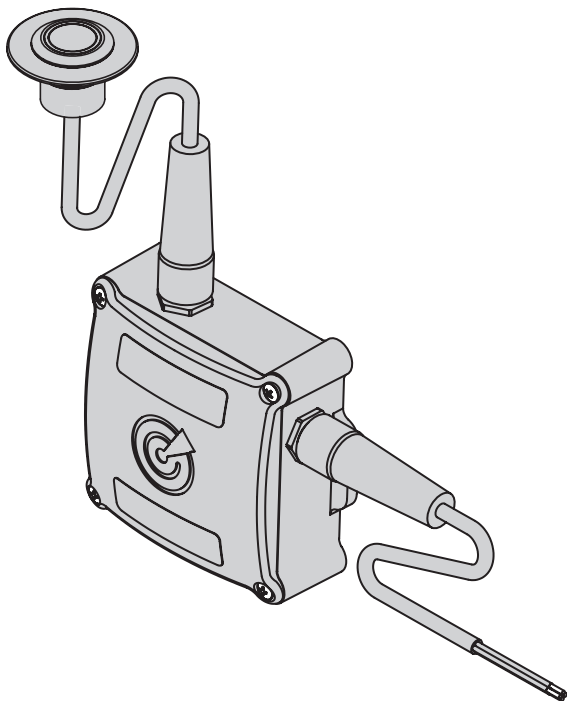


DIESEL ENGINE CONNECTION GUIDE



DIESEL ENGINE CONNECTION

The OLAS Guardian can be used to stop diesel engines in several ways, dependent on the existing setup.

1. Mechanically activating the engine stop solenoid directly.

If the vessels existing stop switch is on a circuit which supplies power to the engines stop solenoid directly you need to check the maximum Amps required to energise the solenoid.

The Guardian has an internal relay rated to 2A.

If the solenoid requires a current greater than 2A you will need to install an additional, sufficiently rated relay. In this instance the Guardian can be used as a wireless switch to activate the higher rated relay.

If your existing stop circuit is 'Close to stop', the higher rated relay will need to be installed in parallel with your existing stop switch.

If your existing stop circuit is 'Open to stop', the higher rated relay will need to be installed in series with your existing stop switch.

The part EXPOLASGDRLY (for a single engine) / EXPOLASGDRLY2 (for a twin engine) uses a 30A relay and can be connected directly to the Guardian.

2. Activating the engine stop solenoid via the manufacturers / a pre-installed stop relay.

If the vessels existing stop switch is used to energise or de-energise a relay on a circuit which supplies power to the engines stop solenoid, then the Guardian can be installed in series or parallel with the existing stop switch.

If your existing stop circuit is 'Close to stop', the Guardian will need to be installed in parallel with your existing stop switch.

If your existing stop circuit is 'Open to stop', the Guardian will need to be installed in series with your existing stop switch.

3. Stopping the engine via the electronic control unit.

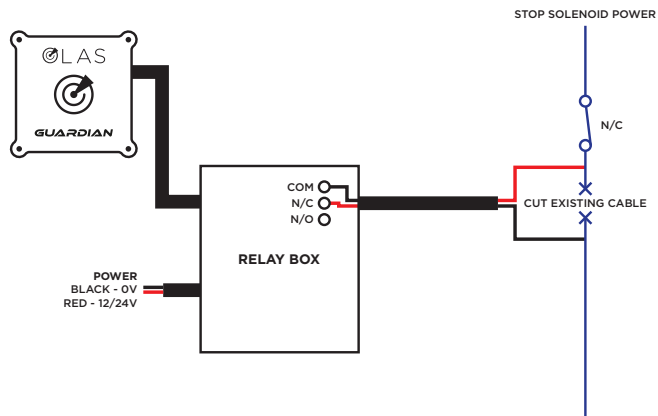
If your engine is controlled via the vessels engine control unit (ECU) generally the emergency stop switch will be acting as a signal switch. It is important to check if the existing stop switch is operating an 'Open to stop' or 'Close to stop system'.

If the system is 'Open to stop' the Guardian signal wires will need to be connected in series with the existing stop switch.

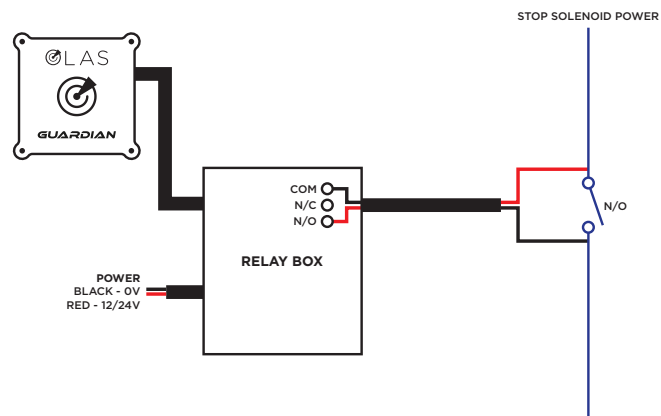
If the system is 'Close to stop' the Guardian signal wires will need to be connected in parallel with the existing stop switch.

Number of engines	Stop system	Voltage	Solenoid operation	Maximum circuit current	Additional part required	Additional part	Part number
1	Open to stop	12/24	Direct circuit	30A	Yes	30A relay box	EXPOLASGDRLY
1	Open to stop	12/24	Indirect circuit	2A	No	N/A	N/A
1	Close to stop	12/24	Direct circuit	30A	Yes	30A relay box	EXPOLASGDRLY
1	Close to stop	12/24	Indirect circuit	2A	No	N/A	N/A
2	Open to stop	12/24	Direct circuit	30A	Yes	Twin 30A relay box	EXPOLASGDRLY2
2	Open to stop	12/24	Indirect circuit	30A	Yes	Twin 30A relay box	EXPOLASGDRLY2
2	Close to stop	12/24	Direct circuit	30A	Yes	Twin 30A relay box	EXPOLASGDRLY2

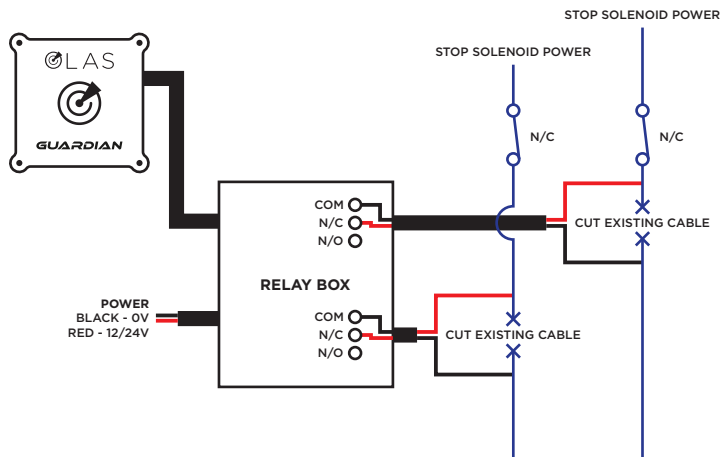
1RLYOS



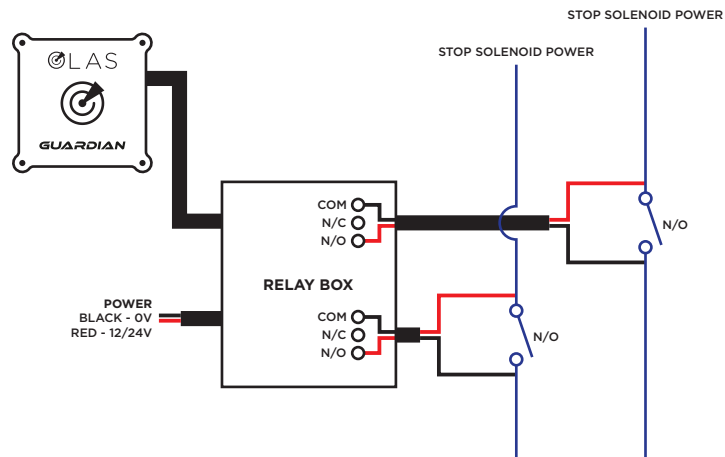
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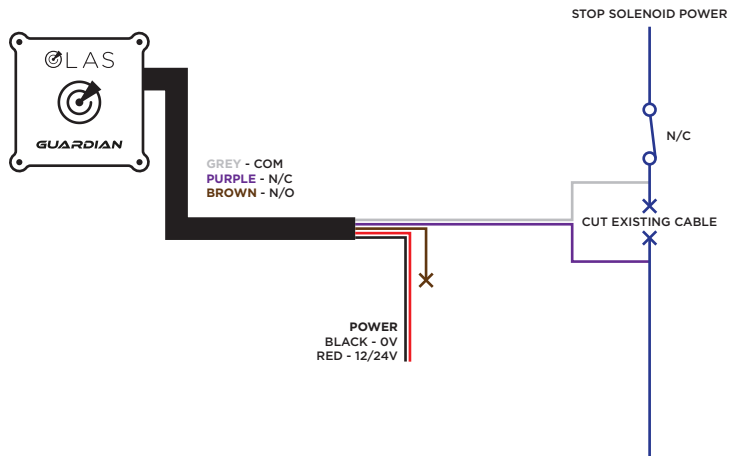
2RLYOS



2RLYCS



10S



1CS

