TAKAMISAWA (Fujitsu) Power Relay 1 POLE-5A NYP24W-K

Features

- Slim type with 5mm thickness
- Low power consumption and high sensitivity



Coil Specifications

Model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption
NYP24W-K	24VDC==	16.1V	2.4V	5mA	4,800Ω	120mW

%All values in the table are measured at 20 $^\circ\!C$ with a tolerance of ±10%.

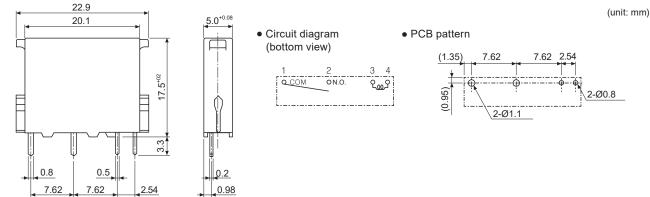
Contact Specifications

Manufactu	•		TAKAMISAWA (Fujitsu)			
	re					
Model			NYP24W-K			
	Arrangement		1 Form A (SPST-1a)			
Contact	Material		Gold overlay silver alloy			
	Resistance	e (initial)	30mΩ (6VDC== 1A)			
	Rated load	ł	3A 250VAC \sim	3A 30VDC		
	Max. switc	hing capacity	750VA	90W		
Rating	Min. switch	ning capacity	5VDC=== 1mA			
	Max. switc	hing voltage	270VAC~	150VDC		
	Max. switc	hing current	5A			
s	Insulation resistance		≥ 1,000MΩ (at 500VDC megger)			
Electrical characteristics	Dielectric	Between contact-coil	3,000VAC 50/60Hz for 1 minute			
charac	strength	Between open contacts	750VAC 50/60Hz for 1 minute			
ical	Surge volt	age	5,080V			
ectr	Operate tir	ne	≤ 10ms			
	Release tii	me	≤ 5ms			
		Mechanical	5.0mm amplitude at frequency of 10 to 55	Hz (for 1 min) in each X, Y, Z direction for 1 hour		
Mechanical characteristics	Vibration	Malfunction	1.5mm amplitude at frequency of 10 to 55h	Hz (for 1 min) in each X, Y, Z direction for 10 minute		
acha		Mechanical	1000m/s² (approx. 100G) in each X, Y, Z d	irection for 3 times		
cha M	Shock	Malfunction	100m/s ² (approx.10G) in each X, Y, Z direc	tion for 3 times		
Life	Mechanica	al	≥ 20,000,000 operations (at 180 operations	s/min)		
expectancy	Electrical*	1	≥ 100,000 operations (3A 250VAC, 30VDC resistive load)			
Environ-	Ambient te	emperature	-40 to 90°C			
ment	Ambient h	umidity	35 to 80%RH			
Weight	1		Approx. 3.5g			
Weight			, pp. o.			

%1: 50,000 operations: 5A 250VAC, 5A 30VDC resistive load (per 20 operations/min)

*Environment resistance is rated at no freezing or condensation.

Dimensions



I/O Terminal Blocks Interface Terminal Blocks

Common Terminal Blocks Sensor Connector Terminal Blocks

Relay Terminal Blocks I/O Cables Connector Type Cables

Open Type Cables Others

MATSUSHITA(Panasonic) Power relay 1 POLE-5A APAN3124

Features

- Slim type with 5mm thickness
- Excellent durability resistance against vibration and shock



Coil Specifications

Model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption
APAN3124	24VDC	≥ 70% of rated voltage	≤ 5% of rated voltage	7.5mA	3,200Ω	180mW

%All values in the table are measured at 20 $^\circ\!C$ with a tolerance of ±10%.

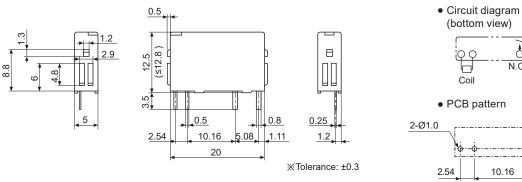
Contact Specifications

Manufactu	Ire		MATSUSHITA (Panasonic)			
Model			APAN3124			
	Arrangement		1 Form A (SPST-1a)			
Contact Material			Au-clad AgNi type			
	Resistance	(initial)	30mΩ (6VDC== 1A)			
	Rated load		5A 250VAC \sim	5A 30VDC		
	Max. switch	ning capacity	1,250VA	150W		
Rating	Min. switch	ing capacity	100mVDC 100µA			
	Max. switch	ning voltage	250 VAC \sim	110VDC		
	Max. switch	ning current	5A	· · · · ·		
	Insulation resistance		≥ 1,000MΩ (at 500VDC megger)			
tics	Dielectric	Between contact-coil	3,000VAC 50/60Hz for 1 minute			
Electrical characteristics	strength Between open contact		1,000VAC 50/60Hz for 1 minute			
El	Surge voltage		6,000V			
0	Operate tin	ne	≤ 10ms			
	Release tin	ne	≤ 5ms			
al tics	Vibration	Mechanical	3.5mm amplitude at frequency of 10 to 5	55Hz (for 1 min) in each X, Y, Z direction for 1 hour		
anic	Vibration	Malfunction	2.5mm amplitude at frequency of 10 to 5	55Hz (for 1 min) in each X, Y, Z direction for 10 minute		
Mechanical characteristics	Cheek	Mechanical	980m/s² (approx. 100G) in each X, Y, Z	direction for 3 times		
cha M	Shock	Malfunction	147m/s² (approx. 15G) in each X, Y, Z di	irection for 3 times		
Life	Mechanica	l	≥ 20,000,000 operations (at 180 operations/min)			
expectancy	Electrical ^{*1}		≥ 100,000 operations (3A 250VAC, 30VDC resistive load)			
Environ-	Ambient ter	mperature	-40 to 90°C			
ment	Ambient hu	imidity	5 to 85%RH			
Weight			Approx. 3g			

*1: 50,000 operations-5A 250VAC, 5A 30VDC resistive load (per 20 operations/min)

Environment resistance is rated at no freezing or condensation.

Dimensions



ABL Series ASL Series Power Relay SSR

ABS Series



(unit: mm)

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MATSUSHITA (Panasonic) Power Relay 1 POLE-5A PQ1a-24V

Features

- Slim type
- Excellent durability resistance against vibration and shock

Coil Specifications

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Model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption				
PQ1a-24V	24VDC	≥ 75% of rated voltage	≤ 5% of rated voltage	8.3mA	2,880Ω	200mW				
XAll values in the table a	XAII values in the table are measured at 20 ℃ with a tolerance of ±10%.									

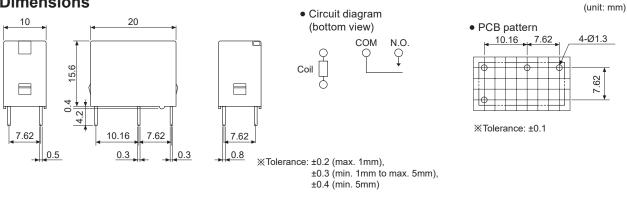
Contact Specifications

Manufactur	re		MATSUSHITA (Panasonic)			
Model			PQ1a-24V			
	Arrangement		1 Form A (SPST-1a)			
Contact	Material		Au-clad AgNi type			
	Resistance	e (initial)	50mΩ (6VDC== 1A)			
	Rated load	(resistive load)	5A 250VAC \sim	5A 30VDC		
Rating	Max. switc (resistive lo	hing power bad)	1,250VA	150W		
	Max. switc	hing voltage	$250VAC\sim$	110VDC		
	Max. switc	hing current	5A			
	Insulation resistance (initial)		≥ 1,000MΩ (at 500VDC megger)			
s	Dielectric strength	Between contact-coil	00VAC 50/60Hz for 1 minute			
Electrical characteristics		Between open contacts	1,000VAC 50/60Hz for 1 minute			
Ele	Surge voltage		8,000V			
5	Operate time (supplying rated voltage)		≤ 20ms			
	Release tir (supplying	ne rated voltage)	≤ 10ms			
al	Vibration	Mechanical	3.5mm amplitude at frequency of 10 to 55H	z (for 1 min) in each X, Y, Z direction for 1 hour		
Mechanical characteristics	VIDIALION	Malfunction	2.0mm amplitude at frequency of 10 to 55H	z (for 1 min) in each X, Y, Z direction for 10 minute		
lecha	Shock	Mechanical	980m/s² (approx. 100G) in each X, Y, Z dire	ection for 3 times		
Sh	SHOCK	Malfunction	294m/s² (approx. 30G) in each X, Y, Z direc	tion for 3 times		
Life	Mechanica	I	≥ 20,000,000 operations (at 180 operations/min)			
expectancy	Electrical*	1	≥ 100,000 operations (5A 250VAC, 30VDC resistive load)			
Environ-	Ambient te	mperature	-40 to 70°C			
ment	Ambient h	umidity	5 to 85%RH			
Weight			Approx. 7g			

%1: 20 operations per 1 minute

Environment resistance is rated at no freezing or condensation.

Dimensions



Autonics

MATSUSHITA (Panasonic) Power Relay Plug-In Type 1 Form C

Features

- Slim type
- High capacity, high reliability

Coil Specifications

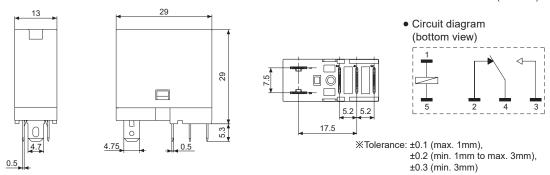
Model	Rated voltage	Must operate voltage	Must release voltage	Rated current		Power consumption	
AHN12024	24VDC===	≥ 70% of rated voltage	≤ 15% of rated voltage	22mA		0.53W	
	100/110VAC~ ≥ 80% of rate		0% of rated voltage ≤ 30% of rated voltage	50Hz	60Hz	50Hz	60Hz
AHN110X0		≥ 80% of rated voltage		11/13mA	9/10.6mA	1.1 to 1.4VA	0.9 to 1.2VA
	220VAC~ ≥ 80% of rated voltage			50Hz	60Hz	50Hz	60Hz
AHN110Y2		≤ 30% of rated voltage	5.0/5.9mA	4.1/4.8mA	1.1 to 1.4VA	0.9 to 1.2VA	

Contact Specifications

Manufactur	re		MATSUSHITA (Panasonic)		
Model			AHN12024	AHN110X0	AHN110Y2
	Arrangem	ent	1 Form C		
Contact	Material		AgSnO ₂ type		
	Resistance	e (initial)	≤ 100mΩ (6VDC 1A)		
	Rated load	d (resistive load)	10A 250VAC~, 10A 30VDC		
Rating	Max. switc (resistive l	ching power oad)	4,000VA, 300W		
Ŭ	Max. swite	hing voltage	250VAC~, 30VDC==		
	Max. swite	hing current	16A (AC load), 10A (DC load)		
	Insulation	resistance (initial)	≥ 1,000MΩ (at 500VDC megge	r)	
<u>cs</u>	Dielectric strength	Between contact-coil	5,000VAC 50/60Hz for 1 minute	2	
Electrical characteristics		Between open contacts	1,000VAC 50/60Hz for 1 minute	2	
Ele	Operate time (supplying rated voltage)		≤ 15ms		
	Release time (supplying rated voltage)		≤ 5ms		
al	Vibration	Mechanical	1.5mm amplitude at frequency	of 10 to 55Hz (for 1 min) i	n each X, Y, Z direction for 1 hour
anic	VIDIALION	Malfunction	1.5mm amplitude at frequency	of 10 to 55Hz (for 1 min) ii	n each X, Y, Z direction for 10 minute
Mechanical characteristics	Shock	Mechanical	1,000m/s ² (approx. 100G) in ea	ch X, Y, Z direction for 3 ti	mes
⊂ha ⊠	SHOCK	Malfunction	100m/s ² (approx. 10G) in each	X, Y, Z direction for 3 time	S
Life	Mechanical		≥ 20,000,000 operations (at 300 operations/min) ≥ 10,000,000 operations (at 300 operations/min)		
expectancy	Electrical		≥ 100,000 operations (at 20 operations/min)		
Environ-	Ambient te	emperature	-40 to 70°C		
ment	Ambient h	umidity	5 to 85%RH		
Weight			Approx. 19g		

*Environment resistance is rated at no freezing or condensation.

Dimensions



(unit: mm)

ABS Series ABL Series ASL Series

Power Relay SSR

I/O Terminal Blocks Interface Terminal Blocks

Common Terminal Blocks

Sensor Connector Terminal Blocks

ay minal Bloo I/O Cables

Connector Type Cables Open Type Cables Others





OMRON Power Relay 1 Form C

Features

- Slim type
- High capacity, high reliability

Coil Specifications



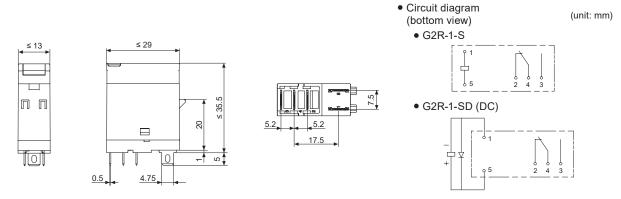
Model	Rated voltage	Must operate voltage	Must release voltage	Rated current		Power consumption
G2R-1-S24VDC	24VDC===	≥ 70% of rated voltage	≤ 15% of rated voltage	21.8mA		0.53W
G2R-1-S100/ (110)VAC	100/110VAC~	≥ 80% of rated voltage	≤ 30% of rated voltage	50Hz	60Hz	60Hz
G2R-1-5100/ (110)VAC				11mA	9/10.6mA	0.9VA
G2R-1-S200/ (220)VAC	VAC 200/220VAC~ ≥ 80	≥ 80% of rated voltage	< 200/ of rotad valtage	50Hz	60Hz	60Hz
	200/220VAC~		≤ 30% of rated voltage	5.5/4mA	4.5/5.3mA	0.9VA

Contact Specifications

00110	or opo	omoution	•					
Manufact	ure		OMRON					
Model	Model		G2R-1-S24VDC	G2R-1-S100/ (110)VAC	G2R-1-S100/ (110)VAC			
	Arrangeme	ent	1 Form C					
Contact	Material		AgCdO type					
	Resistance	e (initial)	≤ 100mΩ					
	Rated load	(resistive load)	10A 250VAC~, 10A 30VDC					
Rating	Max. switcl (resistive l	hing power oad)	2,500VA, 300W	2,500VA, 300W				
	Max. switcl	hing voltage	380VAC~, 125VDC					
	Max. switching current		10A (resistive load)					
	Insulation re	esistance (initial)	≥ 1,000MΩ (at 500VDC megger)					
S	Dielectric strength	Between contact-coil	5,000VAC 50/60Hz for 1 minute					
Electrical characteristics		Between open contacts	1,000VAC 50/60Hz for 1 minute					
Ele	Operate time (supplying rated voltage)		≤ 15ms					
	Release tir (supplying	ne rated voltage)	≤ 5ms	≤ 10ms				
ics al	Vibration	Mechanical	1.5mm amplitude at frequency of	10 to 55Hz (for 1 min) in each X, Y,	Z direction for 1 hour			
Mechanical characteristics	VIDIATION	Malfunction	1.5mm amplitude at frequency of	10 to 55Hz (for 1 min) in each X, Y,	Z direction for 10 minute			
lecha	Shock	Mechanical	1,000m/s ² (approx. 100G) in each	X, Y, Z direction for 3 times				
⊂ha ⊂	SHOCK	Malfunction	100m/s ² (approx. 10G) in each X,	Y, Z direction for 3 times				
Life	Mechanica	I	≥ 20,000,000 operations (at 18,000 operations/hour)	≥ 10,000,000 operations (at 18,0	00 operations/hour)			
expectancy	Electrical		≥ 100,000 operations (at 1,800 op	perations/hour)				
Environ-	Ambient te	mperature	-40 to 70°C					
ment	Ambient hu	umidity	5 to 85%RH					
Weight			Approx. 20g					

*Environment resistance is rated at no freezing or condensation.

Dimensions



OMRON Power Relay 1 Form A

Features

- Slim type
- High capacity, high reliability

Coil Specifications

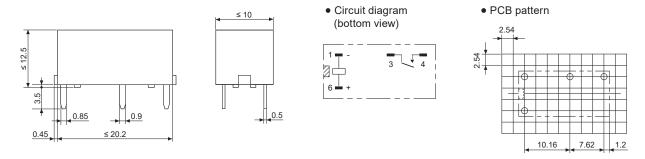
Model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption	Cables Open T Cables
G6B-1174P-FD-US	24VDC	≥ 70% of rated voltage	≤ 10% of rated voltage	8.3mA	2,880Ω	200mW	Others

Contact Specifications

Manufacture			OMRON
Model			G6B-1174P-FD-US
	Arrangement		1 Form A (SPST-1a)
Contact	Material		AgSnIn type
	Resistance (initial)		30mΩ (5VDC== 1A)
Rating	Rated load (resistive load)		5A 250VAC~, 5V 30VDC==
	Max. switching power		1,250VA, 150W
	Max. switching voltage		380VAC~, 125VDC
	Max. switching current		5A
Electrical characteristics	Insulation resistance (initial)		≥ 1,000MΩ (at 500VDC megger)
	Dielectric strength	Between contact-coil	3,000VAC 50/60Hz for 1 minute
		Between open contacts	1,000VAC 50/60Hz for 1 minute
	Surge voltage		6,000V
	Operate time (supplying rated voltage)		≤ 10ms
	Release time (supplying rated voltage)		≤ 10ms
Mechanical characteristics	Vibration	Mechanical	1.5mm amplitude at frequency of 10 to 55Hz (for 1 min) in each X, Y, Z direction for 1 hour
		Malfunction	1.5mm amplitude at frequency of 10 to 55Hz (for 1 min) in each X, Y, Z direction for 10 minute
	Shock	Mechanical	1,000m/s ² (approx. 100G) in each X, Y, Z direction for 3 times
		Malfunction	100m/s ² (approx. 10G) in each X, Y, Z direction for 3 times
Life expectancy	Mechanical		≥ 50,000,000 operations (at 300 operations/min)
	Electrical		≥ 100,000 operations (5A, 250VAC, 30VDC) (at 30 operations/min)
Environ- ment	Ambient temperature		-25 to 70°C
	Ambient humidity		5 to 85%RH
Weight			Approx. 5g

%Environment resistance is rated at no freezing or condensation.

Dimensions





Interface Terminal Blocks Common Terminal Blocks Sensor Connector Terminal Blocks Relay Terminal Blocks

I/O Terminal Blocks

I/O Cables Connector Type Cables Open Type Cables

Autonics

(unit: mm)

ABL Series ASL Series Power Relay SSR

ABS Series