

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 to continuously manufacture the SJ-1SG type.
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 December 2015
Attachments	- New and old comparison document: FIN 0291180a
Last order date	We will stop accepting orders at the end of November 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	-
Coil	Minimum operational voltage/current		5V DC 3mA	5V DC 3mA
	Mirror contact		OK	OK
	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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DRAWN 4/13/2015	Shiiki	Morishita	DWG.No. FIN0291180		a
CHECKED 4/13/2015	Okubo				
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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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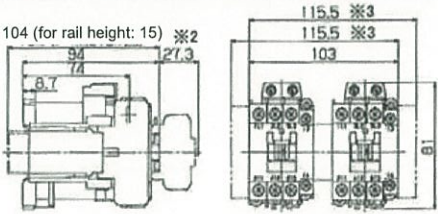
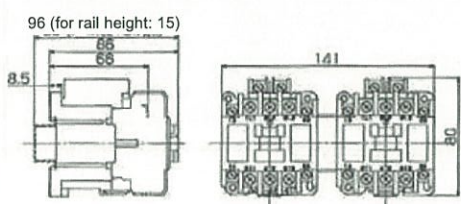
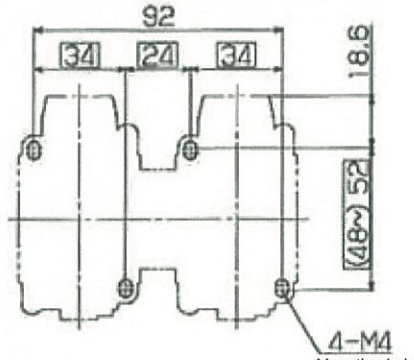
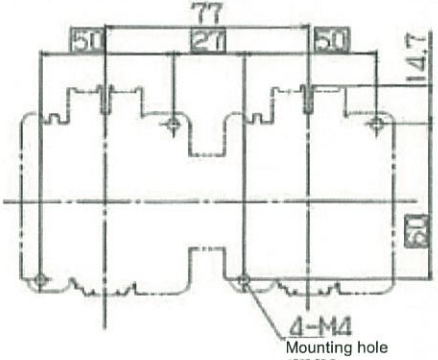
4.1 Irreversible Type Magnetic Contactor

Adapter plate type: SZ1APK11

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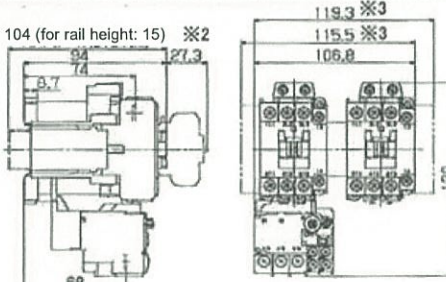
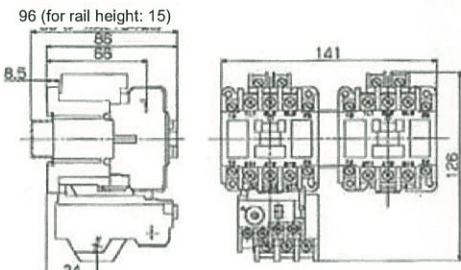
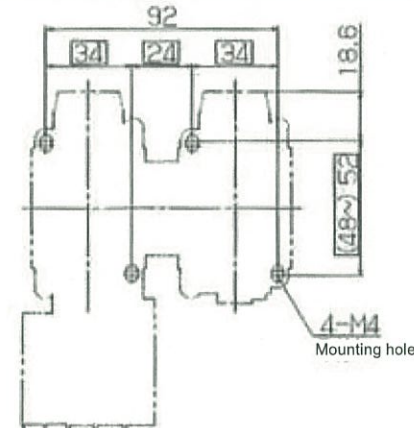
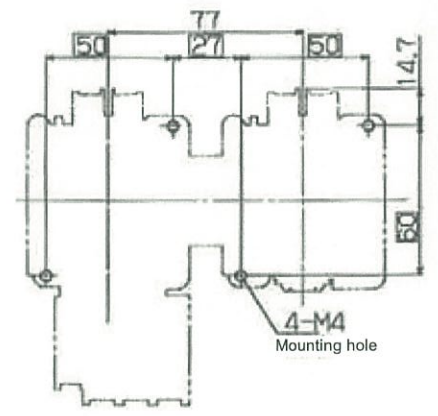
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4.3 Reversible Type Magnetic Contactor

New/old	New	Old
Type	SK18GR	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	New	Old
Type	SK18GWR	SJ-1SWGRM
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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