

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.

MODBUS RS485 & TCP-IP remote monitoring are included as standard.



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	Home	Manual
Stop	Settings	Automatic
Test start	Back	AC isolator, door interlocked

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
			c 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
			h1 Anti-condensation heater, with thermostat
			h2 Anti-condensation heater, with humidistat

FM Approved from 4 to 50 deg Celsius. The standard plumbing arrangement (pressure transducer & drain valve) is rated at 25 bar.

