock models allows manual unlocking of the guard door



Conforms to EN1088, EN60947-5-1, EN292, EN60204-1
UL and C-UL listed, BG approved

- Optional slide bolt with integral door handle aids installation on sliding and swinging guard doors
- Two LED (red/green) status indicators on the lid may be wired to suit the application

Ordering Information

Model	Part Number	Description
TL4024-10242TM	44535-0010	TL4024 BASE MODEL, 24VAC/DC, 2N/C+ 1N/O+1N/C, FLAT ACTUATOR
TL4024-10242SM	44535-0110	TL4024 BASE MODEL, 24VAC/DC, 2N/C+ 1N/O+1N/C, 90-DEGREE ACTUATOR
TL4024-10242	44535-2010	TL4024 BASE MODEL, 24VAC/DC, 2N/C+1N/O+1N/C, 3 X .05 IN. NPT CONDUIT
TL4024-10243	44535-2030	TL4024 BASE MODEL, 24VAC/DC, 2N/C+1N/O+1N/O, 3 X .05 IN. NPT CONDUIT
SA35-F1	44535-0750	TL4024 REPLACEMENT FLEX 1 ACTUATOR

D4JL Safety Interlock Switches

Quick Link

S247

omron247.com

Guard Lock Safety-Door Switch

- Holding force of 3,000 N
- Two safety circuits and two monitor contacts provide an array of monitoring patterns.
- Standard gold-clad contacts enable use with ordinary loads and microloads.
- Models with trapped keys prevent workers from being locked in hazardous work areas.
- Models with rear release buttons allow people to unlock the Switch and escape if they are locked into hazardous areas.
- IP67 degree of protection



Ordering Information

Model	Part Number	Description
D4JL-2NFA-C5	11022-0004	D4JL BASE MODEL, SPECIAL RELEASE KEY, GREEN, MECHANICAL LOCK, 2NC/1NO+2NC/1NO
D4JL-2NFA-D5	11022-0036	D4JL BASE MODEL, SPECIAL RELEASE KEY, ORANGE, MECHANICAL LOCK, 2NC/1NO+2NC/1NO
D4JL-2NFA-C6	11022-0068	D4JL BASE MODEL, SPECIAL RELEASE KEY+REAR RELEASE, GREEN, MECHANICAL LOCK, 2NC/1NO+2NC/1NO
D4JL-K1	11022-0001	D4JL OPERATION KEY, HORIZONTAL MOUNT
D4JL-K2	11022-0002	D4JL OPERATION KEY, VERTICAL MOUNT
D4JL-K3	11022-0254	D4JL OPERATION KEY, ADJUSTABLE MOUNT (HORIZONTAL)
D4JL-SK40	11022-0194	D4JL MOUNTING SLIDE KEY

CM Series Safety Interlock Switches

Quick Link

S282

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Most Diverse and Flexible Line of Coded Magnetic Safety Interlock Switches and Controllers

- Combine door switch monitoring and E-stop monitoring by using the CM-S41 controller
- Monitor is single switch to CAT4 with the CM-S30 controller
- Monitor multiple switches to CAT3 using CM-S4 or CM-S30 controllers
- Monitoring multiple switches on individual channels can be achieved by using the CM-S21 or CM-S41 controllers. Easily expand your system by using the CM-SE expansion module.
- All CM switches are rated IP67
- Stainless steel switches are available for harsh environments



Conforms to EN292, EN60204-1, EN954-1, EN1088, EN60947-5-3, EN947-5-3, EN50081, EN50082, EN61000-6-2, ISO 13849-1
UL and C-UL listed, TUV certified

Ordering Information

Model	Part Number	Description
CM-S4	44536-0040	CM-S4 BASE MODEL, CONTROL (24VAC/DC) 1N/O+1N/O AUX.
CM-S1PC3	44536-0100	CM-S1 BASE MODEL, SWITCH & ACT WITH 1N/O+1N/C, 3 M CABLE
CM-S1PC5	44536-0105	CM-S1 BASE MODEL, SWITCH & ACT WITH 1N/O+1N/C, 5 M CABLE
CM-S21-24	44536-0120	CM-S21 BASE MODEL, CONTROL (24 VAC/DC) 2N/O+1N/C AUX.
CM-S2PC3	44536-0200	CM-S2 BASE MODEL, SWITCH & ACT WITH 1N/O+1N/C, 3 M CABLE
CM-S221PC5	44536-0221	CM-S221PC5 BASE MODEL, SWITCH & ACT WITH 2NO+1NC, 5M CABLE
CM-S521PC5	44536-0521	CM-S521 BASE MODEL, SWITCH & ACT WITH 2N/C+1N/O, 5 M CABLE
CM-S621PC5	44536-0621	CM-S5621 BASE MODEL, SWITCH & ACT WITH 2N/C+1N/O, 5 M CABLE
CM-S621PC10	44536-1621	CM-S621 BASE MODEL, SWITCH & ACT WITH 2N/C+1N/O, 10 M CABLE
CM-S31SC3	44536-3100	CM-S31 BASE MODEL, SWITCH+ACT, 3M CABLE
CM-S31SC5	44536-3105	CM-S31 BASE MODEL, SWITCH+ACT, 5M CABLE

MA Series Safety Interlock Switches

Quick Link

S283

omron247.com

Magnetically Actuated Safety Interlock Switches

- Large selection—choose from a large selection of contact configurations housed in plastic to satisfy most application requirements
- NEMA 6 enclosure enables the MA Series switches to satisfy most application requirements (MA 3, 4, 5 are NEMA 4)
- Misalignment tolerant—the non-contact actuation of the switches makes them very tolerant to misalignment of up to 10 mm (0.39 in.)
- Variety of terminations—select various cable lengths or terminal strip termination for easy installation. Cable connector on selected models



Conforms to EN1088, EN292, EN60204-1 UL and C-UL listed

- Long life—the MA Series is designed for a minimum of one million actuations

Ordering Information

Model	Part Number	Description
MA-1APC4	44507-0020	MA-1 BASE MODEL (AC ONLY), 1N/C, 4M CABLE SWITCH+ACTUATOR
MA-1APC8	44507-0180	MA-1 BASE MODEL (AC ONLY), 1N/C, 8M CABLE SWITCH+ACTUATOR
MA-10APC2	44507-0110	MA-10 BASE MODEL (110 VAC ONLY), 1N/C, 2M CABLE, SWITCH+ACTUATOR
MA-10APC4	44507-0330	MA-10 BASE MODEL (110 VAC ONLY), 1N/C, 4M CABLE, SWITCH+ACTUATOR
MA-15DP21C3	44507-1540	MA-15 BASE MODEL (24VDC ONLY), 2N/C+1N/O 3M CABLE, SWITCH+ACT'R (300MA MAX.)
MA-15DP21C5	44507-1541	MA-15 BASE MODEL (24VDC ONLY), 2N/C+1N/O 5M CABLE, SWITCH+ACT'R (300MA MAX.)
MA-15DP21CC	44507-1549	MA-15 BASE MODEL (24VDC ONLY), 2N/C+1N/O CONNECTOR, MALE M12, SW+ACT'R (300MA MAX.)
MA16DP11C3	44507-1620	MA-16 BASE MODEL (24VDC ONLY), 1N/C, 1N/O, 3M CABLE, SWITCH & ACTUATOR
MA16DP11C6	44507-1621	MA-16 BASE MODEL (24VDC ONLY), 1N/C, 1N/O, 6M CABLE, SWITCH & ACTUATOR
MA16DP10C3	44507-1610	MA-16 BASE MODEL (24VDC ONLY), 1N/C, 3M CABLE, SWITCH & ACTUATOR
MA16DP10C6	44507-1611	MA-16 BASE MODEL (24VDC ONLY), 1N/C, 6M CABLE, SWITCH & ACTUATOR
MA16DP21C3	44507-1640	MA-16 BASE MODEL (24VDC ONLY), 2 N/C, 1N/O, 3M CABLE, SWITCH & ACTUATOR
MA-16AP11C6	44507-1661	MA-16 BASE MODEL (AC ONLY), 1N/C, 1N/O 6M CABLE, SWITCH & ACTUATOR
MA-16AP11C3	44507-1660	MA-16 BASE MODEL (AC ONLY), 1N/C, 1N/O, 3M CABLE, SWITCH & ACTUATOR
MA-16AP10C3	44507-1650	MA-16 BASE MODEL (AC ONLY), 1N/C, 3M CABLE, SWITCH & ACTUATOR
MA-16AP10C6	44507-1651	MA-16 BASE MODEL (AC ONLY), 1N/C, 6M CABLE, SWITCH & ACTUATOR
MA-2DPC15	44507-0370	MA-2 BASE MODEL (24VDC ONLY), 1N/C+1N/O, 15M CABLE, SWITCH+ACTUATOR
MA-2DPCC	44507-0650	MA-2 BASE MODEL (24VDC ONLY), 1N/C+1N/O, CONNECTOR 4-PIN MICRO DC, SWITCH+ACTUATOR
MA-2APC4	44507-0040	MA-2 BASE MODEL (AC ONLY), 1N/C+1N/O, 4M CABLE, SWITCH+ACTUATOR
MA-20DPCC	44507-0630	MA-20 BASE MODEL (24VDC ONLY), 2N/C, CONNECTOR 4-PIN MICRO DC M12, SWITCH+ACTUATOR
MA-21DPCC	44507-0670	MA-21 BASE MODEL (24VDC ONLY), 2N/C+1N/O, CONNECTOR, SWITCH+ACTUATOR
MA-34DS11C3	44507-3420	MA-34 BASE MODEL, 1N/C+1N/O, 3M CABLE, SWITCH+ACTUATOR
MA-35DS21C3	44507-3540	MA-35 BASE MODEL, 2N/C+1N/O, 3M CABLE, SWITCH+ACTUATOR (300MA MAX.)
MA-35DS21C5	44507-3541	MA-35 BASE MODEL, 2N/C+1N/O, 5M CABLE, SWITCH+ACTUATOR (300MA MAX.)
MA-35DS21CC	44507-3549	MA-35 BASE MODEL, 2N/C+1N/O, M12 MALE CONNECTOR, SWITCH+ACTUATOR (300MA MAX.)
MA-36DS11C3	44507-3620	MA-36 BASE MODEL, 1N/C+1N/O, 3M CABLE, SWITCH & ACTUATOR
MA-36AS10C3	44507-3650	MA-36 BASE MODEL, 1N/C, 3M CABLE, SWITCH & ACTUATOR
MA-4APTC	44507-0060	MA-4 BASE MODEL (AC ONLY), 1N/C+1N/O, TERMINAL CONNECTION, SWITCH+ACTUATOR
SA07-MA00	44507-0700	MA 1-5, 20 & 21 REPLACEMENT ACTUATOR RED ABS PLASTIC
SA07-MA10	44507-0710	MA 6, 9 & 10 REPLACEMENT ACTUATOR RED ABS PLASTIC
SA07-MA16	44507-0716	MA-10-16 REPLACEMENT ACTUATOR RED ABS PLASTIC

D40Z/D40A/G9SX-NS

Safety Interlock Switches

Quick Link

S362

omron247.com

Compact Non-contact Door Switch/ Flexible Safety Unit

- Up to 30 units can be connected to a single G9SX (15 units with G9SP) Controller
- Troubleshooting is made easy with the switch's two-color diagnostic LED display patterns
- Photocoupler monitor output allows connection to a general-purpose PLC (NPN type)



D40Z

- Supports ISO 13849-1 (Safety Category 4/PLe)
- Non-magnetic actuator will not attract metal fillings

D40Z   

D40A    

D40A

- Magnetic actuator

Ordering Information

Model	Part Number	Description
D40A-1C5	11008-6002	D40A BASE MODEL, SWITCH AND ACTUATOR, 5M CABLE
D40Z-1C2	11081-0001	D40Z BASE MODEL, SWITCH AND ACTUATOR, 2M CABLE
D40Z-1C5	11081-0002	D40Z BASE MODEL, SWITCH AND ACTUATOR, 5M CABLE
D40Z-1C-A	11081-0003	D40Z BASE MODEL, ACTUATOR ONLY

MA-S Series Safety Interlock Switches

Quick Link

S285

omron247.com

Stainless Steel Magnetically Actuated Safety Interlock Switches and Actuators

- Stainless steel cases—both switch and actuator are housed in stainless steel for applications that require the use of this robust and corrosion resistant material
- Large selection—choose from a variety of contact configurations housed in stainless steel to satisfy the most demanding applications
- NEMA 6 enclosure enables the MA-S Series switches to satisfy most application requirements
- Misalignment tolerant—the non-contact actuation of the MA-S Series switches makes them very tolerant to misalignment of up to 10 mm (0.39 in.)
- High temperature—the MA-S switches and cables are designed to operate in temperatures up to 125°C (257°F)
- Long life—the MA-S Series safety interlock switches are designed for a minimum of one million actuations



Conforms to EN1088, EN292, EN60204-1
UL and C-UL listed

Ordering Information

Model	Part Number	Description
MA-S21DSC3	44507-0450	MA-S21 BASE MODEL, 2N/C+1N/O, 3M CABLE, SWITCH+ACTUATOR

MFS Safety Interlock Switches

Quick Link

S286

omron247.com

Magnetic Ferroresonant Stand-alone Safety Interlock Switch

- Tamper resistant—the combination of magnetic and ferroresonant signals required to close the safety contacts makes the MFS very tamper resistant
- Standalone—use for lower risk applications as a stand-alone safety switch allowing direct switching of relays and contactors up to 2 A at 230 VAC
- MFS-11 provides a visible LED which illuminates green when the actuator is in range and contacts are closed
- MFS-12 provides a dual color LED indicator. LED illuminates green when the actuator is in range and the contacts are closed. LED illuminates Red when the actuator is out of range and contacts are open.
- Compact size—mounts easily on 1-in. square tubing
- Use with safety monitoring relays in applications requiring a higher level of safety reliability
- NEMA 4 enclosure enables water wash-down cleaning



Conforms to EN1088, EN292, EN60204-1, EN954-1, EN947-5-3, EN60947-5-1, EN50081, EN50082, EN61000-6-2
UL and C-UL listed

E
E

Ordering Information

Model	Part Number	Description
MFS-11P11C3	44508-1120	MFS BASE MODEL, SWITCH & ACTUATOR, 1N/C+1N/O, 3M CABLE
MFS-11P11C6	44508-1121	MFS BASE MODEL, SWITCH & ACTUATOR, 1N/C+1N/O, 6M CABLE
MFS-11P11CC5	44508-1128	MFS BASE MODEL, SWITCH & ACTUATOR, 1N/C+1N/O, M12 MALE CONNECTOR+5M CABLE
MFS-11P20C10	44508-1132	MFS BASE MODEL, SWITCH & ACTUATOR, 2N/C, 10M CABLE
MFS-12P21C6	44508-1133	MFS BASE MODEL,-12 SWITCH & ACTUATOR, 2N/C+1N/O, 6M CABLE
MFS-12P21CC5	44508-1134	MFS-12 BASE MODEL, SWITCH & ACTUATOR, 2N/C+1N/O, M12 MALE CONNECTOR+5M CABLE
MFS-11P20CC	44508-1139	MFS BASE MODEL, SWITCH & ACTUATOR, 2N/C, M12 MALE CONNECTOR

D4NH Safety Interlock Switches

Quick Link

S242

omron247.com

Safety-door Hinge Switch

- Compact, plastic-body safety-door hinge switch designed for saving space in machines
- Lineup includes three contact models with 2NC/1NO and 3NC contact forms in addition to the previous contact forms 1NC/1NO, and 2NC. Models with MBB contacts are also available
- M12-connector models are available, saving on labor and simplifying replacement
- Standardized gold-clad contacts provide high contact reliability. Can be used with both standard loads and microloads.



Ordering Information

Model	Part Number	Description
D4NH-4CAS-NPT	11024-0105	D4NH BASE MODEL, SHAFT ACTUATOR, 1-CONDUIT, NPT, 2NC/1NO
D4NH-4CBC-NPT	11024-0107	D4NH BASE MODEL, ARM LEVER ACTUATOR, 1-CONDUIT, NPT, 2NC/1NO
D4NH-4BBC-NPT	11024-0108	D4NH BASE MODEL, ARM LEVER ACTUATOR, 1-CONDUIT, NPT, 2NC
D4NH-4ABC-NPT	11024-0109	D4NH BASE MODEL, ARM LEVER ACTUATOR, 1-CONDUIT, NPT, 1NC/1NO

Emergency Stop Devices

OMRON

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ER6022	Rope Pull Emergency Stop Switch	FF-3
ER6022-SS	Stainless Steel Rope Pull Emergency Stop Switch	FF-4
ER1022/ ER1032	Rope Pull Emergency Stop Switches	FF-5
E-Stops		
A22E	22 or 25 mm Diameter Emergency Stop Switch	FF-6
A165E	16 mm Diameter Emergency Stop Switch	FF-7

FF
FF

ER5018 Emergency Stop Devices

Quick Link

S424

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Compact Rope Pull Emergency Stop Switch

- Compact size allows this switch to be used on smaller machines with a mounting width of 40 mm (1.57 in.) and covering rope spans up to 40 m (131 ft.)
- Tension indicator makes system setup and rope tension maintenance easy
- Contact arrangements of 2 N/C + 1 N/O or 3 N/C
- IP67 (NEMA 6) enclosure enables the ER5018 switch to withstand water wash-down cleaning
- Heavy-duty housing—the die-cast housing and stainless steel eye nut makes the ER5018 suitable for demanding industrial applications
- Integral E-Stop—the optional E-stop provides emergency stopping at the extreme end of the installation
- Reset button—the blue reset button must be pushed in order to return to “machine run” condition following switch actuation by a pulled or slacked rope
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications



Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304
UL and C-UL listed, TUV certified

Ordering Information

Model	Part Number	Description
ER5018-021M	44506-4010	ER5018 BASE MODEL, 2N/C+1N/O, M20
ER5018-021N	44506-4020	ER5018 BASE MODEL, 2N/C+1N/O, 1/2 IN. NPT
ER5018-021NE	44506-4120	ER5018 BASE MODEL, 2N/C+1N/O, 1/2 IN. NPT, E STOP

ER6022 Emergency Stop Devices

Quick Link

S425

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Rope Pull Emergency Stop Switch

- Rope spans up to 80 m (262 ft.) means fewer number of switches required per application
- Tension indicator makes system setup and rope tension maintenance easy
- Contact arrangements of 2 N/C + 1 N/O, 3 N/C + 1 N/O or 2 N/C + 2 N/O
- IP67 (NEMA 6) enclosure enables the ER6022 switch to withstand water wash-down cleaning
- Reset button—the blue reset button must be pushed in order to return to “machine run” condition following switch actuation by a pulled or slacked rope
- Indicator beacon—the optional dual indicator beacon, available in 24 VDC or 120 VAC, can be wired to flash red to indicate a tripped switch or glow a constant green to indicate a properly reset switch
- E-stop button—the ER6022 has two mounting positions where the optional E-stop button may be installed; the E-stop button may be added or replaced in the field
- Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications



Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304
UL and C-UL listed, TUV certified

Ordering Information

Model	Part Number	Description
ER6022-021M	44506-5010	ER6022-BASE MODEL, 2N/C+1N/O, M20
ER6022-021ME	44506-5210	ER6022-BASE MODEL, 2N/C+1N/O, M20, E STOP
ER6022-021MEL	44506-5410	ER6022-BASE MODEL, 2N/C+1N/O, M20, E STOP, LED
ER6022-021NE	44506-5220	ER6022-BASE MODEL, 2N/C+1N/O, 1/2 IN. NPT, E STOP
ER6022-021NEL	44506-5420	ER6022-BASE MODEL, 2N/C+1N/O, 1/2 IN. NPT, E STOP, LED
ER6022-021NELAC	44506-5423	ER6022-BASE MODEL, 2N/C+1N/O, 1/2 IN. NPT, E STOP, 120VAC LED
ER6022-022MLSS	44506-5910	ER6022-BASE MODEL, 2NC+2NO,3 X M20, LED
ER6022-022N	44506-5080	ER6022-BASE MODEL, 2N/C+2N/O, 1/2 IN. NPT
ER6022-022NE	44506-5280	ER6022-BASE MODEL, 2N/C+2N/O, 1/2 IN. NPT, E-STOP
ER6022-022NEL	44506-5480	ER6022-BASE MODEL, 2N/C+2N/O, 1/2 IN. NPT, E-STOP, LED
ER6022-022NELSS	44506-5960	ER6022-BASE MODEL, 2NC+2NO,3 X 1/2 IN. NPT, E-STOP, LED

ER6022-SS Emergency Stop Devices

Quick Link

S426

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Stainless Steel Rope Pull Emergency Stop Switch

- Rope spans up to 100 m (328 ft.) means fewer number of switches required per application
- Tension indicator maintains the proper rope tension
- Contact arrangements of 3 N/C + 1 N/O or 2 N/C + 2 N/O
- IP67 (NEMA 6) enclosure withstands water washdown cleaning
- 316 stainless steel cast housing and stainless steel hardware
- Reset button—the blue reset button must be pushed in order to return to “machine run” condition following switch actuation by a pulled or slacked rope
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- Indicator beacon—the dual indicator beacon is optional on the ER6022-SS; the indicator beacon can be wired to flash red to indicate a tripped switch or glow a constant green to indicate a properly reset switch
- Optional E-stop button—may be added or replaced in the field
- Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications
- Extreme Cold Version—for applications down to -40°C



Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304
UL and C-UL listed, TUV certified

ER1022/ER1032 Rope Pull Emergency Stop Devices

Common Features

- IP67 (NEMA 6) enclosure enables the switch to withstand water washdown cleaning
- Integral E-stop—the E-stop button provides emergency stopping capability at the extreme end of the installation and is field serviceable
- Tension indicator makes system setup and rope tension maintenance easy
- 4 N/C safety contacts and 2 N/O auxiliary contacts satisfy the most demanding applications
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- Indicator beacon—the indicator beacon, available in 24 VDC or 120 VAC, can be wired to flash red to indicate a tripped switch or glow a constant green to indicate a properly reset switch
- Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications

ER1022

Rope spans up to 125 m (410 ft.)



Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304
UL and C-UL listed, TUV certified

ER1032

Rope spans up to 200 m (656 ft.)



Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304
UL and C-UL listed, TUV certified

Quick Link **S422** omron247.com

Quick Link **S423** omron247.com

Ordering Information

Model	Part Number	Description
ER1022-042MELL	44506-6410	ER1022 BASE MODEL, 4N/C+2N/O, M20, E STOP, LED 24VDC, L
ER1022-042MELR	44506-6510	ER1022 BASE MODEL, 4N/C+2N/O, M20, E STOP, LED 24VDC, R
ER1022-042NELL	44506-6420	ER1022 BASE MODEL, 4N/C+2N/O, 1/2 IN. NPT, E STOP, LED 24VDC, L
ER1022-042NELR	44506-6520	ER1022 BASE MODEL, 4N/C+2N/O, 1/2 IN. NPT, E STOP, LED 24VDC, R

Ordering Information

Model	Part Number	Description
ER1032-042MEL	44506-7410	ER1032 BASE MODEL, 4N/C+2N/O, M20, E STOP, LED 24VDC, D
ER1032-042NEL	44506-7420	ER1032 BASE MODEL, 4N/C+2N/O, 1/2 IN. NPT, E STOP, LED 24VDC, D
ER1032-042NELAC	44506-7421	ER1032 BASE MODEL, 4N/C+2N/O, 1/2 IN. NPT, E STOP, LED 120 VAC, D

A22E Emergency Stop Devices

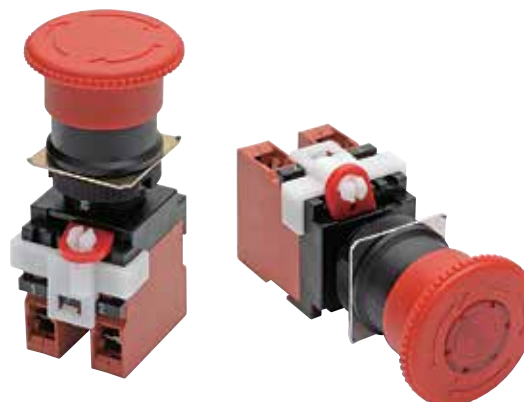
Quick Link

P623

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Emergency Stop Switch (22 mm or 25 mm diameter)

- Install in 22-dia. or 25-dia. panel cutout
- Direct opening mechanism to open the circuit when the contact welds
- Safety lock mechanism prevents operating errors
- Easy mounting and removal of Switch Blocks using a lever
- Mount three Switch Units in series to improve wiring efficiency (with non-lighted Switch Units, three Units can be mounted for multiple contacts)
- Finger protection mechanism on Switch Unit provided as a standard feature
- Install using either round, or forked crimp terminals



- Non-lighted versions are IP65 (oil resistant). Lighted versions are IP65
- A lock plate is provided as a standard feature to ensure that the control box and switch are not easily separated

Ordering Information

Model	Part Number	Description
A22E-L-02	11004-7013	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 2NC, 60 DIA.
A22EL-M-24A-02	11004-7010	A22E BASE MODEL, LIGHTED, PUSH-LOCK, TURN RESET, 2NC, 24V, NO REDUCTION, 40 DIA.
A22E-M	11004-2002	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 40 DIA.
A22E-M-01	11004-7001	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 1NC, 40 DIA.
A22E-M-02	11004-7002	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 2NC, 40 DIA.
A22E-M-11	11004-7004	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 1NC+1NO, 40 DIA.
A22E-M-12	11004-7051	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 2NC+1NO, 40 DIA.
A22E-MP-02	11004-7034	A22E BASE MODEL, NON-LIGHTED, PUSH-PULL, 2NC, 40 DIA.
A22E-MP-11	11004-7036	A22E BASE MODEL, NON-LIGHTED, PUSH-PULL, 1NC+1NO, 40 DIA.
A22E-S-01	11004-7024	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 1NC, 30 DIA.
A22E-S-02	11004-7025	A22E BASE MODEL, NON-LIGHTED, PUSH-LOCK, TURN RESET, 2NC, 30 DIA.

A165E Emergency Stop Devices

Quick Link

P633

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Emergency Stop Switch (16 mm diameter)

- Separate construction with one of the smallest class of depths in the world
- Direct opening mechanism to open contacts in emergencies, such as when they are welded
- Conforms to EN418
- Includes a safety lock to prevent misuse
- Features separate construction that allows the switch to be separated for easier wiring and one-piece-like construction that allows easier handling
- Models available with 3 contacts built into a single block (A165E-U)



Ordering Information

Model	Part Number	Description
A165E-S-01	11002-7007	A165E BASE MODEL, NON-LIGHTED, 30 DIA., SPST-NC
A165E-S-02	11002-7008	A165E BASE MODEL, NON-LIGHTED, 30 DIA., DPST-NC
A165E-S-03U	11002-7012	A165E BASE MODEL, NON-LIGHTED, 30 DIA., TPST-NC

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FF

Emergency Stop Devices

Safety Switches & Operator Controls

OMRON

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TS	TouchStart™ Capacitive Palm Button	GG-8

GG

D4N Safety Limit Switches

Quick Link

S238

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Safety Limit Switch

- Upgraded safety limit switches based on the popular D4D, providing a full lineup conforming to international standards
- Lineup includes three contact models with 2NC/1NO and 3NC contact forms in addition to the previous contact forms 1NC/1NO, and 2NC. Models with MBB contacts are also available
- M12-connector models are available, saving on labor and simplifying replacement
- Standardized gold-clad contacts provide high contact reliability. Can be used with both standard loads and microloads
- Conforms to EN115, EN81-1, and EN81-2 (slow-action models only)
- Lineup includes both slow-action and snap-action models with Zb contacts
- Certified standards: UL, EN (TÜV), and CCC



Ordering Information

Model	Part Number	Description
D4N-4120-NPT	11023-0707	D4N BASE MODEL,1NC/1NO, ROLLER LEVER, SNAP ACT, M20+NPT
D4N-412G-NPT	11023-0702	D4N BASE MODEL,1NC/1NO, ADJ ROLLER LEVER, SNAP ACT, M20+NPT
D4N-4132-NPT	11023-0705	D4N BASE MODEL, 1NC/1NO, ROLLER PLUNGER, M20+NPT
D4N-4162-NPT	11023-0704	D4N BASE MODEL,1NC/1NO, ONE WAY ROLLER HORIZONTAL, SNAP ACT, M20+NPT
D4N-4172-NPT	11023-0703	D4N BASE MODEL,1NC/1NO, ONE WAY ROLLER VERTICAL, SNAP ACT, M20+NPT

D4N-□R Safety Limit Switches

Quick Link

S239

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Pull-reset Safety Limit Switch

- A series of pull-reset models now available
- Lineup includes three contact models with 2NC/1NO and 3NC contact forms in addition to the previous contact forms 1NC/1NO and 2NC
- M12-connector models are available, saving on labor and simplifying replacement
- Standardized gold-clad contacts provide high contact reliability. Can be used with both standard loads and microloads
- Conforms to EN115, EN81-1 and EN81-2
- Certified standards: UL, EN (TÜV), and CCC



Ordering Information

Model	Part Number	Description
D4N-4A32R-NPT	11023-0694	D4N-R BASE MODEL, 1NC+1NO, SLOW ACT, TOP ROLLER PLUNGER, M20+NPT
D4N-4A2GR-NPT	11023-0697	D4N-R BASE MODEL, 1NC+1NO, SLOW ACT, ADJ ROLLER LEVER, M20+NPT
D4N-4A20R-NPT	11023-0698	D4N-R BASE MODEL, 1NC+1NO, SLOW ACT, ROLLER LEVER, M20+NPT
D4N-4B2GR-NPT	11023-0699	D4N-R BASE MODEL, 2NC, SLOW ACT, ADJ ROLLER LEVER, M20+NPT

GG

D4B-□N Safety Limit Switches

Quick Link

S232

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Safety Limit Switch

- Snap-action contact with certified direct opening operation
- Direct opening mechanism (NC contacts only) added to enable opening contacts when faults occur, such as fused contacts
- Safety of lever settings ensured using a mechanism that engages a gear between the operating position indicator plate and the lever
- Equipped with a mechanism that indicates the applicable operating zone, as well as push-button switching to control left and right motion
- Head seal structure strengthened to improve seal properties (TÜV: IEC IP67, UL: NEMA 3, 4, 4X, 6P, and 13)
- Wide standard operating temperature range: -40 to 80°C
- Models with gold-plated contacts to enable handling microloads
- Certified standards: UL, CSA, EN (TÜV), and CCC



Ordering Information

Model	Part Number	Description
D4B-4111N-NPT	11012-0020	D4B-N BASE MODEL, ROLLER LEVER, NPT,1NC/1NO
D4B-4113N-NPT	11012-4029	D4BN-N BASE MODEL, 1NC/1NO, SNAP ACTION, NPT
D4B-4115N-NPT	11012-0024	D4B-N BASE MODEL, ROLLER LEVER, STAINLESS STEEL, NPT, 1NC/1NO
D4B-4116N-NPT	11012-0025	D4B-N BASE MODEL, ADJUSTABLE ROLLER LEVER, NPT, 1NC/1NO
D4B-4117N-NPT	11012-4028	D4B-N BASE MODEL, ADJUSTABLE ROD LEVER, NPT, 1NC/1NO
D4B-4170N-NPT	11012-0026	D4B-N BASE MODEL, TOP PLUNGER, NPT, 1NC/1NO
D4B-4171N-NPT	11012-0022	D4B-N BASE MODEL, TOP ROLLER PLUNGER, M20+NPT1NC/1NO, SNAP ACTION
D4B-4A13N-NPT	11012-4027	D4B-N BASE MODEL, NPT, 2NC
D4B-4A71N-NPT	11012-0023	D4B-N BASE MODEL, TOP ROLLER PLUNGER, NPT, 2NC

D4F Safety Limit Switches

Quick Link

S235

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Small Safety Limit Switch

- Smallest class of safety limit switches
- Extra small limit switch with a direct opening mechanism (four-contact model)
- High-sensitivity safety limit switch
- Four contacts in either 2NC + 2NO or 4NC versions
- Degree of protection: IP67 (EN60947-5-1)
- Certified standards: UL, EN (TÜV), and CC



Ordering Information

Model	Part Number	Description
D4F-302-1R	11019-0007	D4F BASE MODEL, 2NC+2NO, ROLLER PLUNGER, 1M CABLE, HORIZONTAL
D4F-102-3R	11019-0021	D4F BASE MODEL, 1NC+1NO, ROLLER PLUNGER, 3M CABLE, HORIZONTAL
D4F-202-3R	11019-0022	D4F BASE MODEL, 2NC, ROLLER PLUNGER, 3M CABLE, HORIZONTAL
D4F-302-3R	11019-0023	D4F BASE MODEL, 2NC+2NO, ROLLER PLUNGER, 3M CABLE, HORIZONTAL
D4F-120-3D	11019-0025	D4F BASE MODEL, 1NC+1NO, ROLLER LEVER, 3M CABLE, VERTICAL
D4F-302-3D	11019-0031	D4F BASE MODEL, 2NC+2NO, ROLLER PLUNGER, 3M CABLE, VERTICAL
D4F-120-5R	11019-0033	D4F BASE MODEL, 1NC+1NO, ROLLER LEVER, 5M CABLE, HORIZONTAL
D4F-320-5R	11019-0035	D4F BASE MODEL, 2NC+2NO, ROLLER LEVER, 5M CABLE, HORIZONTAL
D4F-220-5D	11019-0042	D4F BASE MODEL, 2NC, ROLLER LEVER, 5M CABLE, VERTICAL
D4F-320-5D	11019-0043	D4F BASE MODEL, 2NC+2NO, ROLLER LEVER, 5M CABLE, VERTICAL
D4F-420-5D	11019-0044	D4F BASE MODEL, 4NC, ROLLER LEVER, 5M CABLE, VERTICAL
D4F-302-5D	11019-0047	D4F BASE MODEL, 2NC+2NO, ROLLER PLUNGER, 5M CABLE, VERTICAL

GG

A22TK Safety Key Selector Switch

Quick Link

P655

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Safety Key Selector Switch

- Key-type selector switch with direct opening mechanism
- Selector Switch for secure equipment activation during maintenance
- 30 types of exclusive keys make it more difficult to disable
- The trapped key of the D4JL Guard Lock Safety-door Switch has the same shape as the locking key of the D4SL-SK10-LK Slide Key Unit. Units can be combined to improve safety. (Specify the same key type.)
- Common to the switch part of Emergency Stop Switch A22E. (Non-lighted model only)



Ordering Information

Model	Part Number	Description
A22TK-2LL-02-K01	11004-8009	A22TK BASE MODEL, 2N/C, LEFT KEY RELEASE, LEFT N/C CLOSED, KEY INCLUDED
A22TK-2LR-12-K01	11004-8022	A22TK BASE MODEL, 1N/O+2N/C, LEFT KEY RELEASE, RIGHT N/C CLOSED, KEY INCLUDED
A22TK-2RL-02-K01	11004-8033	A22TK BASE MODEL, 2N/C, RIGHT KEY RELEASE, LEFT N/C CLOSED, KEY INCLUDED
A22TK-2RL-12-K01	11004-8034	A22TK BASE MODEL, 1N/O+2N/C, RIGHT KEY RELEASE, LEFT N/C CLOSED, KEY INCLUDED
A22Z-3466-1	11003-0053	A22E LEGEND PLATE, 60-DIA.
A22Z-B101Y	11003-0061	A22E CONTROL BOX
A22Z-EG1	11004-0001	A22E E-SHOP SHROUD FOR EMERGENCY OFF "EMO", YELLOW

A4EG Enabling Switch Device

Quick Link

P657

omron247.com

Enabling Grip Switch with Distinct Feel for Three Easily Discernible Positions

- The difficult task of configuring safety circuits is now easily achieved by combining the A4EG with the G9SX-GS
- In addition to the standard models, the lineup also includes models with an emergency stop switch and models with a momentary operation switch
- An optional Holding Key (sold separately) provides a versatile method for selecting modes
- Equipped with conduit connector



Ordering Information

Model	Part Number	Description
A4EG-C000041	11073-0001	A4EG BASE MODEL, SWITCH ONLY, 2NC SAFETY, 1 AUX
A4EG-BM2B041	11073-0003	A4EG BASE MODEL, SWITCH ONLY, 2NC SAFETY, 2NO FUNCTION
A4EG-OP2	11073-0005	A4EG MOUNTING BRACKET
A4EG-OP3	11073-0006	A4EG HOLDING KEY
SC09-9M310	44509-0310	A4EG CABLE, 10-PIN MINI MALE, 9 MS
SC09-9M320	44509-0320	A4EG CABLE, 8-PIN MINI MALE, 9 MS
SC09-9M330	44509-0330	A4EG CABLE, 4-PIN MINI MALE, 10 MS
SC12-M16CG80	44512-0080	M16 CORD GRIP (4-5MM ID)
SC12-M20CG90	44512-0090	M20 CORD GRIP (4-5MM ID)

GG

TouchStart™ Two-Hand Control

Quick Link

S226

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Capacitive Palm Button

- No physical pressure required to actuate switch—reduces the likelihood of wrist injury caused by repetitive motion
- Excellent sensitivity—sensor is designed to operate even if operator is wearing gloves
- RFI Immunity—special circuitry inhibits output in the presence of RFI that would otherwise cause false triggering of output
- AC version is UL Recognized—meets the applicable requirements in the proposed first edition of UL 491
- Saves time and money
- Easy mounting in a single hole
- Wiring is simplified because terminals are clearly identified and easily accessible
- No special power supplies are required because switch is available in either 120 VAC or 24 VDC versions



Ordering Information

Model	Part Number	Description
TS-10	44527-0010	TOUCHSTART BASE MODEL, 120 VAC, REV. 2

Safety Monitoring & Force-Guided Relays

OMRON

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G9SA Safety Monitoring Relays

Quick Link

S354

omron247.com

Safety Relay Unit

- Four kinds of 45-mm wide units are available:
A 3-pole model, a 5-pole model, and models with 3 poles and 2 OFF-delay poles, as well as a two-hand controller.
Also available are 17.5 mm wide expansion units with 3 poles and 3 OFF-delay poles.
- Simple expansion connection
- OFF-delay models have 15-step OFF-delay settings



- Conforms to EN standards (BG approval)
- Both DIN track mounting and screw mounting are possible

Ordering Information

Model	Part Number	Description
G9SA-301 AC/DC24	11054-6001	G9SA BASE MODEL, 3NO+1NC, 45MM, E-STOP CONTROL
G9SA-301 AC100-240	11054-6012	G9SA BASE MODEL, 3NO+1NC, 45MM, E-STOP CONTROL
G9SA-321-T075 AC/DC24	11054-6003	G9SA BASE MODEL, 3NO IMMEDIATE, 2NO DELAYED, 7.5 SEC.
G9SA-501 AC/DC24	11054-6002	G9SA BASE MODEL, 5NO+1NC, 45MM, E-STOP CONTROL
G9SA-EX301	11054-6007	G9SA BASE MODEL, 3NO+1NC, EXP MODULE, 45MM, NO DELAY

SR101A Safety Monitoring Relays

Quick Link

S367

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Single-Channel Monitoring Relay

- Power requirements—the SR101A will accept 24 VAC/DC or 115 VAC
- Inputs—a single N/C input channel, not monitored, is provided
- Outputs—the SR101A has two N/O outputs to route power to the coils of power contactors
- External Device Monitoring (EDM) is provided with a N/C loop between S11 and S21 on the SR101A
- Reset mode—an automatic reset mode is provided with the SR101A



Ordering Information

Model	Part Number	Description
SR101A01	44510-1011	SR101 BASE MODEL, 24VAC/DC, 1 INPUT, 2 OUTPUTS

SR103AM Safety Monitoring Relays

Quick Link

S368

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Dual-Channel Monitoring Relay

- Power requirements—the SR103AM will accept 24 VAC/DC or 115 VAC
- Inputs—the SR103AM will accept single or dual N/C inputs or dual inputs from a light curtain
- Outputs—the SR103AM has 3 N/O outputs to route power to the coils of power contactors, plus 1 N/C auxiliary output for signaling purposes
- External Device Monitoring (EDM) is provided with a N/C loop between S11/ S12 and S21 on the SR103AM
- Monitored manual or automatic/manual reset modes are available on the SR103AM.



Conforms to EN60204-1, EN954-1, VDE 0113-1
UL and C-UL listed
TÜV Rheinland approved

- Monitored manual reset requires closure of the reset circuit followed by opening of the circuit. Reset occurs when circuit is opened. Auto reset requires only closure of the reset circuit as reset occurs when circuit is closed

Ordering Information

Model	Part Number	Description
SR103AM01	44510-1031	SR103 BASE MODEL, 24VAC/DC, 2 INPUTS, 3 OUTPUTS, 1 N/C AUX.
SR103AM02	44510-1032	SR103 BASE MODEL, 110 VAC, 2 INPUTS, 3 OUTPUTS, 1 N/C AUX.

SR104P Safety Monitoring Relays

Quick Link

S369

omron247.com

Two-Hand Control Monitoring Relay

- Power requirements—the SR104P will accept 24 VAC/DC and 115 VAC
- Inputs—controls and monitors two-hand control switches to ensure that both switches are operated within 0.5 seconds of each other
- Outputs—the SR104P has 2 N/O outputs to route power to the coils of power contactors
- External Device Monitoring (EDM) is provided with a N/C loop between X1 and X2 on the SR104P



Conforms to EN574 Cat. IIIC, EN60204-1, EN954-1, VDE 0113-1
UL and C-UL listed, BG approved

Ordering Information

Model	Part Number	Description
SR104P01	44510-1041	SR104 BASE MODEL, 24 VAC/DC, 2 HAND CONTROL UNIT, 2 OUTPUTS
SR104P02	44510-1042	SR104 BASE MODEL, 110 VAC, 2 HAND CONTROL UNIT, 2 OUTPUTS

SR106ED Safety Monitoring Relays

Quick Link

S373

omron247.com

Safety Expansion Unit

- Power requirements—the SR106ED will accept 24 VAC/DC or 115 VAC
- Outputs—the SR106ED has 3 N/O delayed outputs to route power to the coils of power contactors (delay selectable from 1 to 30 sec.)
- Auxiliary Output—the SR106ED has 1 N/C auxiliary for monitoring by the safety monitoring relay
- PLC Compatible—The N/O off delayed output makes it possible to use the SR106ED on machines with



Conforms to EN60204-1, EN954-1, VDE 0113-1
UL and C-UL listed
TÜV Rheinland approved

programmable logic controllers that require some time to execute an orderly shutdown

Ordering Information

Model	Part Number	Description
SR106ED01	44510-1061	SR106 BASE MODEL, 24VAC/DC, 1 INPUT, 3 OFF DELAYED OUTPUTS, 1 AUX.

SR107, 108 & 109AD Safety Monitoring Relays

Quick Link

S375

omron247.com

Dual-Channel Monitoring Relay

- Power requirements—the SR107AD, SR108AD and SR109AD will accept 24 VAC/DC
- Inputs—the SR107AD, SR108AD and SR109AD will accept single or dual N/C inputs or dual PNP solid-state inputs from a light curtain
- Outputs—the SR107AD, SR108AD and SR109AD have a total of 4 N/O outputs with 3, 2 or 1 of the outputs with a time delay of 1-30 sec.
- External Device Monitoring (EDM) is provided with a N/C loop between S12 and S21 on the SR107AD, SR108AD and SR109AD
- Reset mode—a monitored manual start or an auto/manual start may be configured with the SR107AD, SR108AD and SR109AD. Monitored manual reset requires closure of the reset circuit followed



Conforms to EN60204-1, EN954-1, EN292, VDE 0113-1
UL and C-UL listed, BG approved

by opening of the circuit. Reset occurs when circuit is opened. Auto reset requires only closure of the reset circuit as reset occurs when circuit is closed.

- PLC Compatible—The N/O off delayed outputs make it possible to use the SR107AD, SR108AD and SR109AD on machines with Programmable Logic Controllers that require some time to execute an orderly shutdown

Ordering Information

Model	Part Number	Description
SR108AD01	44510-1081	SR108 BASE MODEL, 24VAC/DC, 2 INPUTS, 2 OUTPUTS, 2 DELAYED OUTPUTS

SR125SMS45 Safety Monitoring Relays

Quick Link

S377

omron247.com

Stop Motion Sensing Unit

- Power requirements—the SR125SMS45 will accept 24 VDC or 110 VAC
- Motion detection input—the SR125SMS45 detects the stop condition of all types of AC or DC motors by sensing the motor's back EMF across terminals Z1, Z2 and Z3
- Drive compatible—the SR125SMS45 will function with electronic motor control devices such as variable speed controllers, DC injection brakes, etc.
- Selectable speed limit—the SR125SMS45 has 1 N/O and 1 N/C outputs that are switched when motor speed reaches the adjustable preset limit (0.01 to 0.10 V) for the particular output
- Auxiliary output—the SR125SMS45 has 2 solid state auxiliary signaling outputs



Conforms to EN60204-1, EN292, and EN692
UL listed, CSA and BG approved

Ordering Information

Model	Part Number	Description
SR125SMS4501	44510-1271	SR125 BASE MODEL, 24 VDC, BACK EMF SENSING, 1NO+1NC, 2 SOLID STATE

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SR131A Safety Monitoring Relays

Quick Link

S378

omron247.com

Dual-Channel Monitoring Relay

- Power requirements—the SR131A will accept 24 VDC
- Inputs—The SR131A is designed to monitor two magnetically encoded non-contact switches with 1 N/C and 1 N/O contacts
- Outputs—the SR131A has 2 N/O outputs to route power to the coils of external device power contactors plus 2 N/C auxiliary solid state outputs for signaling purposes
- External Device Monitoring (EDM) is provided with a N/C loop between Y1 and Y2 on the SR131A



Conforms to EN60204-1, EN954-1, EN292, and EN1088
UL and C-UL listed, CSA and BG approved

- Selectable reset modes—automatic/manual reset mode is available on the SR131A

Ordering Information

Model	Part Number	Description
SR131A00	44510-1310	SR131 BASE MODEL, 24VDC, 2 INPUTS (TWO), 2 OUTPUTS, 2 SOLID STATE AUX.

SR203M & 203AM Safety Monitoring Relays

Quick Link

S382

omron247.com

Dual-Channel Monitoring Relay

- Power requirements—the SR203M/A will accept 24 VAC/DC or 115 VAC
- Inputs—the SR203M/A will accept single or dual N/C inputs or dual PNP inputs from a light curtain
- Outputs—the SR203M/A has 3 N/O outputs to route power to the coils of power contactors, plus 1 N/C auxiliary output for signaling purposes
- External Device Monitoring (EDM) is provided with a N/C loop between S12 and S34 on the SR203M/A



Conforms to EN60204-1, EN954-1, ISOTR 12100
UL and C-UL listed

- Monitored manual or automatic/manual reset modes are available on the SR203M/A
- The SR203M/A have removable terminal blocks

SR203AM

Quick Link

S383

omron247.com

Ordering Information

Model	Part Number	Description
SR203A01	44510-2031	SR203 BASE MODEL, 24VAC/DC, 2 INPUTS, 3 OUTPUTS, 1 N/C AUX.

SR208 & 209AD Safety Monitoring Relays

Quick Link

S385

omron247.com

Dual-Channel Safety Monitoring Relay

- Power requirements—the SR208AD/209AD will accept 24 VAC/DC or 115 VAC
- Inputs—the SR208AD/209AD will accept single or dual N/C inputs or dual PNP inputs from a light curtain
- Outputs—the SR208AD has 2 N/O immediate outputs plus 3 N/O delayed outputs. The SR209AD has 2 N/O immediate outputs plus 2 N/O and 1 N/C delayed outputs to route power to the coils of power contactors (selectable from 0.5 to 10 sec)
- External Device Monitoring (EDM) is provided with a N/C loop between Y1 and Y2 on the SR208AD/209AD
- Reset mode—monitored manual or automatic/manual reset modes are available on the SR208/209AD



- PLC Compatible—The N/O off delayed outputs make it possible to use the SR208AD/209AD on machines with Programmable Logic Controllers that require some time to execute an orderly shut-down. The N/C on delayed output of the SR209AD may be used to apply power for unlocking a solenoid locking switch
- The SR208AD/209AD have removable terminal blocks

Ordering Information

Model	Part Number	Description
SR208AD01	44510-2081	SR208 BASE MODEL, 24VAC/DC, 2 INPUTS, 2 OUTPUTS, 3 DELAYED OUTPUTS
SR209AD01	44510-2091	SR209 BASE MODEL, 24VAC/DC, 2 INPUTS, 2 OUTPUTS, DELAYED OUTPUTS 2N/O+1N/C

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G7SA Force-Guided Relays

Quick Link

S353

omron247.com

Compact, Slim Relays Conforming to EN Standards

- Relays with forcibly guided contacts (EN50205 Class A, certified by VDE)
- Supports the CE marking of machinery (Machinery Directive)
- Helps avoid hazardous machine status when used as part of an interlocking circuit
- Four-pole and six-pole relays are available
- The relay's terminal arrangement simplifies PWB pattern design



- Reinforced insulation between inputs and outputs. Reinforced insulation between some poles of different polarity

Ordering Information

Model	Part Number	Description
G7SA-2A2B DC24	11051-0002	G7SA BASE MODEL, 2NO+2NC, 24VDC, FORCE GUIDED RELAY
G7SA-3A1B DC24	11051-0001	G7SA BASE MODEL, 3NO+1NC, 24VDC, FORCE GUIDED RELAY
G7SA-3A3B DC24	11051-0005	G7SA BASE MODEL, 3NO+3NC, 24VDC, FORCE GUIDED RELAY
G7SA-4A2B DC24	11051-0004	G7SA BASE MODEL, 4NO+2NC, 24VDC, FORCE GUIDED RELAY
G7SA-5A1B DC24	11051-0003	G7SA BASE MODEL, 5NO+1NC, 24VDC, FORCE GUIDED RELAY
P7SA-10F	11059-0012	G7SA 4 POLE SOCKET, TRACK MOUNTING, NO LED
P7SA-10F-ND DC24	11059-0010	G7SA 4 POLE SOCKET, TRACK MOUNTING, LED
P7SA-10P	11059-0008	G7SA 4 POLE SOCKET, BACK MOUNTING, NO LED
P7SA-14F	11059-0009	G7SA 6 POLE SOCKET, TRACK MOUNTING, NO LED
P7SA-14F-ND DC24	11059-0011	G7SA 6 POLE SOCKET, TRACK MOUNTING, LED
P7SA-14P	11059-0007	G7SA 6 POLE SOCKET, BACK MOUNTING, NO LED

G7S-□-E Force-Guided Relays

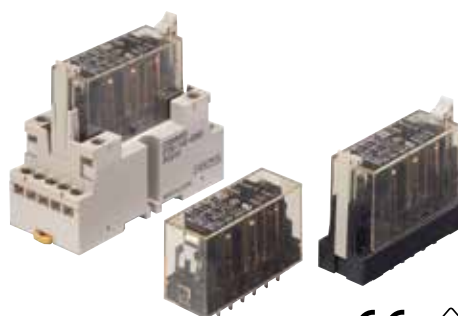
Quick Link

S352

omron247.com

Lineup Now Includes 10-A Models

- Relays with forcibly guided contacts (EN50205 Class A, certified by VDE)
- Supports the CE marking of machinery (Machinery Directive)
- Helps avoid hazardous machine status when used as part of an interlocking circuit
- Track-mounting and back-mounting sockets are available



Ordering Information

Model	Part Number	Description
G7S-3A3B-E DC24	11052-0001	G7S-E BASE UNIT, 6 POLES, 3PST-NO, 3PST-NC
G7S-4A2B-E DC24	11052-0002	G7S-E BASE UNIT, 6 POLES, 4PST-NO, DPST-NC
P7S-14F-END DC24	11060-0001	G7S-E, TRACK-MOUNT SOCKET, 24VDC

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NEMA Ratings

NEMA (National Electrical Manufacturers Association) ratings ensure protection against the following environmental conditions.

Environmental Conditions	Type of Enclosure													
	1	2	3	3R	3S	4	4X	5	6	6P	11	12	12K	13
Accidental contact with the enclosed equipment	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Falling dirt	X	X	--	--	--	X	X	X	X	X	X	X	X	X
Falling liquids, light splashing	--	X	--	--	--	X	X	--	X	X	X	X	X	X
Dust, lint, fibers and flyings (non-combustible, non-ignitable)	--	--	--	--	--	X	X	X	X	X	--	X	X	X
Windblown dust	--	--	X	--	X	X	X	--	X	X	--	--	--	--
Hosedown and splashing water	--	--	--	--	--	X	X	--	X	X	--	--	--	--
Oil and coolant seepage	--	--	--	--	--	--	--	--	--	--	--	X	X	X
Oil or coolant spraying and splashing	--	--	--	--	--	--	--	--	--	--	--	--	--	X
Corrosive agents	--	--	--	--	--	--	X	--	--	X	X	--	--	--
Occasional temporary submersion	--	--	--	--	--	--	--	--	X	X	--	--	--	--
Occasional prolonged submersion	--	--	--	--	--	--	--	--	--	X	--	--	--	--

IP Ratings

The IEC (International Electrotechnical Commission) defines degrees of protection provided by electrical enclosures with respect to personnel, equipment within the enclosure and ingress of water. The degree of protection is expressed by the letters “IP” followed by two numerals (Example: IP67). See the table below for an explanation of the numerals.

The following information is drawn from publication IEC 60529 of 2004 and 529 of 1989.

By contrast to NEMA, “IP” ratings do not apply to protection against the risk of explosion or conditions such as humidity, corrosive gases, fungi or vermin. Also, different parts of a piece of equipment can have different degrees of protection and still comply with the standards. An example would be the opening in the base of an enclosure.

1st characteristic numeral		2nd characteristic numeral	
Protection against contact and penetration of solid bodies.		Protection against the penetration of liquids.	
0	Not protected	0	Not protected
1	Protection against solid objects greater than 50 mm	1	Protection against dripping water
2	Protection against solid objects greater than 12 mm	2	Protection against dripping water when tilted up to 15°
3	Protection against solid objects greater than 2.5 mm	3	Protection against spraying water
4	Protection against solid objects greater than 1 mm	4	Protection against splashing water
5	Dust protected	5	Protection against water jets
6	Dust tight	6	Protection against heavy seas
--		7	Protection against the effects of immersion
--		8	Protection against submersion
--		9K	Protection against steam jet cleaning

Social Responsibility

WORKING FOR THE BENEFIT OF SOCIETY

Our approach to product development and business is guided by core values based on serving the needs of society. This is reflected in the Omron corporate motto...

“At work for a better life, a better world for all.”

Conceived by Omron’s founder Kazuma Tateisi, these words reflect his pioneering idea that a company should fulfill its responsibility to society rather than solely focusing on productivity, efficiency, sales and profits. Our unending commitment to identifying social needs is embedded in Omron’s corporate DNA, along with a challenge-oriented spirit capable of responding to those needs.

The Omron Foundation in the Americas funds charitable donations for disaster relief and recovery efforts, and matches individual employee donations to social support, education, and cultural enrichment organizations. Each year on May 10, Omron employees around the world actively participate in charitable activities to honor the core values established by the company’s founder. Throughout the year, Omron offers team and individual opportunities at partner charitable organizations to underscore the need for social responsibility as a corporate priority.



ENVIRONMENTAL PROTECTION

Providing environmentally safe products to the world.

Omron’s social responsibility also takes the form of decisions and actions that help preserve and restore the environment. Far in advance of directives banning the use of harmful chemicals in making electronics (RoHS), Omron adopted an ECO policy that works to eliminate these and other pollutants. The policy also mandates significant reductions in power consumption to conserve energy and natural resources for future generations.

