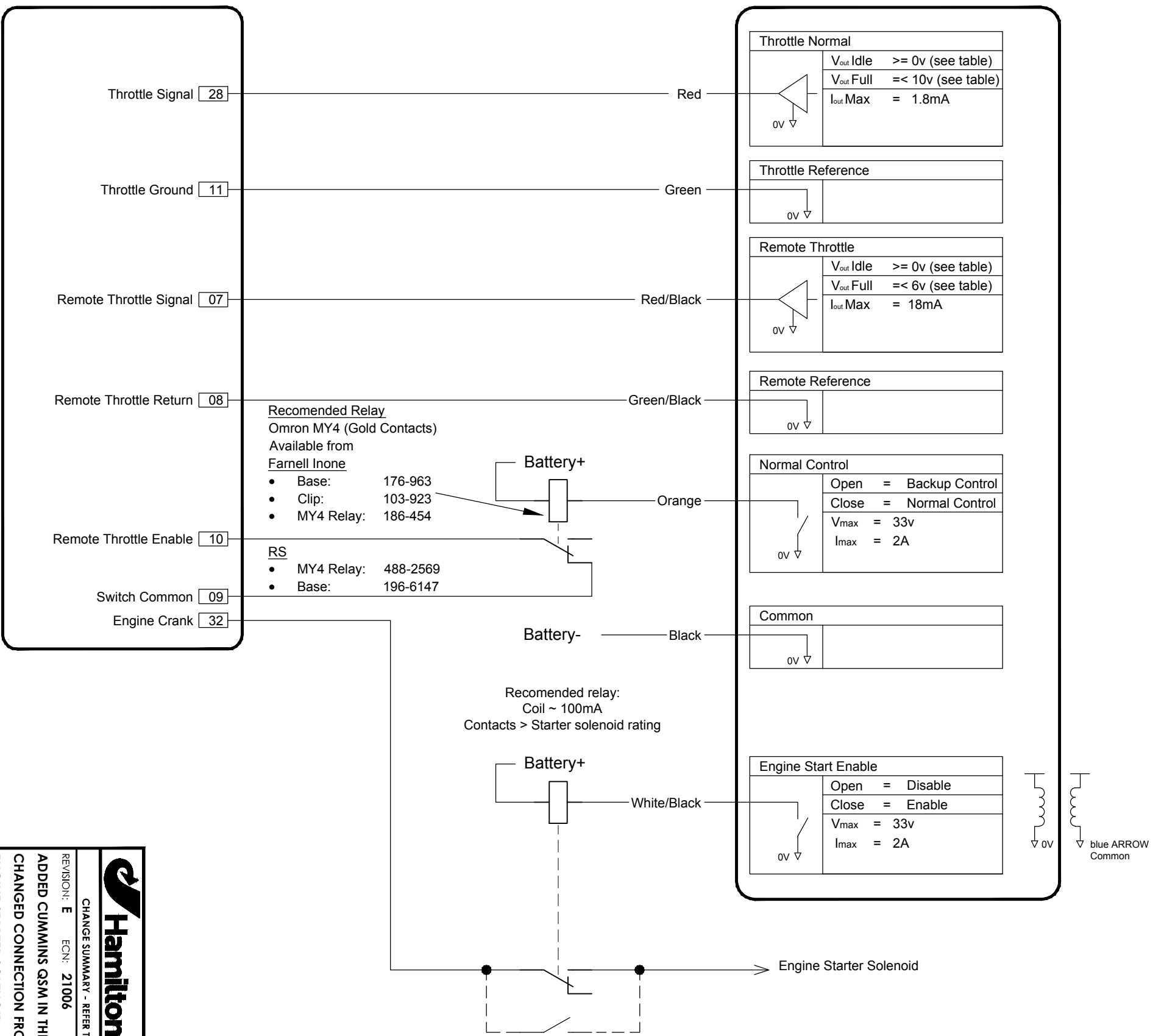


Engine Controller

blue ARROW
Engine Interface Module



- Recommended Relay**
Omron MY4 (Gold Contacts)
Available from
Farnell Inone
- Base: 176-963
 - Clip: 103-923
 - MY4 Relay: 186-454
- RS**
- MY4 Relay: 488-2569
 - Base: 196-6147

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

By-pass switch:
Must be fitted in single jet vessels
Optional in twin jet vessels

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

REMOTE THROTTLE OPTION

Manufacturer	Model	Notes	Demand Type	Feedback Type	Normal				Backup		
					Idle RPM	Full RPM	Idle Level	Full Level	EngDmd Mode	EngDmdHi	EngDmdLo
Cummins	QSC		Voltage	Jet	800#	2600#	12	41	Voltage	9933* (4.12v)	3271* (1.2v)
Cummins	QSB		Voltage	Jet	600#	3000#	12	41	Voltage	9933* (4.12v)	3271* (1.2v)
Cummins	QSM		Voltage	Jet	800#	2600#	12	41	Voltage	9933* (4.12v)	3271* (1.2v)

Notes

- # Engine RPM is affected by specific waterjet selection. Enter values set for particular installation. If gearbox fitted adjust to give jet shaft RPM.
- * Initial values only. Adjust values during installation to achieve correct levels.



CHANGE SUMMARY - REFER TO E.C.N. FOR DETAILS

REVISION: **E** ECN: **21006**

ADDED CUMMINS QSM IN THE ENGINE TYPE TABLE.
CHANGED CONNECTION FROM BYPASS SWITCH TO ENGINE STARTER SOLENOID.

DESIGN CHECK:	A.P.	26.03.14	SIGN
DRAWING REVISION:	S.S.	26.03.14	SIGN
DOCUMENT CHECK:	R.T.	26.03.14	SIGN
ORIGINAL DESIGN:	F.K.	20.03.06	SIGN

MANUFACTURING INFORMATION

MATERIAL: STANDARD

FINISHED WEIGHT: [kg]

ALL DIMENSIONS IN (mm) UNLESS OTHERWISE SPECIFIED

REMOVE ALL SHARP EDGES AND BURNS

UNTOLERANCED DIMENSIONS & SURFACE FINISH

GENERAL: ±0.5 HOLES: 0.02 ANGULAR: ±0.5°

MACHINED SURFACE FINISH: Ra 6.3 µm

blueARROW ENGINE SCHEMA D CONFIGURATION VOLTAGE DRIVE

JET / CONTROL TYPE: BA

DRAWN TO: HAMILJET 085175

PROJECTION:

SCALE: NTS

SHEET SIZE: A3

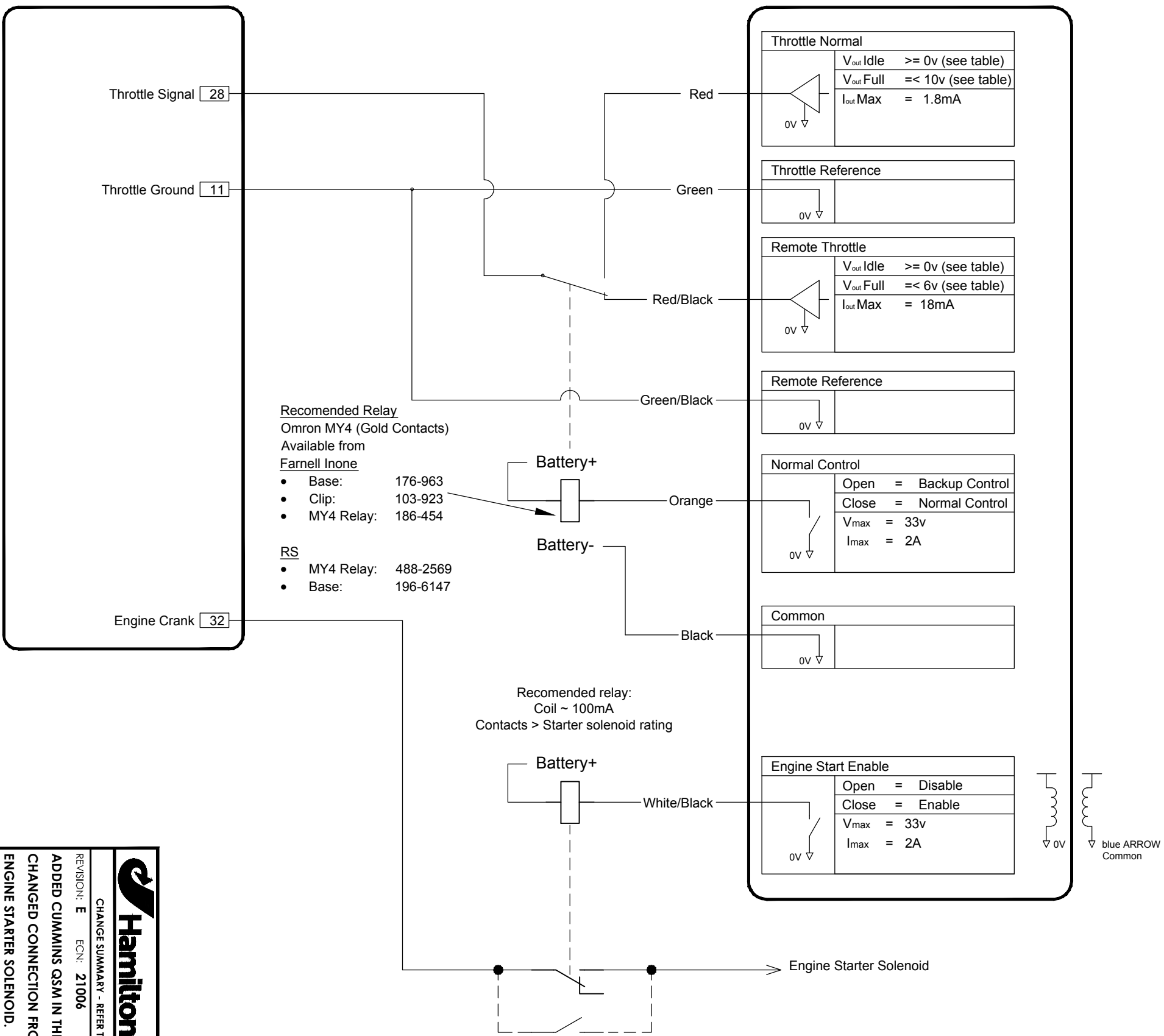
DWG NO: 204970

REV: E

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Engine Controller

blue ARROW
Engine Interface Module



- Recommended Relay**
Omron MY4 (Gold Contacts)
Available from
Farnell Inone
- Base: 176-963
 - Clip: 103-923
 - MY4 Relay: 186-454
- RS**
- MY4 Relay: 488-2569
 - Base: 196-6147

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

By-pass switch:
Must be fitted in single jet vessels
Optional in twin jet vessels

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

NON REMOTE THROTTLE OPTION

Manufacturer	Model	Notes	Normal						Backup		
			Demand Type	Feedback Type	Idle RPM	Full RPM	Idle Level	Full Level	EngDmd Mode	EngDmdHi	EngDmdLo
Cummins	QSC		Voltage	Jet	800#	2600#	12	41	Voltage	9933* (4.12v)	3271* (1.2v)
Cummins	QSB		Voltage	Jet	600#	3000#	12	41	Voltage	9933* (4.12v)	3271* (1.2v)
Cummins	QSM		Voltage	Jet	800#	2600#	12	41	Voltage	9933* (4.12v)	3271* (1.2v)

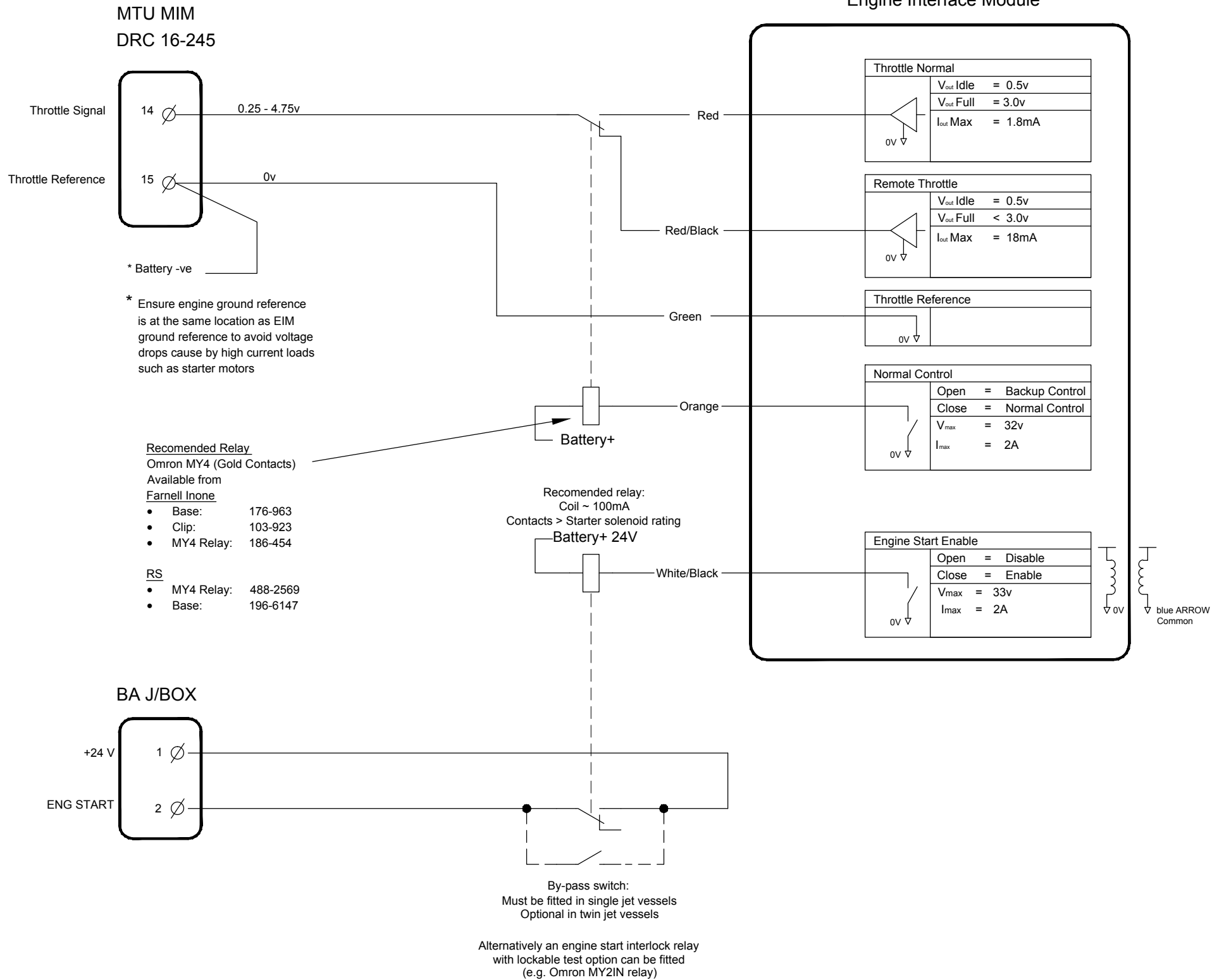
- Notes
- # Engine RPM is affected by specific waterjet selection. Enter values set for particular installation. If gearbox fitted adjust to give jet shaft RPM.
 - * Initial values only. Adjust values during installation to achieve correct levels.



CHANGE SUMMARY - REFER TO E.C.N. FOR DETAILS		REVISION: E ECN: 21006	
ADDED CUMMINS QSM IN THE ENGINE TYPE TABLE. CHANGED CONNECTION FROM BYPASS SWITCH TO ENGINE STARTER SOLENOID.			
DESIGN CHECK:	A.P.	26.03.14	SIGN
DRAWING REVISION:	S.S.	26.03.14	SIGN
DOCUMENT CHECK:	R.T.	26.03.14	SIGN
ORIGINAL DESIGN:	F.K.	20.03.06	SIGN
MATERIAL:		MANUFACTURING INFORMATION	
STANDARD:		REMOVE ALL SHARP EDGES AND BURNS	
MATERIAL:		ALL DIMENSIONS IN (mm) UNLESS OTHERWISE SPECIFIED	
MATERIAL:		FINISHED WEIGHT: [kg]	
MATERIAL:		TRACEABILITY REQ: YES	
MATERIAL:		UNTOLERANCED DIMENSIONS & SURFACE FINISH	
MATERIAL:		GENERAL: ±0.5 HOLES: 0.02 ANGULAR: ±0.5°	
MATERIAL:		MACHINED SURFACE FINISH: Ra 6.3 µm	
JET / CONTROL TYPE: BA		DRAWING INFORMATION	
SCALE: NTS		blueARROW	
SCALE: NTS		ENGINE SCHEMA D	
SCALE: NTS		CONFIGURATION VOLTAGE DRIVE	
SCALE: NTS		DRAWN TO HAMILJET 085175	
SCALE: NTS		PROJECTION:	
SCALE: NTS		SHEET SIZE: A3	
SCALE: NTS		Sht 2 of 3	
SCALE: NTS		DWG NO: 204970	
SCALE: NTS		REV: E	

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blue ARROW
Engine Interface Module



Make	Model	Feedback Type	Demand Type	Min RPM	Max RPM	Volt Min	Volt Max	Eng Dmd Mode	Eng Dmd Low	Eng Dmd High
MTU	MTU SERIES 60	Jet	Voltage	550 [#]	2350 [#]	2	47	Voltage	1300*	8250*

* Initial values only. Adjust values during installation to achieve correct level.
Engine RPM is affected by specific waterjet selection. If gearbox fitted, adjust to give jet shaft RPM.



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CHANGE SUMMARY - REFER TO E.C.N. FOR DETAILS				MANUFACTURING INFORMATION		DRAWING INFORMATION	
REVISION: E	ECN: 21006	ADDED CUMMINS QSM IN THE ENGINE TYPE TABLE.		MATERIAL:	blueARROW		
CHANGED CONNECTION FROM BYPASS SWITCH TO ENGINE STARTER SOLENOID.		STANDARD:		MAT CERT REQ: YES		TRACEABILITY REQ: YES	
DESIGN CHECK: A.P. 26.03.14		SIGN. <i>[Signature]</i>		FINISHED WEIGHT: [kg]		JET / CONTROL TYPE bA	
DRAWING REVISION: S.S. 26.03.14		SIGN. <i>[Signature]</i>		REMOVE ALL SHARP EDGES AND BURRS		DRAWN TO HAMJET 085195	
DOCUMENT CHECK: R.T. 26.03.14		SIGN. <i>[Signature]</i>		UNTOLERANCED DIMENSIONS & SURFACE FINISH		SCALE: NTS	
ORIGINAL DESIGN: F.K. 20.03.06		SIGN.		GENERAL: ±0.5 HOLES: Ø0.2 ANGULAR: ± 0.5°		SHEET SIZE: A3	
				MACHINED SURFACE FINISH: Ra 6.3 µm		Sht 3 of 3	
DWG No: 204970						REV: E	