

Automatic Engine Controller



AS3000 Model

- Auto crank disconnect
- Multi Multi-attempt starting
- Fault warning and shutdown
- Reduced panel wiring
- Simple set set-up

Description

The AS3000 provides automatic start up, fault monitoring and shutdown control for engine driven applications. The unique two-module design, with a single interconnecting lead, gives reduced panel wiring and installation. This simple, compact unit is ideally suited to small engine and generator panels.

Key features

- Multi-attempt cranking with auto crank disconnect
- Automatic or manual modes, selected by front facia pushbuttons. Control inputs for optional security keyswitch.
- User interface module: front of panel mounted, 92mm square DIN cut-out. Environmental sealing to IP65
- Panel interface module: DIN rail mounted PCB tray.
- Fault shutdown and indication system. Low oil pressure, high coolant temperature and auxiliary inputs are fitted to both modules, allowing use with engine mounted fault switches or facia mounted SWICHGAGE® units.
- Speed sensing (auto crank disconnect and over-speed shutdown) is via magnetic pickup, generator AC or remote contact. Speed calibration is automatic and adjustment free.
- Mains charger/charge alternator fail warning LED.

- Easy setup of operating options using circuit board links.

- Generator AC Hz meter output, 0 – 5V.

Product Specification

Power supply

Continuous voltage range: 8 – 35 VDC

Brown out voltage: < 5 VDC for 2 secs (recovery to 8V)

Blackout voltage: 0V for 50ms (from 10V, recovery to 5V)

Overvoltage withstand: 50 VDC for 5 seconds (to SAEJ1810 load dump immunity)

Reverse voltage withstand: 100 VDC continuous

Current consumption (standby): 50mA

Current consumption (max): 500mA (plus output loads)

DC Inputs

Oil pressure, coolant temp, auxiliary and charger faults: Closed to negative DC ($\pm 3V$) on fault

Remote start positive: Open from positive DC to start

Remote start negative: Close to negative DC ($\pm 3V$) to start

Lamp test: Close to negative DC ($\pm 3V$) to activate

DC input protection: ± 50 VDC max.

AC Inputs

Magnetic pickup: 3 – 60 VAC, 50Hz – 10 kHz.

Generator AC: 600 VAC max (L-L or L-N), 50/60 Hz.

Outputs

Fuel: Positive DC (semiconductor), 5A max.

Crank, preheat: Positive DC (semiconductor), 2A max.

Common alarm, fault lockout: Negative DC (semiconductor), 300mA max.

Generator Hz. meter: 0 – 5VDC (@ 45–65Hz), 10mA max

Physical

Dimensions: See overleaf

Operating temperature: -10 to +65°C

Relative humidity: 95% @ 60 °C

Environmental protection: AS3000U front: IP65, NEMA4

Vibration: ISO 88528 pt.9, & 3 axis 3g

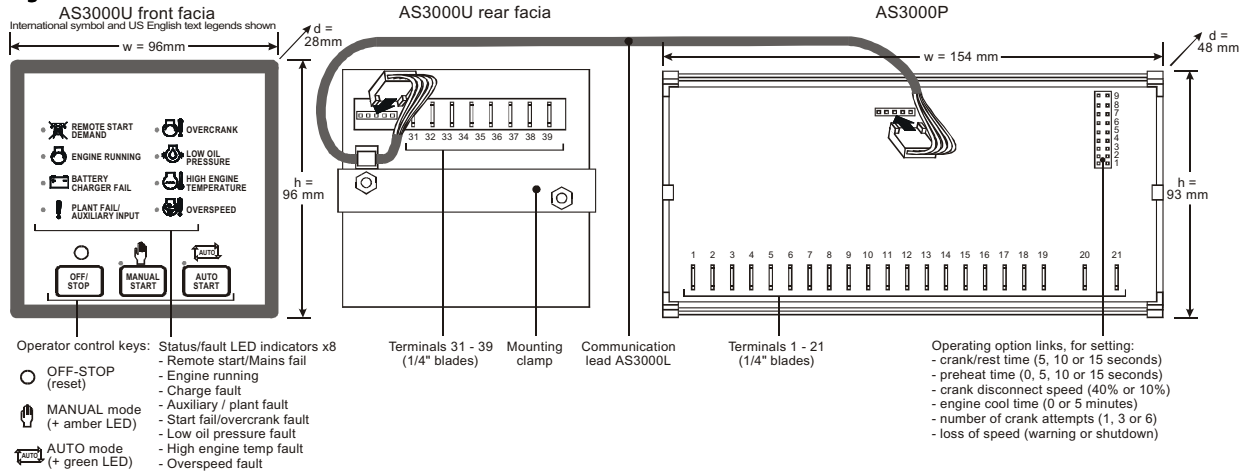
Weight: AS3000U: approx. 250g
AS300P: approx. 160g

Warranty

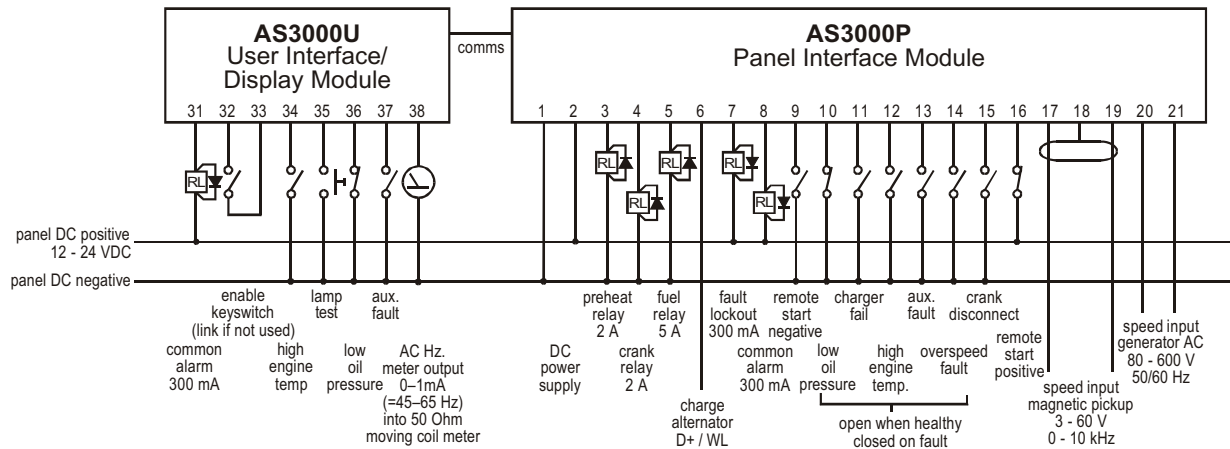
A two year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and are packed with each unit.



System Overview



Electrical Connection



How to order

Stock no.	Unit type
Complete systems:	
41.70.0092	AS3000 system, front facia symbols
41.70.0093	AS3000 system, front facia US English
Components:	
41.70.0095	AS3000U user interface, international symbols
41.70.0096	AS3000U user interface, US English text
41.70.0097	AS3000P panel interface module
41.70.0098	AS3000L communication lead



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