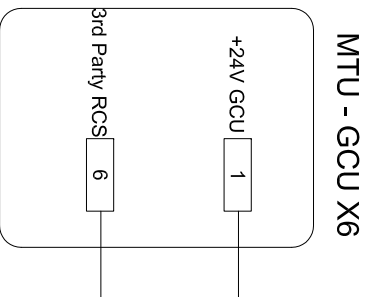


RELAY *

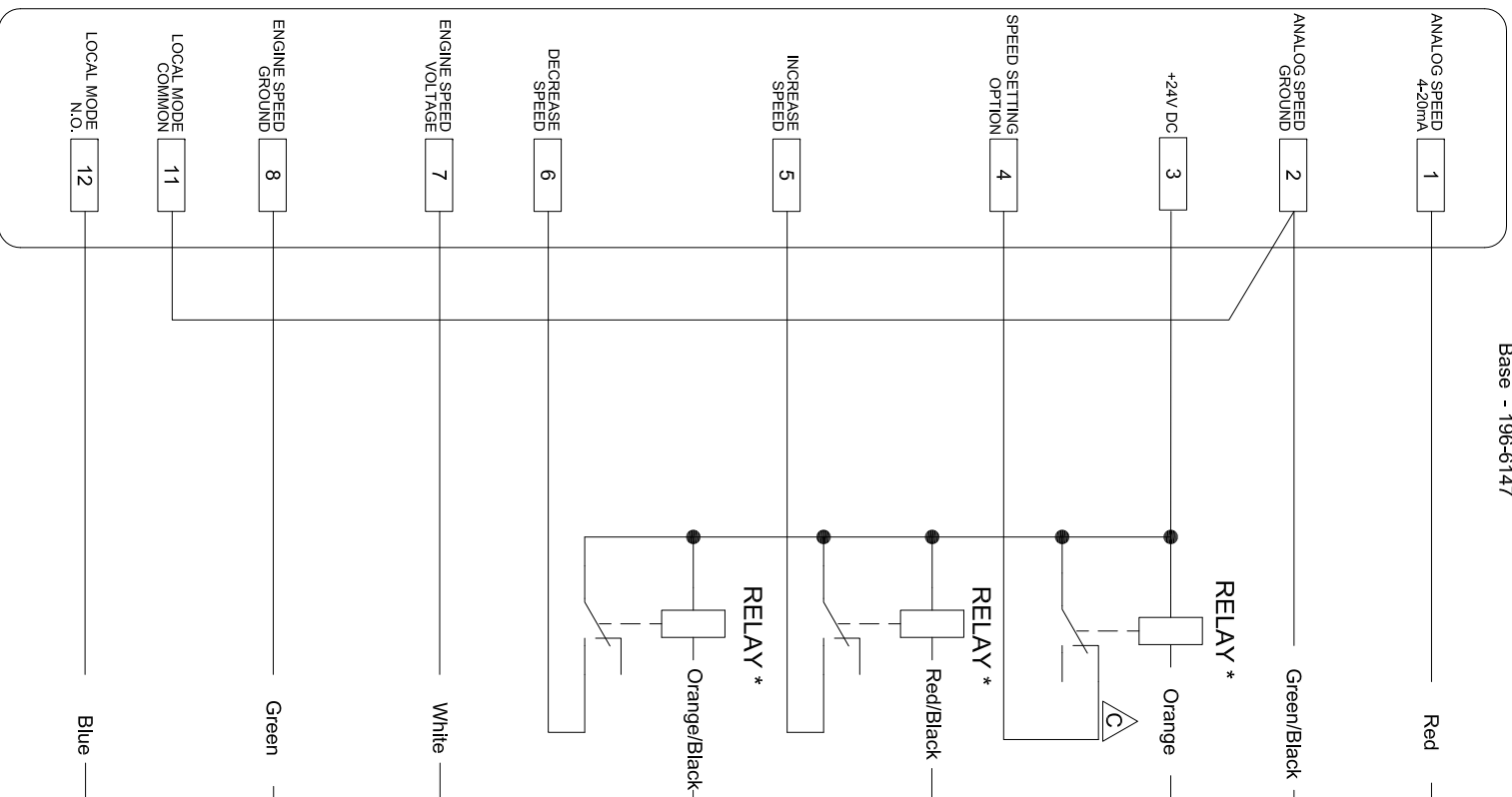
Recommended relay:
 Omron MY4 12DCS : Gold contact Change over relay
 PYE14A-E Relay socket base
 Farnell In-one
 Relay - 186-454
 Base - 176-963
 Clip - 1030923

blue ARROW
 Engine Interface Module



MTU - LOP X12

RS
 Relay - 488-2669
 Base - 196-6147



Throttle Demand 4-20mA	Idle = 4mA
	Full = 20mA
	R _{Lmax} = 400ohms

4-20mA Reference	0V ∇
Throttle Select	Open = INC/DEC
	Close = 4-20mA
	V _{max} = 33V
	I _{max} = 2A

INCREMENT	Open = Inactive
	Close = Active
	V _{max} = 33V
	I _{max} = 2A

DECREMENT	Open = Inactive
	Close = Active
	V _{max} = 33V
	I _{max} = 2A

Engine Speed	V _{Idle} = 0V
	V _{Full} = 10V
	Z _{in} = 100KΩ

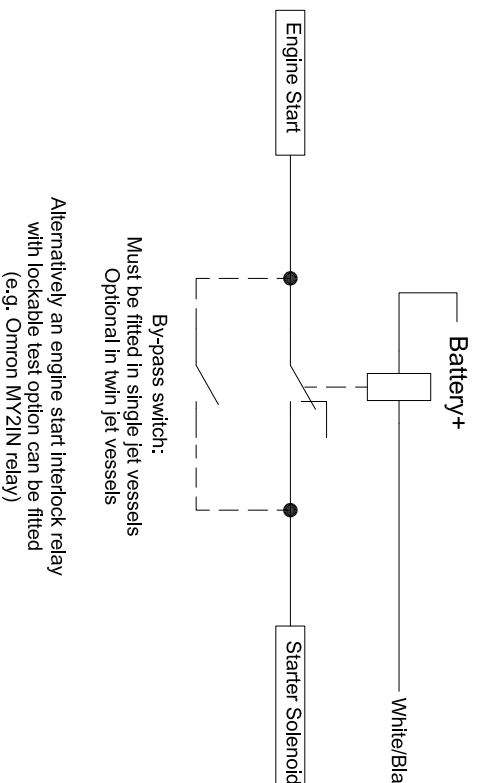
Engine Speed Reference	0V ∇
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Engine Local	O/C = Remote Control
	Low = Local Control
	Z _{in} = 100KΩ
	V _{LOW} <=1V

Common Reference	0V ∇
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Engine Start Interlock	Open = Disable
	Close = Enable
	V _{max} = 33V
	I _{max} = 2A

Recommended relay:
 24V Changeover
 Coil ~ 100mA
 Contacts > Starter solenoid rating



Alternatively an engine start interlock relay with lockable test option can be fitted (e.g. Omron MY2IN relay)

C. W. F. Hamilton & Co. Ltd Christchurch, New Zealand

AMENDMENT		MATERIAL		DESIGNATION	
C - WIRING CORRECTION	Weight (kg)	Certified	Cast	M/C	DESCRIPTION
B - ENGINE INTERLOCK BYPASS SWITCH ADDED	UNLIMITED DIMENSIONS TO BE ±0.5				Scale
ECN CL631	BY J.S.R	DATE 02.08.10	DESIGNED	A.B.	14.02.07
JET	APPROVALS	NAME	DATE	MTU BlueLine	
This print is provided on a restricted basis and is not to be used in any way detrimental to the interests of C. W. F. Hamilton Ltd					
DWG No 206077					

Manufacturer	Model	Note	Dmd Type	Feedback Type	Idle RPM	Full RPM	EngDmd Mode
MTU	8V 2000 M92	BlueLine controls	Current	Jet	#	2450#	IncDec

Note:
 # Engine RPM is affected by specific waterjet selection. If gearbox fitted, adjust to give jet shaft RPM.