

OMRON

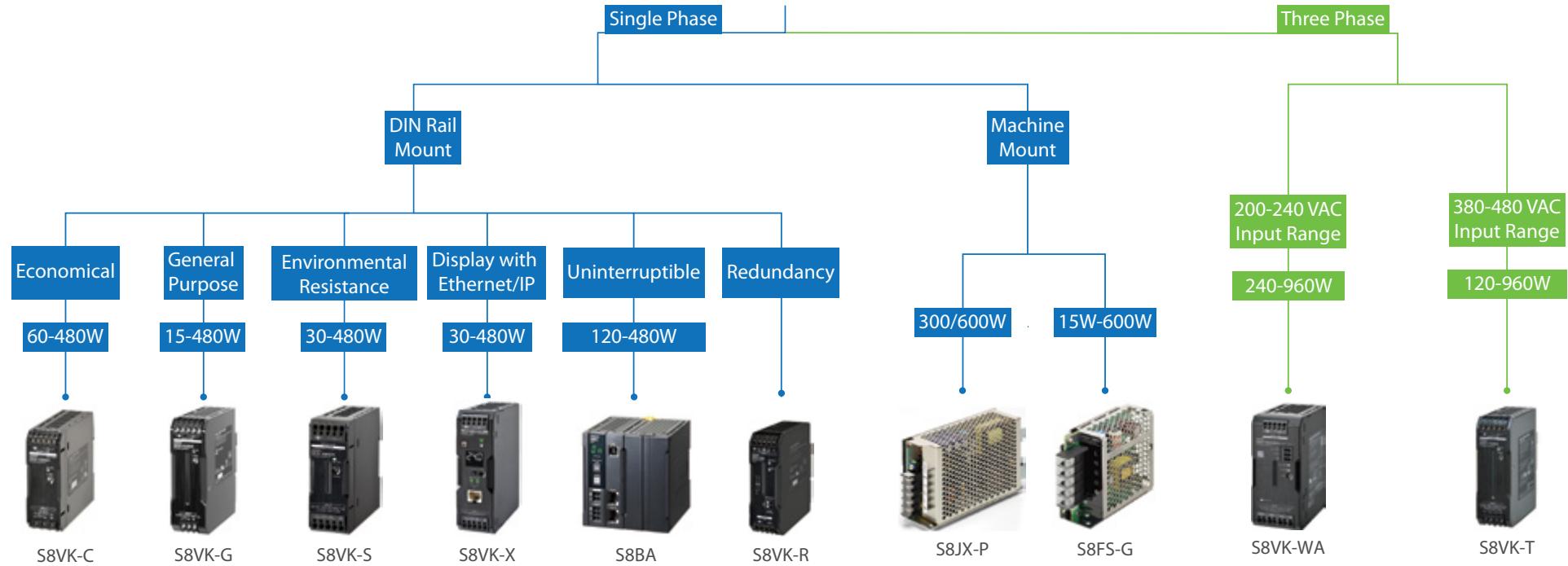
Industrial Panel Products

Component selection guide



Power Supplies

What type of power supply is required?



Recommended use with power supplies

Model	Description	Part Number
S8V-NF	Noise Filter, Single-phase, 250VAC, 6A	S8V-NFS206
S8V-CP	24VDC Circuit Protector, 4-channel output	S8V-CP0424
S8V-CP	24VDC Circuit Protector, 8-channel output	S8V-CP0824

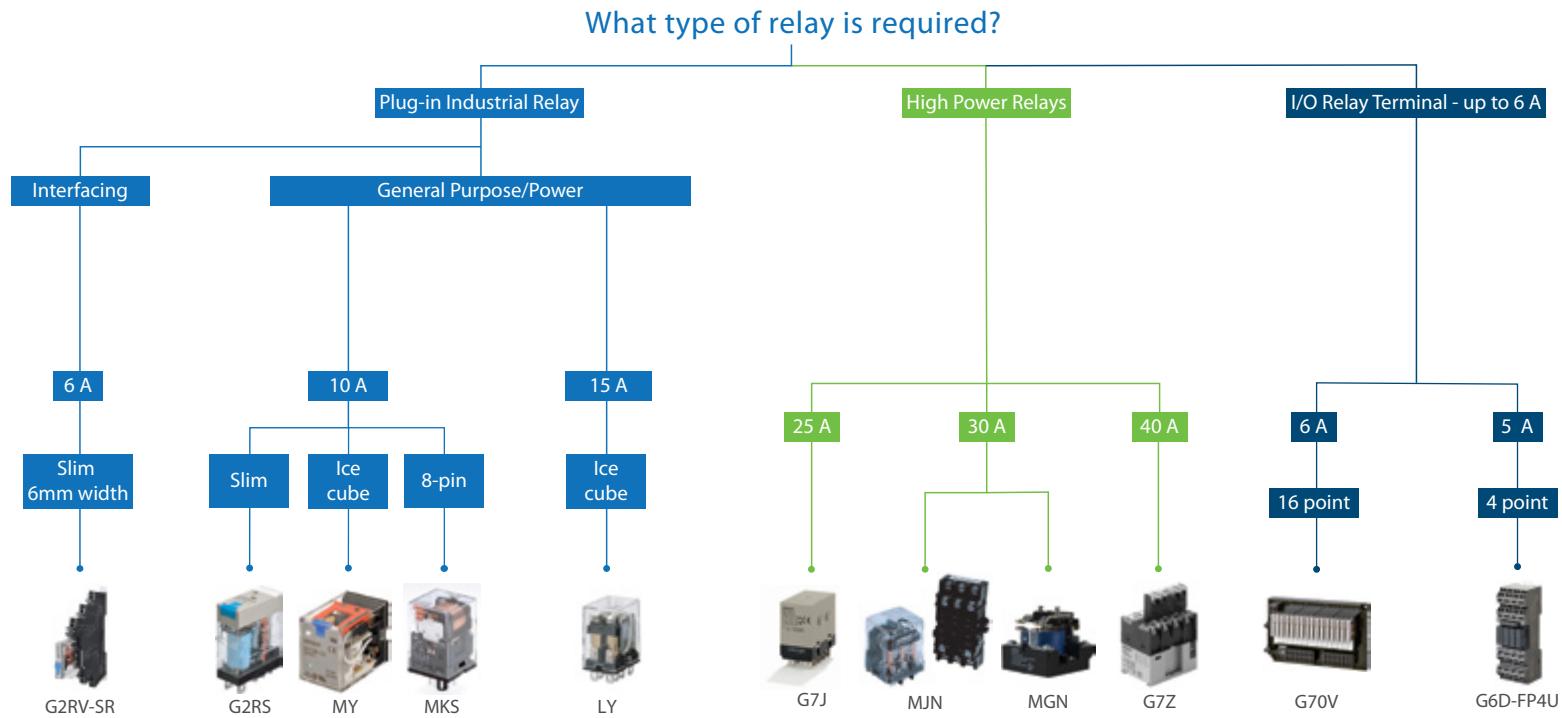


Suggested Part Numbers

Model		Part Number	Description	Notes
S8VK-G		S8VK-G06024	60W, 24VDC, 2.5A, 100-240VAC	Single-Phase: Standard Power Supply. Includes power boost function to protect against in-rush current. Screw terminals. Rated for -40° to 70°C
		S8VK-G12024	120W, 24VDC, 5A, 100-240VAC	
		S8VK-G24024	240W, 24VDC, 10A, 100-240VAC	
S8VK-S		S8VK-S06024	60W, 24VDC, 2.5A, 100-240VAC, Push-in terminals	Single-Phase: Environmental Resistance Power Supply. Added PCB coating for protection against moisture. Higher altitude rating and push-in terminals. Rated for -40° to 70°C
		S8VK-S12024	120W, 24VDC, 5A, 100-240VAC, Push-in terminals	
		S8VK-S24024	240W, 24VDC, 10A, Push-in terminals	
S8VK-X		S8VK-X06024-EIP	60W, 24VDC, 2.5A, 100-240VAC, EIP	Single-Phase : Predictive Maintenance Power Supply. Equipped with Ethernet/IP and optional display for real-time monitoring of power supply life, voltage, peak current and run-time. Free software tool included.
		S8VK-X09024-EIP	90W, 24VDC, 3.75A, 100-240VAC, EIP	
		S8VK-X09024A-EIP	90W, 24VDC, 3.75A, 100-240VAC, EIP with display	
		S8VK-X12024-EIP	120W, 24VDC, 5A, 100-240VAC, EIP	
		S8VK-X12024A-EIP	120W, 24VDC, 5A, 100-240VAC, EIP with display	
		S8VK-X24024-EIP	240W, 24VDC, 10A, 100-240VAC, EIP	
		S8VK-X24024A-EIP	240W, 24VDC, 10A, 100-240VAC, EIP with display	
S8VK-C		S8VK-C06024	60W, 24VDC, 2.5A, 100-240VAC	Single-Phase : Economical Power Supply. No power boost function to protect against in-rush current damage. Screw terminals. Rated for -25° to 60°C
		S8VK-C12024	120W, 24VDC, 5A, 100-240VAC	
		S8VK-C24024	240W, 24VDC, 10A, 100-240VAC	
S8VK-T		S8VK-T12024	3-phase 120W, 24VDC, 5A, 380-480VAC	Three-Phase: Standard Power Supply. Includes power boost function to protect against in-rush current. Screw terminals. Rated for -40° to 70°C
		S8VK-T24024	3-phase 240W, 24VDC, 5A, 380-480VAC	
S8FS-G		S8FS-G10024CD	100W, 24VDC, 4.5A, DIN mount	Single-Phase: Machine or DIN rail mount power supply. Ideal for machine tool and semiconductor manufacturing equipment. Rated for -20° to 70°C.
		S8FS-G15024CD	150W, 24VDC, 6.5A, DIN mount	
		S8FS-G30024CD	300W, 24VDC, 14A, DIN mount	

Mechanical Relays

| Omron is the world's largest relay manufacturer and has been manufacturing relays for over 50 years



Type	Description	Typical Relays
Control Panel Relays	Relays with 1 to 4 poles that are mainly used for relay sequences or I/O applications	MY, LY, MK(S), G2R(S), G2RV, G7T
High Power Relays	Multi-pole power relays rated up to 40A that can control heaters, compressors and fan motors	G7Z, G7J
Terminal Relays	Relay units that are mainly used for PLC applications. Reduces wiring work and panel space. Up to 16 points models available.	G6D-F4PU, G70V, G7TC

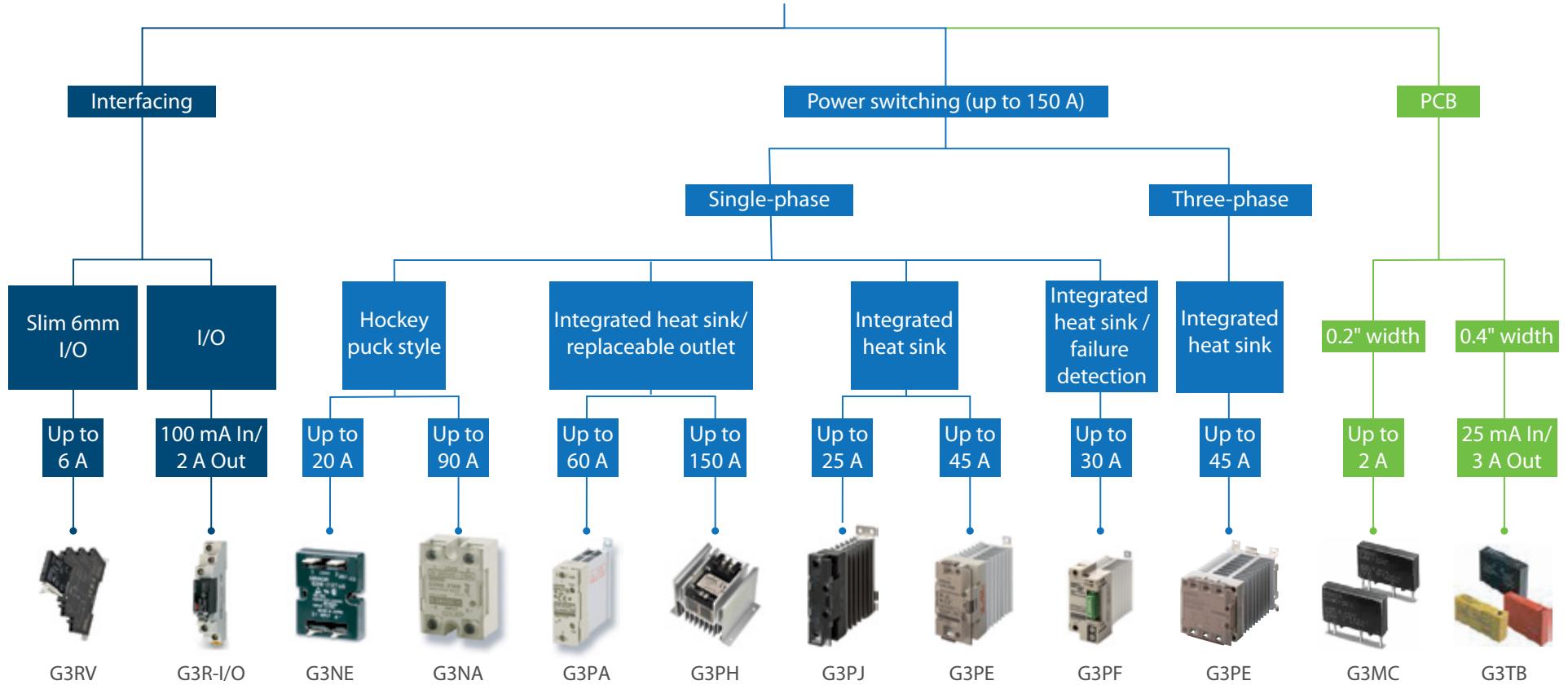
Suggested Part Numbers

Model		Part Number	Description	Notes
G2RV-SR		G2RV-SR500 DC24	Slim I/O Relay, 24VDC & Socket, Push-in terminals, w/o latching lever	Slim mechanical relay, ideal for I/O Relay application. SPDT rating
		G2RV-SR500 AC/DC24	Slim I/O Relay, 24VAC/VDC & Socket, Push-in terminals, w/o latching lever	
		G2RV-SR500 AC110	Slim I/O Relay, 100VAC & Socket, Push-in terminals, w/o latching lever	
		G2RV-SR500 AC230	Slim I/O Relay, 230VAC & Socket, Push-in terminals, w/o latching lever	
G2RS		G2R-1-S DC24 (S)	SPDT, 24VDC	 G2RS Screw Terminal Socket (P2RFZ)
		G2R-1-SN DC24 (S)	SPDT, LED, 24VDC	
		G2R-1-S AC120 (S)	SPDT, 120VAC	
		G2R-1-SN AC120 (S)	SPDT, LED, 120VAC	
		G2R-2-S DC24 (S)	DPST, 24VDC	
		G2R-2-SN DC24 (S)	DPDT, LED, 24VDC	
		G2R-2-S AC120 (S)	DPST, 120VAC	
		G2R-2-SN AC120 (S)	DPDT, LED, 120VAC	
		P2RFZ-05-E	Screw terminal socket for G2R-1-S(S) relay	
		P2RFZ-08-E	Screw terminal socket for G2R-2-S(S) relay	
		P2RF-05-PU	Push-in Plus socket for G2R-1-S(S) relay	
		P2RF-08-PU	Push-in Plus socket for G2R-2-S(S) relay	
MY		MY2N DC24 (S)	DPST, 24VDC w/operation indicator	 MY Screw Terminal Socket (PYFZ)
		MY2N AC110/120 (S)	DPST, 110/120VAC w/operation indicator	
		MY4N DC24 (S)	4PST, 24VDC w/operation indicator	
		MY4N AC110/120 (S)	4PST, 110/120VAC w/operation indicator	
		PYFZ-08	Screw terminal socket for MY2 relay	
		PYFZ-14	Screw terminal socket for MY4 relay	
		PYF-08-PU	Push-in Plus socket for MY2 relay w/release lever	
		PYF-14-PU	Push-in Plus socket for MY4 relay w/release lever	
LY		LY2N DC24	DPST, 24VDC w/operation indicator	 LY Screw Terminal Socket (PTF-AE)
		LY2N AC110/120	DPST, 110/120VAC w/operation indicator	
		LY4N DC24	DPST, 24VDC w/operation indicator	
		LY4N AC110/120	DPST, 24VDC w/operation indicator	
		PTF08A-E	Screw terminal socket for LY2 relay	
		PTF14A-E	Screw terminal socket for LY4 relay	
		PTF-08-PU	Push-in Plus socket for LY2 relay w/release lever	
		PTF-14-PU-L	Push-in Plus socket for LY4 relay w/o release lever	

Solid State Relays

| Omron is the world's largest relay manufacturer and has been manufacturing relays for over 50 years

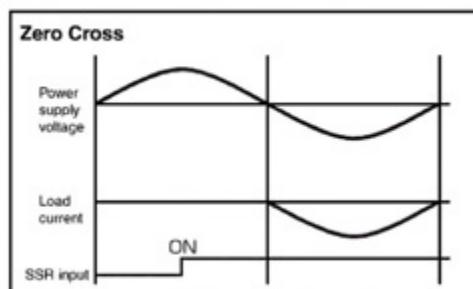
What type of relay is required?



Application	Recommended SSR
Motor Control	G3NE, G3NA
Heater Control	G3PF, G3NE, G3NA, G3PH, G3PE, G3PJ, G3PA
Lighting Control	G3NE, G3NA, G3PH, G3PE, G3PJ, G3PA
I/O	G3RV, G3R-I/O
PCB	G3MC, G3TB

Suggested Part Numbers

Model		Part Number	Description	Notes
G3PJ		G3PJ-215B-PU DC12-24	15A, 1-phase SSR, 240VAC out, 24VDC in	Built-in heat sink with push-in terminals
		G3PJ-225B-PU DC12-24	25A, 1-phase SSR, 240VAC out, 24VDC in	
		G3PJ-515B-PU DC12-24	15A, 1-phase SSR, 480VAC out, 24VDC in	
		G3PJ-525B-PU DC12-24	25A, 1-phase SSR, 480VAC out, 24VDC in	
G3NA		G3NA-225B-UTU DC5-24	25A, 240VAC out, 24VDC in, with indicator	Hockey Puck Style, zero cross function standard with AC-output models
		G3NA-240B-UTU DC5-24	40A, 240VAC out, 24VDC in, with indicator	
		G3NA-225B-UTU AC100-240	25A, 240VAC out, 100-240VAC in, with indicator	
		G3NA-240B-UTU AC100-240	40A, 240VAC out, 100-240VAC in, with indicator	
G3PE		G3PE-225B DC12-24	25A, 1-phase, 240VAC out, 24VDC in, zero cross	Single and three phase models, zero cross option, built in heat sink, screw terminals.
		G3PE-245B DC12-24	45A, 1-phase, 240VAC out, 24VDC in, zero cross	
		G3PE-525B DC12-24	25A, 1-phase, 480VAC out, 24VDC in, zero cross	
		G3PE-545B DC12-24	45A, 1-phase, 480VAC out, 24VDC in, zero cross	
		G3PE-225B-3N DC12-24	25A, 3-phase, 3-pole, 240VAC out, 24VDC in	
		G3PE-245B-3N DC12-24	45A, 3-phase, 3-pole, 240VAC out, 24VDC in	

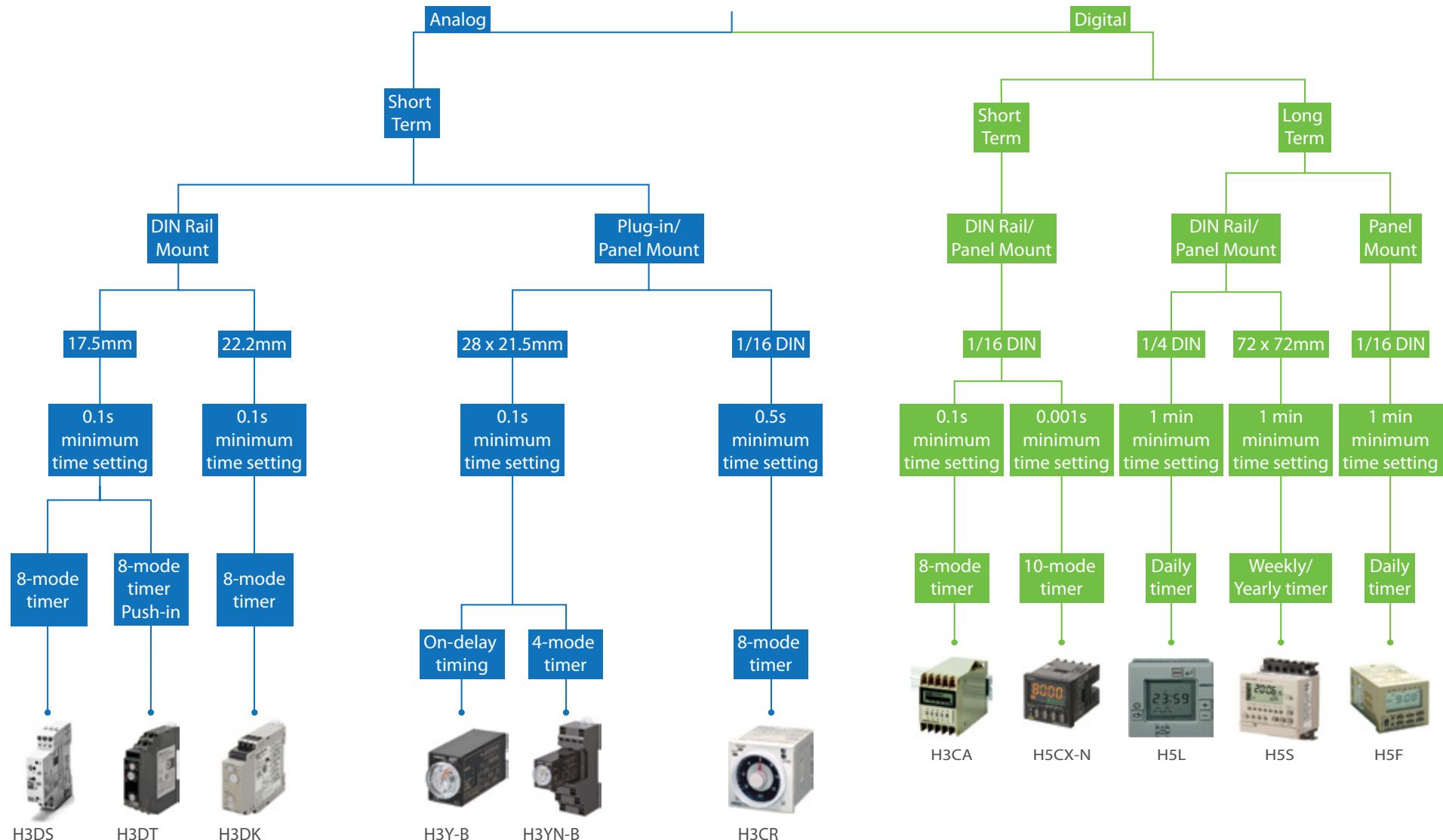


The zero cross function causes the relay to turn ON when the AC load power supply approaches 0 V. This suppresses noise and minimizes the surge current through the load. Zero crossing relays are ideal for resistive heaters, lamps and ballasts.

Timers

| Manufacturing timers for over 80 years

What type of timer is required?

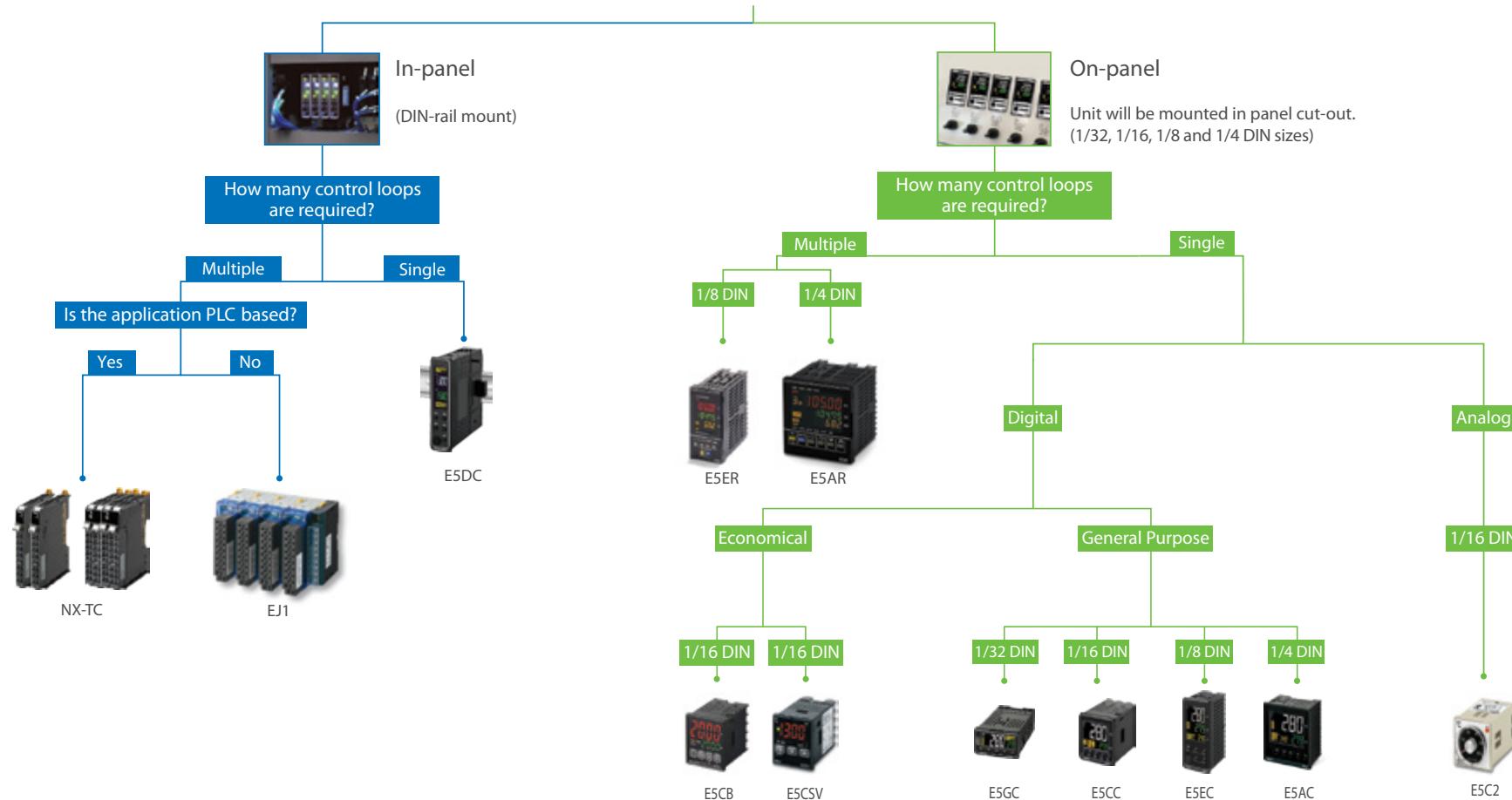


Suggested Part Numbers

Model		Part Number	Description	Notes
H5CX-N		H5CX-A-N AC100-240	Standard, relay output, 100-240VAC	Digital Solid State Timer with 4-digit display. 10 time range settings and multi-operating modes (On-delay, interval, twin timer, flicker and more).
		H5CX-AD-N AC24/DC12-24	Standard, relay output, 24VAC/12-24VDC	
H3CR		H3CR-A8 AC24-48 DC12-48	Multi-Function Timer, 8 pin, 24-48VAC/12-48VDC	Simple analog solid state timer with 20 time range settings and multi-operating modes (On-delay, flicker, interval, signal on/off delay, one shot and more).
		H3CR-A8 AC100-240 DC100-125	Multi-Function Timer, 8 pin, 100-240VAC/100-125VDC	
		H3CR-F8 AC24-48 DC12-48	Twin Timer, 8 pin, 24-48VAC/12-48VDC	
		H3CR-F8 AC100-240 DC100-125	Twin Timer, 8 pin, 100-240VAC/100-125VDC	
H3CA		H3CAA	Digital Solid State Timer, 11 pin, 24-240VAC, 12-240VDC	Digital Solid State Timer with 7 time ranges and 8 available operation modes. Accepts up to four external signal inputs.
H3YN-B		H3YN-2-B DC24	DPDT, 0.1s-10min, Black, 24VDC	Plug-in analog timer with four time ranges and four operation modes (On delay, interval, flicker-off start, flicker on start). Push-in terminal sockets.
		H3YN-2-B AC100-120	DPDT, 0.1s-10min, Black, 100-120VAC	
		H3YN-4-B DC24	4PDT, 0.1s-10min, Black, 24VDC	
		H3YN-4-B AC100-120	4PDT, 0.1s-10min, Black, 100-120VAC	
		PYF-08-PU-L	Push-in Plus Socket for H3Y(N)-2-B timers	
		PYF-14-PU-L	Push-in Plus Socket for H3Y(N)-4-B timers	

Temperature Controllers

Where will the temperature controller be mounted?



Key Features of E5_C Series Digital Temperature Controller	CX-Thermo Software	Recommended Thermocouple Part Numbers	Thermocouple Description
(E5GC, E5CC, E5DC, E5EC, E5AC models) •Compact Design •High contrast LCD Display •50 ms sampling speed for high speed and precise regulation •User-friendly interface for quick setup and operation •Easy programming with CX-Thermo PC software	Part Number: EST2-2C-MV4 Compatible with all Omron Digital Temperature Controller Models. •Advanced Parameter setting •Batch-downloading function •Graphical PID-tuning	E52-CA1DY M6 1M E52-CA1DY M6 4M E52-CA1GTY 1M	K-type, 0-400°C, M6 screw, 1m lead wire, crimp terminal K-type, 0-400°C, M6 screw, 4m lead wire, crimp terminal K-type, 0-300°C, 1m lead wire, crimp terminal

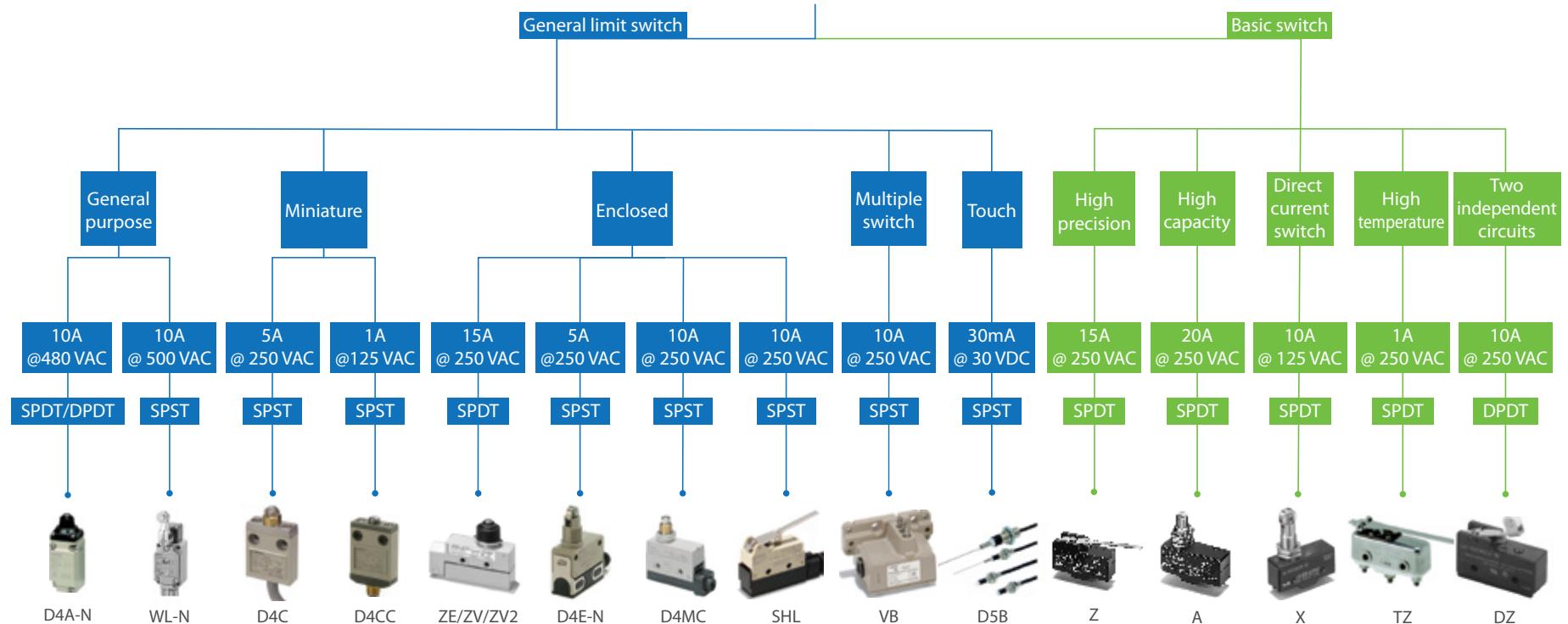
Suggested Part Numbers

Model		Part Number	Description	Notes
<u>E5CC</u>		E5CC-RX3A5M-000	Temp Controller, 1/16 DIN,PID,100 - 240 VAC, Relay Output, 3 Aux, Screw Terminal w/cover	Standard 1/16 DIN Temperature controller
		E5CC-QX3A5M-000	Temp Controller, 1/16 DIN,PID,100 - 240 VAC, Voltage Output, 3 Aux, Screw Terminal w/cover	
		E5CC-RX3D5M-000	Temp Controller, 1/16 DIN,PID, 24 VAC/VDC, Relay Output, 3 Aux, Screw Terminal w/cover	Key Applications: Boilers, Ovens, Vertical/ Horizontal Sealing, Shrink Wrap, Injection Molding, and Heat Tunnels
		E5CC-QX3D5M-000	Temp Controller, 1/16 DIN,PID, 24 VAC/VDC, Voltage Output, 3 Aux, Screw Terminal w/cover	
		E5CC-CX3A5M-000	Temp Controller, 1/16 DIN, PID, 100 - 240 VAC, Linear Current Outup, 3 Aux, Screw Terminal w/cover	
<u>E5GC</u>		E5GC-QX0A6M-000	Temp Controller, 1/32 DIN,PID, 100 - 240 VAC, Voltage Output, Screw Terminal w/cover	Small and compact 1/32 DIN Temperature controller
		E5GC-QX1A6M-000	Temp Controller, 1/32 DIN, PID, 100 - 240 VAC, 1 AUX Voltage Output Screw Terminal w/cover	
		E5GC-RX0A6M-000	Temp Controller, 1/32 DIN, PID, 100 - 240 VAC, Relay Outup, Screw Terminal w/cover	Key Applications Small adhesion, labeling, sealing equipment
		E5GC-RX1A6M-000	Temp Controller, 1/32 DIN, PID,100 - 240 VAC, Relay Outup, 1 Aux, Screw Terminal w/cover	
<u>E5EC</u>		E5EC-RX4A5M-000	Temp Controller, 1/8 DIN, PID,100-240 VAC, Relay Output, 4 Aux, Screw Terminal w/cover	1/8 DIN Temperature Controller
		E5EC-RR4A5M-000	Temp Controller, 1/8 DIN, PID,100-240 VAC, Dual Relay Output, 4 Aux, Screw Terminal w/cover	
		E5EC-QX4A5M-000	Temp Controller, 1/8 DIN, PID,100-240 VAC, Voltage Output, 4 Aux, Screw Terminal w/cover	Key Applications: Boilers, Ovens, Vertical/ Horizontal Sealing, Shrink Wrap, Injection Molding, and Heat Tunnels
		E5EC-RX4D5M-000	Temp Controller, 1/8 DIN, PID, 24 VAC/VDC, Relay Output, 4 Aux, Screw Terminal w/cover	
<u>E5DC</u>		E5DC-RX2ASM-000	Temp Controller, DIN-Rail, PID,100-240VAC, Relay Output, 2 Aux, Screw Terminal	In-Panel DIN rail mount Temperature Controller.
		E5DC-QX2DSM-002	Temp Controller, DIN-Rail, PID, 24VAC/VDC, Voltage Output, 2Aux, RS-485, Heater Burnout Alarm, Screw Terminal	Key Applications Temperature control equipment designs that hide control systems in panel and require little operator use with temperature control.

Limit Switches and Basic Switches

| Manufacturing limit switches for over 60 years

What type of switch is required?

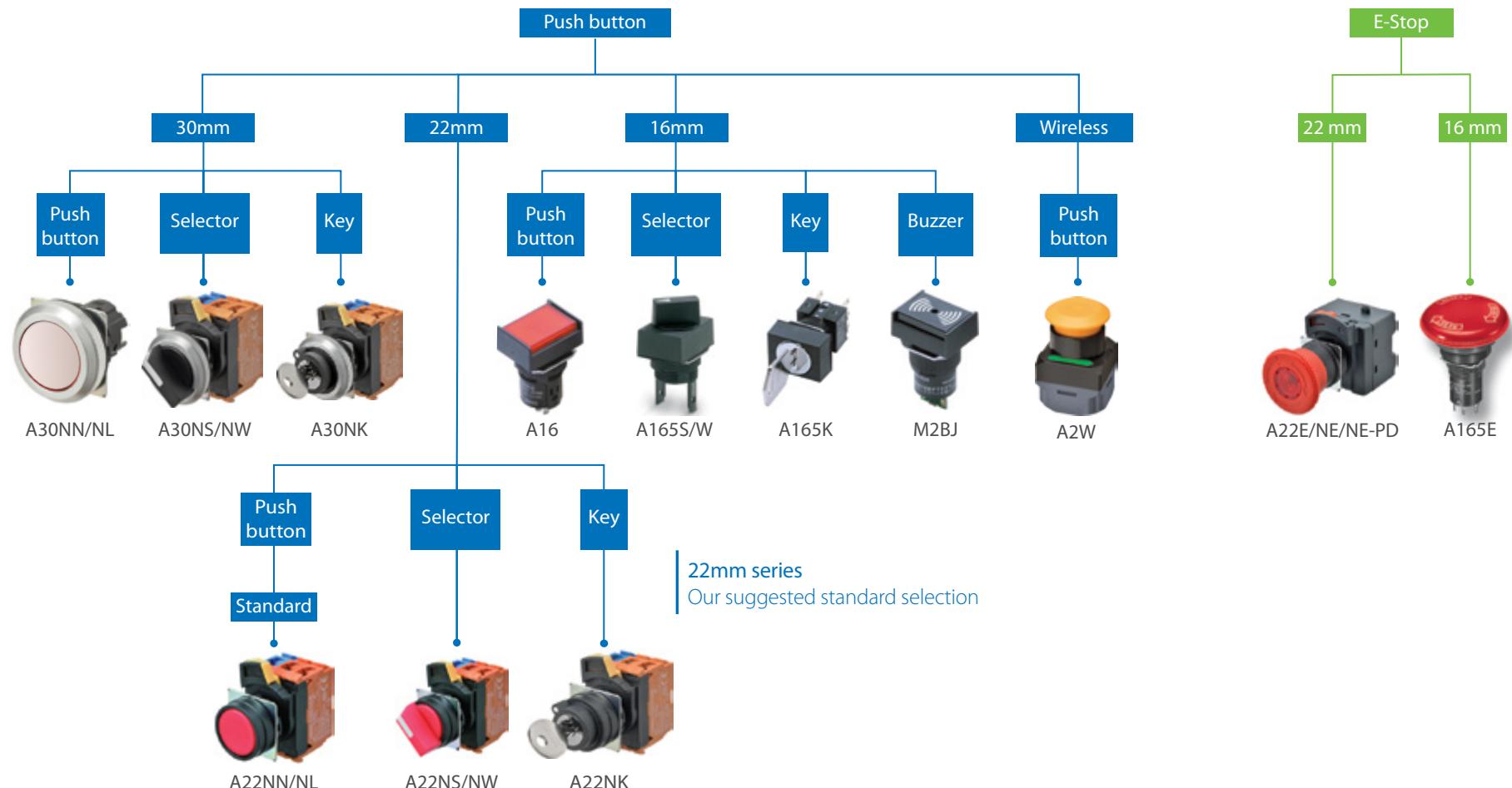


Type	Model Series	Features	Applications
General Limit Switches	D4A	Wide temperature range from -40°C to +100°C (standard type) for use in heavy duty applications	Machine tool, Welding machines, Auto assembly line
	WL-N	Two-circuit switch for reliable switching	Machine tool, Welding machines, Auto assembly line
	D4C	Slim body and designed for easy side-by-side mounting (Plunger type: 6 switches maximum)	Material handling, Packaging equipment, Machine tool
	ZE	Long service life and high breaking capacity	Conveyor, Waste handling systems
	SHL	Rated IP67, rigid zinc die-cast alloy housing with available molded terminals and indicators	Conveyor, Waste handling systems
Basic Switches	Z	A large switching capacity of 15A and high repeat accuracy	Pressure gauges, Power transformers, Elevators, Manually operated devices, Electrical switchgear
	A	High-capacity switch capable of handling 20A loads and maximum permissible inrush current of 75A	Heaters, Motors, Dryer, Home appliances, Mower, Forklift, Manually operated devices
	X	Direct current switch that incorporates a permanent magnet in the contact mechanism to deflect arcs and increases switch life	Power transformers, Pressure gauges, Forklifts, Elevators
	TZ	High temperature switch that maintains stable operation at an ambient temperature of 400°C	Industrial ovens, Incinerators, Aircraft engine valve position
	DZ	Double pole double throw basic switch for two independent circuit control. Ideal for switching the circuits operating on two different voltages, and controlling two circuits.	Power transformers, Heavy duty vehicle, foot switches

Suggested Part Numbers

Model		Part Number	Description	Notes
WL-N		WLG2-LD	Roller Lever, LED, High sensitivity	Two-circuit switch with environmental-resistant and spatter-prevention model Mounting Holes 30.2 mm x 58.7 mm
		WLNJ-TS-N	Flex rod, ground terminal	
		WLCA2-LD-N	Roller Lever, LED, basic model	
		WLCA12-2TS-N	Adjustable Roller Lever, ground terminal	
		WLNJ-N	Flex rod	
		WLCA2-TS-N	Roller lever, ground terminal	
		WLCA2-N	Roller lever	
		WLCA12-N	Adjustable Roller Lever	
		WLCA2-2N-N	Roller lever 20 degree max travel	
D4A-N		D4A-2918-N	Roller Lever, center neutral operation	Wide temperature range -40°C to +100°C Mounting Holes 29.4 mm x 59.5 mm
		D4A-1101-N	Roller Lever, Standard	
		D4A-1102-N	Roller Lever, High Sensitivity	
		D4A-2501-N	Roller Lever, Standard	
		D4A-1110-N	Top Plunger, Standard	
		D4A-1114-N	Flexible plastic rod	
D4C		D4C-1620	Roller Lever	IP67 rated slim body limit switch Mounting Holes 25 mm
		D4C-1602	Roller Plunger	
		D4C-1650	Plastic Rod	
		D4C-1631	Sealed Pin Plunger	
		D4C-1632	Sealed Roller Plunger	
ZE		ZE-NJ-2S	Flexible Rod Lever	Long service life enclosed limit switch. Mounting Holes 25.4 mm
		ZE-N-2S	Sealed Plunger	
		ZE-N22-2S	Sealed Roller Plunger	
		ZE-NA2-2S	Sealed Roller Arm Lever	
		ZE-Q22-2S	Roller Plunger	
		ZE-Q-2S	Plunger	
Z		Z-15GW22S-B	Short Hinge Roller Lever	General-purpose, High Precision Mounting Holes 25.4 mm
		Z-15GQ-B	Panel Mount Plunger	
		Z-15HW24-B	Hinge Lever Long (Low-Force)	
		Z-15GW2-B7-K	Short Hinge Roller Lever	
		Z-15GQ-B7-K	Panel Mount Plunger	
		Z-15GW22-B	Hinge Roller Lever	
		Z-15GW-B7-K	Hinge Roller Lever	
		Z-15GW-B	Hinge Roller Lever	
		Z-15GW2-B	Hinge Roller Lever	
X		X-10GW22-B	Short Hinge Roller Lever	Built-in magnet to deflect arcing and increasing switch life Mounting Holes 25.4 mm
		X-10GW-B	Hinge Lever	
		X-10GQ22-B	Panel Mount Roller Plunger	
DZ		DZ-10GW-1B	Hinge Lever	DPDT for running two independent circuits Mounting Holes 25.4 mm
		DZ-10GW22-1B	Hinge Roller	
		DZ-10GV22-1B	Hinge Roller	
		DZ-10G-1B	Pin Plunger	
		DZ-10GW2-1B	Hinge Roller Lever	

Pushbuttons and Emergency Stop Switches



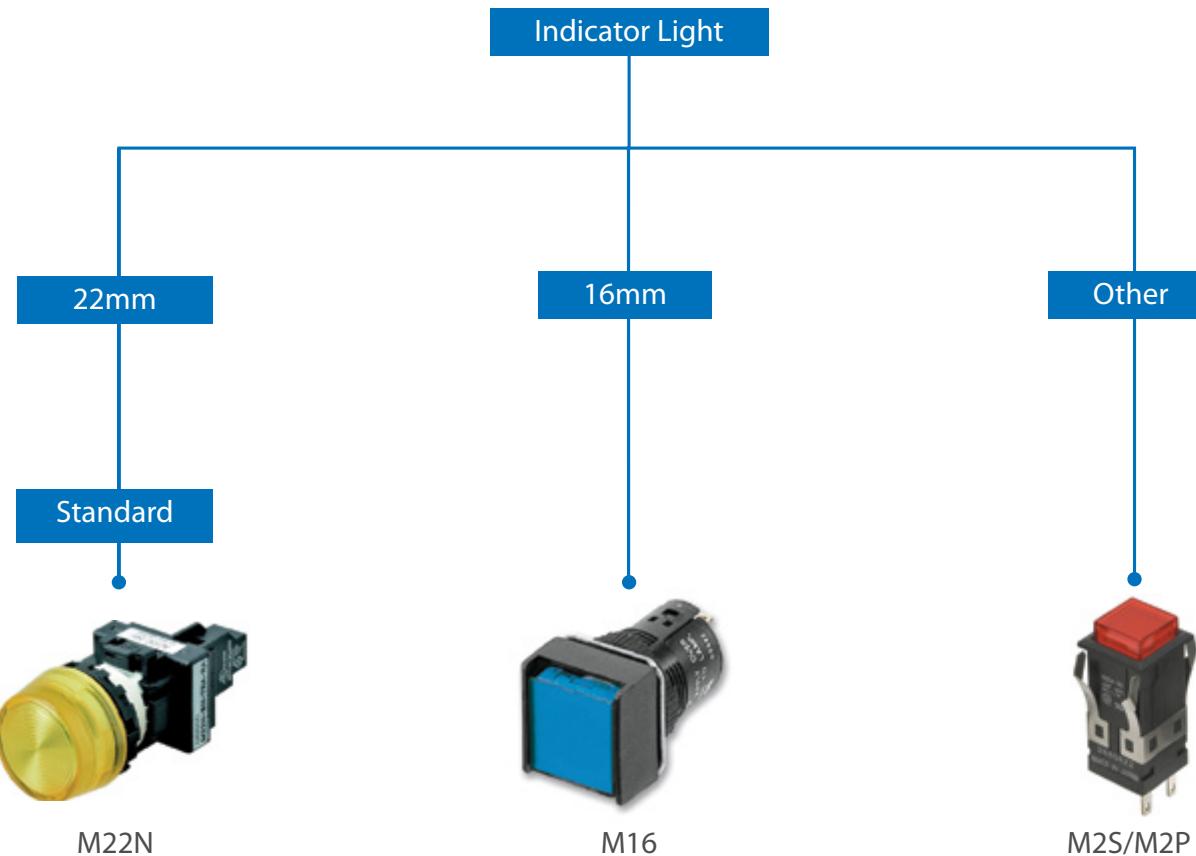
Operator Unit	Mounting Collar	LED Lamp	Lighting Unit	Contact Block

Omron provides pushbutton sub-assemblies for
A30NN/NL/NK/NS/NW & A22NN/NL/NK/NS/NW pushbuttons

Build your pushbutton assembly part number
using Omron's online configuration tool

http://www.ia.omron.com/product/switches/push-buttons_indicator-lamps/specifications-search/

Indicators



Indicator Shapes	Plastic-round flat, Plastic-round projected, Plastic-round semi-spherical, Plastic-round flat etched, Square, Rectangle
Colors	Red, Green, Yellow, White, Blue, Orange
Voltage Rating	6VAC/DC, 12VAC/DC, 24VAC/DC, 110-120VAC, 220-240VAC

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