PRODUCT NEWS

Product Discontinuation Notices

March 1, 2012

Contactors

No. 2012076E

Discontinuation Notice of Contactors J7A(R)N series, J73 series, J7T series

Product Discontinuation

Contactors

Model J7A(R)N series
Model J73 series
Model J7T series

Recommended Replacement

OMRON have no recommended replacement
Mitsubishi Electric Corp. Contactor

SD-Q series
UQ-AX2 series
TH-N12 series

Discontinuation date : The end of March, 2013

Caution on recommended replacement

OMRON have no recommended replacement.
Please ask Mitsubishi Electric about the details of recommended replacement.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
SD-Q series	*	*	*	--	--	--	*
UQ-AX2 series	*	--	*	-	--	--	*
TH-N12 series	--	--	--	-	--	--	--

** : Fully compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

OMRON Corporation
Industrial Automation Company

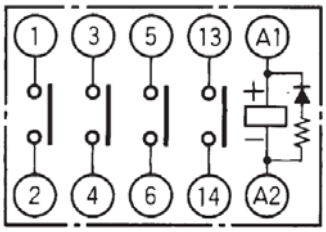
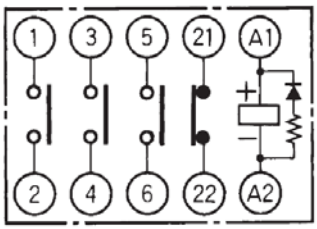
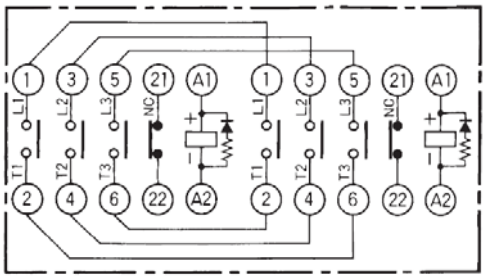
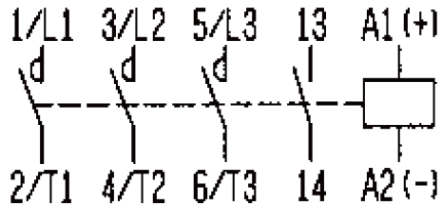
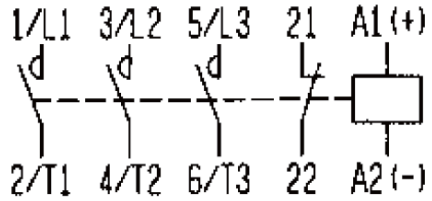
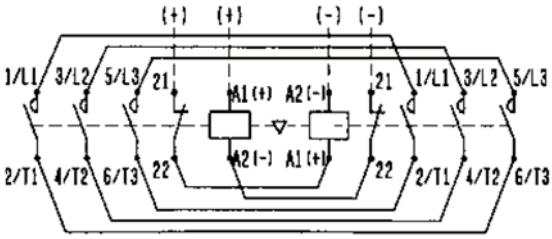
Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
J7AN-E3 12VDC	SD-Q11 DC12V 1a
J7AN-E3 24VDC	SD-Q11 DC24V 1a
J7AN-E9 12VDC	SD-Q11 DC12V 1b
J7AN-E9 24VDC	SD-Q11 DC24V 1b
J7ARN-E9 12VDC	SD-QR11 DC12V 1b
J7ARN-E9 24VDC	SD-QR11 DC24V 1b
J73-11	UQ-AX2
J73-20	No recommended replacement
J7T-E170 12/24VDC	TH-N12 0.5 to TH-N12 1.7 *Model is decided by a current setting range.
J7T-E170-1 12/24VDC	
J7T-E350 12/24VDC	TH-N12 0.9 to TH-N12 3.6 *Model is decided by a current setting range.
J7T-E350-1 12/24VDC	
J7T-E700 12/24VDC	TH-N12 2.5 to TH-N12 6.6 *Model is decided by a current setting range.
J7T-E700-1 12/24VDC	
J7T-E141 12/24VDC	TH-N12 5 to TH-N12 11 *Model is decided by a current setting range.
J7T-E141-1 12/24VDC	

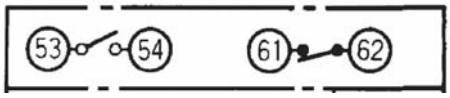
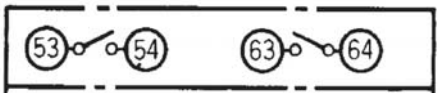
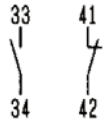
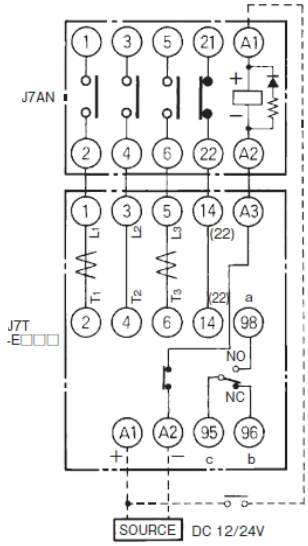
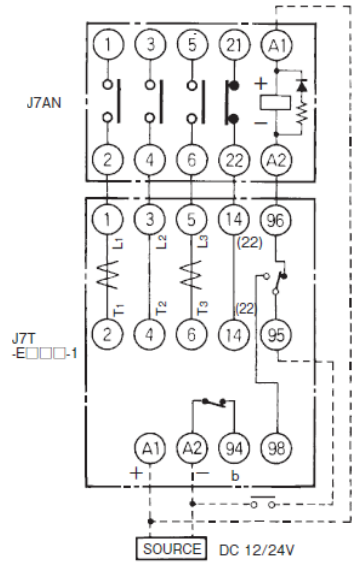
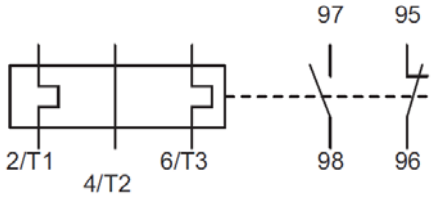
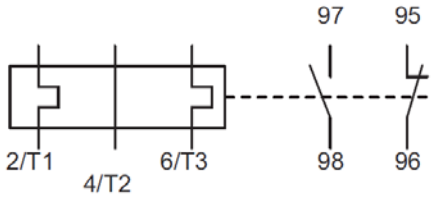
Body color

Product discontinuation	Recommended replacement
Model J7A (R) N series: Ivory Model J73 series: Ivory Model J7T series: Ivory	SD-Q series: White (Surface) Black (Attachment part) UQ-AX2 series: White TH-N12 series: Black

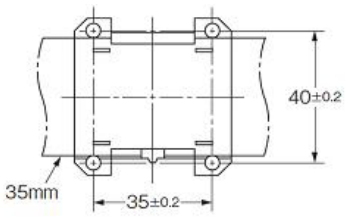
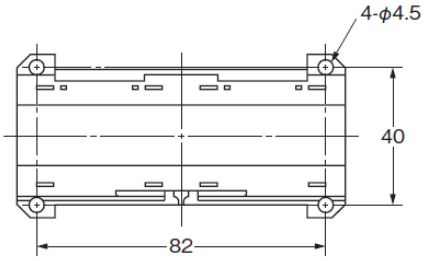
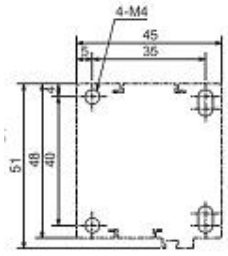
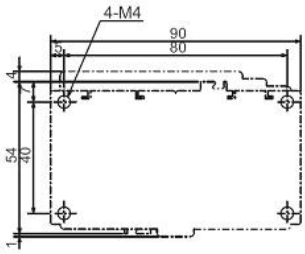
Wire connection

Product discontinuation	Recommended replacement
Model J7A(R)N series Model J7AN-E3  Model J7AN-E9  Model J7ARN-E9  	**SD-Q series** SD-Q11 1a  SD-Q11 1b  SD-QR11 1b 

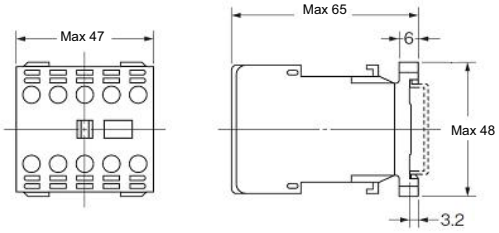
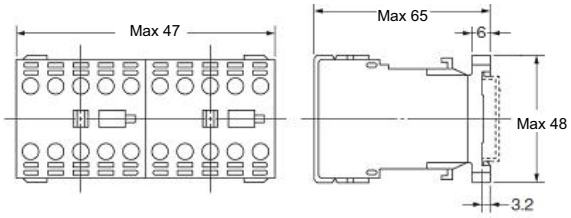
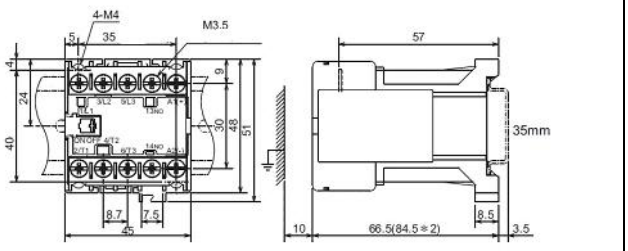
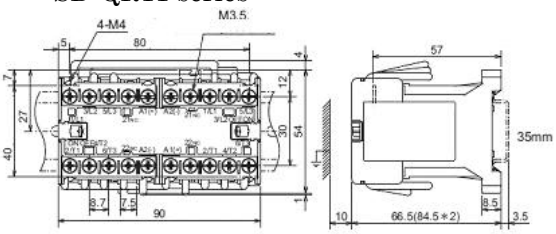
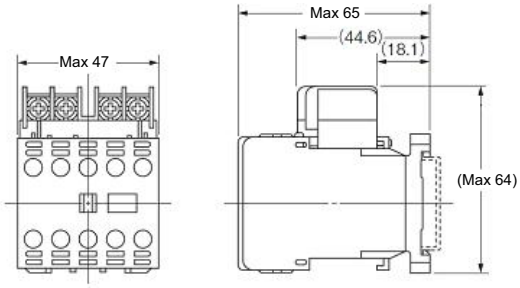
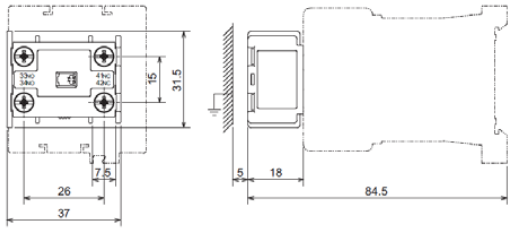
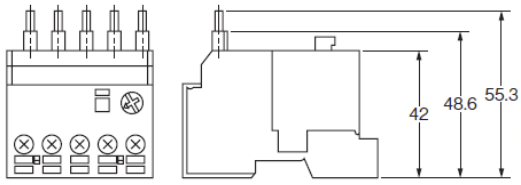
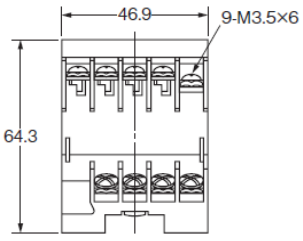
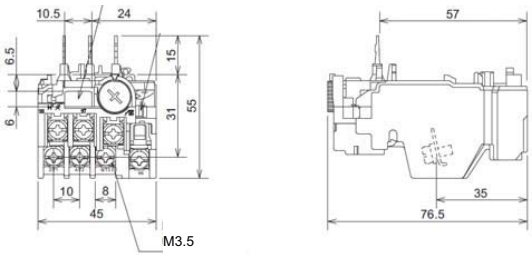
Wire connection

Product discontinuation	Recommended replacement
Model J73 series Model J73-11  Model J73-20  	**UQ-AX2 series** UQ-AX2 1a1b  * Type 2a No recommended replacement
Model J7T series Model J7T-[][][] series  Model J7T-[][][]-1 series  	**TH-N12 series** TH-N12 series  TH-N12 series 

Mounting dimensions

Product discontinuation	Recommended replacement
Model J7A(R)N series Model J7AN series  Model J7ARN series  **Model J73 series** Attached to Model J7AN series or J7ARN series. **Model J7T series** Attached to Model J7AN series or J7ARN series.	**SD-Q series** SD-Q11 series  SD-QR11 series  **UQ-AX2 series** Attached to SD-Q series or SD-QR series. **TH-N12 series** Attached to SD-Q series or SD-QR series.

Dimensions

Product discontinuation	Recommendable replacement
Model J7A(R)N series Model J7AN series  Model J7ARN series 	**SD-Q series** SD-Q11 series  SD-QR11 series 
Model J73 series 	**UQ-AX2 series** 
Model J7T series  	**TH-N12 series** 

Characteristics

Product discontinuation Model J7A(R)N series.

Must operate voltage

80% max (% of rated voltage)

Must release voltage

10% min (% of rated voltage)

Power consumption

0.8W

Contact Ratings

Contact

Contact ratings	Rated carry current (1th)		15A
	AC3 class	Rated load 3-phase 220V	1.5kW
		1-phase 100 to 110V	0.2kW
		1-phase 200 to 220V	0.4kW
	AC4 class	3-phase 200 to 220V	0.4kW
	AC1 class	Resistive load	15A
	Making current		120A
	Breaking current 200 to 220V		104A
	Minimum applicable load 24VAC		0.5A
	Switching frequency		1800 operations/h
	Electrical durability		1,000,000 operations
Mechanical durability (Switching frequency :1800 operations/h)			10,000,000 operations
Rated insulation voltage			600V

Recommendable replacement SD-Q series

85% max (% of rated voltage)

10% min (% of rated voltage)

1.3W

Main contact

Conventional free air thermal current			20A
Rated operational current	3-phase squirrel-cage motor (AC3 class)	200 to 240V	12A
		380 to 440V	9A
		500 to 550V	7A
	1-phase motor (AC3 class)	100 to 110V	8A
		200 to 220V	6A
	Resistive load (AC1 class)	100 to 220V	10A
		380 to 440V	10A
	DC motor (DC2 class, DC4 class) 2 pole series	24V	12A
		48V	6A
		100 to 110V	1.2A
	3 pole series	24V	12A
		48V	10A
		100 to 110V	2.5A
Rated capacity	3-phase squirrel-cage motor (AC3 class)	200 to 240V	2.5kW
		380 to 440V	4kW
		500 to 550V	4kW
	1-phase motor (AC3 class)	100 to 110V	0.2kW
		200 to 220V	0.4kW
Breaking current capacity		220V	120A
		440V	90A
Making current capacity		220V	120A
		440V	90A
Switching frequency			1800 operations/h
Switching durability		Electrical	1,000,000 operations
		Mechanical	10,000,000 operations
Rated insulation voltage			690V

Auxiliary contact

Rated operational current	AC15 class	220VAC	3A
		440VAC	1A
	DC12 class	24VDC	10A
Conventional free air thermal current			10A
Electrical durability			500,000 operations

Characteristics

Product discontinuation Model J73 series

Contact Ratings

Contact

Rated carry current		3A
Rated operational current (AC1 class)	110V	2A
	220V	1.5A
Min. load switching capacity		5mW
Switching frequency		1800 operations/h
Electrical durability		1,000,000 operations
Mechanical durability		10,000,000 operations
Min. operating current and voltage	NO	1mA 5VDC
	NC	1mA 5VDC

Recommendable replacement UQ-AX2 series

Contact

Rated operational current	AC15 class	220VAC	3A
		440VAC	1A
	DC12 class	24VDC	10A
Conventional free air thermal current			10A
Electrical durability			500,000 operations

Product discontinuation Model J7T series

Ratings

Ratings

Rated insulation voltage	motor circuit		660VAC
	control circuit		30VAC/DC
Rated operate voltage			12/24VDC (common)
Operating circuit current	12VDC		7.5mA(TYP.)
	24VDC		
Output contact circuit Rated load			0.5A 24VDC, resistive load
	contact form		0.1A 24VDC, L/R = 7ms
	NC + transfer contact		0.2A 24VAC, resistive load
			0.05A 24VAC, cosφ = 0.4

Recommendable replacement TH-N12 series

Spec of operating circuit (contact)

Contact form			1a+1b
Conventional free air thermal current 1th			2A
Rated operational current	AC15 class NO/NC	24VAC	2A/2A
		110VAC	2A/2A
		220VAC	1A/1A
		550VAC	0.5A/0.5A
	DC13 class	24VDC	0.5A
		110VDC	0.2A
		220VDC	0.1A
	Minimum applicable load		5mA 20V

Operation ratings

Product discontinuation	Recommendable replacement

Model J7A(R)N series

Contact resistance		50mΩ max.
Operate time		100ms max.
Release time		30ms max. (NO contact) 60ms max. (NC contact)
Bounce time		5ms max.
Insulation resistance		100MΩ min. (at 500VDC)
Impulse withstand voltage		6000V for 1.2×50μs
Dielectric strength		2500VAC, 50/60Hz for 1min
Vibration	Mechanical durability	10 to 55Hz 1.5mm double amplitude
	Malfunction durability	10 to 55Hz 1.5mm double amplitude (when excited and non-excited)
Shock	Mechanical durability	1000m/s^2 200m/s^2 (when attached to DIN rail)
	Malfunction durability	100m/s^2 (when excited and non-excited)
Ambient temperature		-10°C to +55°C
Humidity		35% to 85%RH
Weight		Approx. 200g : Model J7AN series Approx. 400g : Model J7ARN series

Note. The data shown above are initial values.

Model J73 series

Contact resistance	30mΩ max.
Operate time	(100ms max.)
Bounce time	3ms max.
Insulation resistance	100MΩ min. (at 500VDC)
Impulse withstand voltage	1500V for 1.2×50μs
Dielectric strength	1500VAC, 50/60Hz for 1min
Ambient temperature	-10°C to +55°C
Humidity	35% to 85%RH
Weight	Approx. 20g

Note. The data shown above are initial values.

SD-Q series

Operate time	50ms max.
Release time	20ms max.
vibration	10 to 55Hz, 19.6m/s^2 max.
Shock	49m/s^2 max.
Ambient temperature	Standard 20°C, -10°C to +40°C (The average value of 24 hours per day is not exceeding 35°C)
Max. temperature in control panel	+55°C
relative humidity	45% to 85%RH
Weight	Approx. 190g : SD-Q11 series Approx. 420g : SD-QR11 series

UQ-AX2 series

Weight	Approx. 20g

Operation ratings

Product discontinuation

Model J7T series

overload element	When operating	110% ±5%
	105%	Non-operating within 2 hours
	120%	Hot start Operating within 1 hour
	200%	Hot start Operating within 2 minutes
	600%	Cold start Operating within 6 to 11 seconds.
open phase element	2-phase 100% 1-phase 90%	Non-operating within 2 hours
	2-phase 115% 1-phase 0%	Operating within 1 hour
Influence of temperature (-10°C to +55°C)		operating value ±10%
Influence of operating voltage (10.2 to 26.4V)		operating value ±3%
Influence of Switching frequency (95 to 100 to 105%)		operating value ±3%
Operate voltage		DC10.2 to 26.4V
Dielectric strength		2500VAC for 1min
vibration	Mechanical durability	10 to 55Hz 1.5mm double amplitude
	Malfunction durability	10 to 55Hz 1.5mm double amplitude
shock	Mechanical durability	200m/s^2
	Malfunction durability	100m/s^2
Ambient temperature		-10°C to +55°C
Humidity		35% to 85%RH
Weight		Approx. 80g

Note. The data shown above are initial values.

Recommendable replacement

TH-N12 series

Operating characteristic according to JIS C8201-4-1

Condition		Multiple of setting current	Operate time
Marginal operation	A (Cold start)	1.05	Non-operating (2 hours)
	B (follow A)	1.2	Within 2 hours
Operation of overload	C (Hot start)	1.5	(5) less than 2 minutes (10A) less than 2 minutes (10) less than 4 minutes (20) less than 8 minutes (30) less than 12 minutes
Operation of restraint	D (Cold start)	7.2	(5) Tp ≤ 5 seconds (10A) 2 < Tp ≤ 10 seconds (10) 4 < TP ≤ 10 seconds (20) 6 < TP ≤ 20 seconds (30) 9< TP ≤ 30 seconds
Non-operating	A (Cold start)	2-pole 1.0 1-pole 0.9	Non-operating (2 hours)
Operation	B (follow A)	2-pole 1.15 1-pole 0	Within 2 hours
Ambient temperature		-10°C to + 40°C (Standard 20°C, Max. temperature in control panel + 55°C)	
Weight		Approx. 110g	

Operation methods

Product discontinuation

Model J7A(R)N series

Input the rated voltage to coil.

Model J73 series

Attached to Model J7AN series or J7ARN series.

Model J7T series

Attached to Model J7AN series or J7ARN series.

Input the rated voltage to coil.

Recommendable replacement

SD-Q series

Input the rated voltage to coil.

UQ-AX2 series

Attached to SD-Q series or SD-QR series.

TH-N12 series

Attached to SD-Q series or SD-QR series.