

Electronic overload relays

22A

Description

- Wide and adjustable current range
- Adjustable trip time (trip class 5-10-15-20-30)
- Designed suitable for use with contactors
- Directly mountable on the CGC-9, 12, 18, 22 contactors
- Separate mount versions are also available
- Mounting on 35mm DIN rail is possible by optional base.
- 1NO+1NC trip contacts
- Manual reset as standard (Automatic reset optional)

Extended protective functions

Number of sensors		2CT	3CT	3CT
Types (CGE22-□)		(-2P, -2T, -2S)	(-3P, -3T, -3S)	(-3PR, -3TR, -3SR)
Functions	Overcurrent	✓	✓	✓
	Phase loss	✓	✓	✓
	Locked rotor	✓	✓	✓
	Phase unbalance		✓	✓
	Phase reversed			✓

Selection

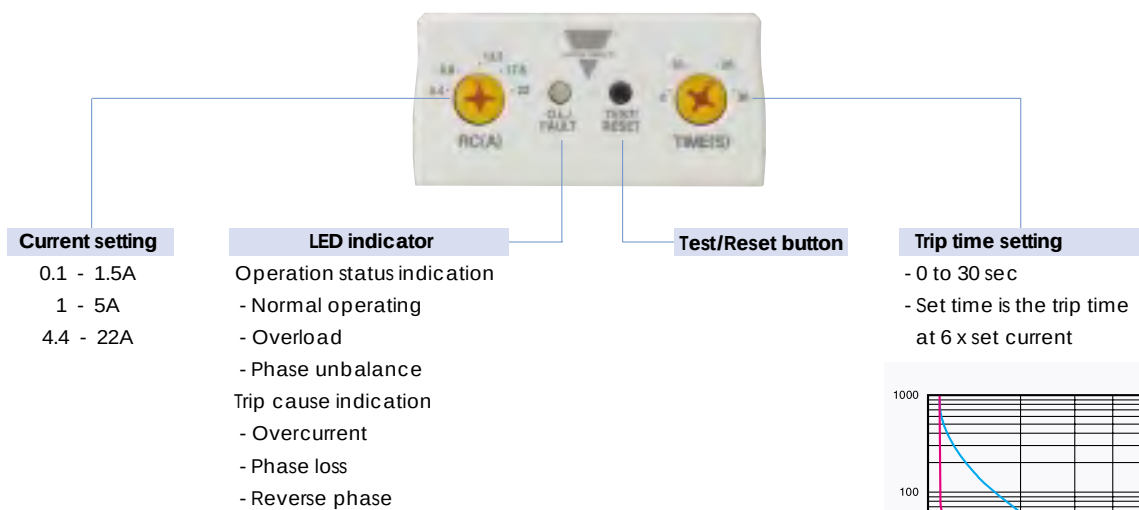
Mount/Connection	Sensor	Setting range	Catalog No.
Directly on a contactor	2-sensor (2 CT)	0.3 - 1.5A	CGE22 - 2P - 1.5AN
		1 - 5A	CGE22 - 2P - 5AN
		4.4 - 22A	CGE22 - 2P - 22AN
	3-sensor (3 CT)	0.3 - 1.5A	CGE22 - 3P - 1.5AN
		1 - 5A	CGE22 - 3P - 5AN
		4.4 - 22A	CGE22 - 3P - 22AN
	3-sensor Reverse phase detection	0.3 - 1.5A	CGE22 - 3PR - 1.5AN
		1 - 5A	CGE22 - 3PR - 5AN
		4.4 - 22A	CGE22 - 3PR - 22AN
Separate mount ①	2-sensor (2 CT)	0.3 - 1.5A	CGE22 - 2S - 1.5A
		1 - 5A	CGE22 - 2S - 5A
		4.4 - 22A	CGE22 - 2S - 22A
Cable connection with a screw ②	3-sensor (3 CT)	0.3 - 1.5A	CGE22 - 3S - 1.5A
		1 - 5A	CGE22 - 3S - 5A
		4.4 - 22A	CGE22 - 3S - 22A
	3-sensor Reverse phase detection	0.3 - 1.5A	CGE22 - 3SR - 1.5A
		1 - 5A	CGE22 - 3SR - 5A
		4.4 - 22A	CGE22 - 3SR - 22A
Separate mount ①	2-sensor (2 CT)	0.3 - 1.5A	CGE22 - 2T - 1.5A
		1 - 5A	CGE22 - 2T - 5A
		4.4 - 22A	CGE22 - 2T - 22A
Connection without a screw ② - cables pass through CT holes	3-sensor (3 CT)	0.3 - 1.5A	CGE22 - 3T - 1.5A
		1 - 5A	CGE22 - 3T - 5A
		4.4 - 22A	CGE22 - 3T - 22A
	3-sensor Reverse phase detection	0.3 - 1.5A	CGE22 - 3TR - 1.5A
		1 - 5A	CGE22 - 3TR - 5A
		4.4 - 22A	CGE22 - 3TR - 22A

Certificate
CE, ULcUL

Ordering information

Specify catalog number

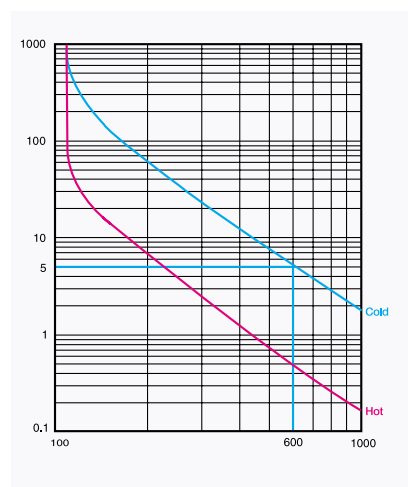
Front face configuration



① To mount on 35mm DIN rail use the optional base



② Cable connection part can be modified between screw connection and passing CT hole



Technical information

Relay control voltage	100 to 260V AC 50/60Hz
Auxiliary contact	3A/250VAC at resistive load 1NO(97-98) + 1NC(95-96)
Setting tolerance	Current $\pm 5\%$ Time $\pm 5\%$ (or $\pm 0.5\text{sec}$)
Insulation resistance	Min 100 $\text{M}\Omega$ at 500V DC
Impulse withstand voltage	1.2x50 μs 5kV (IEC1000-4-5)
Fast transient burst	2kV/5min (IEC1000-4-4)
Ambient temperature	-25 to 70 $^{\circ}\text{C}$ for operation -30 to 80 $^{\circ}\text{C}$ for storage
Humidity	30 to 90% RH

For more information

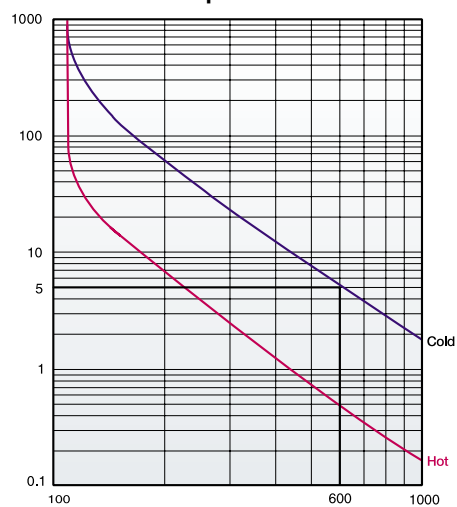
Drawings	➔ page 169
Connections	➔ page 170
Contactors	➔ page 40
Starters	➔ page 81
Bimetallic overload relay	➔ page 64
Operating curves	➔ page 137

Trip curves for electronic overload relays

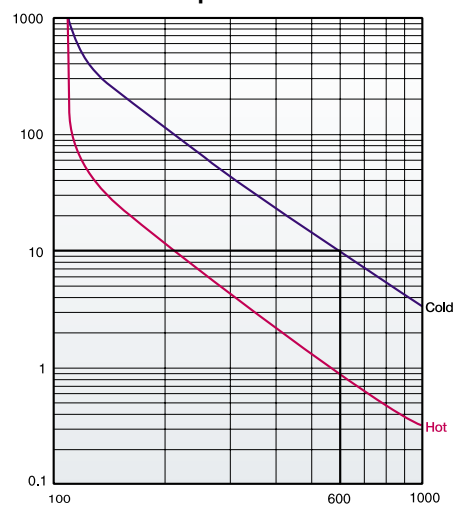


CGE

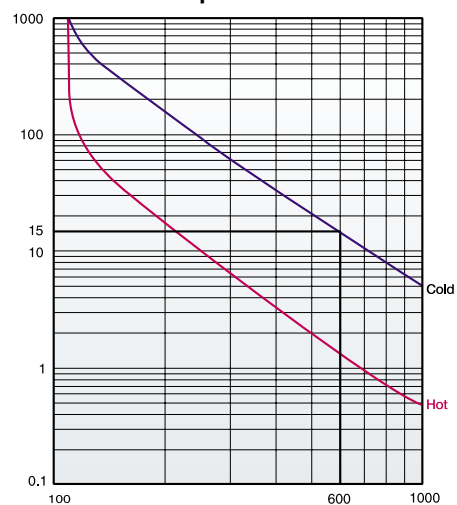
Trip class 5



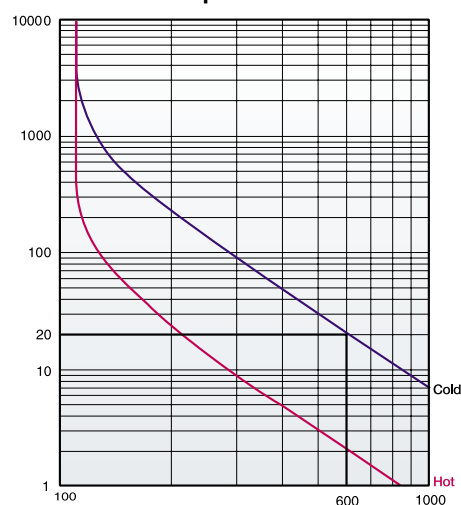
Trip class 10



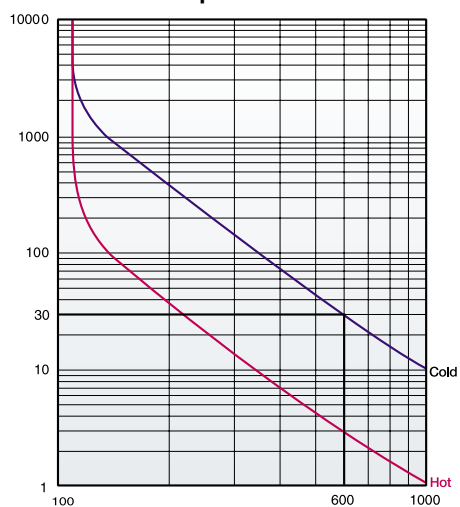
Trip class 15



Trip class 20



Trip class 30



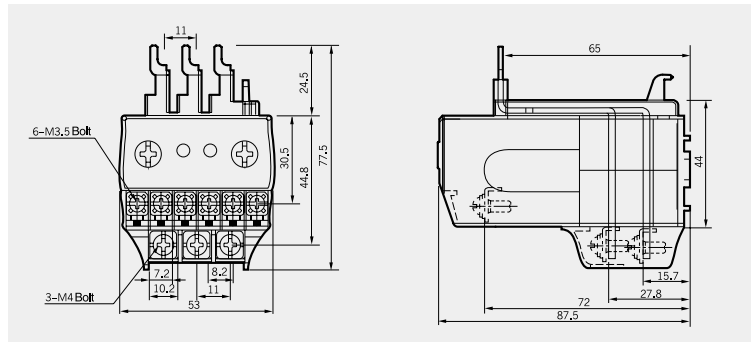
Dimensions

Electronic Overload Relays

CGE22-2P

CGE22-3P

CGE22-3PR



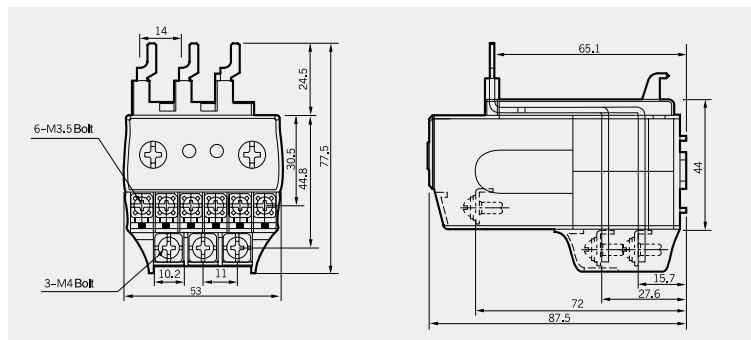
Terminal configuration : See Fig. 1 on the next page

0.18kg

CGE40-2P

CGE40-3P

CGE40-3PR



Terminal configuration : See Fig. 1 on the next page

0.20kg/0.22kg

CGE22-2S

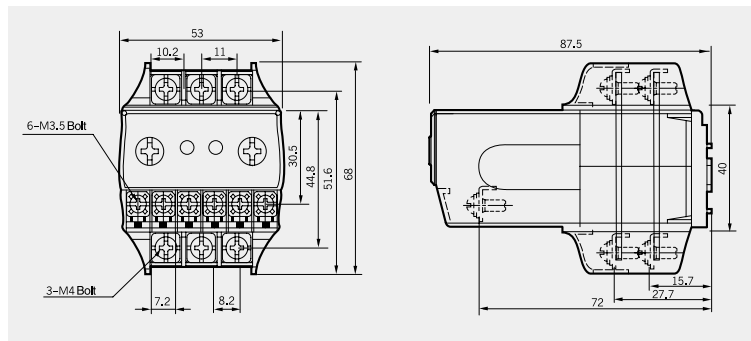
CGE22-3S

CGE22-3SR

CGE40-2S

CGE40-3S

CGE40-3SR



Terminal configuration : See Fig. 2 on the next page

0.19kg/0.21kg

CGE22-2T

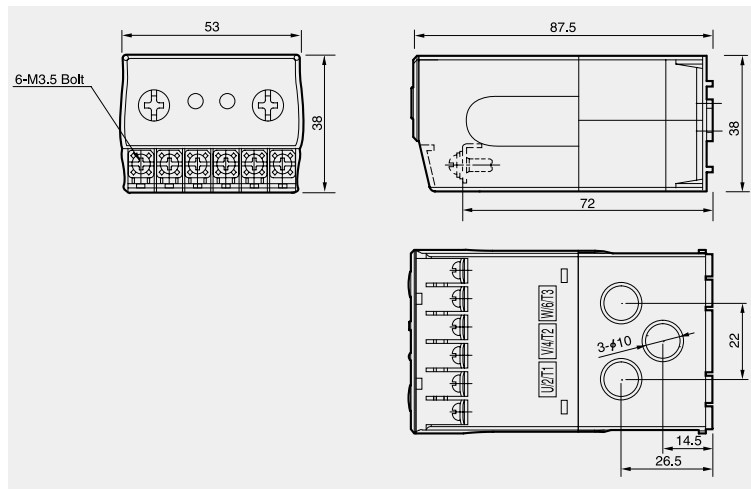
CGE22-3T

CGE22-3TR

CGE40-2T

CGE40-3T

CGE40-3TR



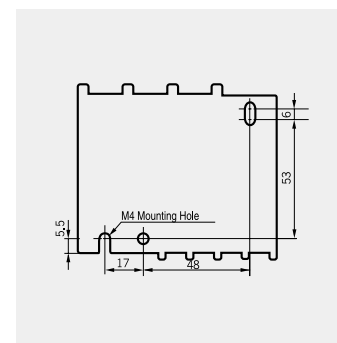
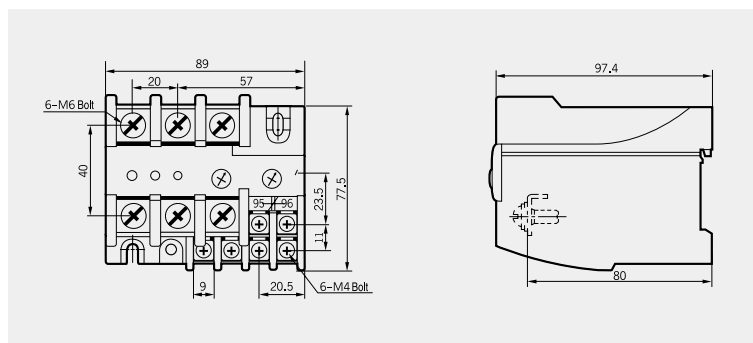
Terminal configuration : See Fig. 3 on the next page

0.14kg/0.16kg

CGE80-2S

CGE80-3S

CGE80-3SR



Terminal configuration : See Fig. 2

0.42kg/0.46kg

Terminal configuration

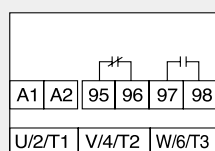


Fig. 1

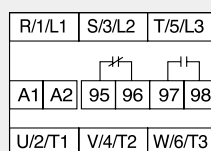


Fig. 2

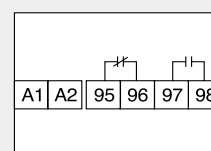
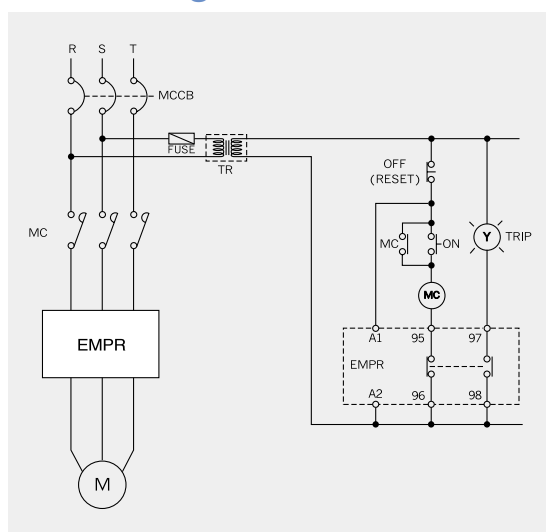
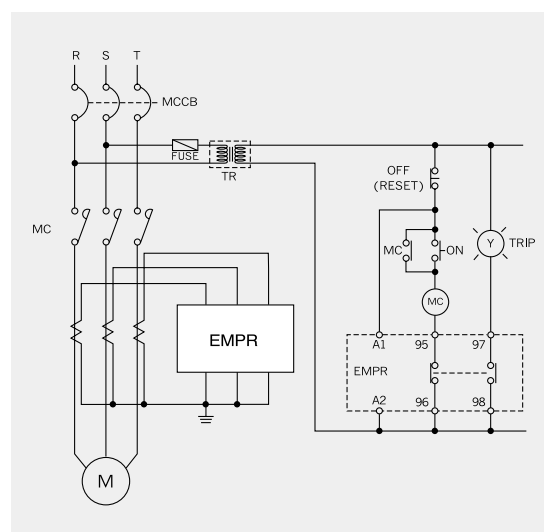


Fig. 3

Circuit diagram



Without additional CTs



In case of using additional CTs