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Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR



C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT



CONSULTANT / CONSULTANT

		Șef proiect Project manager	R. Liuzza	Data Date	Semnătură Signature
Aprobat Approved					
Aprobat Approved	Coordonator Section 1 Coordinator	C. Gambelli			
Verificat Checked	Tunel Expert Tunnel Expert	C. Gambelli			
Intocmit Elaborated	Proiectant Designer	P. Amodio			

SUBCONSULTANT / SUBCONSULTANT

Aprobat Approved	Responsabil Subconsultant Responsible	Intocmit Elaborated	Proiectant Designer		Project/Project
					2004/RO/16/P/PA/003
Reabilitarea liniei de cale ferata Brașov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteză maximă de 160 km/h. Section 1 Brasov - Sighisoara					Faza / Phase: P.Th. / T.D.

Denumire desen / Drawing Title : TUNNEL/TUNELUL HOMOROD

RACIOS SIDE/NSPRE RACOS  
**Safety Tunnel Power Supply system /Sistem de alimentare de siguranță a tunelului**  
 Single-line diagrams low-voltage electrical panels of safe area QdP  
 Diagrame single-line cadru electrice joasa tensiune de zona sigura QdP

Codificare / Codification System

Scara / Scale	LOT	Nr. / No
-		

E A 5 1 0 1 C 1 2 L X T S 2 0 7 6 0 0 4 0

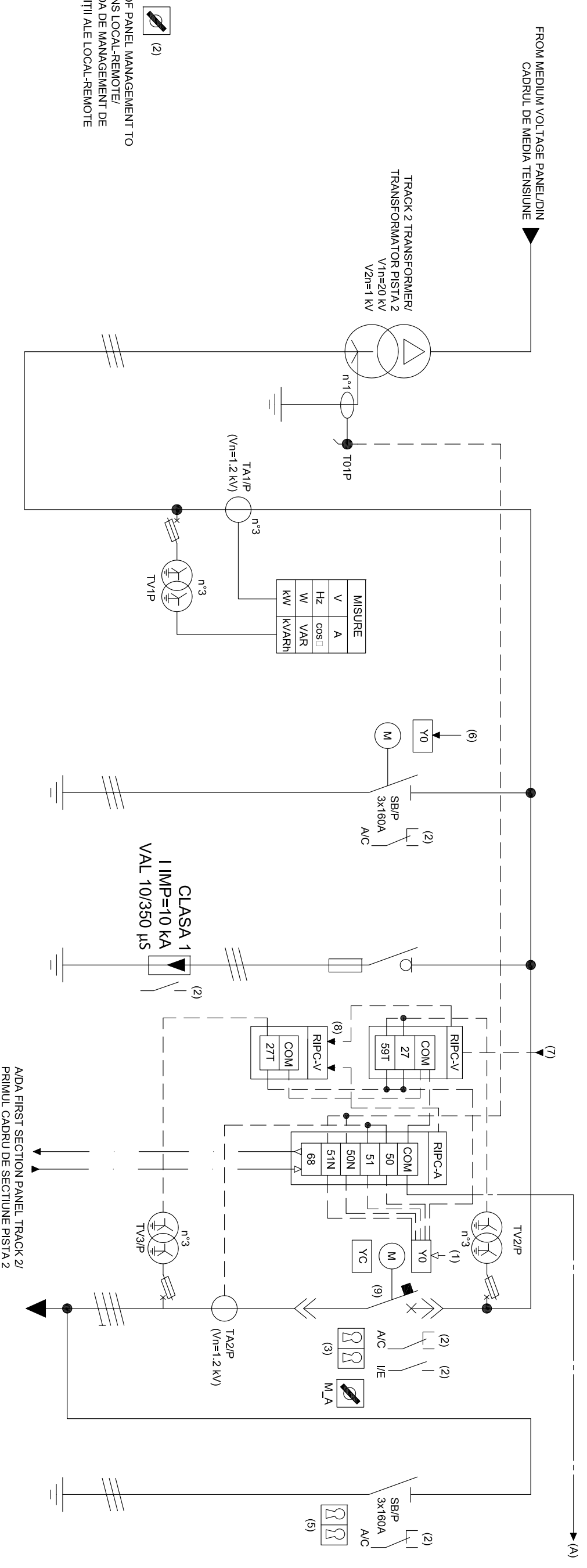
<p>1 ELECTRICAL CHARACTERISTICS/ CARACTERISTICILE ELECTRICE</p>	<p>2 3</p>	<p>4 MECHANICAL CHARACTERISTICS/ CARACTERISTICILE MECANICE</p>	<p>5 6 7 8 CONDITIONS OF SERVICE CONDITII DE SERVICE</p>
<p>A RATED INSULATION VOLTAGE/TENSIUNEA NOMINALA DE IZOLARE 1000 V</p>	<p>FORM OF SEGREGATION/FORMA DE SEGREGARE 3A</p>	<p>TEMPERATURE MAX./TEMPERATURA MAX. +40°C</p>	
<p>RATED WORKING VOLTAGE/TENSIUNEA DE LUCRU NOMINALA 400/230 V</p>	<p>MEDIA AMBIENT TEMPERATURE/TEMPERATURA IN CAMERA MEDIA</p>	<p>-5°C</p>	
<p>NOMINAL FREQUENCY/FRECVENTA NOMINALA 50 Hz</p>	<p>MINIMUM AMBIENT TEMPERATURE/TEMPERATURA IN CAMERA MINIMA</p>	<p>83% (23°C)</p>	
<p>ELECTRICAL SYSTEM/SISTEMUL ELECTRIC TN-S</p>	<p>RELATED HUMIDITY MAX/UMIDITATE RELATIVA MAX</p>	<p>ALTITUDE ABOVE SEA LEVEL/ALTITUDINEA</p>	
<p>B MAXIMUM SHORT CIRCUIT CURRENT ALLEGED/Maximă Curent de scurt circuitului PRESUPUSA 25 kA</p>	<p>DEGREE OF PROTECTION/ GRAD DE PROTECTIE IP41</p>	<p>PRESSURE-DEPRESSION/PRESIUNE-DEPRESIA</p>	
<p>RATED CURRENT (BAR MAIN)/CURENT NOMINAL (BARUL PRINCIPAL) 400 A</p>	<p>ON THE EXTERNAL INVOLUCRE/ PE EXTERIOR LOCUINTE IP20</p>	<p>COMPLIANCE WITH REGULATIONS/RESPECTAREA REGLEMENTARILOR</p>	
<p>ACCEPTABLE RATED CURRENT/CURENT NOMINAL ACCEPTABIL SHORT FOR 1 SEC./SCURT PENTRU 1 SEC. 105 kA</p>	<p>WITHIN THE PANEL AT OPEN DOORS/ IN CADRULA UN DESCHISE USI</p>	<p>CEI ITALIANE 17-113 / EN61439</p>	
<p>RATED CURRENT/CURENT NOMINAL ALLOWABLE PEAK/ADMISIBILE PEAK 254 kA</p>	<p>PANEL ACCESSIBILITY/ACCES CADRU</p>	<p>IEC INTERNATIONAL 61439-1</p>	
<p>NOMINAL VOLTAGE AUXILIARY CIRCUITS/ TENSIUNEA NOMINAL CIRCUITELOR AUXILIARE</p>	<p>EXPANDABLE PANEL/EXTENSIBIL CADRU</p>	<p>OTHERS/ALTE</p>	
<p>C TEST VOLTAGE/TENSIUNEA DE TESTARE 2500 V</p>	<p>FUND/PARTEA INFERIOARA</p>	<p>NOTE</p>	
<p>A 50 HZ FOR 1 MIN./A 50 HZ PENTRU 1 MIN. AUXILIARY CIRCUITS/ CIRCUITELOR AUXILIARE 1500 V</p>	<p>FRAME OR BASIC IRON/ FRAME SAU FIER DE BASE ACCIAIO ZINCATO</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>D IMPULSE WITHSTAND VOLTAGE/TENSIUNEA DE REZISTA LA IMPULS 8 kV</p>	<p>FRAME OR BASIC IRON/ FRAME SAU FIER DE BASE ACCIAIO ZINCATO</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>TESTING/TESTAREA 17-113</p>	<p>INDIVIDUAL TESTS/TESTE INDIVIDUALE</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>SEC. CEI</p>	<p>TYPE TESTS/TESTE DE TIP</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>SPECIFIC DESCRIPTION/DESCRIERE SPECIFICA:</p>	<p>POWER/PUTERE</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>SBARRE PRINCIPALI E DERIVATE</p>	<p>ARRIVALS/SOSIRI HIGH/TOPURI LOW/JOASA</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>- IN PIATTO DI RAME E/O ALLUMINIO</p>	<p>DEPARTURES/PLECARI HIGH/TOPURI LOW/JOASA</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>- ISOLAMENTO IN ARIA</p>	<p>ENTRY/INTRARE HIGH/TOPURI LOW/JOASA</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>SBARRA DI TERRA</p>	<p>OUTPUT/ESIRE HIGH/TOPURI LOW/JOASA</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>- SEZIONE MINIMA 150 mmq</p>	<p>PAINING/PICTURA</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>OVERALL DIMENSIONS (mm)/ DIMENSUNI DE GABARIT (mm)</p>	<p>EXTERNAL PANEL/ EXTERNE CADRU RAL 7035</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>SUBDIVISION SECTIONS/COMPARTIMENTARE SECTIUNI</p>	<p>INTERNAL PANEL/ INTERN CADRU</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>TOTAL MASS/TOTALE MASA</p>	<p>3950 LX 2231 HX 637 P</p>	<p>CAVETTERIA PER CIRCUITI AUSILIARI: - TIPO N07G9-K - CAVETTERIA DI COLORE NERO SEZIONI: - CIRCUITI AMPEROMETRICI/VOLTIMETRICI &gt;= 2.5 mmq - CIRCUITI DI COMANDO &gt;= 1.5 mmq - CIRCUITI DI SEGNALE &gt;= 1.5 mmq</p>	
<p>1</p>	<p>2</p>	<p>3</p>	
<p>4</p>	<p>5</p>	<p>6</p>	
<p>7</p>	<p>8</p>	<p>9</p>	

A	<p>NOTES NUMBER (SEE SUBSEQUENT SHEETS):</p> <ol style="list-style-type: none"> <li>(1) COMMAND TO RELEASE OF EMERGENCY BUTTON PLACE OUT OF THE DOOR OF THE CABIN</li> <li>(2) REPORTING TO BRING THE SYSTEM OF SUPERVISION</li> <li>(3) RELATED TO EMERGENCY NETWORK DATA IN SQUARE</li> <li>(4) 3 BLOCKS WITH KEYS RINGED WITH KEY ON: <ul style="list-style-type: none"> <li>- EARTHING SIDE MT</li> <li>- EARTHING PDQ</li> <li>- EARTHING ARRIVAL IN FIRST CELL QDT</li> </ul> </li> <li>(5) 2 BLOCKS WITH KEYS RINGED WITH KEY ON: <ul style="list-style-type: none"> <li>- SWITCH BACK PDQ</li> <li>- CELL SWITCH IN THE FIRST ARRIVAL QDT</li> </ul> </li> <li>(6) ELECTRIC DRIVE THE SWITCH TRANSFORMER PROTECTION OF LAND IN RELATED Q_MT</li> <li>(7) CONSENT BY OPERATOR FOR RECONFIGURATION / REFEEDING THROUGH AUTOMATIC SYSTEM OF PROTECTION</li> <li>(8) INPUTS FOR THE RE-ACTIVATION / REFEEDING AUTOMATIC (TWISTED SHIELDED INDIVIDUALLY 2X1 SQ MM)</li> <li>(9) THE CORRESPONDING SWITCH INTERLOCK ELECTRIC TRANSFORMER SIDE MT</li> </ol>	1	2	3	4	5
B	<p>NOTE numărul (a se vedea coli ulterioare):</p> <ol style="list-style-type: none"> <li>(1) COMANDA LA ELIBERAREA DE buton de urgenta plosa în afara ușa DE MÂNĂ</li> <li>(2) RAPORTARE pentru a aduce sistemul de supraveghere</li> <li>(3) referitoare la datele de REȚEA DE URGENȚĂ în Piața</li> <li>(4) 3 blocuri cu ajutorul tastelor cu inele CHEIE ON: <ul style="list-style-type: none"> <li>- Împământare SIDE MT</li> <li>- Împământare PDQ</li> <li>- SOSIREA de împământare în QDT prima celulă</li> </ul> </li> <li>(5) 2 blocuri cu CHEILE inele cu CHEIE ON: <ul style="list-style-type: none"> <li>- Reveni PDQ</li> <li>- SWITCH celulă din QDT prima sosire</li> </ul> </li> <li>(6) ELECTRICE DRIVE PROTECȚIA TRANSFORMER SWITCH de teren în Q_MT CONEXE</li> <li>(7) ACORD de către operator pentru reconfigurarea / refeeding PRIN SISTEM AUTOMAT DE PROTECȚIE</li> <li>(8) input-uri pentru AUTOMATIC RE-ACTIVAREA / refeeding (rusucita ecranate INDIVIDUAL mm 2x1 m<sup>2</sup>)</li> <li>(9) corespunzătoare SWITCH interblocare electrice de transformare MT SIDE</li> </ol>	1	2	3	4	5
C	<p>KEY TO ABBREVIATIONS:</p> <ul style="list-style-type: none"> <li>- Ib: OPERATING CURRENT, CALCULATED ACCORDING TO THE SIZE OF POWER [A]</li> <li>SWITCH</li> <li>- In: PROTECTION OF RATED CURRENT [A]</li> <li>- Ith: SETTING THE CURRENT RESPONSE THERMAL PROTECTION [A]</li> <li>- Idn: CALIBRATION OF DIFFERENTIAL CURRENT [A]</li> <li>- Im: CALIBRATION OF MAGNETIC ACTION OF THE PROTECTION OF CURRENT [A]</li> </ul> <p>CONTACTOR</p> <ul style="list-style-type: none"> <li>- In: CONTACTOR SIZE [A]</li> <li>- Pn: SCOPE OF CONTACTOR [kW]</li> </ul> <p>TA</p> <ul style="list-style-type: none"> <li>- I1n/I2n: CONVERSION RATIO OF CURRENT [A / A]</li> </ul> <p>TV</p> <ul style="list-style-type: none"> <li>- V1n/V2n: CONVERSION RATIO OF NOMINAL [v / v]</li> </ul> <p>POWER LINE</p> <ul style="list-style-type: none"> <li>- Iz: PERMISSIBLE CURRENT CABLE, CALCULATED ON THE BASIS OF FLOW RATE AND COEFFICIENTS DERATING ARISING FROM THE INSTALLATION MODE [A]</li> </ul> <p>THE INSTALLATION MODE [A]</p> <ul style="list-style-type: none"> <li>- Cdt in Ib: PARTIAL LOSS OF POWER (PIPELINE DUE TO USERS ONLY) AND THE CURRENT Ib cosj NOMINAL [%]</li> <li>- Cdt tot. in Ib: DROP VOLTAGE TOTAL (FROM THE VALLEY TO THE PROVISION OF USERS) AND THE CURRENT Ib cosj NOMINAL [%]</li> </ul> <p>NOMINAL [%]</p> <ul style="list-style-type: none"> <li>- Zk: MINIMUM IMPEDANCE FAULT OR THREE-PHASE NEUTRAL DOWNSTREAM USERS [mW]</li> <li>- Zs: Minimal impedance of phase-earth fault DOWNSTREAM USERS [mW]</li> <li>- Ik trifos. / SINGLE-PHASE.: MAXIMUM SHORT CIRCUIT CURRENT PERMANENT NEUTRAL-PHASE OR DOWNSTREAM USERS [kA]</li> <li>- Ik1 phase / earth: MAXIMUM SHORT CIRCUIT CURRENT PHASE-GROUND DOWNSTREAM USERS [kA]</li> </ul>	1	2	3	4	5
D	<p>CHEIA ABREVIERI:</p> <ul style="list-style-type: none"> <li>- Ib: Curent de operare, calculat în conformitate cu DIMENSIUNEA DE PUTERE [A]</li> <li>SWITCH</li> <li>- In: PROTECȚIA A Curent nominal [A]</li> <li>- Ith: STABILIRE PROTECȚIA RĂSPUNS ACTUAL termică [A]</li> <li>- Idn: CALIBRAREA DIFERENTIAL curent [A]</li> <li>- Im: CALIBRAREA DE ACȚIUNE MAGNETICE DE PROTECȚIE A curent [A]</li> </ul> <p>CONTACTOR</p> <ul style="list-style-type: none"> <li>- In: SIZE CONTACTOR [A]</li> <li>- Pn: DOMENIUL DE APLICARE A CONTACTOR [kW]</li> </ul> <p>TA</p> <ul style="list-style-type: none"> <li>- I1n/I2n: rata de conversie a curentului [A / A]</li> </ul> <p>televizor</p> <ul style="list-style-type: none"> <li>- V1n/V2n: rata de conversie nominală de [v / v]</li> </ul> <p>POWER LINE</p> <ul style="list-style-type: none"> <li>- Iz: CABLU ADMISE CURENT, calculată pe baza debitului și coeficienții de declosare REZULTATE DIN MODUL DE INSTALARE [A]</li> </ul> <p>INSTALARE [A]</p> <ul style="list-style-type: none"> <li>- Cdt în Ib: pierderi parțiale de putere (PIPELINE CAUZA utilizatorilor numai), iar curentul Ib cosj NOMINALE [%]</li> <li>- Cdt tot. în Ib: tensiunea totală DROP (DIN vale la dispoziție de utilizator) și curentul Ib cosj NOMINALE [%]</li> <li>- Zk: FAULT impedanta MINIMUM sau trei faze UTILIZATORI NEUTRE DOWNSTREAM [mW]</li> <li>- Zs: impedanta minima de fază-pământ vina DOWNSTREAM Utilizatori [mW]</li> <li>- Trifos Ik / SINGLE-PHASE: MAXIM Curent de scurt CIRCUIT FAZA utilizatori permanenti NEUTRE-FAZA sau în oval [kA].</li> <li>- Ik1 faza / pământ: maximă a circuitului; Curent de scurt FAZA-SOL UTILIZATORII DIN AVAL [kA]</li> </ul>	1	2	3	4	5
E	<p>THE INSTALLATION MODE [A]</p> <ul style="list-style-type: none"> <li>- Cdt in Ib: PARTIAL LOSS OF POWER (PIPELINE DUE TO USERS ONLY) AND THE CURRENT Ib cosj NOMINAL [%]</li> <li>- Cdt tot. in Ib: DROP VOLTAGE TOTAL (FROM THE VALLEY TO THE PROVISION OF USERS) AND THE CURRENT Ib cosj NOMINAL [%]</li> </ul> <p>NOMINAL [%]</p> <ul style="list-style-type: none"> <li>- Zk: MINIMUM IMPEDANCE FAULT OR THREE-PHASE NEUTRAL DOWNSTREAM USERS [mW]</li> <li>- Zs: Minimal impedance of phase-earth fault DOWNSTREAM USERS [mW]</li> <li>- Ik trifos. / SINGLE-PHASE.: MAXIMUM SHORT CIRCUIT CURRENT PERMANENT NEUTRAL-PHASE OR DOWNSTREAM USERS [kA]</li> <li>- Ik1 phase / earth: MAXIMUM SHORT CIRCUIT CURRENT PHASE-GROUND DOWNSTREAM USERS [kA]</li> </ul>	1	2	3	4	5
F	<p>KEY TO ABBREVIATIONS:</p> <ul style="list-style-type: none"> <li>- Ib: OPERATING CURRENT, CALCULATED ACCORDING TO THE SIZE OF POWER [A]</li> <li>SWITCH</li> <li>- In: PROTECTION OF RATED CURRENT [A]</li> <li>- Ith: SETTING THE CURRENT RESPONSE THERMAL PROTECTION [A]</li> <li>- Idn: CALIBRATION OF DIFFERENTIAL CURRENT [A]</li> <li>- Im: CALIBRATION OF MAGNETIC ACTION OF THE PROTECTION OF CURRENT [A]</li> </ul> <p>CONTACTOR</p> <ul style="list-style-type: none"> <li>- In: CONTACTOR SIZE [A]</li> <li>- Pn: SCOPE OF CONTACTOR [kW]</li> </ul> <p>TA</p> <ul style="list-style-type: none"> <li>- I1n/I2n: CONVERSION RATIO OF CURRENT [A / A]</li> </ul> <p>TV</p> <ul style="list-style-type: none"> <li>- V1n/V2n: CONVERSION RATIO OF NOMINAL [v / v]</li> </ul> <p>POWER LINE</p> <ul style="list-style-type: none"> <li>- Iz: PERMISSIBLE CURRENT CABLE, CALCULATED ON THE BASIS OF FLOW RATE AND COEFFICIENTS DERATING ARISING FROM THE INSTALLATION MODE [A]</li> </ul> <p>THE INSTALLATION MODE [A]</p> <ul style="list-style-type: none"> <li>- Cdt in Ib: PARTIAL LOSS OF POWER (PIPELINE DUE TO USERS ONLY) AND THE CURRENT Ib cosj NOMINAL [%]</li> <li>- Cdt tot. in Ib: DROP VOLTAGE TOTAL (FROM THE VALLEY TO THE PROVISION OF USERS) AND THE CURRENT Ib cosj NOMINAL [%]</li> </ul> <p>NOMINAL [%]</p> <ul style="list-style-type: none"> <li>- Zk: MINIMUM IMPEDANCE FAULT OR THREE-PHASE NEUTRAL DOWNSTREAM USERS [mW]</li> <li>- Zs: Minimal impedance of phase-earth fault DOWNSTREAM USERS [mW]</li> <li>- Ik trifos. / SINGLE-PHASE.: MAXIMUM SHORT CIRCUIT CURRENT PERMANENT NEUTRAL-PHASE OR DOWNSTREAM USERS [kA]</li> <li>- Ik1 phase / earth: MAXIMUM SHORT CIRCUIT CURRENT PHASE-GROUND DOWNSTREAM USERS [kA]</li> </ul>	1	2	3	4	5

CODES ANSI LEGEND/  
LEGENDA CODURI ANSI

49T	MAXIMUM TEMPERATURE (TRANSFORMER)/TEMPERATURA MAXIMA (TRANSFORMATOR)
50	MAXIMUM PEAK CURRENT/CURRENTUL MAXIM INSTANTANEU
51	CURRENT MAXIMUM LATE/CURRENTUL MAXIM INTARZIERE
51N	MAXIMUM EARTH FAULT LATE CURRENT/CURRENT MAXIM DE DEFECTE PAMANTULUI INTARZIERE
67	MAXIMUM CURRENT DIRECTIONAL PHASE/CURRENTUL MAXIM DE DIRECTIONAL FAZA
67N	MAXIMUM CURRENT DIRECTIONAL EARTH FAULT/MAXIME DIRECTIONAL CURENT DE DEFECT PAMANTULUI
68	SELECTIVITY LOGIC (NETWORK LOCK)/SELECTIVITATEA LOGIC (RETEA BLOCK)
52	SWITCH/SWITCH
89	DISCONNECTOR/SEPARATOR



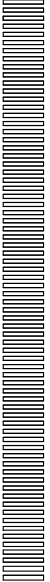















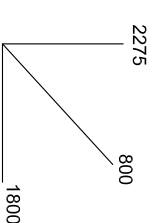
SELECTOR METHOD OF PANEL MANAGEMENT TO TWO POSITIONS LOCAL-REMOTE/  
 SELECTOR METODA DE MANAGEMENT DE CADRU DOUA POZITII ALE LOCAL-REMOTE

USERS/UTILIZATORI	NAME/NUME	TRACK 1/PISTA 1		TRACK 2/PISTA 2		TRACK 1/PISTA 1		TRACK 2/PISTA 2	
	SIGLA	TYPE/TIP	POWER/PUTERE kW	Ib	cosφ	TYPE/TIP	POWER/PUTERE kW	Ib	cosφ
SWITCH OR DISCONNECTOR/	N. POLES	In				In			
	Ith	A				A			
	IM (o curva)	A	PdI	kA		A	PdI	kA	
FUSE/FUSE	TYPE/TIP	A				A			
	CALIBER	A/A				A/A			
TA	PERFORMANCE PERFORMANCE	5	100/1	3	100/5	5	100/1	3	100/5
	V1n/V2n	VA	PRECISION PRECIZIE	CI 0.5		VA	PRECISION PRECIZIE	CI 0.5	
TV	PERFORMANCE PERFORMANCE	20	FG10M1 0.6/1 kV	20	FG10M1 0.6/1 kV	20	FG10M1 0.6/1 kV	20	FG10M1 0.6/1 kV
	V1n/V2n	VA	PRECISION PRECIZIE	CI 0.5		VA	PRECISION PRECIZIE	CI 0.5	
POWER LINE/ LINE PUTERE	LENHT/LUNGIMEA	m	3x1x240 mmq	m	3x1x240 mmq	m	3x1x240 mmq	m	3x1x240 mmq
	Iz	A	396	A	396	A	396	A	396
DISCONNECTOR GROUND/ SEPARATOR DE SOL	SAP	R-S-T	160	R-S-T	160	R-S-T	160	R-S-T	160
	SCA1	R-S-T	125	R-S-T	125	R-S-T	125	R-S-T	125
SWITCH BACK 1000V-TRACK 1 COMUTATI INAPOI 1000V-PISTA 1	IQdP/P	R-S-T	250	R-S-T	250	R-S-T	250	R-S-T	250
	SB/P	R-S-T	160	R-S-T	160	R-S-T	160	R-S-T	160
DISCONNECTOR GROUND/ SEPARATOR DE SOL	SB/P	R-S-T	160	R-S-T	160	R-S-T	160	R-S-T	160
	SCA1	R-S-T	125	R-S-T	125	R-S-T	125	R-S-T	125

ADA FIRST SECTION PANEL TRACK 2/  
 PRIMUL CADRU DE SECTIUNE PISTA 2

VISUALIZATION DEVICES/  
VEDEREA DISPOZITIV

			
	 BACK LIKE 1kV		 ODD BACK 1kV
	CUBICULUM AMPEROMETRIC PROTECTION/ CUBICULUI PROTECTIE AMPEROMETRICE		CUBICULUM AMPEROMETRIC PROTECTION/ CUBICULUI PROTECTIE AMPEROMETRICE
	CUBICULUM VOLTMETRIC PROTECTION/ CUBICULUI PROTECTIE VOLTMETRICE		CUBICULUM VOLTMETRIC PROTECTION/ CUBICULUI PROTECTIE VOLTMETRICE
	CUBICULUM POWER/ CUBICULUI PUTERE 230VCA/ 24VCC		CUBICULUM POWER/ CUBICULUI PUTERE 230VCA/ 24VCC
	CUBICULUM FIBER OPTIC/ CUBICULUI FIBRA OPTICA		CUBICULUM FIBER OPTIC/ CUBICULUI FIBRA OPTICA
			
	TERMINAL CUBICULUM/ CUBICULUI TERMINAL		TERMINAL CUBICULUM/ CUBICULUI TERMINAL
			



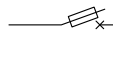
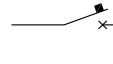
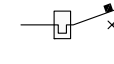
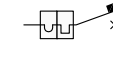
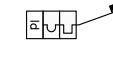
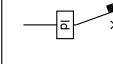
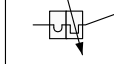
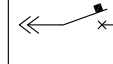






	1	2	3	4	5	6	7	8
A								
	CLOSING CONTACT (OPEN TO REPOSE)/CONTACT DE INCHIDERE (DESCHIS LA REPAUS)				CLOSING CONTACT SENSITIVE TO TEMPERATURE/CONTACT DE INCHIDEREA SENSIBILE LA TEMPERATURA			
	OPENING CONTACT (OPEN TO REPOSE)/CONTACT DE DESCHIDERE (DESCHIS LA REPAUS)				CLOSING CONTACT TO THERMIC RELAY/CONTACT DE INCHIDERE DE RELEU TERMICE			
	CONTACT EXCHANGE WITH MOMENTARY INTERRUPTION/DATE DE SCHIMB CU ÎNTRERUPERILOR MOMENTANE				THREE-WAY SWITCH/TREI-WAY SWITCH			
B								
	CONTACT A TWO-WAY THREE POSITIONS WITH CENTRAL POSITION OPENING/DATE DE A DOUA-WAY TREI POZITII, CU DESCHIDERE POZITIE CENTRALĂ				TWO-WAY SWITCH/DOUA-WAY SWITCH			
	CLOSING CONTACT WITH MANUAL DRIVE/CONTACT DE INCHIDERE CU COMANDA MANUAL				TWO-WAY SWITCH AT THREE POSITIONS WITH CENTRAL POSITION OPENING/DOUA-WAY SWITCH TREI POZITII CU DESCHIDERE POZITIE CENTRALĂ			
C								
	CLOSING CONTACT WITH CONTROL BUTTON/CONTACT DE INCHIDERE CU BUTONUL DE CONTROL				CONTACT N.A.-N.C. TIMED TO ACTION/CONTACT N.A.-N.C. CRONOMETRAT PENTRU A ACȚIUNE			
	OPENING CONTACT WITH CONTROL BUTTON/CONTACT DE DESCHIDERE CU BUTONUL DE CONTROL				CONTACT N.A.-N.C. THE TIMED RELEASE/CONTACT N.A.-N.C.CRONOMETRAT PENTRU A ELIBERAREA			
D								
	CLOSING CONTACT WITH CONTROL ROD/CONTACT DE INCHIDERE CU COMANDA ROD							
	CLOSING CONTACT WITH ROTARY CONTROL/CONTACT DE INCHIDERE CU CONTROL ROTATIV							
E								
	CLOSING POSITION CONTACT/POZITIA DE CONTACT DE INCHIDERE							
	OPENING POSITION CONTACT/POZITIA DE CONTACT DE DESCHIDERE (LIMIT/LIMITA)							
F								
	EXCHANGE CONTACT WITHOUT INTERRUPTION/CONTACT DE SCHIMB FĂRĂ ÎNTRERUPERE							



	1	2	3	4	5	6	7	8				
A		SWITCH (POWER)/SWITCH (PUTERE)			<input type="checkbox"/> X	RELAY OF MEASURING OR SIMILAR DEVICE WITH INDICATION OF SECURITY FEATURES ENABLED IN ANSI CODES/RELEU PENTRU DISPOZITIV DE MĂSURARE SAU SIMILARE CU INDICĂȚIE DE CARACTERISTICI DE SECURITATE ESTE ACTIVAT ÎN CODURI ANSI						
		SWITCH WITH BUILT-IN FUSE/SWITCH CU BUILT-IN FUSE			<input type="checkbox"/>	THERMAL RELAY/RELEU TERMIC						
		POWER SWITCH FOR AUTOMATIC OPENING/BUTONUL DE PORNIRE DESCHIDEREA AUTOMATĂ			<input type="checkbox"/>	RELAY MAGNETIC/RELEU MAGNETIC						
B		POWER SWITCH OPENING AUTOMATIC, THERMIC/BUTONUL DE PORNIRE DESCHIDEREA AUTOMATĂ. TERMICE			<input type="checkbox"/> Id	CURRENT DIFFERENTIAL RELAY/RELEU CURENT DIFERENTIAL						
		POWER SWITCH OPENING AUTOMATIC, MAGNETOTHERMIC/BUTONUL DE PORNIRE DESCHIDEREA AUTOMATĂ. MAGNETOTERMICE			<input type="checkbox"/> I >	OVERCURRENT RELAY (LONG DELAY)/RELEU SUPRACURENT (ÎNȚĂRZIERII PRELUNGITE)						
C		POWER SWITCH FOR AUTOMATIC OPENING, DIFFERENTIAL MAGNETOTHERMIC/COMUTATORUL DE ALIMENTARE TIMP DESCHIDEREA AUTOMATĂ, DIFERENȚIAL MAGNETO TERMICE			<input type="checkbox"/> I >>	OVERCURRENT RELAY (SHORT DELAY)/RELEU SUPRACURENT (SCURTĂ ÎNȚĂRZIERE)						
		POWER SWITCH FOR AUTOMATIC OPENING, WORKING FOR CURENT DIFFERENTIAL/COMUTATORUL DE ALIMENTARE TIMP DESCHIDEREA AUTOMATĂ, LUCRU PENTRU DIFERENȚIAL CURENT			<input type="checkbox"/> I ±	EARTH FAULT RELAY/RELEU FAULT PĂMÂNTULUI						
D		POWER SWITCH AT AUTOMATIC OPENING WITH ADJUSTABLE THERMIC/COMUTATORUL DE ALIMENTARE TIMP DESCHIDEREA AUTOMATĂ CU CĂLDURĂ REGLABIL			<input type="checkbox"/> U = 0	RELAY GROUND FAULT RELAY A LACK OF POWER/RELEU ÎMPĂMÂNTARE RELEU LIPSĂ DE PUTERE						
		POWER SWITCH AT AUTOMATIC OPENING REMOVABLE/COMUTATORUL DE ALIMENTARE TIMP DESCHIDEREA AUTOMATĂ AMOVIBIL			<input type="checkbox"/> U <	RELAY UNDERVOLT/RELEU UNDERVOLT						
E					<table border="1" data-bbox="577 1543 661 1632"> <tr> <td>M</td> <td>D</td> </tr> <tr> <td>Sf</td> <td>EL</td> </tr> </table>	M	D	Sf	EL	PROTECTION TRIP UNITS ELECTRIC UNIT OF MEASURE (M) AND DIALOGUE (D)/ ÎMPEDICAT DE UNITATI ELECTRICE CU UNITATEA DE MASURA (M) ȘI DALOG (D)		
M	D											
Sf	EL											
F												
	1	2	3	4	5	6	7	8				



