

Caiet de sarcini

№ crt.	Simbol norme și Cod resurse	Denumirea lucrărilor	Unitatea de măsură	Cantitatea	Valoarea de deviz, lei	
					Pe unitate de măsură incl. salariu	Total incl. salariu
1	2	3	4	5	6	7
1. Lucrari de constructii						
1.1. LEA 10 kV						
1	33-04-003-5 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea stîlpilor din beton armat pentru suspendarea comuna a conductorilor LEA 0,38, 6-10 kV fara adaosuri, cu un singur picior cu o proptea	buc	1		
2	00015. п. K=3=1,0000; M=1,0000; III=1,0000	Stîlp din beton armat CB 105-5	buc	2		
3	0002. п. K=3=1,0000; M=1,0000; III=1,0000	Beton marfa clasa C8/10	m3	0.45		
4	33-04-007-1 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea placilor din beton armat pentru sustineri LEA 35 kV, de ancorare, volum pina la 0,2 m3	buc	7		
5	0003. п. K=3=1,0000; M=1,0000; III=1,0000	Placa de ancorare П-3и	buc	7		
6	33-04-030-3 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea intreruptoarelor: cu ajutorul mecanismelor	set	1		
7	33-04-030-1 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea detensionatoarelor: cu ajutorul mecanismelor CUT OUT	set	1		
8	33-04-027-1 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea substatiilor de transformare de stilpi, putere pina la 100 kVA: montarea elementelor de constructii	buc	1		
9	33-04-027-2 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea substatiilor de transformare de stilpi, putere pina la 100 kVA: montarea utilajului	buc	1		
10	33-04-015-1 п. K=3=1,0000; M=1,0000; III=1,0000	Instalarea legarii la pamint a sustinerilor LEA si a substatiilor	10 m	2.36		

1	2	3	4	5	6	7
11	33-04-009-2 п. K=3=1,0000; M=1,0000; III=1,0000	Suspendarea in localitate nepopulata a conductorilor LEA 6-10 kV, sectiune peste 35 mm ² , cu ajutorul mecanismelor	1 km	0.008		
12	33-04-009-10 п. K=3=1,0000; M=1,0000; III=1,0000	La majorarea cantitatii de stilpi la 1 km LEA, a adauga la norma 33-04-009-2	buc	5		
13	0004 п. K=3=1,0000; M=1,0000; III=1,0000	Conductor din aluminiu de tip SIP-3 1x70 mm ²	m	30		
14	0005. п. K=3=1,0000; M=1,0000; III=1,0000	Izolator de tip SF-20-G	buc	7		
15	0006. п. K=3=1,0000; M=1,0000; III=1,0000	Izolator de tensiune polimer de tipPS-70	buc	12		
16	0007. п. K=3=1,0000; M=1,0000; III=1,0000	Izolator de tensiune polimer de tip SML 70/20G	buc	15		
17	0008. п. K=3=1,0000; M=1,0000; III=1,0000	Traversa 10kV de tip M-2-10-SP	buc	3		
18	0009 п. K=3=1,0000; M=1,0000; III=1,0000	Constructie metalica sub separator CUT-OUT	buc	1		
19	0010. п. K=3=1,0000; M=1,0000; III=1,0000	Traversa 10kV de tip TM-1	buc	1		
20	0011. п. K=3=1,0000; M=1,0000; III=1,0000	Traversa 10kV de tip TM-2	buc	1		
21	0012. п. K=3=1,0000; M=1,0000; III=1,0000	Traversa 10kV de tip TM-6	buc	2		
22	0013. п. K=3=1,0000; M=1,0000; III=1,0000	Constructie metalica pentru sustinerea transformatorului	buc	1		
23	0014. п. K=3=1,0000; M=1,0000; III=1,0000	Scoaba de tip H1	buc	7		

1	2	3	4	5	6	7
24	0015. п. K=3=1,0000; M=1,0000; III=1,0000	Scoaba de tip H7	buc	6		
25	0016. п. K=3=1,0000; M=1,0000; III=1,0000	Scoaba de tip H8	buc	2		
26	00017. п. K=3=1,0000; M=1,0000; III=1,0000	Consola de tip RA-1	buc	1		
27	00018. п. K=3=1,0000; M=1,0000; III=1,0000	Consola de tip RA-2	buc	1		
28	00019. п. K=3=1,0000; M=1,0000; III=1,0000	Consola de tip RA-3	buc	2		
29	00020. п. K=3=1,0000; M=1,0000; III=1,0000	Consola de tip RA-4	buc	1		
30	00021. п. K=3=1,0000; M=1,0000; III=1,0000	Consola de tip RA-5	buc	1		
31	00023. п. K=3=1,0000; M=1,0000; III=1,0000	Consola de tip CM1	buc	4		
32	00024. п. K=3=1,0000; M=1,0000; III=1,0000	Scoaba de tip K1	buc	6		
33	00025. п. K=3=1,0000; M=1,0000; III=1,0000	Marca de tip K3	buc	2		
34	00026. п. K=3=1,0000; M=1,0000; III=1,0000	Capatul de intarire de tip OG-2	buc	6		
35	00027. п. K=3=1,0000; M=1,0000; III=1,0000	Capatul de intarire de tip OG-5	buc	3		
36	00028. п. K=3=1,0000; M=1,0000; III=1,0000	Bulon de tip B5	buc	3		
37	00029. п. K=3=1,0000;	Consola de tip U1	buc	4		

1	2	3	4	5	6	7
	M=1,0000; III=1,0000					
38	00030. п. K=3=1,0000; M=1,0000; III=1,0000	Catarama de tip G1	buc	7		
39	00031. п. K=3=1,0000; M=1,0000; III=1,0000	Clema de intindere de tip NB-2-6A	buc	15		
40	00032. п. K=3=1,0000; M=1,0000; III=1,0000	Ureche de tip U1-7-16	buc	6		
41	00033. п. K=3=1,0000; M=1,0000; III=1,0000	Clema conexiune de tip PS-2	buc	20		
42	00034. п. K=3=1,0000; M=1,0000; III=1,0000	Clema de tip A1A	buc	6		
43	00035. п. K=3=1,0000; M=1,0000; III=1,0000	Clema de tip A2A	buc	12		
44	00036. п. K=3=1,0000; M=1,0000; III=1,0000	Veriga intermediara de tip PRT-7-1	buc	10		
45	00037. п. K=3=1,0000; M=1,0000; III=1,0000	Brida de tip CPC-7-17	buc	7		
46	00038. п. K=3=1,0000; M=1,0000; III=1,0000	Clema de tip PGN-2-6	buc	2		
47	00039. п. K=3=1,0000; M=1,0000; III=1,0000	Cleme placa de conectare - tip PA	buc	21		
48	00040. п. K=3=1,0000; M=1,0000; III=1,0000	Scoaba de tip SC-7-1A	buc	1		
49	00041 п. K=3=1,0000; M=1,0000; III=1,0000	Capac pentru izolator de tip K-6	buc	24		
1.2. Statie de transformare						
50	CP10B п. K=3=1,0000; M=1,0000; III=1,0000	Montarea elementelor prefabricate din beton armat la cladiri de locuit sau social-culturale cu structura din beton armat monolit,mixta sau zidarie portanta, la inaltimea pina la 20 m	buc	2		

1	2	3	4	5	6	7
		inclusiv, cu volum de la 0,2-2,5 mc				
51	33-04-029-6 п. K=3=1,0000; M=1,0000; III=1,0000	Montarea utilajului pentru substatii complete de transformare tip chiosc: a substatiiilor de capat cu bransamente aeriene	buc	1		
52	00075. п. K=3=1,0000; M=1,0000; III=1,0000	Transformator de forta cu ulei 25kVA, U=10/0.4kV, schema deconexiune stea / zigzag cu fir nul	buc	1		
53	TsA16A1 п. K=3=1,0000; M=1,0000; III=1,0000	Sapatura manuala de pamint, in spatii limitate, in transe de pina la 4 m adincime, pentru cabluri electrice de inalta tensiune, in pamint cu umiditate naturala fara sprijiniri latime < 1 m, adincime < 1,5 m, teren usor	m3	22.2		
54	TsD19A п. K=3=1,0000; M=1,0000; III=1,0000	Umplutura de pamint compactata, la fundatiile de la stilpii liniilor electrice aeriene de inalta tensiune, cu pamint provenit din teren usor sau mijlociu	m3	22.2		
55	TsD04A п. K=3=1,0000; M=1,0000; III=1,0000	Compactarea cu maiul de mina a umpluturilor executate in sapaturi orizontale sau inclinate la 1/4, inclusiv udarea fiecarui strat de pamint in parte, avind 10 cm grosime pamint necoeziv	m3	22.2		
1.3. LEC 10kV						
56	TsA02E п. K=3=1,0000; M=1,0000; III=1,0000	Sapatura manuala de pamint in spatii limitate, avind sub 1,00 m sau peste 1,00 m latime, executata fara sprijiniri, cu taluz vertical, la fundatii, canale, subsoluri, drenuri, trepte de infratire, in pamint coeziv mijlociu sau foarte coeziv adincime < 1,5 m teren mijlociu	m3	60		
57	08-02-148-1 п. K=3=1,0000; M=1,0000; III=1,0000	Cablu pina la 35 kV in tevi, blocuri si cutii pozate, masa 1 m pina la: 1 kg	100 m	17.9		
58	00055. п. K=3=1,0000; M=1,0000; III=1,0000	Cablu de tip АБл 3x70 mmp	m.l.	185		
59	00055. п. K=3=1,0000; M=1,0000; III=1,0000	Cablu de tip АБл 3x70 mmp	m.l.	185		
60	AcF03A п. K=3=1,0000; M=1,0000; III=1,0000	Umpluturi in santuri la conductele de alimentare cu apa sau canalizare, ca substrat, strat de protectie, strat de izolare sau strat filtrant la tuburile de drenaj, executate cu nisip	m3	35		
61	TsD18B п. K=3=1,0000; M=1,0000; III=1,0000	Umplutura compactata in santuri, pentru cablurile ingropate ale liniilor electrice de inalta tensiune, executata cu pamint provenit din teren mijlociu	m3	25		
62	TsD01B п. K=3=1,0000; M=1,0000; III=1,0000	Imprastierea cu lopata a pamintului afinat, in straturi uniforme, de 10-30 cm grosime, printr-o aruncare de pina la 3 m din gramezi, inclusiv sfarimarea bulgarilor, pamintul provenind din teren mijlociu	m3	60		

1	2	3	4	5	6	7
1.4. Inpamintare						
63	TsA02B п. K=3=1,0000; M=1,0000; III=1,0000	Sapatura manuala de pamint in spatii limitate, avind sub 1,00 m sau peste 1,00 m latime, executata fara sprijiniri, cu taluz vertical, la fundatii, canale, subsoluri, drenuri, trepte de infratire, in pamint necoeziv sau slab coeziv adincime < 0,75 m teren mijlociu	m3	8.1		
64	TsD18B п. K=3=1,0000; M=1,0000; III=1,0000	Umplutura compactata in santuri, pentru cablurile ingropate ale liniilor electrice de inalta tensiune, executata cu pamint provenit din teren mijlociu	m3	8.1		
2. Lucrari de montare						
2.1. LEC 0,4 kV						
65	08-03-572-3 п. K=3=1,0000; M=1,0000; III=1,0000	Bloc de comanda de executare tip dulap sau punct de distributie (dulap), montat pe perete, inaltime si latime, mm, pina la 600x600	buc	2		
66	08-03-575-1 п. K=3=1,0000; M=1,0000; III=1,0000	Dispozitiv sau aparat demontat inainte de transportare	buc	8		
67	08-03-600-2 п. K=3=1,0000; M=1,0000; III=1,0000	Contoare, montate pe suport pregatit, cu trei faze	buc	1		
68	08-01-080-3 п. K=3=1,0000; M=1,0000; III=1,0000	Aparat pentru masurare si protectie, cantitate extremitati conectate pina la: 12	buc	2		
69	08-03-522-28 п. K=3=1,0000; M=1,0000; III=1,0000	Comutator pe placa cu dispozitiv de actionare, montat pe suport metalic, tripolar, curent pina la 250 A	buc	1		
70	08-03-575-1 п. K=3=1,0000; M=1,0000; III=1,0000	Dispozitiv sau aparat demontat inainte de transportare	buc	1		
71	08-01-081-2 п. K=3=1,0000; M=1,0000; III=1,0000	Aparat de comanda si semnalizare (buton, cheie de comanda, lacat de blocare electromagnetica, semnal acustic, lampa de semnalizare), cantitate extremitati conectate pina la: 6	buc	2		
72	08-03-591-8 п. K=3=1,0000; M=1,0000; III=1,0000	Priza de fisa tip neingropat, la instalatie deschisa	100 buc	0.0001		
73	00040. п. K=3=1,0000; M=1,0000; III=1,0000	Priza montare pe bara DIN 2P+E, 16A, 230V	buc	1.0000		
74	08-02-396-6 п. K=3=1,0000; M=1,0000; III=1,0000	Canal metalic pe pereti si tavane, lungime 3 m	100 m	0.03		

1	2	3	4	5	6	7
75	00051. п. K=3=1,0000; M=1,0000; III=1,0000	Canal metalic pentru cabluri cucapac sectiune 60x50(h) mm	m.l.	3		
76	08-02-411-2 п. K=3=1,0000; M=1,0000; III=1,0000	Furtun metalic, diametrul exterior pina la 60 mm	100 m	0.05		
77	00052. п. K=3=1,0000; M=1,0000; III=1,0000	Tub metalic flexibil cu izolatiePVC D=50 mm	m.l.	5		
78	08-02-409-1 п. K=3=1,0000; M=1,0000; III=1,0000	Teava din vinilplast pe constructii instalate, pe pereti si coloane, fixare cu scoabe, diametru pina la 25 mm	100 m	0.045		
79	00054. п. K=3=1,0000; M=1,0000; III=1,0000	Teava corugata cu sonda,rezistenta la strivire 750N, d=25mm	m.l.	4.5		
80	08-02-148-1 п. K=3=1,0000; M=1,0000; III=1,0000	Cablu pina la 35 kV in tevi, blocuri si cutii pozate, masa 1 m pina la: 1 kg	100 m	0.09		
81	00055. п. K=3=1,0000; M=1,0000; III=1,0000	Cablu de tip AVVGng 4x150 mmp	m.l.	6		
82	00056. п. K=3=1,0000; M=1,0000; III=1,0000	Cablu de tip AVVGng 5x150mmp	m.l.	3		
83	08-02-144-4 п. K=3=1,0000; M=1,0000; III=1,0000	Conectarea firelor conductorilor sau a cablurilor la cleme, sectiune pina la: 150 mm ²	100 buc	0.16		
84	00057. п. K=3=1,0000; M=1,0000; III=1,0000	Papuc de cablu pentru cablu dinaluminiu, sectiune cablu - 150mmp	buc	8		
85	00058. п. K=3=1,0000; M=1,0000; III=1,0000	Papuc de cablu pentru cablu dinaluminiu, sectiune cablu - 150mmp	buc	8		
86	08-02-148-1 п. K=3=1,0000; M=1,0000; III=1,0000	Cablu pina la 35 kV in tevi, blocuri si cutii pozate, masa 1 m pina la: 1 kg	100 m	0.13		
87	00059. п. K=3=1,0000; M=1,0000; III=1,0000	Cablu de tip VVGng-LS-0.66-3x1.5 mmp	m.l.	3		
88	00060. п. K=3=1,0000; M=1,0000;	Cablu de tip VVGng-LS-0.66-3x2.5 mmp	m.l.	10		

1	2	3	4	5	6	7
	III=1,0000					
89	08-02-148-1 п. K=3=1,0000; M=1,0000; III=1,0000	Cablu pina la 35 kV in tevi, blocuri si cutii pozate, masa 1 m pina la: 1 kg	100 m	0.05		
90	08-02-145-1 п. K=3=1,0000; M=1,0000; III=1,0000	Cablu pina la 35 kV, pozat pe fundul canalului fara fixari, masa 1 m pina la: 1 kg	100 m	0.78		
91	08-02-163-1 п. K=3=1,0000; M=1,0000; III=1,0000	Cap terminal cu manusi termocontractabile din polietilena pentru cablu cu 3-4 conductori cu izolatie din hirtie, tensiune pina la 1 kV, sectiunea unui conductor, pina la: 150 mm ²	buc	6		
92	00066. п. K=3=1,0000; M=1,0000; III=1,0000	Manusa termoretractabila pentrucablul de tip AVVGng 4x150mm ²	buc	2		
93	00067. п. K=3=1,0000; M=1,0000; III=1,0000	Manusa termoretractabila pentrucablul de tip AVVGng 5x150 mmp	buc	2		
94	00069. п. K=3=1,0000; M=1,0000; III=1,0000	Manson terminal,termoretractabil, pentru cabluricu tensiunea de pina la 1000V,montare interioara pentru cablu cu4 fire sectiune 16-25 mmp	buc	2		
95	00070. п. K=3=1,0000; M=1,0000; III=1,0000	Manson terminal,termoretractabil, pentru cabluricu tensiunea de pina la 1000V,montare interioara pentru cablu cu5 fire sectiune 16-25 mmp	buc	2		
2.2. Impamintare						
96	08-02-472-2 п. K=3=1,0000; M=1,0000; III=1,0000	Conductori de legare la pamint: priza de pamint, orizontala, din otel fisie, sectiune 160 mm ²	100 m	0.33		
97	08-02-472-6 п. K=3=1,0000; M=1,0000; III=1,0000	Conductor de legare la pamint, deschis, pe suporturi de constructii, din otel fisie, sectiune 100 mm ²	100 m	0.12		
98	08-02-471-4 п. K=3=1,0000; M=1,0000; III=1,0000	Priza de pamint, verticala, din otel rotund, diametru 16 mm	10 buc	0.8		
99	08-02-471-4 п. K=3=1,0000; M=1,0000; III=1,0000	Priza de pamint, verticala, din otel rotund, diametru 16 mm	10 buc	1.8		
100	08-02-471-4 п. K=3=1,0000; M=1,0000; III=1,0000	Priza de pamint, verticala, din otel rotund, diametru 16 mm	10 buc	0.2		
101	08-02-471-4 п. K=3=1,0000; M=1,0000; III=1,0000	Priza de pamint, verticala, din otel rotund, diametru 16 mm Coeficient la manoperei=2,0000 Coeficient la pentru materiale=2,0000 Coeficient la utilajului=2,0000	10 buc	0.6		

1	2	3	4	5	6	7
3. Utilaj						
3.1. LEA 10kV						
102	00071. п. K=3=1,0000; M=1,0000; III=1,0000	Separator CUT-OUT U=12kV,I=200A cu tub portfuzibil	buc	3		
103	00073. п. K=3=1,0000; M=1,0000; III=1,0000	Fuzibil pentru CUT-OUT 8A buc	buc	3		
104	00074. п. K=3=1,0000; M=1,0000; III=1,0000	Descarcator Unom=10kV	buc	3		
3.2. LEC 0,4 kV						
105	00076. п. K=3=1,0000; M=1,0000; III=1,0000	Panou de evidenta de tip BZUMDDE-400 completat cu bare DIN,N, PE, IP 54, dotat cu modul pentru amplasarea contorului de evidenta a energiei electrice 220/380V, intreruptor de sarcina si intreruptor automat	buc	1		
106	00077. п. K=3=1,0000; M=1,0000; III=1,0000	Contor de evidenta a energiei electrice (active / reactive), multitarifar, conectare directa, Unom = 3 x 230/380 V, I = 5 (85)A ; 50 Hz	buc	1		
107	00078. п. K=3=1,0000; M=1,0000; III=1,0000	Separator de sarcina modular, Un=400V, 3P, In=63A	buc	1		
108	00079. п. K=3=1,0000; M=1,0000; III=1,0000	Intreruptor automat tripolar, caracteristica reglabila, In=400A, Un=400V	buc	1		
109	00080. п. K=3=1,0000; M=1,0000; III=1,0000	Tablou de distributie din metal montat aparent pe perete, dimensiuni de gabarit: 650x220x500(h) mm, IP54, dotat cu lacat si bare de tip DIN, N, PE	buc	1		
110	00081. п. K=3=1,0000; M=1,0000; III=1,0000	Separator de sarcina modular, Un=400V, 3P, In=400A	buc	2		
111	00083. п. K=3=1,0000; M=1,0000; III=1,0000	Protectie la supratensiuni OIIC 1-B/3P	buc	1		
112	00084. п. K=3=1,0000; M=1,0000; III=1,0000	Intreruptor automat tripolar, caracteristica C, In=25A, Un=400V	buc	1		
113	00085. п. K=3=1,0000; M=1,0000; III=1,0000	Intreruptor automat monopolar, caracteristica B, In=6A, U=230V	buc	1		
114	00086. п. K=3=1,0000; M=1,0000;	Intreruptor automat monopolar, caracteristica B, In=3A, U=230V	buc	1		

1	2	3	4	5	6	7
	III=1,0000					
115	00087. п. K=3=1,0000; M=1,0000; III=1,0000	Intrerupator automat de curentdiferentiat, bipolar, cucaracteristica "AC", In=16A,30mA, Un=230V	buc	1		
116	00088. п. K=3=1,0000; M=1,0000; III=1,0000	Demarator electromagnet modular de tip KM20-400 A,230 V	buc	1		