EOCR-SSD

Digital Type Standard Over-current Relay with Ammeter

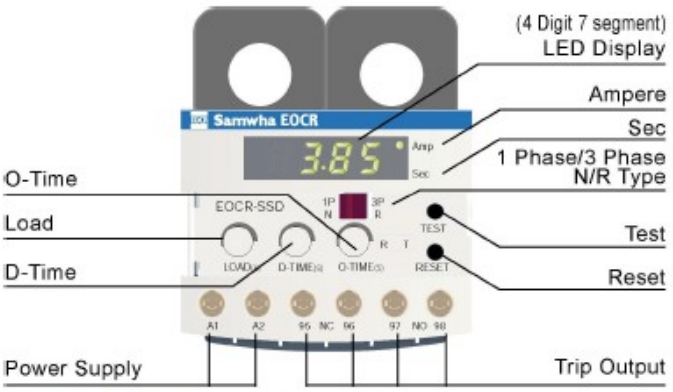
■ Introduction

• Protective Item

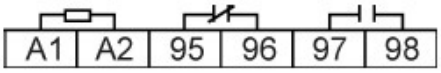
Item	Trip Delay Time	Conditions
Over-current	Class 0.5 to 10	Adjustable / Definite
Phase Loss	Within 3 sec	More than 70% of phase current deviation
Locked Rotor	The relay will be tripped in 0.5 sec by Locked Rotor if the lock current is > 200% of OC setting. This function is not available for 1P single-pole selection.	

• Over-current range – 05Type : 0.5~6A
30Type : 3A~30A
60Type : 10A~60A
• Display Specific Trip Fault
• Manual(Instantaneous) Reset / Electrical Reset
• Selected function by DIP SW 1P(1 Phase) / 3P(3 Phase)
• Selected Relay output – Fail safe(N) / Non-fail safe(R)
• Use on secondary of Inverter : 20~200Hz

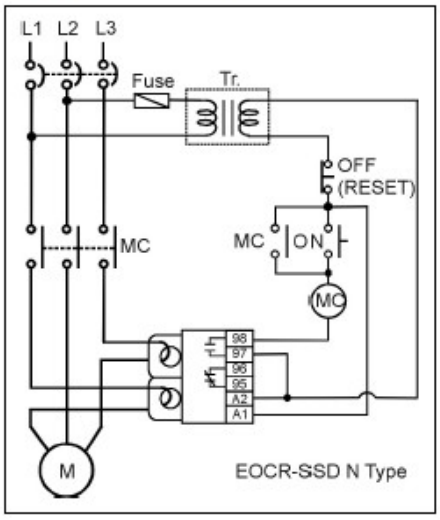
■ Relay Fascia

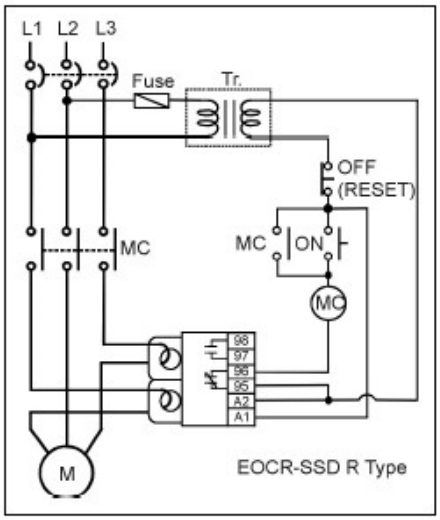


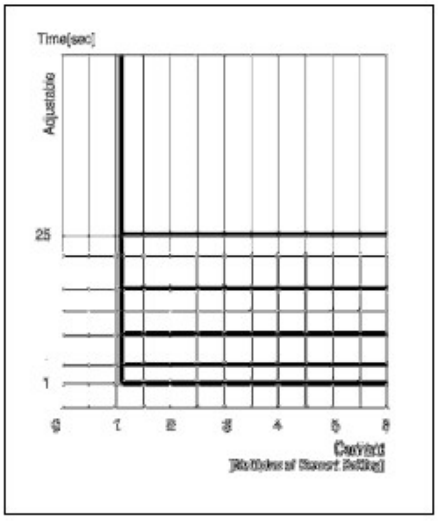
※ **State of Input/Output Terminal**



■ Typical Wiring Diagram

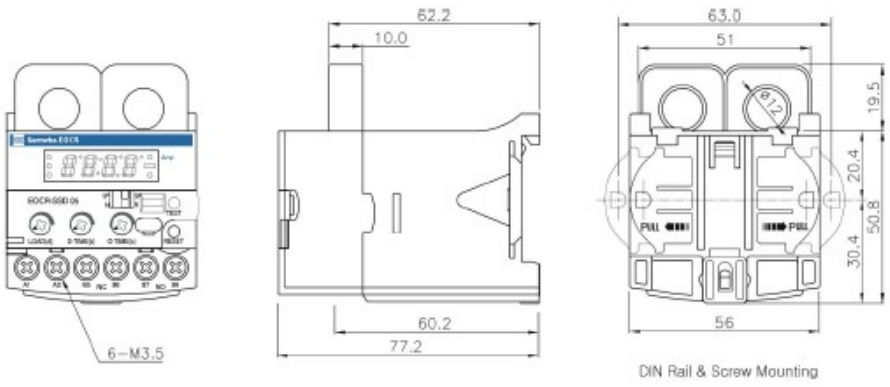






<Table#1 Definite time characteristics of OC>

■ Dimension



DIN Rail & Screw Mounting

Specification

Setting	Over-current	05	0.5~6A
		30	3~30A
		60	10~60A
	Delay Time	D-time	1~30sec
	Operating Time	O-time	0.5, 1~10sec
Reset			Manual(Instantaneous) Reset / Electrical Reset
Operation Characteristic	Over-current		Definite Time Type
Tolerance	Current		I < 1A : ±0.05A, I ≥ 1A : ±5%
	Time		t ≤ 3s : ±0.2s, t > 3s : ±5%
Ambient Temperature	Operation		-20℃~60℃
	Storage		-30℃~80℃
Ambient Humidity			30~85% RH without condensation
Control Voltage			• 110 : 110VAC±15%, 50/60Hz • 220 : 220VAC±15%, 50/60Hz • 380 : 380VAC±15%, 50/60Hz • 440 : 440VAC±15%, 50/60Hz • 24 : 24VAC/DC
Output Contacts	2-SPST(1a1b)		3A/250VAC, Resistive
Insulation	Between Casing & Circuits		500VDC10MΩ
Dielectric Strength	Between Casing & Circuits		2.0kV 60Hz, 1min
	Between Contacts		1.0kV 60Hz, 1min
	Between Circuits		2.0kV 60Hz, 1min
Mounting			35mm Din Rail or Panel
Power Consumption			Less than 2W
Electrostatic Discharge	IEC61000-4-2		Level 3 : Air Discharge : ±8kV, Contact Discharge : ±6kV
Radiated Electromagnetic Field Disturbance	IEC61000-4-3		Level 3 : 10V/m, 80-1000MHz
EFT/Burst	IEC61000-4-4		Level 3 : ±2kV, 1min
Surge	IEC61000-4-5		Level 3 : 1.2X50μs, ±2kV(0°,90°,180°,270°)
Conducted disturbance	IEC61000-4-6		Level 3 : 10V, 0.15-80MHz
1MHz Burst disturbance	IEC61000-4-12		Level 3 : 2.5kV, 1MHz
Emission	IEC60255-25		Radiated & Conducted Emission

Trip Display

Trip cause	FND Indication	Description
Over Current	o 10.0	Tripped after sensing over-current 10A during operation
Phase Loss	PL - 1	Phase Loss of L1(R)
	PL - 2	Phase Loss of L2(S)
	PL - 3	Phase Loss of L3(T)
Locked Rotor	-Lc-	Tripped after sensing Locked Rotor during starting

TEST

It has function to check and confirm the status of the relay by depressing the TEST Button.

When Motor is stopped	During Motor operating
Whenever you depressing the test button, you can check and confirm the setting value of each mode. If the relay enters into "TEST" mode, it begins to countdown preset value of O-Time after waiting 3 sec and becomes trip state as showing "END" message.	Whenever you depressing the test button, you can check and confirm the setting value of each mode.
↓ Depress the TEST ↓ Depress the TEST ↓ Depress the TEST ↓ Depress the TEST ↓ 3sec+preset O-Time ↓ Depress the RESET	Maximum Motor current out of L1 and L3 are displayed on LED display. ↓ Depress the TEST ↓ Depress the TEST ↓ Depress the TEST ↓ Depress the TEST Not permitted to test this function to prevent unwanted motor stop. ↓ To return to Motor current display mode, depress Reset button or wait till 20 sec passed.