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| **طرح نگهداشت و افزایش تولید 27 مخزن** | | | | | | |
| **DATA SHEETS FOR DISTRIBUTION & LIGHTING PANELS OF**  **WELL PADS**  **نگهداشت و افزایش تولید میدان نفتی بینک** | | | | | | |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| D02 | Jul. 2022 | IFA | H.Shakiba | M.Fakharian | M.Mehrshad |  |
| D01 | May. 2022 | IFA | H.Shakiba | M.Fakharian | M.Mehrshad |  |
| D00 | Sep.2021 | IFC | M.Asgharnejad | M.Fakharian | Sh.Ghalikar |  |
| **Rev.** | **Date** | **Purpose of Issue/Status** | **Prepared by:** | **Checked by:** | **Approved by:** | **CLIENT Approval** |
| **Class: 2** | | **CLIENT Doc. Number: F0Z-707396** | | | | |
| **Status:** | **IDC: Inter-Discipline Check**  **IFC: Issued For Comment**  **IFA: Issued For Approval**  **AFD: Approved For Design**  **AFC: Approved For Construction**  **AFP: Approved For Purchase**  **AFQ:** Approved For Quotation  **IFI: Issued For Information**  **AB-R: As-Built for CLIENT Review**  **AB-A: As-Built –Approved** | | | | | |

**REVISION RECORD SHEET**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |  | **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |
| **1** | X | X | X |  |  | **51** |  |  |  |  |  |
| **2** | X | X | X |  |  | **52** |  |  |  |  |  |
| **3** | X | X | X |  |  | **53** |  |  |  |  |  |
| **4** | X | X | X |  |  | **54** |  |  |  |  |  |
| **5** | X | X | X |  |  | **55** |  |  |  |  |  |
| **6** |  | X | X |  |  | **56** |  |  |  |  |  |
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| **Technical Data Sheet for Distribution & Lighting Panels of Well Pads** | | | |
| --- | --- | --- | --- |
| **ITEM** | **DESCRIPTION** | **REQUIREMENT** | **SUPPLIER DATA** |
| **1** | **SITE CONDITION** | | |
|  | Location | Binak Oilfield in Bushehr Province | D02 |
|  | Max. Outdoor Ambient Temperature | 52°C |  |
|  | Min. Outdoor Ambient Temperature | -5°C |  |
|  | Direct Sunlight Temperature | 85°C |  |
|  | Maximum Relative Outdoor Humidity | 100% |  |
|  | Altitude | 12.5 m Above Sea Level |  |
|  | Installation Method | Direct Buried Cable |  |
| **2** | **GENERAL INFORMATION** | | |
|  | Tag Numbers | Well XX-DP01 (Distribution Panel for Switchgear Building (Indoor)) |  |
| Well XX-DP02 (Distribution Panel for Security Building (Indoor)) |  |
| Well XX-DP03 (Distribution Panel for Outdoor Area (Indoor)) |  |
|  | Quantity | 3 Set for Each Well Pad |  |
|  | Application Standard | IPS-E-EL-100  IPS-M-EL-143(3)  IPS-M-EL-161(2) |  |
|  | Manufacturer | By Vendor |  |
|  | Related Document | Single Line Diagram For LV Power  Distribution Panel of Well Pads  (BK-SSGRL-PEDCO-110-EL-SL-0003) |  |
| **3** | **ELECTRICAL DATA** | | |
|  | System Voltage/ Frequency | 400V AC / 50Hz |  |
|  | Voltage Variation/ Frequency Variation | ±10 / ± 5% |  |
|  | Insulation Voltage | 0.6/1KV |  |
|  | Rated Power Frequency Withstand Voltage | 2.5 KV |  |
|  | Rated Impulse Withstand Voltage | 8 KV |  |
|  | No. of Phases / Wires | 3Ph+N+PE |  |
|  | Control Voltage | 230VAC (With Isolating Transformer if Any) |  |
|  | Space Heater Voltage | 230VAC |  |
|  | Internal/ External Voltage Supply | Internal |  |
|  | Main Bus-Bar Rating | According to SLD (Item 2.5) |  |
|  | Bus-Bars Material | Indoor: Heat Shrink Copper  Outdoor: Silver Plated Copper |  |
|  | Bus Bar Insulation | Dielectric Insulation |  |
|  | Bus Bars Joints | Silver Plated |  |
|  | Earth Bus-Bar Size | By Vendor |  |
|  | Rated Short Circuit Current | According to SLD (Item 2.5) |  |
|  | Type Of System Grounding | TNS / Solid Earthed |  |
| **4** | **ENCLOSURE DATA** | | |
|  | Enclosure Type | Wall Mounted , Fixed Type, Front Access | D02 |
|  | Degree of Protection | Indoor: IP 42, Outdoor: IP 54 |  |
|  | Cable Entry | Bottom via Gland |  |
|  | Outgoing Feeder | Cable, Bottom |  |
|  | Material | Painted Sheet Steel |  |
|  | Finish Color | RAL 7032 |  |
|  | Dimensions (HxWxD) | By Vendor |  |
|  | Sheet Steel Thickness (Body/Frame) | Free Standing: 2mm/2mm  Wall Mounted: 1.5mm/2mm |  |
|  | Painting | For Corrosive & Hot Atmosphere |  |
|  | Thickness | Min. 60μ |  |
|  | Type | Epoxy Powder Elector Static |  |
|  | Weight | By Vendor |  |
| **5** | **CIRCUIT BREAKERS** | | |
|  | Manufacturer / Type | By Vendor |  |
|  | Rated Operating Voltage | 690V AC |  |
|  | Service Voltage | 400V AC |  |
|  | Incoming Circuit Breaker Type | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
|  | Internal Protections for MCCB | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003”  Thermal Over Load (49) & Instantaneous O/C 50) are Required |  |
|  | Incoming C.B Aux. Switches | Yes |  |
|  | Incoming C.B Trip Switches | Yes |  |
|  | Rated Current | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
|  | Outgoing Circuit Breakers Type | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
| **6** | **LV FUSES** | | |
|  | Manufacturer | By Vendor |  |
|  | Type Designation | gG | D02 |
|  | Rated Voltage | 690V |  |
|  | Service Voltage | 400V |  |
|  | Rated Current | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
| **7** | **CURRENT TRANSFORMERS** | | |
|  | Manufacturer / Type | By Vendor |  |
|  | Rated Secondary Current | 5A, 1A, According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
|  | Accuracy Class | Metering: 1.0, Protection: 5P10 |  |
| **8** | **AMMETERS** | | |
|  | Manufacturer / Type | By Vendor |  |
|  | Operating Range | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
|  | Accuracy Class | 1.5 |  |
| **9** | **VOLTMETERS** | | |
|  | Manufacturer / Type | By Vendor |  |
|  | Operating Range | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
|  | Accuracy Class | 1.5 |  |
| **10** | **CONTACTORS** | | |
|  | Manufacturer / Type | By Vendor |  |
|  | Rated Voltage | 400V AC |  |
|  | Coil Voltage | 230V AC |  |
|  | Duty | AC3 |  |
|  | Aux. Switches | Yes |  |
|  | Rated Current | According to  “BK-SSGRL-PEDCO-110-EL-SL-0003” |  |
| **11** | **PHOTOCELL** | | |
|  | Constructed | 5A,230 V,50Hz |  |
|  | Degree of Protection | IP55 ,Heavy Duty Type |  |
|  | Opseration Type | Fail Safe & Adjustable |  |
| **12** | **LABLE** | | |
|  | Language | English |  |
|  | Material | Stainless Steel-Screwed/Reverted |  |
|  | Main Label (Front / Back) | Engraved / Black Font-White Background |  |
| **13** | **PANEL WIRING** | | |
|  | Manufacturer | By Vendor |  |
|  | Type | CU/PVC |  |
|  | Power Wire Color | R: Red, S: Yellow, T: Blue, Neutral: Black  PH: Red, Neutral: Black |  |
|  | Signal Wire Color  (Voltage Presence Indicator) | Red (L1), Green (L2), Yellow (L3) |  |
| **14** | **PANEL TERMINAL** | | |
|  | Manufacturer | By Vendor |  |
|  | Model NO. | By Vendor |  |
|  | Type | Solderless Clamp Type-Flame Retardant |  |
|  | Rated Voltage | According to IEC |  |
|  | Size | Min. 4sqmm & AS Per SLD |  |
|  | Color | Neutral (Blue) / PE (Green/ Yellow) |  |
| **15** | **ACCESSORIES** | | |
|  | Panel Lighting | Yes |  |
|  | Space Heater with Thermostat | Yes |  |
|  | Door Key | Yes |  |
|  | Gland Plate (Undrilled) | Yes |  |
|  | Gland Plate Type (Normal/Non-Magnetic) | Normal |  |
|  | Terminal Lugs | Yes |  |
|  | Commissioning Spare Parts | Yes |  |
|  | Two Year Operation Spare Parts | Yes |  |
|  | Routine Test | Witnessed & Report |  |
|  | Type Test Certificate (if Required) | Certificate |  |

This data sheet is valid for all 6 numbers of well pads as follow:

Well Number BK-**12** Well Number BK-**15**

Well Number BK-**05** Well Number W-**046S**

Well Number W-**007S** Well Number BK-**14**

Therefore in item 2.1, “Well XX” is:

D02

XX: BK-12, BK-15, BK-05, W-046S, W-007S, BK-14