

Ancillary functions

- Metering functions:
 - Phase currents (Ia, Ib, Ic), Zero sequence current (Ie, Ise)
 - Sequence currents (I1, I2), Ratio of sequence currents (I2/I1)
 - Percentage of thermal capacity (THM), Max. phase current (Iamax, Ibmax, Icmax)
 - Max. zero sequence current (Iemax, Isemax), Maximum negative sequence currents (I2max)
 - Maximum ratio of sequence current (I21 max)
- Event Recording
 - Up to 200 most recent events time-tagged to 1ms resolution.
- Fault recording
 - Up to 4 most recent faults with phase-by-phase reports prior to and during fault conditions.
- Disturbance recording
 - 4 analog and 32 binary signal records.
 - Max. 5 records each of five seconds duration.
- Communication
 - RS485: Modbus

Dimensions and Weight

- 4U (177mm) height,
- 1/3 x 19" (149mm) width (for model 400, 401, 420 and 421),
- 1/2 x 19" (223mm) width (for model 402 and 422)
- 151mm depth
- 1.5kg (for model 400, 401, 420 and 421)
- 1.8kg (for model 402 and 422)

Ordering code GRE120 - [] A - [] - []

Type :	
Motor protection	GRE120
Model :	
3OC+EF	
2xBIs, 4xBOs + Fail	400
6xBIs, 4xBOs + Fail	401
6xBIs, 8xBOs + Fail	402
3OC+EF+SEF	
2xBIs, 4xBOs + Fail	420
6xBIs, 4xBOs + Fail	421
6xBIs, 8xBOs + Fail	422
Rating :	
CT : 1/5A, f: 50/60Hz, 110/250Vdc/110/240Vac	1
CT: 1/5A, f: 50/60Hz, 48/110Vdc	2
CT : 1/5A, f: 50/60Hz, 24/48Vdc	A
Standard and language :	
IEC (English)	0
ANSI (English)	1
Communication :	
RS485 x 1 (Modbus)	10

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GRE120

Motor Protection and Control
 for MV Systems

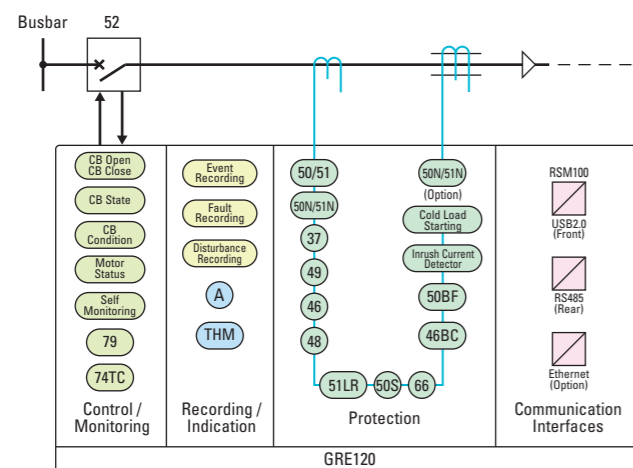


GRE-Series – GRE120

Multi-Function Motor Protection and Control



GRE120 is a fully numerical multi-function protection device designed for motor protection applications in MV networks, drawing upon proven technologies developed over more than 100 years, and providing a comprehensive range of protection and control functions. GRE120 provides multiple, high accuracy motor protection elements such as thermal protection based upon the IEC 60255-149 standard, motor status monitoring, locked rotor protection and restart inhibit as well as featuring protection and control functions.



Features

- Protection of motors and feeders in medium voltage networks
- Feeder manager device with CB control function, 43R/L switch and comprehensive support functions
- Compact and cost-effective design
- Elementary, environmentally-friendly, easy to use and featuring enhanced product concepts

Functions

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> - Protection Phase Fault O/C (50/51P) Earth Fault O/C (50/51N) SEF (50/51N) Phase Undercurrent (37) Thermal Overload (49) Start Protection (48) Locked Rotor Protection (51LR) Stalled motor Protection (50S) Restart Inhibit (66) NPS Overcurrent (46) Broken Conductor (46BC) Circuit Breaker Fail (50BF) Inrush Current Detector (ICD) Cold Load Protection | <ul style="list-style-type: none"> - Control Local/Remote Control Autoreclose (79) - Monitoring Trip circuit supervision (74TC) Self supervision CB State Monitoring Trip Counter Alarm ΣI^2 Alarm CB Operate Time Alarm - Communication USB port Remote communication (Modbus) | <ul style="list-style-type: none"> - Others Two setting groups Menu-based HMI (16 x 8 characters) Configurable LED (8 fixed and 6 configurable) Programmable Logic Controller (PLC) |
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