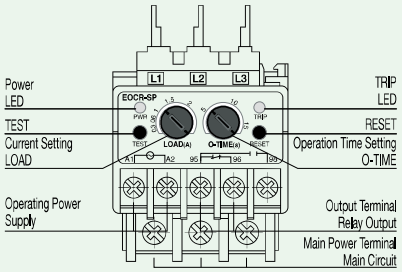
EOCR-SP

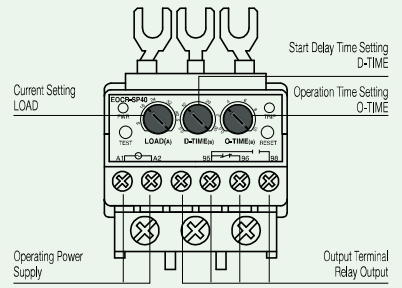
Micro electronic over current relay designed to be directly coupled with magnetic contactors

- Built-in MCU (Microprocessor Control Unit)
- Can be directly coupled with all domestic/imported magnetic contactors (MC)
- Various protection functions
- Operating current check: Red LED
- Operation display and trip cause check: Red/Green LED
- Manual (instant)/electrical (remote) reset
- Strong environmental resistance
- Super energy-saver
- No-voltage release/Fail-safe operation→ N type

※ SP is single-phase/3-phase compatible



EOCR-SP



EOCR-SP40

Protection Functions and Characteristics

Model	Type	Protection Function			Operation Characteristics	Time Setting	
		Over Current	Phase Loss	Locked Rotor		Start Delay	Operation Time
SP	01, 10, 20	○	△	△	Definite	×	0.5~15 sec
	40	○	○	△	Definite	0.5~30 sec	0.5~10 sec

- Phase loss and locked rotors protection for SP are operated by over current.
- 40Type phase loss of SP operates within 4 sec (only protects L1 and L3 phases)

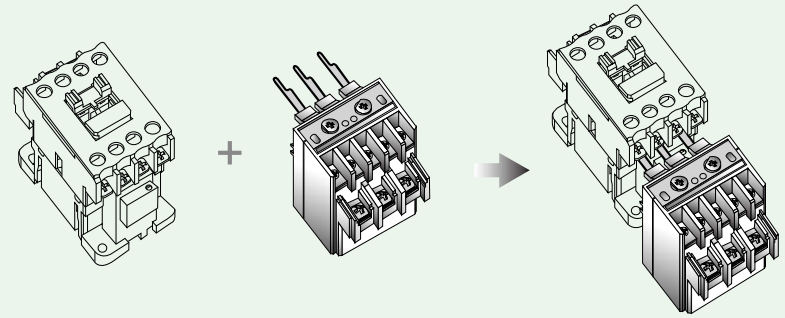
Trip Cause Check (for SP40)

Condition			LED Signal (Pulse Chart)			
			Green LED		Red LED	
Power Supply			Flicker		Lights-out	
In Operation			Flicker		Flicker	
Normal operation			Lights-on		Lights-out	
In overload			Lights-on		Flicker	
Upon operation /trip	Over Current		Lights-out		Lights-on	
	Locked Rotor		Lights-out		Flicker	
	Phase Loss	L1	Lights-out		Repeats flickering once	
		L2	Lights-out		Repeats flickering 2 times	
		L3	Lights-out		Repeats flickering 3 times	

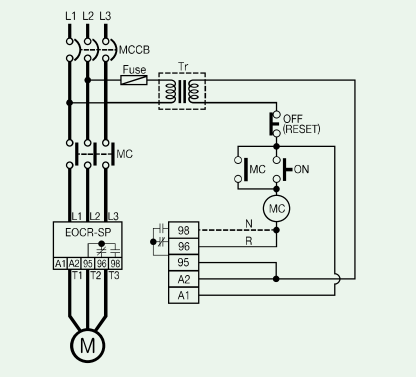
※ For the SP models, only the green LED flickers when it is supplied with power. When operated (tripped) by over current, the green LED is turned off and only the red LED is illuminated.

※ For the SP 40 model, the green LED flickers once at every interval when supplied with power. When operated (tripped) by over current, the green LED is turned off and only the red LED is illuminated.

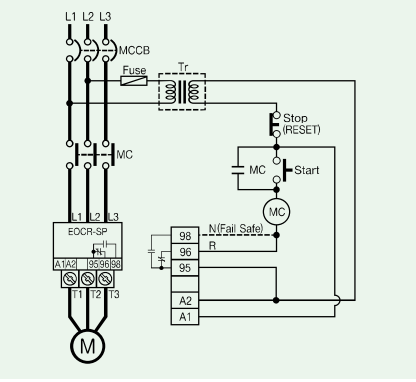
High compatibility, can be directly coupled with all domestic/foreign magnetic contactors



Magnetic Contactor (MC) EOCR Electronic Switch (EOCR+MC)



EOCR-SP

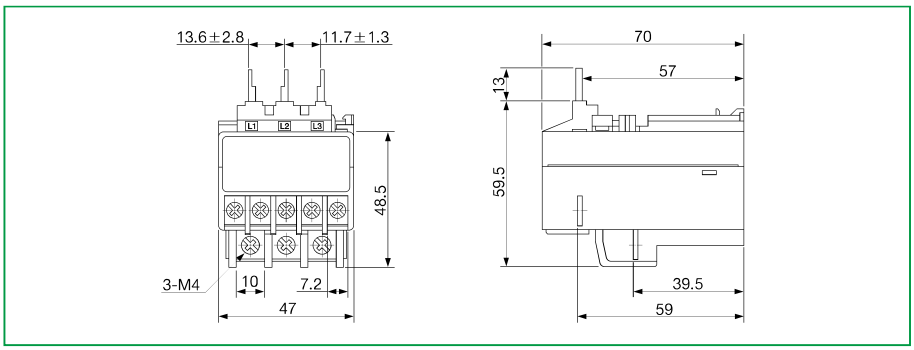


EOCR-SP(40Type)

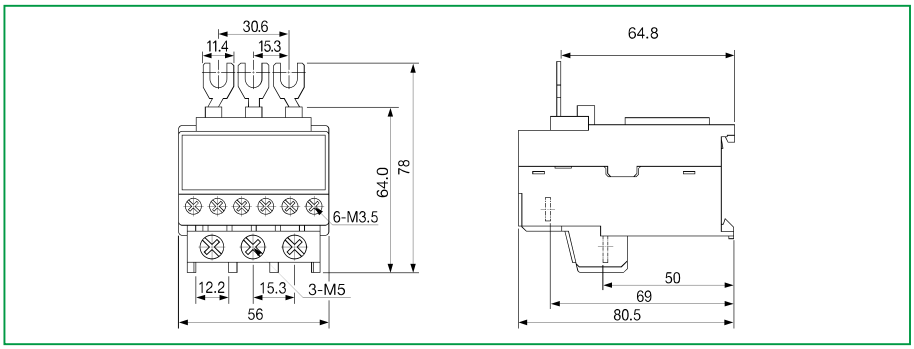
※ *"N"(Fail safe) Type converts 95-|/|-96 to open and 97-| |-98 to close when operating power is supplied to A1 and A2 (or L1 and L2).*

Specifications

Current Setting		Type	Setting Range		
		1	0.3~1.2A		SP
		10	1~12A		SP
		20	5~25A		SP
		40	8~40A		SP40
Time Setting	Start Delay Time	D-TIME	Protection Functions and Characteristics (see p.233)		
	Operation Time	O-TIME	Protection Functions and Characteristics (see p.233)		
Reset			Manual (instant)/electrical reset		
Operation Time Characteristic			Definite		
Operation Display			LED Lamp (trip cause check, see p.233)		
Operating Power Supply	Voltage	SP (01,10,20)	R Type : AC90~260V		Other AC/DC 24V
		SP (40)	N Type : AC110V	AC85~150V	
			N Type : AC220V	AC180~260V	
	Frequency		50/60Hz		
Auxiliary Contact	SP	SPDT (1c)	AC250V/3A resistive load		
Attachment			Electric Contactor (direct-coupled)		



EOCR-SP



EOCR-SP(40Type)

How to Order

Reference		Current Range [A]	Contact Output	Operating Power Supply		Notes
				Voltage [V]	Frequency [Hz]	
EOCRSP	-01NF7	1	N	AC 110V	50/60	Direct-coupled, Definite
	-01NM7	1	N	AC 220V	50/60	Direct-coupled, Definite
	-01RY7	1	R	AC220V(90~260)	50/60	Direct-coupled, Definite
	-10NF7	10	N	AC 110V	50/60	Direct-coupled, Definite
	-10NM7	10	N	AC 220V	50/60	Direct-coupled, Definite
	-10RY7	10	R	AC220V(90~260)	50/60	Direct-coupled, Definite
	-20NF7	20	N	AC 110V	50/60	Direct-coupled, Definite
	-20NM7	20	N	AC 220V	50/60	Direct-coupled, Definite
	-20RY7	20	R	AC220V(90~260)	50/60	Direct-coupled, Definite
	-40RM7	40	R	AC 220V	50/60	Direct-coupled, Definite
	-40RF7	40	R	AC 110V	50/60	Direct-coupled, Definite
	-40RB	40	R	AC/DC 24V	50/60	Direct-coupled, Definite
	-40NM7	40	N	AC 220V	50/60	Direct-coupled, Definite
	-40NF7	40	N	AC 110V	50/60	Direct-coupled, Definite
	-40NB	40	N	AC/DC 24V	50/60	Direct-coupled, Definite

Ordering Example

e.g., To order an EOCR-SP:

E O C R S P – 0 1 N F 7

❶ ❷ ❸

❶	Current Range	1	0.3~1.2A
		10	1~12A
		20	5~25A
		40	8~40A
❷	Output Contact State	N	Normally Energized
		R	Normally De-energized
❸	Operating Power Supply/ Frequency	B	AC/DC24V Compatible
		Y7	AC90~260V, 50/60Hz (SP R Type)
		F7	AC110V, 50/60Hz (SP N Type)
		M7	AC220V, 50/60Hz (SP N Type)