Pitanje:

Poštovani, molimo pojašnjenja tenderske dokumentacije broj 02-37/98-2018-JP27 Radovi - izgradnja nove trafostanice 04/50 kV na UPOV-u - ORN - 31174000 za potrebe JKP "Vodokanal" Sombor

1. Stranica br. 6/46 od 46 TD pod tačkom 2.1 navodi se isporuka i montaža prefabrikovanog 20 kV rasklopnog postrojenja elektrane pojedinačnih modularnih ćelija u konfiguraciji: - Prekidačka ćelija 1 kom, - Direktni kablovski priključak 1 kom. Si 20 kV, 20 kA. Rasklopno postrojenjeje kompletno opremljeno opremom za zaštitu od ostrvskog rada. Zaštitno rele je u prekidačkoj ćeliji je tipa REF 615 ili odgovarajući sa optičkim interfejsom za komunikaciju sa SDU. U ćeli se montirani odgovarajući SMT i NMT za potrebe zaštite i merenja u skladu sa zahtevima nadležne EDB

Naše pitanje glasi koja je dimenzija modularnog postojenja - ćelija, kog su tipa (vazduhom izolovano sa aparatima u SF6 tehnici, SF6 RMU postrojenje ili vazduhom izolovano postrojenje sa vazduhom izolovanim aparatima), da li je u prekidačkoj ćeliji ugrađen vakumski prekidač ili SF6 prekidač i da li se može dobiti jednopolna šema, predmer ili referntni proizvođači za traženo postrojenje.

Odgovor:

1. U prilogu su date šeme I ostali potrebni podaci za potpuno definisanje prekidačke ćelije.

SWITCHGEAR TYPE : **UniSec 24kV / 50Hz - 630A - 20kA x1 s**

DOCUMENT : **General Arrangement Drawings**

CHARACTERISTICS

(IN COMPLIANCE WITH STANDARD IEC 62271-200)

SWITCHGEAR VERSION	= COMPLETE
RATED VOLTAGE (Un)	= 24 kV
OPERATING VOLTAGE	= 20 kV
RATED FREQUENCY (fr)	= 50 Hz
RATED LIGHTNING IMPULSE WITHSTAND VOLTAGE (Up)	= 125 kV
RATED POWER FREQUENCY WITHSTAND VOLTAGE (Ud)	= 50 kV
RATED CURRENT OF MAIN BUSBARS (Ir)	= 630 A
RATED SHORT-TIME WITHSTAND CURRENT (Ik)	= 20 kA
RATED PEAK WITHSTAND CURRENT (Ip)	= 50 kA
RATED DURATION OF SHORT CIRCUIT (tk)	= 1 s
INTERNAL ARC CLASSIFICATION (IAC)	= AFL
AMBIENT CONDITION	= NORMAL
AMBIENT AIR TEMPERATURE	= -5°C ..+40°C
DEGREE OF PROTECTION (OPERATION SEATS EXCLUDED)	= IP3X
DEGREE OF PROTECTION WITH OPEN DOORS	= IP2X
RATED SUPPLY VOLTAGE OF CONTROL AND SIGNALLING CIRCUITS (Ua)	= 48VDC
RATED SUPPLY VOLTAGE OF SPRING CHARGING MOTOR (Ua)	= 48VDC
RATED SUPPLY VOLTAGE OF LIGHTING AND HEATING CIRCUITS (Ua)	= 230VAC
TYPE OF CABLE FOR LOW VOLTAGE CONDUCTORS	= PVC
CROSS-SECTION OF CONDUCTORS FOR CURRENT CIRCUITS	= 4 mm²
CROSS-SECTION OF CONDUCTORS FOR VOLTAGE CIRCUITS	= 1.5 mm²
CROSS-SECTION OF CONDUCTORS FOR MOTORS	= 2.5 mm²
CROSS-SECTION OF OTHER CONDUCTORS (CONTROL AND SIGNALLING CIRCUITS)	= 1 mm²
CROSS-SECTION OF CONDUCTORS FOR INTERCONNECTIONS	= 2.5 mm²
CROSS-SECTION OF CONDUCTORS FOR INTERCONNECTIONS OF SUPPLY VOLTAGE	= 4 mm²
COMMUNICATION CABLE	= -

NOTES

COLOUR OF FRONT DOORS = RAL7035

SIDEWALLS PAINTED = YES SIDES = L+R

SUPPLIED IMPLEMENTS

MIMIC DIAGRAM

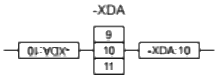
COUPLE OF SIDES CLOSING

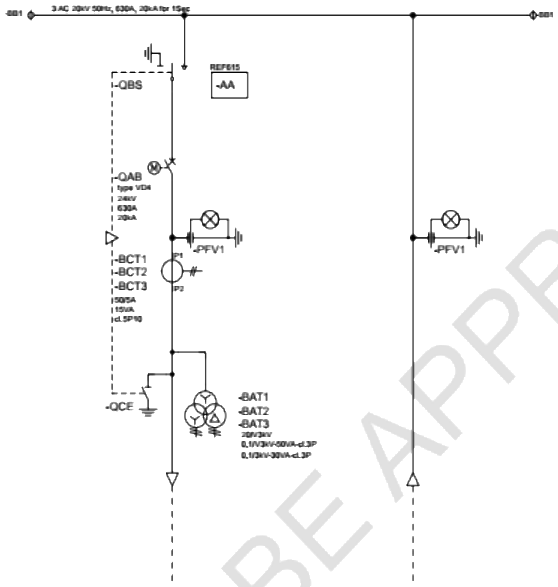
BOTTOM CLOSURE

ISOLATOR OPERATING LEVER

IDENTIFICATION OF CONDUCTORS

FOR IDENTIFICATION OF CONDUCTORS THE "LOCAL END CONNECTION LABELLING" SYSTEM IS USED, IN COMPLIANCE WITH STANDARD IEC 62491 PARAGRAPH 6.2. THIS SYSTEM FORESEES THAT THE MARKING CONDUCTOR END SHOWS THE DESIGNATION OF THE TERMINAL TO WHICH IT IS CONNECTED. IN COMPLIANCE WITH STANDARD IEC 61666 EACH CONDUCTOR IS IDENTIFIED WITH THE REFERENCE DESIGNATION OF THE CONNECTED ELECTRICAL COMPONENT FOLLOWED BY SIGN ":" (COLON), FOLLOWED BY THE TERMINAL DESIGNATION. FOR EXAMPLE THE CONDUCTOR CONNECTED TO TERMINAL "10" OF THE COMPONENT WITH DESIGNATION "-XA" HAS THE MARKING "-XA:10". THE CONDUCTOR MARKING IS PLACED IN SUCH A WAY TO READ IT ALWAYS FROM THE TERMINAL TOWARDS THE CONDUCTOR, AS SHOWN BELOW





Panel	H01	H02
Panel Name	SBC	DRC
Description	Prekidačka ćelija	Odvod na T2
Circuit Diagram		

INDEX OF SHEETS

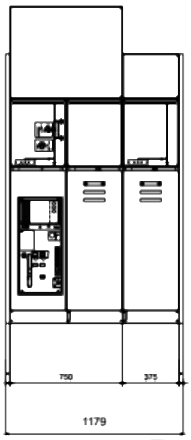
SHEET	DESCRIPTION	REVISION
A01	COVER SHEET	
A03	INDEX OF SHEETS	
C01	GENERAL CHARACTERISTICS	
D01	SINGLE LINE DIAGRAM	A
F01	FRONT VIEW DRAWING	A
H01	FOUNDATION FRAMES DRAWING	A
J01	FOUNDATION FRAME DRAWINGS WITH DETAILS	A
L01	SECTION VIEW	A
L02	SECTION VIEW	A

STANDARD REFERENCES

THIS DRAWING IS IN COMPLIANCE WITH THE FOLLOWING INTERNATIONAL STANDARDS:
- IEC 60617: GRAPHICAL SYMBOLS FOR DIAGRAMS
- IEC 61082: PREPARATION OF DOCUMENTS USED IN ELECTROTECHNOLOGY
- IEC 81346: STRUCTURING PRINCIPLES AND REFERENCE DESIGNATIONS

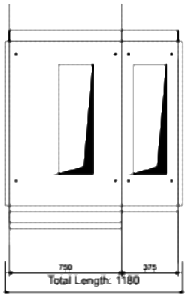
THE DIAGRAM INDICATES COMPONENTS HAVING A MOVABLE PART IN THE FOLLOWING POSITION OR OPERATIONAL STATE (IEC 61082-17.4.4.1):
- C.BREAKER OR CONTACTOR IN OPEN (OFF) AND SERVICE POSITION
- DISCONNECTORS AND EARTHING SWITCH IN OPEN POSITION
- WITHDRAWABLE VOLTAGE TRANSFORMERS IN CONNECTED POSITION
- CLOSING SPRINGS OF C.BREAKER IN DISCHARGED POSITION
- CONNECTOR OF C.BREAKER AUXILIARY CIRCUITS IN CONNECTED POSITION
- CIRCUITS IN DE-ENERGIZED STATE
- RELAYS IN NON-ACTUATED STATE
- GAS PRESSURE AT RATED SERVICE VALUE
- FUSES NOT OPERATED
- DOORS AND PRESSURE RELIEF FLAPS IN CLOSED POSITION

FRONT VIEW



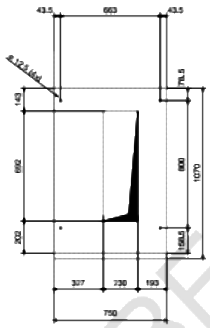
Panel	H01	H02
Panel Type	SBC	DRC
Description	Prekidačka ćelija	Odvod na T2

FOUNDATION FRAMES

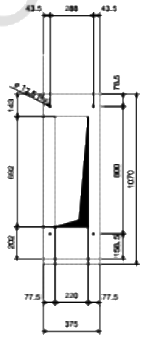


Panel	H01	H02
Panel Type	SBC	DRC
Description	Prekidačka ćelija	Odvod na T2

FOUNDATION FRAMES DETAILS

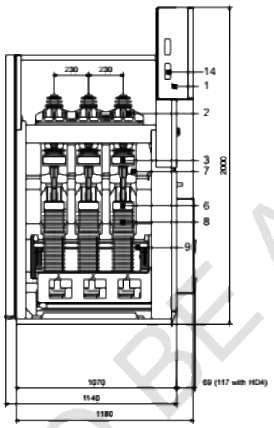


PANELS:
H01



PANELS:
H02

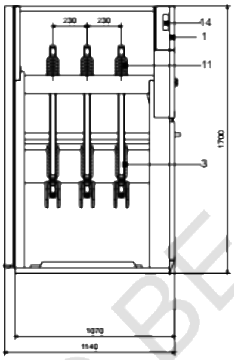
SECTION VIEW



Panel :
H01

-	DISTANCE BETWEEN THE CABLE CONNECTION POINT AND THE FLOOR = 480mm
1	LVC
2	SWITCH DISCONNECTOR
3	LOWER COPPER BARS
6	CURRENT TRANSFORMER
7	VOLTAGE TRANSFORMER
8	CIRCUIT BREAKER
9	EARTHING-SWITCH
14	INTERPANEL WIRING PASSAGE

SECTION VIEW



Panel :
H02

-	DISTANCE BETWEEN THE CABLE CONNECTION POINT AND THE FLOOR = 500mm
1	LVC
3	LOWER COPPER BARS
11	INSULATOR
14	INTERPANEL WIRING PASSAGE