

## **ANNEX II: TECHNICAL SPECIFICATIONS & ANNEX III: TECHNICAL OFFER**

### **SECTION 3: TECHNICAL DATA SCHEDULE**

#### **LOT 3: Development of remote supervision and control systems for the medium voltage distribution grid in the area of Elektrosrbija Kraljevo**

##### **TECHNICAL REQUIREMENTS FOR SF6 LINE LOAD BREAK SWITCH WITH MOTOR DRIVE FOR 20 kV**

Item	Description	Unit	Required	Guaranteed
<b>1</b>	<b>GENERAL</b>			
1.1	Manufacturer			
1.2	Type			
1.3	Model			
1.4	Country of origin			
1.5	Standards			
1.6	QMS		ISO 9001	
1.7	Mount location (indoor/outdoor)		outdoor	
<b>2</b>	<b>RATED VALUES</b>			
2.1	Rated voltage	kV	24	
2.2	Rated industrial frequency withstand voltage (1min, 50Hz)	kV	50	
2.3	Rated frequency	Hz	50	
2.4	Rated withstand current	A	min 400	
2.5	Short-time withstand current	kA	16	
2.6	Inrush current	kA	16	
2.7	Rated impulse withstand voltage	kV	125	
<b>3</b>	<b>MOTOR DRIVE</b>			
3.1	Power source	V	24 VDC	
3.2	Maximum energy consumption at Rated voltage	W	150 W	
3.3	Operating temperature	°C	-25°C to +40°C	
<b>4</b>	<b>ENVIRONMENT CONDITIONS</b>			
4.1	Temperature range	°C	-25°C to +50°C	
4.2	Humidity		0-90%	
4.3	Altitude	m		
4.4	Number of mechanical operations		min 1000 cycles	
4.5	Number of operations under full load		100 times	

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## SF6 LINE LOAD BREAK SWITCH WITH MOTOR DRIVE FOR 20 kV

Item	Description	Unit	Required	Guaranteed
4.6	Maximum thickness of tank shell	mm	3, stainless steel	
4.7	Rated filling pressure	bar	Min 1.25 bar	
5	<b>CASING</b>			
5.1	Material		Stainless steel	
5.2	Insulators		Silicone rubber	
5.3	Insulator connections		Silver-coated copper	
5.4	Protection level		IP64 IP54 is acceptable in case that complete primary equipment is maintenance free for 25 years under normal operating conditions	
6	<b>DOCUMENTATION</b>			
6.1	The device shall be delivered with complete documentation (CD and printouts) for mounting and maintenance. The documentation shall be in Serbian		yes	
7	<b>CERTIFICATE OF COMPLIANCE AND TESTING DOCUMENTATION</b>			
7.1	The device shall be delivered with complete certificate of compliance documentation: factory test sheets in accordance with IEC standards (IEC60265-1, IEC60694 or other standards covering the same requirements)		yes	
8	<b>FUNCTIONS</b>			
8.1	Outdoor mount		yes	
8.2	Three-pole		yes	
8.3	Intended for remote supervision and control, i.e. providing for easy connection with the remote unit without additional adjustments		yes	
8.4	Manual switch on/off option included		yes	
8.5	Number of manipulations registry included		for equipment that is not remotely supervised	

Item	Description	Unit	Required	Guaranteed
8.6	Casing and drive mechanisms shall be made of stainless steel and all nonferrous metals included in the operating mechanisms shall be corrosion proofed and/or galvanized		yes	
8.7	The disconnecter shall be capable of withstanding transient return voltage in contacts		yes	
8.8	Highly dependable operation, i.e. no need for regular maintenance;		yes	
8.9	the Supplier shall provide an authorized service outlet and spare parts in the territory of the Republic of Serbia in a period not shorter than 2 years from the date of commissioning the system. The equipment supplier shall be obligated to provide a warranty period for the installed equipment within 1 year from the date of commissioning the system (per site);		yes	
8.10	The disconnecter shall be able to prevent the possibility of overvoltage occurring during disconnection		yes	
8.11	The disconnecter shall require a reduced amount of energy for gas compression		yes	
8.12	When switching on/off, the dynamic force inside the disconnecter should be reduced, which shall be achieved via self-extinguishing		yes	
8.13	The disconnecter shall consume little energy for triggering		yes	
8.14	Resistant to external influences		yes	
8.15	The offered equipment shall comply with SRPS, i.e. IEC standards relevant to this field.		yes	
OVERALL COMPLIANCE WITH THE REQUIREMENTS (YES/NO)				