

# OMRON Power Relays

## OMRON MGN SERIES: 30A HEAVY-DUTY, OPEN-FRAME POWER RELAYS

**Specifications:**

- Life expectancy: Electrical 100,000 operations (minimum)  
Mechanical 1,000,000 operations
- Dielectric strength: 2,200VRMS, 60Hz between contacts
- Terminals: Screw type

**Features:**

- Class F coil insulation system for 155°C (311°F)
- Coil molded in DuPont Pyrite® for environmental protection
- Rugged construction rivets terminals to base
- Short Circuit Current Rating (SCCR) of 5KA, 600VAC



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Coil Voltage	Base Size	Price Each			
						1	25	50	100
653-MGN1C-AC120	MGN1C-AC120	A	SPDT	120VAC	Short	32.68	30.86	29.77	28.24
653-MGN1C-DC12	MGN1C-DC12	A	SPDT	12VDC	Short	30.32	27.29	25.72	24.75
653-MGN1C-DC24	MGN1C-DC24	A	SPDT	24VDC	Short	24.37	21.66	20.25	19.50
653-MGN2A-AC240	MGN2A-AC240	A	DPST-NO	240VAC	Short	31.13	27.90	27.52	27.05
653-MGN2A-DC12	MGN2A-DC12	A	DPST-NO	12VDC	Short	34.62	33.51	32.90	31.68
653-MGN2A-DC24	MGN2A-DC24	A	DPST-NO	24VDC	Short	26.39	24.55	22.96	22.10
653-MGN2C-AC120	MGN2C-AC120	B	DPDT	120VAC	Long	34.37	30.93	27.49	23.37
653-MGN2C-DC12	MGN2C-DC12	B	DPDT	12VDC	Long	48.00	43.19	38.39	34.55

## OMRON G7Z SERIES: POWER RELAYS WITH AUXILIARY CONTACT BLOCKS

**Specifications:**

- Maximum operating frequency: Rated Load 1,200 operations/hour  
Mechanical 1,800 operations/hour
- Dielectric strength: 4,000VAC, 50/60Hz
- Terminal type: Screw

**Features:**

- 40A can be carried and switched on each of 4 poles
- Possible to reach a maximum load capacity of 160A when using 4-pole parallel connection
- EN 60947-4-1 certification for mirror contact mechanisms has been obtained by using a combination of the relay and auxiliary contact blocks



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MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Configuration		Coil Voltage (VDC)	Price Each			
			Relay	Auxiliary Contact Block		1	25	50	100
653-G7Z-2A2B-11ZDC12	G7Z-2A2B-11Z DC12	C	DPST-NO/DPST-NC	SPST-NO/SPST-NC	12	138.62	122.17	112.00	103.37
653-G7Z-2A2B-02ZDC24	G7Z-2A2B-02Z DC24	C	DPST-NO/DPST-NC	DPST-NC	24	138.62	130.19	127.74	122.46
653-G7Z-4A-11ZDC12	G7Z-4A-11Z DC12	C	4PST-NO	SPST-NO/SPST-NC	12	134.40	122.17	112.00	103.37
653-G7Z-4A-11ZDC24	G7Z-4A-11Z DC24	C	4PST-NO	SPST-NO/SPST-NC	24	135.35	112.56	103.16	95.23

## OMRON G9EA-1 SERIES: 60A AND 100A DC POWER RELAYS

**Specifications:**

- Contact form: SPST-NO
- Power consumption: Approx. 5W
- Rated load: 60A @ 400VDC  
100A @ 120VDC
- Terminal type: Screw
- UL/CSA standard UL508 approved

**Features:**

- Switching and driving sections are gas-injected/hermetically sealed which allow relays to interrupt high-capacity loads
- Sealed construction requires no arc space, saves space, and helps ensure safe applications
- No restrictions on the mounting direction



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Switching/Current Conduction Models, 60A</b>									
653-G9EA-1-B-DC12	G9EA-1-B-DC12	D	417.0	28.8	12	176.84	171.41	141.47	127.33
653-G9EA-1-B-DC24	G9EA-1-B-DC24	D	208.0	115.2	24	171.92	153.50	128.30	119.39
<b>High-Current Conduction Models, 100A</b>									
653-G9EA-1-B-CA-DC12	G9EA-1-B-CA-DC12	D	417.0	28.8	12	176.07	168.44	148.58	142.03
653-G9EA-1-B-CA-DC24	G9EA-1-B-CA-DC24	D	208.0	115.2	24	165.35	158.16	139.54	133.94
<b>Accessories</b>									
653-P9EA-C	P9EA-C	-		Terminal cover		2.82	2.50	2.32	2.13
653-P9EA-D	P9EA-D	-		DIN track adapter		15.80	15.34	14.43	12.02

## OMRON G9EB-1 SERIES: 25A DC POWER RELAYS

**Specifications:**

- Contact form: SPST-NO
- Power consumption: Approx. 5W
- Terminal type: Screw
- UL/CSA standard UL508 approved

**Features:**

- Low-cost relay that is both compact 25x60x58mm and lightweight @ approx. 135g
- Unique gas-filled, fully sealed, non-ceramic construction reduces need for special processing and materials



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Switching/Current Conduction Models, 25A</b>									
653-G9EB-1-B-DC12	G9EB-1-B-DC12	E	166.7	72.0	12	117.34	113.81	93.95	96.34
653-G9EB-1-B-DC24	G9EB-1-B-DC24	E	83.3	288.0	24	171.20	163.82	137.48	120.31
653-G9EB-1-BDC48	G9EB-1-B DC48	E	41.7	1152.0	48	145.63	136.05	124.55	129.95

## OMRON G9EC-1 SERIES: 200A DC POWER RELAYS

**Specifications:**

- Contact form: SPST-NO
- Power consumption: Approx. 11W
- Rated load: 200A @ 400VDC
- Terminal type: Screw
- UL/CSA standard UL508 approved

**Features:**

- Switching and driving sections are gas-injected/hermetically sealed which allow relays to interrupt high-capacity loads.
- Sealed construction requires no arc space, saves space, and helps ensure safe applications.
- No restrictions on the mounting direction
- UL/CSA standard UL508 approved



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Switching/Current Conduction Models, 200A</b>									
653-G9EC-1-B-DC24	G9EC-1-B-DC24	F	469.0	51.2	24	230.24	226.21	214.89	209.65
<b>Accessories</b>									
653-P9EC-C	P9EC-C	-		Terminal cover		3.44	3.21	3.05	2.96

**DIMENSIONS: mm**

