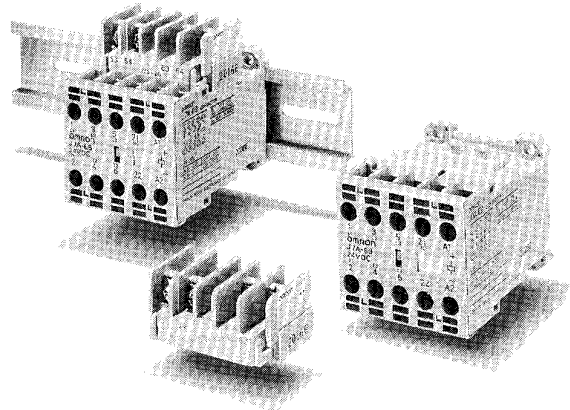


Small, Sensitive Contactor with Efficient Magnetic Circuit (OMRON's moving loop system)

- Low, 800 mW power consumption.
- Driven directly by a transistor.
- Cone-shaped spring construction and silver alloy contacts.
- 104 A break current.
- 120 A make current.
- 660 VAC insulation voltage.
- Conforms to IEC158-1, VDE0660, BS5424.
- Details of reversible contactor and terminal relay are given in the following sections.



Ordering Information

■ Contactor Main Unit

Contact-form	Model
3PST-NO with one NO auxiliary contact	J7AN-E3
3PST-NO with one NC auxiliary contact	J7AN-E9

■ Clip-on Auxiliary Contact Blocks

Contact form	SPST-NO + SPST-NC	DPST-NO
Model	J73-11	J73-20

Note: The auxiliary contact block can be easily mounted to the contactor.

Specifications

■ Ratings

Coil Ratings

Rated voltage (VDC)	Coil resistance (Ω)	Must operating voltage	Must dropout voltage	Max. voltage	Power consumption (W)
12	183	80% max.	10% max.	110%	Approx. 0.8
24	731				

Main Contact Ratings

Note: The ratings of the built-in auxiliary contact (NO) are the same as those listed below.

Max. operating voltage		600 VAC		
Max. horse power	Single phase	115 VAC	1/2 HP	NEMA size 00
	Three phase	200 VAC	3 HP	NEMA size 00
		230 VAC	3 HP	NEMA size 00
		460 VAC	5 HP	NEMA size 00
		575 VAC	5 HP	NEMA size 00
Max. operating current		15 A (resistive load: $\cos \phi = 1$)		
Carry current		15 A		
Rated making current		120 A		
Insulation voltage		660 VAC		
Contact materials		Silver alloy		
Housing materials		Polyamid resin		
Service life		Mechanical: 10,000,000 operations min. Electrical: 500,000 operations min. (at rated horse power)		

Auxiliary Contact Block Ratings

Model	J73-11 J73-20
Rated carry current	3 A
Resistive load ($\cos \phi = 1$)	2 A 110 VAC 1.5 A 220 VAC
Min. operating current/voltage	1 mA 5 VDC for both NO and NC
Contact materials	Silver
Housing materials	Polycarbonate

■ Characteristics

Note: The data shown below are initial values.

Model		J7AN-E3, -E9	J73-11, -20
Contact resistance		50 mΩ max.	30 mΩ max.
Operating time		100 ms max.	100 ms max.
Release time		30 ms max. (NO contact), 60 ms max. (NC contact)	—
Bounce time		5 ms max.	3 ms max.
Operating frequency		1,800 operations/hour	—
Insulation resistance		100 MΩ max. at 500 VDC	—
Impulse withstand voltage		6,000 V for 1.2 x 50 μs	1,500 V for 1.2 x 50 μs
Dielectric strength		2,500 VAC, 50/60 Hz for 1 min	1,500 VAC, 50/60 Hz for 1 min
Vibration	Mechanical durability	10 to 55 Hz; 1.5 mm double amplitude (approx. 10G)**	—
	Malfunction durability*	10 to 55 Hz; 1.5 mm double amplitude (approx. 10G, when excited and non-excited)	—
Shock	Mechanical durability	1,000 m/s ² (approx. 100G) 200 m/s ² when attached to DIN rail	—
	Malfunction durability*	100 m/s ² (approx. 10G, when excited and non-excited)	—
Ambient temperature		-10° to 55°C	
Humidity		35% to 85%	
Weight		Approx. 200 g	Approx. 20 g

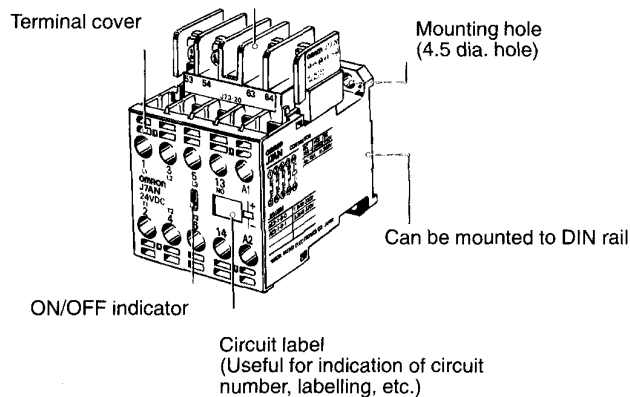
*1 ms contact separation **Approx. 7G when attached to DIN rail

**The data shown above are initial values.

Nomenclature

■ Controller Main Unit

Auxiliary contact block
(Can be easily mounted to the contactor)

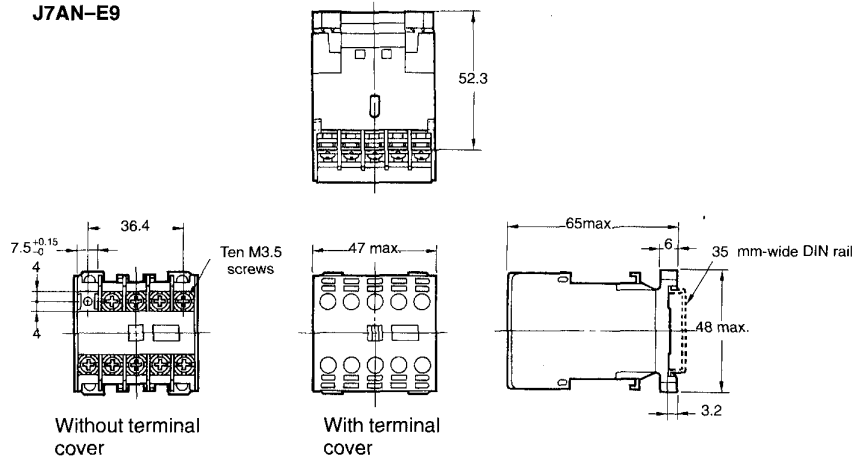


Dimensions

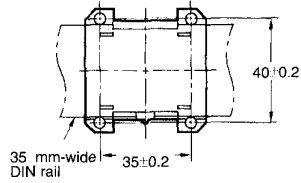
Note: All units are in millimeters unless otherwise indicated.

■ Contactor

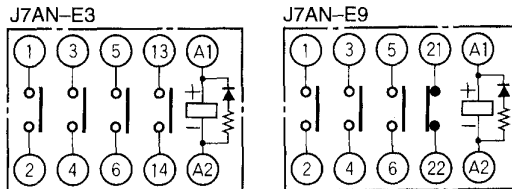
J7AN-E3
J7AN-E9



Mounting Holes (Top View)

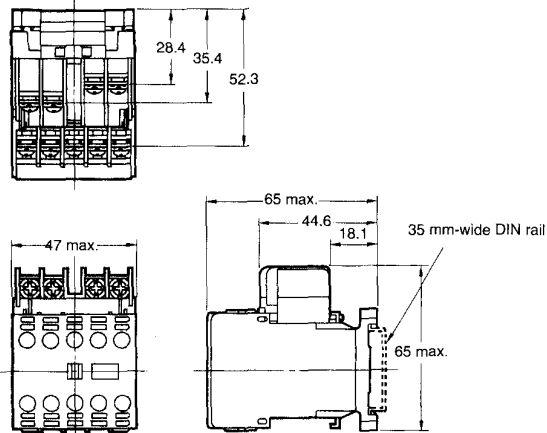


Terminal Arrangement/Internal Connections (Built-in Surge Suppressor) (Top View)

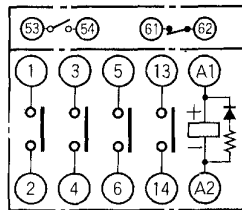


■ In Combination With Auxiliary Contact Block

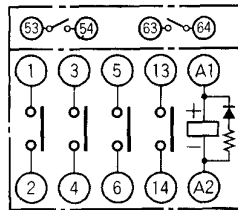
J7AN + J73



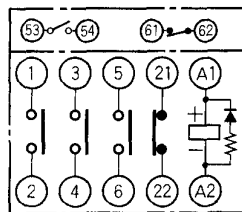
J7AN-E3 + J73-11



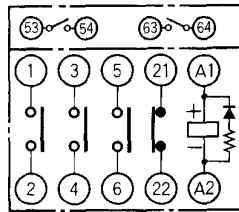
J7AN-E3 + J73-20



J7AN-E9 + J73-11

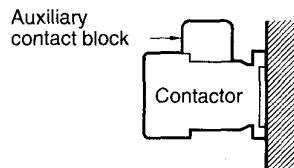


J7AN-E9 + J73-20



Installation

One auxiliary contact block can be attached on the top of the contactor as follows:



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ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

OMRON

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