

TRANSFORMADOR NO. TR-05B-05 DE SERVICIOS AUXILIARES DE 225 KVA	POSTE POLIESTER Y FIBRA DE VIDRIO	SECCIÓN VÍA	CARGA LUMINARIAS	CARGA TOTAL LUMINARIA LED (KVA)	CARGA TOTAL USUARIOS (KVA)	CARGA DEMANDADA USUARIOS (KVA)	CAPACIDAD TRANSFORMADOR (KVA)	RESERVA (KVA)	BAJANTES		CORTACIRCUITOS		CON DPS CON TESTIGO, PROGRAMADOR HORARIO DE A-P Y RELEVADOR				
									FASES		25	KACI					
									NEUTRO		BREAKERS 2X20 A.						
									COBRE -THW		CIRCUITO 2F - 3H - 220V						
TRAMO	LONGITUD (METROS X KG)	ANCHO (METROS)	LED (W)	CARGA LUMINARIAS LED (KVA)	NÚMERO DE LUMINARIAS (UNID.)	CARGAS AUXILIARES (KVA)	CARGA TOTAL (KVA)	LONGITUD DEL TRAMO (METROS)	SUMATORIA LONGITUD DEL TRAMO (METROS)	MOMENTO ELÉCTRICO (KVAXM)	CALIBRE CU	DIÁMETRO PVC	% REGULACIÓN MOMENTO X CTE	CORRIENTE (AMPERIOS)	CORRIENTE (AMPERIOS) X 1,25		
VANOS											SUBTERRÁNEO	PULGADAS	CTE	TOTAL %			
PP-05B-01	C9P1	10X510	9.20	49	0.061	1	0.015	0.077	72.00	72.00	5.513	2#6, 1#12	3/4"	0.006	0.03	0.44	0.54
C9P1	C9P2	10X510	9.20	49	0.061	1	0.015	0.077	30.00	102.00	7.809	2#6, 1#12	3/4"	0.006	0.05	0.44	0.54
C9P2	C9P3	10X510	9.20	49	0.061	1	0.015	0.077	29.43	131.43	10.063	2#6, 1#12	3/4"	0.006	0.06	0.44	0.54
C9P3	C9P4	10X510	9.20	49	0.061	1	0.015	0.077	23.66	155.09	11.874	2#6, 1#12	3/4"	0.006	0.07	0.44	0.54
C9P4	C9P5	10X510	9.20	49	0.061	1	0.015	0.077	30.00	185.09	14.171	2#6, 1#12	3/4"	0.006	0.09	0.44	0.54
C9P5	C9P6	10X510	9.20	49	0.061	1	0.015	0.077	30.00	215.09	16.468	2#6, 1#12	3/4"	0.006	0.10	0.44	0.54
C9P6	C9P7	10X510	9.20	49	0.061	1	0.015	0.077	30.00	245.09	18.765	2#6, 1#12	3/4"	0.006	0.11	0.44	0.54
C9P7	C9P8	10X510	9.20	49	0.061	1	0.015	0.077	29.22	274.31	21.002	2#6, 1#12	3/4"	0.006	0.13	0.44	0.54
C9P8	C9P9	10X510	9.20	49	0.061	1	0.015	0.077	29.35	303.66	23.249	2#6, 1#12	3/4"	0.006	0.14	0.44	0.54
C9P9	C9P10	10X510	9.20	49	0.061	1	0.015	0.077	29.29	332.95	25.491	2#6, 1#12	3/4"	0.006	0.15	0.44	0.54
C9P10	C9P11	10X510	9.20	49	0.061	1	0.015	0.077	29.42	362.37	27.744	2#6, 1#12	3/4"	0.006	0.17	0.44	0.54
C9P11	C9P12	10X510	9.20	49	0.061	1	0.015	0.077	29.42	391.79	29.996	2#6, 1#12	3/4"	0.006	0.18	0.44	0.54
C9P12	C9P13	10X510	9.20	49	0.061	1	0.015	0.077	29.33	421.12	32.242	2#6, 1#12	3/4"	0.006	0.19	0.44	0.54
C9P13	C9P14	10X510	9.20	49	0.061	1	0.015	0.077	29.30	450.42	34.485	2#6, 1#12	3/4"	0.006	0.21	0.44	0.54
C9P14	C9P15	10X510	9.20	49	0.061	1	0.015	0.077	28.70	479.12	36.683	2#6, 1#12	3/4"	0.006	0.22	0.44	0.54
C9P15	C9P16	12X510	Z-V	72	0.090	1	0.023	0.113	29.30	508.42	37.927	2#6, 1#12	3/4"	0.006	0.24	0.64	0.80
C9P16	C9P17	12X510	Z-V	72	0.090	1	0.023	0.113	29.60	538.02	40.170	2#6, 1#12	3/4"	0.006	0.26	0.64	0.80
C9P17	C9P18	10X510	9.20	49	0.061	1	0.015	0.077	29.44	567.46	42.413	2#6, 1#12	3/4"	0.006	0.28	0.64	0.80
C9P18	C9P19	10X510	9.20	49	0.061	1	0.015	0.077	29.40	596.86	44.656	2#6, 1#12	3/4"	0.006	0.29	0.64	0.80
C9P19	C9P20	10X510	9.20	49	0.061	1	0.015	0.077	29.45	626.31	46.900	2#6, 1#12	3/4"	0.006	0.30	0.64	0.80
C9P20	C9P21	10X510	9.20	49	0.061	1	0.015	0.077	29.44	655.75	49.143	2#6, 1#12	3/4"	0.006	0.31	0.64	0.80
C9P21	C9P22	10X510	9.20	49	0.061	1	0.015	0.077	25.60	685.35	51.386	2#6, 1#12	3/4"	0.006	0.32	0.64	0.80
TOTAL TRAMO PRINCIPAL	22		1124	1.405	22	0.351	1.756	681.35				2#6, 1#12	3/4"	0.006	4.04	9.979	12.473
C9A	C9P23	10X510	9.20	49	0.061	1	0.015	0.077	12.00	12.00	0.919	2#6, 1#12	3/4"	0.006	0.01	0.44	0.54
C9P23	C9P24	10X510	9.20	49	0.061	1	0.015	0.077	29.40	41.40	3.170	2#6, 1#12	3/4"	0.006	0.02	0.44	0.54
C9P24	C9P25	10X510	9.20	49	0.061	1	0.015	0.077	29.25	70.65	5.409	2#6, 1#12	3/4"	0.006	0.03	0.44	0.54
C9P25	C9P26	10X510	6.00	39	0.049	1	0.012	0.061	19.30	89.95	5.481	2#6, 1#12	3/4"	0.006	0.03	0.35	0.43
TOTAL TRAMOS AUXILIARES	4		186	0.233	4	0.058	0.291	89.95				2#6, 1#12	3/4"	0.006	0.09	1.65	2.06
TOTAL	26		1,310	1.638	26	0.409	2.047	771.30				2#6, 1#12	3/4"	0.006		11.63	14.54

NOTA 1: REGULACIÓN TRAMO PRINCIPAL = 4.04 %  
 NOTA 2: LOS TRAMOS PRINCIPALES Y AUXILIARES VAN EN CALIBRE ESPECIFICADO EN LOS CUADROS DE CÁLCULO Y LOS TRAMOS COMPLEMENTARIOS VAN EN CALIBRE 2#12, 1#12 (DE USO FINAL AL POSTE Y LUMINARIA LED)

CUADRO DE CÁLCULO DEL CIRCUITO DE ILUMINACIÓN NO. 9. QUE SALE DEL TABLERO DE SERVICIOS AUXILIARES PP-05B-01 DE LA SUBESTACIÓN PREDESHIDRATACIÓN.

TRANSFORMADOR NO. TR-07A-03 DE SERVICIOS AUXILIARES DE 112,5 KVA	POSTE POLIESTER Y FIBRA DE VIDRIO	SECCIÓN VÍA	CARGA LUMINARIAS	CARGA TOTAL LUMINARIA LED (KVA)	CARGA TOTAL USUARIOS (KVA)	CARGA DEMANDADA USUARIOS (KVA)	CAPACIDAD TRANSFORMADOR (KVA)	RESERVA (KVA)	BAJANTES		CORTACIRCUITOS		CON DPS CON TESTIGO, PROGRAMADOR HORARIO DE A-P Y RELEVADOR				
									FASES		25	KACI					
									NEUTRO		BREAKERS 2X30 A.						
									COBRE -THW		CIRCUITO 2F - 3H - 220V						
TRAMO	LONGITUD (METROS X KG)	ANCHO (METROS)	LED (W)	CARGA LUMINARIAS LED (KVA)	NÚMERO DE LUMINARIAS (UNID.)	CARGAS AUXILIARES (KVA)	CARGA TOTAL (KVA)	LONGITUD DEL TRAMO (METROS)	SUMATORIA LONGITUD DEL TRAMO (METROS)	MOMENTO ELÉCTRICO (KVAXM)	CALIBRE CU	DIÁMETRO PVC	% REGULACIÓN MOMENTO X CTE	CORRIENTE (AMPERIOS)	CORRIENTE (AMPERIOS) X 1,25		
VANOS											SUBTERRÁNEO	PULGADAS	CTE	TOTAL %			
PP-07A-01	C10P1	12X510	Z-V	72	0.090	2	0.023	0.203	65.00	65.00	13.163	2#6, 1#10	3/4"	0.006	0.08	1.15	1.44
C10P1	C10P2	10X510	9.00	49	0.061	1	0.015	0.077	16.30	81.30	6.225	2#6, 1#10	3/4"	0.006	0.04	0.44	0.54
C10P2	C10P3	10X510	9.00	49	0.061	1	0.015	0.077	30.00	111.30	8.521	2#6, 1#10	3/4"	0.006	0.05	0.44	0.54
C10P3	C10P4	10X510	9.20	49	0.061	1	0.015	0.077	52.00	163.30	12.503	2#6, 1#10	3/4"	0.006	0.08	0.44	0.54
C10P4	C10P5	10X510	9.20	49	0.061	1	0.015	0.077	28.90	192.20	14.715	2#6, 1#10	3/4"	0.006	0.09	0.44	0.54
C10P5	C10P6	10X510	9.20	49	0.061	1	0.015	0.077	30.00	222.20	17.012	2#6, 1#10	3/4"	0.006	0.10	0.44	0.54
C10P6	C10P7	10X510	9.20	49	0.061	1	0.015	0.077	16.00	238.20	18.237	2#6, 1#10	3/4"	0.006	0.11	0.44	0.54
C10P7	C10P8	10X510	9.20	49	0.061	1	0.015	0.077	30.00	268.20	20.534	2#6, 1#10	3/4"	0.006	0.12	0.44	0.54
C10P8	C10P9	10X510	9.20	49	0.061	1	0.015	0.077	30.00	298.20	22.831	2#6, 1#10	3/4"	0.006	0.14	0.44	0.54
C10P9	C10P10	10X510	9.20	49	0.061	1	0.015	0.077	30.00	328.20	25.128	2#6, 1#10	3/4"	0.006	0.15	0.44	0.54
C10P10	C10P11	10X510	14.20	49	0.061	1	0.015	0.077	26.40	354.60	27.149	2#6, 1#10	3/4"	0.006	0.16	0.44	0.54
C10P11	C10P12	10X510	14.20	49	0.061	1	0.015	0.077	30.00	384.60	29.446	2#6, 1#10	3/4"	0.006	0.18	0.44	0.54
C10P12	C10P13	12X510	24.00	49	0.061	1	0.015	0.077	27.00	411.60	31.513	2#6, 1#10	3/4"	0.006	0.19	0.44	0.54
TOTAL TRAMO PRINCIPAL	13		660	0.825	14	0.206	1.121	411.60				2#6, 1#10	3/4"	0.006	1.48	6.371	7.963
C10D	C10P14	12X510	Z-V	72	0.090	2	0.023	0.203	20.30	20.30	4.111	2#6, 1#10	3/4"	0.006	0.02	1.15	1.44
C10C	C10P15	12X510	10.20	49	0.061	1	0.015	0.077	20.40	40.70	3.116	2#6, 1#10	3/4"	0.006	0.02	0.44	0.54
C10A	C10P16	12X510	Z-V	72	0.090	2	0.023	0.203	18.20	58.90	11.927	2#6, 1#10	3/4"	0.006	0.07	1.15	1.44
C10B	C10P17	10X510	9.20	49	0.061	1	0.015	0.077	13.20	72.10	5.520	2#6, 1#10	3/4"	0.006	0.03	0.44	0.54
C10P17	C10P18	10X510	9.20	49	0.061	1	0.015	0.077	26.20	98.30	7.526	2#6, 1#10	3/4"	0.006	0.05	0.44	0.54
C10P18	C10P19	10X510	9.20	49	0.061	1	0.015	0.077	25.70	124.00	9.494	2#6, 1#10	3/4"	0.006	0.06	0.44	0.54
C10P19	C10P20	10X510	9.20	49	0.061	1	0.015	0.077	16.31	140.31	10.742	2#6, 1#10	3/4"	0.006	0.06	0.44	0.54
C10C	C10P21	10X510	9.20	49	0.061	1	0.015	0.077	30.00	170.31	13.039	2#6, 1#10	3/4"	0.006	0.08	0.44	0.54
C10P21	C10P22	10X510	9.20	49	0.061	1	0.015	0.077	30.00	200.31	15.336	2#6, 1#10	3/4"	0.006	0.09	0.44	0.54
C10P22	C10P23	10X510	9.20	49	0.061	2	0.015	0.138	29.36	229.67	31.651	2#6, 1#10	3/4"	0.006	0.19	0.78	0.98
C10P23	C10P24	12X510	Z-V	72	0.090	2	0.023	0.203	17.32	246.99	50.015	2#6, 1#10	3/4"	0.006	0.30	1.15	1.44
C10H	C10P25	10X510	9.20	49	0.061	2	0.015	0.138	11.00	257.99	35.554	2#6, 1#10	3/4"	0.006	0.21	0.78	0.98
C10P8	C10P26	12X510	9.20	72	0.090	2	0.023	0.203	20.00	277.99	56.293	2#6, 1#10	3/4"	0.006	0.34	1.15	1.44
C10I	C10P27	12X510	9.20	72	0.090	2	0.023	0.203	20.00	297.99	60.343	2#6, 1#10	3/4"	0.006	0.36	1.15	1.44
TOTAL TRAMOS AUXILIARES	14		801	1.001	21	0.250	1.824	297.990				2#6, 1#10	3/4"	0.006	1.89	10.364	12.955
TOTAL	27		1,461	1.826	35	0.457	2.945	709.59				2#6, 1#10	3/4"	0.006	0.00	16.735	20.918

NOTA 1: REGULACIÓN TRAMO PRINCIPAL = 1.48 %  
 NOTA 2: LOS TRAMOS PRINCIPALES Y AUXILIARES VAN EN CALIBRE ESPECIFICADO EN LOS CUADROS DE CÁLCULO Y LOS TRAMOS COMPLEMENTARIOS VAN EN CALIBRE 2#12, 1#12 (DE USO FINAL AL POSTE Y LUMINARIA LED)

CUADRO DE CÁLCULO DEL CIRCUITO DE ILUMINACIÓN NO. 10. QUE SALE DEL TABLERO GENERAL DE 220V PP-07A-01 DE LA SUBESTACIÓN DIGESTIÓN NO. 1

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