EATON | Cutler-Hammer

ATC-5000 Soft Load Controller

Product Focus

For Utility & Generator
Protection & Control

The ATC-5000 is a micro-processor-based controller designed to provide total control for small to medium size applications with single and /or multiple generator sets in stand alone or utility parallel configuration.

General Features

- True RMS voltage (generator/bus/utility)
- True RMS current (generator/utility)
- Start/stop logic for Diesel/Gas engines
- Engine pre-glow or purge control
- Battery voltage monitoring
- Speed control with overspeed monitoring
- kWh/operation hours/start/maintenance counter
- Load dependent start/stop
- Configurable trip/control set points
- Configurable delays for each protection
- Magnetic Pickup input
- 16 configurable discrete alarm inputs
- 7 configurable/programmable relays
- Two-line LC display
- Synchroscope
- Push-buttons for direct control
- CAN bus communication
- Multi level password protection
- UL/cUL and CE Listed

Control Features

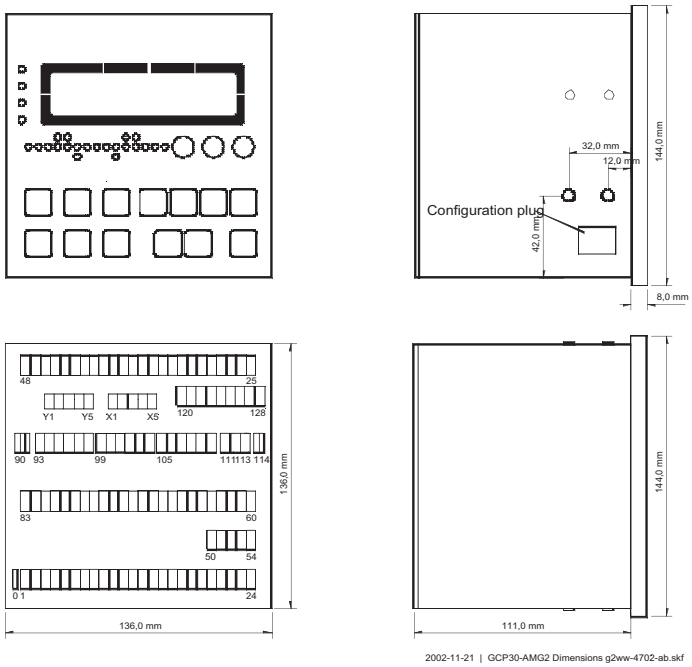
- Speed/frequency/real power
- Voltage/VAR/power factor
- Synchronizer
- ATS Functions
  - — AMF automatic mains failure
  - — Isolated operation
  - — Open transition (break-before-make)
  - — Closed transition (make-before-break)
  - — Soft loading/unloading
- Utility parallel operation
  - — Baseload
  - — Import/export
- 2 configurable analog outputs (0/4..20 mA)
- Active power setpoint (0/4..20 mA)
- Discrete raise/lower for rpm/Hz/V/P/Q
- Analog raise/lower for rpm/Hz/V/P/Q
- PWM raise/lower for rpm/Hz/P
- 6 configurable analog measuring inputs (0/4..20 mA, Pt100, VDO)
- Event recorder with real time clock

Protection	ANSI #
Utility	
• Over-/undervoltage	(59/27)
• Over-/underfrequency	(81O/U)
• Phase/vector shift	(78)
Generator	
• Over-/undervoltage	(59/27)
• Over-/underfrequency	(81O/U)
• Overload	(32)
• Reverse/reduced power	(32R/F)
• Load imbalance	(46)
• Time-overcurrent (TOC)	(50)

Specifications

Accuracy			Class 1
Power supply			12/24 Vdc (9.5..32 Vdc)
Intrinsic consumption			max. 15 W
Ambient temperature			-20..70 °C
Ambient humidity			95 %, non-condensing
Voltage	Rated:	[1] 57/100(120) Vac	or [4] 230/400 Vac
	UL:	[1] max. 150 Vac	or [4] max. 300 Vac
	Setting range:	[1] 50..125 Vac	or [4] 200..440 Vac
Measuring frequency			50/60 Hz (40..70 Hz)
Input resistance			[1] 0.21 MW, [4] 0.7 MW
Max. power consumption per path			< 0.15 W
Current			[../1] ../1 A or [../5] ../5 A
Current-carrying capacity			Igen = 3.0_In
			Iutility = 1.5_In
Load			Util< 0.15 VA
Rated short-time current (1 s)			[../1] 50_In, [../5] 10_In
Discrete inputs			metallically separated
Input range			12/24 Vdc (4..40 Vdc)
Input resistance			approx. 6.7 kW
Relay outputs			metallically separated
Contact material			AgCdO
Load (GP)			24 Vdc@2 Adc, 250 Vac@2 Aac
Pilot duty (PD)			24 Vdc@1 Adc
Analog inputs			freely scaleable
Type			0/4..20 mA, Pt100, VDO
Resolution			10 Bit
Analog outputs			metallically separated
Type			0/4..20 mA, freely scaleable
Resolution			12 Bit
Max. load 0/4..20 mA			500 W
Insulating voltage			3,000 Vdc
Housing			
Dimensions (with back connections)			144 W x 144 H x 118 D mm
Front cutout			138 W x 136 H mm
Front			insulating surface
Weight			approx. 1,000 g
Disturbance test (CE)			tested according to applicable EN guidelines

Dimensions



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