

Engine Room Simulator

ERS M22 10 PC-IV Ferry

VARIABLE LIST

Department/Author:

Approved by:

Berit Baggerud (s)

Arild Hermansen (s)

© 2005 KONGSBERG MARITIME AS
All rights reserved
No part of this work covered by the copyright
hereon may be reproduced or otherwise copied
without prior permission from
KONGSBERG MARITIME AS

DOCUMENT STATUS

Issue No.	Date/Year	Inc. by	Issue No.	Date/Year	Inc. by
A	26-Nov-03	BEBA			
B	15-Dec-04	BEBA			
C	28-Oct-05	BEBA			

CHANGES IN DOCUMENT

Issue No.	ECO No.	Paragraph No.	Paragraph Heading/ Description of Change
B	MP-1535		Updated Variable list to latest revision.
C	MP-1571		Updated according to latest revision.



<This page is intentionally left blank>

TABLE OF CONTENTS

Section		Page
1	DIRECTORY LIST	1
2	VARIABLE LIST PAGES	2
2.1	Page: 0100 MD01** MAIN SEA WATER SYSTEM - PRESS/FLOWS.....	2
2.2	Page: 0101 MD01** MAIN SEA WATER SYSTEM - VALVES/FLOWS	2
2.3	Page: 0102 MD01** MAIN SEA WATER SYSTEM - TANK VALVES	3
2.4	Page: 0103 MD01** MAIN SEA WATER SYSTEM - TANK LEVELS	3
2.5	Page: 0104 MD01** MAIN SEA WATER SYSTEM - EMERG. / FIRE	4
2.6	Page: 0190 MD01** CONFIGURABLE PAGE	4
2.7	Page: 0200 MD02** FO SUPPLY SYSTEM - MAIN VARIABLES	5
2.8	Page: 0201 MD02** FO SUPPLY SYSTEM - HEATING.....	5
2.9	Page: 0202 MD02** FO SUPPLY SYSTEM - BOOSTER PUMPS	6
2.10	Page: 0203 MD02** FO SUPPLY SYSTEM - SUPPLY PUMPS	6
2.11	Page: 0204 MD02** FO SUPPLY SYSTEM - VENTING TANK	7
2.12	Page: 0205 MD02** FO SUPPLY SYSTEM - FO ISOLATION	7
2.13	Page: 0210 MD02** FO SUPPLY SYSTEM - VISCO CONTROL (1).....	8
2.14	Page: 0211 MD02** FO SUPPLY SYSTEM - VISCO CONTROL (2).....	8
2.15	Page: 0220 MD02** FO SUPPLY SYSTEM - ME FO HEATERS.....	9
2.16	Page: 0221 MD02** FO SUPPLY SYSTEM - FUEL OIL DATA	9
2.17	Page: 0290 MD02** CONFIGURABLE PAGE	10
2.18	Page: 0300 MD03** HFO SERVICE TANK - FLOW/LEVEL.....	10
2.19	Page: 0301 MD03** DO SERVICE TANK - FLOW/LEVEL	11
2.20	Page: 0302 MD03** FO SERVICE TANK - HEATING.....	11
2.21	Page: 0303 MD03** FO SERVICE TANK - PURIFIER ROUTING	12
2.22	Page: 0390 MD03** CONFIGURABLE PAGE	12
2.23	Page: 0400 MD04** HFO SETTLING TANK 1	13
2.24	Page: 0401 MD04** HFO SETTLING TANK 2	13
2.25	Page: 0402 MD04** HFO SETTLING TANK 1/2 HEATING	14
2.26	Page: 0490 MD04** CONFIGURABLE PAGE	14
2.27	Page: 0500 MD05** FO TRANSFER SYSTEM / SPILL OIL TANK	15
2.28	Page: 0501 MD05** BUNKER OIL TANK - AFT.....	15
2.29	Page: 0502 MD05** BUNKER OIL TANK - PORT	16
2.30	Page: 0503 MD05** BUNKER OIL TANK - STBD	16
2.31	Page: 0504 MD05** BUNKER OIL TANK - FORE	17
2.32	Page: 0590 MD05** CONFIGURABLE PAGE	17
2.33	Page: 0600 MD06** HFO SEPARATOR 1 - MAIN VARIABLES	18
2.34	Page: 0601 MD06** HFO SEPARATOR 1 - FLOW CONTROL	18
2.35	Page: 0602 MD06** HFO SEPARATOR 1 - AUXIL SYSTEMS	19
2.36	Page: 0610 MD06** HFO SEPARATOR 1 - TEMP CONTROL.....	19
2.37	Page: 0611 MD06** HFO SEPARATOR 1 - ALCAP CONTROL	20
2.38	Page: 0690 MD06** CONFIGURABLE PAGE	20
2.39	Page: 0700 MD07** HFO SEPARATOR 2 - MAIN VARIABLES	21
2.40	Page: 0701 MD07** HFO SEPARATOR 2 - FLOW CONTROL	21
2.41	Page: 0702 MD07** HFO SEPARATOR 2 - AUXIL SYSTEMS	22
2.42	Page: 0710 MD07** HFO SEPARATOR 2 - TEMP CONTROL.....	22
2.43	Page: 0711 MD07** HFO SEPARATOR 2 - ALCAP CONTROL	23
2.44	Page: 0790 MD07** CONFIGURABLE PAGE	23
2.45	Page: 0800 MD08** DO PURIFIER SYSTEM - MAIN VARIABLES	24
2.46	Page: 0801 MD08** DO PURIFIER SYSTEM - FLOW CONTROL.....	24
2.47	Page: 0802 MD08** DO PURIFIER SYSTEM - AUXIL VARIABLES	25
2.48	Page: 0810 MD08** DO PURIFIER SYSTEM - TEMP CONTROL	25



2.49	Page:0890 MD08**	CONFIGURABLE PAGE	26
2.50	Page:0900 MD09**	LO PURIFIER SYSTEM - MAIN VARIABLES.....	26
2.51	Page:0901 MD09**	LO PURIFIER SYSTEM - FLOW CONTROL	27
2.52	Page:0902 MD09**	LO PURIFIER SYSTEM - AUXIL VARIABLES.....	27
2.53	Page:0910 MD09**	LO PURIFIER SYSTEM - TEMP CONTROL	28
2.54	Page:0990 MD09**	CONFIGURABLE PAGE	28
2.55	Page:1000 MD10**	ME 1 POWER SYSTEM (1)	29
2.56	Page:1001 MD10**	ME 1 POWER SYSTEM (2)	29
2.57	Page:1010 MD10**	ME 1 CONTROL SYSTEM - LOCAL CONTROL	30
2.58	Page:1020 MD10**	AUTO CHIEF CONTROL PANEL (1)	30
2.59	Page:1021 MD10**	AUTO CHIEF CONTROL PANEL (2)	31
2.60	Page:1022 MD10**	AUTO CHIEF CONTROL PANEL (3)	31
2.61	Page:1023 MD10**	AUTO CHIEF CONTROL PANEL (4)	32
2.62	Page:1024 MD10**	AUTO CHIEF - SLOW / SHUTDOWN ACTIONS (1) ...	32
2.63	Page:1025 MD10**	AUTO CHIEF - SLOW / SHUTDOWN ACTIONS (2) ...	33
2.64	Page:1026 MD10**	AUTO CHIEF - SLOW / SHUTDOWN ACTIONS (3) ...	33
2.65	Page:1027 MD10**	AUTO CHIEF - EMERGENCY CONTROL.....	34
2.66	Page:1090 MD10**	CONFIGURABLE PAGE	34
2.67	Page:1100 MD11**	ME 1 JW SYSTEM - MAIN VARIABLES.....	35
2.68	Page:1101 MD11**	ME 1 JW SYSTEM - AUXIL VARIABLES.....	35
2.69	Page:1110 MD11**	ME 1 JW SYSTEM - TEMP CONTROL.....	36
2.70	Page:1190 MD11**	CONFIGURABLE PAGE	36
2.71	Page:1200 MD12**	ME 1 LO SYSTEM - MAIN VARIABLES.....	37
2.72	Page:1201 MD12**	ME 1 LO SYSTEM - AUXIL VARIABLES.....	37
2.73	Page:1202 MD12**	ME 1 LO SYSTEM - BEARING TEMP.....	38
2.74	Page:1210 MD12**	ME 1 LO SYSTEM - TEMP CONTROL (1)	38
2.75	Page:1211 MD12**	ME 1 LO SYSTEM - TEMP CONTROL (2)	39
2.76	Page:1250 MD12**	ME 1 ROCKER ARM LO SYSTEM - MAIN VAR.	39
2.77	Page:1251 MD12**	ME 1 ROCKER ARM LO SYSTEM - AUXIL (1).....	40
2.78	Page:1252 MD12**	ME 1 ROCKER ARM LO SYSTEM - AUXIL (2).....	40
2.79	Page:1290 MD12**	CONFIGURABLE PAGE	41
2.80	Page:1300 MD13**	ME 1 TURBOCHARGER SYSTEM (1)	41
2.81	Page:1301 MD13**	ME 1 TURBOCHARGER SYSTEM (2)	42
2.82	Page:1302 MD13**	ME 1 EXHAUST TEMPERATURES (1).....	42
2.83	Page:1303 MD13**	ME 1 EXHAUST TEMPERATURES (2).....	43
2.84	Page:1390 MD13**	CONFIGURABLE PAGE	43
2.85	Page:1400 MD14**	ME 1 SW SYSTEM - PRESS/TEMP	44
2.86	Page:1401 MD14**	ME 1 SW SYSTEM - FLOWS	44
2.87	Page:1402 MD14**	ME 1 SW SYSTEM - VALVES/PUMPS	45
2.88	Page:1410 MD14**	ME 1 SW SYSTEM - TEMP CONTROL (1)	45
2.89	Page:1411 MD14**	ME 1 SW SYSTEM - TEMP CONTROL (2)	46
2.90	Page:1412 MD14**	ME 1 SW SYSTEM - TEMP CONTROL (3)	46
2.91	Page:1420 MD14**	ME 1 SW SYSTEM - PUMPS	47
2.92	Page:1490 MD14**	CONFIGURABLE PAGE	47
2.93	Page:1500 MD15**	ME 1 Inj CW SYSTEM - MAIN VARIABLES (1).....	48
2.94	Page:1501 MD15**	ME 1 Inj CW SYSTEM - EXPANSION TANK (2)	48
2.95	Page:1502 MD15**	ME 1 Inj CW SYSTEM - TEMP CONTROL (3)	49
2.96	Page:1590 MD15**	CONFIGURABLE PAGE	49
2.97	Page:2000 MD20**	ME 2 POWER SYSTEM (1)	50
2.98	Page:2001 MD20**	ME 2 POWER SYSTEM (2)	50
2.99	Page:2010 MD20**	ME 2 CONTROL SYSTEM (1) (AUTOCHIEF).....	51
2.100	Page:2090 MD20**	CONFIGURABLE PAGE	51
2.101	Page:2100 MD21**	ME 2 JW SYSTEM - MAIN VARIABLES.....	52
2.102	Page:2101 MD21**	ME 2 JW SYSTEM - AUXIL VARIABLES.....	52



2.103	Page: 2110 MD21**	ME 2 JW SYSTEM - TEMP CONTROL	53
2.104	Page: 2190 MD21**	CONFIGURABLE PAGE	53
2.105	Page: 2200 MD22**	ME 2 LO SYSTEM - MAIN VARIABLES	54
2.106	Page: 2201 MD22**	ME 2 LO SYSTEM - AUXIL VARIABLES	54
2.107	Page: 2202 MD22**	ME 2 LO SYSTEM - BEARING TEMP	55
2.108	Page: 2210 MD22**	ME 2 LO SYSTEM - TEMP CONTROL (1)	55
2.109	Page: 2211 MD22**	ME 2 LO SYSTEM - TEMP CONTROL (2)	56
2.110	Page: 2250 MD22**	ME 2 ROCKER ARM LO SYSTEM - MAIN VAR.	56
2.111	Page: 2251 MD22**	ME 2 ROCKER ARM LO SYSTEM - AUXIL (1)	57
2.112	Page: 2252 MD22**	ME 2 ROCKER ARM LO SYSTEM - AUXIL (2)	57
2.113	Page: 2290 MD22**	CONFIGURABLE PAGE	58
2.114	Page: 2300 MD23**	ME 2 TURBOCHARGER SYSTEM (1).....	58
2.115	Page: 2301 MD23**	ME 2 TURBOCHARGER SYSTEM (2).....	59
2.116	Page: 2302 MD23**	ME 2 EXHAUST TEMPERATURES (1).....	59
2.117	Page: 2303 MD23**	ME 2 EXHAUST TEMPERATURES (2).....	60
2.118	Page: 2390 MD23**	CONFIGURABLE PAGE	60
2.119	Page: 2400 MD24**	ME 2 SW SYSTEM - PRESS/TEMP	61
2.120	Page: 2401 MD24**	ME 2 SW SYSTEM - FLOWS	61
2.121	Page: 2402 MD24**	ME 2 SW SYSTEM - VALVES/PUMPS.....	62
2.122	Page: 2410 MD24**	ME 2 SW SYSTEM - TEMP CONTROL (1)	62
2.123	Page: 2411 MD24**	ME 2 SW SYSTEM - TEMP CONTROL (2)	63
2.124	Page: 2412 MD24**	ME 2 SW SYSTEM - TEMP CONTROL (3)	63
2.125	Page: 2420 MD24**	ME 2 SW SYSTEM - PUMPS.....	64
2.126	Page: 2490 MD24**	CONFIGURABLE PAGE	64
2.127	Page: 2500 MD25**	ME 2 Inj CW SYSTEM - MAIN VARIABLES (1)	65
2.128	Page: 2501 MD25**	ME 2 Inj CW SYSTEM - EXPANSION TANK (2)	65
2.129	Page: 2502 MD25**	ME 2 Inj CW SYSTEM - TEMP CONTROL (3)	66
2.130	Page: 2590 MD25**	CONFIGURABLE PAGE	66
2.131	Page: 5000 MD50**	PORT PROPELLER GEAR LO SYSTEM (1)	67
2.132	Page: 5001 MD50**	PORT PROPELLER GEAR LO SYSTEM (2)	67
2.133	Page: 5010 MD50**	PORT PROPELLER GEAR LO SYSTEM (3)	68
2.134	Page: 5090 MD50**	CONFIGURABLE PAGE	68
2.135	Page: 5100 MD51**	STBD PROPELLER GEAR LO SYSTEM (1)	69
2.136	Page: 5101 MD51**	STBD PROPELLER GEAR LO SYSTEM (2)	69
2.137	Page: 5110 MD51**	STBD PROPELLER GEAR LO SYSTEM (3)	70
2.138	Page: 5190 MD51**	CONFIGURABLE PAGE	70
2.139	Page: 5200 MD52**	PORT PROPELLER SERVO OIL SYSTEM (1)	71
2.140	Page: 5201 MD52**	PORT PROPELLER SERVO OIL SYSTEM (2)	71
2.141	Page: 5202 MD52**	PORT PROP SO SYSTEM - SHAFT BEARINGS	72
2.142	Page: 5210 MD52**	PORT PROPELLER CONTROL	72
2.143	Page: 5290 MD52**	CONFIGURABLE PAGE	73
2.144	Page: 5300 MD53**	STBD PROPELLER SERVO OIL SYSTEM (1)	73
2.145	Page: 5301 MD53**	STBD PROPELLER SERVO OIL SYSTEM (2)	74
2.146	Page: 5302 MD53**	STBD PROP SO SYSTEM - SHAFT BEARINGS	74
2.147	Page: 5310 MD53**	STBD PROPELLER CONTROL	75
2.148	Page: 5390 MD53**	CONFIGURABLE PAGE	75
2.149	Page: 5400 MD54**	PORT STERN TUBE SYSTEM - GRAVITY TANKS	76
2.150	Page: 5401 MD54**	PORT STERN TUBE SYSTEM - BEARINGS	76
2.151	Page: 5402 MD54**	PORT STERN TUBE SYSTEM - LO COOLER	77
2.152	Page: 5430 MD54**	PORT STERN TUBE SYSTEM - MISC	77
2.153	Page: 5490 MD54**	CONFIGURABLE PAGE	78
2.154	Page: 5500 MD55**	STBD STERN TUBE SYSTEM - GRAVITY TANKS	78
2.155	Page: 5501 MD55**	STBD STERN TUBE SYSTEM - BEARINGS	79
2.156	Page: 5502 MD55**	STBD STERN TUBE SYSTEM - LO COOLER	79



2.157	Page: 5530 MD55**	STBD STERN TUBE SYSTEM - MISC	80
2.158	Page: 5590 MD55**	CONFIGURABLE PAGE	80
2.159	Page: 5600 MD56**	SHIP PROPULSION SYSTEM.....	81
2.160	Page: 5601 MD56**	SHIP PROPULSION SYSTEM - STEERING GEAR.....	81
2.161	Page: 5610 MD56**	SHIP COURSE CONTROL	82
2.162	Page: 5611 MD56**	SHIP PROPULSION SYSTEM - HULL FORCES	82
2.163	Page: 5690 MD56**	CONFIGURABLE PAGE	83
2.164	Page: 5700 MD57**	SHIP LOAD CONDITION (1).....	83
2.165	Page: 5701 MD57**	SHIP LOAD CONDITION (2).....	84
2.166	Page: 5790 MD57**	CONFIGURABLE PAGE	84
2.167	Page: 5800 MD58**	ENGINE ROOM VENTILATION / FIRE.....	85
2.168	Page: 5801 MD58**	SHIP FIRE EXTINGUISHING SYSTEM	85
2.169	Page: 5810 MD58**	STEERING GEAR SYSTEM.....	86
2.170	Page: 5811 MD58**	STEERING GEAR SYSTEM.....	86
2.171	Page: 5812 MD58**	STEERING GEAR SYSTEM.....	87
2.172	Page: 5813 MD58**	STEERING GEAR SYSTEM.....	87
2.173	Page: 5890 MD58**	CONFIGURABLE PAGE	88
2.174	Page: 6000 MD60**	START AIR RECEIVER SYSTEM (1)	88
2.175	Page: 6001 MD60**	START AIR RECEIVER SYSTEM (2)	89
2.176	Page: 6002 MD60**	SERV AIR RECEIVER SYSTEM (1)	89
2.177	Page: 6003 MD60**	SERV AIR RECEIVER SYSTEM (2)	90
2.178	Page: 6004 MD60**	START AIR COMPRESSOR 1.....	90
2.179	Page: 6005 MD60**	START AIR COMPRESSOR 2.....	91
2.180	Page: 6006 MD60**	SERVICE AIR COMPRESSOR	91
2.181	Page: 6007 MD60**	AIR RECEIVER SAFETY VALVE DATA.....	92
2.182	Page: 6090 MD60**	CONFIGURABLE PAGE	92
2.183	Page: 6100 MD61**	FRESH WATER GENERATOR - EJECTOR SYSTEM....	93
2.184	Page: 6101 MD61**	FRESH WATER GENERATOR - SW FEED.....	93
2.185	Page: 6102 MD61**	FRESH WATER GENERATOR - HEATING SECT. 1....	94
2.186	Page: 6103 MD61**	FRESH WATER GENERATOR - HEATING SECT. 2....	94
2.187	Page: 6104 MD61**	FRESH WATER GENERATOR - COOLING	95
2.188	Page: 6105 MD61**	FRESH WATER GENERATOR - DISTILLATE	95
2.189	Page: 6106 MD61**	FRESH WATER GENERATOR - VACUUM CONTROL ...	96
2.190	Page: 6107 MD61**	FRESH WATER GENERATOR - ISOLATION.....	96
2.191	Page: 6130 MD61**	FRESH WATER GENERATOR - MISC	97
2.192	Page: 6190 MD61**	CONFIGURABLE PAGE	97
2.193	Page: 6200 MD62**	SLUDGE TANK / INCINERATOR	98
2.194	Page: 6201 MD62**	BILGE WELL SYSTEM - LEVELS	98
2.195	Page: 6202 MD62**	BILGE WELL SYSTEM - LEVELS	99
2.196	Page: 6290 MD62**	CONFIGURABLE PAGE	99
2.197	Page: 6300 MD63**	BILGE SEPARATOR (1)	100
2.198	Page: 6301 MD63**	BILGE SEPARATOR (2)	100
2.199	Page: 6302 MD63**	CLEAN BILGE WATER TANK.....	101
2.200	Page: 6390 MD63**	CONFIGURABLE PAGE	101
2.201	Page: 6400 MD64**	REFRIG SYSTEM - COMPRESSOR	102
2.202	Page: 6401 MD64**	REFRIG SYSTEM - CONDENSER	102
2.203	Page: 6402 MD64**	REFRIG SYS -EVAPORATOR CARGO H / PROV S ...	103
2.204	Page: 6403 MD64**	REFRIG SYSTEM - LIQUID RECEIVER	103
2.205	Page: 6404 MD64**	REFRIG SYSTEM - COMPR LO SYSTEM	104
2.206	Page: 6405 MD64**	REFRIG SYSTEM - SW SUPPLY.....	104
2.207	Page: 6406 MD64**	REFRIG SYSTEM - MISCELLANEOUS	105
2.208	Page: 6410 MD64**	REFRIG SYSTEM - CAPACITY CONTROL.....	105
2.209	Page: 6420 MD64**	REFRIG SYSTEM -CARGO HOLD / HEAT FLUXES ...	106
2.210	Page: 6421 MD64**	REFRIG SYSTEM -PROV STORE / HEAT FLUXES....	106



2.211	Page: 6422 MD64**	REFRIG SYSTEM - PERFORMANCE	107
2.212	Page: 6490 MD64**	CONFIGURABLE PAGE	107
2.213	Page: 7000 MD70**	ELECTRIC POWER PLANT - MAIN VAR. (1)	108
2.214	Page: 7001 MD70**	ELECTRIC POWER PLANT - MAIN VAR. (2)	108
2.215	Page: 7002 MD70**	ELECTRIC POWER PLANT - DG 1	109
2.216	Page: 7003 MD70**	ELECTRIC POWER PLANT - DG 2	109
2.217	Page: 7004 MD70**	ELECTRIC POWER PLANT - SG 1	110
2.218	Page: 7005 MD70**	ELECTRIC POWER PLANT - SG 2	110
2.219	Page: 7006 MD70**	ELECTRIC POWER PLANT - EG / SHORE CONN.	111
2.220	Page: 7007 MD70**	ELECTRIC POWER PLANT - MISCELLANEOUS	111
2.221	Page: 7008 MD70**	ELECTRIC POWER PLANT - CIRCUIT BREAKERS.....	112
2.222	Page: 7010 MD70**	POWER CHIEF - GENERATOR LOGIC (1)	112
2.223	Page: 7011 MD70**	POWER CHIEF - GENERATOR LOGIC (2)	113
2.224	Page: 7012 MD70**	POWER CHIEF - CONTROL DATA (1)	113
2.225	Page: 7013 MD70**	POWER CHIEF - CONTROL DATA (2)	114
2.226	Page: 7014 MD70**	POWER CHIEF - CONTROL DATA (3)	114
2.227	Page: 7020 MD70**	POWER CHIEF - PUMP CONTROL (1)	115
2.228	Page: 7021 MD70**	POWER CHIEF - PUMP CONTROL (2)	115
2.229	Page: 7022 MD70**	POWER CHIEF - PUMP CONTROL (3)	116
2.230	Page: 7023 MD70**	POWER CHIEF - PUMP LOGIC DATA	116
2.231	Page: 7024 MD70**	POWER CHIEF - PUMP STBY DATA (1)	117
2.232	Page: 7025 MD70**	POWER CHIEF - PUMP STBY DATA (2)	117
2.233	Page: 7026 MD70**	POWER CHIEF - PUMP STBY DATA (3)	118
2.234	Page: 7030 MD70**	POWER CHIEF - PURIFIER LOGIC	118
2.235	Page: 7090 MD70**	CONFIGURABLE PAGE	119
2.236	Page: 7100 MD71**	DIESELGENERATOR 1 - MAIN VARIABLES.....	119
2.237	Page: 7101 MD71**	DIESELGENERATOR 1 - FW SYSTEM	120
2.238	Page: 7102 MD71**	DIESELGENERATOR 1 - LO SYSTEM.....	120
2.239	Page: 7103 MD71**	DIESELGENERATOR 1 - FO SYSTEM.....	121
2.240	Page: 7104 MD71**	DIESELGENERATOR 1 - SW SYSTEM.....	121
2.241	Page: 7105 MD71**	DIESELGENERATOR 1 - ENGINE PROTECTION.....	122
2.242	Page: 7110 MD71**	DIESELGENERATOR 1 - SPEED CONTROLLER.....	122
2.243	Page: 7111 MD71**	DIESELGENERATOR 1 - TEMP CONTROLLER.....	123
2.244	Page: 7190 MD71**	CONFIGURABLE PAGE	123
2.245	Page: 7200 MD72**	DIESELGENERATOR 2 - MAIN VARIABLES.....	124
2.246	Page: 7201 MD72**	DIESELGENERATOR 2 - FW SYSTEM	124
2.247	Page: 7202 MD72**	DIESELGENERATOR 2 - LO SYSTEM.....	125
2.248	Page: 7203 MD72**	DIESELGENERATOR 2 - FO SYSTEM.....	125
2.249	Page: 7204 MD72**	DIESELGENERATOR 2 - SW SYSTEM.....	126
2.250	Page: 7205 MD72**	DIESELGENERATOR 2 - ENGINE PROTECTION.....	126
2.251	Page: 7210 MD72**	DIESELGENERATOR 2 - SPEED CONTROLLER.....	127
2.252	Page: 7211 MD72**	DIESELGENERATOR 2 - TEMP CONTROLLER.....	127
2.253	Page: 7290 MD72**	CONFIGURABLE PAGE	128
2.254	Page: 8300 MD83**	STEAM SYSTEM - MAIN VARIABLES (1)	128
2.255	Page: 8301 MD83**	STEAM PLANT - MAIN VARIABLES (2)	129
2.256	Page: 8302 MD83**	STEAM PLANT - FEEDW SUPPLY	129
2.257	Page: 8303 MD83**	STEAM PLANT - BOILER / EX. SECTION.....	130
2.258	Page: 8304 MD84**	STEAM PLANT - BOILER / OIL SECTION.....	130
2.259	Page: 8305 MD84**	STEAM PLANT - BURNER CONTROL.....	131
2.260	Page: 8307 MD83**	STEAM PLANT - ISOLATION.....	131
2.261	Page: 8310 MD83**	STEAM PLANT - LEVEL CONTROL.....	132
2.262	Page: 8311 MD83**	STEAM PLANT - PRESSURE CONTROL	132
2.263	Page: 8390 MD83**	CONFIGURABLE PAGE	133
2.264	Page: 9000 MD90**	SIM CONTROL : PROCESS DYNAMICS	133



2.265	Page: 9001 MD90**	SIM CONTROL : ISOLATIONS	134
2.266	Page: 9002 MD90**	SIM CONTROL : EXTERNAL CONDITIONS	134
2.267	Page: 9003 MD90**	SIM CONTROL : AIR / STEAM / EL LOADS	135
2.268	Page: 9004 MD90**	SIM CONTROL : LOG SETTING.....	135
2.269	Page: 9005 MD90**	SIM CONTROL : MISCELLANEOUS	136
2.270	Page: 9006 MD90**	SIM CONTROL : TRIP STATE SURVEY (1)	136
2.271	Page: 9007 MD90**	SIM CONTROL : TRIP STATE SURVEY (2)	137
2.272	Page: 9010 MD90**	SIM CONTROL : ME BRIDGE CONTROL (1)	137
2.273	Page: 9011 MD90**	SIM CONTROL : ME BRIDGE CONTROL (2)	138
2.274	Page: 9012 MD90**	SIM CONTROL : ME BRIDGE CONTROL (3)	138
2.275	Page: 9020 MD90**	SIM CONTROL : DIRECT LEVEL ADJUST	139
2.276	Page: 9090 MD90**	CONFIGURABLE PAGE	139
2.277	Page: 9300 MD93**	SCENARIO - FREE TAGS	140
2.278	Page: 9390 MD93**	CONFIGURABLE PAGE	140

1 DIRECTORY LIST

Page:0100	MAIN SEA WATER SYSTEM
Page:0200	FO SUPPLY SYSTEM
Page:0300	FUEL OIL TANK SYSTEM
Page:0400	HFO SETTLING TANK SYSTEM
Page:0500	FO TRANSFER SYSTEM
Page:0600	HFO SEPARATOR 1
Page:0700	HFO SEPARATOR 2
Page:0800	DO PURIFIER SYSTEM
Page:0900	LO PURIFIER SYSTEM
Page:1000	ME 1 POWER SYSTEM
Page:1010	ME 1 CONTROL SYSTEM
Page:1020	AUTO CHIEF CONTROL PANEL
Page:1100	ME 1 JACKET W SYSTEM
Page:1200	ME 1 LO SYSTEM
Page:1250	ME 1 ROCKER ARM LO SYSTEM
Page:1300	ME 1 TURBOCHARGER SYSTEM
Page:1400	ME 1 SW SYSTEM
Page:1500	ME 1 Inj CW SYSTEM
Page:2000	ME 2 POWER SYSTEM
Page:2010	ME 2 CONTROL SYSTEM
Page:2100	ME 2 JACKET W SYSTEM
Page:2200	ME 2 LO SYSTEM
Page:2250	ME 2 ROCKER ARM LO SYSTEM
Page:2300	ME 2 TURBOCHARGER SYSTEM
Page:2400	ME 2 SW SYSTEM
Page:2500	ME 2 Inj CW SYSTEM
Page:5000	PORT PROPELLER GEAR LO SYSTEM
Page:5100	STBD PROPELLER GEAR LO SYSTEM
Page:5200	PORT PROPELLER SERVO OIL SYSTEM
Page:5210	PORT PROPELLER CONTROL
Page:5300	STBD PROPELLER SERVO OIL SYSTEM
Page:5310	STBD PROPELLER CONTROL
Page:5400	PORT STERN TUBE SYSTEM
Page:5500	STBD STERN TUBE SYSTEM
Page:5600	SHIP PROPULSION SYSTEM
Page:5700	SHIP LOAD CONDITION
Page:5800	ENGINE ROOM VENTILATION
Page:5801	SHIP FIRE EXTINGUISHING SYSTEM
Page:5810	STEERING GEAR SYSTEM
Page:6000	START AIR SYSTEM
Page:6100	FRESH WATER GENERATOR
Page:6200	SLUDGE TANK / INCINERATOR
Page:6300	BILGE SEPARATOR
Page:6400	REFRIG SYSTEM - COMPRESSOR
Page:7000	ELECTRIC POWER PLANT
Page:7010	POWER CHIEF - GENERATORS
Page:7020	POWER CHIEF - PUMP CONTROL
Page:7100	DIESELGENERATOR 1 - MAIN VARIABLES
Page:7200	DIESELGENERATOR 2 - MAIN VARIABLES
Page:8300	STEAM SYSTEM
Page:9000	SIM CONTROL
Page:9300	SCENARIO - FREE TAGS



2 VARIABLE LIST PAGES

2.1 Page:0100 MD01 ** MAIN SEA WATER SYSTEM - PRESS/FLOWS

A:	P10001	bar	L=4.0	H=---	MAIN SW LINE PRESSURE
B:					
C:	R10044	<0-1>			MAIN SW PUMP 1
D:	R10045	<0-1>			MAIN SW PUMP 2
E:	R10046	<0-1>			AUX SW PUMP
F:					
G:	E10042	kW			MAIN SW PUMP 1 POWER
H:	E10043	kW			MAIN SW PUMP 2 POWER
I:					
J:	N10040	%			MAIN SW PUMP SPEED
K:	Z10041	%			MAIN SW PUMP EFFICIENCY
L:	G10020	ton/h			MAIN SW PUMP FLOW
M:					
N:					
O:	G10022	ton/h			SW FLOW TO AIR COMPRESSOR SYSTEM
P:	G10021	ton/h			SW FLOW TO MISCELLANEOUS SYSTEM
Q:					
R:	G10024	ton/h			SW FLOW TO BALLAST TANKS
S:	G10070	ton/h			MAIN SW EDUCTOR DRIVE FLOW
T:	Z10076	%			MAIN SW EDUCTOR EFFICIENCY

2.2 Page:0101 MD01 ** MAIN SEA WATER SYSTEM - VALVES/FLOWS

A:	V10073	<0-1>			MAIN SW EDUCTOR DRIVE VALVE
B:	V10074	<0-1>			MAIN SW EDUCTOR SUCTION VALVE
C:	V10075	<0-1>			MAIN SW EDUCTOR DISCHARGE VALVE
D:					
E:	G10070	ton/h			MAIN SW EDUCTOR DRIVE FLOW
F:	G10071	ton/h			MAIN SW EDUCTOR SUCTION FLOW
G:	G10072	ton/h			MAIN SW EDUCTOR DISCHARGE FLOW
H:					
I:	G10030	ton/h			SW FLOW FROM VARIOUS USERS
J:					
K:	G10135	ton/h			MAIN SW BYPASS FLOW
L:					
M:	V10050	<0-1>			MAIN SW SEA CHEST SHUT OFF VALVE
N:	V10051	<0-1>			MAIN SW OVERBOARD VALVE
O:					
P:	V10136	<0-1>			MAIN SW BYPASS VALVE
Q:	V10055	<0-1>			AIR COMPR SYSTEM SW SUPPLY VALVE
R:	V10056	<0-1>			AIR CONDITION SW SUPPLY VALVE
S:					
T:	V10057	%			MISCELLANEOUS SYSTEM SW LOAD VALVE

2.3 Page:0102 MD01** MAIN SEA WATER SYSTEM - TANK VALVES

A:			
B:			
C:	V10103	<0-1>	AFT SW BALLAST TANK INLET VALVE
D:	V10104	<0-1>	AFT SW BALLAST TANK OUTLET VALVE
E:			
F:	V10113	<0-1>	PORT SW BALLAST TANK INLET VALVE
G:	V10114	<0-1>	PORT SW BALLAST TANK OUTLET VALVE
H:			
I:	V10123	<0-1>	STBD SW BALLAST TANK INLET VALVE
J:	V10124	<0-1>	STBD SW BALLAST TANK OUTLET VALVE
K:			
L:	V10133	<0-1>	FORE SW BALLAST TANK INLET VALVE
M:	V10134	<0-1>	FORE SW BALLAST TANK OUTLET VALVE
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

2.4 Page:0103 MD01** MAIN SEA WATER SYSTEM - TANK LEVELS

A:				
B:	G10100	ton/h		AFT SW BALLAST TANK INLET FLOW
C:	G10101	ton/h		AFT SW BALLAST TANK OUTLET FLOW
D:	L10102	m	L=---	H=3.9
E:				AFT SW BALLAST TANK LEVEL
F:	G10110	ton/h		PORT SW BALLAST TANK INLET FLOW
G:	G10111	ton/h		PORT SW BALLAST TANK OUTLET FLOW
H:	L10112	m	L=---	H=3.9
I:				PORT SW BALLAST TANK LEVEL
J:	G10120	ton/h		STBD SW BALLAST TANK INLET FLOW
K:	G10121	ton/h		STBD SW BALLAST TANK OUTLET FLOW
L:	L10122	m	L=---	H=3.9
M:				STBD SW BALLAST TANK LEVEL
N:	G10130	ton/h		FORE SW BALLAST TANK INLET FLOW
O:	G10131	ton/h		FORE SW BALLAST TANK OUTLET FLOW
P:	L10132	m	L=---	H=3.9
Q:				FORE SW BALLAST TANK LEVEL
R:				
S:				
T:				



2.5 Page:0104 MD01 ** MAIN SEA WATER SYSTEM - EMERG. / FIRE

A:	V10061	<0-1>	Direct emergency suction valve
B:	G10060	ton/h	Direct emergency suction flow
C:			
D:			
E:	V10062	<0-1>	FIRE LINE SUPPLY VALVE
F:	V10065	<0-1>	SW FIRE LINE SUPPLY VALVE
G:			
H:	R10063	<0-1>	SW FIRE PUMP
I:			
J:	P10064	bar	SW FIRE PUMP PRESSURE
K:	P10067	bar	SW FIRE LINE PRESSURE
L:			
M:	G10068	ton/h	FIRE SEA CHEST INLET FLOW
N:	G10066	ton/h	SW FIRE LINE FLOW
O:			
P:			
Q:			
R:			
S:			
T:			

2.6 Page:0190 MD01 ** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.7 Page:0200 MD02** FO SUPPLY SYSTEM - MAIN VARIABLES

A:				
B:	G00026	ton/h		FO FLOW OUTLET VENTING TANK
C:	G00027	ton/h		FO FLOW INLET ME (total)
D:				
E:	P00020	bar		FO BOOSTER PUMP DISCHARGE PRESS
F:	P00066	bar		FO BOOSTER PUMP SUCTION PRESS
G:	P00022	bar		FO PRESSURE OUTLET ME FO HEATERS
H:	P00023	bar	L=6.0 H=12.0	FO PRESSURE AT ME
I:	P00021	bar	L=--- H=1.5	ME FO FILTER DIFF PRESSURE
J:				
K:	T00001	degC		FO TEMP IN VENTING TANK
L:	T00002	degC	L=10.0 H=140.0	FO TEMP AT ME
M:	W00010	cSt		FO VISCOSITY IN VENTING TANK
N:	W00011	cSt	L=11.0 H=17.0	FO VISCOSITY AT ME
O:				
P:	Z00014	%		FO GASSING INDICATION
Q:				
R:	V00016	%		ME FO PRESS CONTROL VALVE POS
S:	C00017	bar		ME FO PRESS CONTROL VALVE OPEN PRESS
T:				

2.8 Page:0201 MD02** FO SUPPLY SYSTEM - HEATING

A:	T00001	degC		FO TEMP IN VENTING TANK
B:	T00005	degC		FO TEMP OUTLET ME FO HEATERS
C:	W00010	cSt		FO VISCOSITY IN VENTING TANK
D:	W00012	cSt		FO VISCOSITY OUTLET ME FO HEATERS
E:				
F:	P00062	bar		STEAM PRESS AFTER PRESS RED VALVE
G:	P00063	bar		STEAM PRESS RED VALVE SET POINT
H:				
I:	V00140	%		FO VISCO CONTR VALVE POS
J:				
K:	T00003	degC	L=--- H=140.0	ME FO HEATER 1 OUTLET TEMP
L:	G00047	ton/h		ME FO HEATER 1 FLOW
M:	G00050	ton/h		ME FO HEATER 1 STEAM FLOW
N:				
O:	T00004	degC	L=--- H=140.0	ME FO HEATER 2 OUTLET TEMP
P:	G00051	ton/h		ME FO HEATER 2 FLOW
Q:	G00052	ton/h		ME FO HEATER 2 STEAM FLOW
R:				
S:	G00064	ton/h		FO LINE STEAM TRACING FLOW
T:	V00112	<0-1>		FO STEAM TRACING SHUT OFF VALVE

**2.9 Page:0202 MD02** FO SUPPLY SYSTEM - BOOSTER PUMPS**

A:				
B:	R00122	<0-1>		FO BOOSTER PUMP 1
C:	R00123	<0-1>		FO BOOSTER PUMP 2
D:				
E:	V00105	<0-1>		ME FO HEATER 1 FO SHUT OFF VALVE
F:	V00106	<0-1>		ME FO HEATER 2 FO SHUT OFF VALVE
G:				
H:	V00107	<0-1>		ME FO HEATER 1 STEAM SHUT OFF VALVE
I:	V00110	<0-1>		ME FO HEATER 2 STEAM SHUT OFF VALVE
J:				
K:				
L:				
M:	V00114	<0-1>		ME FO FILTER 1
N:	V00115	<0-1>		ME FO FILTER 2
O:				
P:	V00117	<0-1>		ME FO EMERG SHUT OFF VALVE
Q:				
R:	V00120	<0-1>		ME FO RETURN SELECT VALVE (1=serv)
S:				
T:				

2.10 Page:0203 MD02 FO SUPPLY SYSTEM - SUPPLY PUMPS**

A:	R00124	<0-1>						FO SUPPLY PUMP 1
B:	R00125	<0-1>						FO SUPPLY PUMP 2
C:								
D:	P00024	bar	L=3.0	H=6.0				FO SUPPLY PUMP PRESSURE
E:	G00025	ton/h						FO SUPPLY PUMP FLOW (total)
F:	G00042	ton/h						FO SUPPLY PUMP RECIRC FLOW
G:	T00015	degC						FO SUPPLY PUMP RECIRC TEMP
H:								
I:	T00043	degC	L=---	H=140.0				FO SUPPLY PUMP 1 CASING TEMP
J:	T00044	degC	L=---	H=140.0				FO SUPPLY PUMP 2 CASING TEMP
K:								
L:	V00077	%						DO/HFO MIXING VALVE (100 % = DO)
M:	V00076	<0-1>						FO METER BYPASS VALVE
N:	G00101	ton/h						FO METER BYPASS FLOW
O:	G00100	ton/h						FO METER FLOW
P:	M00102	ton						FO METER FLOW (total) (0-100)
Q:								
R:	G00041	ton/h						DO FLOW TO VENTING TANK
S:	G00040	ton/h						HFO FLOW TO VENTING TANK
T:	T00060	degC						HFO SUPPLY LINE TO ME TEMP

2.11 Page:0204 MD02** FO SUPPLY SYSTEM - VENTING TANK

A:	L00070	m	FO VENTING TANK LEVEL
B:	T00001	degC	FO TEMP IN VENTING TANK
C:	W00010	cSt	FO VISCOSITY IN VENTING TANK
D:	P00067	bar	FO VENTING TANK PRESSURE
E:			
F:	G00037	ton/h	FO FLOW INLET VENTING TANK
G:	G00035	ton/h	FO RETURN FLOW TO VENTING TANK
H:	G00036	ton/h	FO RETURN FLOW TO HFO SERV TANK
I:	G00026	ton/h	FO FLOW OUTLET VENTING TANK
J:			
K:	G00040	ton/h	HFO FLOW TO VENTING TANK
L:	G00041	ton/h	DO FLOW TO VENTING TANK
M:			
N:			
O:	V00077	%	DO/HFO MIXING VALVE (100 % = DO)
P:	V00076	<0-1>	FO METER BYPASS VALVE
Q:			
R:	V00071	<0-1>	FO VENTING TANK DRAIN VALVE
S:	G00072	ton/h	FO VENTING TANK DRAIN FLOW
T:	Z00073	%	FO VENTING TANK WATER INDEX

2.12 Page:0205 MD02** FO SUPPLY SYSTEM - FO ISOLATION

A:			
B:			
C:	X07031	<0-1>	DO ISOLATION
D:	X07030	<0-1>	HFO ISOLATION
E:			
F:	G00033	ton/h	FO FLOW INLET ME AT ISOLA (total)
G:			
H:			
I:			
J:			
K:			
L:			
M:			
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

**2.13 Page:0210 MD02** FO SUPPLY SYSTEM -
VISCO CONTROL (1)**

A:	X00146	<0-1>			FO VISCO CONTR AUTO SWITCH
B:	Z00147	%			FO VISCO CONTR MANUAL OUTPUT
C:					
D:	W00141	cSt			FO VISCO CONTR SET POINT
E:	W00142	cSt			FO VISCO CONTR INPUT SIGNAL
F:	Z00143	%			FO VISCO CONTR OUTPUT SIGNAL
G:					
H:	X00176	<0-1>			FO SLAVE CONTR TEST (manual setpoint)
I:	T00165	degC			FO SLAVE CONTR SET POINT
J:	T00166	degC			FO SLAVE CONTR INPUT SIGNAL
K:	Z00167	%			FO SLAVE CONTR OUTPUT SIGNAL
L:					
M:	V00140	%			FO VISCO CONTR VALVE POS
N:					
O:	W00011	cSt	L=11.0	H=17.0	FO VISCOSITY AT ME
P:	W00012	cSt			FO VISCOSITY OUTLET ME FO HEATERS
Q:	W00010	cSt			FO VISCOSITY IN VENTING TANK
R:					
S:	T00005	degC			FO TEMP OUTLET ME FO HEATERS
T:					

2.14 Page:0211 MD02 FO SUPPLY SYSTEM -
VISCO CONTROL (2)**

A:					
B:	X00153	<0-1>			CONTROL MODE (0=single , 1=cascade)
C:	X00152	<0-1>			FO VISCO CONTR HW PID SELECT
D:					
E:	C00155	%/cSt			FO VISCO CONTR GAIN
F:	C00156	sec			FO VISCO CONTR INTEGRATION TIME
G:	C00157	sec			FO VISCO CONTR DERIVATION TIME
H:	C00160	<0-10>			FO VISCO CONTR DERIVATION RANGE
I:					
J:	C00170	%/degC			FO SLAVE CONTR GAIN
K:	C00171	sec			FO SLAVE CONTR INTEGRATION TIME
L:	C00172	sec			FO SLAVE CONTR DERIVATION TIME
M:	C00173	<0-10>			FO SLAVE CONTR DERIVATION RANGE
N:					
O:	C00162	sec			FO VISCO CONTR SENSOR TC
P:	C00161	sec			FO VISCO CONTR VALVE TC
Q:	X00163	<0-2>			FO VISCO CONTR VALVE HYST TYPE
R:	X00168	%			FO VISCO CONTR VALVE HYST VALUE
S:	X00164	<0-2>			FO VISCO CONTR VALVE CHARA
T:	C00174	sec			FO SLAVE CONTR SENSOR TC

2.15 Page:0220 MD02** FO SUPPLY SYSTEM - ME FO HEATERS

A:	V00107	<0-1>			ME FO HEATER 1 STEAM SHUT OFF VALVE
B:					
C:	G00050	ton/h			ME FO HEATER 1 STEAM FLOW
D:	P00053	bar			ME FO HEATER 1 STEAM PRESSURE
E:	T00006	degC			ME FO HEATER 1 METAL TEMP (mean)
F:	T00003	degC	L=---	H=140.0	ME FO HEATER 1 OUTLET TEMP
G:	P00056	bar	L=---	H=2.0	ME FO HEATER 1 PRESS DROP
H:					
I:					
J:					
K:	V00110	<0-1>			ME FO HEATER 2 STEAM SHUT OFF VALVE
L:					
M:	G00052	ton/h			ME FO HEATER 2 STEAM FLOW
N:	P00054	bar			ME FO HEATER 2 STEAM PRESSURE
O:	T00007	degC			ME FO HEATER 2 METAL TEMP (mean)
P:	T00004	degC	L=---	H=140.0	ME FO HEATER 2 OUTLET TEMP
Q:	P00057	bar	L=---	H=2.0	ME FO HEATER 2 PRESS DROP
R:					
S:					
T:					

2.16 Page:0221 MD02** FO SUPPLY SYSTEM - FUEL OIL DATA

A:					
B:	C00505	kJ/kg			HFO HEAT VALUE
C:	C00510	kg/m3			HFO DENSITY (at 15 dgrc)
D:	C00500	degC			HFO VISCO REF (temp at 15 cSt)
E:					
F:	C00506	kJ/kg			DO HEAT VALUE
G:	C00511	kg/m3			DO DENSITY (at 15 dgrc)
H:	C00501	degC			DO VISCO REF (temp at 15 cSt)
I:					
J:	H00507	kJ/kg			FO HEAT VALUE INLET ME
K:	D00512	kg/m3			FO DENSITY INLET ME
L:					
M:	H00514	kJ/kg			FO HEAT VALUE IN VENTING TANK
N:	H00513	kJ/kg			FO HEAT VALUE IN HFO SERV TANK
O:					
P:					
Q:					
R:					
S:					
T:					

**2.17 Page:0290 MD02** CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.18 Page:0300 MD03 HFO SERVICE TANK - FLOW/LEVEL**

A:					
B:	L00300	m	L=1.8	H=4.8	HFO SERVICE TANK LEVEL
C:					
D:					
E:	G04076	ton/h			HFO SEP FLOW TO SERV TANK
F:	G04074	ton/h			HFO SEP FLOW FROM SERV TANK
G:	T04028	degC			HFO SEPARATORS DISCHARGE FLOW TEMP
H:	G00036	ton/h			FO RETURN FLOW TO HFO SERV TANK
I:	G00305	ton/h	L=---	H=0.1	HFO SERVICE TANK OVER FLOW
J:					
K:	V00310	<0-1>			HFO SERVICE TANK DRAIN VALVE
L:	V00326	<0-1>			HFO SUPPLY VALVE TO VENTING TANK
M:	V00327	<0-1>			HFO SUPPLY VALVE TO BOILER
N:					
O:	G00040	ton/h			HFO FLOW TO VENTING TANK
P:	G00304	ton/h			HFO SERVICE TANK DRAIN FLOW
Q:					
R:					
S:	Z00306	%			HFO SERVICE TANK WATER INDEX
T:					

2.19 Page:0301 MD03** DO SERVICE TANK - FLOW/LEVEL

A:					
B:	L00340	m	L=1.5	H=4.8	DO SERVICE TANK LEVEL
C:					
D:					
E:	G00345	ton/h	L=---	H=0.1	DO SERVICE TANK OVER FLOW
F:	G04176	ton/h			DO PURIF FLOW TO SERV TANK
G:	G04174	ton/h			DO PURIF FLOW FROM SERV TANK
H:					
I:					
J:	V00350	<0-1>			DO SERVICE TANK DRAIN VALVE
K:	V00366	<0-1>			DO SUPPLY VALVE TO FO SUPPLY SYSTEM
L:	V00365	<0-1>			DO SUPPLY VALVE TO DG 1/2
M:	V00367	<0-1>			DO SUPPLY VALVE TO BOILER
N:					
O:	G00041	ton/h			DO FLOW TO VENTING TANK
P:	G00042	ton/h			FO SUPPLY PUMP RECIRC FLOW
Q:	G00344	ton/h			DO SERVICE TANK DRAIN FLOW
R:					
S:	L00336	m			DO STORAGE TANK LEVEL
T:	T00337	degC			DO STORAGE TANK TEMP

2.20 Page:0302 MD03** FO SERVICE TANK - HEATING

A:	T00302	degC	L=60.0	H=80.0	HFO SERVICE TANK TEMP
B:	W00303	cSt			HFO SERVICE TANK VISCOSITY
C:					
D:	V00316	<0-1>			HFO SERV TANK HEATING SHUT OFF VALVE
E:	V00315	%			HFO SERV TANK STEAM VALVE POS
F:	G00314	ton/h			HFO SERV TANK HEATING STEAM FLOW
G:	C00320	degC			HFO SERV TANK CONTR SET POINT
H:	C00321	%/degC			HFO SERV TANK CONTR GAIN
I:	C00322	%			HFO SERV TANK CONTR BIAS
J:					
K:	T00342	degC	L=30.0	H=50.0	DO SERVICE TANK TEMP
L:	W00343	cSt			DO SERVICE TANK VISCOSITY
M:					
N:	V00356	<0-1>			DO SERV TANK HEATING SHUT OFF VALVE
O:	V00355	%			DO SERV TANK STEAM VALVE POS
P:	G00354	ton/h			DO SERV TANK HEATING STEAM FLOW
Q:	C00360	degC			DO SERV TANK CONTR SET POINT
R:	C00361	%/degC			DO SERV TANK CONTR GAIN
S:	C00362	%			DO SERV TANK CONTR BIAS
T:					



2.21 Page:0303 MD03** FO SERVICE TANK - PURIFIER ROUTING

A:
B:
C: V04066 <0-1> HFO SEP 1 SETTL TANK SUCTION
D: V04067 <0-1> HFO SEP SERV TANK SUCTION
E: V04071 <0-1> HFO SEP SERV TANK DISCHARGE
F:
G:
H:
I: V04166 <0-1> DO PURIF STORAGE TANK SUCTION
J: V04167 <0-1> DO PURIF SERV TANK SUCTION
K: V04171 <0-1> DO PURIF SERV TANK DISCHARGE
L: V04170 <0-1> DO PURIF STORAGE TANK DISCHARGE
M:
N:
O:
P:
Q:
R:
S:
T:

2.22 Page:0390 MD03** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.23 Page:0400 MD04** HFO SETTLING TANK 1

A:	L00400	m	L=2.0	H=4.8	SETTLING TANK 1 LEVEL
B:					
C:	L00402	m	L=---	H=0.8	SETTLING TANK 1 WATER LEVEL
D:	Z00403	%			SETTLING TANK 1 WATER CONCENTRATION
E:					
F:	G00405	ton/h			SETTLING TANK 1 TRANSFER INLET FLOW
G:	G00406	ton/h			SETTLING TANK 1 PURIF RECIRC FLOW
H:	G00407	ton/h			SETTLING TANK 1 OUTLET FLOW
I:	G00404	ton/h	L=---	H=0.1	SETTLING TANK 1 OVER FLOW
J:					
K:	V00416	<0-1>			SETTLING TANK 1 TRANSFER INLET VALVE
L:	V00417	<0-1>			SETTLING TANK 1 PURIF RECIRC VALVE
M:	V00415	<0-1>			SETTLING TANK 1 OUTLET VALVE
N:					
O:					
P:					
Q:	V00414	<0-1>			SETTLING TANK 1 DRAIN VALVE
R:	G00410	ton/h			SETTLING TANK 1 DRAIN FLOW
S:					
T:					

2.24 Page:0401 MD04** HFO SETTLING TANK 2

A:	L00440	m	L=2.0	H=4.8	SETTLING TANK 2 LEVEL
B:					
C:	L00442	m	L=---	H=0.8	SETTLING TANK 2 WATER LEVEL
D:	Z00443	%			SETTLING TANK 2 WATER CONCENTRATION
E:					
F:	G00445	ton/h			SETTLING TANK 2 TRANSFER INLET FLOW
G:	G00446	ton/h			SETTLING TANK 2 PURIF RECIRC FLOW
H:	G00447	ton/h			SETTLING TANK 2 OUTLET FLOW
I:	G00444	ton/h	L=---	H=0.1	SETTLING TANK 2 OVER FLOW
J:					
K:	V00456	<0-1>			SETTLING TANK 2 TRANSFER INLET VALVE
L:	V00457	<0-1>			SETTLING TANK 2 PURIF RECIRC VALVE
M:	V00455	<0-1>			SETTLING TANK 2 OUTLET VALVE
N:					
O:					
P:					
Q:	V00454	<0-1>			SETTLING TANK 2 DRAIN VALVE
R:	G00450	ton/h			SETTLING TANK 2 DRAIN FLOW
S:					
T:					

**2.25 Page:0402 MD04** HFO SETTLING TANK 1/2
HEATING**

A:	T00401	degC	L=60.0	H=80.0	SETTLING TANK 1 TEMPERATURE
B:	V00425	%			SETTLING TANK 1 STEAM VALVE POS
C:	V00426	<0-1>			SETTLING TANK 1 HEATING SHUT OFF VALVE
D:	G00424	ton/h			SETTLING TANK 1 HEATING STEAM FLOW
E:					
F:	C00430	degC			SETTLING TANK 1 CONTR SET POINT
G:	C00431	%/degC			SETTLING TANK 1 CONTR GAIN
H:	C00432	%			SETTLING TANK 1 CONTR BIAS
I:					
J:					
K:	T00441	degC	L=60.0	H=80.0	SETTLING TANK 2 TEMPERATURE
L:	V00465	%			SETTLING TANK 2 STEAM VALVE POS
M:	V00466	<0-1>			SETTLING TANK 2 HEATING SHUT OFF VALVE
N:	G00464	ton/h			SETTLING TANK 2 HEATING STEAM FLOW
O:					
P:	C00470	degC			SETTLING TANK 2 CONTR SET POINT
Q:	C00471	%/degC			SETTLING TANK 2 CONTR GAIN
R:	C00472	%			SETTLING TANK 2 CONTR BIAS
S:					
T:					

2.26 Page:0490 MD04 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.27 Page:0500 MD05** FO TRANSFER SYSTEM / SPILL OIL TANK

A:	R00266	<0-1>			FO TRANSFER PUMP 1
B:	R00268	<0-1>			FO TRANSFER PUMP 2
C:	G00267	ton/h			FO TRANSFER PUMP FLOW
D:	G00262	ton/h			FO TRANSFER FLOW TO SETTLE TANKS
E:	T00257	degC			FO TRANSFER FLOW TEMP
F:					
G:	V00203	<0-1>			AFT BUNKER TANK FO SUCTION VALVE
H:	V00204	<0-1>			AFT BUNKER TANK FO FILLING VALVE
I:	V00217	<0-1>			PORT BUNKER TANK FO SUCTION VALVE
J:	V00220	<0-1>			PORT BUNKER TANK FO FILLING VALVE
K:	V00233	<0-1>			STBD BUNKER TANK FO SUCTION VALVE
L:	V00234	<0-1>			STBD BUNKER TANK FO FILLING VALVE
M:	V00247	<0-1>			FORE BUNKER TANK FO SUCTION VALVE
N:	V00250	<0-1>			FORE BUNKER TANK FO FILLING VALVE
O:	V00264	<0-1>			SPILL OIL TANK FO SUCTION VALVE
P:	V00265	<0-1>			SETTLE TANKS FO DISCHARGE VALVE
Q:					
R:	L00263	m	L=---	H=1.5	SPILL OIL TANK LEVEL
S:	G00260	ton/h			SPILL OIL TANK INLET FLOW (total)
T:	G00261	ton/h			SPILL OIL TANK OUTLET FLOW

2.28 Page:0501 MD05** BUNKER OIL TANK - AFT

A:					
B:					
C:	L00202	m	L=---	H=3.9	AFT BUNKER TANK FO LEVEL
D:					
E:	G00200	ton/h			AFT BUNKER TANK INLET FLOW
F:	G00201	ton/h			AFT BUNKER TANK OUTLET FLOW
G:					
H:	V00203	<0-1>			AFT BUNKER TANK FO SUCTION VALVE
I:	V00204	<0-1>			AFT BUNKER TANK FO FILLING VALVE
J:					
K:					
L:	T00205	degC	L=40.0	H=---	AFT BUNKER TANK FO TEMP
M:	V00206	%			AFT BUNKER TANK STEAM VALVE
N:	G00207	ton/h			AFT BUNKER TANK STEAM FLOW
O:					
P:					
Q:					
R:					
S:					
T:					

**2.29 Page:0502 MD05** BUNKER OIL TANK - PORT**

A:
B:
C: L00216 m L=--- H=3.9 PORT BUNKER TANK FO LEVEL
D:
E: G00214 ton/h PORT BUNKER TANK INLET FLOW
F: G00215 ton/h PORT BUNKER TANK OUTLET FLOW
G:
H: V00217 <0-1> PORT BUNKER TANK FO SUCTION VALVE
I: V00220 <0-1> PORT BUNKER TANK FO FILLING VALVE
J:
K:
L: T00221 degC L=40.0 H=--- PORT BUNKER TANK FO TEMP
M: V00222 % PORT BUNKER TANK STEAM VALVE
N: G00223 ton/h PORT BUNKER TANK STEAM FLOW
O:
P:
Q:
R:
S:
T:

2.30 Page:0503 MD05 BUNKER OIL TANK - STBD**

A:
B:
C: L00232 m L=--- H=3.9 STBD BUNKER TANK FO LEVEL
D:
E: G00230 ton/h STBD BUNKER TANK INLET FLOW
F: G00231 ton/h STBD BUNKER TANK OUTLET FLOW
G:
H: V00233 <0-1> STBD BUNKER TANK FO SUCTION VALVE
I: V00234 <0-1> STBD BUNKER TANK FO FILLING VALVE
J:
K:
L: T00235 degC L=40.0 H=--- STBD BUNKER TANK FO TEMP
M: V00236 % STBD BUNKER TANK STEAM VALVE
N: G00237 ton/h STBD BUNKER TANK STEAM FLOW
O:
P:
Q:
R:
S:
T:

2.31 Page:0504 MD05** BUNKER OIL TANK - FORE

A:
B:
C: L00246 m L=--- H=3.9 FORE BUNKER TANK FO LEVEL
D:
E: G00244 ton/h FORE BUNKER TANK INLET FLOW
F: G00245 ton/h FORE BUNKER TANK OUTLET FLOW
G:
H: V00247 <0-1> FORE BUNKER TANK FO SUCTION VALVE
I: V00250 <0-1> FORE BUNKER TANK FO FILLING VALVE
J:
K:
L: T00251 degC L=40.0 H=--- FORE BUNKER TANK FO TEMP
M: V00252 % FORE BUNKER TANK STEAM VALVE
N: G00253 ton/h FORE BUNKER TANK STEAM FLOW
O:
P:
Q:
R:
S:
T:

2.32 Page:0590 MD05** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.33 Page:0600 MD06** HFO SEPARATOR 1 - MAIN VARIABLES**

A:				
B:				
C:	G04001	kg/h		HFO SEP 1 INLET LINE FLOW
D:	G04007	kg/h		HFO SEP 1 OUTLET LINE FLOW
E:	G04004	kg/h		HFO SEP 1 DRAIN FLOW
F:				
G:				
H:	Z04018	%	L=0.1 H=0.8	HFO SEP 1 OUTLET OIL FLOW WATER CONTENT
I:				
J:				
K:	R04066	<0-1>		HFO SEP 1 RUNNING
L:	X04066	<0-1>		HFO SEP 1 ALCAP CONTROL ON
M:				
N:				
O:	X04055	<0-1>		HFO SEP 1 BOWL OPEN
P:				
Q:	P04025	bar		HFO SEP 1 OUTLET PRESSURE
R:				
S:				
T:				

2.34 Page:0601 MD06 HFO SEPARATOR 1 - FLOW CONTROL**

A:				
B:				
C:	R04061	<0-1>		HFO SEP 1 FEED PUMP
D:	V04077	%		HFO SEP 1 INLET FLOW VALVE POS
E:				
F:	G04006	kg/h		HFO SEP 1 SUCTION LINE FLOW
G:	T04020	degC		HFO SEP 1 SUCTION FLOW TEMP
H:				
I:	G04001	kg/h		HFO SEP 1 INLET LINE FLOW
J:	T04021	degC	L=90.0 H=105.0	HFO SEP 1 HEATER OUTLET TEMP
K:				
L:	G04008	kg/h		HFO SEP 1 RECIRC. LINE FLOW
M:	T04022	degC		HFO SEP 1 RECIRC FLOW TEMP
N:				
O:				
P:				
Q:	G04004	kg/h		HFO SEP 1 DRAIN FLOW
R:	V04056	<0-1>		HFO SEP 1 WATER DRAIN VALVE
S:				
T:				

2.35 Page:0602 MD06** HFO SEPARATOR 1 - AUXIL SYSTEMS

A:	R04062	<0-1>			HFO SEP 1 ELECTRIC MOTOR START
B:	R04063	<0-1>			HFO SEP 1 EMERG./HIGH VIBRATION STOP
C:	R04064	<0-1>			HFO SEP 1 ELECTRIC MOTOR BRAKE ON
D:					
E:	R04066	<0-1>			HFO SEP 1 RUNNING
F:	C04001	A	L=---	H=---	HFO SEP 1 EL. MOTOR CURRENT CONSUMPTION
G:	P04001	kW			HFO SEP 1 EL. MOTOR POWER CONSUMPTION
H:					
I:					
J:					
K:					
L:	V04055	<0-1>			HFO SEP 1 WATER SUPPLY VALVE
M:	V04058	<0-1>			HFO SEP 1 WATER MAKE-UP VALVE
N:	L04041	m	L=0.3	H=0.9	HFO SEP 1 OPERATING WATER TANK LEVEL
O:					
P:					
Q:					
R:					
S:					
T:					

2.36 Page:0610 MD06** HFO SEPARATOR 1 - TEMP CONTROL

A:					
B:	X04031	<0-1>			HFO SEP 1 TEMP CONTR AUTO SWITCH
C:	Z04032	%			HFO SEP 1 TEMP CONTR MANUAL OUTPUT
D:					
E:	T04030	degC			HFO SEP 1 TEMP CONTR SET POINT
F:	T04021	degC	L=90.0	H=105.0	HFO SEP 1 HEATER OUTLET TEMP
G:	V04024	%			HFO SEP 1 HEATER VALVE POS
H:					
I:	G04023	ton/h			HFO SEP 1 HEATER STEAM FLOW
J:	T04020	degC			HFO SEP 1 SUCTION FLOW TEMP
K:					
L:					
M:					
N:	X04035	<0-1>			HFO SEP 1 TEMP CONTR HW PID SELECT
O:					
P:	C04033	%/degC			HFO SEP 1 TEMP CONTR GAIN
Q:	C04034	sec			HFO SEP 1 TEMP CONTR INTEGR TIME
R:	C04036	sec			HFO SEP 1 TEMP CONTR DERIV. TIME
S:					
T:					

**2.37 Page:0611 MD06** HFO SEPARATOR 1 - ALCAP CONTROL**

A:				
B:	X04066	<0-1>		HFO SEP 1 ALCAP CONTROL ON
C:	X04065	<0-1>		HFO SEP 1 ALCAP CONTR OL MANUAL
	DISCHARGE			
D:	X04068	<0-8>		HFO SEP 1 ALCAP FAIL CODE
E:				
F:	T04001	sec		HFO SEP 1 MAX TIME BETWEEN DISCHARGE(P1)
G:	T04002	sec		HFO SEP 1 MIN TIME BETWEEN DISCHARGE(P60)
H:				
I:	Z04019	%		HFO SEP 1 MAX WATER CONTENT MARGIN
J:	Z04020	%		HFO SEP 1 WATER CONTENT REFERANCE
K:	Z04018	%	L=0.1 H=0.8	HFO SEP 1 OUTLET OIL FLOW WATER CONTENT
L:				
M:	V04047	<0-1>		HFO SEP 1 CLOSING VALVE (MV15)
N:	V04046	<0-1>		HFO SEP 1 OPENING VALVE (MV16)
O:	V04050	<0-1>		HFO SEP 1 SEAL/FLUSH WATER VALVE
P:	V04051	<0-1>		HFO SEP 1 FO INLET VALVE
Q:	V04056	<0-1>		HFO SEP 1 WATER DRAIN VALVE
R:				
S:				
T:				

2.38 Page:0690 MD06 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.39 Page:0700 MD07** HFO SEPARATOR 2 - MAIN VARIABLES

A:				
B:				
C:	G24001	kg/h		HFO SEP 2 INLET LINE FLOW
D:	G24007	kg/h		HFO SEP 2 OUTLET LINE FLOW
E:	G24004	kg/h		HFO SEP 2 DRAIN FLOW
F:				
G:				
H:	Z24018	%	L=0.1 H=0.8	HFO SEP 2 OUTLET OIL FLOW WATER CONTENT
I:				
J:				
K:	R24066	<0-1>		HFO SEP 2 RUNNING
L:	X24066	<0-1>		HFO SEP 2 ALCAP CONTROL ON
M:				
N:				
O:	X24055	<0-1>		HFO SEP 2 BOWL OPEN
P:				
Q:	P24025	bar		HFO SEP 2 OUTLET PRESSURE
R:				
S:				
T:				

2.40 Page:0701 MD07** HFO SEPARATOR 2 - FLOW CONTROL

A:				
B:				
C:	R24061	<0-1>		HFO SEP 2 FEED PUMP
D:	V24077	%		HFO SEP 2 INLET FLOW VALVE POS
E:				
F:	G24006	kg/h		HFO SEP 2 SUCTION LINE FLOW
G:	T24020	degC		HFO SEP 2 SUCTION FLOW TEMP
H:				
I:	G24001	kg/h		HFO SEP 2 INLET LINE FLOW
J:	T24021	degC	L=90.0 H=105.0	HFO SEP 2 HEATER OUTLET TEMP
K:				
L:	G24008	kg/h		HFO SEP 2 RECIRC. LINE FLOW
M:	T24022	degC		HFO SEP 2 RECIRC FLOW TEMP
N:				
O:				
P:				
Q:	G24004	kg/h		HFO SEP 2 DRAIN FLOW
R:	V24056	<0-1>		HFO SEP 2 WATER DRAIN VALVE
S:				
T:				

**2.41 Page:0702 MD07** HFO SEPARATOR 2 - AUXIL SYSTEMS**

A:	R24062	<0-1>			HFO SEP 2 ELECTRIC MOTOR START
B:	R24063	<0-1>			HFO SEP 2 EMERG./HIGH VIBRATION STOP
C:	R24064	<0-1>			HFO SEP 2 ELECTRIC MOTOR BRAKE ON
D:					
E:	R24066	<0-1>			HFO SEP 2 RUNNING
F:	C24001	A	L=0.0	H=40.0	HFO SEP 2 EL. MOTOR CURRENT CONSUMPTION
G:	P24001	kW			HFO SEP 2 EL. MOTOR POWER CONSUMPTION
H:					
I:					
J:					
K:					
L:	V24055	<0-1>			HFO SEP 2 WATER SUPPLY VALVE
M:	V24058	<0-1>			HFO SEP 2 WATER MAKE-UP VALVE
N:	L24041	m	L=0.3	H=0.9	HFO SEP 2 WATER TANK LEVEL
O:					
P:					
Q:					
R:					
S:					
T:					

2.42 Page:0710 MD07 HFO SEPARATOR 2 - TEMP CONTROL**

A:					
B:	X24031	<0-1>			HFO SEP 2 TEMP CONTR AUTO SWITCH
C:	Z24032	%			HFO SEP 2 TEMP CONTR MANUAL OUTPUT
D:					
E:	T24030	degC			HFO SEP 2 TEMP CONTR SET POINT
F:	T24021	degC	L=90.0	H=105.0	HFO SEP 2 HEATER OUTLET TEMP
G:	V24024	%			HFO SEP 2 HEATER VALVE POS
H:					
I:	G24023	ton/h			HFO SEP 2 HEATER STEAM FLOW
J:	T24020	degC			HFO SEP 2 SUCTION FLOW TEMP
K:					
L:					
M:					
N:	X24035	<0-1>			HFO SEP 2 TEMP CONTR HW PID SELECT
O:					
P:	C24033	%/degC			HFO SEP 2 TEMP CONTR GAIN
Q:	C24034	sec			HFO SEP 2 TEMP CONTR INTEGR TIME
R:	C24036	sec			HFO SEP 2 TEMP CONTR DERIV. TIME
S:					
T:					

2.43 Page:0711 MD07** HFO SEPARATOR 2 - ALCAP CONTROL

A:				
B:	X24066	<0-1>		HFO SEP 2 ALCAP CONTROL ON
C:	X24065	<0-1>		HFO SEP 2 ALCAP CONTROL MANUAL DISCHARGE
D:	X24068	<0-8>		HFO SEP 2 ALCAP FAIL CODE
E:				
F:	T24001	sec		HFO SEP 2 MAX TIME BETWEEN DISCHARGE(P1)
G:	T24002	sec		HFO SEP 2 MIN TIME BETWEEN DISCHARGE(P60)
H:				
I:	Z24019	%		HFO SEP 2 MAX WATER CONTENT MARGIN
J:	Z24020	%		HFO SEP 2 WATER CONTENT REFERANCE
K:	Z24018	%	L=0.1 H=0.8	HFO SEP 2 OUTLET OIL FLOW WATER CONTENT
L:				
M:	V24047	<0-1>		HFO SEP 2 CLOSING VALVE (MV15)
N:	V24046	<0-1>		HFO SEP 2 OPENING VALVE (MV16)
O:	V24050	<0-1>		HFO SEP 2 DISPL./COND WATER
P:	V24051	<0-1>		HFO SEP 2 FO INLET VALVE
Q:	V24056	<0-1>		HFO SEP 2 WATER DRAIN VALVE
R:				
S:				
T:				

2.44 Page:0790 MD07** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.45 Page:0800 MD08** DO PURIFIER SYSTEM -
MAIN VARIABLES**

A:	G04101	kg/h			DO PURIF INLET FLOW
B:	G04105	kg/h			DO PURIF OUTLET FLOW (clean)
C:	G04102	kg/h			DO PURIF SLUDGE FLOW (dirty)
D:	G04103	kg/h			DO PURIF DRAIN FLOW (shooting)
E:					
F:	X04111	%			DO PURIF GRAVITY RING (100=max dia)
G:					
H:	Z04115	%			DO PURIF OUTLET FLOW DRT INDEX
I:	Z04116	%	L=---	H=90.0	DO PURIF SLUDGE FLOW OIL INDEX
J:					
K:	X04164	<0-2>			DO PURIF AUTO SWITCH
L:	R04160	<0-1>			DO PURIF START/STOP (centrifuge)
M:	V04146	<0-1>			DO PURIF MAKE-UP WATER VALVE
N:	V04147	<0-1>			DO PURIF OPERATING WATER VALVE
O:	V04150	<0-1>			DO PURIF SEAL/FLUSH WATER VALVE
P:	V04151	<0-1>			DO PURIF FO INLET VALVE
Q:					
R:	X04155	<0-1>			DO PURIF BOWL OPEN
S:	X04162	<0-6>			DO PURIF STATE (indication)
T:					

2.46 Page:0801 MD08 DO PURIFIER SYSTEM -
FLOW CONTROL**

A:					
B:					
C:	R04161	<0-1>			DO PURIF FEED PUMP
D:	N04110	%			DO PURIF FEED PUMP SPEED SETTING
E:					
F:	V04157	<0-1>			DO PURIF BYPASS FEED VALVE
G:					
H:					
I:	G04106	kg/h			DO PURIF SUCTION LINE FLOW
J:	T04120	degC			DO PURIF SUCTION FLOW TEMP
K:					
L:	G04107	kg/h			DO PURIF DISCHARGE LINE FLOW
M:	T04117	degC			DO PURIF DISCHARGE FLOW TEMP
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.47 Page:0802 MD08** DO PURIFIER SYSTEM - AUXIL VARIABLES

A:
B:
C:
D: V04153 <0-1> DO PURIF HOT FLUSH WATER SUPPLY VALVE
E: V04154 <0-1> DO PURIF HEATER STEAM SHUT OFF VALVE
F:
G:
H: V04152 <0-1> DO PURIF OPERATING TANK MAKE-UP VALVE
I: G04140 kg/h DO PURIF OPERATING WATER MAKE UP FLOW
J: L04141 m L=0.3 H=0.9 DO PURIF OPERATING WATER TANK LEVEL
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.48 Page:0810 MD08** DO PURIFIER SYSTEM - TEMP CONTROL

A:
B: X04131 <0-1> DO PURIF TEMP CONTR AUTO SWITCH
C: Z04132 % DO PURIF TEMP CONTR MANUAL OUTPUT
D:
E: T04130 degC DO PURIF TEMP CONTR SET POINT
F: T04121 degC L=45.0 H=70.0 DO PURIF HEATER OUTLET TEMP
G: V04124 % DO PURIF HEATER VALVE POS
H:
I: G04123 ton/h DO PURIF HEATER STEAM FLOW
J: T04120 degC DO PURIF SUCTION FLOW TEMP
K:
L:
M:
N: X04135 <0-1> DO PURIF TEMP CONTR HW PID SELECT
O:
P: C04133 %/degC DO PURIF TEMP CONTR GAIN
Q: C04134 sec DO PURIF TEMP CONTR INTEGR TIME
R: C04136 sec DO PURIF TEMP CONTR DERIV. TIME
S:
T:

**2.49 Page:0890 MD08** CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.50 Page:0900 MD09 LO PURIFIER SYSTEM - MAIN VARIABLES**

A:	G04201	kg/h			LO PURIF INLET FLOW
B:	G04205	kg/h			LO PURIF OUTLET FLOW (clean)
C:	G04202	kg/h			LO PURIF SLUDGE FLOW (dirty)
D:	G04203	kg/h			LO PURIF DRAIN FLOW (shooting)
E:					
F:	X04211	%			LO PURIF GRAVITY RING (100=max dia)
G:					
H:	Z04215	%			LO PURIF OUTLET FLOW DRT INDEX
I:	Z04216	%	L=---	H=90.0	LO PURIF SLUDGE FLOW OIL INDEX
J:					
K:	X04264	<0-2>			LO PURIF AUTO SWITCH
L:	R04260	<0-1>			LO PURIF START/STOP (centrifuge)
M:	V04246	<0-1>			LO PURIF MAKE-UP WATER VALVE
N:	V04247	<0-1>			LO PURIF OPERATING WATER VALVE
O:	V04250	<0-1>			LO PURIF SEAL/FLUSH WATER VALVE
P:	V04251	<0-1>			LO PURIF LO INLET VALVE
Q:					
R:	X04255	<0-1>			LO PURIF BOWL OPEN
S:	X04262	<0-6>			LO PURIF STATE (indication)
T:					

2.51 Page:0901 MD09** LO PURIFIER SYSTEM - FLOW CONTROL

A:			
B:			
C:	R04261	<0-1>	LO PURIF FEED PUMP
D:	N04210	%	LO PURIF FEED PUMP SPEED SETTING
E:			
F:	V04257	<0-1>	LO PURIF BYPASS FEED VALVE
G:			
H:			
I:	G04206	kg/h	LO PURIF SUCTION LINE FLOW
J:	T04220	degC	LO PURIF SUCTION FLOW TEMP
K:			
L:	G04207	kg/h	LO PURIF DISCHARGE LINE FLOW
M:	T04217	degC	LO PURIF DISCHARGE FLOW TEMP
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

2.52 Page:0902 MD09** LO PURIFIER SYSTEM - AUXIL VARIABLES

A:				
B:				
C:				
D:	V04253	<0-1>		LO PURIF HOT FLUSH WATER SUPPLY VALVE
E:	V04254	<0-1>		LO PURIF HEATER STEAM SHUT OFF VALVE
F:				
G:				
H:	V04252	<0-1>		LO PURIF OPERATING TANK MAKE-UP VALVE
I:	G04240	kg/h		LO PURIF OPERATING WATER MAKE UP FLOW
J:	L04241	m	L=0.3 H=0.9	LO PURIF OPERATING WATER TANK LEVEL
K:				
L:				
M:				
N:				
O:				
P:				
Q:				
R:				
S:				
T:				

**2.53 Page:0910 MD09** LO PURIFIER SYSTEM -
TEMP CONTROL**

A:				
B:	X04231	<0-1>		LO PURIF TEMP CONTR AUTO SWITCH
C:	Z04232	%		LO PURIF TEMP CONTR MANUAL OUTPUT
D:				
E:	T04230	degC		LO PURIF TEMP CONTR SET POINT
F:	T04221	degC	L=80.0 H=95.0	LO PURIF HEATER OUTLET TEMP
G:	V04224	%		LO PURIF HEATER VALVE POS
H:				
I:	G04223	ton/h		LO PURIF HEATER STEAM FLOW
J:	T04220	degC		LO PURIF SUCTION FLOW TEMP
K:				
L:				
M:				
N:	X04235	<0-1>		LO PURIF TEMP CONTR HW PID SELECT
O:				
P:	C04233	%/degC		LO PURIF TEMP CONTR GAIN
Q:	C04234	sec		LO PURIF TEMP CONTR INTEGR TIME
R:	C04236	sec		LO PURIF TEMP CONTR DERIV. TIME
S:				
T:				

2.54 Page:0990 MD09 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.55 Page:1000 MD10** ME 1 POWER SYSTEM (1)

A:					
B:	X01012	<0-5>	L=---	H=1.0	ME 1 DAMAGE (serious)
C:					
D:	N01001	rpm	L=---	H=420.0	ME 1 SPEED
E:	E01002	kW	L=---	H=11800.0	ME 1 EFFECTIVE POWER
F:	E01003	kW			ME 1 INDICATED POWER
G:	Q01007	kNm			ME 1 SHAFT TORQUE
H:	P01004	bar			ME 1 MEAN EFFECTIVE PRESSURE
I:	Z01011	%			ME 1 MECHANICAL EFFICIENCY
J:					
K:	X01000	%			ME 1 FUEL LINK POSITION
L:					
M:	G01005	kg/h			ME 1 FUEL OIL CONSUMPTION
N:	G01006	g/kWh			ME 1 FUEL OIL CONSUMPTION (specific)
O:					
P:					
Q:	Z01010	%			ME 1 SMOKE INDICATION
R:					
S:	T01315	degC	L=---	H=300.0	ME 1 MEAN CYL LINER TEMP
T:	T01316	degC	L=---	H=400.0	ME 1 MEAN PISTON TEMP

2.56 Page:1001 MD10** ME 1 POWER SYSTEM (2)

A:	V01270	<0-1>			ME 1 START AIR VALVE
B:	R01267	<0-1>			ME 1 FL STOP CYLINDER
C:					
D:	X01274	<0-1>			ME 1 CLUTCH CONTROL LOCAL SWITCH
E:	V01275	<0-1>			ME 1 CLUTCH CONTROL COMMAND
F:	X01273	<0-3>			ME 1 CLUTCH POSITION
G:					
H:	Z01276	%			ME 1 CLUTCH CONNECTION HEAT
I:	X01277	<0-1>	L=---	H=1.0	ME 1 CLUTCH FAILURE
J:					
K:	X01760	<0-7>	L=---	H=6.0	ME 1 START/STOP LOGIC STATE
L:	X01761	<0-7>	L=---	H=6.0	ME 1 CONNECTION LOGIC STATE
M:					
N:	N01001	rpm	L=---	H=420.0	ME 1 SPEED
O:	N01263	rpm			ME 1 SPEED CONTR ACTIVE SET POINT
P:					
Q:					
R:	V04517	<0-1>			ME 1 CLUTCH AIR SUPPLY VALVE
S:	V01271	<0-1>			ME 1 TURNING GEAR
T:	V01272	<0-1>			ME 1 INDICATION COCKS

**2.57 Page:1010 MD10** ME 1 CONTROL SYSTEM -
LOCAL CONTROL**

A:		
B:	X01261 <0-1>	ME 1 SPEED CONTR LOCAL SWITCH
C:	Z01262 mm MCR=46mm)	ME 1 SPEED CONTR LOCAL SETTING (idle=6mm,
D:		
E:		
F:	N01263 rpm	ME 1 SPEED CONTR ACTIVE SET POINT
G:	N01266 rpm	ME 1 SPEED CONTR INPUT SIGNAL
H:	X01000 %	ME 1 FUEL LINK POSITION
I:		
J:		
K:		
L:		
M:		
N:		
O:		
P:		
Q:	C01264 %/%	ME 1 SPEED CONTR GAIN
R:	C01265 sec	ME 1 SPEED CONTR INTEGRATION TIME
S:		
T:		

2.58 Page:1020 MD10 AUTO CHIEF CONTROL
PANEL (1)**

A:	Z01757 %	STBD CONTROL LEVER POS (ec)
B:	X01000 %	ME 1 FUEL LINK POSITION
C:		
D:	Z02757 %	PORT CONTROL LEVER POS (ec)
E:	X02000 %	ME 2 FUEL LINK POSITION
F:		
G:	N01763 rpm	FIXED SPEED SET POINT
H:	N02763 rpm	PORT FIXED SPEED SET POINT
I:		
J:		
K:	X07562 <0-1>	ME 1 CONTROL MODE : COMBINATOR
L:	X07561 <0-1>	ME 1 CONTROL MODE : FIXED PITCH
M:	X07564 <0-1>	ME 1 CONTROL MODE : ECONOMY
N:	X07563 <0-1>	ME 1 CONTROL MODE : FIXED SPEED
O:		
P:	N03761 rpm	STBD PROPELLER SPEED
Q:	X03762 P/D	STBD PROPELLER PITCH
R:		
S:	N03661 rpm	PORT PROPELLER SPEED
T:	X03662 P/D	PORT PROPELLER PITCH

2.59 Page:1021 MD10** AUTO CHIEF CONTROL PANEL (2)

A:	X07027	<0-1>			GENERAL AUTOCHIEF RESET (slow/shut)
B:					
C:	X01700	<0-7>	L=---	H=1.0	ME 1 SLOW DOWN INDICATION
D:	X01730	<0-4>	L=---	H=1.0	ME 1 SHUT DOWN INDICATION
E:	X01711	<0-9>			ME 1 START INH INDICATION
F:					
G:	X02700	<0-7>	L=---	H=1.0	ME 2 SLOW DOWN INDICATION
H:	X02730	<0-4>	L=---	H=1.0	ME 2 SHUT DOWN INDICATION
I:	X02711	<0-9>			ME 2 START INH INDICATION
J:					
K:	X01723	<0-3>	L=---	H=1.0	STBD GEAR SHUT DOWN INDICATION
L:	X01774	<0-5>	L=---	H=1.0	STBD PROP GEAR SLOW DOWN
M:					
N:	X02723	<0-3>	L=---	H=1.0	PORT GEAR SHUT DOWN INDICATION
O:	X02774	<0-5>	L=---	H=1.0	PORT PROP GEAR SLOW DOWN
P:					
Q:					
R:					
S:					
T:					

2.60 Page:1022 MD10** AUTO CHIEF CONTROL PANEL (3)

A:	X01740	<0-1>			ME 1 OPERATION : READY
B:					
C:	X01741	<0-1>			ME 1 OPERATION : START AHEAD
D:	X01742	<0-1>			ME 1 OPERATION : STOP
E:	X01743	<0-1>			ME 1 OPERATION : CONNECT
F:	X01744	<0-1>			ME 1 OPERATION : DISCONNECT
G:	X01745	<0-1>			ME 1 OPERATION : SLOW DOWN
H:	X01746	<0-1>			ME 1 OPERATION : SHUT DOWN
I:					
J:					
K:					
L:	X01712	<0-1>			ME 1 START INH 1 : ME LOCAL CONTROL
M:	X01713	<0-1>			ME 1 START INH 2 : TURNING GEAR IN
N:	X01714	<0-1>			ME 1 START INH 3 : START AIR PRESS LOW
O:	X01715	<0-1>			ME 1 START INH 4 : CONTR AIR PRESS LOW
P:	X01716	<0-1>			ME 1 START INH 5 : ROCKER ARM LO TEMP LOW
Q:	X01717	<0-1>			ME 1 START INH 6 : ME CLUTCH CONNECTED
R:	X01720	<0-1>			ME 1 START INH 7 : JW TEMP LOW
S:	X01721	<0-1>			ME 1 START INH 8 : LO TEMP LOW
T:	X01722	<0-1>			ME 1 START INH 9 : ME DAMAGE (ruined)

**2.61 Page:1023 MD10** AUTO CHIEF CONTROL
PANEL (4)**

A:	X02740	<0-1>	ME 2 OPERATION : READY
B:			
C:	X02741	<0-1>	ME 2 OPERATION : START AHEAD
D:	X02742	<0-1>	ME 2 OPERATION : STOP
E:	X02743	<0-1>	ME 2 OPERATION : CONNECT
F:	X02744	<0-1>	ME 2 OPERATION : DISCONNECT
G:	X02745	<0-1>	ME 2 OPERATION : SLOW DOWN
H:	X02746	<0-1>	ME 2 OPERATION : SHUT DOWN
I:	X02747	<0-1>	ME 2 OPERATION : SG SPEED
J:			
K:			
L:	X02712	<0-1>	ME 2 START INH 1 : ME LOCAL CONTROL
M:	X02713	<0-1>	ME 2 START INH 2 : TURNING GEAR IN
N:	X02714	<0-1>	ME 2 START INH 3 : START AIR PRESS LOW
O:	X02715	<0-1>	ME 2 START INH 4 : CONTR AIR PRESS LOW
P:	X02716	<0-1>	ME 2 START INH 5 : ROCKER ARM LO TEMP LOW
Q:	X02717	<0-1>	ME 2 START INH 6 : ME CLUTCH CONNECTED
R:	X02720	<0-1>	ME 2 START INH 7 : JW TEMP LOW
S:	X02721	<0-1>	ME 2 START INH 8 : LO TEMP LOW
T:	X02722	<0-1>	ME 2 START INH 9 : ME DAMAGE (ruined)

2.62 Page:1024 MD10 AUTO CHIEF - SLOW /
SHUTDOWN ACTIONS (1)**

A:			
B:	X01701	<0-1>	ME 1 SLOWD 1 : LOW LO PRESS
C:	X01702	<0-1>	ME 1 SLOWD 2 : LOW JW PRESS
D:	X01703	<0-1>	ME 1 SLOWD 3 : HIGH LO TEMP
E:	X01704	<0-1>	ME 1 SLOWD 4 : HIGH JW TEMP
F:	X01705	<0-1>	ME 1 SLOWD 5 : HIGH SCAV AIR TEMP
G:	X01706	<0-1>	ME 1 SLOWD 6 : HIGH BEARING TEMP
H:	X01707	<0-1>	ME 1 SLOWD 7 : LOW ROCKER ARM LO PRESS
I:	X01708	<0-1>	ME 1 SLOWD 8 : HIGH ROCKER ARM LO TEMP
J:			
K:	X01731	<0-2>	ME 1 SHUTD 1 : LO PRESS LOW
L:	X01732	<0-2>	ME 1 SHUTD 2 : JW TEMP HIGH
M:	X01733	<0-2>	ME 1 SHUTD 3 : ME OVERSPEED
N:	X01734	<0-2>	ME 1 SHUTD 4 : ROCKER ARM LO PRESS LOW
O:			
P:			
Q:	X01724	<0-2>	STBD GEAR SHUTD 3 : GEAR LO PRESS LOW
R:	X01725	<0-2>	STBD GEAR SHUTD 2 : GEAR LO TEMP HIGH
S:	X01726	<0-2>	STBD GEAR SHUTD 1 : SERV LO PRESS LOW
T:			

2.63 Page:1025 MD10** AUTO CHIEF - SLOW / SHUTDOWN ACTIONS (2)

A:	X01776	<0-1>	STBD GEAR SLOWD 1 : LOW GEAR LO PRESS
B:	X01777	<0-1>	STBD GEAR SLOWD 2 : HIGH GEAR LO TEMP
C:	X01778	<0-1>	STBD GEAR SLOWD 3 : LOW SERVO LO PRESS
D:	X01779	<0-1>	STBD GEAR SLOWD 4 : HIGH SERVO LO TEMP
E:	X01780	<0-1>	STBD GEAR SLOWD 5 : HIGH GEAR BEAR TEMP
F:			
G:	X01726	<0-2>	STBD GEAR SHUTD 1 : SERV LO PRESS LOW
H:	X01725	<0-2>	STBD GEAR SHUTD 2 : GEAR LO TEMP HIGH
I:	X01724	<0-2>	STBD GEAR SHUTD 3 : GEAR LO PRESS LOW
J:			
K:			
L:	X02776	<0-1>	PORT GEAR SLOWD 1 : LOW GEAR LO PRESS
M:	X02777	<0-1>	PORT GEAR SLOWD 2 : HIGH GEAR LO TEMP
N:	X02778	<0-1>	PORT GEAR SLOWD 3 : LOW SERVO LO PRESS
O:	X02779	<0-1>	PORT GEAR SLOWD 4 : HIGH SERVO LO TEMP
P:	X02780	<0-1>	PORT GEAR SLOWD 5 : HIGH GEAR BEAR TEMP
Q:			
R:	X02726	<0-2>	PORT GEAR SHUTD 1 : SERV LO PRESS LOW
S:	X02725	<0-2>	PORT GEAR SHUTD 2 : GEAR LO TEMP HIGH
T:	X02724	<0-2>	PORT GEAR SHUTD 3 : GEAR LO PRESS LOW

2.64 Page:1026 MD10** AUTO CHIEF - SLOW / SHUTDOWN ACTIONS (3)

A:			
B:	X02701	<0-1>	ME 2 SLOWD 1 : LOW LO PRESS
C:	X02702	<0-1>	ME 2 SLOWD 2 : LOW JW PRESS
D:	X02703	<0-1>	ME 2 SLOWD 3 : HIGH LO TEMP
E:	X02704	<0-1>	ME 2 SLOWD 4 : HIGH JW TEMP
F:	X02705	<0-1>	ME 2 SLOWD 5 : HIGH SCAV AIR TEMP
G:	X02706	<0-1>	ME 2 SLOWD 6 : HIGH BEARING TEMP
H:	X02707	<0-1>	ME 2 SLOWD 7 : LOW ROCKER ARM LO PRESS
I:	X02708	<0-1>	ME 2 SLOWD 8 : HIGH ROCKER ARM LO TEMP
J:			
K:	X02731	<0-2>	ME 2 SHUTD 1 : LO PRESS LOW
L:	X02732	<0-2>	ME 2 SHUTD 2 : JW TEMP HIGH
M:	X02733	<0-2>	ME 2 SHUTD 3 : ME OVERSPEED
N:	X02734	<0-2>	ME 2 SHUTD 4 : ROCKER ARM LO PRESS LOW
O:			
P:			
Q:			
R:			
S:			
T:			



2.65 Page:1027 MD10** AUTO CHIEF - EMERGENCY CONTROL

A:	X01671	<0-2>	RESPONSIBILITY TRANSFER : BRIDGE (ME 1)
B:	X01672	<0-2>	RESPONSIBILITY TRANSFER : ECR (ME 1)
C:			
D:	X01660	<0-2>	EMERGENCY TELEGRAPH : ME 1 FULL AHEAD
E:	X01661	<0-2>	EMERGENCY TELEGRAPH : ME 1 HALF AHEAD
F:	X01662	<0-2>	EMERGENCY TELEGRAPH : ME 1 SLOW AHEAD
G:	X01663	<0-2>	EMERGENCY TELEGRAPH : ME 1 DEADS AHEAD
H:	X01664	<0-2>	EMERGENCY TELEGRAPH : ME 1 STOP
I:	X01665	<0-2>	EMERGENCY TELEGRAPH : ME 1 DEADS ASTERN
J:	X01666	<0-2>	EMERGENCY TELEGRAPH : ME 1 SLOW ASTERN
K:	X01667	<0-2>	EMERGENCY TELEGRAPH : ME 1 HALF ASTERN
L:	X01670	<0-2>	EMERGENCY TELEGRAPH : ME 1 FULL ASTERN
M:			
N:			
O:	X01756	<0-1>	ME 1 CONTROL MODE : EMERG STOP
P:	X01754	<0-1>	ME 1 CONTROL MODE : EMERG RUN
Q:			
R:	X02756	<0-1>	ME 2 CONTROL MODE : EMERG STOP
S:	X02754	<0-1>	ME 2 CONTROL MODE : EMERG RUN
T:			

2.66 Page:1090 MD10** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.67 Page:1100 MD11** ME 1 JW SYSTEM - MAIN VARIABLES

A:	P01054	bar	L=0.7	H=3.2	JW PRESS INLET ME 1
B:	P01055	bar			JW PRESS INLET ME 1 JW COOLER
C:	P01053	bar			JW PRESS INLET ME 1 PUMPS
D:					
E:					
F:	T01056	degC	L=60.0	H=---	JW TEMP INLET ME 1
G:	T01057	degC	L=---	H=85.0	JW TEMP OUTLET ME 1
H:	T01373	degC	L=---	H=85.0	JW TEMP OUTLET ME 1, BLOCK 2
I:	T01060	degC			JW TEMP OUTLET ME 1 JW COOLER
J:					
K:					
L:	V01130	%			ME 1 JW TEMP CONTR VALVE POS
M:					
N:	G01375	ton/h			JW FLOW OUTLET ME 1, BLOCK 1
O:	G01374	ton/h			JW FLOW OUTLET ME 1, BLOCK 2
P:	G01066	ton/h			JW FLOW TO ME 1 JW LINE
Q:	G01067	ton/h			JW FLOW TO ME 1 JW LINE
R:					
S:	L01062	m	L=0.3	H=0.9	ME 1 JW EXPANSION TANK LEVEL
T:					

2.68 Page:1101 MD11** ME 1 JW SYSTEM - AUXIL VARIABLES

A:	L01062	m	L=0.3	H=0.9	ME 1 JW EXPANSION TANK LEVEL
B:					
C:	V01223	<0-1>			ME 1 JW EX. TANK MAKE-UP VALVE
D:	G01070	ton/h			ME 1 JW EX. TANK MAKE-UP FLOW
E:	V01224	<0-1>			ME 1 JW EX. TANK SHUT OFF VALVE
F:					
G:	V01370	<0-1>			ME 1 JW EX. TANK DRAIN VALVE
H:	G01371	ton/h			ME 1 JW EX. TANK DRAIN FLOW
I:	G01372	ton/h	L=---	H=0.5	ME 1 JW EX. TANK OVERFLOW
J:					
K:					
L:	R01226	<0-1>			ME 1 JW AUXIL PUMP
M:	V01220	<0-1>			ME 1 JW AUXIL PUMP SUCTION VALVE
N:	V01221	<0-1>			ME 1 JW MECH PUMP SUCTION VALVE
O:					
P:	R01230	<0-1>			ME 1 JW CIRC PUMP
Q:	V01222	<0-1>			ME 1 JW CIRC PUMP SUCTION VALVE
R:	X01231	<0-1>			ME 1 JW CIRC PUMP HEATER
S:	V01376	<0-1>			ME 1 JW HEATER STEAM SHUT OFF VALVE
T:	G01377	ton/h			ME 1 JW HEATER STEAM FLOW

**2.69 Page:1110 MD11** ME 1 JW SYSTEM - TEMP CONTROL**

A:	X01136	<0-1>	ME 1 JW TEMP CONTR AUTO SWITCH
B:	Z01137	%	ME 1 JW TEMP CONTR MANUAL OUTPUT
C:			
D:	T01131	degC	ME 1 JW TEMP CONTR SET POINT
E:	T01132	degC	ME 1 JW TEMP CONTR INPUT SIGNAL
F:	Z01133	%	ME 1 JW TEMP CONTR OUTPUT SIGNAL
G:	V01130	%	ME 1 JW TEMP CONTR VALVE POS
H:			
I:	G01066	ton/h	JW FLOW TO ME 1 JW LINE
J:	G01067	ton/h	JW FLOW TO ME 1 JW LINE
K:			
L:	X01144	<0-1>	ME 1 JW TEMP CONTR HW PID SELECT
M:	C01145	%/degC	ME 1 JACKET W TEMP CONTR GAIN
N:	C01146	sec	ME 1 JW TEMP CONTR INTEGRATION TIME
O:	C01147	sec	ME 1 JW TEMP CONTR DERIVATION TIME
P:	C01150	<0-10>	ME 1 JW TEMP CONTR DERIVATION RANGE
Q:	C01151	sec	ME 1 JW TEMP CONTR VALVE TC
R:	C01152	sec	ME 1 JW TEMP CONTR SENSOR TC
S:	X01153	<0-2>	ME 1 JW TEMP CONTR VALVE HYST TYPE
T:	X01158	%	ME 1 JW TEMP CONTR VALVE HYST VALUE

2.70 Page:1190 MD11 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.71 Page:1200 MD12** ME 1 LO SYSTEM - MAIN VARIABLES

A:	P01073	bar	L=1.2	H=---	LO PRESS INLET ME 1
B:	T01076	degC	L=50.0	H=62.0	LO TEMP INLET ME 1
C:	G01110	ton/h			LO FLOW INLET ME 1
D:					
E:	P01074	bar			ME 1 LO MICRO FILTER INLET PRESS
F:	P01075	bar	L=---	H=1.5	ME 1 LO DUPLEX FILTER DIFF PRESS
G:					
H:	V01241	<0-1>			ME 1 MAIN LO FILTER 1
I:	V01242	<0-1>			ME 1 MAIN LO FILTER 2
J:					
K:	V01243	<0-1>			ME 1 LO MICRO FILTER INLET VALVE
L:					
M:	G01103	ton/h			ME 1 LO MICRO FILTER FLOW
N:					
O:					
P:	T01100	degC	L=30.0	H=75.0	ME 1 LO CIRCULATION TANK TEMP
Q:	L01077	%	L=30.0	H=90.0	ME 1 LO CIRCULATION TANK LEVEL
R:					
S:					
T:					

2.72 Page:1201 MD12** ME 1 LO SYSTEM - AUXIL VARIABLES

A:	R01237	<0-1>			ME 1 LO AUXIL PUMP
B:					
C:	V01247	<0-1>			ME 1 LO MAKE UP VALVE (from storage)
D:	V01250	<0-1>			ME 1 LO DISCHARGE VALVE (to spill)
E:					
F:	G01104	ton/h			ME 1 LO FLOW FROM STORAGE TANK
G:	G01105	ton/h			ME 1 LO FLOW TO SPILL OIL TANK
H:					
I:	V01244	<0-1>			ME 1 LO PURIF SUCTION VALVE
J:	V01245	<0-1>			ME 1 LO PURIF DISCHARGE VALVE
K:	G01111	ton/h			ME 1 LO FLOW TO PURIFIER
L:	G01112	ton/h			ME 1 LO FLOW FROM PURIFIER
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

**2.73 Page:1202 MD12** ME 1 LO SYSTEM - BEARING TEMP**

A:
B:
C:
D: T01301 degC L=--- H=75.0 ME 1 MAIN BEARING 1 TEMP
E: T01302 degC L=--- H=75.0 ME 1 MAIN BEARING 2 TEMP
F: T01303 degC L=--- H=75.0 ME 1 MAIN BEARING 3 TEMP
G: T01304 degC L=--- H=75.0 ME 1 MAIN BEARING 4 TEMP
H: T01305 degC L=--- H=75.0 ME 1 MAIN BEARING 5 TEMP
I: T01306 degC L=--- H=75.0 ME 1 MAIN BEARING 6 TEMP
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.74 Page:1210 MD12 ME 1 LO SYSTEM - TEMP CONTROL (1)**

A:
B: X01166 <0-1> ME 1 LO TEMP CONTR AUTO SWITCH
C: Z01167 % ME 1 LO TEMP CONTR MANUAL OUTPUT
D:
E: T01161 degC ME 1 LO TEMP CONTR SET POINT
F: T01162 degC ME 1 LO TEMP CONTR INPUT SIGNAL
G: Z01163 % ME 1 LO TEMP CONTR OUTPUT SIGNAL
H: V01160 % ME 1 LO TEMP CONTR VALVE POS
I:
J: T01100 degC L=30.0 H=75.0 ME 1 LO CIRCULATION TANK TEMP
K:
L: T01076 degC L=50.0 H=62.0 LO TEMP INLET ME 1
M: T01101 degC LO TEMP OUTLET ME 1 LO COOLER
N:
O:
P: G01106 ton/h ME 1 LO FLOW INLET LO COOLER
Q: G01107 ton/h ME 1 LO FLOW BYPASS LO COOLER
R:
S: E01002 kW L=--- H=11800.0 ME 1 EFFECTIVE POWER
T:

2.75 Page:1211 MD12** ME 1 LO SYSTEM - TEMP CONTROL (2)

A:
 B:
 C: X01172 <0-1> ME 1 LO TEMP CONTR HW PID SELECT
 D:
 E: C01175 %/degC ME 1 LO TEMP CONTR GAIN
 F: C01176 sec ME 1 LO TEMP CONTR INTEGRATION TIME
 G: C01177 sec ME 1 LO TEMP CONTR DERIVATION TIME
 H: C01200 <0-10> ME 1 LO TEMP CONTR DERIVATION RANGE
 I:
 J:
 K: C01201 sec ME 1 LO TEMP CONTR VALVE TC
 L: C01202 sec ME 1 LO TEMP CONTR SENSOR TC
 M: X01203 <0-2> ME 1 LO TEMP CONTR VALVE HYST TYPE
 N: X01208 % ME 1 LO TEMP CONTR VALVE HYST VALUE
 O:
 P:
 Q:
 R:
 S:
 T:

2.76 Page:1250 MD12** ME 1 ROCKER ARM LO SYSTEM - MAIN VAR.

A: P01823 bar L=0.8 H=--- RA LO PRESS INLET ME 1
 B: T01824 degC L=38.0 H=--- RA LO TEMP INLET ME 1
 C: G01825 ton/h RA LO FLOW INLET ME 1
 D:
 E: P01813 bar ME 1 ROCKER ARM LO PUMP DISCHARGE PRESS
 F: P01822 bar L=--- H=1.0 ME 1 ROCKER ARM LO FILTER DIFF PRESS
 G:
 H: V01820 <0-1> ME 1 ROCKER ARM LO FILTER 1
 I: V01821 <0-1> ME 1 ROCKER ARM LO FILTER 2
 J:
 K: L01800 % ME 1 ROCKER ARM LO SETTLE TANK LEVEL
 L: T01801 degC ME 1 ROCKER ARM LO SETTLE TANK TEMP
 M:
 N: L01802 % L=30.0 H=90.0 ME 1 ROCKER ARM LO SUCTION TANK LEVEL
 O: T01803 degC L=30.0 H=--- ME 1 ROCKER ARM LO SUCTION TANK TEMP
 P:
 Q:
 R: T01833 degC L=--- H=75.0 RA LO TEMP OUTLET ME 1
 S:
 T:

**2.77 Page:1251 MD12** ME 1 ROCKER ARM LO SYSTEM - AUXIL (1)**

A:	R01810	<0-1>	ME 1 ROCKER ARM LO PUMP 1
B:	R01811	<0-1>	ME 1 ROCKER ARM LO PUMP 2
C:			
D:	P01813	bar	ME 1 ROCKER ARM LO PUMP DISCHARGE PRESS
E:	G01814	ton/h	ME 1 ROCKER ARM LO PUMP DISCHARGE FLOW
F:	G01812	ton/h	ME 1 ROCKER ARM LO PUMP RECIRC FLOW
G:	V01816	<0-1>	ME 1 ROCKER ARM LO PUMP RECIRC VALVE
H:			
I:	V01827	<0-1>	ME 1 ROCKER ARM LO RECIRC VALVE
J:	G01826	ton/h	ME 1 ROCKER ARM LO RECIRC FLOW
K:			
L:	V01829	<0-1>	ME 1 ROCKER ARM LO BYPASS RECIRC VALVE
M:	G01828	ton/h	ME 1 ROCKER ARM LO BYPASS RECIRC FLOW
N:			
O:	V01804	<0-1>	ME 1 ROCKER ARM SUCT TANK MAKE-UP VALVE
P:	G01805	ton/h	ME 1 ROCKER ARM SUCT TANK MAKE-UP FLOW
Q:			
R:	V01832	<0-1>	ME 1 ROCKER ARM LO SETTLE TANK DRAIN VALVE
S:	G01831	ton/h	ME 1 ROCKER ARM LO TANKS DRAIN FLOW
T:	G01830	ton/h	ME 1 ROCKER ARM LO SUCTION TANK OVERFLOW

2.78 Page:1252 MD12 ME 1 ROCKER ARM LO SYSTEM - AUXIL (2)**

A:			
B:	V01806	<0-1>	ME 2 ROCKER ARM SUCT TANK STEAM VALVE
C:	G01807	ton/h	ME 1 ROCKER ARM SUCT TANK STEAM FLOW
D:			
E:			
F:	X01815	<0-1>	ME 1 ROCKER ARM LO PUMPS AUTO SWITCH
G:			
H:	P01840	bar	ME ROCKER ARM PUMPS START LIMIT
I:	P01841	bar	ME ROCKER ARM PUMPS STOP LIMIT
J:	X01842	<0-1>	ME 1 ROCKER ARM PUMP AUTO-CYCLE ON
K:			
L:			
M:	P01834	bar	ME 1 ROCKER ARM PUMP REC. V OPEN PRESS
N:	P01835	bar	ME 1 ROCKER ARM PUMP REC. V CLOSE PRESS
O:			
P:	P01836	bar	ME 1 ROCKER ARM REC. VALVE OPEN PRESS
Q:	P01837	bar	ME 1 ROCKER ARM REC. VALVE CLOSE PRESS
R:			
S:			
T:			

2.79 Page:1290 MD12** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.80 Page:1300 MD13** ME 1 TURBOCHARGER SYSTEM (1)

A:
B:
C: P01020 bar L=--- H=2.4 ME 1 SCAV AIR RECEIVER PRESS
D: T01021 degC L=--- H=65.0 ME 1 SCAV AIR RECEIVER TEMP
E:
F: N01022 krpm L=--- H=19.0 ME 1 TBCH SPEED
G: T01025 degC L=--- H=550.0 ME 1 TBCH EXHAUST INLET TEMP
H: T01026 degC L=--- H=410.0 ME 1 TBCH EXHAUST OUTLET TEMP
I:
J:
K: T01030 degC AIR TEMP INLET ME 1 TBCH
L: T01047 degC L=--- H=220.0 AIR TEMP INLET ME 1 AIR COOLER
M: T01050 degC L=20.0 H=70.0 AIR TEMP OUTLET ME 1 AIR COOLER
N:
O:
P: G01024 ton/h ME 1 TBCH AIR FLOW
Q:
R: P01043 mmWC L=--- H=200.0 ME 1 TBCH AIR FILTER DIFF PRESS
S: P01044 mmWC L=--- H=200.0 ME 1 TBCH AIR COOLER DIFF PRESS
T:

**2.81 Page:1301 MD13** ME 1 TURBOCHARGER SYSTEM (2)**

A:
 B:
 C: P01620 bar L=--- H=2.4 ME 1 SCAV AIR RECEIVER 2 PRESS
 D: T01621 degC L=--- H=65.0 ME 1 SCAV AIR RECEIVER 2 TEMP
 E:
 F: N01622 krpm L=--- H=19.0 ME 1 TBCH 2 SPEED
 G: T01625 degC L=--- H=550.0 ME 1 TBCH 2 EXHAUST INLET TEMP
 H: T01626 degC L=--- H=410.0 ME 1 TBCH 2 EXHAUST OUTLET TEMP
 I:
 J:
 K: T01630 degC AIR TEMP INLET ME 1 TBCH 2
 L: T01647 degC L=--- H=220.0 AIR TEMP INLET ME 1 AIR COOLER 2
 M: T01650 degC L=20.0 H=70.0 AIR TEMP OUTLET ME 1 AIR COOLER 2
 N:
 O:
 P: G01624 ton/h ME 1 TBCH 2 AIR FLOW
 Q:
 R: P01643 mmWC L=--- H=200.0 ME 1 TBCH AIR FILTER 2 DIFF PRESS
 S: P01644 mmWC L=--- H=200.0 ME 1 TBCH AIR COOLER 2 DIFF PRESS
 T:

2.82 Page:1302 MD13 ME 1 EXHAUST TEMPERATURES (1)**

A:
 B: T01320 degC L=--- H=510.0 ME 1 MEAN CYL EXHAUST TEMP
 C:
 D: T01031 degC L=--- H=520.0 ME 1 CYL 1 EXHAUST TEMP
 E: T01032 degC L=--- H=520.0 ME 1 CYL 2 EXHAUST TEMP
 F: T01033 degC L=--- H=520.0 ME 1 CYL 3 EXHAUST TEMP
 G: T01034 degC L=--- H=520.0 ME 1 CYL 4 EXHAUST TEMP
 H: T01035 degC L=--- H=520.0 ME 1 CYL 5 EXHAUST TEMP
 I:
 J: T01036 degC L=--- H=520.0 ME 1 CYL 6 EXHAUST TEMP
 K: T01037 degC L=--- H=520.0 ME 1 CYL 7 EXHAUST TEMP
 L: T01038 degC L=--- H=520.0 ME 1 CYL 8 EXHAUST TEMP
 M: T01039 degC L=--- H=520.0 ME 1 CYL 9 EXHAUST TEMP
 N: T01040 degC L=--- H=520.0 ME 1 CYL 10 EXHAUST TEMP
 O:
 P:
 Q:
 R:
 S:
 T:

2.83 Page:1303 MD13** ME 1 EXHAUST TEMPERATURES (2)

A:	T01321	degC	L=-20.0	H=20.0	ME 1 CYL 1 EXHAUST DEV TEMP
B:	T01322	degC	L=-20.0	H=20.0	ME 1 CYL 2 EXHAUST DEV TEMP
C:	T01323	degC	L=-20.0	H=20.0	ME 1 CYL 3 EXHAUST DEV TEMP
D:	T01324	degC	L=-20.0	H=20.0	ME 1 CYL 4 EXHAUST DEV TEMP
E:	T01325	degC	L=-20.0	H=20.0	ME 1 CYL 5 EXHAUST DEV TEMP
F:					
G:	T01326	degC	L=-20.0	H=20.0	ME 1 CYL 6 EXHAUST DEV TEMP
H:	T01327	degC	L=-20.0	H=20.0	ME 1 CYL 7 EXHAUST DEV TEMP
I:	T01328	degC	L=-20.0	H=20.0	ME 1 CYL 8 EXHAUST DEV TEMP
J:	T01329	degC	L=-20.0	H=20.0	ME 1 CYL 9 EXHAUST DEV TEMP
K:	T01330	degC	L=-20.0	H=20.0	ME 1 CYL 10 EXHAUST DEV TEMP
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.84 Page:1390 MD13** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.85 Page:1400 MD14** ME 1 SW SYSTEM -
PRESS/TEMP**

A:	P01414	bar			ME 1 SW PUMP SUCTION PRESS
B:	P01415	bar	L=---	H=4.0	ME 1 SW PUMP DISCHARGE PRESS
C:	P01416	bar	L=1.0	H=3.5	ME 1 SW MAIN LINE PRESS
D:					
E:	P01413	bar	L=---	H=0.5	ME 1 SW FILTER DIFF PRESS
F:	T01400	degC	L=15.0	H=35.0	ME 1 SW TEMP OUTLET PUMP
G:					
H:	T01407	degC			ME 1 SW TEMP INLET GEAR LOC
I:	T01410	degC			ME 1 SW TEMP INLET SERVO LOC
J:	T01411	degC			ME 1 SW TEMP OUTLET SERVO LOC
K:					
L:	T01521	degC			ME 1 SW TEMP OUTLET AIR COOLER 1
M:	T01522	degC			ME 1 SW TEMP OUTLET AIR COOLER 2
N:	T01520	degC			ME 1 SW TEMP OUTLET INJ WATER COOLER
O:					
P:	T01401	degC	L=15.0	H=35.0	ME 1 SW TEMP INLET LOC
Q:	T01403	degC			ME 1 SW TEMP INLET FWC
R:	T01404	degC			ME 1 SW TEMP OUTLET FWC
S:					
T:	T01405	degC			ME 1 SW TEMP INLET RECIRC VALVE

2.86 Page:1401 MD14 ME 1 SW SYSTEM - FLOWS**

A:					
B:					
C:	G01421	ton/h			ME 1 SW PUMP FLOW
D:	G01420	ton/h			ME 1 SEA CHEST INLET FLOW
E:					
F:	G01433	ton/h			ME 1 SW FLOW TO AIR COOLER 1
G:	G01434	ton/h			ME 1 SW FLOW TO AIR COOLER 2
H:	G01436	ton/h			ME 1 SW FLOW TO INJ WATER COOLER
I:	G01430	ton/h			ME 1 SW FLOW TO GEARC/SERVOC
J:					
K:	G01422	ton/h			ME 1 SW FLOW TO LOC/FWC
L:					
M:	G01425	ton/h			ME 1 SW FLOW INLET CONTROL VALVE
N:	G01423	ton/h			ME 1 SW FLOW OVERBOARD
O:	G01424	ton/h			ME 1 SW FLOW RECIRC
P:					
Q:					
R:	G01431	ton/h			ME 1 SW CROSS-OVER SUCTION FLOW
S:	G01432	ton/h			ME 1 SW CROSS-OVER DISCHARGE FLOW
T:					

2.87 Page:1402 MD14** ME 1 SW SYSTEM - VALVES/PUMPS

A:		
B:		
C:	R01462 <0-1>	ME 1 SW PUMP 1
D:	R01463 <0-1>	ME 1 SW PUMP 2
E:		
F:	V01451 <0-1>	ME 1 SW PUMP SUCTION VALVE
G:		
H:	V01459 <0-1>	ME 1 AIR COOLER 1 SW SUPPLY VALVE
I:	V01460 <0-1>	ME 1 AIR COOLER 2 SW SUPPLY VALVE
J:	V01458 <0-1>	ME 1 INJ WATER COOLER SW SUPPLY VALVE
K:	V01453 <0-1>	ME 1 GEARC/SERVOC SW SUPPLY VALVE
L:		
M:	V01450 <0-1>	ME 1 SEA CHEST SHUT OFF VALVE
N:	V01454 <0-1>	ME 1 OVERBOARD SHUT OFF VALVE
O:	V01455 <0-1>	ME 1 SW RECIRC SHUT OFF VALVE
P:		
Q:		
R:	V01456 <0-1>	ME 1 SW CROSS-OVER SUCTION VALVE
S:	V01457 <0-1>	ME 1 SW CROSS-OVER DISCHARGE VALVE
T:		

2.88 Page:1410 MD14** ME 1 SW SYSTEM - TEMP CONTROL (1)

A:				
B:				
C:	X01476 <0-1>			ME 1 SW TEMP CONTR AUTO SWITCH
D:	Z01477 %			ME 1 SW TEMP CONTR MANUAL OUTPUT
E:				
F:	T01471 degC			ME 1 SW TEMP CONTR SET POINT
G:	T01472 degC			ME 1 SW TEMP CONTR INPUT SIGNAL
H:	Z01473 %			ME 1 SW TEMP CONTR OUTPUT SIGNAL
I:	V01470 %			ME 1 SW TEMP CONTR VALVE POS
J:				
K:	T01400 degC	L=15.0	H=35.0	ME 1 SW TEMP OUTLET PUMP
L:	T01405 degC			ME 1 SW TEMP INLET RECIRC VALVE
M:				
N:				
O:	N01515 %			ME 1 SW TEMP CONTR MOTOR SPEED
P:				
Q:				
R:				
S:				
T:				

**2.89 Page:1411 MD14** ME 1 SW SYSTEM - TEMP CONTROL (2)**

A:
B:
C: X01502 <0-1> ME 1 SW TEMP CONTR HW PID SELECT
D:
E: C01505 %/degC ME 1 SW TEMP CONTR GAIN
F: C01506 sec ME 1 SW TEMP CONTR INTEGRATION TIME
G: C01507 sec ME 1 SW TEMP CONTR DERIVATION TIME
H: C01510 <0-10> ME 1 SW TEMP CONTR DERIVATION RANGE
I:
J: X01513 <0-2> ME 1 SW TEMP CONTR VALVE HYST TYPE
K: X01518 % ME 1 SW TEMP CONTR VALVE HYST VALUE
L: C01511 sec ME 1 SW TEMP CONTR VALVE TC
M: C01512 sec ME 1 SW TEMP CONTR SENSOR TC
N:
O: X01503 <0-1> ME 1 SW TEMP CONTR MOTOR SELECT
P: C01514 %/sec ME 1 SW TEMP CONTR MOTOR CONSTANT
Q:
R:
S:
T:

2.90 Page:1412 MD14 ME 1 SW SYSTEM - TEMP CONTROL (3)**

A: X01529 <0-1> ME 1 SW AIR REC TEMP CONTR AUTO SWITCH
B: Z01530 % ME 1 SW AIR REC TEMP CONTR MANUAL OUTP
C:
D: T01526 degC ME 1 SW AIR REC TEMP CONTR SET POINT
E: T01527 degC ME 1 SW AIR REC TEMP CONTR INPUT SIGNAL
F: Z01528 % ME 1 SW AIR REC TEMP CONTR OUTPUT SIGNAL
G: V01525 % ME 1 SW AIR REC TEMP CONTR VALVE POS
H:
I: G01435 ton/h ME 1 SW AIR COOLERS BYPASS FLOW
J:
K:
L: X01531 <0-1> ME 1 SW AIR REC TEMP CONTR HW PID SELECT
M: C01532 %/degC ME 1 SW AIR REC TEMP CONTR GAIN
N: C01533 sec ME 1 SW AIR REC TEMP CONTR INTEGR TIME
O: C01534 sec ME 1 SW AIR REC TEMP CONTR DERIV TIME
P: C01535 <0-10> ME 1 SW AIR REC TEMP CONTR DERIV RANGE
Q: C01536 sec ME 1 SW AIR REC TEMP CONTR VALVE TC
R: C01537 sec ME 1 SW AIR REC TEMP CONTR SENSOR TC
S: X01538 <0-2> ME 1 SW AIR REC TEMP CONTR VALVE HYST TYPE
T: X01539 % ME 1 SW AIR REC TEMP CONTR VALVE HYST VALUE

2.91 Page:1420 MD14** ME 1 SW SYSTEM - PUMPS

A:				
B:				
C:	R01462	<0-1>		ME 1 SW PUMP 1
D:	R01463	<0-1>		ME 1 SW PUMP 2
E:				
F:	E01442	kW		ME 1 SW PUMP 1 POWER
G:	E01443	kW		ME 1 SW PUMP 2 POWER
H:				
I:	Z01441	%		ME 1 SW PUMP EFFICIENCY
J:				
K:	N01440	%		ME 1 SW PUMP SPEED
L:	G01421	ton/h		ME 1 SW PUMP FLOW
M:				
N:	P01414	bar		ME 1 SW PUMP SUCTION PRESS
O:	P01415	bar	L=---	H=4.0
P:	V01467	%		ME 1 SW PUMP DISCHARGE PRESS
Q:				ME 1 SW PUMP OUTLET CHOKE VALVE
R:				
S:				
T:				

2.92 Page:1490 MD14** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.93 Page:1500 MD15** ME 1 Inj CW SYSTEM -
MAIN VARIABLES (1)**

A:	R01556	<0-1>			ME 1 Inj CW PUMP 1
B:	R01557	<0-1>			ME 1 Inj CW PUMP 2
C:					
D:	P01555	bar			ME 1 Inj CW PUMP DISCHARGE PRESS
E:					
F:	V01560	<0-1>			ME 1 Inj CW INLET VALVE
G:					
H:	P01554	bar	L=1.9	H=---	ME 1 Inj CW INLET PRESSURE
I:	T01552	degC	L=50.0	H=---	ME 1 Inj CW INLET TEMP
J:	G01550	ton/h			ME 1 Inj CW INLET FLOW
K:					
L:	T01553	degC	L=---	H=85.0	ME 1 Inj CW OUTLET TEMP
M:	G01551	ton/h			ME 1 Inj CW OUTLET FLOW
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.94 Page:1501 MD15 ME 1 Inj CW SYSTEM -
EXPANSION TANK (2)**

A:	L01570	m	L=0.3	H=0.9	ME 1 Inj CW TANK LEVEL
B:	T01571	degC	L=---	H=90.0	ME 1 Inj CW TANK TEMPERATURE
C:					
D:	G01574	ton/h	L=---	H=0.5	ME 1 Inj CW TANK OVERFLOW
E:	V01573	<0-1>			ME 1 Inj CW TANK MAKE-UP VALVE
F:	G01572	ton/h			ME 1 Inj CW TANK MAKE-UP FLOW
G:					
H:	V01576	<0-1>			ME 1 Inj CW TANK DRAIN VALVE
I:	G01575	ton/h			ME 1 Inj CW TANK DRAIN FLOW
J:					
K:					
L:					
M:	V01577	<0-1>			ME 1 Inj CW TANK OUTLET VALVE
N:					
O:					
P:	V01601	<0-1>			ME 1 Inj CW TANK STEAM VALVE
Q:	G01600	ton/h			ME 1 Inj CW TANK STEAM FLOW
R:					
S:					
T:					

2.95 Page:1502 MD15** ME 1 Inj CW SYSTEM - TEMP CONTROL (3)

A:	T01612	degC		ME 1 Inj CW COOLER TEMP CONTROL SET POINT
B:	C01615	%/degC	ME 1 Inj CW	COOLER TEMP CONTROL GAIN
C:	C01614	%		ME 1 Inj CW COOLER TEMP CONTROL BIAS
D:				
E:	V01613	%		ME 1 Inj CW COOLER TEMP CONTROL VALVE
				POS
F:	X01609	<0-1>		ME 1 Inj CW COOLER TEMP CONTR AUTO
				SWITCH
G:				
H:	G01604	ton/h		ME 1 Inj CW COOLER INLET FLOW
I:	G01603	ton/h		ME 1 Inj CW COOLER BYPASS FLOW
J:				
K:	T01610	degC		ME 1 Inj CW COOLER INLET TEMP
L:	T01602	degC		ME 1 Inj CW COOLER OUTLET TEMP
M:	T01611	degC		ME 1 Inj CW COOLER FINAL TEMP
N:				
O:	G01607	ton/h		ME 1 Inj CW COOLER SW FLOW
P:	T01605	degC		ME 1 Inj CW COOLER SW INLET TEMP
Q:	T01606	degC		ME 1 Inj CW COOLER SW OUTLET TEMP
R:				
S:				
T:				

2.96 Page:1590 MD15** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.97 Page:2000 MD20** ME 2 POWER SYSTEM (1)**

A:					
B:	X02012	<0-5>	L=---	H=1.0	ME 2 DAMAGE (serious)
C:					
D:	N02001	rpm	L=---	H=420.0	ME 2 SPEED
E:	E02002	kW	L=---	H=11800.0	ME 2 EFFECTIVE POWER
F:	E02003	kW			ME 2 INDICATED POWER
G:	Q02007	kNm			ME 2 SHAFT TORQUE
H:	P02004	bar			ME 2 MEAN EFFECTIVE PRESSURE
I:	Z02011	%			ME 2 MECHANICAL EFFICIENCY
J:					
K:	X02000	%			ME 2 FUEL LINK POSITION
L:					
M:	G02005	kg/h			ME 2 FUEL OIL CONSUMPTION
N:	G02006	g/kWh			ME 2 FUEL OIL CONSUMPTION (specific)
O:					
P:					
Q:	Z02010	%			ME 2 SMOKE INDICATION
R:					
S:	T02315	degC	L=---	H=300.0	ME 2 MEAN CYL LINER TEMP
T:	T02316	degC	L=---	H=400.0	ME 2 MEAN PISTON TEMP

2.98 Page:2001 MD20 ME 2 POWER SYSTEM (2)**

A:	V02270	<0-1>			ME 2 START AIR VALVE
B:	R02267	<0-1>			ME 2 FL STOP CYLINDER
C:					
D:	X02274	<0-1>			ME 2 CLUTCH CONTROL LOCAL SWITCH
E:	V02275	<0-1>			ME 2 CLUTCH CONTROL COMMAND
F:	X02273	<0-3>			ME 2 CLUTCH POSITION
G:					
H:	Z02276	%			ME 2 CLUTCH CONNECTION HEAT
I:	X02277	<0-1>	L=---	H=1.0	ME 2 CLUTCH FAILURE
J:					
K:	X02760	<0-7>	L=---	H=6.0	ME 2 START/STOP LOGIC STATE
L:	X02761	<0-7>	L=---	H=6.0	ME 2 CONNECTION LOGIC STATE
M:					
N:	N02001	rpm	L=---	H=420.0	ME 2 SPEED
O:	N02263	rpm			ME 2 SPEED CONTR ACTIVE SET POINT
P:					
Q:					
R:	V04518	<0-1>			ME 2 CLUTCH AIR SUPPLY VALVE
S:	V02271	<0-1>			ME 2 TURNING GEAR
T:	V02272	<0-1>			ME 2 INDICATION COCKS

2.99 Page:2010 MD20** ME 2 CONTROL SYSTEM (1) (AUTOCHIEF)

A:
B: X02261 <0-1> ME 2 SPEED CONTR LOCAL SWITCH
C: Z02262 mm ME 2 SPEED CONTR LOCAL SETTING (idle=6mm,
MCR=46mm)
D:
E:
F: N02263 rpm ME 2 SPEED CONTR ACTIVE SET POINT
G: N02266 rpm ME 2 SPEED CONTR INPUT SIGNAL
H: X02000 % ME 2 FUEL LINK POSITION
I:
J:
K:
L:
M:
N:
O:
P:
Q: C02264 %/% ME 2 SPEED CONTR GAIN
R: C02265 sec ME 2 SPEED CONTR INTEGRATION TIME
S:
T:

2.100 Page:2090 MD20** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.101 Page:2100 MD21** ME 2 JW SYSTEM - MAIN VARIABLES**

A:	P02054	bar	L=0.7	H=3.2	JW PRESS INLET ME 2
B:	P02055	bar			JW PRESS INLET ME 2 JW COOLER
C:	P02053	bar			JW PRESS INLET ME 2 PUMPS
D:					
E:					
F:	T02056	degC	L=60.0	H=---	JW TEMP INLET ME 2
G:	T02057	degC	L=---	H=85.0	JW TEMP OUTLET ME 2
H:	T02373	degC	L=---	H=85.0	JW TEMP OUTLET ME 2, BLOCK 2
I:	T02060	degC			JW TEMP OUTLET ME 2 JW COOLER
J:					
K:					
L:	V02130	%			ME 2 JW TEMP CONTR VALVE POS
M:					
N:	G02375	ton/h			JW FLOW OUTLET ME 2, BLOCK 1
O:	G02374	ton/h			JW FLOW OUTLET ME 2, BLOCK 2
P:	G02066	ton/h			JW FLOW TO ME 2 JW LINE
Q:	G02067	ton/h			JW FLOW TO ME 2 JW LINE
R:					
S:	L02062	m	L=0.3	H=0.9	ME 2 JW EXPANSION TANK LEVEL
T:					

2.102 Page:2101 MD21 ME 2 JW SYSTEM - AUXIL VARIABLES**

A:	L02062	m	L=0.3	H=0.9	ME 2 JW EXPANSION TANK LEVEL
B:					
C:	V02223	<0-1>			ME 2 JW EX. TANK MAKE-UP VALVE
D:	G02070	ton/h			ME 2 JW EX. TANK MAKE-UP FLOW
E:	V02224	<0-1>			ME 2 JW EX. TANK SHUT OFF VALVE
F:					
G:	V02370	<0-1>			ME 2 JW EX. TANK DRAIN VALVE
H:	G02371	ton/h			ME 2 JW EX. TANK DRAIN FLOW
I:	G02372	ton/h	L=---	H=0.5	ME 2 JW EX. TANK OVERFLOW
J:					
K:					
L:	R02226	<0-1>			ME 2 JW AUXIL PUMP
M:	V02220	<0-1>			ME 2 JW AUXIL PUMP SUCTION VALVE
N:	V02221	<0-1>			ME 2 JW MECH PUMP SUCTION VALVE
O:					
P:	R02230	<0-1>			ME 2 JW CIRC PUMP
Q:	V02222	<0-1>			ME 2 JW CIRC PUMP SUCTION VALVE
R:	X02231	<0-1>			ME 2 JW CIRC PUMP HEATER
S:	V02376	<0-1>			ME 2 JW HEATER STEAM SHUT OFF VALVE
T:	G02377	ton/h			ME 2 JW HEATER STEAM FLOW

2.103 Page:2110 MD21** ME 2 JW SYSTEM - TEMP CONTROL

A:	X02136	<0-1>	ME 2 JW TEMP CONTR AUTO SWITCH
B:	Z02137	%	ME 2 JW TEMP CONTR MANUAL OUTPUT
C:			
D:	T02131	degC	ME 2 JW TEMP CONTR SET POINT
E:	T02132	degC	ME 2 JW TEMP CONTR INPUT SIGNAL
F:	Z02133	%	ME 2 JW TEMP CONTR OUTPUT SIGNAL
G:	V02130	%	ME 2 JW TEMP CONTR VALVE POS
H:			
I:	G02066	ton/h	JW FLOW TO ME 2 JW LINE
J:	G02067	ton/h	JW FLOW TO ME 2 JW LINE
K:			
L:	X02144	<0-1>	ME 2 JW TEMP CONTR HW PID SELECT
M:	C02145	%/degC	ME 2 JACKET W TEMP CONTR GAIN
N:	C02146	sec	ME 2 JW TEMP CONTR INTEGRATION TIME
O:	C02147	sec	ME 2 JW TEMP CONTR DERIVATION TIME
P:	C02150	<0-10>	ME 2 JW TEMP CONTR DERIVATION RANGE
Q:	C02151	sec	ME 2 JW TEMP CONTR VALVE TC
R:	C02152	sec	ME 2 JW TEMP CONTR SENSOR TC
S:	X02153	<0-2>	ME 2 JW TEMP CONTR VALVE HYST TYPE
T:	X02158	%	ME 2 JW TEMP CONTR VALVE HYST VALUE

2.104 Page:2190 MD21** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.105 Page:2200 MD22** ME 2 LO SYSTEM - MAIN VARIABLES**

A:	P02073	bar	L=1.2	H=---	LO PRESS INLET ME 2
B:	T02076	degC	L=50.0	H=62.0	LO TEMP INLET ME 2
C:	G02110	ton/h			LO FLOW INLET ME 2
D:					
E:	P02074	bar			ME 2 LO MICRO FILTER INLET PRESS
F:	P02075	bar	L=---	H=1.5	ME 2 LO DUPLEX FILTER DIFF PRESS
G:					
H:	V02241	<0-1>			ME 2 MAIN LO FILTER 1
I:	V02242	<0-1>			ME 2 MAIN LO FILTER 2
J:					
K:	V02243	<0-1>			ME 2 LO MICRO FILTER INLET VALVE
L:					
M:	G02103	ton/h			ME 2 LO MICRO FILTER FLOW
N:					
O:					
P:	T02100	degC	L=30.0	H=75.0	ME 2 LO CIRCULATION TANK TEMP
Q:	L02077	%	L=30.0	H=90.0	ME 2 LO CIRCULATION TANK LEVEL
R:					
S:					
T:					

2.106 Page:2201 MD22 ME 2 LO SYSTEM - AUXIL VARIABLES**

A:	R02237	<0-1>			ME 2 LO AUXIL PUMP
B:					
C:	V02247	<0-1>			ME 2 LO MAKE UP VALVE (from storage)
D:	V02250	<0-1>			ME 2 LO DISCHARGE VALVE (to spill)
E:					
F:	G02104	ton/h			ME 2 LO FLOW FROM STORAGE TANK
G:	G02105	ton/h			ME 2 LO FLOW TO SPILL OIL TANK
H:					
I:	V02244	<0-1>			ME 2 LO PURIF SUCTION VALVE
J:	V02245	<0-1>			ME 2 LO PURIF DISCHARGE VALVE
K:	G02111	ton/h			ME 2 LO FLOW TO PURIFIER
L:	G02112	ton/h			ME 2 LO FLOW FROM PURIFIER
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.107 Page:2202 MD22** ME 2 LO SYSTEM - BEARING TEMP

A:
 B:
 C:
 D: T02301 degC L=--- H=75.0 ME 2 MAIN BEARING 1 TEMP
 E: T02302 degC L=--- H=75.0 ME 2 MAIN BEARING 2 TEMP
 F: T02303 degC L=--- H=75.0 ME 2 MAIN BEARING 3 TEMP
 G: T02304 degC L=--- H=75.0 ME 2 MAIN BEARING 4 TEMP
 H: T02305 degC L=--- H=75.0 ME 2 MAIN BEARING 5 TEMP
 I: T02306 degC L=--- H=75.0 ME 2 MAIN BEARING 6 TEMP
 J:
 K:
 L:
 M:
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.108 Page:2210 MD22** ME 2 LO SYSTEM - TEMP CONTROL (1)

A:
 B: X02166 <0-1> ME 2 LO TEMP CONTR AUTO SWITCH
 C: Z02167 % ME 2 LO TEMP CONTR MANUAL OUTPUT
 D:
 E: T02161 degC ME 2 LO TEMP CONTR SET POINT
 F: T02162 degC ME 2 LO TEMP CONTR INPUT SIGNAL
 G: Z02163 % ME 2 LO TEMP CONTR OUTPUT SIGNAL
 H: V02160 % ME 2 LO TEMP CONTR VALVE POS
 I:
 J: T02100 degC L=30.0 H=75.0 ME 2 LO CIRCULATION TANK TEMP
 K:
 L: T02076 degC L=50.0 H=62.0 LO TEMP INLET ME 2
 M: T02101 degC LO TEMP OUTLET ME 2 LO COOLER
 N:
 O:
 P: G02106 ton/h ME 2 LO FLOW INLET LO COOLER
 Q: G02107 ton/h ME 2 LO FLOW BYPASS LO COOLER
 R:
 S: E02002 kW L=--- H=11800.0 ME 2 EFFECTIVE POWER
 T:

**2.109 Page:2211 MD22** ME 2 LO SYSTEM - TEMP CONTROL (2)**

A:
B:
C: X02172 <0-1> ME 2 LO TEMP CONTR HW PID SELECT
D:
E: C02175 %/degC ME 2 LO TEMP CONTR GAIN
F: C02176 sec ME 2 LO TEMP CONTR INTEGRATION TIME
G: C02177 sec ME 2 LO TEMP CONTR DERIVATION TIME
H: C02200 <0-10> ME 2 LO TEMP CONTR DERIVATION RANGE
I:
J:
K: C02201 sec ME 2 LO TEMP CONTR VALVE TC
L: C02202 sec ME 2 LO TEMP CONTR SENSOR TC
M: X02203 <0-2> ME 2 LO TEMP CONTR VALVE HYST TYPE
N: X02208 % ME 2 LO TEMP CONTR VALVE HYST VALUE
O:
P:
Q:
R:
S:
T:

2.110 Page:2250 MD22 ME 2 ROCKER ARM LO SYSTEM - MAIN VAR.**

A: P02823 bar L=0.8 H=--- RA LO PRESS INLET ME 2
B: T02824 degC L=38.0 H=--- RA LO TEMP INLET ME 2
C: G02825 ton/h RA LO FLOW INLET ME 2
D:
E: P02813 bar ME 2 ROCKER ARM LO PUMP DISCHARGE PRESS
F: P02822 bar L=--- H=1.0 ME 2 ROCKER ARM LO FILTER DIFF PRESS
G:
H: V02820 <0-1> ME 2 ROCKER ARM LO FILTER 1
I: V02821 <0-1> ME 2 ROCKER ARM LO FILTER 2
J:
K: L02800 % ME 2 ROCKER ARM LO SETTLE TANK LEVEL
L: T02801 degC ME 2 ROCKER ARM LO SETTLE TANK TEMP
M:
N: L02802 % L=30.0 H=90.0 ME 2 ROCKER ARM LO SUCTION TANK LEVEL
O: T02803 degC L=30.0 H=--- ME 2 ROCKER ARM LO SUCTION TANK TEMP
P:
Q:
R: T02833 degC L=--- H=75.0 RA LO TEMP OUTLET ME 2
S:
T:

2.111 Page:2251 MD22** ME 2 ROCKER ARM LO SYSTEM - AUXIL (1)

A:	R02810	<0-1>	ME 2 ROCKER ARM LO PUMP 1
B:	R02811	<0-1>	ME 2 ROCKER ARM LO PUMP 2
C:			
D:	P02813	bar	ME 2 ROCKER ARM LO PUMP DISCHARGE PRESS
E:	G02814	ton/h	ME 2 ROCKER ARM LO PUMP DISCHARGE FLOW
F:	G02812	ton/h	ME 2 ROCKER ARM LO PUMP RECIRC FLOW
G:	V02816	<0-1>	ME 2 ROCKER ARM LO PUMP RECIRC VALVE
H:			
I:	V02827	<0-1>	ME 2 ROCKER ARM LO RECIRC VALVE
J:	G02826	ton/h	ME 2 ROCKER ARM LO RECIRC FLOW
K:			
L:	V02829	<0-1>	ME 2 ROCKER ARM LO BYPASS RECIRC VALVE
M:	G02828	ton/h	ME 2 ROCKER ARM LO BYPASS RECIRC FLOW
N:			
O:	V02804	<0-1>	ME 2 ROCKER ARM SUCT TANK MAKE-UP VALVE
P:	G02805	ton/h	ME 2 ROCKER ARM SUCT TANK MAKE-UP FLOW
Q:			
R:	V02832	<0-1>	ME 2 ROCKER ARM LO SETTLE TANK DRAIN VALVE
S:	G02831	ton/h	ME 2 ROCKER ARM LO TANKS DRAIN FLOW
T:	G02830	ton/h	ME 2 ROCKER ARM LO SUCTION TANK OVERFLOW

2.112 Page:2252 MD22** ME 2 ROCKER ARM LO SYSTEM - AUXIL (2)

A:			
B:	V02806	<0-1>	ME 2 ROCKER ARM SUCT TANK STEAM VALVE
C:	G02807	ton/h	ME 2 ROCKER ARM SUCT TANK STEAM FLOW
D:			
E:			
F:	X02815	<0-1>	ME 2 ROCKER ARM LO PUMPS AUTO SWITCH
G:			
H:	P01840	bar	ME ROCKER ARM PUMPS START LIMIT
I:	P01841	bar	ME ROCKER ARM PUMPS STOP LIMIT
J:			
K:	X02842	<0-1>	ME 1 ROCKER ARM PUMP AUTO-CYCLE ON
L:			
M:			
N:	P02834	bar	ME 2 ROCKER ARM PUMP REC. V OPEN PRESS
O:	P02835	bar	ME 2 ROCKER ARM PUMP REC. V CLOSE PRESS
P:			
Q:	P02836	bar	ME 2 ROCKER ARM REC. VALVE OPEN PRESS
R:	P02837	bar	ME 2 ROCKER ARM REC. VALVE CLOSE PRESS
S:			
T:			

**2.113 Page:2290 MD22** CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.114 Page:2300 MD23 ME 2 TURBOCHARGER SYSTEM (1)**

A:
B:
C: P02020 bar L=--- H=2.4 ME 2 SCAV AIR RECEIVER PRESS
D: T02021 degC L=--- H=65.0 ME 2 SCAV AIR RECEIVER TEMP
E:
F: N02022 krpm L=--- H=19.0 ME 2 TBCH SPEED
G: T02025 degC L=--- H=550.0 ME 2 TBCH EXHAUST INLET TEMP
H: T02026 degC L=--- H=410.0 ME 2 TBCH EXHAUST OUTLET TEMP
I:
J:
K: T02030 degC AIR TEMP INLET ME 2 TBCH
L: T02047 degC L=--- H=220.0 AIR TEMP INLET ME 2 AIR COOLER
M: T02050 degC L=20.0 H=70.0 AIR TEMP OUTLET ME 2 AIR COOLER
N:
O:
P: G02024 ton/h ME 2 TBCH AIR FLOW
Q:
R: P02043 mmWC L=--- H=200.0 ME 2 TBCH AIR FILTER DIFF PRESS
S: P02044 mmWC L=--- H=200.0 ME 2 TBCH AIR COOLER DIFF PRESS
T:

2.115 Page:2301 MD23** ME 2 TURBOCHARGER SYSTEM (2)

A:					
B:					
C:	P02620	bar	L=---	H=2.4	ME 2 SCAV AIR RECEIVER PRESS
D:	T02621	degC	L=---	H=65.0	ME 2 SCAV AIR RECEIVER TEMP
E:					
F:	N02622	krpm	L=---	H=19.0	ME 2 TBCH SPEED
G:	T02625	degC	L=---	H=550.0	ME 2 TBCH EXHAUST INLET TEMP
H:	T02626	degC	L=---	H=410.0	ME 2 TBCH EXHAUST OUTLET TEMP
I:					
J:					
K:	T02630	degC			AIR TEMP INLET ME 2 TBCH
L:	T02647	degC	L=---	H=220.0	AIR TEMP INLET ME 2 AIR COOLER
M:	T02650	degC	L=20.0	H=70.0	AIR TEMP OUTLET ME 2 AIR COOLER
N:					
O:					
P:	G02624	ton/h			ME 2 TBCH AIR FLOW
Q:					
R:	P02643	mmWC	L=---	H=200.0	ME 2 TBCH AIR FILTER DIFF PRESS
S:	P02644	mmWC	L=---	H=200.0	ME 2 TBCH AIR COOLER DIFF PRESS
T:					

2.116 Page:2302 MD23** ME 2 EXHAUST TEMPERATURES (1)

A:					
B:	T02320	degC	L=---	H=510.0	ME 2 MEAN CYL EXHAUST TEMP
C:					
D:	T02031	degC	L=---	H=520.0	ME 2 CYL 1 EXHAUST TEMP
E:	T02032	degC	L=---	H=520.0	ME 2 CYL 2 EXHAUST TEMP
F:	T02033	degC	L=---	H=520.0	ME 2 CYL 3 EXHAUST TEMP
G:	T02034	degC	L=---	H=520.0	ME 2 CYL 4 EXHAUST TEMP
H:	T02035	degC	L=---	H=520.0	ME 2 CYL 5 EXHAUST TEMP
I:					
J:	T02036	degC	L=---	H=520.0	ME 2 CYL 6 EXHAUST TEMP
K:	T02037	degC	L=---	H=520.0	ME 2 CYL 7 EXHAUST TEMP
L:	T02038	degC	L=---	H=520.0	ME 2 CYL 8 EXHAUST TEMP
M:	T02039	degC	L=---	H=520.0	ME 2 CYL 9 EXHAUST TEMP
N:	T02040	degC	L=---	H=520.0	ME 2 CYL 10 EXHAUST TEMP
O:					
P:					
Q:					
R:					
S:					
T:					

**2.117 Page:2303 MD23** ME 2 EXHAUST
TEMPERATURES (2)**

A:	T02321	degC	L=-20.0	H=20.0	ME 2 CYL 1 EXHAUST DEV TEMP
B:	T02322	degC	L=-20.0	H=20.0	ME 2 CYL 2 EXHAUST DEV TEMP
C:	T02323	degC	L=-20.0	H=20.0	ME 2 CYL 3 EXHAUST DEV TEMP
D:	T02324	degC	L=-20.0	H=20.0	ME 2 CYL 4 EXHAUST DEV TEMP
E:	T02325	degC	L=-20.0	H=20.0	ME 2 CYL 5 EXHAUST DEV TEMP
F:					
G:	T02326	degC	L=-20.0	H=20.0	ME 2 CYL 6 EXHAUST DEV TEMP
H:	T02327	degC	L=-20.0	H=20.0	ME 2 CYL 7 EXHAUST DEV TEMP
I:	T02328	degC	L=-20.0	H=20.0	ME 2 CYL 8 EXHAUST DEV TEMP
J:	T02329	degC	L=-20.0	H=20.0	ME 2 CYL 9 EXHAUST DEV TEMP
K:	T02330	degC	L=-20.0	H=20.0	ME 2 CYL 10 EXHAUST DEV TEMP
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.118 Page:2390 MD23 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.119 Page:2400 MD24** ME 2 SW SYSTEM - PRESS/TEMP

A:	P02414	bar			ME 2 SW PUMP SUCTION PRESS
B:	P02415	bar	L=---	H=4.0	ME 2 SW PUMP DISCHARGE PRESS
C:	P02416	bar	L=1.0	H=3.5	ME 2 SW MAIN LINE PRESS
D:					
E:	P02413	bar	L=---	H=0.5	ME 2 SW FILTER DIFF PRESS
F:	T02400	degC	L=15.0	H=35.0	ME 2 SW TEMP OUTLET PUMP
G:					
H:	T02407	degC			ME 2 SW TEMP INLET GEAR LOC
I:	T02410	degC			ME 2 SW TEMP INLET SERVO LOC
J:	T02411	degC			ME 2 SW TEMP OUTLET SERVO LOC
K:					
L:	T02521	degC			ME 2 SW TEMP OUTLET AIR COOLER 1
M:	T02522	degC			ME 2 SW TEMP OUTLET AIR COOLER 2
N:	T02520	degC			ME 2 SW TEMP OUTLET INJ WATER COOLER
O:					
P:	T02401	degC	L=15.0	H=35.0	ME 2 SW TEMP INLET LOC
Q:	T02403	degC			ME 2 SW TEMP INLET FWC
R:	T02404	degC			ME 2 SW TEMP OUTLET FWC
S:					
T:	T02405	degC			ME 2 SW TEMP INLET RECIRC VALVE

2.120 Page:2401 MD24** ME 2 SW SYSTEM - FLOWS

A:					
B:					
C:	G02421	ton/h			ME 2 SW PUMP FLOW
D:	G02420	ton/h			ME 2 SEA CHEST INLET FLOW
E:					
F:	G02433	ton/h			ME 2 SW FLOW TO AIR COOLER 1
G:	G02434	ton/h			ME 2 SW FLOW TO AIR COOLER 2
H:	G02436	ton/h			ME 2 SW FLOW TO INJ WATER COOLER
I:	G02430	ton/h			ME 2 SW FLOW TO GEARC/SERVOC
J:					
K:	G02422	ton/h			ME 2 SW FLOW TO LOC/FWC
L:					
M:	G02425	ton/h			ME 2 SW FLOW INLET CONTROL VALVE
N:	G02423	ton/h			ME 2 SW FLOW OVERBOARD
O:	G02424	ton/h			ME 2 SW FLOW RECIRC
P:					
Q:					
R:	G02431	ton/h			ME 2 SW CROSS-OVER SUCTION FLOW
S:	G02432	ton/h			ME 2 SW CROSS-OVER DISCHARGE FLOW
T:					

**2.121 Page:2402 MD24** ME 2 SW SYSTEM - VALVES/PUMPS**

A:		
B:		
C:	R02462 <0-1>	ME 2 SW PUMP 1
D:	R02463 <0-1>	ME 2 SW PUMP 2
E:		
F:	V02451 <0-1>	ME 2 SW PUMP SUCTION VALVE
G:		
H:	V02459 <0-1>	ME 2 AIR COOLER 1 SW SUPPLY VALVE
I:	V02460 <0-1>	ME 2 AIR COOLER 2 SW SUPPLY VALVE
J:	V02458 <0-1>	ME 2 INJ WATER COOLER SW SUPPLY VALVE
K:	V02453 <0-1>	ME 2 GEARC/SERVOC SW SUPPLY VALVE
L:		
M:	V02450 <0-1>	ME 2 SEA CHEST SHUT OFF VALVE
N:	V02454 <0-1>	ME 2 OVERBOARD SHUT OFF VALVE
O:	V02455 <0-1>	ME 2 SW RECIRC SHUT OFF VALVE
P:		
Q:		
R:	V02456 <0-1>	ME 2 SW CROSS-OVER SUCTION VALVE
S:	V02457 <0-1>	ME 2 SW CROSS-OVER DISCHARGE VALVE
T:		

2.122 Page:2410 MD24 ME 2 SW SYSTEM - TEMP CONTROL (1)**

A:				
B:				
C:	X02476 <0-1>			ME 2 SW TEMP CONTR AUTO SWITCH
D:	Z02477 %			ME 2 SW TEMP CONTR MANUAL OUTPUT
E:				
F:	T02471 degC			ME 2 SW TEMP CONTR SET POINT
G:	T02472 degC			ME 2 SW TEMP CONTR INPUT SIGNAL
H:	Z02473 %			ME 2 SW TEMP CONTR OUTPUT SIGNAL
I:	V02470 %			ME 2 SW TEMP CONTR VALVE POS
J:				
K:	T02400 degC	L=15.0	H=35.0	ME 2 SW TEMP OUTLET PUMP
L:	T02405 degC			ME 2 SW TEMP INLET RECIRC VALVE
M:				
N:				
O:	N02515 %			ME 2 SW TEMP CONTR MOTOR SPEED
P:				
Q:				
R:				
S:				
T:				

2.123 Page:2411 MD24** ME 2 SW SYSTEM - TEMP CONTROL (2)

A:		
B:		
C:	X02502 <0-1>	ME 2 SW TEMP CONTR HW PID SELECT
D:		
E:	C02505 %/degC	ME 2 SW TEMP CONTR GAIN
F:	C02506 sec	ME 2 SW TEMP CONTR INTEGRATION TIME
G:	C02507 sec	ME 2 SW TEMP CONTR DERIVATION TIME
H:	C02510 <0-10>	ME 2 SW TEMP CONTR DERIVATION RANGE
I:		
J:	X02513 <0-2>	ME 2 SW TEMP CONTR VALVE HYST TYPE
K:	X02518 %	ME 2 SW TEMP CONTR VALVE HYST VALUE
L:	C02511 sec	ME 2 SW TEMP CONTR VALVE TC
M:	C02512 sec	ME 2 SW TEMP CONTR SENSOR TC
N:		
O:	X02503 <0-1>	ME 2 SW TEMP CONTR MOTOR SELECT
P:	C02514 %/sec	ME 2 SW TEMP CONTR MOTOR CONSTANT
Q:		
R:		
S:		
T:		

2.124 Page:2412 MD24** ME 2 SW SYSTEM - TEMP CONTROL (3)

A:	X02529 <0-1>	ME 2 SW AIR REC TEMP CONTR AUTO SWITCH
B:	Z02530 %	ME 2 SW AIR REC TEMP CONTR MANUAL OUTP
C:		
D:	T02526 degC	ME 2 SW AIR REC TEMP CONTR SET POINT
E:	T02527 degC	ME 2 SW AIR REC TEMP CONTR INPUT SIGNAL
F:	Z02528 %	ME 2 SW AIR REC TEMP CONTR OUTP SIGNAL
G:	V02525 %	ME 2 SW AIR REC TEMP CONTR VALVE POS
H:		
I:	G02435 ton/h	ME 2 SW AIR COOLERS BYPASS FLOW
J:		
K:		
L:	X02531 <0-1>	ME 2 SW AIR REC TEMP CONTR HW PID SELECT
M:	C02532 %/degC	ME 2 SW AIR REC TEMP CONTR GAIN
N:	C02533 sec	ME 2 SW AIR REC TEMP CONTR INTEGR TIME
O:	C02534 sec	ME 2 SW AIR REC TEMP CONTR DERIV TIME
P:	C02535 <0-10>	ME 2 SW AIR REC TEMP CONTR DERIV RANGE
Q:	C02536 sec	ME 2 SW AIR REC TEMP CONTR VALVE TC
R:	C02537 sec	ME 2 SW AIR REC TEMP CONTR SENSOR TC
S:	X02538 <0-2>	ME 2 SW AIR REC TEMP CONTR VALVE HYST TYPE
T:	X02539 %	ME 2 SW AIR REC TEMP CONTR VALVE HYST VALUE

**2.125 Page:2420 MD24** ME 2 SW SYSTEM - PUMPS**

A:				
B:				
C:	R02462	<0-1>		ME 2 SW PUMP 1
D:	R02463	<0-1>		ME 2 SW PUMP 2
E:				
F:	E02442	kW		ME 2 SW PUMP 1 POWER
G:	E02443	kW		ME 2 SW PUMP 2 POWER
H:				
I:	Z02441	%		ME 2 SW PUMP EFFICIENCY
J:				
K:	N02440	%		ME 2 SW PUMP SPEED
L:	G02421	ton/h		ME 2 SW PUMP FLOW
M:				
N:	P02414	bar		ME 2 SW PUMP SUCTION PRESS
O:	P02415	bar	L=---	H=4.0
P:	V02467	%		ME 2 SW PUMP DISCHARGE PRESS
Q:				ME 2 SW PUMP OUTLET CHOKE VALVE
R:				
S:				
T:				

2.126 Page:2490 MD24 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.127 Page:2500 MD25** ME 2 Inj CW SYSTEM - MAIN VARIABLES (1)

A:	R02556	<0-1>			ME 2 Inj CW PUMP 1
B:	R02557	<0-1>			ME 2 Inj CW PUMP 2
C:					
D:	P02555	bar			ME 2 Inj CW PUMP DISCHARGE PRESS
E:					
F:	V02560	<0-1>			ME 2 Inj CW INLET VALVE
G:					
H:	P02554	bar	L=1.9	H=---	ME 2 Inj CW INLET PRESSURE
I:	T02552	degC	L=50.0	H=---	ME 2 Inj CW INLET TEMP
J:	G02550	ton/h			ME 2 Inj CW INLET FLOW
K:					
L:	T02553	degC	L=---	H=85.0	ME 2 Inj CW OUTLET TEMP
M:	G02551	ton/h			ME 2 Inj CW OUTLET FLOW
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.128 Page:2501 MD25** ME 2 Inj CW SYSTEM - EXPANSION TANK (2)

A:	L02570	m	L=0.3	H=0.9	ME 2 Inj CW TANK LEVEL
B:	T02571	degC	L=---	H=90.0	ME 2 Inj CW TANK TEMPERATURE
C:					
D:	G02574	ton/h	L=---	H=0.5	ME 2 Inj CW TANK OVERFLOW
E:	V02573	<0-1>			ME 2 Inj CW TANK MAKE-UP VALVE
F:	G02572	ton/h			ME 2 Inj CW TANK MAKE-UP FLOW
G:					
H:	V02576	<0-1>			ME 2 Inj CW TANK DRAIN VALVE
I:	G02575	ton/h			ME 2 Inj CW TANK DRAIN FLOW
J:					
K:					
L:					
M:	V02577	<0-1>			ME 2 Inj CW TANK OUTLET VALVE
N:					
O:					
P:	V02601	<0-1>			ME 2 Inj CW TANK STEAM VALVE
Q:	G02600	ton/h			ME 2 Inj CW TANK STEAM FLOW
R:					
S:					
T:					

**2.129 Page:2502 MD25** ME 2 Inj CW SYSTEM -
TEMP CONTROL (3)**

A:	T02612	degC	ME 2 Inj CW COOLER TEMP CONTROL SET POINT
B:	C02615	%/degC	ME 2 Inj CW COOLER TEMP CONTROL GAIN
C:	C02614	%	ME 2 Inj CW COOLER TEMP CONTROL BIAS
D:			
E:	V02613	%	ME 2 Inj CW COOLER TEMP CONTROL VALVE POS
F:	X02609	<0-1>	ME 2 Inj CW COOLER TEMP CONTR AUTO SWITCH
G:			
H:	G02604	ton/h	ME 2 Inj CW COOLER INLET FLOW
I:	G02603	ton/h	ME 2 Inj CW COOLER BYPASS FLOW
J:			
K:	T02610	degC	ME 2 Inj CW COOLER INLET TEMP
L:	T02602	degC	ME 2 Inj CW COOLER OUTLET TEMP
M:	T02611	degC	ME 2 Inj CW COOLER FINAL TEMP
N:			
O:	G02607	ton/h	ME 2 Inj CW COOLER SW FLOW
P:	T02605	degC	ME 2 Inj CW COOLER SW INLET TEMP
Q:	T02606	degC	ME 2 Inj CW COOLER SW OUTLET TEMP
R:			
S:			
T:			

2.130 Page:2590 MD25 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.131 Page:5000 MD50** PORT PROPELLER GEAR LO SYSTEM (1)

A:	X02774	<0-5>	L=---	H=1.0	PORT PROP GEAR SLOW DOWN
B:	X02723	<0-3>	L=---	H=1.0	PORT GEAR SHUT DOWN INDICATION
C:					
D:	R03431	<0-1>			PORT GEAR AUXIL LO PUMP
E:					
F:	P03400	bar	L=---	H=4.0	PORT GEAR LO PRESS OUTLET PUMPS
G:	P03401	bar			PORT GEAR LO PRESS OUTLET FILTER
H:	P03402	bar	L=0.8	H=---	PORT GEAR LO PRESS INLET GEAR
I:					
J:	G03415	ton/h			PORT GEAR LO FLOW OUTLET PUMPS
K:					
L:	V03432	<0-1>			PORT GEAR LO FILTER 1
M:	V03433	<0-1>			PORT GEAR LO FILTER 2
N:	P03403	bar	L=---	H=1.0	PORT GEAR LO FILTER DIFF PRESS
O:					
P:	L03411	%	L=30.0	H=90.0	PORT GEAR LO SUMP LEVEL
Q:	V03434	<0-1>			PORT GEAR LO MAKE-UP VALVE
R:	G03416	ton/h			PORT GEAR LO MAKE-UP FLOW
S:					
T:					

2.132 Page:5001 MD50** PORT PROPELLER GEAR LO SYSTEM (2)

A:					
B:	T03404	degC			PORT GEAR LO TEMP IN SUMP
C:	T03405	degC			PORT GEAR LO TEMP OUTLET GEAR LOC
D:	T03407	degC	L=---	H=55.0	PORT GEAR LO TEMP INLET GEAR
E:					
F:					
G:					
H:					
I:	G02430	ton/h			ME 2 SW FLOW TO GEARC/SERVOC
J:	T02407	degC			ME 2 SW TEMP INLET GEAR LOC
K:	T02406	degC			ME 2 SW TEMP OUTLET GEAR LOC
L:					
M:					
N:					
O:	T03425	degC	L=---	H=70.0	PORT GEAR FORE BULL BEARING TEMP
P:	T03426	degC	L=---	H=70.0	PORT GEAR AFT BULL BEARING TEMP
Q:	T03428	degC	L=---	H=70.0	PORT GEAR FORE PINION BEARING TEMP
R:	T03429	degC	L=---	H=70.0	PORT GEAR AFT PINION BEARING TEMP
S:	T03427	degC	L=---	H=75.0	PORT GEAR THRUST BEARING TEMP
T:					

**2.133 Page:5010 MD50** PORT PROPELLER GEAR LO SYSTEM (3)**

A:
 B:
 C: T03421 degC PORT GEAR LO TEMP CONTR SET POINT
 D: T03407 degC L=--- H=55.0 PORT GEAR LO TEMP INLET GEAR
 E:
 F: V03420 % PORT GEAR LO TEMP CONTR VALVE POS
 G:
 H: G03413 ton/h PORT GEAR LO FLOW INLET GEAR LOC
 I: G03414 ton/h PORT GEAR LO FLOW BYPASS GEAR LOC
 J:
 K:
 L:
 M:
 N:
 O:
 P: C03422 %/degC PORT GEAR LO TEMP CONTR GAIN
 Q: C03423 % PORT GEAR LO TEMP CONTR BIAS
 R:
 S:
 T:

2.134 Page:5090 MD50 CONFIGURABLE PAGE**

A:
 B:
 C:
 D:
 E:
 F:
 G:
 H:
 I:
 J:
 K:
 L:
 M:
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.135 Page:5100 MD51** STBD PROPELLER GEAR LO SYSTEM (1)

A:	X01774	<0-5>	L=---	H=1.0	STBD PROP GEAR SLOW DOWN
B:	X01723	<0-3>	L=---	H=1.0	STBD GEAR SHUT DOWN INDICATION
C:					
D:	R03531	<0-1>			STBD PROP GEAR AUXIL LO PUMP
E:					
F:	P03500	bar	L=---	H=4.0	STBD PROP GEAR LO PRESS OUTLET PUMPS
G:	P03501	bar			STBD PROP GEAR LO PRESS OUTLET FILTER
H:	P03502	bar	L=0.8	H=---	STBD PROP GEAR LO PRESS INLET GEAR
I:					
J:	G03515	ton/h			STBD PROP GEAR LO FLOW OUTLET PUMPS
K:					
L:	V03532	<0-1>			STBD PROP GEAR LO FILTER 1
M:	V03533	<0-1>			STBD PROP GEAR LO FILTER 2
N:	P03503	bar	L=---	H=1.0	STBD PROP GEAR LO FILTER DIFF PRESS
O:					
P:	L03511	%	L=30.0	H=90.0	STBD PROP GEAR LO SUMP LEVEL
Q:	V03534	<0-1>			STBD PROP GEAR LO MAKE-UP VALVE
R:	G03516	ton/h			STBD PROP GEAR LO MAKE-UP FLOW
S:					
T:					

2.136 Page:5101 MD51** STBD PROPELLER GEAR LO SYSTEM (2)

A:					
B:	T03504	degC			STBD PROP GEAR LO TEMP IN SUMP
C:	T03505	degC			STBD PROP GEAR LO TEMP OUTLET GEAR LOC
D:	T03507	degC	L=---	H=55.0	STBD PROP GEAR LO TEMP INLET GEAR
E:					
F:					
G:					
H:					
I:	G01430	ton/h			ME 1 SW FLOW TO GEARC/SERVOC
J:	T01407	degC			ME 1 SW TEMP INLET GEAR LOC
K:	T01406	degC			ME 1 SW TEMP OUTLET GEAR LOC
L:					
M:					
N:					
O:	T03525	degC	L=---	H=70.0	STBD PROP GEAR FORE BULL BEARING TEMP
P:	T03526	degC	L=---	H=70.0	STBD PROP GEAR AFT BULL BEARING TEMP
Q:	T03528	degC	L=---	H=70.0	STBD GEAR FORE PINION BEARING TEMP
R:	T03529	degC	L=---	H=70.0	STBD GEAR AFT PINION BEARING TEMP
S:	T03527	degC	L=---	H=75.0	STBD PROP GEAR THRUST BEARING TEMP
T:					

**2.137 Page:5110 MD51 ** STBD PROPELLER GEAR LO SYSTEM (3)**

A:
 B:
 C: T03521 degC STBD PROP GEAR LO TEMP CONTR SET POINT
 D: T03507 degC L=--- H=55.0 STBD PROP GEAR LO TEMP INLET GEAR
 E:
 F: V03520 % STBD PROP GEAR LO TEMP CONTR VALVE POS
 G:
 H: G03513 ton/h STBD PROP GEAR LO FLOW INLET GEAR LOC
 I: G03514 ton/h STBD PROP GEAR LO FLOW BYPASS GEAR LOC
 J:
 K:
 L:
 M:
 N:
 O:
 P: C03522 %/degC STBD PROP GEAR LO TEMP CONTR GAIN
 Q: C03523 % STBD PROP GEAR LO TEMP CONTR BIAS
 R:
 S:
 T:

2.138 Page:5190 MD51 ** CONFIGURABLE PAGE

A:
 B:
 C:
 D:
 E:
 F:
 G:
 H:
 I:
 J:
 K:
 L:
 M:
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.139 Page:5200 MD52** PORT PROPELLER SERVO OIL SYSTEM (1)

A:	R03637	<0-1>			PORT PROP AUXIL SERVO OIL PUMP
B:					
C:	P03600	bar	L=14.0	H=---	PORT PROP SO PRESS OUTLET PUMPS
D:	P03601	bar	L=14.0	H=---	PORT PROP SO PRESS OUTLET FILTER
E:	P03602	bar			PORT PROP SO PRESS INLET SERVO
F:					
G:	G03606	ton/h			PORT PROP SO FLOW INLET FILTER
H:					
I:	V03642	<0-1>			PORT PROP SO FILTER 1
J:	V03643	<0-1>			PORT PROP SO FILTER 2
K:	P03603	bar	L=---	H=1.5	PORT PROP SO FILTER DIFF PRESS
L:					
M:	T03613	degC	L=---	H=50.0	PORT PROP SO TANK TEMP
N:	L03612	%	L=30.0	H=90.0	PORT PROP SO TANK LEVEL
O:					
P:	G03611	ton/h			PORT PROP SO FLOW RECIRC SO TANK
Q:	T03620	degC			PORT PROP SO TEMP INLET SO TANK
R:					
S:	P03754	bar			PROP SERVO OIL RELIEF V. OPEN PRESS
T:	P03755	bar			PROP SERVO OIL RELIEF V. CLOSE PRESS

2.140 Page:5201 MD52** PORT PROPELLER SERVO OIL SYSTEM (2)

A:	T03615	degC			PORT PROP SO TEMP CONTR SET POINT
B:	T03621	degC	L=---	H=70.0	PORT PROP SO TEMP OUTLET SERVO
C:					
D:	V03614	%			PORT PROP SO TEMP CONTR VALVE POS
E:					
F:	G03607	ton/h			PORT PROP SO FLOW INLET SERVO
G:	G03610	ton/h			PORT PROP SO FLOW BYPASS SERVO
H:					
I:	C03616	%/degC			PORT PROP SO TEMP CONTR GAIN
J:	C03617	%			PORT PROP SO TEMP CONTR BIAS
K:					
L:					
M:	T02410	degC			ME 2 SW TEMP INLET SERVO LOC
N:	T02411	degC			ME 2 SW TEMP OUTLET SERVO LOC
O:	G02430	ton/h			ME 2 SW FLOW TO GEARC/SERVO
P:	E03646	kW			TRANSFERRED HEAT IN PORT SERVO
Q:					
R:					
S:	R03644	<0-1>			PORT PROP SO MAKE-UP PUMP
T:	G03624	ton/h			PORT PROP SO MAKE-UP FLOW

**2.141 Page:5202 MD52** PORT PROP SO SYSTEM -
SHAFT BEARINGS**

A: R03641 <0-1> PORT PROP SERVO LO GRAVITY PUMP
 B:
 C: X03640 <0-1> PORT PROP SO GRAVITY PUMP AUTO
 D:
 E: L03633 % L=30.0 H=90.0 PORT PROP SO GRAVITY TANK LEVEL
 F:
 G: P03626 bar L=0.0 H=--- PORT PROP SO PRESS INLET SHAFT BEARN
 H:
 I: G03631 ton/h PORT PROP SO FLOW INLET SHAFT BEARN
 J: G03630 ton/h PORT PROP SO FLOW INLET GRAVIT TANK
 K: G03632 ton/h PORT PROP SO FLOW OVERF GRAVIT TANK
 L:
 M:
 N: T03650 degC L=--- H=60.0 PORT PROP FORE SHAFT BEARING TEMP
 O: T03651 degC L=--- H=60.0 PORT PROP AFT SHAFT BEARING TEMP
 P:
 Q:
 R:
 S:
 T:

2.142 Page:5210 MD52 PORT PROPELLER CONTROL**

A:
 B: X03667 <0-1> PORT PROPELLER LOCAL PITCH CONTROL
 C: Z03670 % PORT PROPELLER LOCAL PITCH COMMAND
 D:
 E:
 F:
 G: E03660 kW L=--- H=11600.0 PORT PROPELLER SHAFT POWER
 H: N03661 rpm PORT PROPELLER SPEED
 I:
 J: X03662 P/D PORT PROPELLER PITCH
 K: Q03663 tonm L=--- H=95.0 PORT PROPELLER TORQUE
 L: Q03664 ton PORT PROPELLER THRUST
 M: Z03665 % PORT PROPELLER CAVITATION INDEX
 N: Z03666 % PORT PROPELLER EFFICIENCY
 O:
 P:
 Q:
 R:
 S:
 T:

2.143 Page:5290 MD52** CONFIGURABLE PAGE

A:
 B:
 C:
 D:
 E:
 F:
 G:
 H:
 I:
 J:
 K:
 L:
 M:
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.144 Page:5300 MD53** STBD PROPELLER SERVO OIL SYSTEM (1)

A:	R03737	<0-1>			STBD SERVO AUXIL LO PUMP
B:					
C:	P03700	bar	L=14.0	H=---	STBD PROP SERVO LO PRESS OUTLET PUMPS
D:	P03701	bar	L=14.0	H=---	STBD PROP SERVO LO PRESS OUTLET FILTER
E:	P03702	bar			STBD PROP SERVO LO PRESS INLET SERVO
F:					
G:	G03706	ton/h			STBD PROP SERVO LO FLOW INLET FILTER
H:					
I:	V03742	<0-1>			STBD SERVO LO FILTER 1
J:	V03743	<0-1>			STBD SERVO LO FILTER 2
K:	P03703	bar	L=---	H=1.5	STBD PROP SERVO LO FILTER DIFF PRESS
L:					
M:	T03713	degC	L=---	H=50.0	STBD PROP SERVO LO TANK TEMP
N:	L03712	%	L=30.0	H=90.0	STBD PROP SERVO LO TANK LEVEL
O:					
P:	G03711	ton/h			STBD PROP SERVO LO FLOW RECIRC SO TANK
Q:	T03720	degC			STBD PROP SERVO LO TEMP INLET SO TANK
R:					
S:	P03754	bar			PROP SERVO OIL RELIEF V. OPEN PRESS
T:	P03755	bar			PROP SERVO OIL RELIEF V. CLOSE PRESS

**2.145 Page:5301 MD53** STBD PROPELLER SERVO OIL SYSTEM (2)**

A:	T03715	degC			STBD PROP SERVO LO TEMP CONTR SET POINT
B:	T03721	degC	L=---	H=55.0	STBD PROP SERVO LO TEMP OUTLET LOC
C:					
D:	V03714	%			STBD PROP SERVO LO TEMP CONTR VALVE POS
E:					
F:	G03707	ton/h			STBD PROP SERVO LO FLOW INLET SERVO C
G:	G03710	ton/h			STBD PROP SERVO LO FLOW BYPASS SERVO C
H:					
I:	C03716	%/degC			STBD PROP SERVO LO TEMP CONTR GAIN
J:	C03717	%			STBD PROP SERVO LO TEMP CONTR BIAS
K:					
L:					
M:	T01410	degC			ME 1 SW TEMP INLET SERVO LOC
N:	T01411	degC			ME 1 SW TEMP OUTLET SERVO LOC
O:	G01430	ton/h			ME 1 SW FLOW TO GEARC/SERVO C
P:	E03746	kW			TRANSFERRED HEAT IN STBD SERVO LOC
Q:					
R:					
S:	R03744	<0-1>			STBD SERVO LO MAKE-UP PUMP
T:	G03724	ton/h			STBD PROP SERVO LO MAKE-UP FLOW

2.146 Page:5302 MD53 STBD PROP SO SYSTEM - SHAFT BEARINGS**

A:	R03741	<0-1>			STBD PROP SERVO LO GRAVITY PUMP
B:					
C:	X03740	<0-1>			STBD SERVO LO GRAVITY PUMP AUTO
D:					
E:	L03733	%	L=30.0	H=90.0	STBD SERVO LO GRAVITY TANK LEVEL
F:					
G:	P03726	bar	L=0.0	H=---	STBD SERVO LO PRESS INLET SHAFT BEARN
H:					
I:	G03731	ton/h			STBD SERVO LO FLOW INLET SHAFT BEARN
J:	G03730	ton/h			STBD SERVO LO FLOW INLET GRAVIT TANK
K:	G03732	ton/h			STBD SERVO LO FLOW OVERF GRAVIT TANK
L:					
M:					
N:	T03750	degC	L=---	H=60.0	STBD PROPELLER FORE SHAFT BEARING TEMP
O:	T03751	degC	L=---	H=60.0	STBD PROPELLER AFT SHAFT BEARING TEMP
P:					
Q:					
R:					
S:					
T:					

2.147 Page:5310 MD53** STBD PROPELLER CONTROL

A:
B: X03767 <0-1> STBD PROPELLER PITCH LOCAL CONTROL
C: Z03770 % STBD PROPELLER PITCH LOCAL COMMAND
D:
E:
F:
G: E03760 kW L=--- H=11600.0 STBD PROPELLER SHAFT POWER
H: N03761 rpm STBD PROPELLER SPEED
I:
J: X03762 P/D STBD PROPELLER PITCH
K: Q03763 tonm L=--- H=95.0 STBD PROPELLER TORQUE
L: Q03764 ton STBD PROPELLER THRUST
M: Z03765 % STBD PROPELLER CAVITATION INDEX
N: Z03766 % STBD PROPELLER EFFICIENCY
O:
P:
Q:
R:
S:
T:

2.148 Page:5390 MD53** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.149 Page:5400 MD54** PORT STERN TUBE SYSTEM
- GRAVITY TANKS**

A:	R03460	<0-1>			PORT STERN TUBE LO PUMP 1
B:	R03461	<0-1>			PORT STERN TUBE LO PUMP 2
C:					
D:	X03456	<0-1>			PORT STERN TUBE LO PUMP 1 AUTO
E:	X03457	<0-1>			PORT STERN TUBE LO PUMP 2 AUTO
F:					
G:					
H:					
I:					
J:	L03472	%	L=40.0	H=---	PORT STERN TUBE GRAV TANK LEVEL
K:	T03475	degC			PORT STERN TUBE GRAV TANK TEMP
L:	G03491	ton/h			PORT STERN TUBE GRAV TANK INL FLOW
M:	G03492	ton/h			PORT STERN TUBE GRAV TANK OUTL FLOW
N:	G03493	ton/h			PORT STERN TUBE GRAV TANK OVERFLOW
O:					
P:					
Q:					
R:					
S:					
T:					

2.150 Page:5401 MD54 PORT STERN TUBE SYSTEM
- BEARINGS**

A:	X03465	<0-1>	L=---	H=1.0	PORT STERN TUBE SERIOUS DAMAGE
B:					
C:	T03452	degC	L=---	H=60.0	PORT STERN TUBE FORE BEARING TEMP
D:	T03453	degC	L=---	H=60.0	PORT STERN TUBE AFT BEARING TEMP
E:					
F:	P03484	mWC			PORT STERN TUBE LO INLET PRESS
G:	P03485	mWC	L=1.0	H=5.0	PORT STERN TUBE LO / SW DIFF PRESS
H:	G03454	kg/h			PORT STERN TUBE LO LEAKAGE (pollution)
I:					
J:	T03476	degC			PORT STERN TUBE LO INLET TEMP
K:	T03477	degC			PORT STERN TUBE LO OUTLET TEMP
L:	G03450	kg/h			PORT STERN TUBE LO INLET FLOW
M:	G03451	kg/h			PORT STERN TUBE LO RETURN FLOW
N:					
O:	L03470	%	L=30.0	H=90.0	PORT STERN TUBE LO SUMP LEVEL
P:	Z03455	%	L=---	H=30.0	PORT STERN TUBE LO CONTAMINATION
Q:					
R:	R03462	<0-1>			PORT STERN TUBE LO SUMP MAKE-UP PUMP
S:	G03495	ton/h			PORT STERN TUBE LO SUMP MAKE-UP FLOW
T:	G03496	ton/h	L=---	H=0.1	PORT STERN TUBE LO SUMP OVERFLOW

2.151 Page:5402 MD54** PORT STERN TUBE SYSTEM - LO COOLER

A:					
B:	T03473	degC	L=---	H=60.0	PORT STERN TUBE LO SUMP TEMP
C:					
D:	P03483	bar			PORT STERN TUBE LOC LO INLET PRESS
E:	P03482	bar			PORT STERN TUBE LOC LO OUTLET PRESS
F:					
G:	G03497	ton/h			PORT STERN TUBE LOC LO INLET FLOW
H:	T03480	degC	L=10.0	H=40.0	PORT STERN TUBE LOC LO OUTLET TEMP
I:					
J:	V03468	<0-1>			PORT STERN TUBE LOC CW INLET VALVE
K:	G03467	ton/h			PORT STERN TUBE LOC CW INLET FLOW
L:	T03481	degC			PORT STERN TUBE LOC CW OUTLET TEMP
M:					
N:					
O:	V03469	<0-1>			PORT STERN TUBE LO DISCHARGE VALVE
P:	G03494	ton/h			PORT STERN TUBE LO DISCH FLOW (to spill)
Q:					
R:					
S:					
T:	C03466	degC			PORT STERN TUBE SERIOUS DAMAGE LIMIT

2.152 Page:5430 MD54** PORT STERN TUBE SYSTEM - MISC

A:	T03452	degC	L=---	H=60.0	PORT STERN TUBE FORE BEARING TEMP
B:	P03485	mWC	L=1.0	H=5.0	PORT STERN TUBE LO / SW DIFF PRESS
C:	G03454	kg/h			PORT STERN TUBE LO LEAKAGE (pollution)
D:	L03470	%	L=30.0	H=90.0	PORT STERN TUBE LO SUMP LEVEL
E:	T03473	degC	L=---	H=60.0	PORT STERN TUBE LO SUMP TEMP
F:	Z03455	%	L=---	H=30.0	PORT STERN TUBE LO CONTAMINATION
G:					
H:	L03472	%	L=40.0	H=---	PORT STERN TUBE GRAV TANK LEVEL
I:	T03475	degC			PORT STERN TUBE GRAV TANK TEMP
J:	G03491	ton/h			PORT STERN TUBE GRAV TANK INL FLOW
K:					
L:					
M:					
N:					
O:	T03476	degC			PORT STERN TUBE LO INLET TEMP
P:	T03477	degC			PORT STERN TUBE LO OUTLET TEMP
Q:	G03450	kg/h			PORT STERN TUBE LO INLET FLOW
R:	N03661	rpm			PORT PROPELLER SPEED
S:	X06334	%			SHIP LOAD (active)
T:	P00771	mWC			STATIC SW PRESSURE

**2.153 Page:5490 MD54** CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.154 Page:5500 MD55 STBD STERN TUBE SYSTEM
- GRAVITY TANKS**

A:	R03560	<0-1>			STBD STERN TUBE LO PUMP 1
B:	R03561	<0-1>			STBD STERN TUBE LO PUMP 2
C:					
D:	X03556	<0-1>			STBD STERN TUBE LO PUMP 1 AUTO
E:	X03557	<0-1>			STBD STERN TUBE LO PUMP 2 AUTO
F:					
G:					
H:					
I:					
J:	L03572	%	L=40.0	H----	STBD STERN TUBE GRAV TANK LEVEL
K:	T03575	degC			STBD STERN TUBE GRAV TANK TEMP
L:	G03591	ton/h			STBD STERN TUBE GRAV TANK INL FLOW
M:	G03592	ton/h			STBD STERN TUBE GRAV TANK OUTL FLOW
N:	G03593	ton/h			STBD STERN TUBE GRAV TANK OVERFLOW
O:					
P:					
Q:					
R:					
S:					
T:					

2.155 Page:5501 MD55** STBD STERN TUBE SYSTEM - BEARINGS

A:	X03565	<0-1>	L=---	H=1.0	STBD STERN TUBE SERIOUS DAMAGE
B:					
C:	T03552	degC	L=---	H=60.0	STBD STERN TUBE FORE BEARING TEMP
D:	T03553	degC	L=---	H=60.0	STBD STERN TUBE AFT BEARING TEMP
E:					
F:	P03584	mWC			STBD STERN TUBE LO INLET PRESS
G:	P03585	mWC	L=1.0	H=5.0	STBD STERN TUBE LO / SW DIFF PRESS
H:	G03554	kg/h			STBD STERN TUBE LO LEAKAGE (pollution)
I:					
J:	T03576	degC			STBD STERN TUBE LO INLET TEMP
K:	T03577	degC			STBD STERN TUBE LO OUTLET TEMP
L:	G03550	kg/h			STBD STERN TUBE LO INLET FLOW
M:	G03551	kg/h			STBD STERN TUBE LO RETURN FLOW
N:					
O:	L03570	%	L=30.0	H=90.0	STBD STERN TUBE LO SUMP LEVEL
P:	Z03555	%	L=---	H=30.0	STBD STERN TUBE LO CONTAMINATION
Q:					
R:	R03562	<0-1>			STBD STERN TUBE LO SUMP MAKE-UP PUMP
S:	G03595	ton/h			STBD STERN TUBE LO SUMP MAKE-UP FLOW
T:	G03596	ton/h	L=---	H=0.1	STBD STERN TUBE LO SUMP OVERFLOW

2.156 Page:5502 MD55** STBD STERN TUBE SYSTEM - LO COOLER

A:					
B:	T03573	degC	L=---	H=60.0	STBD STERN TUBE LO SUMP TEMP
C:					
D:	P03583	bar			STBD STERN TUBE LOC LO INLET PRESS
E:	P03582	bar			STBD STERN TUBE LOC LO OUTLET PRESS
F:					
G:	G03597	ton/h			STBD STERN TUBE LOC LO INLET FLOW
H:	T03580	degC	L=10.0	H=40.0	STBD STERN TUBE LOC LO OUTLET TEMP
I:					
J:	V03568	<0-1>			STBD STERN TUBE LOC CW INLET VALVE
K:	G03567	ton/h			STBD STERN TUBE LOC CW INLET FLOW
L:	T03581	degC			STBD STERN TUBE LOC CW OUTLET TEMP
M:					
N:					
O:	V03569	<0-1>			STBD STERN TUBE LO DISCHARGE VALVE
P:	G03594	ton/h			STBD STERN TUBE LO DISCH FLOW (to spill)
Q:					
R:					
S:					
T:	C03566	degC			STBD STERN TUBE SERIOUS DAMAGE LIMIT

**2.157 Page:5530 MD55** STBD STERN TUBE SYSTEM
- MISC**

A:	T03552	degC	L=---	H=60.0	STBD STERN TUBE FORE BEARING TEMP
B:	P03585	mWC	L=1.0	H=5.0	STBD STERN TUBE LO / SW DIFF PRESS
C:	G03554	kg/h			STBD STERN TUBE LO LEAKAGE (pollution)
D:	L03570	%	L=30.0	H=90.0	STBD STERN TUBE LO SUMP LEVEL
E:	T03573	degC	L=---	H=60.0	STBD STERN TUBE LO SUMP TEMP
F:	Z03555	%	L=---	H=30.0	STBD STERN TUBE LO CONTAMINATION
G:					
H:	L03572	%	L=40.0	H=---	STBD STERN TUBE GRAV TANK LEVEL
I:	T03575	degC			STBD STERN TUBE GRAV TANK TEMP
J:	G03591	ton/h			STBD STERN TUBE GRAV TANK INL FLOW
K:					
L:					
M:					
N:					
O:	T03576	degC			STBD STERN TUBE LO INLET TEMP
P:	T03577	degC			STBD STERN TUBE LO OUTLET TEMP
Q:	G03550	kg/h			STBD STERN TUBE LO INLET FLOW
R:	N03761	rpm			STBD PROPELLER SPEED
S:	X06334	%			SHIP LOAD (active)
T:	P00771	mWC			STATIC SW PRESSURE

2.158 Page:5590 MD55 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.159 Page:5600 MD56** SHIP PROPULSION SYSTEM

A:	N06312	knot			SHIP SPEED
B:	X06314	Nm			SHIP POS
C:	Q06331	ton			SHIP HULL DRAG FORCE (total)
D:					
E:	N03761	rpm			STBD PROPELLER SPEED
F:	E03760	kW	L=---	H=11600.0	STBD PROPELLER SHAFT POWER
G:	Q03764	ton			STBD PROPELLER THRUST
H:					
I:	N03661	rpm			PORT PROPELLER SPEED
J:	E03660	kW	L=---	H=11600.0	PORT PROPELLER SHAFT POWER
K:	Q03664	ton			PORT PROPELLER THRUST
L:					
M:					
N:	X06334	%			SHIP LOAD (active)
O:	X06335	m			TRIM (active)
P:	X06336	deg			HEEL (active)
Q:					
R:	G06326	kg/h			TOTAL ME FO FLOW
S:	G06327	kg/h			TOTAL DG FO FLOW
T:	E06325	kg/Nm			OVERALL PROPULSION EFFICIENCY

2.160 Page:5601 MD56** SHIP PROPULSION SYSTEM - STEERING GEAR

A:					
B:	R06276	<0-1>			STEERING GEAR SERVO PUMP 1
C:	R06277	<0-1>			STEERING GEAR SERVO PUMP 2
D:					
E:					
F:					
G:					
H:					
I:					
J:	R06270	<0-1>			BOW THRUSTER RUN (start/stop)
K:	X06278	P/D			BOW THRUSTER PITCH
L:					
M:	E06272	kW			BOW THRUSTER POWER
N:	Q06273	ton			BOW THRUSTER FORCE (lateral)
O:					
P:	R06280	<0-1>			STERN THRUSTER RUN (start/stop)
Q:	X06288	P/D			STERN THRUSTER PITCH
R:					
S:	E06282	kW			STERN THRUSTER POWER
T:	Q06283	ton			STERN THRUSTER FORCE (lateral)

**2.161 Page:5610 MD56** SHIP COURSE CONTROL**

A:	N06313	knot	SHIP SPEED (manual if ISOLA)
B:	N03761	rpm	STBD PROPELLER SPEED
C:	N03661	rpm	PORT PROPELLER SPEED
D:			
E:	X06300	<0-1>	AUTO PILOT ACTIVE
F:			
G:	X06306	deg	SHIP COURSE COMMAND
H:	X06307	deg	SHIP COURSE (-180/180)
I:	X06310	deg	SHIP COURSE (0-360)
J:	X06314	Nm	SHIP POS
K:			
L:	X06304	deg	RUDDER COMMAND
M:	X06305	deg	RUDDER POS
N:	R06311	deg/s	TURNING RATE
O:			
P:			
Q:	C06301	-	AUTOPILOT COURSE GAIN
R:	C06302	-	AUTOPILOT RATE GAIN
S:	C06303	-	AUTOPILOT COURSE DEADBAND
T:			

2.162 Page:5611 MD56 SHIP PROPULSION SYSTEM
- HULL FORCES**

A:			
B:	X07041	<0-1>	SHIP SPEED ISOLATION
C:			
D:			
E:	Q06330	ton	PROPELLER THRUST (total)
F:	Q06331	ton	SHIP HULL DRAG FORCE (total)
G:			
H:	Q06332	ton	ICE RESISTANCE FORCE
I:	Q06333	ton	WIND RESISTANCE FORCE
J:			
K:			
L:	Z00770	Beauf	WEATHER CONDITION (waves)
M:	N00766	m/sec	WIND FORCE (speed)
N:	X00767	deg	WIND DIRECTION (0-360 dgr)
O:	X06315	m	SEA WATER DEPTH
P:			
Q:	X06334	%	SHIP LOAD (active)
R:			
S:			
T:			

2.163 Page:5690 MD56** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.164 Page:5700 MD57** SHIP LOAD CONDITION (1)

A:		
B:	M06316 ton	SHIP LOAD (deadweighth)
C:	X06320 %	SHIP LOAD (relative)
D:		
E:		
F:	X06322 deg	HEEL (by stbd)
G:	X06321 m	TRIM (by stern)
H:	X06323 m	DRAFT (mean)
I:		
J:		
K:	M06360 ton	SPILL OIL TANK CONTENT
L:	M06361 ton	HFO SERVICE TANK CONTENT
M:	M06362 ton	DO SERVICE TANK CONTENT
N:	M06363 ton	HFO SETTLE TANK 1 CONTENT
O:	M06364 ton	HFO SETTLE TANK 2 CONTENT
P:		
Q:	M06365 ton	DO STORAGE TANK CONTENT
R:	M06366 ton	LO STORAGE TANK CONTENT
S:	M06367 ton	FW STORAGE TANK CONTENT
T:		

**2.165 Page:5701 MD57** SHIP LOAD CONDITION
(2)**

A:	M06340 ton	AFT BUNKER TANK CONTENT
B:	M06341 ton	PORT BUNKER TANK CONTENT
C:	M06342 ton	STBD BUNKER TANK CONTENT
D:	M06343 ton	FORE BUNKER TANK CONTENT
E:		
F:	M06344 ton	AFT SW BAL TANK CONTENT
G:	M06345 ton	PORT SW BAL TANK CONTENT
H:	M06346 ton	STBD SW BAL TANK CONTENT
I:	M06347 ton	FORE SW BAL TANK CONTENT
J:		
K:	M06350 ton	AFT CARGO CONTENT
L:	M06351 ton	PORT CARGO CONTENT
M:	M06352 ton	STBD CARGO CONTENT
N:	M06353 ton	FORE CARGO CONTENT
O:		
P:	M06354 ton	TOTAL CARGO LOAD
Q:	M06355 ton	TOTAL HFO LOAD
R:	M06356 ton	TOTAL DO LOAD
S:	M06357 ton	TOTAL SW LOAD
T:	M06337 ton	TOTAL STEEL LOAD (fixed equipment)

2.166 Page:5790 MD57 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.167 Page:5800 MD58** ENGINE ROOM VENTILATION / FIRE

A:
B:
C: T00760 degC AMBIENT AIR TEMPERATURE
D:
E: T00761 degC ENGINE ROOM AIR TEMP
F: T00762 degC L=--- H=40.0 CONTROL ROOM AIR TEMP
G:
H:
I: R00764 <0-1> ENG ROOM FAN 1
J: R00765 <0-1> ENG ROOM FAN 2
K:
L: R00763 <0-2> CONTROL ROOM AIR CONDITION
M:
N: R00774 <0-1> MAIN AIR VENTILATION 1 (el load)
O: R00775 <0-1> MAIN AIR VENTILATION 2 (el load)
P:
Q:
R:
S:
T:

2.168 Page:5801 MD58** SHIP FIRE EXTINGUISHING SYSTEM

A:
B: Z00570 <0-2> L=--- H=1.0 FIRE DETECTION (engine room)
C: Z00571 <0-2> L=--- H=1.0 FIRE DETECTION (deck)
D:
E: Z00572 <0-1> FIRE EXTINGUISHER (delayed CO2 gas release)
F: Z00573 <0-1> FIRE ALARM RELAY
G: Z00574 <0-1> CO2 ALARM RELAY
H:
I: Z00578 <0-1> FIRE ALARM HORN RESET (sound off)
J: Z00579 <0-1> CO2 ALARM HORN RESET (sound off)
K: X00580 <0-1> CO2 DOOR switch (alarm command)
L: X00581 <0-1> CO2 RELEASE (no delay)
M:
N: C00582 sec CO2 REALEASE DELAY
O: C00583 sec FIRE DAMAGE TIME LIMIT
P:
Q: V10065 <0-1> SW FIRE LINE SUPPLY VALVE
R: P10067 bar SW FIRE LINE PRESSURE
S: V10069 <0-1> SW FIRE LINE WATER CANON (deck)
T:

**2.169 Page:5810 MD58** STEERING GEAR SYSTEM**

A:	P15801	bar			STEERING GEAR PUMP 1 DISCHARGE PRESS
B:	P15802	bar			STEERING GEAR PUMP 2 DISCHARGE PRESS
C:					
D:	P15803	bar			STEERING GEAR PUMP 1 PRESS SETPOINT
E:	P15804	bar			STEERING GEAR PUMP 2 PRESS SETPOINT
F:					
G:	P15805	bar			STEERING GEAR P1 CHAMBER PRESS
H:	P15806	bar			STEERING GEAR S1 CHAMBER PRESS
I:	P15807	bar			STEERING GEAR S2 CHAMBER PRESS
J:	P15808	bar			STEERING GEAR P2 CHAMBER PRESS
K:					
L:	P15809	bar	L=---	H=1.5	STEERING GEAR OIL FILTER 1 DIFF PRESS
M:	P15810	bar	L=---	H=1.5	STEERING GEAR OIL FILTER 2 DIFF PRESS
N:					
O:	P15821	bar			STEERING GEAR P1 TO S1 RLF VALVE OPEN PRESS
P:	P15822	bar			STEERING GEAR S1 TO P1 RLF VALVE OPEN PRESS
Q:	P15823	bar			STEERING GEAR P2 TO S2 RLF VALVE OPEN PRESS
R:	P15824	bar			STEERING GEAR S2 TO P2 RLF VALVE OPEN PRESS
S:					
T:					

2.170 Page:5811 MD58 STEERING GEAR SYSTEM**

A:	G15801	ton/h			STEERING GEAR PUMP 1 OIL FLOW
B:	G15802	ton/h			STEERING GEAR PUMP 2 OIL FLOW
C:					
D:	G15803	ton/h			STEERING GEAR FILTER 1 OIL FLOW
E:	G15804	ton/h			STEERING GEAR FILTER 2 OIL FLOW
F:					
G:	G15805	ton/h			STEERING GEAR PUMP 1 FLOW TO S CHAMBERS
H:	G15806	ton/h			STEERING GEAR PUMP 1 FLOW TO P CHAMBERS
I:					
J:	G15807	ton/h			STEERING GEAR PUMP 2 FLOW TO P CHAMBERS
K:	G15808	ton/h			STEERING GEAR PUMP 2 FLOW TO S CHAMBERS
L:					
M:					
N:	T15801	degC	L=---	H=50.0	STEERING GEAR OIL SUMP 1 TEMP
O:	T15802	degC	L=---	H=50.0	STEERING GEAR OIL SUMP 2 TEMP
P:					
Q:					
R:					
S:					
T:					

2.171 Page:5812 MD58** STEERING GEAR SYSTEM

A:	L15801	%	L=50.0	H=95.0	STEERING GEAR EXP TANK 1 LEVEL
B:	L15802	%	L=50.0	H=95.0	STEERING GEAR EXP TANK 2 LEVEL
C:					
D:	L15803	%	L=30.0	H=---	STEERING GEAR OIL SUMP 1 LEVEL
E:	L15804	%	L=30.0	H=---	STEERING GEAR OIL SUMP 2 LEVEL
F:					
G:	L15810	%			STEERING GEAR STBY START LEVEL SWITCH POS
H:	L15811	%			STEERING GEAR STOP PUMP1 LEVEL SWITCH POS
I:	L15812	%			STEERING GEAR STOP PUMP2 LEVEL SWITCH POS
J:					
K:					
L:	X15802	deg			STEERING GEAR CONTR - START HYSTERESIS
M:	X15803	deg			STEERING GEAR CONTR - STOP HYSTERESIS
N:					
O:					
P:	X15801	<0-1>			STEERING GEAR SAFEMATIC VALVE
Q:					
R:	V15801	%			STEERING GEAR 1 PRESS CONTROL VALVE POS
S:	V15802	%			STEERING GEAR 2 PRESS CONTROL VALVE POS
T:					

2.172 Page:5813 MD58** STEERING GEAR SYSTEM

A:	V15803	<0-1>			STEERING GEAR 1 P SHUT OFF VALVE
B:	V15804	<0-1>			STEERING GEAR 1 S SHUT OFF VALVE
C:	V15805	<0-1>			STEERING GEAR 2 P SHUT OFF VALVE
D:	V15806	<0-1>			STEERING GEAR 2 S SHUT OFF VALVE
E:					
F:	V15807	<0-1>			STEERING GEAR 1 BYPASS VALVE
G:	V15808	<0-1>			STEERING GEAR 2 BYPASS VALVE
H:					
I:	V15809	<0-1>			STEERING GEAR 1 S TO P RELIEF VALVE
J:	V15810	<0-1>			STEERING GEAR 1 P TO S RELIEF VALVE
K:	V15811	<0-1>			STEERING GEAR 2 P TO S RELIEF VALVE
L:	V15812	<0-1>			STEERING GEAR 2 S TO P RELIEF VALVE
M:					
N:	V15813	<0-1>			STEERING GEAR OIL SUMP 1 DRAIN VALVE
O:	V15814	<0-1>			STEERING GEAR OIL SUMP 2 DRAIN VALVE
P:	V15815	<0-1>			STEERING GEAR EXP TANK 1 DRAIN VALVE
Q:	V15816	<0-1>			STEERING GEAR EXP TANK 2 DRAIN VALVE
R:	V15817	<0-1>			STEERING GEAR EXP TANK 1 SHUT OFF VALVE
S:	V15818	<0-1>			STEERING GEAR EXP TANK 2 SHUT OFF VALVE
T:	V15819	<0-1>			STEERING GEAR EXP TANK MAKE-UP VALVE

**2.173 Page:5890 MD58** CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.174 Page:6000 MD60 START AIR RECEIVER SYSTEM (1)**

A:	P04300	bar	L=22.0	H=32.0	START AIR RECEIVER 1 PRESSURE
B:	G04316	kg/h			START AIR RECEIVER 1 INLET FLOW
C:	V04460	<0-1>			START AIR RECEIVER 1 INLET VALVE
D:	V04462	<0-1>			START AIR RECEIVER 1 OUTLET VALVE
E:					
F:	P04301	bar	L=22.0	H=32.0	START AIR RECEIVER 2 PRESSURE
G:	G04317	kg/h			START AIR RECEIVER 2 INLET FLOW
H:	V04461	<0-1>			START AIR RECEIVER 2 INLET VALVE
I:	V04463	<0-1>			START AIR RECEIVER 2 OUTLET VALVE
J:					
K:	P04302	bar			START AIR REC INLET LINE PRESS
L:	P04303	bar			START AIR REC OUTLET LINE PRESS
M:	G04427	kg/h			START AIR LEAKAGE (basic)
N:					
O:					
P:	P04421	bar			ME 1 START AIR SUPPLY PRESS
Q:	P04422	bar			ME 2 START AIR SUPPLY PRESS
R:					
S:	P04425	bar	L=15.0	H=---	DG 1 START AIR SUPPLY PRESS
T:	P04426	bar	L=15.0	H=---	DG 2 START AIR SUPPLY PRESS

2.175 Page:6001 MD60** START AIR RECEIVER SYSTEM (2)

A:	V04511	<0-1>			ME 1 START AIR SUPPLY VALVE
B:	V04512	<0-1>			ME 2 START AIR SUPPLY VALVE
C:					
D:					
E:					
F:	V04515	<0-1>			DG 1 START AIR SUPPLY VALVE
G:	V04516	<0-1>			DG 2 START AIR SUPPLY VALVE
H:					
I:	Z04312	%	L=---	H=50.0	START AIR RECEIVER 1 WATER CONTENT
J:	V04447	<0-1>			START AIR RECEIVER 1 DRAIN VALVE
K:	V04446	<0-1>	L=---	H=1.0	START AIR RECEIVER 1 SAFETY VALVE
L:	G04361	kg/h			START AIR REC 1 AIR DRAIN FLOW
M:	G04370	kg/h			START AIR REC 1 SAFETY VALVE FLOW
N:					
O:	Z04313	%	L=---	H=50.0	START AIR RECEIVER 2 WATER CONTENT
P:	V04451	<0-1>			START AIR RECEIVER 2 DRAIN VALVE
Q:	V04450	<0-1>	L=---	H=1.0	START AIR RECEIVER 2 SAFETY VALVE
R:	G04362	kg/h			START AIR REC 2 AIR DRAIN FLOW
S:	G04371	kg/h			START AIR REC 2 SAFETY VALVE FLOW
T:					

2.176 Page:6002 MD60** SERV AIR RECEIVER SYSTEM (1)

A:	P04306	bar	L=5.0	H=8.0	SERV AIR RECEIVER PRESS
B:	G04322	kg/h			SERV AIR COMPR FLOW
C:					
D:	V04452	<0-1>			SERV AIR RECEIVER MAKE-UP VALVE
E:	G04323	kg/h			SERV AIR RECEIVER MAKE-UP FLOW
F:	V04410	%			SERV AIR PRESS CONTR VALVE POS
G:					
H:	V04464	<0-1>			SERV AIR RECEIVER INLET VALVE
I:	V04465	<0-1>			SERV AIR RECEIVER OUTLET VALVE
J:	G04431	kg/h			SERV AIR FLOW (deck/ex sootblow)
K:	X07002	<0-3>			DECK SERVICE AIR (0-3)
L:	V04466	<0-1>			CONTROL AIR DRIER/PRESS RED VALVE
M:	P04311	bar	L=2.5	H=4.5	CONTROL AIR PRESSURE
N:	G04430	kg/h			CONTROL AIR FLOW (instrument air)
O:					
P:	Z04314	%	L=---	H=50.0	SERV AIR RECEIVER WATER CONTENT
Q:	V04455	<0-1>			SERV AIR RECEIVER DRAIN VALVE
R:	V04454	<0-1>	L=---	H=1.0	SERV AIR RECEIVER SAFETY VALVE
S:	G04363	kg/h			SERV AIR REC AIR DRAIN FLOW
T:	G04372	kg/h			SERV AIR REC SAFETY VALVE FLOW

**2.177 Page:6003 MD60** SERV AIR RECEIVER SYSTEM (2)**

A:
 B: Z04315 % L=--- H=50.0 SERV AIR FILTER WATER CONTENT
 C: V04456 <0-1> SERV AIR FILTER DRAIN VALVE
 D:
 E:
 F: V04517 <0-1> ME 1 CLUTCH AIR SUPPLY VALVE
 G: V04518 <0-1> ME 2 CLUTCH AIR SUPPLY VALVE
 H:
 I:
 J:
 K:
 L:
 M:
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.178 Page:6004 MD60 START AIR COMPRESSOR 1**

A: P04302 bar START AIR REC INLET LINE PRESS
 B:
 C: X04503 <0-2> L=--- H=1.0 START AIR COMPR 1 TRIP INDICATION
 D: R04470 <0-1> START AIR COMPR 1 START/STOP
 E:
 F: G04320 kg/h START AIR COMPR 1 AIR FLOW
 G:
 H: P04335 bar L=1.5 H=--- START AIR COMPR 1 LO INLET PRESS
 I:
 J:
 K: V04440 <0-1> START AIR COMPR 1 WTR SHUT OFF VALVE
 L: G04325 ton/h START AIR COMPR 1 COOLW FLOW
 M: T04331 degC START AIR COMPR 1 COOLW OUTLET TEMP
 N: T04342 degC L=--- H=90.0 START AIR COMPR 1 AIR OUTLET TEMP
 O:
 P: V04441 <0-1> START AIR COMPR 1 AIRC DRAIN VALVE
 Q: Z04350 % L=--- H=80.0 START AIR COMPR 1 AIRC WATER CONTENT
 R: G04355 kg/h START AIR COMPR 1 AIR DRAIN FLOW
 S:
 T: X04481 % L=--- H=20.0 START AIR COMP1 AUTO TIME ON (% of OFFTIME)

2.179 Page:6005 MD60** START AIR COMPRESSOR 2

A:	P04302	bar			START AIR REC INLET LINE PRESS
B:					
C:	X04504	<0-2>	L=---	H=1.0	START AIR COMPR 2 TRIP INDICATION
D:	R04471	<0-1>			START AIR COMPR 2 START/STOP
E:					
F:	G04321	kg/h			START AIR COMPR 2 AIR FLOW
G:					
H:	P04336	bar	L=1.5	H=---	START AIR COMPR 2 LO INLET PRESS
I:					
J:					
K:	V04442	<0-1>			START AIR COMPR 2 WTR SHUT OFF VALVE
L:	G04326	ton/h			START AIR COMPR 2 COOLW FLOW
M:	T04332	degC			START AIR COMPR 2 COOLW OUTLET TEMP
N:	T04343	degC	L=---	H=90.0	START AIR COMPR 2 AIR OUTLET TEMP
O:					
P:	V04443	<0-1>			START AIR COMPR 2 AIRC DRAIN VALVE
Q:	Z04351	%	L=---	H=80.0	START AIR COMPR 2 AIRC WATER CONTENT
R:	G04356	kg/h			START AIR COMPR 2 AIR DRAIN FLOW
S:					
T:	X04482	%	L=---	H=20.0	START AIR COMP2 AUTO TIME ON (% of OFFTIME)

2.180 Page:6006 MD60** SERVICE AIR COMPRESSOR

A:	P04307	bar			SERV AIR INLET LINE PRESS
B:					
C:	X04505	<0-2>	L=---	H=1.0	SERV AIR COMPR TRIP INDICATION
D:	R04472	<0-1>			SERV AIR COMPR START/STOP
E:					
F:	G04322	kg/h			SERV AIR COMPR FLOW
G:					
H:	P04337	bar	L=1.5	H=---	SERV AIR COMPR LO INLET PRESS
I:					
J:					
K:	V04444	<0-1>			SERV AIR COMPR WTR SHUT OFF VALVE
L:	G04327	ton/h			SERV AIR COMPR COOLW FLOW
M:	T04333	degC			SERV AIR COMPR COOLW OUTLET TEMP
N:	T04344	degC	L=---	H=90.0	SERV AIR COMPR AIR OUTLET TEMP
O:					
P:	V04445	<0-1>			SERV AIR COMPR AIRC DRAIN VALVE
Q:	Z04352	%	L=---	H=80.0	SERV AIR COMPR AIRC WATER CONTENT
R:	G04357	kg/h			SERV AIR COMPR AIR DRAIN FLOW
S:					
T:	X04483	%	L=---	H=20.0	SERV AIR COMP AUTO TIME ON (% of OFFTIME)

**2.181 Page:6007 MD60** AIR RECEIVER SAFETY VALVE DATA**

A:
B:
C:
D: C04400 bar START AIR REC 1 SAFETY OPEN PRESS
E: C04401 bar START AIR REC 1 SAFETY CLOSE PRESS
F:
G: C04402 bar START AIR REC 2 SAFETY OPEN PRESS
H: C04403 bar START AIR REC 2 SAFETY CLOSE PRESS
I:
J: C04404 bar SERV AIR SAFETY VALVE OPEN PRESS
K: C04405 bar SERV AIR SAFETY VALVE CLOSE PRESS
L:
M:
N: C04411 bar SERV AIR PRESS CONTR VALVE SET POINT
O:
P:
Q:
R:
S:
T:

2.182 Page:6090 MD60 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.183 Page:6100 MD61** FRESH WATER GENERATOR - EJECTOR SYSTEM

A:	R06720	<0-1>			EJECTOR PUMP
B:	V06721	<0-1>			EJECTOR PUMP SUCTION VALVE
C:	V06732	<0-1>			EJECTOR PUMP OVERBOARD VALVE
D:					
E:	P06660	bar	L=4.0	H=---	EJECTOR PUMP DISCHARGE PRESSURE
F:					
G:	G06643	ton/h			EJECTOR PUMP FLOW (total)
H:					
I:	G06647	ton/h			EJECTOR DRIVE FLOW (total)
J:	G06650	ton/h			EJECTOR DISCHARGE FLOW (total)
K:					
L:	G06651	ton/h			EJECTOR BRINE FLOW
M:	Z06655	%			EJECTOR BRINE FLOW SALINITY
N:	T06656	degC			EJECTOR BRINE FLOW TEMPERATURE
O:					
P:	G06652	kg/h			EJECTOR SUCTION FLOW
Q:	Z06653	%			EJECTOR SUCTION FLOW AIR CONTENT
R:					
S:	Z06712	%			EJECTOR PUMP SW INLET SALINITY
T:	T06711	degC			EJECTOR PUMP SW INLET TEMP

2.184 Page:6101 MD61** FRESH WATER GENERATOR - SW FEED

A:					
B:	V06731	<0-1>			VACUUM BREAKER VALVE (air inlet)
C:					
D:	V06722	<0-1>			FRESH W GEN HEATER FEED SHUT OFF VALVE
E:	V06723	<0-1>			FRESH W GEN HEATER DRAIN VALVE
F:					
G:	G06644	ton/h			FRESH W GEN EVAP FEED LINE FLOW
H:	C06724	<0-2>			FRESH W GEN EVAP FEED ORIFICE SIZE
I:					
J:					
K:	G06645	ton/h			FRESH W GEN HEATER FEED FLOW
L:	G06646	ton/h			FRESH W GEN HEATER DRAIN FLOW
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

**2.185 Page:6102 MD61** FRESH WATER GENERATOR
- HEATING SECT. 1**

A:					
B:	V06733	<0-1>		FW GEN FW INLET SHUT OFF VALVE	
C:	V06734	<0-1>		FW GEN FW OUTLET SHUT OFF VALVE	
D:	V06735	%		FW GEN FW BYPASS VALVE	
E:					
F:	G06700	ton/h		FW GEN BYPASS FLOW	
G:	G06702	ton/h		FW GEN HEATING FLOW	
H:					
I:	T06703	degC		FW GEN HEATING FLOW INLET TEMP	
J:	T06704	degC	L=40.0	H=---	FW GEN HEATING FLOW OUTLET TEMP
K:	T06701	degC			FW GEN HEATING FLOW RETURN TEMP
L:					
M:	E06713	kW			FRESH W GEN HEATER HEAT TRANSFER
N:					
O:	L06670	%			FRESH W GEN HEATER BRINE LEVEL
P:	G06645	ton/h			FRESH W GEN HEATER FEED FLOW
Q:					
R:	G06654	ton/h			FRESH W GEN BOILING FLOW (vapor)
S:					
T:					

2.186 Page:6103 MD61 FRESH WATER GENERATOR
- HEATING SECT. 2**

A:					
B:	V06753	<0-1>			FW GEN FW INLET SHUT OFF VALVE, SECT. 2
C:	V06754	<0-1>			FW GEN FW OUTLET SHUT OFF VALVE, SECT. 2
D:	V06755	%			FW GEN FW BYPASS VALVE, SECT. 2
E:					
F:	G06760	ton/h			FW GEN BYPASS FLOW, SECT. 2
G:	G06762	ton/h			FW GEN HEATING FLOW, SECT. 2
H:					
I:	T06763	degC			FW GEN HEATING FLOW INLET TEMP, SECT. 2
J:	T06764	degC	L=40.0	H=---	FW GEN HEATING FLOW OUTLET TEMP, SECT. 2
K:	T06761	degC			FW GEN HEATING FLOW RETURN TEMP, SECT. 2
L:					
M:	E06713	kW			FRESH W GEN HEATER HEAT TRANSFER
N:					
O:	X06676	<0-2>	L=---	H=2.0	SALINITY CONTROL AUTO SELECT
P:	G06645	ton/h			FRESH W GEN HEATER FEED FLOW
Q:					
R:	G06654	ton/h			FRESH W GEN BOILING FLOW (vapor)
S:					
T:					

2.187 Page:6104 MD61** FRESH WATER GENERATOR - COOLING

A:					
B:	V06736	<0-1>			FRESH W GEN COOLING SHUT OFF VALVE
C:	V06737	%			FRESH W GEN COOLING FLOW ADJUST VALVE
D:	G06706	ton/h			FRESH W GEN COOLING FLOW
E:					
F:	T06707	degC			FRESH W GEN COOLING FLOW INLET TEMP
G:	T06710	degC	L=---	H=100.0	FRESH W GEN COOLING FLOW OUTLET TEMP
H:					
I:					
J:					
K:	E06714	kW			FRESH W GEN COOLER HEAT TRANSFER
L:					
M:	L06671	%	L=---	H=90.0	FRESH W GEN COOLER DISTILLATE LEVEL
N:	T06673	degC			FRESH W GEN COOLER DISTILLATE TEMP
O:	Z06672	ppm			FRESH W GEN COOLER DISTILLATE SALINITY
P:					
Q:	P06661	bara	L=---	H=0.5	FRESH W GEN PRESSURE (total)
R:					
S:					
T:					

2.188 Page:6105 MD61** FRESH WATER GENERATOR - DISTILLATE

A:					
B:	G06640	ton/h			PRODUCED FRESH WATER FLOW
C:	M06657	ton			PRODUCED FRESH WATER FLOW (total)
D:	Z06674	ppm	L=---	H=15.0	PRODUCED FRESH WATER FLOW SALINITY
E:					
F:	R06725	<0-1>			DISTILLATE PUMP
G:	P06664	bar			DISTILLATE PUMP DISCHARGE PRESSURE
H:					
I:	G06642	ton/h			DISTILLATE FLOW FROM FRESH W GEN
J:	G06641	ton/h			DISTILLATE RECIRC TO FRESH W GEN
K:	L06648	%	L=30.0	H=90.0	FRESH W GEN STORAGE TANK LEVEL
L:	V06649	<0-1>			FW STORAGE TANK SHUT OFF VALVE
M:					
N:	X06676	<0-2>	L=---	H=2.0	SALINITY CONTROL AUTO SELECT
O:	C06675	ppm			SALINITY CONTROL RECIRC LIMIT (stop)
P:	C06677	ppm			SALINITY CONTROL RECIRC LIMIT (start)
Q:					
R:	V06727	<0-1>			DISTILLATE DISCHARGE VALVE
S:	V06726	<0-1>			DISTILLATE RECIRC VALVE
T:					

**2.189 Page:6106 MD61** FRESH WATER GENERATOR
- VACUUM CONTROL**

A:
B:
C: X06747 <0-1> EVAP LOAD CONTROL ACTIVE
D:
E: V06730 <0-1> EVAP LOAD CONTROL VALVE (air inlet)
F:
G:
H:
I: C06745 bara EVAP LOAD CONTROL PRESS LIMIT (start)
J: C06746 bara EVAP LOAD CONTROL PRESS LIMIT (stop)
K:
L:
M: P06661 bara L=--- H=0.5 FRESH W GEN PRESSURE (total)
N: P06663 bara FRESH W GEN PRESSURE (air)
O:
P:
Q:
R:
S:
T:

2.190 Page:6107 MD61 FRESH WATER GENERATOR
- ISOLATION**

A:
B:
C: X06744 <0-1> FRESH W GEN ISOLATION
D:
E:
F: G06740 ton/h FRESH W GEN FW FLOW AT ISOLA (total)
G: T06742 degC FRESH W GEN FW TEMP AT ISOLA (inlet)
H:
I: G06741 ton/h FRESH W GEN SW FLOW AT ISOLA (total)
J: T06743 degC FRESH W GEN SW TEMP AT ISOLA (inlet)
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.191 Page:6130 MD61 FRESH WATER GENERATOR
 - MISC**

A:	G06640	ton/h			PRODUCED FRESH WATER FLOW
B:	L06671	%	L=---	H=90.0	FRESH W GEN COOLER DISTILLATE LEVEL
C:	Z06672	ppm			FRESH W GEN COOLER DISTILLATE SALINITY
D:	V06727	<0-1>			DISTILLATE DISCHARGE VALVE
E:	V06726	<0-1>			DISTILLATE RECIRC VALVE
F:	V06730	<0-1>			EVAP LOAD CONTROL VALVE (air inlet)
G:					
H:	P06661	bara	L=---	H=0.5	FRESH W GEN PRESSURE (total)
I:	P06663	bara			FRESH W GEN PRESSURE (air)
J:	T06673	degC			FRESH W GEN COOLER DISTILLATE TEMP
K:	G06654	ton/h			FRESH W GEN BOILING FLOW (vapor)
L:	L06670	%			FRESH W GEN HEATER BRINE LEVEL
M:	E06714	kW			FRESH W GEN COOLER HEAT TRANSFER
N:					
O:	G06702	ton/h			FW GEN HEATING FLOW
P:	T06703	degC			FW GEN HEATING FLOW INLET TEMP
Q:	T06704	degC	L=40.0	H=---	FW GEN HEATING FLOW OUTLET TEMP
R:	G06706	ton/h			FRESH W GEN COOLING FLOW
S:	T06707	degC			FRESH W GEN COOLING FLOW INLET TEMP
T:	T06710	degC	L=---	H=100.0	FRESH W GEN COOLING FLOW OUTLET TEMP

2.192 Page:6190 MD61 CONFIGURABLE PAGE**

- A:
- B:
- C:
- D:
- E:
- F:
- G:
- H:
- I:
- J:
- K:
- L:
- M:
- N:
- O:
- P:
- Q:
- R:
- S:
- T:

**2.193 Page:6200 MD62** SLUDGE TANK /
INCINERATOR**

A:	L06432	m	L=---	H=1.5	SLUDGE TANK LEVEL (total)
B:	L06427	m			SLUDGE TANK LEVEL (oil only)
C:	L06433	m			SLUDGE TANK OIL/WTR INTERFACE
D:	G06434	ton/h			SLUDGE TANK OVERFLOW
E:					
F:	G06435	ton/h			SLUDGE TANK INFLUX (wtr)
G:	G06436	ton/h			SLUDGE TANK INFLUX (oil)
H:					
I:	G06430	ton/h			SLUDGE TANK OUTLET FLOW
J:	V06431	<0-1>			SLUDGE TANK SUCTION VALVE
K:					
L:	G06455	ton/h			BILGE SEP SLUDGE FLOW
M:	Z06462	%			BILGE SEP SLUDGE FLOW OIL CONTENT
N:	R06441	<0-2>			INCINERATOR PUMP
O:	X06442	<0-2>			INCINERATOR FLAME ON
P:	G06440	ton/h			INCINERATOR FLOW
Q:	V06448	<0-1>			SLUDGE TO SHORE VALVE
R:	X06449	<0-1>			SLUDGE TO SHORE CONNECT
S:	R06443	<0-2>			SLUDGE TO SHORE PUMP
T:	G06444	ton/h			SLUDGE TO SHORE FLOW

2.194 Page:6201 MD62 BILGE WELL SYSTEM -
LEVELS**

A:	L06400	m	L=---	H=0.5	ER Aft bilge well level
B:	Z06401	%			ER Aft bilge well oil content
C:	G06402	ton/h			ER Aft bilge well outlet flow
D:	V06403	<0-1>			ER Aft bilge well suction valve
E:					
F:	L06422	m	L=---	H=0.5	ER Fwd bilge well level
G:	Z06423	%			ER Fwd bilge well oil content
H:	G06424	ton/h			ER Fwd bilge well outlet flow
I:	V06425	<0-1>			ER Fwd bilge well suction valve
J:					
K:	L06405	m	L=---	H=0.5	ER Port bilge well level
L:	Z06407	%			ER Port bilge well oil content
M:	G06410	ton/h			ER Port bilge well outlet flow
N:	V06411	<0-1>			ER Port bilge well suction valve
O:					
P:					
Q:	L06414	m	L=---	H=0.5	ER Stbd bilge well level
R:	Z06415	%			ER Stbd bilge well oil content
S:	G06416	ton/h			ER Stbd bilge well outlet flow
T:	V06417	<0-1>			ER Stbd bilge well suction valve

2.195 Page:6202 MD62** BILGE WELL SYSTEM - LEVELS

A:	V06484	<0-1>	AFT EMERGENCY SUCTION VALVE
B:	G06480	ton/h	AFT EMERGENCY SUCTION FLOW
C:	V06485	<0-1>	ENGINE ROOM EMERGENCY SUCTION VALVE
D:	G06481	ton/h	ENGINE ROOM EMERGENCY SUCTION FLOW
E:			
F:	V06486	<0-1>	CARGO HOLD EMERGENCY SUCTION VALVE
G:	G06482	ton/h	CARGO HOLD EMERGENCY SUCTION FLOW
H:	V06487	<0-1>	FORE EMERGENCY SUCTION VALVE
I:	G06483	ton/h	FORE EMERGENCY SUCTION FLOW
J:			
K:			
L:			
M:			
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

2.196 Page:6290 MD62** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.197 Page:6300 MD63** BILGE SEPARATOR (1)**

A:	R06470	<0-1>			BILGE SEP PUMP START/STOP
B:					
C:					
D:	V06472	<0-1>			BILGE SEP OVERBOARD VALVE
E:	V06473	<0-1>			BILGE SEP RECIRC VALVE
F:	V06474	<0-1>			BILGE SEP SLUDGE VALVE
G:	V06479	<0-1>			BILGE SEP BY-PASS VALVE
H:	V06494	<0-1>			BILGE SEP OVERBOARD STOP VALVE
I:	V06495	<0-1>			BILGE SEP TO CLEAN WATER TANK MANUAL VALVE
J:					
K:					
L:	G06452	ton/h			BILGE SEP OVERBOARD FLOW
M:	G06451	ton/h			BILGE SEP RECIRC FLOW
N:	G06453	ton/h			BILGE SEP INLET FLOW
O:	G06454	ton/h			BILGE SEP OUTLET FLOW
P:	G06455	ton/h			BILGE SEP SLUDGE FLOW
Q:					
R:	Z06463	ppm	L=---	H=15.0	BILGE SEP FLOW OIL PPM (measuring cell)
S:	Z06460	%			BILGE SEP INLET FLOW OIL CONTENT
T:	Z06462	%			BILGE SEP SLUDGE FLOW OIL CONTENT

2.198 Page:6301 MD63 BILGE SEPARATOR (2)**

A:					
B:					
C:	X06481	<0-1>			BILGE SEP AUTO SWITCH
D:	X06482	<0-1>			BILGE SEP TRIP INDICATION
E:					
F:	X06475	<0-1>			BILGE SEP HEATER ON SWITCH
G:	E06467	kW			BILGE SEP HEATER POWER
H:	T06466	degC	L=65.0	H=95.0	BILGE SEP OIL/WATER SETTLING TEMP
I:	L06465	%	L=---	H=40.0	BILGE SEP OIL/WATER INTERFACE LEVEL
J:					
K:					
L:					
M:	C06464	ppm			BILGE SEP RECIRC PPM LIMIT
N:					
O:	X06496	%	L=---	H=20.0	BILGE PUMP AUTO TIME ON (% of OFFTIME)
P:					
Q:	L06488	m			BILGE SEP PUMP START LIMIT
R:	L06489	m			BILGE SEP PUMP STOP LIMIT
S:					
T:					

2.199 Page:6302 MD63** CLEAN BILGE WATER TANK

A:					
B:	L06490	m	L=---	H=0.8	CLEAN BILGE WATER TANK LEVEL
C:					
D:	Z06491	%			CLEAN BILGE WATER TANK OIL CONTENT
E:					
F:	G06451	ton/h			BILGE SEP RECIRC FLOW
G:	G06492	ton/h			CLEAN BILGE WATER TANK OUTLET FLOW
H:					
I:	V06493	<0-1>			CLEAN BILGE WATER TANK SUCTION VALVE
J:					
K:	V06494	<0-1>			BILGE SEP OVERBOARD STOP VALVE
L:	V06495	<0-1>			BILGE SEP TO CLEAN WATER TANK MANUAL VALVE
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.200 Page:6390 MD63** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.201 Page:6400 MD64** REFRIG SYSTEM -
COMPRESSOR**

A:	X06524	<0-5>	L=---	H=1.0	REFRIG COMP TRIP INDICATION
B:					
C:	X06523	<0-3>			REFRIG COMP START INHIBIT
D:	R06525	<0-1>			REFRIG COMP START
E:					
F:	E06533	kW	L=---	H=230.0	REFRIG COMP ELECTRIC POWER
G:	Z06534	%			REFRIG COMP EFFICIENCY (overall)
H:					
I:	P06527	bar	L=---	H=16.0	REFRIG COMP DISCHARGE PRESS
J:	P06530	bar	L=0.7	H=---	REFRIG COMP SUCTION PRESS
K:	Z06531	-			REFRIG COMP PRESSURE RATIO
L:					
M:	T06532	degC	L=---	H=90.0	REFRIG COMP DISCHARGE TEMP
N:	G06526	kg/s			REFRIG COMP DISCHARGE FLOW
O:					
P:					
Q:	T06567	degC	L=10.0	H=55.0	REFRIG COMP LO INLET TEMP
R:	P06571	bar	L=1.5	H=---	REFRIG COMP LO INLET DIFF PRESS
S:					
T:	T06535	degC	L=---	H=80.0	REFRIG COMP THRUST BEARING TEMP

2.202 Page:6401 MD64 REFRIG SYSTEM -
CONDENSER**

A:					
B:	P06500	bar	L=---	H=30.0	REFRIG CONDENSER PRESSURE
C:	L06501	%	L=---	H=40.0	REFRIG CONDENSER LEVEL
D:					
E:	T06502	degC			REFRIG COND CONDENSATE TEMP
F:	G06503	kg/s			REFRIG COND CONDENSATE FLOW
G:					
H:					
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.203 Page:6402 MD64** REFRIG SYS -EVAPORATOR CARGO H / PROV S

A:	X06521	%			REFRIG CARGO HOLD EVAP EXP VALVE POS
B:	Z06522	%			REFRIG CARGO HOLD EVAP EXP V SPRING FORCE
C:	P06511	bar	L=0.7	H=---	REFRIG CARGO HOLD EVAP PRESSURE
D:	L06512	%	L=---	H=50.0	REFRIG CARGO HOLD EVAP LIQUID CONTENT
E:	G06513	kg/s			REFRIG CARGO HOLD EVAP LIQ FLOW (inlet)
F:	T06514	degC			REFRIG CARGO HOLD EVAP VAPOR TEMP
G:	Z06515	%			REFRIG CARGO HOLD EVAP VAPOR DROP CONTENT
H:	T06516	degC			REFRIG CARGO HOLD EVAP VAPOR SUPERHEAT
I:					
J:					
K:	X16521	%			REFRIG PROV STORE EVAP EXP VALVE POS
L:	Z16522	%			REFRIG PROV STORE EVAP EXP V SPRING FORCE
M:	P16511	bar	L=3.0	H=6.0	REFRIG PROV STORE EVAP PRESSURE
N:	L16512	%	L=---	H=50.0	REFRIG PROV STORE EVAP LIQUID CONT
O:	G16513	kg/s			REFRIG PROV STORE EVAP LIQ FLOW (inlet)
P:	T16514	degC			REFRIG PROV STORE EVAP VAPOR TEMP
Q:	Z16515	%	L=---	H=---	REFRIG PROV STORE EVAP VAPOR DROP CONTENT
R:	T16516	degC	L=---	H=---	REFRIG PROV STORE EVAP VAPOR SUPERHEAT
S:					
T:	C16635	-			REFRIG PROV STORE EVAP PRESS CONTROL SETP

2.204 Page:6403 MD64** REFRIG SYSTEM - LIQUID RECEIVER

A:					
B:					
C:	L06542	%	L=10.0	H=80.0	REFRIG RECEIVER LEVEL
D:					
E:	V06543	<0-1>			REFRIG RECEIVER INLET VALVE
F:	V06544	<0-1>			REFRIG RECEIVER OUTLET VALVE
G:	V06545	<0-1>			REFRIG RECEIVER VAPOR VALVE
H:					
I:					
J:	V06546	<0-1>			REFRIG LIQUID MAKE-UP VALVE
K:	G06547	kg/s			REFRIG LIQUID MAKE-UP FLOW
L:					
M:					
N:					
O:					
P:					
Q:					
R:	X06613	<0-1>			REFRIGERANT SELECTION (0=R22,1=R12)
S:					
T:					

**2.205 Page:6404 MD64** REFRIG SYSTEM - COMPR
LO SYSTEM**

A:					
B:					
C:					
D:	R06565	<0-1>			REFRIG COMP LO CIRC PUMP
E:	P06566	bar			REFRIG COMP LO CIRC PUMP PRESS
F:					
G:	T06536	degC			REFRIG COMP OIL SEP OIL TEMP
H:	L06537	%	L=20.0	H=80.0	REFRIG COMP OIL SEP OIL LEVEL
I:					
J:	T06567	degC	L=10.0	H=55.0	REFRIG COMP LO INLET TEMP
K:	G06570	kg/s			REFRIG COMP LO INLET FLOW
L:	P06571	bar	L=1.5	H=---	REFRIG COMP LO INLET DIFF PRESS
M:					
N:	P06572	bar			REFRIG COMP LO COOLER PRESS DROP
O:	P06573	bar			REFRIG COMP LO FILTER PRESS DROP
P:					
Q:	R06564	<0-1>			REFRIG COMP LO MAKE UP PUMP
R:					
S:					
T:					

2.206 Page:6405 MD64 REFRIG SYSTEM - SW
SUPPLY**

A:	X06602	<0-1>			REFRIG SYST EL SUPPLY ISOLA
B:					
C:	X06604	<0-1>			REFRIG SYST SW SUPPLY ISOLA
D:	T06603	degC			REFRIG SYST SW SUPPLY TEMP
E:					
F:					
G:	R06576	<0-1>			REFRIG SYST SW SUPPLY PUMP 1
H:	R06577	<0-1>			REFRIG SYST SW SUPPLY PUMP 2
I:					
J:	V06605	%			REFRIG COND SW FLOW VALVE POS
K:	G06606	ton/h			REFRIG COND SW FLOW
L:	T06504	degC	L=---	H=40.0	REFRIG COND SW OUTLET TEMP
M:					
N:	P06510	bar	L=---	H=1.5	REFRIG COND SW DIFF PRESSURE
O:					
P:	V06607	<0-1>			REFRIG COMP LOC SW SHUT OFF VALVE
Q:	G06610	ton/h			REFRIG COMP LOC SW FLOW
R:	T06575	degC			REFRIG COMP LOC SW OUTLET TEMP
S:					
T:					

2.207 Page:6406 MD64** REFRIG SYSTEM - MISCELLANEOUS

A:
 B:
 C: X06633 <0-2> REFRIG EVAP DEFROST COMMAND
 D:
 E:
 F: Z06517 % L=--- H=70.0 REFRIG CARGO HOLD EVAP SURFACE ICE
 G: X06626 <0-1> ICE BUILD-UP OK CARGO HOLD
 H: Z06627 % ICE BUILD-UP RATE CARGO HOLD
 I:
 J:
 K: Z16517 % L=--- H=--- REFRIG PROV STORE EVAP SURFACE ICE
 L: X16626 <0-1> ICE BUILD-UP OK PROV STORE
 M: Z16627 % ICE BUILD-UP RATE PROV STORE
 N:
 O:
 P: E06541 kW REFRIG COMP POWER LIMIT
 Q:
 R:
 S:
 T:

2.208 Page:6410 MD64** REFRIG SYSTEM - CAPACITY CONTROL

A: X06615 <0-1> REFRIG TEMP CONTR AUTO SWITCH
 B: Z06616 % REFRIG TEMP CONTR MANUAL OUTPUT
 C:
 D: T06614 degC REFRIG TEMP CONTR SET POINT
 E: T06620 degC REFRIG TEMP CONTR INPUT SIGNAL
 F: Z06621 % REFRIG TEMP CONTR OUTPUT SIGNAL
 G:
 H: X06540 % REFRIG COMP CAPACITY INDEX
 I:
 J:
 K:
 L:
 M: X06617 <0-1> REFRIG TEMP CONTR HW PID SELECT
 N:
 O: C06622 %/degC REFRIG TEMP CONTR GAIN
 P: C06623 sec REFRIG TEMP CONTR INTEGRATION TIME
 Q: C06624 sec REFRIG TEMP CONTR DERIVATION TIME
 R: C06625 <0-10> REFRIG TEMP CONTR DERIVATION RANGE
 S:
 T:

**2.209 Page:6420 MD64** REFRIG SYSTEM -CARGO
HOLD / HEAT FLUXES**

A: Z06551 - REFRIG CARGO HOLD TEMP SPEED UP FACTOR
 B:
 C:
 D: R06561 <0-1> REFRIG CARGO HOLD AIR FAN 1 (small)
 E: R06562 <0-1> REFRIG CARGO HOLD AIR FAN 2 (big)
 F: E06560 kW REFRIG CARGO HOLD AIR FAN POWER
 G:
 H: T06554 degC L=-35.0 H=-25.0 REFRIG CARGO HOLD AIR TEMP
 I: T06553 degC REFRIG CARGO HOLD CARGO TEMP
 J: M06552 ton REFRIG CARGO HOLD CARGO MASS
 K:
 L:
 M: H06520 kW REFRIG CARGO HOLD EVAP TRANSF HEAT (total)
 N:
 O:
 P:
 Q: Z06555 % REFRIG CARGO HOLD HEAT LOAD SETTING (extra)
 R: H06556 kW REFRIG CARGO HOLD HEAT LOAD (extra)
 S:
 T: T00760 degC AMBIENT AIR TEMPERATURE

2.210 Page:6421 MD64 REFRIG SYSTEM -PROV
STORE / HEAT FLUXES**

A:
 B:
 C:
 D: R16561 <0-1> REFRIG PROV STORE AIR FAN
 E:
 F:
 G:
 H: T16554 degC L=2.0 H=8.0 REFRIG PROV STORE AIR TEMP
 I: T16553 degC REFRIG PROV STORE CARGO TEMP
 J: M16552 ton REFRIG PROV STORE CARGO MASS
 K:
 L:
 M: H16520 kW REFRIG PROV STORE EVAP TRANSF HEAT (total)
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.211 Page:6422 MD64** REFRIG SYSTEM - PERFORMANCE

A:	Z06630	-			REFRIG PERFORMANCE FACTOR (actual)
B:	Z06631	-			REFRIG PERFORMANCE FACTOR (ideal)
C:					
D:	Z06632	%			REFRIG OVERALL EFFICIENCY
E:					
F:					
G:	E06533	kW	L=---	H=230.0	REFRIG COMP ELECTRIC POWER
H:					
I:	H06520	kW			REFRIG CARGO HOLD EVAP TRANSF HEAT (total)
J:	H16520	kW			REFRIG PROV STORE EVAP TRANSF HEAT (total)
K:					
L:	H06505	kW			REFRIG COND TRANSFERRED HEAT
M:	H06574	kW			REFRIG COMP TRANSFERRED HEAT (LOC)
N:					
O:					
P:					
Q:					
R:					
S:	X06613	<0-1>			REFRIGERANT SELECTION (0=R22,1=R12)
T:	X06602	<0-1>			REFRIG SYST EL SUPPLY ISOLA

2.212 Page:6490 MD64** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.213 Page:7000 MD70** ELECTRIC POWER PLANT -
MAIN VAR. (1)**

A:	V06140	Volt	L=405.0	H=465.0	MAIN BUS BAR 1 VOLTAGE
B:	F06141	Hz	L=56.0	H=64.0	MAIN BUS BAR 1 FREQUENCY
C:	V06144	Volt	L=400.0	H=470.0	MAIN BUS BAR 2 VOLTAGE
D:	F06145	Hz	L=54.0	H=66.0	MAIN BUS BAR 2 FREQUENCY
E:	V06191	Volt	L=400.0	H=470.0	MAIN BUS BAR 3 VOLTAGE
F:	F06192	Hz	L=54.0	H=66.0	MAIN BUS BAR 3 FREQUENCY
G:					
H:	E06000	kW	L=---	H=650.0	DG 1 ACTIVE LOAD
I:	X06010	<0-1>			DG 1 raise speed command
J:	X06011	<0-1>			DG 1 lower speed command
K:	E06020	kW	L=---	H=650.0	DG 2 ACTIVE LOAD
L:	X06030	<0-1>			DG 2 raise speed command
M:	X06031	<0-1>			DG 2 lower speed command
N:					
O:	E06060	kW	L=---	H=650.0	SG 1 ACTIVE LOAD
P:	X06070	<0-1>			SG 1 raise speed command
Q:	X06071	<0-1>			SG 1 lower speed command
R:	E06100	kW	L=---	H=650.0	SG 2 ACTIVE LOAD
S:	X06110	<0-1>			SG 2 raise speed command
T:	X06111	<0-1>			SG 2 lower speed command

2.214 Page:7001 MD70 ELECTRIC POWER PLANT -
MAIN VAR. (2)**

A:	X06150	<0-1>			BUS BAR 1/2 CONNECTION (DG/SG)
B:	X06190	<0-1>			BUS BAR 2/3 CONNECTION (SG1/SG2)
C:					
D:	X06901	<0-4>			SemiAuto generator select
E:	X06904	<0-1>			SemiAuto ready light
F:					
G:	X06902	<0-1>			SemiAuto connect command
H:	X06903	<0-1>			SemiAuto disconn command
I:					
J:	X06909	sec			SemiAuto synchro time limit
K:					
L:	F06905	Hz			SemiAuto ready low freq limit
M:	F06906	Hz			SemiAuto ready high freq limit
N:	F06907	Hz			SemiAuto conn. low freq limit
O:	F06908	Hz			SemiAuto conn. high freq limit
P:					
Q:	V06910	V			SemiAuto ready low voltage limit
R:	V06911	V			SemiAuto ready high voltage limit
S:	V06912	V			SemiAuto ready diff volt lim - below
T:	V06913	V			SemiAuto ready diff volt lim - above

2.215 Page:7002 MD70** ELECTRIC POWER PLANT - DG 1

A:	V06140	Volt	L=405.0	H=465.0	MAIN BUS BAR 1 VOLTAGE
B:	F06141	Hz	L=56.0	H=64.0	MAIN BUS BAR 1 FREQUENCY
C:					
D:	X06014	<0-6>	L=---	H=1.0	DG 1 CIRCUIT BREAKER TRIP
E:	X06013	<0-1>			DG 1 CIRCUIT BREAKER
F:					
G:	X06010	<0-1>			DG 1 raise speed command
H:	X06011	<0-1>			DG 1 lower speed command
I:					
J:	E06000	kW	L=---	H=650.0	DG 1 ACTIVE LOAD
K:	E06001	kVAr			DG 1 REACTIVE LOAD
L:	I06003	A	L=---	H=940.0	DG 1 CURRENT
M:	V06002	Volt			DG 1 VOLTAGE
N:	F06004	Hz			DG 1 FREQUENCY
O:	X06012	deg			DG 1 PHASE INDICATION
P:					
Q:	X06016	<0-1>			DG 1 MAGNETIZATION SWITCH
R:	Z06017	%			DG 1 MAGNETIZATION SETTING
S:	I06015	A			DG 1 MAGNETIZATION CURRENT
T:					

2.216 Page:7003 MD70** ELECTRIC POWER PLANT - DG 2

A:	V06140	Volt	L=405.0	H=465.0	MAIN BUS BAR 1 VOLTAGE
B:	F06141	Hz	L=56.0	H=64.0	MAIN BUS BAR 1 FREQUENCY
C:					
D:	X06034	<0-6>	L=---	H=1.0	DG 2 CIRCUIT BREAKER TRIP
E:	X06033	<0-1>			DG 2 CIRCUIT BREAKER
F:					
G:	X06030	<0-1>			DG 2 raise speed command
H:	X06031	<0-1>			DG 2 lower speed command
I:					
J:	E06020	kW	L=---	H=650.0	DG 2 ACTIVE LOAD
K:	E06021	kVAr			DG 2 REACTIVE
L:	I06023	A	L=---	H=940.0	DG 2 CURRENT
M:	V06022	Volt			DG 2 VOLTAGE
N:	F06024	Hz			DG 2 FREQUENCY
O:	X06032	deg			DG 2 PHASE INDICATION
P:					
Q:	X06036	<0-1>			DG 2 MAGNETIZATION SWITCH
R:	Z06037	%			DG 2 MAGNETIZATION SETTING
S:	I06035	A			DG 2 MAGNETIZATION CURRENT
T:					

**2.217 Page:7004 MD70** ELECTRIC POWER PLANT -
SG 1**

A:	V06144	Volt	L=400.0	H=470.0	MAIN BUS BAR 2 VOLTAGE
B:	F06145	Hz	L=54.0	H=66.0	MAIN BUS BAR 2 FREQUENCY
C:					
D:	X06074	<0-6>	L=---	H=1.0	SG 1 CIRCUIT BREAKER TRIP
E:	X06073	<0-1>			SG 1 CIRCUIT BREAKER
F:					
G:	X06070	<0-1>			SG 1 raise speed command
H:	X06071	<0-1>			SG 1 lower speed command
I:					
J:	E06060	kW	L=---	H=650.0	SG 1 ACTIVE LOAD
K:	E06061	kVAr			SG 1 REACTIVE LOAD
L:	I06063	A	L=---	H=940.0	SG 1 CURRENT
M:	V06062	Volt			SG 1 VOLTAGE
N:	F06064	Hz			SG 1 FREQUENCY
O:	X06072	deg			SG 1 PHASE INDICATION
P:					
Q:	X06076	<0-1>			SG 1 MAGNETIZATION SWITCH
R:	Z06077	%			SG 1 MAGNETIZATION SETTING
S:	I06075	A			SG 1 MAGNETIZATION CURRENT
T:					

2.218 Page:7005 MD70 ELECTRIC POWER PLANT -
SG 2**

A:	V06191	Volt	L=400.0	H=470.0	MAIN BUS BAR 3 VOLTAGE
B:	F06192	Hz	L=54.0	H=66.0	MAIN BUS BAR 3 FREQUENCY
C:					
D:	X06114	<0-6>	L=---	H=1.0	SG 2 CIRCUIT BREAKER TRIP
E:	X06113	<0-1>			SG 2 CIRCUIT BREAKER
F:					
G:	X06110	<0-1>			SG 2 raise speed command
H:	X06111	<0-1>			SG 2 lower speed command
I:					
J:	E06100	kW	L=---	H=650.0	SG 2 ACTIVE LOAD
K:	E06101	kVAr			SG 2 REACTIVE
L:	I06103	A	L=---	H=940.0	SG 2 CURRENT
M:	V06102	Volt			SG 2 VOLTAGE
N:	F06104	Hz			SG 2 FREQUENCY
O:	X06112	deg			SG 2 PHASE INDICATION
P:					
Q:	X06116	<0-1>			SG 2 MAGNETIZATION SWITCH
R:	Z06117	%			SG 2 MAGNETIZATION SETTING
S:	I06115	A			SG 2 MAGNETIZATION CURRENT
T:					

2.219 Page:7006 MD70** ELECTRIC POWER PLANT - EG / SHORE CONN.

A:	X06133	<0-1>			EMERGENCY GENERATOR AUTO SWITCH
B:	R06132	<0-1>			EMERGENCY GENERATOR START/STOP
C:	X06134	<0-1>			EMERGENCY GENERATOR CIRCUIT BREAKER
D:	F06137	Hz			EM.GEN FREQUENCY
E:	E06130	kW	L=---	H=180.0	EMERGENCY GENERATOR POWER
F:	V06136	Volt			EM.GEN VOLTAGE
G:	I06138	A	L=---	H=280.0	EM.GEN CURRENT
H:					
I:	X06160	<0-1>			Shore connection circuit breaker
J:	X06161	<0-1>			SHORE CONNECTION CABLE
K:	X06162	<0-1>			SHORE CONNECTION PHASE WRONG WAY
L:	X06167	<0-1>			SHORE CONNECTION PHASE TWIST (input)
M:					
N:	E06163	kW	L=-40.0	H=180.0	SHORE CONNECTION POWER
O:	I06179	A			SHORE CONNECTION CURRENT
P:	X06166	<0-2>	L=---	H=1.0	SHORE CONNECTION TRIP
Q:					
R:	E06156	kW			SHORE CONNECTION POWER LIMIT (high)
S:	E06157	kW			SHORE CONNECTION POWER LIMIT (low)
T:					

2.220 Page:7007 MD70** ELECTRIC POWER PLANT - MISCELLANEOUS

A:	X07032	<0-1>			ELECTRIC ISOLATION
B:	E06153	kW			BUS BAR 1 LOAD (DG) AT ISOLATION
C:	E06154	kW			BUS BAR 2/3 LOAD (SG) AT ISOLATION
D:	E06155	kW			EM.BUS BAR LOAD (EG) AT ISOLATION
E:	C06151	kW			ELECTRIC BASE LOAD - S1
F:	C06152	kW			ELECTRIC BASE LOAD - S2
G:	X06150	<0-1>			BUS BAR 1/2 CONNECTION (DG/SG)
H:	X06147	<0-1>			BUS BAR 1/EM.CONNECTION (DG/EG)
I:	X06168	<0-1>			NONE ESS. BUS CIRCUIT BREAKER
J:	X06169	<0-1>			LIGHTING BUS CIRCUIT BREAKER
K:	X06196	<0-1>			LIGHTING TRANS 1 INLET SWITCH
L:	X06197	<0-1>			LIGHTING TRANS 1 OUTLET SWITCH
M:	X06198	<0-1>			LIGHTING TRANS 2 INLET SWITCH
N:	X06199	<0-1>			LIGHTING TRANS 2 OUTLET SWITCH
O:	X06193	<0-1>			ACCOM LIGHTING SWITCH
P:	X06188	<0-1>			DECK LIGHTING SWITCH
Q:	X06189	<0-1>			ER LIGHTING SWITCH
R:	X06171	<0-1>			STATIC CONVERTER ACTIVE SWITCH
S:	Z06170	%			STATIC CONVERTER SET POINT
T:	F06172	Hz			STATIC CONVERTER FREQUENCY

**2.221 Page:7008 MD70** ELECTRIC POWER PLANT -
CIRCUIT BREAKERS**

A:	X06200	<0-1>		CIRCUIT BREAKER - DECK CRANES
B:	X06209	<0-1>		CIRCUIT BREAKER - DECK MACHINERY 2
C:	X06201	<0-1>		CIRCUIT BREAKER - BOW THRUSTER
D:	X06208	<0-1>		CIRCUIT BREAKER - STERN THRUSTER
E:				
F:	X06202	<0-1>		CIRCUIT BREAKER - ME 1 SW PUMP 1
G:	X06203	<0-1>		CIRCUIT BREAKER - ME 1 SW PUMP 2
H:	X06204	<0-1>		CIRCUIT BREAKER - ME 2 SW PUMP 1
I:	X06205	<0-1>		CIRCUIT BREAKER - ME 2 SW PUMP 2
J:				
K:	X06216	<0-1>		CIRCUIT BREAKER - MAIN SEA WATER PUMP 1
L:	X06217	<0-1>		CIRCUIT BREAKER - MAIN SEA WATER PUMP 2
M:				
N:				
O:	X06214	<0-1>		CIRCUIT BREAKER - FO BOOSTER PUMP 1
P:	X06215	<0-1>		CIRCUIT BREAKER - FO BOOSTER PUMP 2
Q:				
R:	X06212	<0-1>		CIRCUIT BREAKER - FO SUPPLY PUMP 1
S:	X06213	<0-1>		CIRCUIT BREAKER - FO SUPPLY PUMP 2
T:				

2.222 Page:7010 MD70 POWER CHIEF -
GENERATOR LOGIC (1)**

A:	X06220	<0-2>	L=---	H=2.0	DG 1 AUTO CONTROL
B:	X06222	<0-3>			DG 1 PRIORITY (prior1=3)
C:	X06221	<0-2>			DG 1 READY
D:	X06223	<0-10>			DG 1 CONNECT STATE (indication)
E:	X06254	<0-7>			DG 1 DRIVER STATE (indication)
F:					
G:	X06224	<0-2>	L=---	H=2.0	DG 2 AUTO CONTROL
H:	X06226	<0-3>			DG 2 PRIORITY (prior2=2)
I:	X06225	<0-2>			DG 2 READY
J:	X06227	<0-10>			DG 2 CONNECT STATE (indication)
K:	X06255	<0-7>			DG 2 DRIVER STATE (indication)
L:					
M:					
N:	X06244	<0-1>			PCHIEF CONTROL MODE (1=push buttons)
O:	X06245	<0-3>			PCHIEF CONTROL MODE (1,2,3)=(E,O,C)
P:	X06246	<0-1>			PCHIEF CONTROL MODE (1=freq)
Q:					
R:					
S:					
T:					

2.223 Page:7011 MD70** POWER CHIEF - GENERATOR LOGIC (2)

A:	X06234	<0-2>	L=---	H=2.0	SG 1 AUTO CONTROL
B:	X06236	<0-3>			SG 1 PRIORITY (prior3=1)
C:	X06235	<0-2>			SG 1 READY
D:	X06237	<0-10>			SG 1 CONNECT STATE (indication)
E:					
F:	X06240	<0-2>	L=---	H=2.0	SG 2 AUTO CONTROL
G:	X06242	<0-3>			SG 2 PRIORITY
H:	X06241	<0-2>			SG 2 READY
I:	X06243	<0-10>			SG 2 CONNECT STATE (indication)
J:					
K:					
L:	X10412	<0-1>			PCHIEF CONTROL STATE (0=slow , 1=fast)
M:					
N:	X10436	<0-1>			PCHIEF HIGH POWER (warning)
O:					
P:	C10437	kW			PCHIEF TOTAL POWER AVAILABLE
Q:	C10440	kW			PCHIEF TOTAL POWER USED
R:	C10441	kW			PCHIEF TOTAL POWER RESERVE
S:	C10442	kW			PCHIEF TOTAL POWER RESERVE LIMIT
T:					

2.224 Page:7012 MD70** POWER CHIEF - CONTROL DATA (1)

A:					
B:					
C:	C10410	min			PCHIEF GEN MAX IDLE RUN TIME
D:	C10411	min			PCHIEF GEN LOAD CYCLE PERIOD
E:					
F:	C10413	sec			PCHIEF FAST STATE DURATION
G:	C10414	sec			PCHIEF FAST STATE CONTROL PERIOD
H:	C10415	sec			PCHIEF SLOW STATE CONTROL PERIOD
I:					
J:	C10416	sec			PCHIEF OVER/UNDERLOAD TIME DELAY
K:					
L:	C10422	sec			PCHIEF FREQ DEV RESET TIME
M:					
N:	C10417	kW			PCHIEF POWER DEADBAND (1/2)
O:	C10420	Hz			PCHIEF FREQ. DEADBAND (1/2)
P:	C10421	Hz			PCHIEF LOW FREQ DEV (slow adjust)
Q:					
R:					
S:					
T:					

**2.225 Page:7013 MD70** POWER CHIEF - CONTROL DATA (2)**

A:
 B: C10423 kW PCHIEF HIGH SLAVE LOAD
 C: C10424 kW PCHIEF LOW SLAVE LOAD
 D:
 E: C10425 kW PCHIEF HIGH GROUP LOAD (equal)
 F: C10426 kW PCHIEF LOW GROUP LOAD (equal)
 G:
 H: C10427 kW PCHIEF HIGH GROUP LOAD (optim)
 I: C10430 kW PCHIEF LOW GROUP LOAD (optim)
 J:
 K: C10431 kW PCHIEF HIGH SINGL LOAD (equal)
 L: C10432 kW PCHIEF HIGH SINGL LOAD (optim)
 M:
 N:
 O:
 P: C13501 A DG 1 TRIP LIMIT - SLOW OVERLOAD
 Q: C13601 A DG 2 TRIP LIMIT - SLOW OVERLOAD
 R: C13801 A SG 1 TRIP LIMIT - SLOW OVERLOAD
 S: C13701 A SG 2 TRIP LIMIT - SLOW OVERLOAD
 T:

2.226 Page:7014 MD70 POWER CHIEF - CONTROL DATA (3)**

A:
 B: I10454 A DG 1 NONE ESS LOAD TRIP LIMIT
 C: I10455 A DG 2 NONE ESS LOAD TRIP LIMIT
 D: I10457 A SG 1 NONE ESS LOAD TRIP LIMIT
 E:
 F:
 G:
 H: X06250 <0-2> L=--- H=1.0 PCHIEF NONE ESS LOAD TRIP
 I: X06250_DELAY sec PCHIEF NONE ESS LOAD TRIP ALARM DELAY
 J:
 K: X06861 <0-1> L=--- H=1.0 HIGH LOAD (LOW MARGINE)
 L: X06861_DELAY sec HIGH LOAD (LOW MARGINE) ALARM DELAY
 M:
 N: X06247 <0-1> L=--- H=1.0 PCHIEF S/S REQUEST
 O: X06247_DELAY sec PCHIEF S/S REQUEST ALARM DELAY
 P:
 Q:
 R:
 S:
 T:

2.227 Page:7020 MD70** POWER CHIEF - PUMP CONTROL (1)

A:	X10200	<0-2>	FO BOOSTER PUMPS	AUTO
B:	X10374	<0-2>	FO BOOSTER PUMP 1	S/S
C:	X10375	<0-2>	FO BOOSTER PUMP 2	S/S
D:				
E:	X10203	<0-2>	FO SUPPLY PUMPS	AUTO
F:	X10204	<0-2>	FO SUPPLY PUMP 1	S/S
G:	X10205	<0-2>	FO SUPPLY PUMP 2	S/S
H:				
I:	X10210	<0-2>	ME 1 SW PUMPS	AUTO
J:	X10214	<0-2>	ME 1 SW PUMP 1	S/S
K:	X10215	<0-2>	ME 1 SW PUMP 2	S/S
L:				
M:	X10211	<0-2>	ME 2 SW PUMPS	AUTO
N:	X10216	<0-2>	ME 2 SW PUMP 1	S/S
O:	X10217	<0-2>	ME 2 SW PUMP 2	S/S
P:				
Q:	X10201	<0-2>	MAIN SW PUMPS	AUTO
R:	X10376	<0-2>	MAIN SW PUMP 1	S/S
S:	X10377	<0-2>	MAIN SW PUMP 2	S/S
T:				

2.228 Page:7021 MD70** POWER CHIEF - PUMP CONTROL (2)

A:	X10251	<0-2>	ME 1 LO STBY PUMP	AUTO
B:	X10266	<0-2>	ME 1 LO STBY PUMP	S/S
C:				
D:	X10250	<0-2>	ME 1 JW STBY PUMP	AUTO
E:	X10262	<0-2>	ME 1 JW STBY PUMP	S/S
F:				
G:	X10253	<0-2>	ME 2 LO STBY PUMP	AUTO
H:	X10270	<0-2>	ME 2 LO STBY PUMP	S/S
I:				
J:	X10252	<0-2>	ME 2 JW STBY PUMP	AUTO
K:	X10264	<0-2>	ME 2 JW STBY PUMP	S/S
L:				
M:	X10202	<0-2>	STEERING GEAR PUMPS	AUTO
N:	X10372	<0-2>	STEERING GEAR PUMP 1	S/S
O:	X10373	<0-2>	STEERING GEAR PUMP 2	S/S
P:				
Q:				
R:				
S:				
T:				

**2.229 Page:7022 MD70** POWER CHIEF - PUMP CONTROL (3)**

A:	X10220	<0-2>	START AIR COMPR 1	AUTO
B:	X10367	<0-2>	START AIR COMPR 1	S/S
C:				
D:	X10221	<0-2>	START AIR COMPR 2	AUTO
E:	X10370	<0-2>	START AIR COMPR 2	S/S
F:				
G:	X10222	<0-2>	SERV AIR COMPR	AUTO
H:	X10371	<0-2>	SERV AIR COMPR	S/S
I:				
J:	X10235	<0-2>	PORT PROP GEAR LO STBY PUMP	AUTO
K:	X10277	<0-2>	PORT PROP GEAR LO STBY PUMP	S/S
L:				
M:	X10234	<0-2>	STBD PROP GEAR LO STBY PUMP	AUTO
N:	X10276	<0-2>	PROP GEAR LO STBY PUMP	S/S
O:				
P:	X10232	<0-2>	PORT PROP SERVO LO STBY PUMP	AUTO
Q:	X10274	<0-2>	PORT PROP SERVO LO STBY PUMP	S/S
R:				
S:	X10230	<0-2>	STBD PROP SERVO LO STBY PUMP	AUTO
T:	X10273	<0-2>	PROP SERVO LO STBY PUMP	S/S

2.230 Page:7023 MD70 POWER CHIEF - PUMP LOGIC DATA**

A:				
B:	C10357	min	PUMP AUTO-CYCLE TIME INTERVAL	
C:				
D:	X10368	<0-1>	FO SUPPLY PUMP	AUTO-CYCLE ON
E:	X10364	<0-1>	FO BOOSTER PUMP	AUTO-CYCLE ON
F:	X10365	<0-1>	MAIN SW PUMP	AUTO-CYCLE ON
G:	X10366	<0-1>	STEERING GEAR PUMP	AUTO-CYCLE ON
H:				
I:	X10360	<0-1>	ME 1 SW PUMP	AUTO-CYCLE ON
J:	X10361	<0-1>	ME 2 SW PUMP	AUTO-CYCLE ON
K:	X10358	<0-1>	ME 1 INJ COOL W PUMP	AUTO-CYCLE ON
L:	X10359	<0-1>	ME 2 INJ COOL W PUMP	AUTO-CYCLE ON
M:	X01842	<0-1>	ME 1 ROCKER ARM PUMP	AUTO-CYCLE ON
N:	X02842	<0-1>	ME 1 ROCKER ARM PUMP	AUTO-CYCLE ON
O:				
P:				
Q:	C10353	sec	TIME DELAY FAST BLACK-OUT GROUP	
R:	C10354	sec	TIME DELAY MEDI BLACK-OUT GROUP	
S:	C10355	sec	TIME DELAY SLOW BLACK-OUT GROUP	
T:				

2.231 Page:7024 MD70** POWER CHIEF - PUMP STBY DATA (1)

A:	P10300	bar	FO BOOSTER PUMP	START LIMIT
B:	P10301	bar	FO BOOSTER PUMP	STOP LIMIT
C:				
D:	P10302	bar	MAIN SW PUMP	START LIMIT
E:	P10303	bar	MAIN SW PUMP	STOP LIMIT
F:				
G:	P10304	bar	STEERING GEAR PUMP	START LIMIT
H:	P10305	bar	STEERING GEAR PUMP	STOP LIMIT
I:				
J:	P10310	bar	ME 1 SW PUMP	START LIMIT
K:	P10311	bar	ME 1 SW PUMP	STOP LIMIT
L:	P10312	bar	ME 2 SW PUMP	START LIMIT
M:	P10313	bar	ME 2 SW PUMP	STOP LIMIT
N:				
O:	P10322	bar	START AIR COMPR	START LIMIT
P:	P10323	bar	START AIR COMPR	STOP LIMIT
Q:				
R:	P10324	bar	SERV AIR COMPR	START LIMIT
S:	P10325	bar	SERV AIR COMPR	STOP LIMIT
T:				

2.232 Page:7025 MD70** POWER CHIEF - PUMP STBY DATA (2)

A:	P10306	bar	FO SUPPLY PUMP	START LIMIT
B:	P10307	bar	FO SUPPLY PUMP	STOP LIMIT
C:				
D:				
E:				
F:	P10330	bar	ME1 JW STBY PUMP	START LIMIT
G:	P10331	bar	ME1 JW STBY PUMP	STOP LIMIT
H:	P20330	bar	ME2 JW STBY PUMP	START LIMIT
I:	P20331	bar	ME2 JW STBY PUMP	STOP LIMIT
J:				
K:	P10332	bar	ME1 LO STBY PUMP	START LIMIT
L:	P10333	bar	ME1 LO STBY PUMP	STOP LIMIT
M:	P20332	bar	ME2 LO STBY PUMP	START LIMIT
N:	P20333	bar	ME2 LO STBY PUMP	STOP LIMIT
O:				
P:	P10340	bar	STBD GEAR LO STBY PUMP	START LIMIT
Q:	P10341	bar	STBD GEAR LO STBY PUMP	STOP LIMIT
R:	P20340	bar	PORT GEAR LO STBY PUMP	START LIMIT
S:	P20341	bar	PORT GEAR LO STBY PUMP	STOP LIMIT
T:				

**2.233 Page:7026 MD70** POWER CHIEF - PUMP STBY DATA (3)**

A:	P10342	bar	STBD SERVO LO STBY PUMP START LIMIT
B:	P10343	bar	STBD SERVO LO STBY PUMP STOP LIMIT
C:	P20342	bar	PORT SERVO LO STBY PUMP START LIMIT
D:	P20343	bar	PORT SERVO LO STBY PUMP STOP LIMIT
E:			
F:	L10344	%	STBD SERVO LO GRAV PUMP START LIMIT
G:	L10345	%	STBD SERVO LO GRAV PUMP STOP LIMIT
H:	L20344	%	PORT SERVO LO GRAV PUMP START LIMIT
I:	L20345	%	PORT SERVO LO GRAV PUMP STOP LIMIT
J:			
K:	P10334	bar	ME1 NW PUMPS START LIMIT
L:	P10335	bar	ME1 NW PUMPS STOP LIMIT
M:	P20334	bar	ME2 NW PUMPS START LIMIT
N:	P20335	bar	ME2 NW PUMPS STOP LIMIT
O:			
P:	P10336	bar	ME1 ROCKER ARM LO PUMPS START LIMIT
Q:	P10337	bar	ME1 ROCKER ARM LO PUMPS STOP LIMIT
R:	P20336	bar	ME2 ROCKER ARM LO PUMPS START LIMIT
S:	P20337	bar	ME2 ROCKER ARM LO PUMPS STOP LIMIT
T:			

2.234 Page:7030 MD70 POWER CHIEF - PURIFIER LOGIC**

A:			
B:			
C:			
D:	C10400	min	HFO PURIF AUTO SHOOTING INTERVAL
E:	C10401	min	LO PURIF AUTO SHOOTING INTERVAL
F:	C10402	min	DO PURIF AUTO SHOOTING INTERVAL
G:			
H:			
I:			
J:			
K:			
L:			
M:			
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

2.235 Page:7090 MD70 CONFIGURABLE PAGE**

- A:
- B:
- C:
- D:
- E:
- F:
- G:
- H:
- I:
- J:
- K:
- L:
- M:
- N:
- O:
- P:
- Q:
- R:
- S:
- T:

2.236 Page:7100 MD71 DIESELGENERATOR 1 - MAIN VARIABLES**

A:	X03160	<0-5>	L=---	H=1.0	DG 1 TRIP INDICATION
B:	X03157	<0-1>			DG 1 START / STOP
C:	X03156	<0-1>			DG 1 RUNNING HANDLE POS (1=local)
D:	N03100	rpm	L=---	H=1400.0	DG 1 SPEED
E:	Q03101	%			DG 1 SHAFT TORQUE (indicated)
F:	E03102	kW			DG 1 SHAFT POWER
G:	X03103	%			DG 1 FUEL LINK POS
H:	N03056	krpm			DG 1 TBCH SPEED
I:	G03052	kg/h			DG 1 TBCH AIR FLOW
J:	P03053	bar			DG 1 AIR RECEIVER PRESSURE
K:	T03057	degC	L=---	H=610.0	DG 1 EXHAUST TEMP INLET TBCH
L:	T03060	degC	L=---	H=540.0	DG 1 EXHAUST TEMP OUTLET TBCH
M:	T03050	degC			DG 1 AIR TEMP OUTLET TBCH
N:	T03051	degC	L=---	H=80.0	DG 1 AIR TEMP OUTLET AIRC
O:	T03081	degC	L=---	H=610.0	DG 1 EXHAUST TEMP CYL 1
P:	T03082	degC	L=---	H=610.0	DG 1 EXHAUST TEMP CYL 2
Q:	T03083	degC	L=---	H=610.0	DG 1 EXHAUST TEMP CYL 3
R:	T03084	degC	L=---	H=610.0	DG 1 EXHAUST TEMP CYL 4
S:	T03085	degC	L=---	H=610.0	DG 1 EXHAUST TEMP CYL 5
T:	T03086	degC	L=---	H=610.0	DG 1 EXHAUST TEMP CYL 6

**2.237 Page:7101 MD71** DIESELGENERATOR 1 - FW SYSTEM**

A:	T03020	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET DG
B:	T03091	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET CYL 1
C:	T03092	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET CYL 2
D:	T03093	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET CYL 3
E:	T03094	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET CYL 4
F:	T03095	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET CYL 5
G:	T03096	degC	L=---	H=85.0	DG 1 FW TEMP OUTLET CYL 6
H:	T03017	degC			DG 1 FW TEMP INLET DG
I:	T03016	degC			DG 1 FW TEMP INLET AIRC
J:	T03015	degC			DG 1 FW TEMP INLET LOC
K:	T03014	degC			DG 1 FW TEMP OUTLET FWC
L:	P03010	bar			DG 1 FW PRESS OUTLET PUMP
M:	P03011	bar			DG 1 FW PRESS OUTLET LOC
N:	P03012	bar	L=0.7	H=---	DG 1 FW PRESS INLET DG
O:	P03013	bar			DG 1 FW PRESS OUTLET DG
P:	G03024	ton/h			DG 1 FW FLOW INLET DG
Q:	G03022	ton/h			DG 1 FW FLOW INLET FWC
R:	G03023	ton/h			DG 1 FW FLOW BYPASS FWC
S:	L03026	%	L=30.0	H=90.0	DG 1 FW EX. TANK LEVEL
T:	G03025	ton/h			DG 1 FW MAKE-UP FLOW

2.238 Page:7102 MD71 DIESELGENERATOR 1 - LO SYSTEM**

A:	R03154	<0-1>			DG 1 LO PRIMING PUMP
B:	X03155	<0-2>			DG 1 LO PRIMING PUMP AUTO
C:	X03181	sec			DG 1 LO PRIMING PUMP OFF-TIME
D:	X03182	sec			DG 1 LO PRIMING PUMP ON-TIME
E:	L03045	%	L=30.0	H=90.0	DG 1 LO SUMP LEVEL
F:	T03036	degC			DG 1 LO TEMP IN SUMP
G:	T03037	degC	L=---	H=---	DG 1 LO TEMP INLET DG
H:	P03030	bar			DG 1 LO PRESS INLET LOC
I:	P03031	bar			DG 1 LO PRESS INLET FILTER
J:	P03032	bar	L=1.4	H=---	DG 1 LO PRESS INLET DG
K:	G03042	ton/h			DG 1 LO FLOW INLET LOC
L:					
M:	V03144	<0-1>			DG 1 LO FILTER 1
N:	V03145	<0-1>			DG 1 LO FILTER 2
O:	P03033	bar	L=---	H=1.0	DG 1 LO FILTER DIFF PRESS
P:					
Q:	V03141	<0-1>			DG 1 LO MAKE-UP VALVE
R:	G03043	ton/h			DG 1 LO MAKE-UP FLOW
S:	V03142	<0-1>			DG 1 LO DUMP VALVE
T:	G03044	ton/h			DG 1 LO DUMP FLOW

2.239 Page:7103 MD71** DIESELGENERATOR 1 - FO SYSTEM

A:
B:
C: P03064 bar DG 1 FO PRESS OUTLET PUMP
D: P03065 bar DG 1 FO PRESS INLET DG
E:
F: G03072 kg/h DG 1 FO FLOW INLET DG
G: G03070 kg/h DG 1 FO FLOW FROM SERV TANK
H: G03071 kg/h DG 1 FO FLOW RETURN SERV TANK
I:
J: V03150 <0-1> DG 1 FO SHUT OFF VALVE
K:
L: V03151 <0-1> DG 1 FO FILTER 1
M: V03152 <0-1> DG 1 FO FILTER 2
N: P03066 bar L=--- H=1.0 DG 1 FO FILTER DIFF PRESS
O:
P:
Q:
R:
S:
T:

2.240 Page:7104 MD71** DIESELGENERATOR 1 - SW SYSTEM

A:
B:
C: P03000 bar DG 1 SW PRESS INLET FWC
D: P03001 bar DG 1 SW PRESS OUTLET FWC
E:
F: G03003 ton/h DG 1 SW FLOW
G: T03004 degC DG 1 SW TEMP INLET FWC
H: T03002 degC DG 1 SW TEMP OUTLET FWC
I:
J: V03005 <0-1> DG 1 SW INLET VALVE
K: V03006 <0-1> DG 1 SW OUTLET VALVE
L:
M:
N:
O: P03007 bar DG 1 FWC SW DIFF PRESS
P:
Q:
R:
S:
T:

**2.241 Page:7105 MD71** DIESELGENERATOR 1 -
ENGINE PROTECTION**

A:
B:
C:
D:
E:
F: C13001 rpm DG 1 TRIP LIMIT - OVERSPEED
G: C13002 bar DG 1 TRIP LIMIT - LO PRESS
H: C13003 degC DG 1 TRIP LIMIT - LO TEMP
I: C13004 degC DG 1 TRIP LIMIT - FW TEMP
J: C13005 degC DG 1 TRIP LIMIT - EXHAUST TEMP
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.242 Page:7110 MD71 DIESELGENERATOR 1 -
SPEED CONTROLLER**

A:
B:
C: X03103 % DG 1 FUEL LINK POS
D:
E: N03100 rpm L=--- H=1400.0 DG 1 SPEED
F: E03102 kW DG 1 SHAFT POWER
G: Q03101 % DG 1 SHAFT TORQUE (indicated)
H:
I:
J:
K: C03163 % DG 1 SPEED CONTR MAX OUTPUT LIMIT
L:
M:
N: N03161 rpm DG 1 SPEED CONTR SET POINT
O: C03162 %/% DG 1 SPEED CONTR GAIN
P: C03164 % DG 1 SPEED CONTR DROOP SETTING
Q:
R: C03166 %/sec DG 1 SPEED CONTR SP INCR CONSTANT
S:
T:

2.243 Page:7111 MD71** DIESELGENERATOR 1 - TEMP CONTROLLER

A:
B:
C: T03020 degC L=--- H=85.0 DG 1 FW TEMP OUTLET DG
D: T03017 degC DG 1 FW TEMP INLET DG
E:
F: V03120 % DG 1 FW TEMP CONTR POS
G: G03022 ton/h DG 1 FW FLOW INLET FWC
H: G03023 ton/h DG 1 FW FLOW BYPASS FWC
I:
J: E03102 kW DG 1 SHAFT POWER
K:
L:
M:
N: T03121 degC DG 1 FW TEMP CONTR SET POINT (inlet)
O: C03122 %/degC DG 1 FW TEMP CONTR GAIN
P: C03123 % DG 1 FW TEMP CONTR BIAS
Q:
R:
S:
T:

2.244 Page:7190 MD71** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.245 Page:7200 MD72** DIESELGENERATOR 2 -
MAIN VARIABLES**

A:	X03360	<0-5>	L=---	H=1.0	DG 2 TRIP INDICATION
B:	X03357	<0-1>			DG 2 START / STOP
C:	X03356	<0-1>			DG 2 RUNNING HANDLE POS (1=local)
D:	N03300	rpm	L=---	H=1400.0	DG 2 SPEED
E:	Q03301	%			DG 2 SHAFT TORQUE (indicated)
F:	E03302	kW			DG 2 SHAFT POWER
G:	X03303	%			DG 2 FUEL LINK POS
H:	N03256	krpm			DG 2 TBCH SPEED
I:	G03252	kg/h			DG 2 TBCH AIR FLOW
J:	P03253	bar			DG 2 AIR RECEIVER PRESSURE
K:	T03257	degC	L=---	H=610.0	DG 2 EXHAUST TEMP INLET TBCH
L:	T03260	degC	L=---	H=540.0	DG 2 EXHAUST TEMP OUTLET TBCH
M:	T03250	degC			DG 2 AIR TEMP OUTLET TBCH
N:	T03251	degC	L=---	H=80.0	DG 2 AIR TEMP OUTLET AIRC
O:	T03281	degC	L=---	H=610.0	DG 2 EXHAUST TEMP CYL 1
P:	T03282	degC	L=---	H=610.0	DG 2 EXHAUST TEMP CYL 2
Q:	T03283	degC	L=---	H=610.0	DG 2 EXHAUST TEMP CYL 3
R:	T03284	degC	L=---	H=610.0	DG 2 EXHAUST TEMP CYL 4
S:	T03285	degC	L=---	H=610.0	DG 2 EXHAUST TEMP CYL 5
T:	T03286	degC	L=---	H=610.0	DG 2 EXHAUST TEMP CYL 6

2.246 Page:7201 MD72 DIESELGENERATOR 2 - FW
SYSTEM**

A:	T03220	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET DG
B:	T03291	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET CYL 1
C:	T03292	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET CYL 2
D:	T03293	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET CYL 3
E:	T03294	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET CYL 4
F:	T03295	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET CYL 5
G:	T03296	degC	L=---	H=85.0	DG 2 FW TEMP OUTLET CYL 6
H:	T03217	degC			DG 2 FW TEMP INLET DG
I:	T03216	degC			DG 2 FW TEMP INLET AIRC
J:	T03215	degC			DG 2 FW TEMP INLET LOC
K:	T03214	degC			DG 2 FW TEMP OUTLET FWC
L:	P03210	bar			DG 2 FW PRESS OUTLET PUMP
M:	P03211	bar			DG 2 FW PRESS OUTLET LOC
N:	P03212	bar	L=0.7	H=---	DG 2 FW PRESS INLET DG
O:	P03213	bar			DG 2 FW PRESS OUTLET DG
P:	G03224	ton/h			DG 2 FW FLOW INLET DG
Q:	G03222	ton/h			DG 2 FW FLOW INLET FWC
R:	G03223	ton/h			DG 2 FW FLOW BYPASS FWC
S:	L03226	%	L=30.0	H=90.0	DG 2 FW EX. TANK LEVEL
T:	G03225	ton/h			DG 2 FW MAKE-UP FLOW

2.247 Page:7202 MD72** DIESELGENERATOR 2 - LO SYSTEM

A:	R03354	<0-1>			DG 2 LO PRIMING PUMP
B:	X03355	<0-2>			DG 2 LO PRIMING PUMP AUTO
C:	X03281	sec			DG 2 LO PRIMING PUMP OFF-TIME
D:	X03282	sec			DG 2 LO PRIMING PUMP ON-TIME
E:	L03245	%	L=30.0	H=90.0	DG 2 LO SUMP LEVEL
F:	T03236	degC			DG 2 LO TEMP IN SUMP
G:	T03237	degC	L=---	H=---	DG 2 LO TEMP INLET DG
H:	P03230	bar			DG 2 LO PRESS INLET LOC
I:	P03231	bar			DG 2 LO PRESS INLET FILTER
J:	P03232	bar	L=1.4	H=---	DG 2 LO PRESS INLET DG
K:	G03242	ton/h			DG 2 LO FLOW INLET LOC
L:					
M:	V03344	<0-1>			DG 2 LO FILTER 1
N:	V03345	<0-1>			DG 2 LO FILTER 2
O:	P03233	bar	L=---	H=1.0	DG 2 LO FILTER DIFF PRESS
P:					
Q:	V03341	<0-1>			DG 2 LO MAKE-UP VALVE
R:	G03243	ton/h			DG 2 LO MAKE-UP FLOW
S:	V03342	<0-1>			DG 2 LO DUMP VALVE
T:	G03244	ton/h			DG 2 LO DUMP FLOW

2.248 Page:7203 MD72** DIESELGENERATOR 2 - FO SYSTEM

A:					
B:					
C:	P03264	bar			DG 2 FO PRESS OUTLET PUMP
D:	P03265	bar			DG 2 FO PRESS INLET DG
E:					
F:	G03272	kg/h			DG 2 FO FLOW INLET DG
G:	G03270	kg/h			DG 2 FO FLOW FROM SERV TANK
H:	G03271	kg/h			DG 2 FO FLOW RETURN SERV TANK
I:					
J:	V03350	<0-1>			DG 2 FO SHUT OFF VALVE
K:					
L:	V03351	<0-1>			DG 2 FO FILTER 1
M:	V03352	<0-1>			DG 2 FO FILTER 2
N:	P03266	bar	L=---	H=1.0	DG 2 FO FILTER DIFF PRESS
O:					
P:					
Q:					
R:					
S:					
T:					

**2.249 Page:7204 MD72** DIESELGENERATOR 2 - SW SYSTEM**

A:
 B:
 C: P03200 bar DG 2 SW PRESS INLET FWC
 D: P03201 bar DG 2 SW PRESS OUTLET FWC
 E:
 F: G03203 ton/h DG 2 SW FLOW
 G: T03204 degC DG 2 SW TEMP INLET FWC
 H: T03202 degC DG 2 SW TEMP OUTLET FWC
 I:
 J: V03205 <0-1> DG 2 SW INLET VALVE
 K: V03206 <0-1> DG 2 SW OUTLET VALVE
 L:
 M:
 N:
 O: P03207 bar DG 2 FWC SW DIFF PRESS
 P:
 Q:
 R:
 S:
 T:

2.250 Page:7205 MD72 DIESELGENERATOR 2 - ENGINE PROTECTION**

A:
 B:
 C:
 D:
 E:
 F: C13201 rpm DG 2 TRIP LIMIT - OVERSPEED
 G: C13202 bar DG 2 TRIP LIMIT - LO PRESS
 H: C13203 degC DG 2 TRIP LIMIT - LO TEMP
 I: C13204 degC DG 2 TRIP LIMIT - FW TEMP
 J: C13205 degC DG 2 TRIP LIMIT - EXHAUST TEMP
 K:
 L:
 M:
 N:
 O:
 P:
 Q:
 R:
 S:
 T:

2.251 Page:7210 MD72** DIESELGENERATOR 2 - SPEED CONTROLLER

A:
 B:
 C: X03303 % DG 2 FUEL LINK POS
 D:
 E: N03300 rpm L=--- H=1400.0 DG 2 SPEED
 F: E03302 kW DG 2 SHAFT POWER
 G: Q03301 % DG 2 SHAFT TORQUE (indicated)
 H:
 I:
 J:
 K: C03363 % DG 2 SPEED CONTR MAX OUTPUT LIMIT
 L:
 M:
 N: N03361 rpm DG 2 SPEED CONTR SET POINT
 O: C03362 %/% DG 2 SPEED CONTR GAIN
 P: C03364 % DG 2 SPEED CONTR DROOP SETTING
 Q:
 R: C03366 %/sec DG 2 SPEED CONTR SP INCR CONSTANT
 S:
 T:

2.252 Page:7211 MD72** DIESELGENERATOR 2 - TEMP CONTROLLER

A:
 B:
 C: T03220 degC L=--- H=85.0 DG 2 FW TEMP OUTLET DG
 D: T03217 degC DG 2 FW TEMP INLET DG
 E:
 F: V03320 % DG 2 FW TEMP CONTR POS
 G: G03222 ton/h DG 2 FW FLOW INLET FWC
 H: G03223 ton/h DG 2 FW FLOW BYPASS FWC
 I:
 J: E03302 kW DG 2 SHAFT POWER
 K:
 L:
 M:
 N: T03321 degC DG 2 FW TEMP CONTR SET POINT (inlet)
 O: C03322 %/degC DG 2 FW TEMP CONTR GAIN
 P: C03323 % DG 2 FW TEMP CONTR BIAS
 Q:
 R:
 S:
 T:

**2.253 Page:7290 MD72** CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.254 Page:8300 MD83 STEAM SYSTEM - MAIN VARIABLES (1)**

A:	P05122	bar			MAIN LINE STEAM PRESSURE
B:	V05121	%			MAIN LINE STEAM SHUT OFF VALVE
C:					
D:	P05011	bar	L=6.0	H=8.0	BOILER STEAM PRESURE
E:	L05010	mm	L=-150.0	H=150.0	BOILER WATER LEVEL
F:	T05000	degC			BOILER WATER TEMPERATURE
G:					
H:					
I:	G05074	ton/h			PROCESS STEAM FLOW
J:	V05075	<0-1>			PROCESS STEAM SUPPLY VALVE
K:					
L:	G05070	ton/h			DECK STEAM FLOW
M:	V05071	<0-1>			DECK STEAM SUPPLY VALVE
N:	X07001	<0-3>			DECK STEAM (0-3) (superheated)
O:					
P:	G05072	ton/h			ACCOMODATION STEAM FLOW
Q:	V05073	<0-1>			ACCOMODATION STEAM SUPPLY VALVE
R:	X07000	<0-3>			ACCOMMODATION STEAM (0-3) (saturated)
S:					
T:					

2.255 Page:8301 MD83** STEAM PLANT - MAIN VARIABLES (2)

A:				
B:	R05111	<0-1>		BOILER FEEDW PUMP 1
C:	R05112	<0-1>		BOILER FEEDW PUMP 2
D:				
E:	G05120	ton/h		BOILER STEAM FLOW
F:	G05113	ton/h		BOILER FEEDW FLOW
G:				
H:	P05110	bar		BOILER FEEDW PUMP DISCHARGE PRESS
I:				
J:				
K:	V05126	<0-1>		BOILER SAFETY VALVE 1
L:	V05127	<0-1>		BOILER SAFETY VALVE 2
M:				
N:	V05124	<0-1>		BOILER VENT VALVE
O:	G05123	ton/h		BOILER VENT VALVE FLOW
P:				
Q:	V05130	<0-1>		BOILER DRAIN VALVE
R:	G05127	ton/h		BOILER DRAIN VALVE FLOW
S:				
T:				

2.256 Page:8302 MD83** STEAM PLANT - FEEDW SUPPLY

A:					
B:					
C:	L05143	m	L=0.5	H=1.9	FEED WATER TANK LEVEL
D:	T05142	degC			FEED WATER TANK TEMPERATURE
E:					
F:	V05141	<0-1>			FEED WATER TANK MAKE-UP VALVE
G:	G05140	ton/h			FEED WATER TANK MAKE-UP FLOW
H:					
I:					
J:					
K:	G05144	ton/h			RETURN FLOW FROM MISC. CONSUMERS
L:	T05145	degC			RETURN TEMP FROM MISC. CONSUMERS
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

**2.257 Page:8303 MD83** STEAM PLANT - BOILER / EX. SECTION**

A:				
B:				
C:	G05017	ton/h		BOILER EXHAUST INLET FLOW
D:	T05015	degC		BOILER EXHAUST INLET TEMPERATURE
E:				
F:	G05020	ton/h		BOILER EXHAUST OUTLET FLOW
G:	T05016	degC	L=---	H=300.0
H:				BOILER EXHAUST OUTLET TEMPERATURE
I:	G05021	ton/h		BOILER EXHAUST BYPASS FLOW
J:				
K:				
L:	P05024	mmWC	L=---	H=200.0
M:				BOILER EXHAUST PRESSURE DROP
N:				
O:				
P:				
Q:				
R:				
S:				
T:				

2.258 Page:8304 MD84 STEAM PLANT - BOILER / OIL SECTION**

A:	X05044	<0-1>			BURNER CONTROL : AUTO
B:	X05045	<0-3>			BURNER CONTROL : STATE INDICATION
C:	X05046	<0-1>			BURNER CONTROL : START/STOP COMMAND
D:					
E:	R05035	<0-1>			BURNER FO PUMP RUN (indication)
F:	R05036	<0-1>			BURNER AIR FAN RUN (indication)
G:					
H:	X05050	<0-4>	L=---	H=1.0	BURNER TRIP INDICATION
I:					
J:	V05037	<0-1>			BURNER FUEL OIL SUPPLY VALVE
K:					
L:	G05041	kg/h			BURNER COMB AIR FLOW
M:	G05040	kg/h			BURNER FUEL OIL FLOW
N:					
O:	G05003	kg/h			BOILER FLUE GAS FLOW
P:	T05002	degC			BOILER FLUE GAS TEMPERATURE
Q:					
R:					
S:					
T:					



2.259 Page:8305 MD84** STEAM PLANT - BURNER CONTROL

A:		
B:	C05060 bar	BURNER START PRESS LIMIT
C:	C05061 bar	BURNER STOP PRESS LIMIT
D:		
E:		
F:	K05060 bar	BURNER HIGH MODE pressure
G:	K05061 bar	BURNER LOW MODE pressure
H:		
I:	K05062 %	BURNER HIGH MODE capacity
J:	K05063 %	BURNER LOW MODE capacity
K:		
L:	K05055 sec	BOILER PURGE time limit
M:		
N:	C05126 bar	BOILER SAFETY VALVE 1 open press
O:	K05126 bar	BOILER SAFETY VALVE 1 close press
P:	C05127 bar	BOILER SAFETY VALVE 2 open press
Q:	K05127 bar	BOILER SAFETY VALVE 2 close press
R:		
S:		
T:		

2.260 Page:8307 MD83** STEAM PLANT - ISOLATION

A:		
B:	X07034 <0-1>	STEAM ISOLATION
C:		
D:		
E:	P05132 bar	PROCESS STEAM PRESSURE (IF ISOLATION)
F:		
G:	V05133 %	BOILER STEAM LOAD VALVE (IF ISOLATION)
H:	G05131 ton/h	BOILER STEAM LOAD FLOW (IF ISOLATION)
I:		
J:		
K:		
L:	X07035 <0-1>	EX BOIL ISOLATION
M:		
N:		
O:	C05134 ton/h	EXHAUST FLOW INLET EX. BOILER AT ISOLA
P:	C05135 degC	EXHAUST TEMP INLET EX. BOILER AT ISOLA
Q:		
R:		
S:		
T:		

**2.261 Page:8310 MD83** STEAM PLANT - LEVEL CONTROL**

A:	X05153	<0-1>	BOILER LEVEL CONTR	AUTO SWITCH
B:	Z05154	%	BOILER LEVEL CONTR	MANUAL OUTPUT
C:				
D:	L05150	mm	BOILER LEVEL CONTR	SET POINT
E:	L05151	mm	BOILER LEVEL CONTR	INPUT SIGNAL
F:	Z05152	%	BOILER LEVEL CONTR	OUTPUT SIGNAL
G:				
H:	V05116	%	BOILER FEEDW VALVE POS	
I:	G05113	ton/h	BOILER FEEDW FLOW	
J:	G05120	ton/h	BOILER STEAM FLOW	
K:				
L:				
M:	X05155	<0-1>	BOILER LEVEL CONTR	HW PID SELECT
N:				
O:	C05160	%/mm	BOILER LEVEL CONTR	GAIN
P:	C05161	sec	BOILER LEVEL CONTR	INTEGRATION TIME
Q:	C05162	sec	BOILER LEVEL CONTR	DERIVATION TIME
R:	C05163	<0-10>	BOILER LEVEL CONTR	DERIVATION RANGE
S:				
T:				

2.262 Page:8311 MD83 STEAM PLANT - PRESSURE CONTROL**

A:	X05173	<0-1>	BOILER PRESS CONTR	AUTO SWITCH
B:	Z05174	%	BOILER PRESS CONTR	MANUAL OUTPUT
C:				
D:	P05170	bar	BOILER PRESS CONTR	SET POINT
E:	P05171	bar	BOILER PRESS CONTR	INPUT SIGNAL
F:	Z05172	%	BOILER PRESS CONTR	OUTPUT SIGNAL
G:				
H:				
I:	G05017	ton/h	BOILER EXHAUST INLET FLOW	
J:	G05020	ton/h	BOILER EXHAUST OUTLET FLOW	
K:				
L:				
M:	X05175	<0-1>	BOILER PRESS CONTR	HW PID SELECT
N:				
O:	C05200	%/bar	BOILER PRESS CONTR	GAIN
P:	C05201	sec	BOILER PRESS CONTR	INTEGRATION TIME
Q:	C05202	sec	BOILER PRESS CONTR	DERIVATION TIME
R:	C05203	<0-10>	BOILER PRESS CONTR	DERIVATION RANGE
S:				
T:				

2.263 Page:8390 MD83** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.264 Page:9000 MD90** SIM CONTROL : PROCESS DYNAMICS

A:	X07010	<0-2>	PRESET CONDITION (fix and tricks)
B:			
C:			
D:	X07020	<0-1>	EMERG RUN 1 (ME/DG1/DG2)
E:	X07021	<0-1>	EMERG RUN 2 (refrig)
F:	X07022	<0-1>	EMERG RUN 3 (el/misc)
G:			
H:	X07023	<0-1>	FIXED PROCESS 1 (air)
I:	X07024	<0-1>	FIXED PROCESS 2 (steam)
J:	X07025	<0-1>	FIXED PROCESS 3 (level/temp)
K:			
L:	X07027	<0-1>	GENERAL AUTOCHIEF RESET (slow/shut)
M:			
N:	X07004	<0-2>	LEVEL RESPONSE (steady,slow,fast)
O:	X07006	<0-2>	PROCESS DYNAMICS (norm,fast,v fast)
P:	X07003	<0-3>	SHIP DYNAMICS (norm,fast,v fast)
Q:	X07013	<0-1>	FIXED SHIP SPEED (constant speed)
R:	X07005	<0-1>	STOP SHIP (mooring condition)
S:			
T:	Z07073	-	BALLAST/BUNKER TANK SPEED-UP FACTOR

**2.265 Page:9001 MD90** SIM CONTROL :
ISOLATIONS**

A:		
B:	X07032 <0-1>	ELECTRIC ISOLATION
C:		
D:	X07031 <0-1>	DO ISOLATION
E:	X07030 <0-1>	HFO ISOLATION
F:		
G:		
H:	X07041 <0-1>	SHIP SPEED ISOLATION
I:		
J:		
K:	X07034 <0-1>	STEAM ISOLATION
L:		
M:	X06602 <0-1>	REFRIG SYST EL SUPPLY ISOLA
N:		
O:	X06744 <0-1>	FRESH W GEN ISOLATION
P:		
Q:		
R:		
S:		
T:	X07033 <0-1>	STEAM SYSTEM ALARMS OK

2.266 Page:9002 MD90 SIM CONTROL : EXTERNAL
CONDITIONS**

A:	X07015 <0-3>	SHIP LOAD (0,1,2,3)=(M,P,F,E)
B:	X06317 %	SHIP LOAD (pot meter input)
C:	X06334 %	SHIP LOAD (active)
D:		
E:	Z00770 Beauf	WEATHER CONDITION (waves)
F:	N00766 m/sec	WIND FORCE (speed)
G:	X00767 deg	WIND DIRECTION (0-360 dgr)
H:		
I:	T00757 degC	AMBIENT SW TEMPERATURE
J:	T00760 degC	AMBIENT AIR TEMPERATURE
K:		
L:	X07014 <0-3>	ICE CONDITION (hull load)
M:	X06315 m	SEA WATER DEPTH
N:		
O:		
P:		
Q:		
R:		
S:		
T:		

2.267 Page:9003 MD90** SIM CONTROL : AIR / STEAM / EL LOADS

A:	X07002	<0-3>	DECK SERVICE AIR (0-3)
B:	X07012	<0-3>	DECK CRANES (busbar 2 load)
C:	X07019	<0-3>	DECK MACHINERY 2 (busbar 3 load)
D:			
E:	X07044	<0-3>	HEAVY EL POWER 1 (busbar 1 load)
F:	X07045	<0-3>	HEAVY EL POWER 2 (busbar 1 load)
G:	X07046	<0-3>	HEAVY EL POWER 3 (busbar 2 load)
H:	X07047	<0-3>	HEAVY EL POWER 4 (busbar 3 load)
I:			
J:	X07001	<0-3>	DECK STEAM (0-3) (superheated)
K:	X07000	<0-3>	ACCOMMODATION STEAM (0-3) (saturated)
L:	X07033	<0-1>	STEAM SYSTEM ALARMS OK
M:			
N:	G06418	ton/h	EROOM BILGE WELL FW BASE FLOW
O:			
P:			
Q:			
R:			
S:			
T:			

2.268 Page:9004 MD90** SIM CONTROL : LOG SETTING

A:	X07065	<0-1>	ALARM HORN INHIBIT
B:	X07066	<0-1>	ACHIEF HORN INHIBIT
C:	X07067	<0-1>	ALARM BELL INHIBIT (keyboard)
D:			
E:			
F:			
G:			
H:			
I:			
J:			
K:			
L:			
M:			
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

**2.269 Page:9005 MD90** SIM CONTROL :
MISCELLANEOUS**

A:			
B:	Z00800	<0-1>	SHIP PICTURE REMOVAL
C:			
D:	X07102	<0-1>	SOUND ON/OFF
E:			
F:	Z00572	<0-1>	FIRE EXTINGUISHER (delayed CO2 gas release)
G:	Z00579	<0-1>	CO2 ALARM HORN RESET (sound off)
H:			
I:			
J:			
K:	K06900	<0-1>	Synchro panel logic version (SW-mode)
L:	K06901	<0-1>	Synchro panel logic version (HW-mode)
M:			
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

2.270 Page:9006 MD90 SIM CONTROL : TRIP STATE
SURVEY (1)**

A:	X01012	<0-5>	L=---	H=1.0	ME 1 DAMAGE (serious)
B:	X02012	<0-5>	L=---	H=1.0	ME 2 DAMAGE (serious)
C:					
D:	X01277	<0-1>	L=---	H=1.0	ME 1 CLUTCH FAILURE
E:	X02277	<0-1>	L=---	H=1.0	ME 2 CLUTCH FAILURE
F:					
G:	X04503	<0-2>	L=---	H=1.0	START AIR COMPR 1 TRIP INDICATION
H:	X04504	<0-2>	L=---	H=1.0	START AIR COMPR 2 TRIP INDICATION
I:	X04505	<0-2>	L=---	H=1.0	SERV AIR COMPR TRIP INDICATION
J:					
K:	X05050	<0-4>	L=---	H=1.0	BURNER TRIP INDICATION
L:					
M:	X06014	<0-6>	L=---	H=1.0	DG 1 CIRCUIT BREAKER TRIP
N:	X06034	<0-6>	L=---	H=1.0	DG 2 CIRCUIT BREAKER TRIP
O:	X06074	<0-6>	L=---	H=1.0	SG 1 CIRCUIT BREAKER TRIP
P:	X06114	<0-6>	L=---	H=1.0	SG 2 CIRCUIT BREAKER TRIP
Q:	X06166	<0-2>	L=---	H=1.0	SHORE CONNECTION TRIP
R:					
S:	X03160	<0-5>	L=---	H=1.0	DG 1 TRIP INDICATION
T:	X03360	<0-5>	L=---	H=1.0	DG 2 TRIP INDICATION

2.271 Page:9007 MD90** SIM CONTROL : TRIP STATE SURVEY (2)

A: X04056 <0-1> L=--- H=1.0 HFO SEP 1 LOST SEAL (low pressure)
B: X04156 <0-1> L=--- H=1.0 DO PURIF LOST SEAL (low pressure)
C: X04256 <0-1> L=--- H=1.0 LO PURIF LOST SEAL (low pressure)
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

2.272 Page:9010 MD90** SIM CONTROL : ME BRIDGE CONTROL (1)

A: X07540 <0-2> RESPONSIBILITY TRANSFER : BRIDGE (ME 1)
B: X07541 <0-2> RESPONSIBILITY TRANSFER : ECR (ME 1)
C: X07544 <0-2> RESPONSIBILITY TRANSFER : BRIDGE (ME 2)
D: X07545 <0-2> RESPONSIBILITY TRANSFER : ECR (ME 2)
E: X07509 <0-1> L=--- H=1.0 BRIDGE CONTROL LOSS OF RESPONSE (ME 1)
F: X07508 <0-1> L=--- H=1.0 BRIDGE CONTROL LOSS OF RESPONSE (ME 2)
G: X07028 <0-1> BRIDGE TELEGRAPH ENABLE
H:
I: X07550 <0-2> EMERGENCY TELEGRAPH : ME 1 FULL AHEAD
J: X07551 <0-2> EMERGENCY TELEGRAPH : ME 1 HALF AHEAD
K: X07552 <0-2> EMERGENCY TELEGRAPH : ME 1 SLOW AHEAD
L: X07553 <0-2> EMERGENCY TELEGRAPH : ME 1 DEADS AHEAD
M: X07554 <0-2> EMERGENCY TELEGRAPH : ME 1 STOP
N: X07555 <0-2> EMERGENCY TELEGRAPH : ME 1 DEADS ASTERN
O: X07556 <0-2> EMERGENCY TELEGRAPH : ME 1 SLOW ASTERN
P: X07557 <0-2> EMERGENCY TELEGRAPH : ME 1 HALF ASTERN
Q: X07560 <0-2> EMERGENCY TELEGRAPH : ME 1 FULL ASTERN
R:
S: X07573 <0-1> ME 1 OPERATION : EMERG STOP
T: X07574 <0-1> ME 1 OPERATION : EMERG RUN

**2.273 Page:9011 MD90** SIM CONTROL : ME BRIDGE CONTROL (2)**

A:	X07527	<0-2>	EMERGENCY TELEGRAPH : ME 2 FULL AHEAD
B:	X07530	<0-2>	EMERGENCY TELEGRAPH : ME 2 HALF AHEAD
C:	X07531	<0-2>	EMERGENCY TELEGRAPH : ME 2 SLOW AHEAD
D:	X07532	<0-2>	EMERGENCY TELEGRAPH : ME 2 DEADS AHEAD
E:	X07533	<0-2>	EMERGENCY TELEGRAPH : ME 2 STOP
F:	X07534	<0-2>	EMERGENCY TELEGRAPH : ME 2 DEADS ASTERN
G:	X07535	<0-2>	EMERGENCY TELEGRAPH : ME 2 SLOW ASTERN
H:	X07536	<0-2>	EMERGENCY TELEGRAPH : ME 2 HALF ASTERN
I:	X07537	<0-2>	EMERGENCY TELEGRAPH : ME 2 FULL ASTERN
J:			
K:	X07577	<0-1>	ME 2 OPERATION : EMERG STOP
L:	X07576	<0-1>	ME 2 OPERATION : EMERG RUN
M:			
N:			
O:			
P:			
Q:			
R:			
S:			
T:			

2.274 Page:9012 MD90 SIM CONTROL : ME BRIDGE CONTROL (3)**

A:	X07575	%	ME 1 OPERATION : CONTROL LEVER POS
B:	N01764	rpm	SPEED COMMAND (lever)
C:			
D:	X07612	%	ME 2 OPERATION : CONTROL LEVER POS
E:	N02764	rpm	PORT SPEED COMMAND (lever)
F:			
G:			
H:			
I:			
J:			
K:			
L:	X07600	<0-1>	ME 1 OPERATION (bridge): START
M:	X07602	<0-1>	ME 1 OPERATION (bridge): STOP
N:	X07603	<0-1>	ME 1 OPERATION (bridge): CONNECT
O:	X07604	<0-1>	ME 1 OPERATION (bridge): DISCONNECT
P:			
Q:	X07605	<0-1>	ME 2 OPERATION (bridge): START
R:	X07607	<0-1>	ME 2 OPERATION (bridge): STOP
S:	X07610	<0-1>	ME 2 OPERATION (bridge): CONNECT
T:	X07611	<0-1>	ME 2 OPERATION (bridge): DISCONNECT

2.275 Page:9020 MD90** SIM CONTROL : DIRECT LEVEL ADJUST

A:	L01063	m	ME 1 JW EXP TANK LEVEL (steady)
B:	L01102	%	ME 1 LO CIRCULATION TANK (steady)
C:	L01569	m	ME 1 Inj CW TANK LEVEL (steady)
D:	L01808	%	ME 1 ROCKER ARM LO SETTLE TANK L (steady)
E:	L01809	%	ME 1 ROCKER ARM LO SUCTION TANK L (steady)
F:			
G:	L02063	m	ME 2 JW EXP TANK LEVEL (steady)
H:	L02102	%	ME 2 LO SERVICE TANK (steady)
I:	L02569	m	ME 2 Inj CW TANK LEVEL (steady)
J:	L02808	%	ME 2 ROCKER ARM LO SETTLE TANK L (steady)
K:	L02809	%	ME 2 ROCKER ARM LO SUCTION TANK L (steady)
L:			
M:			
N:	L03046	%	DG 1 LO SUMP LEVEL (steady)
O:	L03246	%	DG 2 LO SUMP LEVEL (steady)
P:			
Q:	L00301	m	HFO SERVICE TANK LEVEL (steady)
R:	L00341	m	DO SERVICE TANK LEVEL (steady)
S:			
T:	L06406	m	ER Port bilge well level (steady)

2.276 Page:9090 MD90** CONFIGURABLE PAGE

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T:

**2.277 Page:9300 MD93** SCENARIO - FREE TAGS**

A:	X93001	---	FREE TAG
B:	X93002	---	FREE TAG
C:	X93003	---	FREE TAG
D:	X93004	---	FREE TAG
E:	X93005	---	FREE TAG
F:	X93006	---	FREE TAG
G:	X93007	---	FREE TAG
H:	X93008	---	FREE TAG
I:	X93009	---	FREE TAG
J:	X93010	---	FREE TAG
K:	X93011	---	FREE TAG
L:	X93012	---	FREE TAG
M:	X93013	---	FREE TAG
N:	X93014	---	FREE TAG
O:	X93015	---	FREE TAG
P:	X93016	---	FREE TAG
Q:	X93017	---	FREE TAG
R:	X93018	---	FREE TAG
S:	X93019	---	FREE TAG
T:	X93020	---	FREE TAG

2.278 Page:9390 MD93 CONFIGURABLE PAGE**

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:
T: