

To All Customers

Fuji Electric FA Components & Systems Co., Ltd.

[Prior Notice of Discontinuation]
Notice of Discontinuation of High Sensitivity Contactor SJ-1SG Type

Thank you for your continued patronage of Fuji products.

We would like to notify discontinuation of some of the Fuji Electric's products as described below.

Please review the following information and take appropriate actions.

Please inform all related sections of your company.

Product name	Magnetic contactor and magnetic starter
Series and series name	High sensitivity contactor SJ Series
Types	Magnetic contactor: SJ-1SG□, SJ-1SGRM□ Magnetic starter: SJ-1SWG□, SJ-1SWG RM□ All types which begin with the letters and numbers above will be discontinued.
Reason for discontinuation of production	Because the production facility has become too old.
Replacement models	Magnetic contactor: SK18G□, SK22G□, SK32G□ Magnetic starter: SK18GW□, SK22GW□, SK32GW□ * Since some product specifications differ, refer to the new and old comparison document for confirmation.
Production discontinuation schedule	The production will be discontinued at the end of March 2016
Attachments	- New and old comparison document: FIN 0291180a
Last order date	We will stop accepting orders at the end of December 2015.
Maintenance parts	There are no maintenance parts.
Others	N/A

Comparison of Magnetic Starter Specifications SK Series – SJ Series



1. New & Old Types

SK Series (new)		SJ Series (old)
Main unit	Option	
SK18G	SZ-A □□ (2 poles)	SJ-1SG
	SZ-AS □□ (2 poles)	

2. Comparison of Magnetic Contactor Specifications

		SK Series (new)	SJ Series (old)	
Type		SK18G	SJ-1SG	
Operational ambient temperature		-10°C to +55°C	-10°C to +50°C	
Rail mounting		OK	OK	
Rated insulation voltage		690V	500V	
Rated impulse withstand voltage		6kV	4kV	
Main circuit	Conventional free air thermal current (rated thermal current)	32A	25A	
	Three-phase squirrel-cage motor capacity (AC-3)	200-240V	3.7kW 18A	3.7kW 18A
		380-440V	7.5kW 18A	3.7kW 9A
		500-550V	7kW 13A	-
	Resistive load capacity (AC-1)	200-240V	32A	25A
		380-440V	32A	25A
	Making current capacity	220V	216A	180A
440V		180A	90A	
Breaking current capacity	220V	180A	144A	
	440V	144A	72A	
Durability	Mechanical	5 million times	10 million times	
	Electrical (AC-3)	1 million times (220V) / 0.7 million times (440V)	2 million times (220V,440V)	
Auxiliary circuit	Contact arrangement	1NO, 1NC	2NO, 1NO+1NC	
	Conventional free air thermal current (rated thermal current)	10A	10A	
	Coil load rated operational current (AC-15)	100-120V	6A	6A
		200-240V	3A	3A
		380-440V	1.5A	1.5A
		500-600V	1.2A	-
Minimum operational voltage/current	5V DC 3mA	5V DC 3mA		
Mirror contact	OK	OK		
Coil	Manufacturable voltage range	12-220V DC	12, 24V DC	
	Polarity	Yes	Yes	
	Coil (magnet) power consumption	Upon inrush	2.4W	2.4W
		When sealed	2.4W	2.4W
Applied product	Reversing type	Assembled / sold separately	Assembled	
	Reversing type	Assembled / sold separately	Assembled	
	Auxiliary contact block	2 poles	No	
	Terminal cover	Included as standard	Sold separately	

Caution

- A large inrush current may be applied to the driving equipment, such as an inverter and servo amplifier, during power-up.
When replacing a model, check it in an actual load circuit in advance.
- When electrical durability is insufficient, it is better to switch to SK22 or 32 types. (see below)
SK22: 1.5 million times (220 V, 18 A), SK32: 2.3 million times (220 V, 18 A)
(The outline dimensions of SK32 are different from those in this document. Please contact us for details.)

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CHECKED	4/13/2015	Okubo		DWG.No.	FIN0291180
REVISION			Morishita		

3. Comparison of Thermal Overload Relay Specifications

		SK Series (new)	SJ Series (old)	
Type		TK25	TR-5-1N	
Power consumption		1.4 VA/pole	1.9 VA/pole	
Trip class		10A	5 (quick operating type), 10 A, 30 (long-time operating type)	
Auxiliary circuit	Contact arrangement	1NO+1NC	1NO+1NC	
	Conventional free air thermal current (rated thermal current)	5A	5A	
	Coil load rated operational current (DC-13)	24V	1.1A	1.1A
		100-120V	0.28A	0.28A
		200-240V	0.14A	0.14A
Minimum operational voltage/current	5V DC 3mA	5V DC 3mA		
Protection	Overload detection (2 poles)	*1	Standard	
	Overcurrent detection (3 poles)	Standard	Applied product	
	Open phase detection	Standard	Applied product	
Ambient temperature compensation		Yes	Yes	
Reset method		Manual/auto	Manual/auto	
Changing reset method after shipping		OK	OK	
Trip indicator		Yes	Yes	
Applied product	Dial cover	Standard	Sold separately	
	Terminal cover	Standard	Sold separately	

*1: For the SK series, a heater element is individually installed in each of three phases as standard. Wire the thermal overload relay so that the current is applied to every phase even in a single-phase circuit or DC circuit.

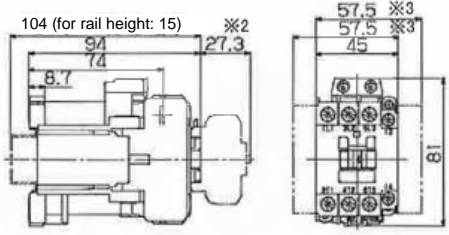
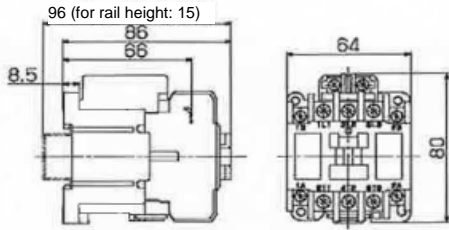
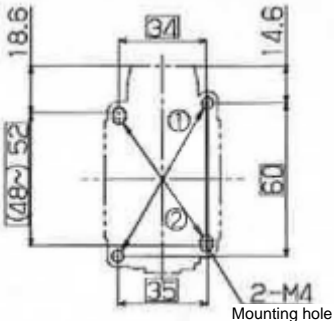
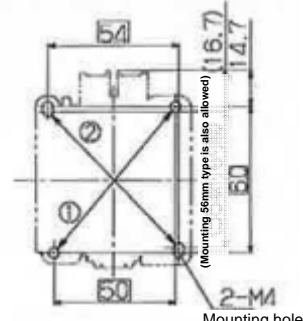
Comparison of heater element ratings of thermal overload relays

Applicable capacity of three-phase squirrel-cage induction motor		Magnetic starter type and accompanying thermal overload relay type	
		New	Old
		SK18GW	SJ-1SWG
4P 400V	4P 200V	TK25	TR-5-1N
		0.1 to 0.15 A	0.1 to 0.15A
		0.13 to 0.2 A	0.15 to 0.24A
		0.18 to 0.27 A	-
0.1 kW		0.24 to 0.36 A	0.24 to 0.36A
		0.34 to 0.52 A	0.36 to 0.54A
0.2 kW	0.1 kW	0.48 to 0.72 A	0.48 to 0.72A
		0.64 to 0.96 A	0.64 to 0.96A
0.4 kW		0.8 to 1.2 A	0.8 to 1.2A
	0.2 kW	0.95 to 1.45 A	0.95 to 1.45A
0.75 kW		1.4 to 2.1 A	1.4 to 2.2A
	0.4 kW	1.7 to 2.6 A	1.7 to 2.6A
		2.2 to 3.4 A	2.2 to 3.4A
1.5 kW	0.75 kW	2.8 to 4.2 A	2.8 to 4.2A
2.2 kW		4 to 6A	4 to 6A
	1.5 kW	5 to 7.5 A	5 to 8A
3.7 kW		6 to 9A	6 to 9A
	2.2 kW	7 to 10.5 A	7 to 11A
5.5 kW		9 to 13 A	9 to 13A
7.5 kW	3.7 kW	12 to 18 A	12 to 18 A
		16 to 22A	-

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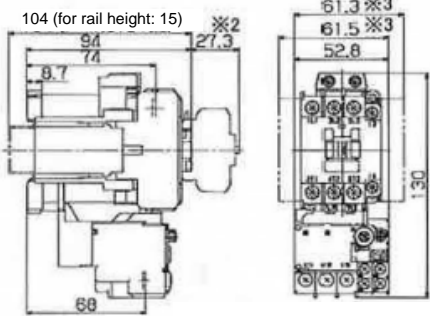
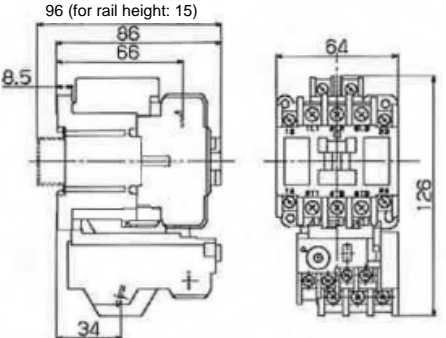
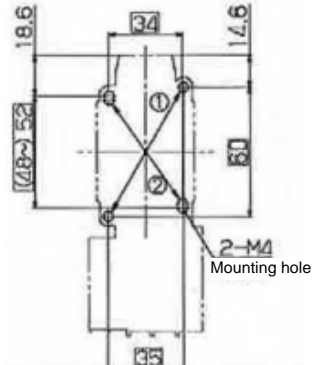
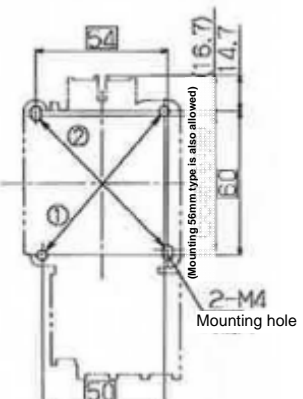
4. Comparison of Physical Appearance

4.1 Irreversible Type Magnetic Contactor

New/old Type	New SK18G	Old SJ-1SG
Outline dimensions [mm]	 <p>*2: When auxiliary contact block is mounted (top mounting) *3: When auxiliary contact block is mounted (side mounting)</p>	
Mounting hole [mm]	 <p>Mounting hole</p>	 <p>Mounting hole</p>

Adapter plate type: SZ1APK11

4.2 Irreversible Type Magnetic Starter

New/old Type	New SK18GW	Old SJ-1SWG
Outline dimensions [mm]	 <p>*2: When auxiliary contact block is mounted (top mounting) *3: When auxiliary contact block is mounted (side mounting)</p>	
Mounting hole [mm]	 <p>Mounting hole</p>	 <p>Mounting hole</p>

Adapter plate type: SZ1APK11

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4.3 Reversible Type Magnetic Contactor

New/old Type	New SK18GR	Old SJ-1SGRM
Outline dimensions [mm]	<p>*2: When auxiliary contact block is mounted (top mounting) *3: When auxiliary contact block is mounted (side mounting)</p>	
Mounting hole [mm]	<p>4-M4 Mounting hole</p>	<p>4-M4 Mounting hole</p>

Adapter plate type: SZ1APK12

4.4 Reversible Type Magnetic Starter

New/old Type	New SK18GWR	Old SJ-1SWGMR
Outline dimensions [mm]	<p>*2: When auxiliary contact block is mounted (top mounting) *3: When auxiliary contact block is mounted (side mounting)</p>	
Mounting hole [mm]	<p>4-M4 Mounting hole</p>	<p>4-M4 Mounting hole</p>

Adapter plate type: SZ1APK12

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