## **Diesel Engine Controller**



Type H700 Version 1.00a

## **Technical Datasheet**

This diesel engine controller, type H700, is specifically designed to meet and exceed the requirements of NFPA20 and FM approved to class 1321/1323.

The control system comprises of a graphic user display, LED indicators, actual discrete push buttons for all operations and a purpose designed interface board.

The graphic display shows both battery voltages, charger current, engine hours run, water pressure and all active alarms.



The display and push buttons are used to modify parameters such as the minimum run timer, delay start timer, stop timer, start & stop pressure etc. The display can also optionally show oil pressure, high water temperature, fuel level and water flow (plus others) using a variety of input sensors. There are also several spare inputs and volt free contacts that can be assigned functions.

The battery chargers are constant current and constant voltage, switched mode type rated at 10A. They have an automatic boost facility and each charger has indication lights to show the present charging and battery status. The charger will pick up a fully discharged battery.

The enclosure size is compact (600x500x250mm) light weight and designed as standard to IP55, with options for IP65 in mild steel or stainless steel (304 or 316). The mounting lugs are supplied as standard and the paint finish is RAL3002.

There is a WIFI connection that can be used to download the various log files, which consist of events and water pressure information.

There are various options available including MODBUS & RS485 remote monitoring.



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Alarms and Indications					
Auto/off/hand	Starter contactor 1 & 2	Pressure transducer fault			
Mains supply on	fault Engine running	Low oil Pressure			
Battery 1 & 2 voltage	Low fuel level	High Water temperature			
Battery 1 & current	High fuel level	Low engine temperature			
Water pressure	Fuel tank leak	Low fuel level			
Battery 1 & 2 failure	High raw water temp.	Failed to start			
Battery charger 1 & 2 failure	Low pump room temp.	Fuel injection malfunction			
Low system pressure	ECM Warning & failure				

Volt free change over contacts (250vac at 8A rated)			
Common pump room fault	Controller fault	Engine running	
Not in Auto	Engine fault	Programmable x1	

Push buttons / Switches				
Crank A	Navigation control	Off		
Crank B	arrows	Manual		
Stop	Home	Automatic		
Test start	Settings	AC isolator, door interlocked		
	Back			

H700	Mains supply	-Battery type	-Options	
	= 208-240v 1 phase	12vL=lead acid	a1	IP65 mild steel
	a= 208-240v 2 phase	24vL=lead acid	a2	IP65 304 stainless steel, brushed finish
	b=120-127v 1 phase		a3	IP65 304 stainless steel, RAL3002 finish
	c=120-127v 2 phase		a4	IP65 316 stainless steel, brush finish
			a5	IP65 316 stainless steel, RAL3002 finish
			b	10 Digital input board
			с	5 Digital output board
			d	Board tropicalisation
			e1	Engine oil heater, 1kW
			f1	Fresh water 40bar maximum
			f2	Sea water, 25bar maximum
			f3	Sea water, 40bar maximum
			g1	MODBUS RTU

- g2 MODBUS TCP-IP
- h1 Anti-condensation heater, with thermostat
- h2 Anti-condensation heater, with humidistat

## FM Approved from 4 to 50 deg Celsius.





