**船舶报警监视系统实验装置**

设计一套船舶报警监视系统实验装置，船舶报警监视系统实验装置通过计算机设置故障点，为船舶报警监视系统提供信号源，船舶报警监视系统实验装置中的故障信息由计算机设置完成，通过MODBUS通信方式传送给机舱监测报警系统，部分故障信息可通过模拟试验台的开关量和模拟量发生器提供。船舶报警监视系统实验装置设置主机、主机遥控、辅助系统、船舶电站等设备故障，船舶机舱报警监视系统监视机舱运行情况。故障点由监控计算机设置产生，通过总线将连接到两台监控计算机工作站，实现整个船舶机舱检测报警系统的模拟，同时，构建1个模拟传感器实验台，设置开关量和模拟量故障信息。

1. **系统组成**
2. 模拟计算机一台；
3. 模拟实验软件一套；
4. 数字量和模拟量输入、输出板卡一套；
5. 模拟传感器实验台2个（已有）。
6. RS485电平通讯板卡一套
7. **主要功能**

构建一套船舶报警监视系统实验装置，给监测报警系统提供故障信号，机舱参数以大型两冲程船用柴油机为基础，在船舶机舱故障模拟系统的计算机显示界面中，设置主机及其各个辅助系统(如燃油系统、压缩空气系统、滑油系统、冷却水系统、增压器扫气系统、排气系统等)、副机(含发电机)的运行参数。通过MODBUS总线将故障信息发送到两台监控计算机工作站，实现船舶机舱检测报警系统的模拟监视。同时，可通过模拟传感器组手动设置开关量和模拟量故障点。

1. **技术参数**

1）船舶机舱故障模拟系统和机舱监测报警系统之间采用MODBUS通讯协议，两台计算机之间通讯的物理层采用RS485方式。通信通讯速度：19200，通信时每个字节定义：1个起始位，8个数据位，无奇偶校验位，1个停止位。

2）通讯采用MODBUS RTU报文格式，机舱监测报警系统采用MODBUS的03功能，向船舶机舱故障模拟系统发送请求命令。机舱监测报警系统读取机舱故障模拟系统统检测通道的参数时，机舱监测报警系统向故障模拟系统发送请求命令，故障模拟系统收到机舱监测报警系统的请求命令后，对监测报警系统的请求命令进行响应。

3）船舶机舱故障模拟系统可以设置的故障点不少于800个，数字量和模拟量故障刷新速度0.5秒/次，模拟量输出的分辨率为8位，输出精度小于1%，输出4～20mA或0～5V信号，数字量信号为继电器式的干接点方式输出。

4）船舶机舱故障模拟的分组不少于16组，故障模拟分组如下：主机停机、主机减速、主机重要故障、1～4号发电机组、应急发电机、辅锅炉、分油机、燃油单元、冷却水单元、艏侧推、机舱重要设备、舵机、甲板机械等。

要求至少提供下表中所有的信号源，涵盖前期报警系统的内容,并通过硬件电路信号点和计算机程序控制的输入输出接口点向前期的报警系统提供所需的按轮机自动化系统内容合理变化的输出。硬件开关电路需要有隔离措施，模拟量信号需要采取一定的滤波措施；通信信号需要满足前期报警系统的通信协议，并实现实时通信。具体硬件电路，包括开关量和模拟量，需要实地考察控制台及其开孔状态，另外列出相关信号源的列表，供业主选择使用。

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| **1. 主机故障停车（SHUT DOWN）** | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
| 1 | | SHD 01 | 主机超速(OVER SPEED) | SE | 0～150 | RPM | 106%MCR | H-SHD | 0 | —— | 模拟台1/DP01 | PCU01-DI1-I0.0/I0.1 | 脉冲输入、或控制台5K欧姆模拟电位器输入 |
| 2 | | SHD 02 | 主滑油进口压力低(MAIN LUB. OIL INLET PRESS. LOW) | PS | 0～1 | Mpa | 0.14 | L-SHD | 6～8 | 主机完车抑制 | 模拟台1/B002 | PCU01-DI1-I1.0 |  |
| 3 | | SHD 03-1 | 1号增压器滑油进口压力低(NO.1 T/C LUB. OIL INLET PRESS. LOW) | PS | 0～1 | Mpa | 0.09 | L-SHD | 6～8 | 主机完车抑制 | 模拟台1/B003 | PCU01-DI1-I1.1 |  |
| 4 | | SHD 03-2 | 2号增压器滑油进口压力低(NO.2 T/C LUB. OIL INLET PRESS. LOW) | PS | 0～1 | Mpa | 0.09 | L-SHD | 6～8 | 主机完车抑制 | 模拟台1/B004 | PCU01-DI1-I1.2 |  |
| 5 | | SHD 04 | 缸套冷却水出口温度高(JACKET C. F. W OUTLET TEMP. HIGH) | TS | 0～150 | ℃ | 96 | H-SHD | 5 | —— | 模拟台1/B005 | PCU01-DI1-I1.3 |  |
| 6 | | SHD 05 | 推力块温度高(THRUST PAD TEMP. HIGH) | TS | 0～150 | ℃ | 90 | H-SHD | 6～8 | —— | 模拟台1/B006 | PCU01-DI1-I1.4 |  |
| 7 | | SHD 06-1 | 驾控台主机紧急停车(EMERGENCY STOP BRIDGE) | DI | ON/OFF | —— | OFF | EMG-STOP | 0 | —— | 模拟台1/B007 | PCU01-DI1-I1.5 |  |
| 8 | | SHD 06-2 | 集控台主机紧急停车(EMERGENCY STOP ECR) | DI | ON/OFF | —— | OFF | EMG-STOP | 0 | —— | 模拟台1/B008 | PCU01-DI1-I1.6 |  |
| 9 | | SHD 06-3 | 就地主机紧急停车(EMERGENCY STOP LOCAL) | DI | ON/OFF | —— | OFF | EMG-STOP | 0 | —— | 模拟台1/B009 | PCU01-DI1-I1.7 |  |
| **2. 主机故障降速（SLOW DOWN）** | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
| 1 | SLD 11-1 | | 1号气缸缸套冷却水出口温度高(NO.1 CYL. C. F. W OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 90 | H-SLD | 6～8 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI1-AI0 |  |
| 2 | SLD 11-2 | | 2号气缸缸套冷却水出口温度高(NO.2 CYL. C. F. W OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 90 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 3 | SLD 11-3 | | 3号气缸缸套冷却水出口温度高(NO.3 CYL. C. F. W OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 90 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 4 | SLD 11-4 | | 4号气缸缸套冷却水出口温度高(NO.4 CYL. C. F. W OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 90 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 5 | SLD 11-5 | | 5号气缸缸套冷却水出口温度高(NO.5 CYL. C. F. W OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 90 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 6 | SLD 11-6 | | 6号气缸缸套冷却水出口温度高(NO.6 CYL. C. F. W OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 90 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 7 | SLD 12-1 | | 1号气缸活塞冷却油出口温度高(NO.1 CYL. P.C.O.OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 70 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 8 | SLD 12-2 | | 2号气缸活塞冷却油出口温度高(NO.1 CYL. P.C.O.OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 70 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 9 | SLD 12-3 | | 3号气缸活塞冷却油出口温度高(NO.1 CYL. P.C.O.OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 70 | H-SLD | 6～8 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI1-AI1 |  |
| 10 | SLD 12-4 | | 4号气缸活塞冷却油出口温度高(NO.1 CYL. P.C.O.OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 70 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 11 | SLD 12-5 | | 5号气缸活塞冷却油出口温度高(NO.1 CYL. P.C.O.OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 70 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 12 | SLD 12-6 | | 6号气缸活塞冷却油出口温度高(NO.1 CYL. P.C.O.OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 70 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 13 | SLD 13-1 | | 1号气缸排气出口温度高(NO.1 CYL. EXH. GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 480 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 14 | SLD 13-2 | | 2号气缸排气出口温度高(NO.2 CYL. EXH. GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 480 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 15 | SLD 13-3 | | 3号气缸排气出口温度高(NO.3 CYL. EXH. GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 480 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 16 | SLD 13-4 | | 4号气缸排气出口温度高(NO.4 CYL. EXH. GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 480 | H-SLD | 6～8 | —— | 模拟台1/0-10mV+4~20mA | PCU01-AI1-AI2 |  |
| 17 | SLD 13-5 | | 5号气缸排气出口温度高(NO.5 CYL. EXH. GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 480 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 18 | SLD 13-6 | | 6号气缸排气出口温度高(NO.6 CYL. EXH. GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 480 | H-SLD | 6～8 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 19 | SLD 14-1 | | 1号气缸扫气温度高(CYL.1 SCAV. AIR FIRE DETECTOR) | TS | 0～150 | ℃ | 120 | H-SLD | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 20 | SLD 14-2 | | 2号气缸扫气温度高(CYL.2 SCAV. AIR FIRE DETECTOR) | TS | 0～150 | ℃ | 120 | H-SLD | 0 | —— | 模拟台1/B010 | PCU01-DI1-I2.0 |  |
| 21 | SLD 14-3 | | 3号气缸扫气温度高(CYL.3 SCAV. AIR FIRE DETECTOR) | TS | 0～150 | ℃ | 120 | H-SLD | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 22 | SLD 14-4 | | 4号气缸扫气温度高(CYL.4 SCAV. AIR FIRE DETECTOR) | TS | 0～150 | ℃ | 120 | H-SLD | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 23 | SLD 14-5 | | 5号气缸扫气温度高(CYL.5 SCAV. AIR FIRE DETECTOR) | TS | 0～150 | ℃ | 120 | H-SLD | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 24 | SLD 14-6 | | 6号气缸扫气温度高(CYL.6 SCAV. AIR FIRE DETECTOR) | TS | 0～150 | ℃ | 120 | H-SLD | 0 | —— | 模拟台1/B011 | PCU01-DI1-I2.1 |  |
| 25 | SLD 15-1 | | 1号增压器滑油出口温度高(NO.1 TURBOCHARGER LUB. OIL OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 100 | H-SLD | 0 | —— | 模拟台1/0-10mV+4~20mA | PCU01-AI1-AI3 |  |
| 26 | SLD 15-2 | | 2号增压器滑油出口温度高(NO.2 TURBOCHARGER LUB. OIL OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 100 | H-SLD | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 27 | SLD 16-1 | | 1号气缸活塞冷却油断流(CYL.1 PISTON COOLING OIL NON FLOW ) | FS | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | ME RCS MAIN | PCU01-RS485-3 |  |
| 28 | SLD 16-2 | | 2号气缸活塞冷却油断流(CYL.2 PISTON COOLING OIL NON FLOW ) | FS | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | ME RCS MAIN | PCU01-RS485-3 |  |
| 29 | SLD 16-3 | | 3号气缸活塞冷却油断流(CYL.3 PISTON COOLING OIL NON FLOW ) | FS | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | ME RCS MAIN | PCU01-RS485-3 |  |
| 30 | SLD 16-4 | | 4号气缸活塞冷却油断流(CYL.4 PISTON COOLING OIL NON FLOW ) | FS | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | ME RCS MAIN | PCU01-RS485-3 |  |
| 31 | SLD 16-5 | | 5号气缸活塞冷却油断流(CYL.5 PISTON COOLING OIL NON FLOW ) | FS | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | ME RCS MAIN | PCU01-RS485-3 |  |
| 32 | SLD 16-6 | | 6号气缸活塞冷却油断流(CYL.6 PISTON COOLING OIL NON FLOW ) | FS | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | 模拟台1/B012 | PCU01-DI1-I2.2 |  |
| 33 | SLD 17 | | 推力块温度高(THRUST PAD TEMP. HIGH) | TE | 0～150 | ℃ | 75 | H-SLD | 6～8 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI1-AI4 |  |
| 34 | SLD 18 | | 主机曲轴箱油雾浓度高 |  | ON/OFF | —— | OFF | L-SLD | 6～8 | 主机完车抑制 | 模拟台1/B013 | PCU01-DI1-I2.3 |  |

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| **3. 主机遥控系统（MAIN ENGINE REMOTE CONTROL SYSTEM）** | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
| 1 | RCS 021 | 主机本地控制失效（LOCAL CONTROL ACTIVE FAILURE) | LS | ON/OFF | —— | OFF | OPEN-ALM | 5 | —— | 模拟台1/B020 | PCU01-DI1-I2.5 |  |
| 2 | RCS 022 | 主机集控室控制失效（ECR CONTROL ACTIVE FAILURE) | LS | ON/OFF | —— | OFF | OPEN-ALM | 5 | —— | 模拟台1/B021 | PCU01-DI1-I2.6 |  |
| 3 | RCS 023 | 主机驾驶室控制失效（BR CONTROL ACTIVE FAILURE) | LS | ON/OFF | —— | OFF | OPEN-ALM | 5 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 4 | RCS 024 | 主机错误转向（WRONG WAY) | LS | ON/OFF | —— | OFF | OPEN-ALM | 15 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 5 | RCS 025 | 主机完车 | LS | ON/OFF | —— | OFF | OPEN-ALM | 15 | —— | 模拟台1/B022 | PCU01-DI1-I2.7 |  |
| 6 | RCS 026 | 紧急停车取消 | LS | ON/OFF | —— | OFF | OPEN-ALM | 5 | —— | 模拟台1/B023 | PCU01-DI1-I3.0 |  |
| 7 | RCS 027 | 故障减速取消 | LS | ON/OFF | —— | OFF | OPEN-ALM | 5 | —— | 模拟台1/B024 | PCU01-DI1-I3.1 |  |
| 8 | RCS 028 | 车钟系统故障 | LS | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 9 | RCS 029 | 主机起动失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 10 | RCS 030 | 主机起动闭锁 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 11 | RCS 031 | 主机未就绪 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 12 | RCS 032 | 主机备车故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 13 | RCS 033 | 主机完车故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 14 | RCS 034 | 慢转取消 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 15 | RCS 035 | 主机紧急停车或故障停车 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 16 | RCS 036 | 主机故障减速 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 17 | RCS 037 | 主机紧急倒车 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 18 | RCS 038 | 主机3次启动失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 19 | RCS 039 | 主机启动时间过长 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 20 | RCS 040 | 慢转启动失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 21 | RCS 041 | 起动空气进口压力低(STARTING AIR INLET PRESS. LOW） | PE | 0～5 | Mpa | 1.5 | L-ALM | 2 | —— | 模拟台1/4--20mA | PCU01-AI1-AI5 |  |
| 22 | RCS 042 | 控制空气进口压力低(CONTROL AIR INLET PRESS. LOW） | PS | 0～1 | Mpa | 0.55 | L-ALM | 2 | —— | 模拟台1/B025 | PCU01-DI1-I3.2 |  |
| 23 | RCS 043 | 安保空气进口压力低(SAFETY AIR INLET PRESS. LOW） | PS | 0～1 | Mpa | 0.55 | L-ALM | 2 | —— | 模拟台1/B026 | PCU01-DI1-I3.3 |  |
| 24 | RCS 044 | 转速检测探头故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 25 | RCS 045 | 空气分配器闭锁 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 26 | RCS 046 | 主起动阀闭锁 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 27 | RCS 047 | 盘车机啮合 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 | 前有 |
| 28 | RCS 048 | 调速器脱开 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 29 | RCS 049 | 主机扫气压力低 | PE | 0～5 | Mpa | 1.5 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 30 | RCS 050 | 主机速度限制起作用 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 31 | RCS 051 | 主机燃油限制起作用 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 32 | RCS 052 | 主机安保系统起作用 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 33 | RCS 053 | 主机遥控系统UPS电源故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 34 | RCS 054 | 主机紧急取消限制 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 35 | RCS 055 | 主机遥控系统通信故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 36 | RCS 056 | 主机遥控系统驾驶室操纵单元故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 37 | RCS 057 | 主机遥控系统集控室操纵单元故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 38 | RCS 058 | 主机遥控系统控制单元故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 39 | RCS 059 | 主机遥控系统调速单元故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 40 | RCS 060 | 主机遥控系统转速检测单元故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 41 | RCS 061 | 主机遥控系统安保系统故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 42 | RCS 062 | 主机遥控系统本身故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 43 | RCS 063 | ME-B控制系统电源1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 44 | RCS 064 | ME-B控制系统电源2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B014 | PCU01-DI1-I0.3 |  |
| 45 | RCS 065 | ME-B控制系统MOP-A故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 46 | RCS 066 | ME-B控制系统MOP-B故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 47 | RCS 067 | ME-B控制系统EICU1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 48 | RCS 068 | ME-B控制系统EICU2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 49 | RCS 069 | ME-B控制系统ECU1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 50 | RCS 070 | ME-B控制系统ECU2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 51 | RCS 071 | ME-B控制系统CCU1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 52 | RCS 072 | ME-B控制系统CCU2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B015 | PCU01-DI1-I0.4 |  |
| 53 | RCS 073 | ME-B控制系统CCU3故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 54 | RCS 074 | ME-B控制系统转速编码器故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 55 | RCS 075 | 主机液压油泵1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 56 | RCS 076 | 主机液压油泵2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 57 | RCS 077 | 辅助鼓风机1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B016 | PCU01-DI1-I0.5 |  |
| 58 | RCS 078 | 辅助鼓风机2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B017 | PCU01-DI1-I0.6 |  |
| 59 | RCS 079 | 自动滤器故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B018 | PCU01-DI1-I0.7 |  |
| 60 | RCS 080 | 主机振动高 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 61 | RCS 081 | 主机轴承磨损过高故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |
| 62 | RCS 082 | 气缸盖冷却水压差大 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS SUB | PCU01-RS485-4 |  |

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| **3. 主机（MAIN ENGINE）** | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | 测点名称(ITEM NAME) | | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
| 1 | ALM 00101 | | 1号增压器排气出口温度高(NO.1 TURBOCHARGER EXH.GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 350 | H-ALM | 0 | —— | 模拟台1/0-10mV+4~20mA | PCU01-AI1-AI6 |  |
| 2 | ALM 00102 | | 2号增压器排气出口温度高(NO.2 TURBOCHARGER EXH.GAS OUTLET TEMP. HIGH) | TE | 0～600 | ℃ | 350 | H-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 3 | ALM 00103 | | 1号增压器排气入口温度高(NO.1 TURBOCHARGER EXH.GAS INLET TEMP. HIGH) | TE | 0～600 | ℃ | 520 | H-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 4 | ALM 00104 | | 2号增压器排气入口温度高(NO.2 TURBOCHARGER EXH.GAS INLET TEMP. HIGH) | TE | 0～600 | ℃ | 520 | H-ALM | 0 | —— | 模拟台1/0-10mV+4~20mA | PCU01-AI1-AI7 |  |
| 5 | ALM 00105 | | 1号增压器滑油进口压力低(NO.1 T/C L.O INLET PRESS. LOW） | PE | 0～1 | Mpa | 0.11 | L-ALM | 2 | —— | 模拟台1/4--20mA | PCU01-AI1-AI8 |  |
| 6 | ALM 00106 | | 2号增压器滑油进口压力低(NO.2 T/C L.O INLET PRESS. LOW） | PE | 0～1 | Mpa | 0.11 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 7 | ALM 00107 | | 1号增压器转速高(NO.1 T/C RPM HIGH） | SE |  | RPM |  | H-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 8 | ALM 00108 | | 2号增压器转速高(NO.2 T/C RPM HIGH） | SE |  | RPM |  | H-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 9 | ALM 00109 | | 1号空气冷却器出口空气温度高(NO.1 AIR COOLER AIR OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 55 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI1-AI9 |  |
| 10 | ALM 00110 | | 2号空气冷却器出口空气温度高(NO.2 AIR COOLER AIR OUTLET TEMP. HIGH) | TE | 0～150 | ℃ | 55 | H-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 11 | ALM 00111 | | 缸套冷却水进口压力低(JACKET COOLING WATER INLET PRESS. LOW） | PE | 0～1 | Mpa | 0.44 | L-ALM | 2 | —— | 模拟台1/4--20mA | PCU01-AI1-AI10 |  |
| 12 | ALM 00112 | | 气缸排气阀进口空气压力低(AIR INLET TO EXHAUST VALVE PRESS. LOW） | PS | 0～1 | Mpa | 0.55 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 13 | ALM 00113 | | 主燃油进口压力低(FUEL OIL INLET PRESS. LOW） | PE | 0～1 | Mpa | 0.65 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 14 | ALM 00114 | | 主滑油进口温度高(MAIN LUB.OIL INLET TEMP. HIGH) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 15 | ALM 00115 | | 主机燃油进口压力(M/E F.O. INLET PRESS.) | PE | 0～1 | Mpa | 0.65 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 16 | ALM 00116 | | 主机燃油进机温度(M/E F.O. IN. TEMP ) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 17 | ALM 00117 | | 主机高压油管泄漏(M/E H. P. PIPE FUEL OIL LEAK.) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 18 | ALM 00118 | | 主机曲轴箱油雾探测器故障(M/E OIL MIST DETECTOR CRANKCASE FAIL. ) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 19 | ALM 00119 | | 主轴承及推力轴承滑油进机压力(M/E L.O.INLET TO M.B.&T.B. PRESS.) | PE | 0～0.6 | Mpa | 0.25 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 20 | ALM 00120 | | 主机滑油进口温度(M/E L.O. INLET TEMP. ) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 21 | ALM 00121 | | 主机增压器滑油进机压力(M/E T/C L.O. INLET PRESS. ) | PE | 0～0.6 | Mpa | 0.25 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 22 | ALM 00122 | | 主机增压器滑油出口温度(M/E T/C L.O. OUT. TEMP. ) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 23 | ALM 00123 | | 主机气缸油加热柜液位低(M/E CYL. L.O PREHEATER UNIT LEVEL LOW) | LS | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 24 | ALM 00124 | | 气缸滑油进口温度(CYL. LUB. OIL INLET) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 25 | ALM 00125 | | 气缸液压单元泄漏液位开关(LEAKAGE OIL FROM HYDRAULIC CYL.UNIT) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 26 | ALM 00126 | | 主机机带反冲洗自清滤器压差高报警(M/E HYD.AUTO FILTER DIFF. PRESS. HIGH) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 27 | ALM 00127 | | 主机机带反冲洗自清滤器故障报警(M/E HYD.AUTO FILTER FAULT ALARM) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 28 | ALM 00128 | | 主机机带反冲洗自清滤器脱扣报警(M/E HYD.AUTO FILTER TRIGGERED ALARM) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 29 | ALM 00129 | | 主机滑油自清滤器压差高(M/E L.O. AUTO FILTER PRESS. DIF. HIGH) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 30 | ALM 00130 | | 主机滑油自清滤器故障报警(M/E L.O.AUTO FILTER GENERAL FAULT) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 31 | ALM 00131 | | 主机气缸活塞冷却出机断流(M/E PISTON COOL OIL OUT.NON- FLOW) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 32 | ALM 00132 | | 主机空冷器冷却水进机压力(M/E COOL. W. IN. AIR COOLER PRESS.) | PE | 0～0.6 | Mpa | 0.25 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 33 | ALM 00133 | | 空冷器冷却水进口温度(COOLING WATER INLET AIR COOLER) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 34 | ALM 00134 | | 空冷器冷却水出口温度(COOLING WATER OUTLET AIR COOLER) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 35 | ALM 00135 | | 主机扫气箱温度(M/E SCAVE. AIR RECEIVER ) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 36 | ALM 00136 | | 主机轴承磨损大报警(M/E BEARING WEAR HIGH ALARM) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 37 | ALM 00137 | | 主机轴承磨损监测系统报警(M/E BEARING WARE MONITOR FAIL) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 38 | ALM 00138 | | 中间轴轴承滑油温度(INTER. SHAFT BEARING L.O. TEMP. ) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 39 | ALM 00139 | | 尾管后轴承温度(STERN TUBE AFT BEARING TEMP. ) | TE | 0～150 | ℃ | 55 | H-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 40 | ALM 00140 | | 轴接地装置公共报警(SHAFT EARTHING DEVICE COMMON ALARM) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | ME RCS MAIN | PCU01-RS485-3 |  |
| 41 | ALM 00141 | | 油中水活性压力测量(WATER IN OIL SENSOR, SYSTEM LUB.OIL IN.) | PE | 0～0.5 | Mpa | 0.2 | L-ALM | 2 | —— | ME RCS MAIN | PCU01-RS485-3 |  |

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| **4. 冷却水系统（COOLING WATER SYSTEM）** | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
| 1 | ALM 00201 | 中央冷却水出口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI1-AI11 |  |
| 2 | ALM 00202 | 中央冷却水进口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 |  |
| 3 | ALM 00203 | 中央冷却水海水泵1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B027 | PCU01-DI1-I3.5 |  |
| 4 | ALM 00204 | 中央冷却水海水泵2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B028 | PCU01-DI1-I3.6 |  |
| 5 | ALM 00205 | 中央冷却水海水泵3故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B029 | PCU01-DI1-I3.7 |  |
| 6 | ALM 00206 | 中央冷却水海水压力低 | PE | 0～0.5 | Mpa | 0.18 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI1-AI12 |  |
| 7 | ALM 00207 | 中央冷却水海水泵压力低切换控制 | PS | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B030 | PCU01-DI2-I4.0 |  |
| 8 | ALM 00208 | 中央冷却水循环泵1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B031 | PCU01-DI2-I4.1 |  |
| 9 | ALM 00209 | 中央冷却水循环泵2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B032 | PCU01-DI2-I4.2 |  |
| 10 | ALM 00210 | 中央冷却水循环泵出口压力低 | PE | 0～0.5 | Mpa | 0.18 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI1-AI13 |  |
| 11 | ALM 00211 | 中央冷却水循环泵压力低切换控制 | PS | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B033 | PCU01-DI2-I4.3 |  |
| 12 | ALM 00212 | 高温冷却水出口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI1-AI14 |  |
| 13 | ALM 00213 | 高温冷却水进口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 |  |
| 14 | ALM 00214 | 高温冷却水循环泵1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B034 | PCU01-DI2-I4.4 |  |
| 15 | ALM 00215 | 高温冷却水循环泵2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 |  |
| 16 | ALM 00216 | 高温冷却水循环泵出口压力低 | PE | 0～0.5 | Mpa | 0.18 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI1-AI15 |  |
| 17 | ALM 00217 | 高温冷却水循环泵压力低切换控制 | PS | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B035 | PCU01-DI2-I4.5 |  |
| 18 | ALM 00218 | 日用舱底水泵故障(DAILY BILGE PUMP FAIL.) |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 |  |
| 19 | ALM 00219 | 冷却水预热泵故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 1 | —— | AUX | PCU02-RS485-3 |  |
| 20 | ALM 00220 | 冷却水预热温度低故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | AUX | PCU02-RS485-4 |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **5. 滑油系统（L.O. SYSTEM）** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | | | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | | 备注(REMARK) |
| 1 | ALM 00221 | | | | | 主滑油冷却器出口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI2-AI20 | |  |
| 2 | ALM 00222 | | | | | 主滑油冷却器进口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 3 | ALM 00223 | | | | | 主滑油泵1故障 | PS | ON/OFF | —— | OFF | OPEN ALM | 0 | —— | 模拟台1/B036 | PCU01-DI2-I5.0 | |  |
| 4 | ALM 00224 | | | | | 主滑油泵2故障 | PS | ON/OFF | —— | OFF | OPEN ALM | 0 | —— | 模拟台1/B037 | PCU01-DI2-I5.1 | |  |
| 5 | ALM 00225 | | | | | 主滑油压力低 | PE | 0～0.5 | Mpa | 0.18 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI21 | |  |
| 6 | ALM 00226 | | | | | 主滑油泵压力低切换控制 | PS | ON/OFF | —— | OFF | OPEN ALM | 0 | —— | 模拟台1/B038 | PCU01-DI2-I5.2 | |  |
| 7 | ALM 00227 | | | | | 滑油冷却器1出口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI2-AI22 | |  |
| 8 | ALM 00228 | | | | | 滑油冷却器1进口温度高 |  | 0～100 | ℃ | 80 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 9 | ALM 00229 | | | | | 滑油泵1故障 | PS | ON/OFF | —— | OFF | OPEN ALM | -1 | —— | AUX | PCU02-RS485-2 | |  |
| 10 | ALM 00230 | | | | | 滑油泵2故障 | PS | ON/OFF | —— | OFF | OPEN ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 11 | ALM 00231 | | | | | 滑油压力低 | PE | 0～0.5 | Mpa | 0.18 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI23 | |  |
| 12 | ALM 00232 | | | | | 滑油泵压力低切换控制 | PS | 0～100 | ℃ | 80 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 13 | ALM 00233 | | | | | 中央冷却水进口温度高 | TE | 0～100 | ℃ | 80 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | | 与中央冷却水出口温度一致 |
| 14 | ALM 00234 | | | | | 中央冷却水进口压力低 | PE | 0～0.5 | Mpa | 0.18 | L-ALM | 0 | —— | AUX | PCU02-RS485-2 | | 与中央冷却水出口压力一致 |
| 15 | ALM 00235 | | | | | 尾管滑油泵故障（STERN TUBE L.O. PUMP FAIL.） |  | ON/OFF | —— | OFF | OPEN ALM | 0 | —— | 模拟台1/B072 | PCU01-DI2-I7.4 | |  |
| 16 | ALM 00236 | | | | | 气缸油输送泵故障（CYLINDER L.O. TRANSFER PUMP FAIL.） |  | ON/OFF | —— | OFF | OPEN ALM | 1 | —— | 模拟台1/B073 | PCU01-DI2-I7.5 | |  |
| 17 | ALM 00237 | | | | | 主机空冷器化学清洗泵故障（M/E A.C. CHEMICAL CLEANING P/P FAIL.） |  | ON/OFF | —— | OFF | OPEN ALM | 2 | —— | AUX | PCU02-RS485-5 | |  |
| 18 | ALM 00238 | | | | | 滑油输送泵故障（L.O. TRANSFER PUMP FAIL.） |  | ON/OFF | —— | OFF | OPEN ALM | 3 | —— | AUX | PCU02-RS485-6 | |  |
| **6. 燃油系统（F.O. SYSTEM）** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | | | 编号(TAG NO.) | | 测点名称(ITEM NAME) | | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) | |
| 1 | | | ALM 00241 | | 燃油单元出口黏度低 | | VE | 0～50 | cSt | 10 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI24 |  | |
| 2 | | | ALM 00242 | | 燃油单元出口温度高 | | TE | 0～150 | ℃ | 120 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI2-AI26 |  | |
| 3 | | | ALM 00243 | | 燃油单元出口压力低 | | PE | 0～1 | Mpa | 0.11 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI25 |  | |
| 4 | | | ALM 00244 | | 燃油单元出口压力高 | | PE | 0～1 | Mpa | 0.8 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 |  | |
| 5 | | | ALM 00245 | | 供油泵1故障 | |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B042 | PCU01-DI2-I5.3 |  | |
| 6 | | | ALM 00246 | | 供油泵2故障 | |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B043 | PCU01-DI2-I5.4 |  | |
| 7 | | | ALM 00247 | | 供油压力低故障 | | PE | 0～1 | Mpa | 0.8 | H-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI27 |  | |
| 8 | | | ALM 00248 | | 供油压力低切换控制 | | PS | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B044 | PCU01-DI2-I5.5 |  | |
| 9 | | | ALM 00249 | | 循环泵1故障 | |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B045 | PCU01-DI2-I5.6 |  | |
| 10 | | | ALM 00250 | | 循环泵2故障 | |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B046 | PCU01-DI2-I5.7 |  | |
| 11 | | | ALM 00251 | | 循环压力低故障 | | PE | 0～1 | Mpa | 0.8 | H-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI28 |  | |
| 12 | | | ALM 00252 | | 循环压力低切换 | | PS | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 |  | |
| 13 | | | ALM 00253 | | 混合罐液位高 | | LS | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| 14 | | | ALM 00254 | | 低硫轻柴油输送泵故障(L.S. M.G.O. TRANSFER P/P FAIL.) | |  | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| 15 | | | ALM 00255 | | 柴油输送泵故障(MDO TRANSFER P/P FAIL.) | |  | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| 16 | | | ALM 00256 | | 低硫轻柴油输送泵故障(L.S. M.G.O. TRANSFER P/P FAIL.) | |  | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| 17 | | | ALM 00257 | | 应急柴油泵故障(EDO PUMP FAILURE) | |  | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| 18 | | | ALM 00258 | | 燃油供油单元综合报警(F.O. MODULE COMMON ALARM) | |  | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| 19 | | | ALM 00259 | | 滤器阻塞报警(AUTO FILTER CLOGGED ) | |  | ON/OFF | —— | OFF | H-ALM | 2 | —— | AUX | PCU02-RS485-2 |  | |
| **7. 空气和排气系统（AIR&EXH. GAS SYSTEM）** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | | | | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | | 备注(REMARK) |
| 1 | | | | ALM 00261 | | 主空气瓶1压力低 | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | 模拟台1/B060 | PCU01-DI2-I6.0 | |  |
| 2 | | | | ALM 00262 | | 主空气瓶2压力低 | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | 模拟台1/B061 | PCU01-DI2-I6.1 | |  |
| 3 | | | | ALM 00263 | | 应急空气瓶压力低 | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | 模拟台1/B062 | PCU01-DI2-I6.2 | |  |
| 4 | | | | ALM 00264 | | 控制空气瓶压力低 | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | 模拟台1/B063 | PCU01-DI2-I6.3 | |  |
| 5 | | | | ALM 00265 | | 主动力空气压力低 | PE | 0～3 | Mpa | 2.1 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI29 | |  |
| 6 | | | | ALM 00266 | | 控制空气压力低 | PE | 0～3 | Mpa | 0.5 | L-ALM | 0 | —— | 模拟台1/4--20mA | PCU01-AI2-AI30 | |  |
| 7 | | | | ALM 00267 | | 排气阀驱动空气压力低 | PS | 0～3 | Mpa | 0.8 | L-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 8 | | | | ALM 00268 | | 控制空气关压力 | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | 模拟台1/B068 | PCU01-DI2-I7.0 | |  |
| 9 | | | | ALM 00269 | | 主机安保空气压力低 | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | 模拟台1/B069 | PCU01-DI2-I7.1 | |  |
| 10 | | | | ALM 00270 | | 甲板日用空压机故障(SERVICE. AIR COMP. FAIL) | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 11 | | | | ALM 00271 | | 甲板日用空气瓶压力(DK SERV.AIR RESERVOIR PRESS.) | PS | ON/OFF | —— | OFF | L-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| **8.轴系及船尾（SHAFTING&STERN）** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | | | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | | 备注(REMARK) |
| 1 | | ALM 00281 | | | | 主机1号缸曲轴温度高 | TS | 0～150 | ℃ | 120 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 2 | | ALM 00282 | | | | 主机2号缸曲轴温度高 | TS | 0～150 | ℃ | 120 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 3 | | ALM 00283 | | | | 主机3号缸曲轴温度高 | TS | 0～150 | ℃ | 120 | H-ALM | 0 | —— | 模拟台1/B070 | PCU01-DI2-I7.2 | |  |
| 4 | | ALM 00284 | | | | 主机4号缸曲轴温度高 | TS | 0～150 | ℃ | 120 | H-ALM | 0 | —— | 模拟台1/B071 | PCU01-DI2-I7.3 | |  |
| 5 | | ALM 00285 | | | | 主机5号缸曲轴温度高 | TS | 0～150 | ℃ | 120 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 6 | | ALM 00286 | | | | 主机6号缸曲轴温度高 | TS | 0～150 | ℃ | 120 | H-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 7 | | ALM 00287 | | | | 主机曲轴箱油雾装置故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B074 | PCU01-DI2-I7.6 | |  |
| 8 | | ALM 00288 | | | | 主机曲轴箱油雾温度高 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B075 | PCU01-DI2-I7.7 | |  |
| 9 | | ALM 00289 | | | | 推力轴承温度高 | TE | 0～150 | ℃ | 120 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI2-AI31 | |  |
| 10 | | ALM 00290 | | | | 主机盘车机脱开 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 | —— | 模拟台1/B076 | PCU01-DI1-I8.0 | |  |
| 12 | | ALM 00292 | | | | 主机盘车机故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B078 | PCU01-DI1-I8.2 | |  |
| 13 | | ALM 00293 | | | | 主机尾轴滑油温度高 | TE | 0～150 | ℃ | 120 | H-ALM | 0 | —— | 模拟台1/100Ω+电位器100Ω | PCU01-AI3-AI32 | |  |
| 14 | | ALM 00294 | | | | 主机尾轴滑油压力低 | PS | 0～0.3 | Mpa | 0.1 | L-ALM | 5 | —— | 模拟台1/4--20mA | PCU01-AI3-AI33 | |  |
| 15 | | ALM 00295 | | | | 主机尾轴进海水 |  | ON/OFF | —— | OFF | OPEN-ALM | 15 | —— | 模拟台1/B079 | PCU01-DI1-I8.3 | |  |
| **9. 锅炉（BOILER）** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | | | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | | 备注(REMARK) |
| 1 | ALM 00301 | | | | | 辅锅炉蒸汽压力超高 | PE | 0～1 | Mpa | 0.11 | H-ALM | 0 | —— | 模拟台1/4--20mA | PCU02-AI1-AI30 | |  |
| 2 | ALM 00302 | | | | | 辅锅炉水位超高 | LE | 0～1000 | mm | 900 | H-ALM | 5 | —— | 模拟台1/4--20mA | PCU02-AI1-AI31 | |  |
| 3 | ALM 00303 | | | | | 辅锅炉水位超低 | LS | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B090 | PCU02-DI1-I8.0 | |  |
| 4 | ALM 00304 | | | | | 辅锅炉水位极低 | LS | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B091 | PCU02-DI1-I8.1 | |  |
| 5 | ALM 00305 | | | | | 紧急停炉 |  | ON/OFF |  | OFF | OPEN-ALM | 5 | —— | 模拟台1/B092 | PCU02-DI1-I8.2 | |  |
| 6 | ALM 00306 | | | | | 辅锅炉盐分高 | LS | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B093 | PCU02-DI1-I8.3 | |  |
| 7 | ALM 00307 | | | | | 辅锅炉燃油压力低 | PS | ON/OFF | —— | OFF | L-ALM | 2 | —— | 模拟台1/B094 | PCU02-DI1-I8.4 | |  |
| 8 | ALM 00308 | | | | | 辅锅炉燃烧风压低 | PS | ON/OFF | —— | OFF | L-ALM | 2 | —— | 模拟台1/B095 | PCU02-DI1-I8.5 | |  |
| 9 | ALM 00309 | | | | | 辅锅炉燃烧器故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B096 | PCU02-DI1-I8.6 | |  |
| 10 | ALM 00310 | | | | | 辅锅炉燃烧器点火故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | 模拟台1/B097 | PCU02-DI1-I8.7 | |  |
| 11 | ALM 00311 | | | | | 辅锅炉风机故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 12 | ALM 00312 | | | | | 辅锅炉给水泵1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 13 | ALM 00313 | | | | | 辅锅炉给水泵2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 14 | ALM 00314 | | | | | 辅锅炉供油泵1故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| 15 | ALM 00315 | | | | | 辅锅炉供油泵2故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 0 | —— | AUX | PCU02-RS485-2 | |  |
| **10. 电站（ELECTRIC GENERATOR PLANT）** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | | | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | | 备注(REMARK) |
|  |  | | | | | 电网断电 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 电网电压低 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 电网电压高 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 电网频率低 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 电网频率高 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 动力电网绝缘低 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 照明电网绝缘低 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 电网短路故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 主配电板优先脱扣(MAIN BUSBAR PREFERENTIAL TRIP) |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS486-PMS | |  |
|  |  | | | | | 母联开关--断 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | 模拟台1/B101 | PCU02-DI1-I9.0 | |  |
|  |  | | | | | 母联开关故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | 模拟台1/B102 | PCU02-DI1-I9.1 | |  |
|  |  | | | | | 1号主开关断开 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关失压脱扣故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关储能不到位故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关合闸失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关脱扣失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关失压脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关过载脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关逆功率脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关短路脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 1号主开关啮合到位位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | 模拟台1/B103 | PCU02-DI1-I9.2 | |  |
|  |  | | | | | 1号主开关测试位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | 模拟台1/B104 | PCU02-DI1-I9.3 | |  |
|  |  | | | | | 1号主开关脱开位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | 模拟台1/B105 | PCU02-DI1-I9.4 | |  |
|  |  | | | | | 2号主开关断开 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关失压脱扣故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关储能不到位故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关合闸失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关脱扣失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关失压脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关过载脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关逆功率脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关短路脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关啮合到位位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关测试位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关脱开位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关断开 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关失压脱扣故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关储能不到位故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关合闸失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关脱扣失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关失压脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关过载脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关逆功率脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关短路脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关啮合到位位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关测试位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 3号主开关脱开位置 |  | ON/OFF | —— | ON | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | |  |  |  |  |  |  |  |  |  |  | |  |
|  |  | | | | | 轴发主开关断开 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关失压脱扣故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关储能不到位故障 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关合闸失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关脱扣失败 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关失压脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关过载脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关逆功率脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 2号主开关短路脱扣 |  | ON/OFF | —— | OFF | OPEN-ALM | 2 |  | PMS | RS485-PMS | |  |
|  |  | | | | | 轴发主开关啮合到位位置 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B106 | PCU02-DI1-I9.5 | |  |
|  |  | | | | | 轴发主开关测试位置 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B107 | PCU02-DI1-I9.6 | |  |
|  |  | | | | | 轴发主开关脱开位置 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B108 | PCU02-DI1-I9.7 | |  |
|  |  | | | | |  |  |  |  |  |  |  |  |  |  | |  |
|  |  | | | | | 1号发电机预脱扣保护动作1 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 1号发电机预脱扣保护动作2 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 2号发电机预脱扣保护动作1 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 2号发电机预脱扣保护动作2 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 3号发电机预脱扣保护动作1 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B108 | PCU02-DI1-I10.0 | |  |
|  |  | | | | | 3号发电机预脱扣保护动作2 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B109 | PCU02-DI1-I10.1 | |  |
|  |  | | | | | 轴带发电机预脱扣保护动作1 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 轴带发电机预脱扣保护动作2 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 应急切断和优先脱扣电源故障 EM'CY STOP & PRE. TRIP SOURCE FAULT |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 应急切断断线报警 EM'CY STOP WIRE BREAK ALARM |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 自动同步失败 AUTO SYNCHRO FAIL |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 主配电板DC24V电源故障(MSB DC24V SOURCE FAILURE) |  | ON/OFF | —— | OFF | L-ALM | 6 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 应急切断系统断线报警(EM'CY STOP SYSTEM LINE BREAK ALARM) |  | ON/OFF | —— | OFF | L-ALM | 7 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 主配电板公共故障(MSB COMMON ALARM) |  | ON/OFF | —— | OFF | L-ALM | 8 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 发电机不间断电源充电器故障(GUPS CHARGER FAILURE ALARM) |  | ON/OFF | —— | OFF | L-ALM | 9 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 发电机不间断电源绝缘低报警(GUPS INSULATION LOW ALARM) |  | ON/OFF | —— | OFF | L-ALM | 10 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 充放电板充电器故障(CHARGE PANEL FAILURE ) |  | ON/OFF | —— | OFF | L-ALM | 11 | —— | PMS | RS485-PMS | |  |
|  |  | | | | | 充放电板绝缘低报警(CHARGE PANEL INSULATION LOW ALARM) |  | ON/OFF | —— | OFF | L-ALM | 12 | —— | PMS | RS485-PMS | |  |
| **11. 1号发电机组（NO.1 G/E）\*3** | | | | | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | | | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | | 备注(REMARK) |
|  |  | | | | | 1号发电机绕组高温 | TE | 0～150 | ℃ | 75 | H-ALM | 5 | —— | 模拟台1/100Ω+电位器100Ω | PCU02-AI1-AI32 | |  |
|  |  | | | | | 1号发电机AVR故障 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机调速器故障 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机超速故障 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机手动应急停车 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | 模拟台1/B109 | PCU02-DI1-I10.2 | |  |
|  |  | | | | | 1号发动机滑油低压故障停车 |  | ON/OFF | —— | OFF | L-SHDN | 5 | 停机抑制 | 模拟台1/B110 | PCU02-DI1-I10.3 | |  |
|  |  | | | | | 1号发动机滑油低压故障 |  | ON/OFF | —— | OFF | L-ALM | 5 | 停机抑制 | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机滑油滤器压差高故障 |  | ON/OFF | —— | OFF | H-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机燃油滤器压差高故障 |  | ON/OFF | —— | OFF | H-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机淡水高温故障 | TE | 0～150 | ℃ | 75 | H-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机缸套水预热温度低 | TS | ON/OFF | —— | OFF | L-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机起动失败 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机闭锁 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机盘车杆盘车 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机启动空气压力低 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B111 | PCU02-DI1-I10.4 | |  |
|  |  | | | | | 1号发动机控制空气压力低 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机燃油滤器堵 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机周期预润滑故障 |  | ON/OFF | —— | OFF | OPEN ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机轴承滑油压力低 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机冷却水压力低 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | 1号发动机转速 | SE | RPM | 0-120 | 135 | H-ALM | 10 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | No.1 柴油发电机滑油循环柜液位高(No.1 D/G L.O. SUMP TK. LEVEL H) |  | ON/OFF | —— | OFF | H-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | No.1 柴油发电机滑油循环柜液位低(No.1 D/G L.O. SUMP TK. LEVEL L) |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | No.1 柴发增压器排气进口温度(1～3缸）（No.1 D/G EXH. GAS TEMP. IN. T/C(1～3CYL.) ） | TE | 0～450 | ℃ | 390 | H-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |
|  |  | | | | | No.1 柴发增压器排气进口温度(4～6缸）（No.1 D/G EXH. GAS TEMP. IN. T/C(4～6CYL.) ） | TE | 0～450 | ℃ | 390 | H-ALM | 5 | —— | DG | PCU02-RS485-1 | |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **15. 轴带发电机组（SHAFT G/E）** | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
|  | |  | 轴发发电机电压低 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机电压高 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机频率低 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机频率高 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机三相电压不均衡 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机过载 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机欠载 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机短路 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机欠压 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机AVR故障 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  | |  | 轴发发电机绕组高温 | TE | 0～150 | ℃ | 75 | H-ALM | 5 | —— | 模拟台1/100Ω+电位器100Ω | PCU02-AI1-AI35 |  |
|  | |  | 主机转速过低，发电闭锁 | VE | 0～150 | rpm | 60 | L-ALM | 0 | —— | 模拟台1/4--20Ma | PCU02-AI1-AI36 |  |
| **14. 应急发电机组（EMERGENCY G/E）** | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
|  |  | | 应急发电机电压低 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机电压高 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机频率低 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机频率高 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机三相电压不均衡 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机过载 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机短路 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机欠压 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发动机超速故障 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发动机滑油低压故障 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B118 | PCU02-DI1-I11.3 |  |
|  |  | | 应急发动机淡水高温故障 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发动机闭锁 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发动机启动空气压力低 |  | ON/OFF | —— | OFF | L-ALM | 5 | —— | 模拟台1/B119 | PCU02-DI1-I11.4 |  |
|  |  | | 应急发动机燃油滤器堵 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电电压低 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电电压高 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电相序错 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电频率与船电不一致 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电三相电压不均衡 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电过载 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电短路 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 岸电欠压 |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急配电板公共故障（ESB COMMON FAILURE） |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急配电板DC24V电源故障（ESB DC24V POWER SOURCE FAIL.） |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急柴油发电机组公共故障（EMERGENCY DISEL COMMON ALARM） |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机蓄电池电压低（EM'CY G/E BATTERY CHARGE VOLT. LOW） |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
|  |  | | 应急发电机蓄电池充电器故障（EM'CY G/E BAT. CHARGE FAIL.） |  |  |  |  |  |  |  | DG | PCU02-RS485-1 |  |
| **18. 燃油驳运净化系统（F.O. TRANSFER&PURIFY SYSTEM）** | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
| 8 |  | | 分油机1运行 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 分油机2运行 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 分油机1出口压力低 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 分油机2出口压力低 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 分油机1故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 分油机2故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油输送泵1故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油输送泵2故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油输送压力低故障 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油输送压力低切换 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油沉淀柜满 |  | ON/OFF | —— | OFF | H-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油沉淀柜空 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油日用柜满 |  | ON/OFF | —— | OFF | H-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油日用柜空 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油污油柜满 |  | ON/OFF | —— | OFF | H-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油沉淀柜高度 | LE | 0-2000 | mm | 200 | L-ALM | 15 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油日用柜高度 | LE | 0-2000 | mm | 200 | L-ALM | 15 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油沉淀柜温度 | TE | 0-150 | ℃ | 80 | L-ALM | 2 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | | 燃油日用柜温度 | TE | 0-150 | ℃ | 100 | L-ALM | 2 |  | 分油机 | PCU02-RS485-3 |  |

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| **19. 滑油驳运净化系统（L.O. TRANSFER&PURIFY SYSTEM）** | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | 采集站/点 | 备注(REMARK) |
|  |  | 分油机1运行 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 分油机2运行 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 分油机1出口压力低 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 分油机2出口压力低 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 分油机1故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 分油机2故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油输送泵1故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油输送泵2故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油输送压力低故障 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油输送压力低切换 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油沉淀柜满 |  | ON/OFF | —— | OFF | H-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油沉淀柜空 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油日用柜满 |  | ON/OFF | —— | OFF | H-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油日用柜空 |  | ON/OFF | —— | OFF | L-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油污油柜满 |  | ON/OFF | —— | OFF | H-ALM | 0 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油沉淀柜高度 | LE | 0-2000 | mm | 200 | L-ALM | 15 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油日用柜高度 | LE | 0-2000 | mm | 200 | L-ALM | 15 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油沉淀柜温度 | TE | 0-150 | ℃ | 80 | L-ALM | 2 |  | 分油机 | PCU02-RS485-3 |  |
|  |  | 滑油日用柜温度 | TE | 0-150 | ℃ | 100 | L-ALM | 2 |  | 分油机 | PCU02-RS485-3 |  |

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| **22. 舱底和油渣系统（BILGE&SLUDGE SYSTEM）** | | | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | 测点名称(ITEM NAME) | | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | | 采集站/点 | 备注(REMARK) |
|  | |  | No.1 燃油储 (左) 液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.1 燃油舱 (右) 液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.2 燃油储 (左) 液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.2 燃油舱 (右) 液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.1燃料油日用舱(兼低硫)液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.1燃料油澄清舱(兼低硫)液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.2燃料油澄清舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | No.2燃料油日用舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 柴油舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 柴油日用舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 低硫轻柴油日用舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 低硫轻柴油舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 燃油溢油舱液位 | | LE |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 滑油泄放舱液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 艉管滑油循环舱液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 燃油泄放舱液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 油渣舱液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 燃油分油机油渣舱液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 滑油分油机油渣舱液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机滑油循环舱液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 热井液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 艉管首密封油柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 艉管滑油重力柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 尾密封油柜液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 尾密封油柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 烟灰收集柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 应急发电机柴油日用柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 焚烧炉柴油柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机扫气箱泄放柜液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机高温淡水报警装置箱液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机缸套淡水膨胀箱液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 低温淡水膨胀箱液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机No.1 气缸油测量柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机No.1 气缸油测量柜液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机No.2 气缸油测量柜液位低 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 主机No.2 气缸油测量柜液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
|  | |  | 尾密封泄放收集单元液位高 | | LS |  |  |  |  |  |  | TANK | | PCU02-RS485-3 |  |
| **23. 空气系统（AIR SYSTEM）** | | | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | 测点名称(ITEM NAME) | | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | 信号源 | | 采集站/点 | 备注(REMARK) |
|  | |  | 1号空压机故障 | |  | ON/OFF | —— | OFF |  | 0 |  | 控制台2/B008 | | PCU02-DI2-I12.0 |  |
|  | |  | 2号空压机故障 | |  | ON/OFF | —— | OFF |  | 0 |  | 控制台2/B009 | | PCU02-DI2-I12.1 |  |
|  | |  | 应急空压机故障 | |  | ON/OFF | —— | OFF |  | 0 |  | 控制台2/B010 | | PCU02-DI2-I12.2 |  |
|  | |  | 1号空压机滑油压力低 | |  | ON/OFF | —— | OFF |  | 0 |  | 控制台2/B011 | | PCU02-DI2-I12.3 |  |
|  | |  | 1号空压机冷却水温度高 | |  | ON/OFF | —— | OFF |  | 0 |  | 控制台2/B012 | | PCU02-DI2-I12.4 |  |
|  | |  | 1号空压机冷却水压力低 | |  | ON/OFF | —— | OFF |  | 0 |  | 控制台2/B013 | | PCU02-DI2-I12.5 |  |
|  | |  | 1号空气瓶压力低 | | PE | 0～3 | Mpa | 2.2 | L-ALM | 0 | —— | 模拟台1/4--20mA | | PCU02-AI37 |  |
|  | |  | 2号空压机滑油压力低 | |  | ON/OFF | —— | OFF |  | 0 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 2号空压机冷却水温度高 | |  | ON/OFF | —— | OFF |  | 0 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 2号空压机冷却水压力低 | |  | ON/OFF | —— | OFF |  | 0 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 2号空气瓶压力低 | | PE | 0～3 | Mpa | 2.2 | L-ALM | 0 | —— | 模拟台1/4--20mA | | PCU02-AI38 |  |
|  | |  | 应急号空压机滑油压力低 | |  | ON/OFF | —— | OFF |  | 0 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 应急号空压机冷却水温度高 | |  | ON/OFF | —— | OFF |  | 0 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 应急号空压机冷却水压力低 | |  | ON/OFF | —— | OFF |  | 0 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 应急号空气瓶压力低 | | PE | 0～3 | Mpa | 2.2 | L-ALM | 0 | —— | OTHER | | PCU02-RS485-3 |  |
|  | |  | 1号机舱风机故障 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 2号机舱风机故障 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 3号机舱风机故障 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 4号机舱风机故障 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | NO.1 BATTERY RM. EXH. FAN ABNORMAL | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 1#蓄电池室风机异常报警 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | NO.2 BATTERY RM. EXH. FAN ABNORMAL | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 2#蓄电池室风机异常报警 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 快关阀控制箱压力低 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
|  | |  | 气动可闭式百叶窗空气瓶压力 | |  | ON/OFF | —— | OFF |  | 2 |  | OTHER | | PCU02-RS485-3 |  |
| **25. 火灾报警（FIRE ALARM）** | | | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | | 信号源 | 采集站/点 | 备注(REMARK) |
|  | |  | | 火警报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 火警报警回路故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 火警报警装置故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 火警报警装置电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 大舱火警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 大舱火警回路故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 大舱火警报警装置故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 大舱火警报警装置电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 货舱烟火探测公共报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 液压舱盖公共报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱水雾灭火系统故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱水雾灭火系统淡水舱液位低 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱水雾灭火系统释放报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱水雾灭火系统泵组电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱水雾灭火系统电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 二氧化释放报警系统电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 二氧化碳泄漏报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 货舱二氧化碳释放报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱二氧化碳释放报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
| **26. 压载水（BALLAST）** | | | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | | 信号源 | 采集站/点 | 备注(REMARK) |
|  | |  | | 压载水泵1故障 |  | ON/OFF | —— | OFF | OPEN ALM | 0 |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 压载水泵2故障 |  | ON/OFF | —— | OFF | OPEN ALM | 1 |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 压载水泵出口压力低故障 | PE | 0～0.3 | Mpa | 0.2 | L-ALM | 0 | —— | | 模拟台1/4--20mA | PCU02-AI39 |  |
|  | |  | | 压载水控制液压泵1故障 |  | ON/OFF | —— | OFF | OPEN ALM | 3 |  | | 控制台2/B014 | PCU02-DI2-I12.6 |  |
|  | |  | | 压载水控制液压泵2故障 |  | ON/OFF | —— | OFF | OPEN ALM | 4 |  | | 控制台2/B015 | PCU02-DI2-I12.7 |  |
|  | |  | | 压载水控制液压泵出口压力低故障 | PE | 0～20 | Mpa | 12 | L-ALM | 0 | —— | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 电磁阀回路故障 |  | ON/OFF | —— | OFF | OPEN ALM | 6 |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱1开阀回路故障 |  |  |  |  |  |  |  | | 控制台2/B016 | PCU02-DI2-I13.0 |  |
|  | |  | | 左舱2开阀故障 |  |  |  |  |  |  |  | | 控制台2/B017 | PCU02-DI2-I13.1 |  |
|  | |  | | 左舱3开阀故障 |  |  |  |  |  |  |  | | 控制台2/B018 | PCU02-DI2-I13.2 |  |
|  | |  | | 左舱4开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱5开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱1开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱2开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱3开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱4开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱5开阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱1关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱2关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱3关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱4关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 左舱5关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱1关阀故障 |  |  |  |  |  |  |  | | 控制台2/B019 | PCU02-DI2-I13.3 |  |
|  | |  | | 右舱2关阀故障 |  |  |  |  |  |  |  | | 控制台2/B020 | PCU02-DI2-I13.4 |  |
|  | |  | | 右舱3关阀故障 |  |  |  |  |  |  |  | | 控制台2/B021 | PCU02-DI2-I13.5 |  |
|  | |  | | 右舱4关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 右舱5关阀故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 船体前后倾角度 | LE | -35---35 | º | 10 |  | 30 |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 船体左右倾角度 | LE | -35---36 | º | 10 |  | 30 |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | |  |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 海水总管压力 | PE |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 消防总管压力传感器 | PE |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | No.1 消防总用泵故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | No.2 消防总用泵故障报警 |  |  |  |  |  |  |  | |  |  |  |
|  | |  | | 阀门遥控1#UPS故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 阀门遥控2#UPS故障报警 |  |  |  |  |  |  |  | |  |  |  |
| **27. 其它（MISC.）** | | | | | | | | | | | | | | | |
| 序号(NO.) | | 编号(TAG NO.) | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | | 信号源 | 采集站/点 | 备注(REMARK) |
|  | |  | | 控制台消音应答 |  |  |  |  |  |  |  | | 控制台2/B030 | PCU02-DI2-I14.0 |  |
|  | |  | | 控制台消闪 |  |  |  |  |  |  |  | | 控制台2/B031 | PCU02-DI2-I14.1 |  |
|  | |  | | 控制台测试 |  |  |  |  |  |  |  | | 控制台2/B032 | PCU02-DI2-I14.2 |  |
|  | |  | | 安全值班复位按钮1 |  |  |  |  |  |  |  | | 控制台2/B033 | PCU02-DI2-I14.3 |  |
|  | |  | | 安全值班复位按钮2 |  |  |  |  |  |  |  | | 控制台2/B034 | PCU02-DI2-I14.4 |  |
|  | |  | | 安全值班复位按钮3 |  |  |  |  |  |  |  | | 控制台2/B035 | PCU02-DI2-I14.5 |  |
|  | |  | | 机舱火警报警按钮1 |  |  |  |  |  |  |  | | 控制台2/B036 | PCU02-DI2-I14.6 |  |
|  | |  | | 机舱火警报警按钮2 |  |  |  |  |  |  |  | | 控制台2/B037 | PCU02-DI2-I14.7 |  |
|  | |  | |  |  |  |  |  |  |  |  | |  |  |  |
|  | |  | | 广播系统电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 广播系统故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 测深仪系统故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 测深仪浅吃水报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 计程仪故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | DGPS位置显示错误报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | VDR 系统故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | X雷达逼近报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | S雷达逼近报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 电子海图故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 电罗经系统异常 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 自动舵偏航报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 1#自动舵电源故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 2#自动舵电源故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 尾密封控制空气低压 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 管弄气压差高报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱报警灯板继电器箱电源故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱集控台AC220V 电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 机舱集控台DC24V 电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 驾控台AC220V 电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 驾控台DC24V 电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | AMS不间断电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | AMS不间断电源DC24V电源接地故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | AMS不间断电源DC24V电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 2#报警分站电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 3#报警分站电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 4#报警分站电源故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | No.1 空调压缩机组公共报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | No.2 空调压缩机组公共报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 空调风机过载报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | No.1 冷藏压缩机组公共报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | No.2 冷藏压缩机组公共报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 船体阴极保护系统故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 防海生物装置故障报警 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 艉缆机公共故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
|  | |  | | 锚缆机公共故障 |  |  |  |  |  |  |  | | OTHER | PCU02-RS485-3 |  |
| **28. 监测报警系统故障（MONITORING&ALARM SYSTEM FAILURE）** | | | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | | 测点名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | | 信号源 | 采集站/点 | 备注(REMARK) |
|  |  | | | PCU01故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | PCU02故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | 采集模块PCU01-DI1故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | 采集模块PCU01-DI2故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | 采集模块PCU01-AI1故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | 采集模块PCU01-AI2故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | 采集模块PCU01-AQ1故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | 采集模块PCU01-DQ1故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | 采集模块PCU02-DI1故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | 采集模块PCU02-DI2故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | 采集模块PCU02-AI1故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | PCU01-RS485-PMS故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | PCU01-RS485-RCS MAIN故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | PCU01-RS485-RCS SUB故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | PCU01-RS485-EAP故障 |  |  |  |  |  |  |  | | PCU01 | PCU01 |  |
|  |  | | | PCU01-RS485-1故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | PCU01-RS485-2故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | PCU01-RS485-3故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | | PCU01-RS485-4故障 |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
|  |  | | |  |  |  |  |  |  |  |  | | PCU02 | PCU02 |  |
| **29. 输出控制** | | | | | | | | | | | | | | | |
| 序号(NO.) | 编号(TAG NO.) | | | 输出名称(ITEM NAME) | 信号类型(SIGNAL TYPE) | 范围(RANGE) | 单位(UNIT) | 报警阀值(ALM. LIMIT) | 报警类型(ALM. TYPE) | 报警延时(ALM. TIME DELAY) | 报警抑制(ALM. SUPPRESSION) | | 信号源 | 显示地点 | 备注(REMARK) |
| 1 |  | | | 机舱警报器 |  | NO/OFF |  |  |  |  |  | | PCU01-DQ0 |  |  |
| 2 |  | | | 火警报警器 |  |  |  |  |  |  |  | | PCU01-DQ1 |  |  |
| 3 |  | | | 通用报警器 |  |  |  |  |  |  |  | | PCU01-DQ2 |  |  |
| 4 |  | | | 灯管报警器 |  |  |  |  |  |  |  | | PCU01-DQ3 |  |  |
| 5 |  | | | CO2报警器 |  |  |  |  |  |  |  | | PCU01-DQ4 |  |  |
| 6 |  | | | 集控室报警 |  |  |  |  |  |  |  | | PCU01-DQ5 |  |  |
| 7 |  | | | 失职报警 |  |  |  |  |  |  |  | | PCU01-DQ6 |  |  |
| 8 |  | | | 值班安全报警 |  |  |  |  |  |  |  | | PCU01-DQ7 |  |  |
| 9 |  | | | 指示灯1 |  |  |  |  |  |  |  | | PCU01-DQ8 |  |  |
| 10 |  | | | 指示灯2 |  |  |  |  |  |  |  | | PCU01-DQ9 |  |  |
| 11 |  | | | 指示灯3 |  |  |  |  |  |  |  | | PCU01-DQ10 |  |  |
| 12 |  | | | 指示灯4 |  |  |  |  |  |  |  | | PCU01-DQ11 |  |  |
| 13 |  | | | 指示灯5 |  |  |  |  |  |  |  | | PCU01-DQ12 |  |  |
| 14 |  | | | 指示灯6 |  |  |  |  |  |  |  | | PCU01-DQ13 |  |  |
| 15 |  | | | 指示灯7 |  |  |  |  |  |  |  | | PCU01-DQ14 |  |  |
| 16 |  | | | 指示灯8 |  |  |  |  |  |  |  | | PCU01-DQ15 |  |  |
| 17 |  | | | 主机转速 |  |  |  |  |  |  |  | | PCU01-AQ0 | 控制台/4-20mA表 |  |
| 18 |  | | | 起动空气压力 |  |  |  |  |  |  |  | | PCU01-AQ1 | 控制台/4-20mA表 |  |
| 19 |  | | | 主机负荷 |  |  |  |  |  |  |  | | PCU01-AQ2 | 控制台/4-20mA表 |  |
| 20 |  | | | 主滑油压力 |  |  |  |  |  |  |  | | PCU01-AQ3 | 控制台/4-20mA表 |  |
| 21 |  | | | 高温冷却水压力 |  |  |  |  |  |  |  | | PCU01-AQ4 | 控制台/4-20mA表 |  |
| 22 |  | | | 主机扫气压力 |  |  |  |  |  |  |  | | PCU01-AQ5 | 控制台/4-20mA表 |  |
| 23 |  | | | 中央冷却水压力 |  |  |  |  |  |  |  | | PCU01-AQ6 | 控制台/4-20mA表 |  |
| 24 |  | | | 主机燃油压力 |  |  |  |  |  |  |  | | PCU01-AQ7 | 控制台/4-20mA表 |  |

1. **通信协议**

1）两台计算机通讯，一台故障模拟系统和一台检测报警系统。两台计算机之间通讯的物理层采用RS485方式。

2）通信时每个字节定义：·1个起始位，·8个数据位，·无奇偶校验位，·1个停止位。3、通讯速度：19200。通讯时采用16进制格式。

3）每次通讯由检测报警系统发送请求命令，故障模拟系统应答，没有请求命令，故障模拟系统不应答。

4）通讯采用MODBUS RTU报文格式，监测报警系统向故障模拟系统发送请求命令，采用MODBUS的03功能。监测报警系统读取故障模拟系统检测通道的参数时，监测报警系统向故障模拟系统发送请求命令。

5）故障模拟系统收到监测报警系统的请求命令后，对监测报警系统的请求命令进行响应。。

6）故障模拟系统大多数参数不变化，仅有少部分发生变化，设置检测报价系统读取故障模拟系统变化参数的请求报文。

1. **船舶报警监视系统实验装置**模拟如下轮机系统：

1）主机、主机故障停车、主机故障降速、主机遥控系统；

2）冷却水系统；

3）滑油系统、燃油系统；

4）空气和排气系统；

5）轴系及船尾；

6）电站、1号发电机组、2号发电机组、3号发电机组、轴带发电机、应急发电机、能量管理系统；

7）燃油驳运净化系统、滑油驳运净化系统、油舱和油柜液位系统；

8）压载水系统。

1. **制作周期**

2018年10月1日-2019年4月1日

1. **验收要求**

1）船舶报警监视系统实验装置故障模拟正常；

2）显示器外观稳重、固定牢靠，控制箱质量可靠；

3）控制回路功能正常；

4）电器元件品牌优质、质量可靠；

5）所有接头考虑避免裸露，避免实验造成触电。