



Series 8003-1000

Distributed Control and Monitoring System

The Omni Chief is a flexible system with many configurations. The basic unit can function as a stand alone alarm annunciator. It is expandable and designed for seamless integration with the PMC IMACS graphic user interface.

This overall system provides reliable hardware and software to suit project specific requirements such as graphics, automation, safety systems, trending and health monitoring.

FEATURES

- Any combination of analog and digital inputs
- Industry standard inputs, see specifications
- Disable / enable points based on machinery status
- Virtual points based on calculations and logic functions
- 96 point indication panel with engraved ID tags
- Graphic LCD for additional information and setup
- High speed network connection for additional computer graphics, control and monitoring
- 28 key membrane keypad
- Menu driven programming
- Setup is password protected and stored in non-volatile memory
- DC to DC converters for enhanced noise immunity
- Relay outputs for communication, CPU, power and ground faults
- Self diagnostic
- Removable connectors throughout for easy maintenance
- Unit is field serviceable by replacing modules

49	STBD IB MAIN ENGINE LUBE OIL PRESSURE LOW DANGER - ENGINE SHUTDOWN	73	STBD OB MAIN ENGINE LUBE OIL PRESSURE LOW DANGER - ENGINE SHUTDOWN
50	STBD IB MAIN ENGINE LUBE OIL PRESSURE LOW WARNING - REDUCE POWER	74	STBD OB MAIN ENGINE LUBE OIL PRESSURE LOW WARNING - REDUCE POWER
51	STBD IB MAIN ENGINE LUBE OIL FILTER PRESSURE DIFFERENTIAL HIGH	75	STBD OB MAIN ENGINE LUBE OIL FILTER PRESSURE DIFFERENTIAL HIGH
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57	STBD IB MAIN ENGINE HT COOLING WATER CIRCUIT PRESSURE LOW WARNING - REDUCE POWER	81	STBD OB MAIN ENGINE HT COOLING WATER CIRCUIT PRESSURE LOW WARNING - REDUCE POWER
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59	STBD IB MAIN ENGINE HT COOLING WATER CIRCUIT TEMPERATURE HIGH WARNING - REDUCE POWER	83	STBD OB MAIN ENGINE HT COOLING WATER CIRCUIT TEMPERATURE HIGH WARNING - REDUCE POWER
60	STBD IB MAIN ENGINE HT COOLING WATER CIRCUIT TEMPERATURE HIGH	84	STBD OB MAIN ENGINE HT COOLING WATER CIRCUIT TEMPERATURE HIGH
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62	STBD IB MAIN ENGINE FUEL PIPE LEAKAGE	86	STBD OB MAIN ENGINE FUEL PIPE LEAKAGE
63	STBD IB MAIN ENGINE OVERSPEED MECHANICAL TRIP RELEASED	87	STBD OB MAIN ENGINE OVERSPEED MECHANICAL TRIP RELEASED
64	STBD IB MAIN ENGINE CHARGE AIR AFTER COOLER TEMPERATURE LOW	88	STBD OB MAIN ENGINE CHARGE AIR AFTER COOLER TEMPERATURE LOW
65	STBD IB MAIN ENGINE TACHOMETER CIRCUIT FAILED	89	STBD OB MAIN ENGINE TACHOMETER CIRCUIT FAILED
66	STBD IB MAIN ENGINE STARTING CIRCUIT FAILED	90	STBD OB MAIN ENGINE STARTING CIRCUIT FAILED
67	STBD GEARBOX LUBE OIL PRESSURE LOW	91	STBD MAIN ENGINE COOLING WATER EXPANSION TANK LEVEL LOW
68	STBD GEARBOX LUBE OIL TEMPERATURE HIGH	92	STBD STERN TUBE COOLING WATER PRESSURE LOW
69	STBD CP PROPELLER HYDRAULIC OIL PRESSURE LOW	93	STBD CONTROL AIR PRESSURE LOW
70	STBD CP PROPELLER HYDRAULIC OIL TEMPERATURE HIGH	94	
71	STBD CP PROPELLER SEAL HEADER TANK LEVEL LOW	95	
72	STBD CP PROPELLER SUMP TANK LEVEL LOW	96	STARTING AIR PRESSURE

Omni Chief

Distributed Control and Monitoring System

PRIME MOVER CONTROLS INC.
Vancouver BC Canada

POWER ON
COM ACTIVE
CPU OK
GROUND FAULT

Alarm Point [2] INP02
 ME2 TUBE OIL PRESSURE
 HIGH 9999
 LOW 241
 LLOW 206
 Aps

581

A	B	C	D	E	F	G
7	8	9	⏏	ESC	INS	DEL
H	I	J	K	L	M	N
4	5	6	⏏	NEXT	⏏	PREV
O	P	Q	R	S	T	U
1	2	3	⏏	⏏	⏏	⏏
V	W	X	Y	Z	ENTER	SHIFT
0	±	.	CLR	MENU	ENTER	SHIFT

TEST

ACKNOWLEDGE

SILENCE

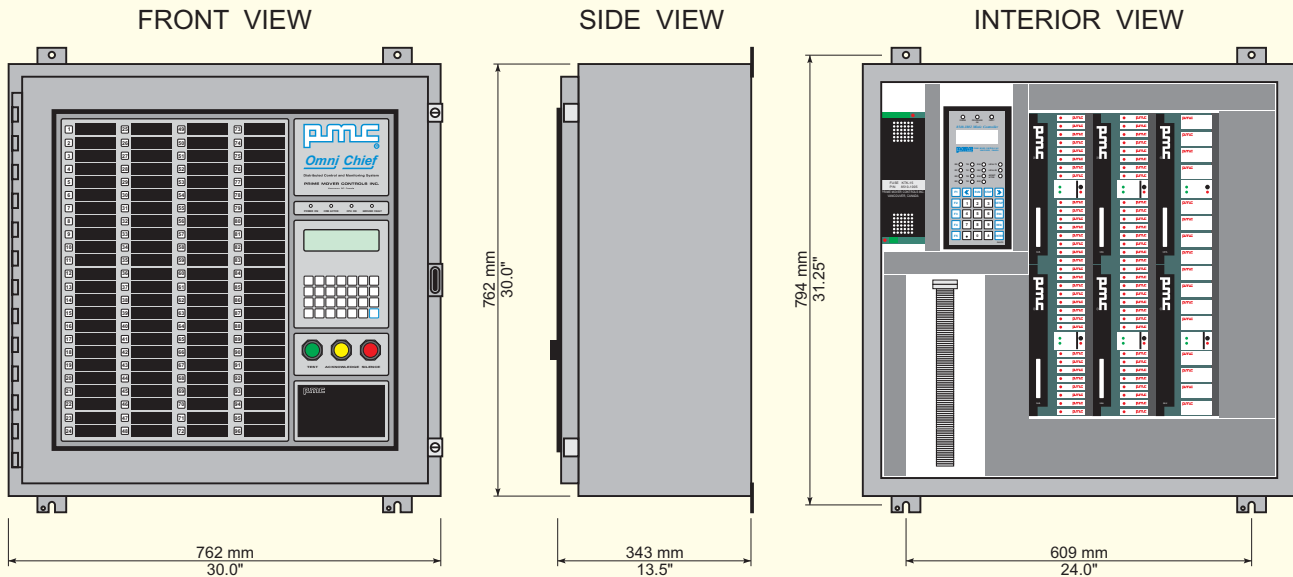
LOCAL OMNICHIEF

MAIN ENGINES

C1

P/N 8003-8888 S/N 888888-888-888
 PRIME MOVER CONTROLS INC. VANCOUVER, BC, CANADA

Specifications for Series 8003-1000 Distributed Control and Monitoring System



Supply:

- Nominal 24 VDC, range 17 to 36 VDC
- 5 Amps typical, may vary depending on system configuration
- Reverse and overvoltage protection to 120 VAC
- Input power fuse, 15 amps, type KTK-15

Environmental:

- Operating temperature 0 to +50°C
- Storage temperature -20 to +60°C
- CE compliant for EMC (IEC/EN60945)

Physical:

- IP65 splash proof front
- Dimensions 30" H x 30" W x 13.5" D (762 mm H x 762 mm W x 343 mm D)
- Enclosure size and weight may vary depending on analog / digital input combination

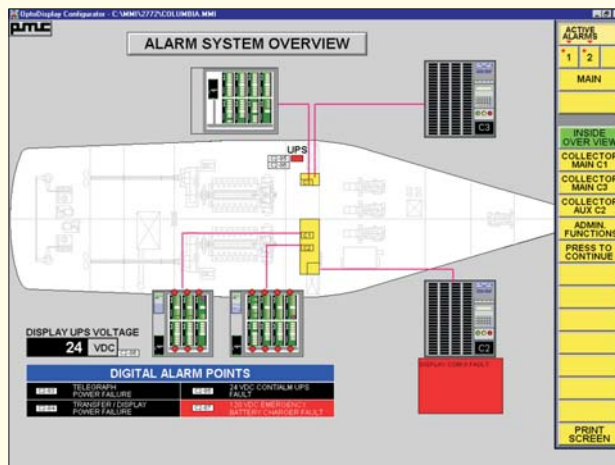
Options:

- Integration to PMC IMACS graphic user interface
- Local connection for lap top computer
- Additional displays can be added for alternate display locations
- Various sizes of remote collectors (without display) can be implemented to optimize wiring
- Output modules
- Optical isolation protection for inputs
- Transducers
- Bells, horns and beacons
- Factory preprogramming
- Dual communication
- Project specific connection diagrams drawn with AutoCAD
- Installation, calibration and testing of complete system by PMC personnel

Input Module Types (max 130 per Omni Chief):

- Current (4-20 mA, 0-5 A)
- VDC digital (2.5-16, 2.5-28, 4-16, 10-32, 35-60, 90-140, 180-280)
- VAC digital (12-32, 35-60, 90-140, 180-280)
- VDC analog (0 to 0.1, 0 to 1, 0 to 5, 0 to 10, -5 to 5, -10 to 10)
- VAC/DC analog (0 to 100 V)
- Frequency
- Quadrature
- Manual
- Thermocouple (B, E, G, J, K, R, S, T)
- RTD (PT100)
- Velocity

Sample PMC IMACS graphic screen



PRIME MOVER CONTROLS INC.

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