Electronic overload relays

40A

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-32, 40 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 (CGE40- ...)		(-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	4 - 20A	CGE40-2P - 20AN
	(2 CT)	8 - 40A	CGE40-2P - 40AN
	3-sensor	4 - 20A	CGE40-3P - 20AN
	(3 CT)	8 - 40A	CGE40-3P - 40AN
	3-sensor	4 - 20A	CGE40-3PR - 20AN
	Reverse phase	8 - 40A	CGE40-3PR - 40AN
	detection		
Separate mount ①	2-sensor	4 - 20A	CGE40-2S - 20A
	(2 CT)	8 - 40A	CGE40-2S - 40A
Cable connection	3-sensor	4 - 20A	CGE40-3S - 20A
with a screw ②	(3 CT)	8 - 40A	CGE40-3S - 40A
	3-sensor	4 - 20A	CGE40-3SR - 20A
	Reverse phase	8 - 40A	CGE40-3SR - 40A
	detection		
Separate mount ①	2-sensor	4 - 20A	CGE40-2T - 20A
	(2 CT)	8 - 40A	CGE40-2T - 40A
Connection	3-sensor	4 - 20A	CGE40-3T - 20A
without a screw ②	(3 CT)	8 - 40A	CGE40-3T - 40A
- cables pass	3-sensor	4 - 20A	CGE40-3TR - 20A
through CT holes	Reverse phase	8 - 40A	CGE40-3TR - 40A
	detection		

Certificate
CE, ULcUL

Ordering information
Specify catalog number

Front face configuration

Current setting

0.1 - 1.5A
1 - 5A
4.4 - 22A

LED indicator

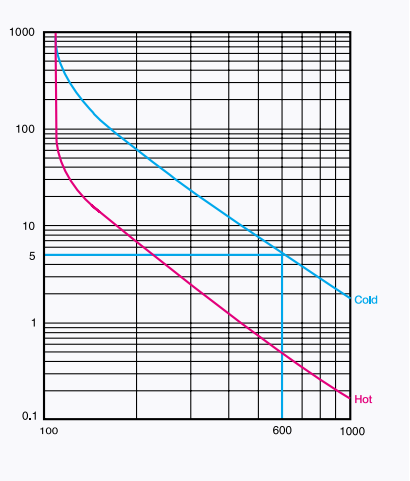
Operation status indication
- Normal operating
- Overload
- Phase unbalance

Trip cause indication
- Overcurrent
- Phase loss
- Reverse phase

Test/Reset button

Trip time setting

- 0 to 30 sec
- Set time is the trip time at 6 x set current



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

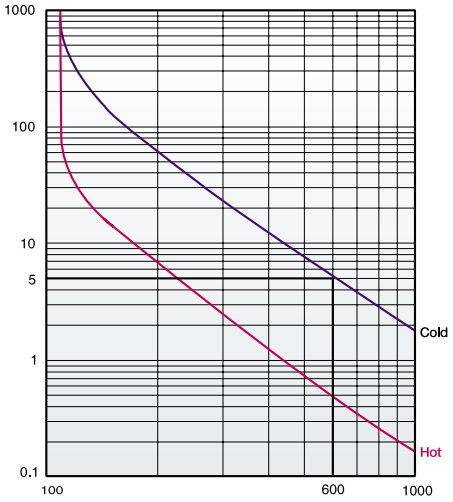
Relay control voltage	100 to 260V AC 50/60Hz
Auxiliary contact	3A/250VAC at resistive load
	1NO(97-98) + 1NC(95-96)
Setting tolerance	Current ± 5%
	Time ± 5% (or ± 0.5sec)
Insulation resistance	Min 100 MΩ at 500V DC
Impulse withstand voltage	1.2x50 μs 5kV (IEC1000-4-5)
Fast transient burst	2kV/5min (IEC1000-4-4)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

For more information

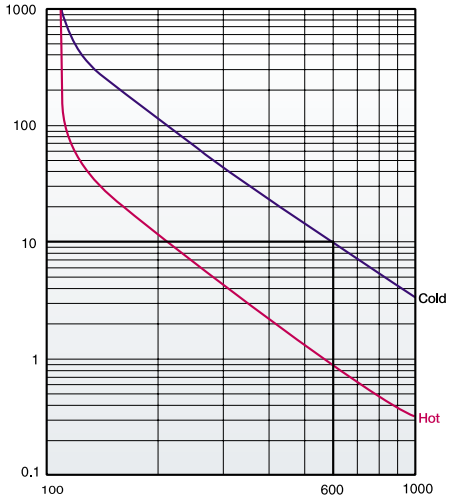
Drawings → page 169
Connections → page 170
Contactors → page 40
Starters → page 81
Bimetallic overload relay → page 65
Operating curves → page 137

CGE

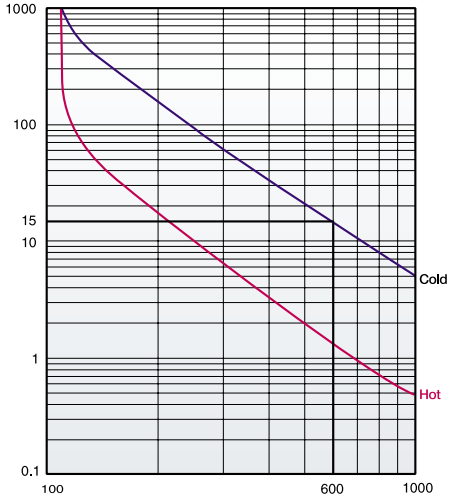
Trip class 5



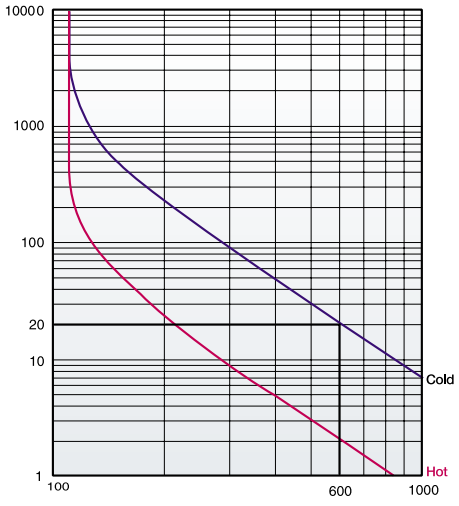
Trip class 10



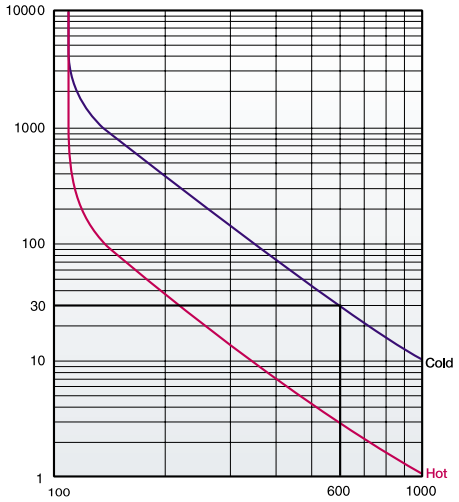
Trip class 15



Trip class 20



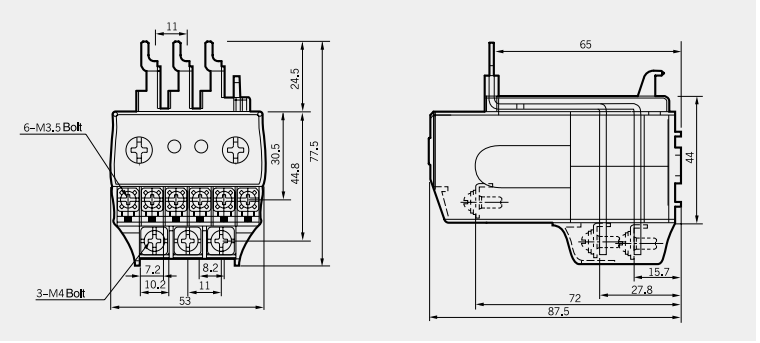
Trip class 30



Dimensions

Electronic Overload Relays

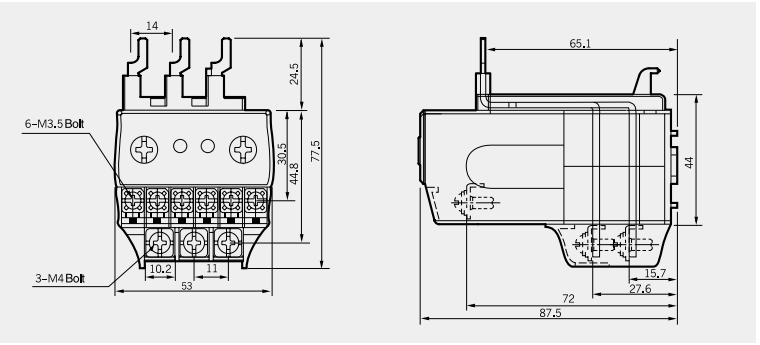
CGE22-2P
CGE22-3P
CGE22-3PR



Terminal configuration : See Fig. 1 on the next page

0.18kg

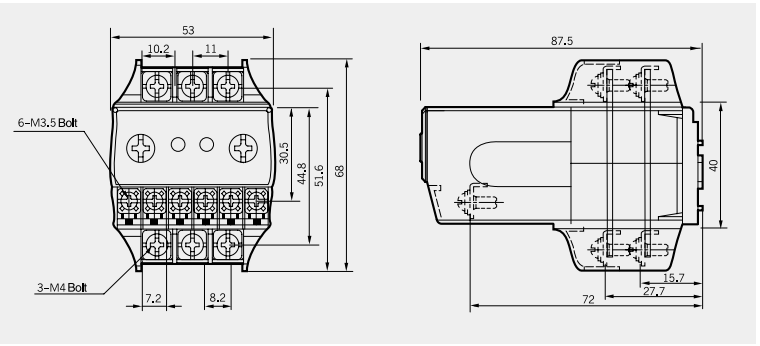
CGE40-2P
CGE40-3P
CGE40-3PR



Terminal configuration : See Fig. 1 on the next page

0.20kg/0.22kg

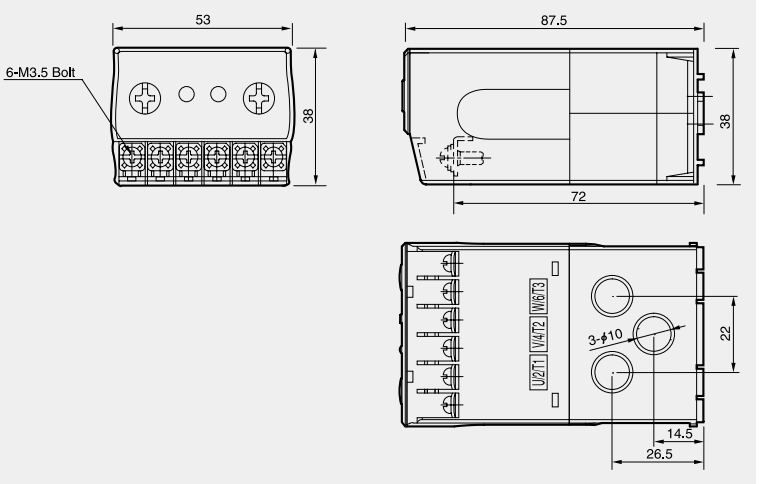
CGE22-2S
CGE22-3S
CGE22-3SR
CGE40-2S
CGE40-3S
CGE40-3SR



Terminal configuration : See Fig. 2 on the next page

0.19kg/0.21kg

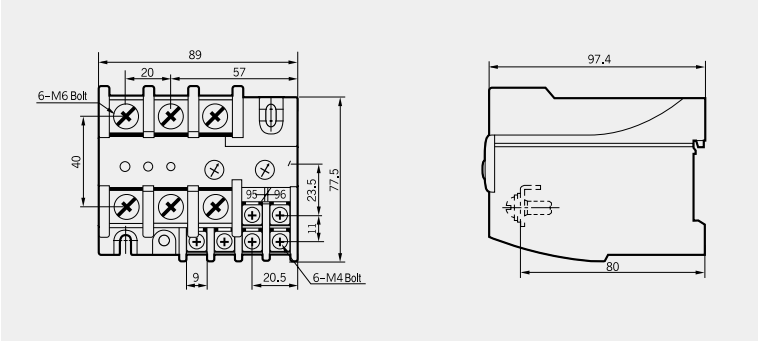
CGE22-2T
CGE22-3T
CGE22-3TR
CGE40-2T
CGE40-3T
CGE40-3TR



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

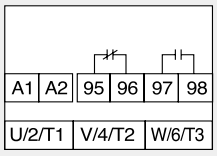


Fig. 1

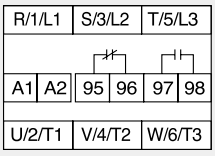


Fig. 2

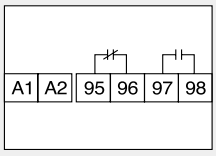
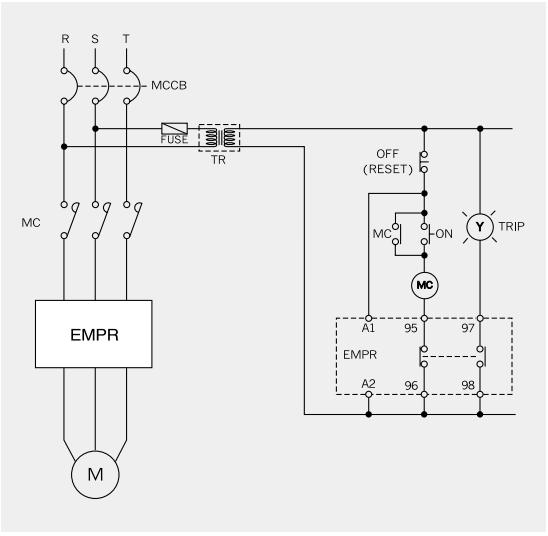
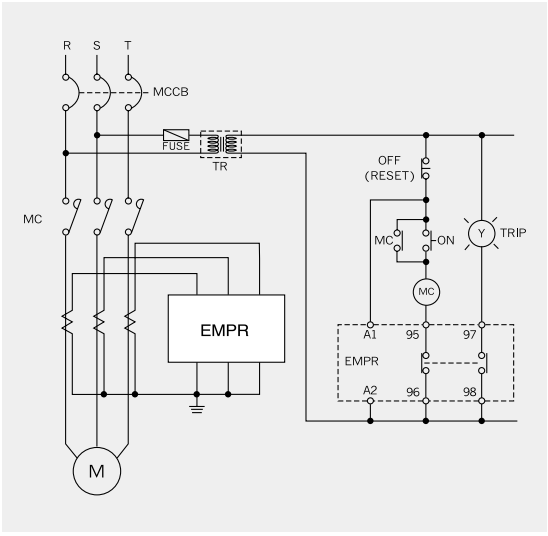


Fig. 3

Circuit diagram



Without additional CTs



In case of using additional CTs