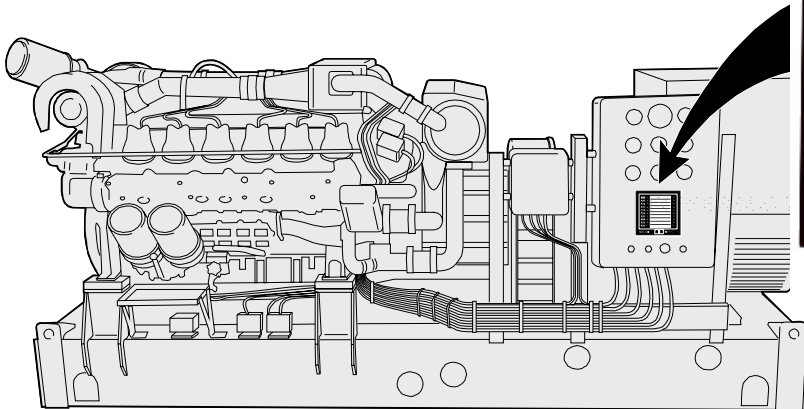


### Integrated control and protection of diesel and gas engines for all purposes



**Especially suited for auxiliary generator sets**

- ★ Type approved by following marine classification societies: Lloyd's Register of Shipping, Germanischer Lloyd, Bureau Veritas, Romanian Register of Shipping, Polish Register of Shipping, Maritime Register of Shipping (Russia), Croatian Register of Shipping, Det Norske Veritas and RINA. Others continuously in process.
- ★ Compact unit for switchboard front panel mounting with standard instrument dimensions of 144 x 144 and a depth of only 35 mm.
- ★ Contains 9 shutdown channels and/or 7 alarm channels selectable.
- ★ Two powerful LEDs for each of the 10 indicating channels with windows for identification.
- ★ CE mark according to EN 50081 and 50082

- ★ Internal tacho relay and programmable check of external circuit.
- ★ Quick installation by means of clamping fittings and plug-in terminal blocks for easy service.
- ★ Microcomputer based circuit designed for high noise immunity and high supply voltage variations.
- ★ Contains automatic test function and control of intermittent prelubrication of engine.
- ★ The blank legend card can be typed or printed and inserted between the front plates as illustrated.
- ★ Auxiliary options: Battery back-up M0100. Tachovoltage detector M0500. Watertight cover M0800. Serial bus interface for connection to the N0300 PC Process Logger system. PC programmer N0500 for expanding the number of programming options.

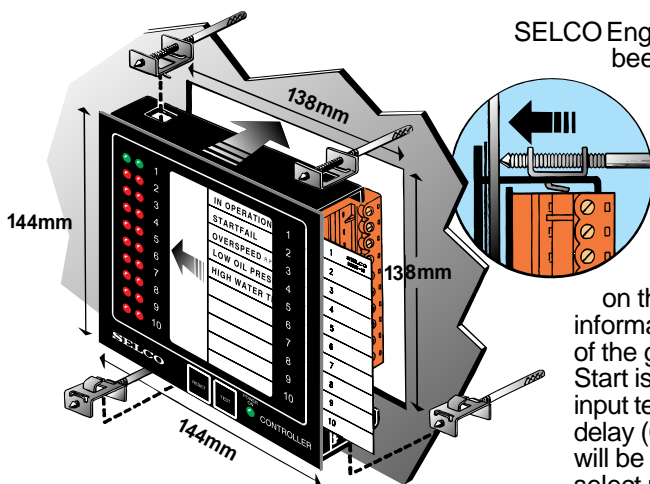
### Functions

SELCO Engine Controller M2000 has been designed to take care of the complete control of a diesel generator. It controls start and stop of the engine, monitors and protects the engine during start and operation, and simultaneously indicates

on the front all necessary information about the conditions of the generator set. Start is obtained by activating input terminal 2 and after start delay (0.5-2-4-10 secs) the start will be initiated. It is possible to select up to 4 start attempts, with both crank and rest periods

adjustable (5-7-10-15 secs). When the engine fires, terminal 9 will be activated from an external tacho relay (crank disconnect) or the internal tacho unit detects in excess of 33% of the nominal frequency, and the cranking will be disconnected. When stopping the engine by deactivating terminal 2, a generator circuit breaker trip delay is available (0-0.5-1-3 min.). Finally a shutdown delay is available for cooling purposes (0-2-4-10 min.). The stated sequence times are standard, but can be altered to suit using SELCO PC programmer N0500. Besides above main functions the controller contains many other features.

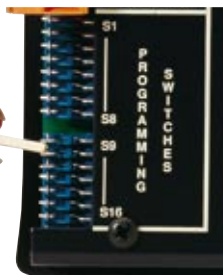
Please request data sheet no. M2096.



Quick and easy replacement of indication label



### Programming switches



<b>Crank time</b>				
	5-	7-	10-	15 secs
S3	on	off	on	off
S4	on	on	off	off
<b>Rest time</b>				
	5-	7-	10-	15 secs
S5	on	off	on	off
S6	on	on	off	off
<b>Start delay (start warning)</b>				
	0.5-	2-	4-	10 secs
S7	on	off	on	off
S8	on	on	off	off
<b>Stop time</b>				
S9	on = 20 secs			
S9	off = 50 secs			
<b>Puls start-stop (term. 1+12)</b>				
S10	on = continuous push			
S10	off = puls			

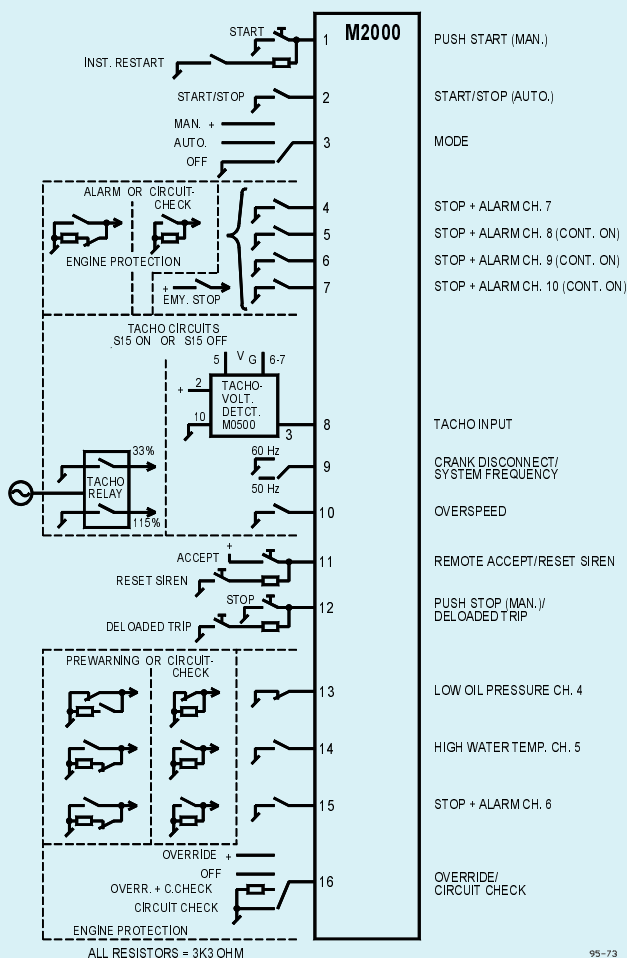
<b>Circuit breaker trip</b>				
	0-	0.5-	1-	3 min.
S11	on	off	on	off
S12	on	on	off	off
<b>Cool down</b>				
	0-	2-	4-	10 min.
S13	on	off	on	off
S14	on	on	off	off
<b>Tacho detection</b>				
S15	on = external tacho relay			
S15	off = SELCO M0500 installed			
<b>Starter engagement protection</b>				
S16	on = no function			
S16	off = S.E.P. + start via oil pres.			
<b>Push-buttons</b>				
Start - stop accept-reset-lamp test				

### Programming table:

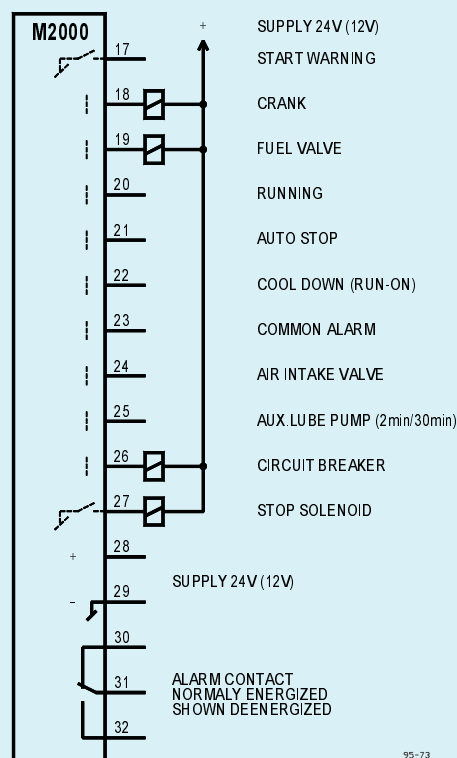
<b>Start attempts</b>				
	1-	2-	3-	4 attempts
S1	on	off	on	off
S2	on	on	off	off

**Example of programming of delay:**  
S7 off and S8 on will provide start delay of 2 secs

### Input terminals



### Output- and supply terminals



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Meterbuen 6-12  
DK-2740 Skovlunde  
Telephone: +45 -44 91 11 22  
Telefax: +45 -44 91 25 22  
<http://www.selco.com>

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13 Orton Enterprise Centre  
Bakewell Road, Orton Southgate  
Peterborough PE2 6XU  
Telephone: +44 (0) 1733 371828  
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