6B-CP

Marine Generator Sets

Specifications

Engine Model	Cummins 6BT5.9-D(M)
Alternator	Newage UCM274E
AVR Type	MX341
Operating Fuel	#2 Diesel, MGO
Agency Approvals	ABS, BV, DNV, GL, LR
Emissions	Not certified

Dimensions

Length	2240 mm	88 in
Width	1250 mm	49 in
Height	1270 mm	50 in
Weight	1270 kg	2800 lb

Dimensions and weight may vary based on selected engine configuration

Ratings

					Fuel Consumption	
Model	**Power* @ RPM**	**kV-A @ 0.8 pf**	**Frequency**	**Voltage**	**Rated Speed L/hr (gal/hr)**	**ISO** L/hr (gal/hr)**
6B-CP	80 kWe @ 1500	100	50 Hz	380, 400, 415	22.4 (5.9)	11.3 (3.0)
6B-CP	99 kWe @ 1800	124	60 Hz	416, 440, 460, 480	27.1 (7.2)	14.0 (3.7)

* kWe reflects the approximate amount of power available when used in a keel cooled genset configuration
* Average fuel consumption based on ISO 8178 E3 Standard Test Cycle (variable speed models) and ISO 8178 D2 Standard Test Cycle (fixed speed models)

6B-CP

C Power Design Features

- World-class Cummins diesel engines matched to industry-leading Cummins alternators. Designed, integrated and assembled for optimal efficiency and performance
- Engineered for the tough demands of the marine environment with superior durability and high uptime requirements
- Simplified vessel integration with less complex mechanical connections
- Available with multi-station alarm and monitoring panels via a local digital network to match application requirements
- Integrated alarm system can be configured to communicate with ship's central data systems
- Flexible configurations available to customize the generating set to the vessel's operation requirements
- Comprehensive warranty applies to entire generating set and is valid globally

Engine Features

- Rugged in-line, six cylinder turbocharged diesel engine with mechanical fuel system provides excellent fuel economy and low maintenance requirements. Optional electronic speed governor
- Available in heat exchanger or keel cooled configurations
- Conforms to SOLAS surface temperature requirements and classifiable for Unmanned Machinery Space (UMS) applications as defined by IACS society rules
- Classification Society type approvals available
- Classed level units fitted with superior aluminum extruded wiring harness, duplex filtration and type-approved hardware

Alternator Features

- 12 wire, 3-phase alternator provides a broad range of re-connectable outputs
- Designed specifically for marine applications with an IP23 rating
- Single bearing close coupled permanent magnet generator provides constant excitation under all conditions
- Standard 2/3 pitch windings avoid excessive neutral currents
- Classifiable for Unmanned Machinery Space (UMS) applications as defined by IACS society rules
- Dynamically balanced rotors with sealed-for-life ball bearings
- Integrated anti-condensation heaters and two sets of thermistors

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Email: wave.master@cummins.com

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ITEM NUMBER
3170700

REVISIONS				
ZONE	REV	DESCRIPTION	DWN	APP'D
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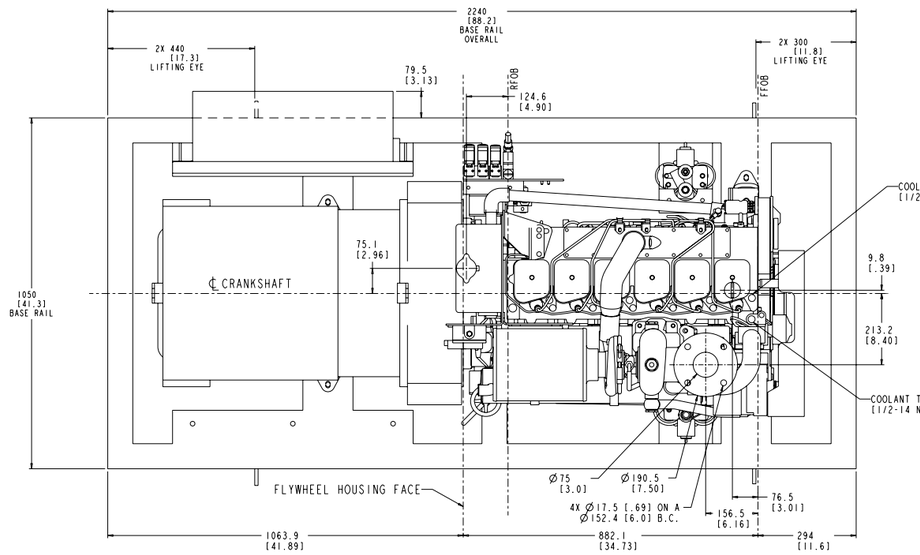
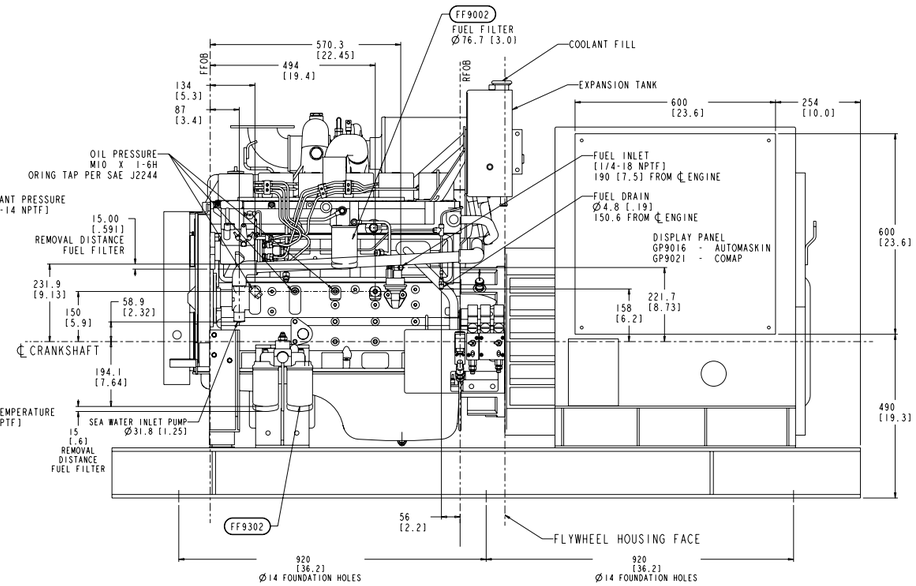
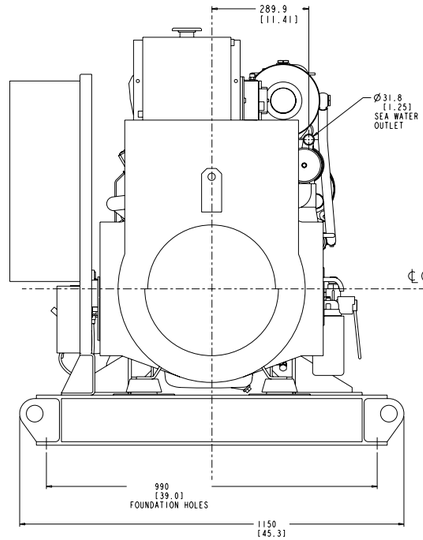


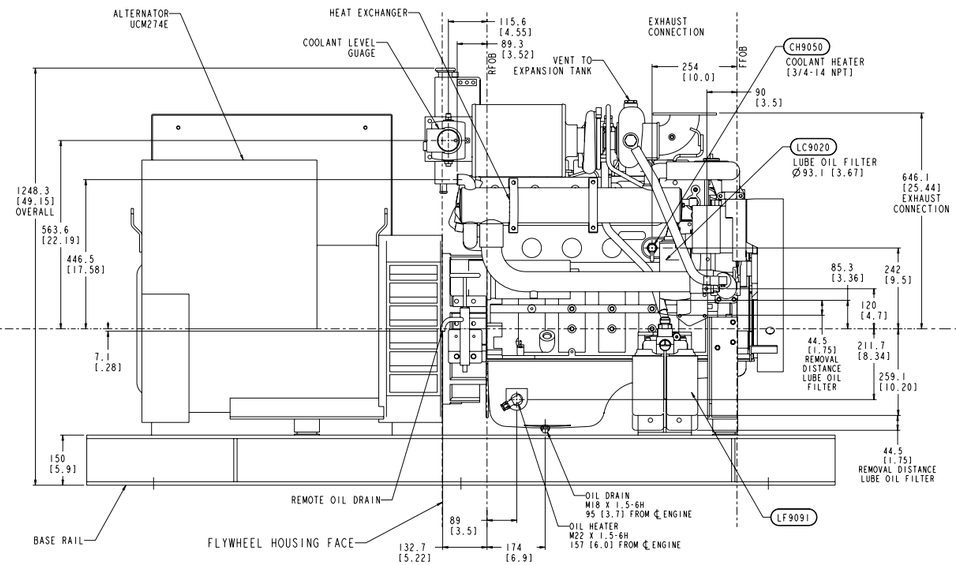
TOP VIEW



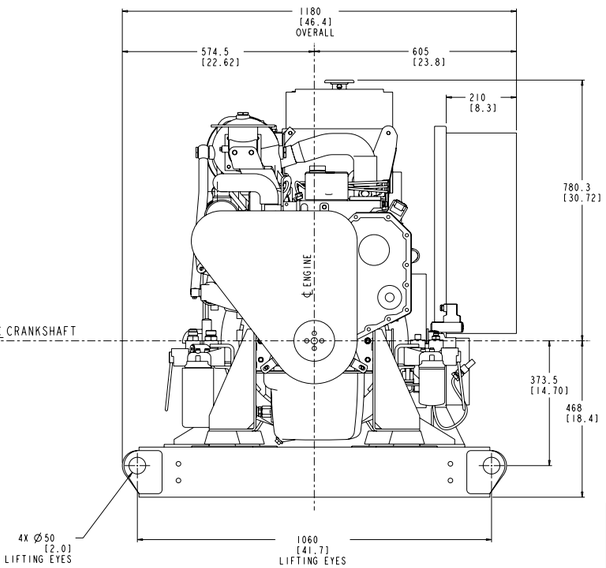
PORT VIEW



REAR VIEW



STARBOARD VIEW



FRONT VIEW

PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED:	.
REF. DRAWING STANDARDS:	ANSI Y14.5M ISO R1101
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MM [ ] ARE IN: IN	

CUMMINS INC.

ITEM NAME: LIGHTHOUSE 99 - HX
IDENTIFIER: INSTALLATION DIAGRAM

DWN	D.SOMIN	01-10-05	SIZE: J	CODE IDENT. NO.
CHD	UNCHECKED		ITEM NUMBER: 3170700	
APPD	.			
APPD			SCALE: .19	ITEM CONTROL: MCS

SHEET 1 OF 1

THIRD ANGLE PROJECTION

INCHES / MILLIMETERS

ITEM NUMBER
3170701

REVISIONS				
ZONE	REV	DESCRIPTION	DWN	APP'D
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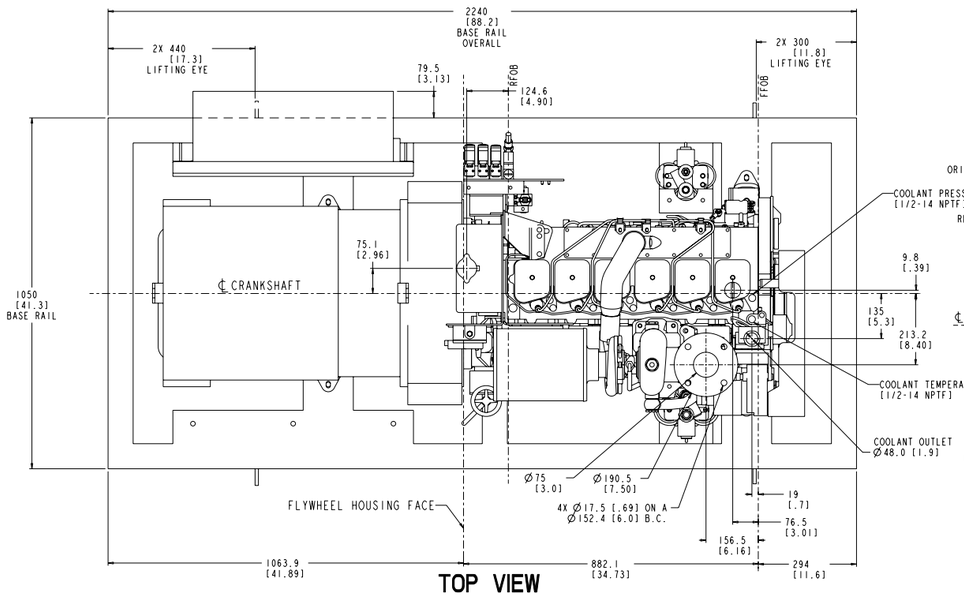
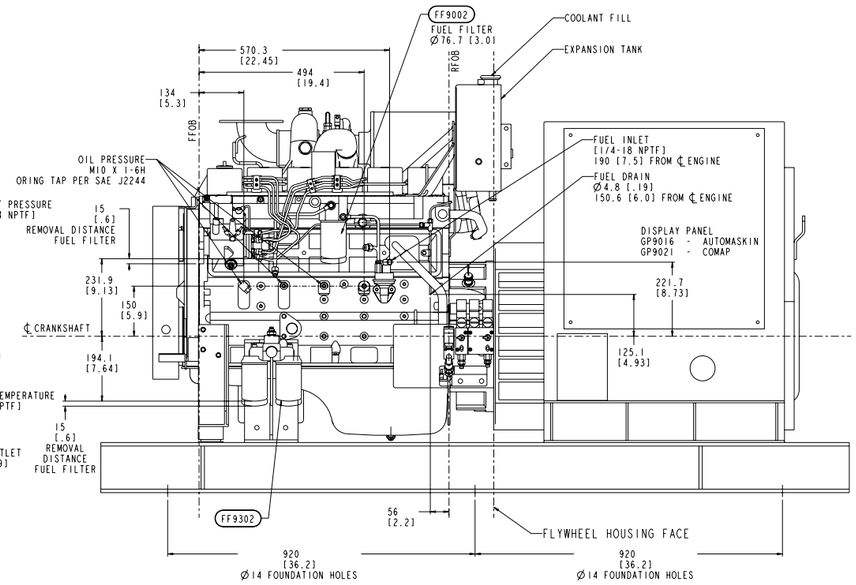
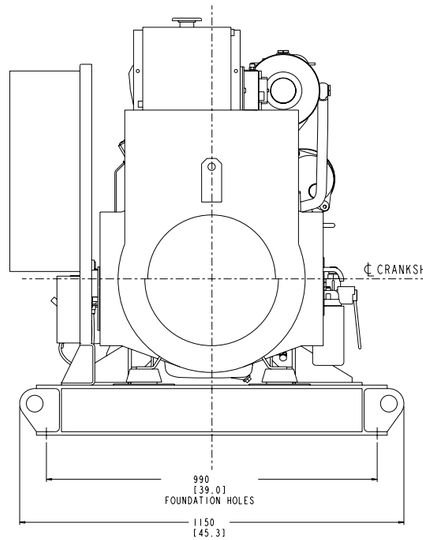


TOP VIEW



PORT VIEW



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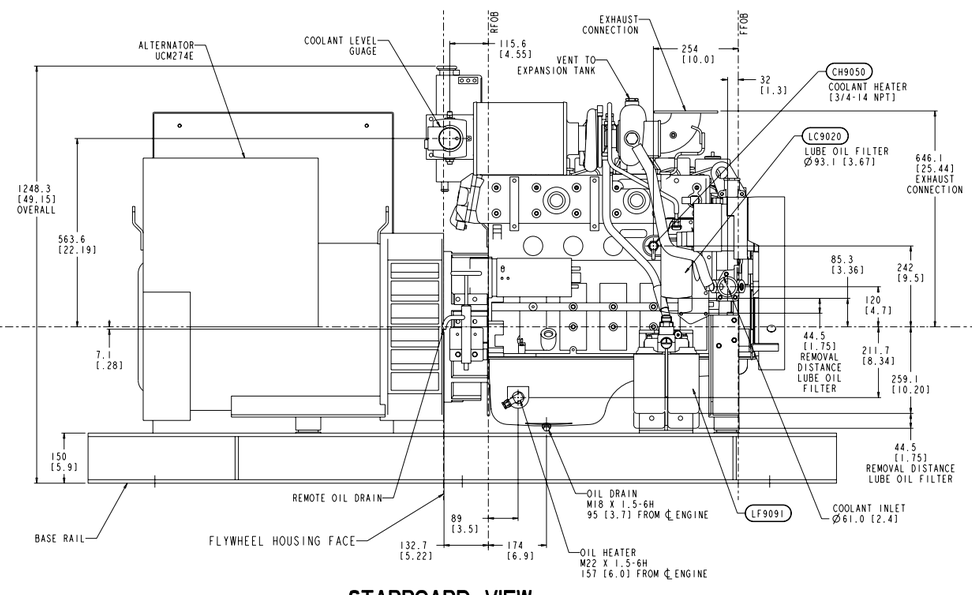
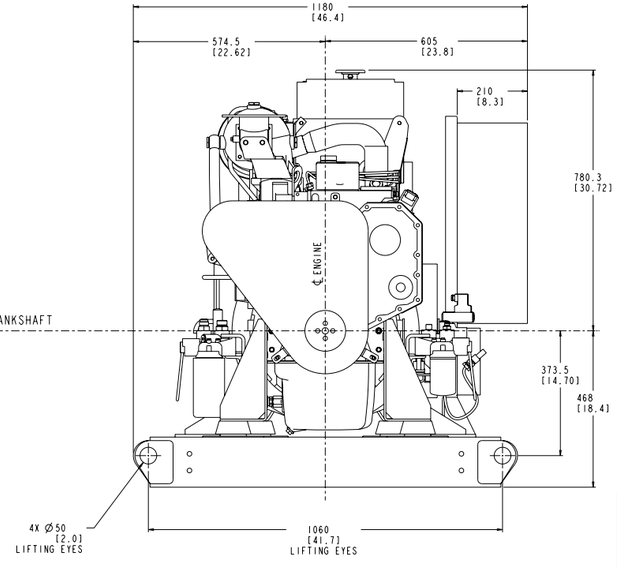


STARBOARD VIEW



FRONT VIEW

INCHES / MILLIMETERS

THIRD ANGLE PROJECTION

Product Graphics File
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: .	REF. DRAWING STANDARDS: ANSI Y14.5M ISO R1101	CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MM [ ] ARE IN: IN		ITEM NAME: LIGHTHOUSE 99 - KC
		IDENTIFIER: INSTALLATION DIAGRAM
DRN D.SOMIN	01-10-05	SIZE: J
CHD UNCHECKED		CODE IDENT. NO.: .
APPD .		ITEM NUMBER: 3170701
APPD		SCALE: .19
		ITEM CONTROL: MCS
		SHEET 1 OF 1

CUSTOMER INTERFACE

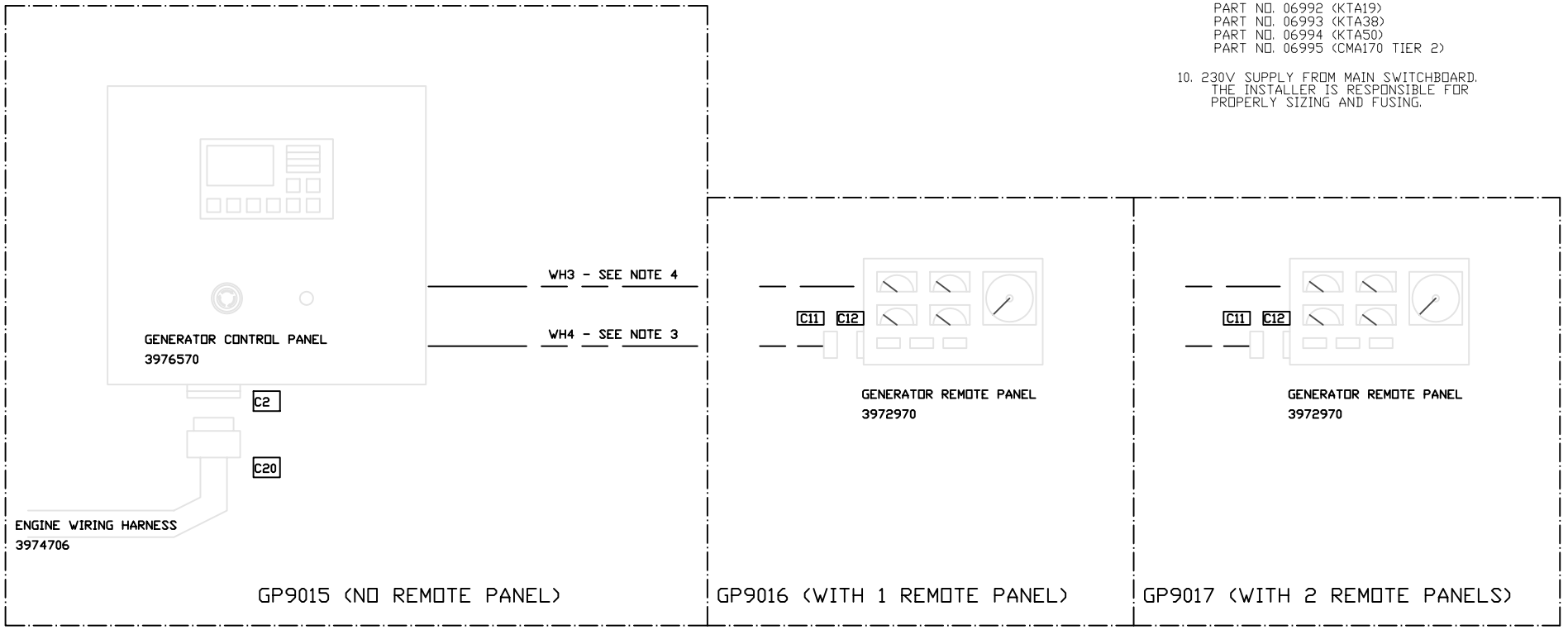
LOC.	PIN	OUTPUT SIGNAL	ELECTRICAL INTERFACE CHARACTERISTICS
X2	1+, 2-	Power to remote panel	Min. 0,5?mm wire, 2A fuse
X2	3-6	Com. to remote panel	RS 422, public data link

CUSTOMER INTERFACE

LOC.	PIN	INPUT SIGNAL	ACTIVE	INACTIVE	ELECTRICAL INTERFACE CHARACTERISTICS
X2	7	0V			0V
X2	8	Remote start	Keep closed until engine has started	NO contact. Engine not cranking	Connect to 0V to activate Works like the local start button
X2	9	Remote stop	Momentarily close to stop the engine	NO contact. Engine can be started, or is running	Connect to 0V to activate Works like the local stop button
X2	10	Remote ackn.	Momentarily close to reset alarms	NO contact. Alarms can be reset	Connect to 0V to activate Resets all active alarms

NOTES:

1. START BATTERY. THE INSTALLER IS RESPONSIBLE FOR PROPERLY SIZING AND FUSING BATTERY CONNECTIONS
2. BACKUP BATTERY. THE INSTALLER IS RESPONIBLE FOR PROPERLY SIZING AND FUSING BATTERY CONNECTIONS
3. WIRE HARNESS No. 4 (WH4) IS AUTO-MASKIN PART NO. 08228
4. CUSTOMER SUPPLIED WIRING
5. OPTIONAL STOP SOLENOID OUTPUT
6. OPTIONAL EMERGENCY STOP SOLENOID OUTPUT
7. SPARE DIGITAL ALARM-/SHUTDOWN SWITCHES
8. FUEL SOLENOID (KTA19/38/50 ENGINES ONLY)
9. CONTROL UNIT BOX, AUTO-MASKIN
   PART NO. 06990 (CMA99)
   PART NO. 06991 (CMA170)
   PART NO. 06992 (KTA19)
   PART NO. 06993 (KTA38)
   PART NO. 06994 (KTA50)
   PART NO. 06995 (CMA170 TIER 2)
10. 230V SUPPLY FROM MAIN SWITCHBOARD. THE INSTALLER IS RESPONSIBLE FOR PROPERLY SIZING AND FUSING.



GP9015 (NO REMOTE PANEL)

GP9016 (WITH 1 REMOTE PANEL)

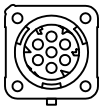
GP9017 (WITH 2 REMOTE PANELS)

6B C-POWER & C-SAFE

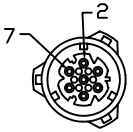
DIAGRAM, WIRING

WIRING/INSTALLATION DIAGRAM

4081995

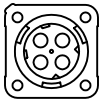


EGTS/CL1
WT/RELAY/TS1

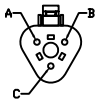


EGTS/CL1
WT/RELAY/TS1

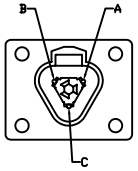
RELAY HEATER
WT



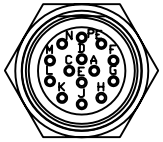
ENGINE TERMINAL BOX
HEATER TERMINAL BOX



EGTS
TS2



EGTS
TS2

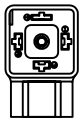


EGTS HARNESS
CT2/EGTS
CL1/CT2/EGTS

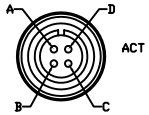
CL1
ACT

COOLANT EXTENSION HARNESS (HEAT EX)
COOLANT EXTENSION HARNESS (RADIATOR)

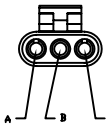
TS1
TS2

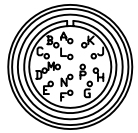


OT1
OP1
OP2
CP1
CT1
CT2

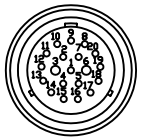


ACT

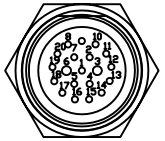




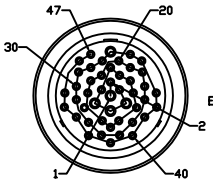
COOLANT TEMP/ FSO/ COOLANT LEVEL



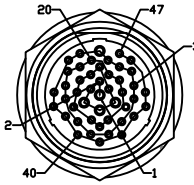
LEFT BANK DICONNECT



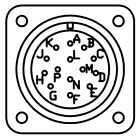
EGTS HARNESS
CT2/EGTS
CL1/CT2/EGTS



EXTENSION TO TERMINAL BOX UDEL



ENGINE TERMINAL BOX CONNECTOR



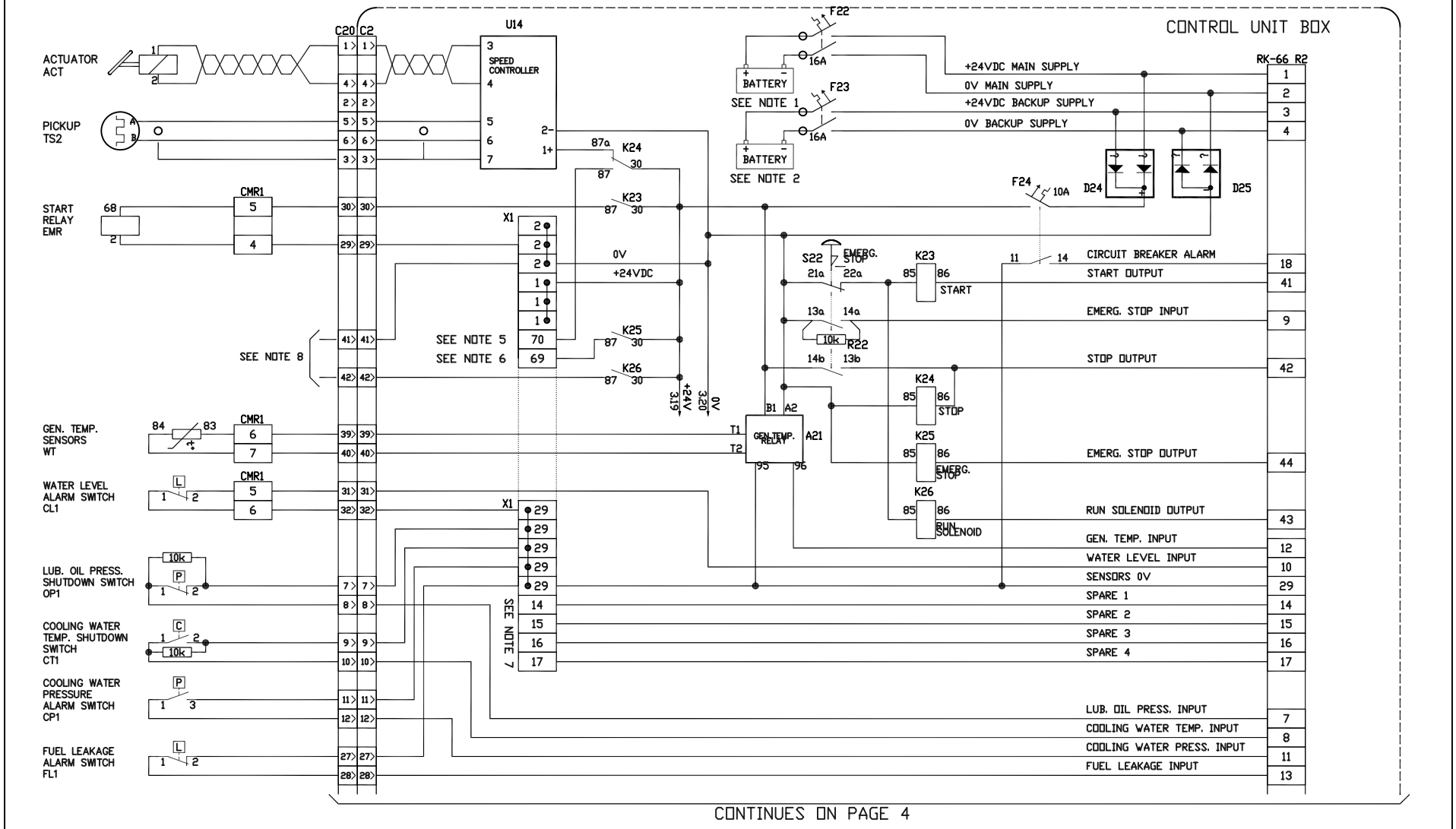
COOLANT TEMP/ FSO/ COOLANT LEVEL

6B C-POWER & C-SAFE

DIAGRAM, WIRING

WIRING/INSTALLATION DIAGRAM

4081995



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6B C-POWER & C-SAFE

DIAGRAM, WIRING

WIRING/INSTALLATION DIAGRAM

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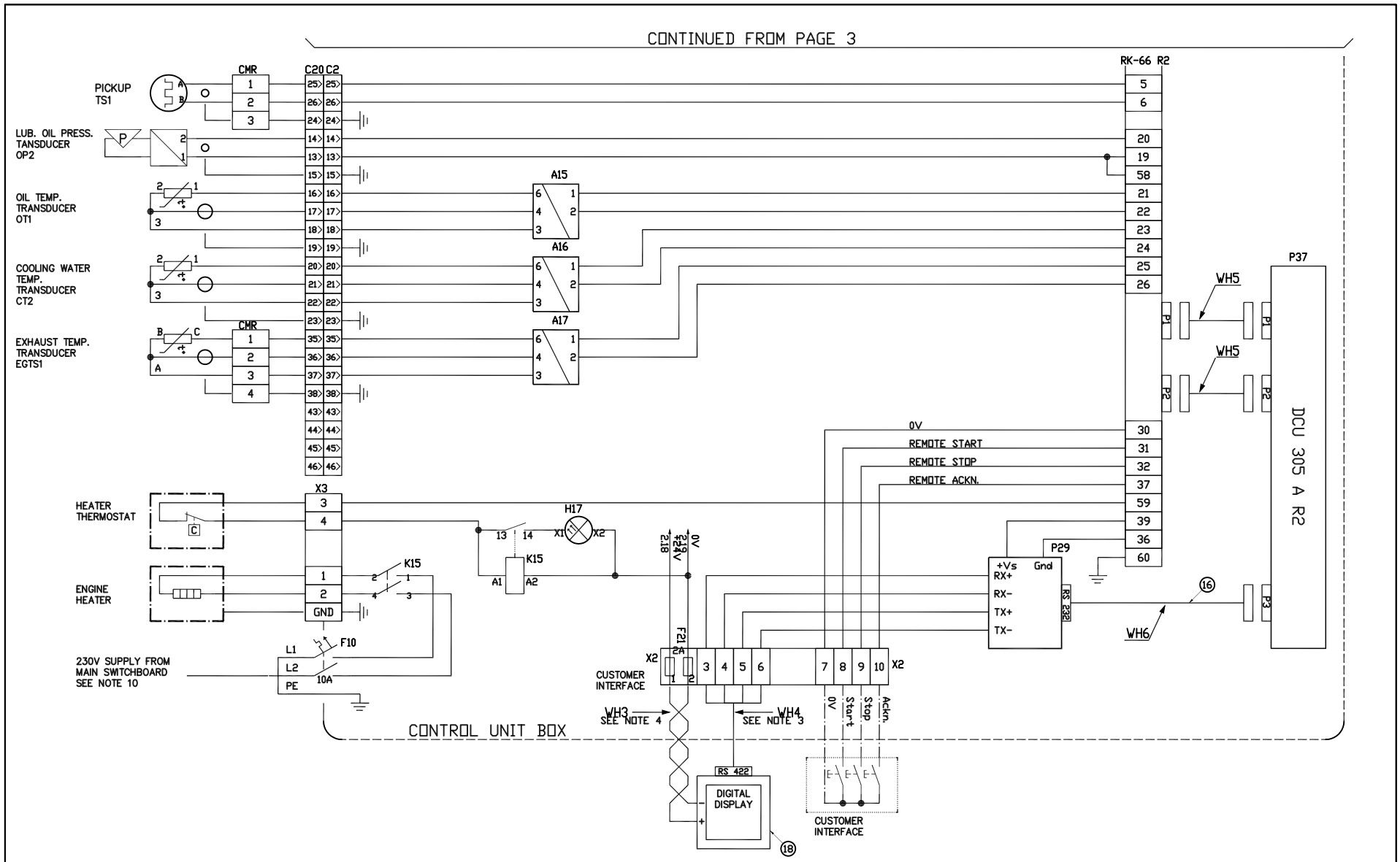

6B C-POWER & C-SAFE	
DIAGRAM, WIRING	
WIRING/INSTALLATION DIAGRAM	
4081995	