1	2	3	4	5	6	7	8

01	General update	2025-09-26	T. Trogrlić
00	First issue	2025-03-19	J. Gregov
Rev.	Note	Rev. Date	Drawn

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	#A
Drawn:	Karlo Cotić Karlo Cotić									
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: TITLE PAGE	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 1
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Unit 2 Turbine
Unit 2 TIV
Unit 2 Cooling water system (Closed)
Unit 2 Cooling water system (Open)
Unit 2 Lubrication system
Unit 2 HPU
13,8kV Auxiliary services feeder
13,8kV Unit 1 generator feeder
13,8kV Unit 2 generator feeder
13,8kV Step-up transformer feeder
13,8/115kV Step-up transformer
Main auxiliary services transformer
Backup auxiliary services transformer
Powerhouse diesel generator
Auxiliary 480/208V transformer
Intake step-up transformer

1	2	3	4	5	6	7	8

SYSTEM/EQUIPMENT

+0CJA01	Control Común
+1CJA01	Unidad 1 Control Y Protección
+2CJA01	Unidad 2 Control Y Protección
+0CHG01	Cubículo De Protección De Subestación Exterior
+0AYH01	Cubículo SCADA
+0BFA01	Cubículo De Suministro CA Principal
+0BFA11	Cubículo De Suministro CA Auxiliar
+1BFA01	MCC Unidad 1
+2BFA01	MCC Unidad 2
+0BVB01	Cubículo De Suministro CC Auxiliar
+1MKA10	Generador Unidad 1
+1MEA10	Turbina Unidad 1
+1MEB10	Válvula TIV Unidad 1
+1PAC10	Sistema De Agua De Enfriamiento Unidad 1 (Cerrado)
+1MEW10	Sistema De Agua De Enfriamiento Unidad 1 (Abierto)
+1MKV10	Sistema De Lubricación Unidad 1
+1MEX10	HPU Unidad 1
+2MKA10	Generador Unidad 2
+2MEA10	Turbina Unidad 2
+2MEB10	Válvula TIV Unidad 2
+2PAC10	Sistema De Agua De Enfriamiento Unidad 2 (Cerrado)
+2MEW10	Sistema De Agua De Enfriamiento Unidad 2 (Abierto)
+2MKV10	Sistema De Lubricación Unidad 2
+2MEX10	HPU Unidad 2
+0AKA01	Alimentador Servicios Auxiliares 13,8 kV
+0AKA02	Alimentador Generador Unidad 1 13,8 kV
+0AKA03	Alimentador Generador Unidad 2 13,8 kV
+0AKA04	Alimentador Transformador Elevador 13,8 kV
=0ATA01	Transformador Elevador 13,8/115 kV
=0BFT01	Transformador Principal De Servicios Auxiliares
=0BFT02	Transformador De Respaldo De Servicios Auxiliares
=0XKA01	Generador Diésel De Casa De Máquinas
=0BFT11	Transformador Auxiliar 480/208 V
=0BFT21	Transformador Elevador De Toma De Agua

DEVICE

A -	Assemblies, subassemblies Conjuntos, subconjuntos
B -	Transducers from non-electric to electric quantities or vice versa Transductores de magnitudes no eléctricas a eléctricas o viceversa
C -	Capacitors
D -	Binary elements Elementos binarios
E -	Miscellaneous Misceláneos
F -	Protective devices Dispositivos de protección
G -	Generators, power supplies Generadores, fuentes de alimentación
H -	Signaling devices Dispositivos de señalización
J -	
K -	Relays, contactors Relés, contactores
L -	Inductors, reactors Inductores, reactores
M -	Motors Motores
N -	Amplifiers, controllers Amplificadores, controladores
P -	Measuring instruments, test equipment Instrumentos de medición, equipos de prueba
Q -	Switching devices for power circuits Dispositivos de conmutación para circuitos de potencia
R -	Resistors Resistencias
S -	Switches for control circuits, selectors Interruptores para circuitos de control, selectores
T -	Transformers Transformadores
U -	Modulators Moduladores
V -	Tubes, semiconductors Tubos, semiconductores
W -	Transmission paths, cables, busbars, antennas Vías de transmisión, cables, barras colectoras, antenas
X -	Terminals, plugs, sockets Terminales, enchufes, tomas de corriente
Y -	Electrically operated mechanical devices Terminales, enchufes, tomas de corriente
Z -	Terminations, hybrid transformers, filters, equilizers, limiters Terminaciones, transformadores híbridos, filtros, ecualizadores, limitadores
100..199 -	Station services Servicios de la estación
200..299 -	Control Control
300..399 -	Protection Protección
400..499 -	Measuring Medición
500..599 -	Freely disposable Libremente desechable

DOCUMENT

001...099 -	Text documents, chapters
100...999 -	Drawings: Block-diagrams, Single line diagrams, General arrangement drawings, Circuit diagrams, Cubicle layouts, Cubicle assigned drawings, Cable lists, cable core lists, Grounding and lightning, Unassigned drawings, Documentos de texto, capítulos Dibujos: Diagramas de bloques, Diagramas unifilares, Dibujos de disposición general, Diagramas de circuitos, Disposiciones de cubículos, Dibujos asignados a cubículos, Listas de cables, Listas de núcleos de cables, Conexión a tierra y pararrayos, Dibujos no asignados,

CIRCUIT DIAGRAM INDEX

A -	Indexes, title sheet, document list Índices, hoja de título, lista de documentos
B -	Function diagrams Diagramas de funciones
C -	Designation code Código de designación
D -	AC power supply (heating, lighting voltage distribution, fuses...) Alimentación CA (calefacción, distribución de tensión de iluminación, fusibles...)
E -	
F -	
G -	DC power supply (voltage distribution...) Fuente de alimentación CC (distribución de tensión...)
H -	Signaling devices Dispositivos de señalización
J -	
K -	
L -	Operating mechanisms for switching devices (circuit breakers, disconnectors...) Mecanismos de funcionamiento para dispositivos de conmutación (interruptores, seccionadores...)
M -	Control (local, remote, station...) Control (local, remoto, estación...)
N -	Protection Protección
P -	Interlocking Enclavamiento
Q -	Position indication (local, remote, station...) Indicación de posición (local, remota, estación...)
R -	Alarm (signaling, monitoring...) Alarma (señalización, monitorización...)
S -	Instruments transformers circuits (measuring, protection...) Circuitos transformadores de instrumentación (medida, protección...)
T -	Measuring (local, remote station... unless under "S") Medición (estación local, remota... a menos que esté en "S")
U -	Feedback control (voltage regulator...) Control de retroalimentación (regulador de voltaje...)
V -	Communication Comunicación
W -	Wiring diagrams, terminal matrix Diagramas de cableado, matriz de terminales
X -	Cable list, cable core list Lista de cables, lista de núcleos de cables
Y -	
Z -	Equipment documents for "C" to "W" Documentos de equipo para "C" a "W"

WIRE AND CABLE COLOURS

BK -	Black
BN -	Brown
RD -	Red
OG -	Orange
YE	Yellow
GN -	Green
BU -	Blue
VT -	Violet
GY -	Grey
WH -	White
PK -	Pink
TO -	Turquaise
GNYE -	Green yellow
BK -	Negro
BN -	Marrón
RD -	Rojo
OG -	Naranja
YE	Amarillo
GN -	Verde
BU -	Azul
VT -	Violeta
GY -	Gris
WH -	Blanco
PK -	Rosa
TO -	Turquesa
GNYE -	Verde amarillo

System and equipment in this project are
designated according to KKS process
related identification:
(Total plant+System code+
Equipment unit code+Component code)
Los sistemas y equipos de este proyecto se designan según la identificación relacionada con el proceso KKS:
(Planta total + Código del sistema + Código de la unidad del equipo + Código del componente)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

LEYENDA DE CONEXIONES / *CONNECTIONS LEGEND*

Símbolos *Symbols*	Descripción *Description*
	Barra colectora de fase *Phase busbar*
	Barra neutra *Neutral busbar*
	Barra colectora de tierra *Ground busbar*
	Alambre *Wire*
	Conectar el puente *Wire ground*
	Cable *Cable*
	Shield *Shield*
	Cable con pantalla *Cable with shielding*

LEYENDA DE SÍMBOLOS / *SYMBOLS LEGEND*

Ident. *Ident.*	Símbolos *Symbols*	Descripción *Description*
-		Contactos auxiliares (símbolo genérico) *Auxiliary contacts (generic symbol)*
-		Bobina (símbolo genérico) *Relay (generic symbol)*
-		Punto de conexión PLC *PLC connection point*
-		Conector enchufable *Plug in bridge*
-	M 3 ~	Motor general (símbolo genérico) *Motor gerenal (generic symbol)*
-A	*	Equipo PLC, dispositivo de control de transferencia *PLC equipment, transfer control device*
-B	%	Higrostato *Hygrostat*
	*	Batería recargable, sensores *Rechargeable battery, sensors*
		Termostato *Thermostat*
-E		Iluminación de cubículos *Cubicle lighting*
-F	I> I> I>	Disyuntor miniatura *Miniature circuit breaker*
		Disyuntor de protección del motor *Motor Protection Circuit Breaker*
		Fusible *Fuse*
	*	Dispositivo de protección *Protection devices*
	I>	Interruptor diferencial con protección contra sobrecorriente *Residual current breaker with overcurrent protection*
		Disyuntor de protección de transformador (símbolo genérico) *Transformer protection circuit breaker (generic symbol)*

Ident. *Ident.*	Símbolos *Symbols*	Descripción *Description*
-FU	*	Dispositivo de protec. contra sobretensiones *Surge protection device*
-H		Luz piloto *Pilot light*
-K		Bobina, Relé *Coil, Relay*
		Relé de bloqueo rápido *Fast lockout relay*
	*	Relé de vigilancia *Monitoring relay*
-P	* %	Dispositivo de medición *Measuring device*
-PE		Punto de conexión de dispositivo PE *PE device connection point*
-Q	I> I> I>	Interruptor de potencia, tripolar (característica L, I) *Power switch, three-pole (characteristic L, I)*
-R		Resistencia deslizante, resistencia variable, resistancia , calefactor *Sliding resistor, variable resistor, resistor, heater*
-S		Interruptor de límite, contactos NA y NC *Limit switch, NO and NC contacts*
		Interruptor de llave / pulsador, contacto NA *Key switch / push button, NO contact*
		Interruptor de leva giratorio *Rotary cam switch*
		Interruptor de leva giratorio *Selector switch*
		Interruptor de apagado *Shut-off switch*
		Interruptor de accionamiento man., pulsador. *Switch manually operated, push-button*
		Interruptor / pulsador, contacto NC *Switch / push button, NC contact*

Ident. *Ident.*	Símbolos *Symbols*	Descripción *Description*
-T		Transformador *Transformer*
-U	*	Rectificador, amplificador de aislamiento, switch ethernet *Rectifier, isolation amplifier, ethernet switch*
	U I	Convertidor de señal *Signal converter*
-V	*	Módulo de diodos *Diode module*
-X		Toma de corriente para cuadro de distribución *Power outlet for distribution panel*
		Terminal (símbolo genérico) *Terminal (generic symbol)*
		Borne interrump. para circ. medida *Test disconnect terminal*
-XF	*	Toma de prueba *Test socket*

* Nota: Para estos dispositivos se utilizan símbolos diferentes a los de la norma IEC 60617.

** Note: Different symbols than IEC 60617 are used for these devices.*

Según IEC 60617

According to IEC 60617

Date:	2026-03-11	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design:	Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-06	Drawing: 221	Revision: 00
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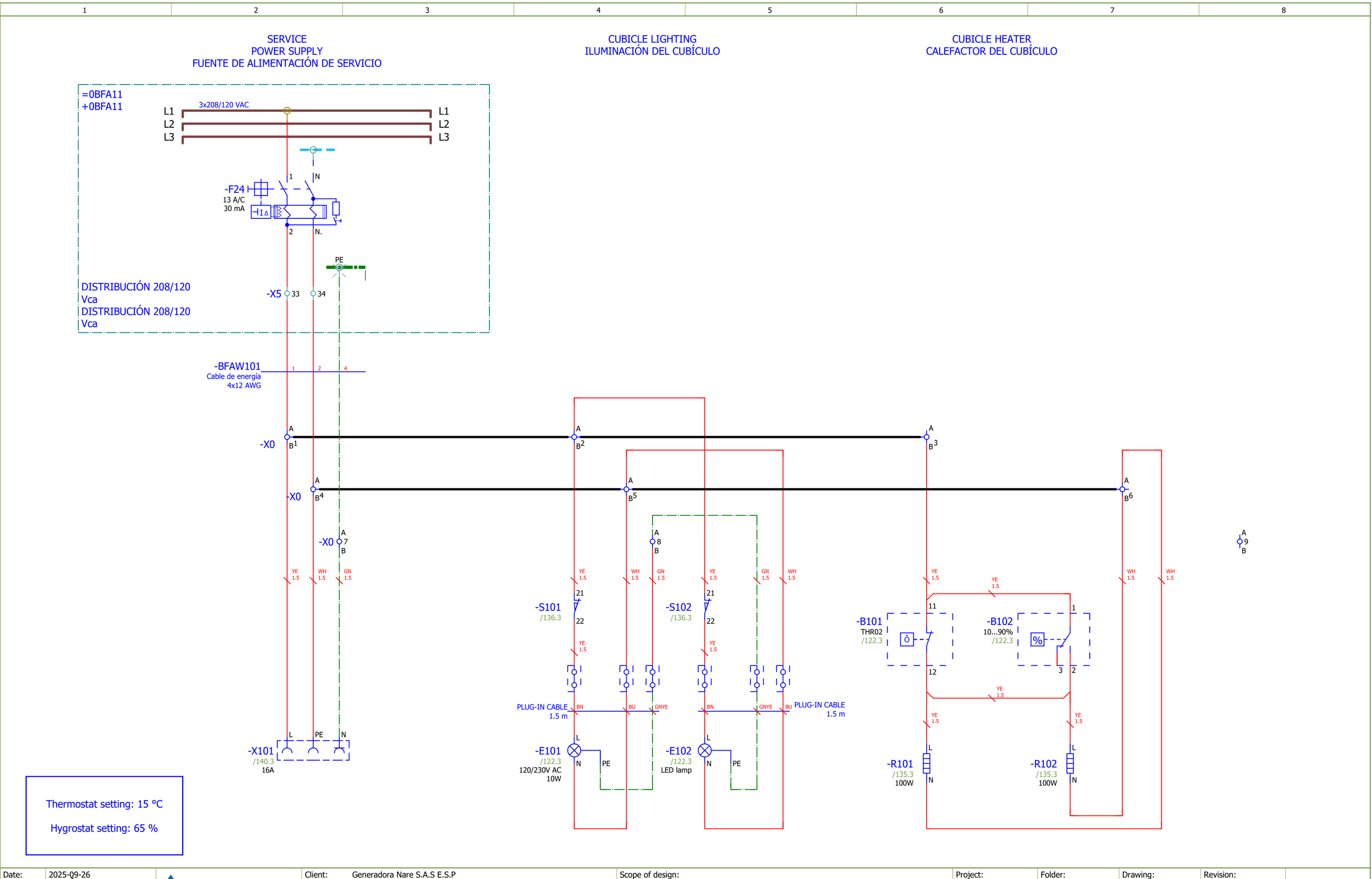

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Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE Columbia	Content: AC DISTRIBUTION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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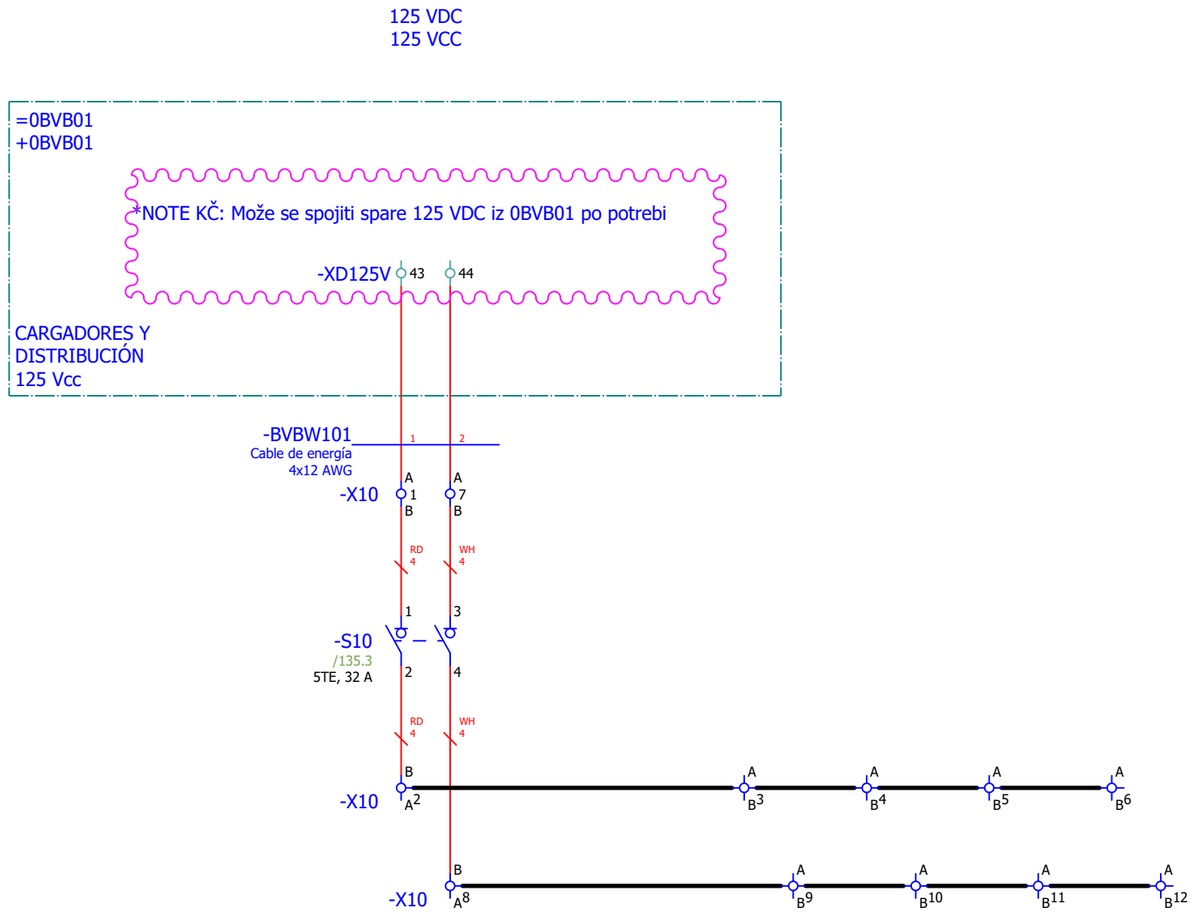

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Drawn:	Karlo Čotić Karlo Čotić				Unit 1 control and protection cubicle	24028-DD	EE-02	221	01 #G
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Colombia PCH NARE	Content:	Drawing designation:			=1CJA01 Sheet: 5
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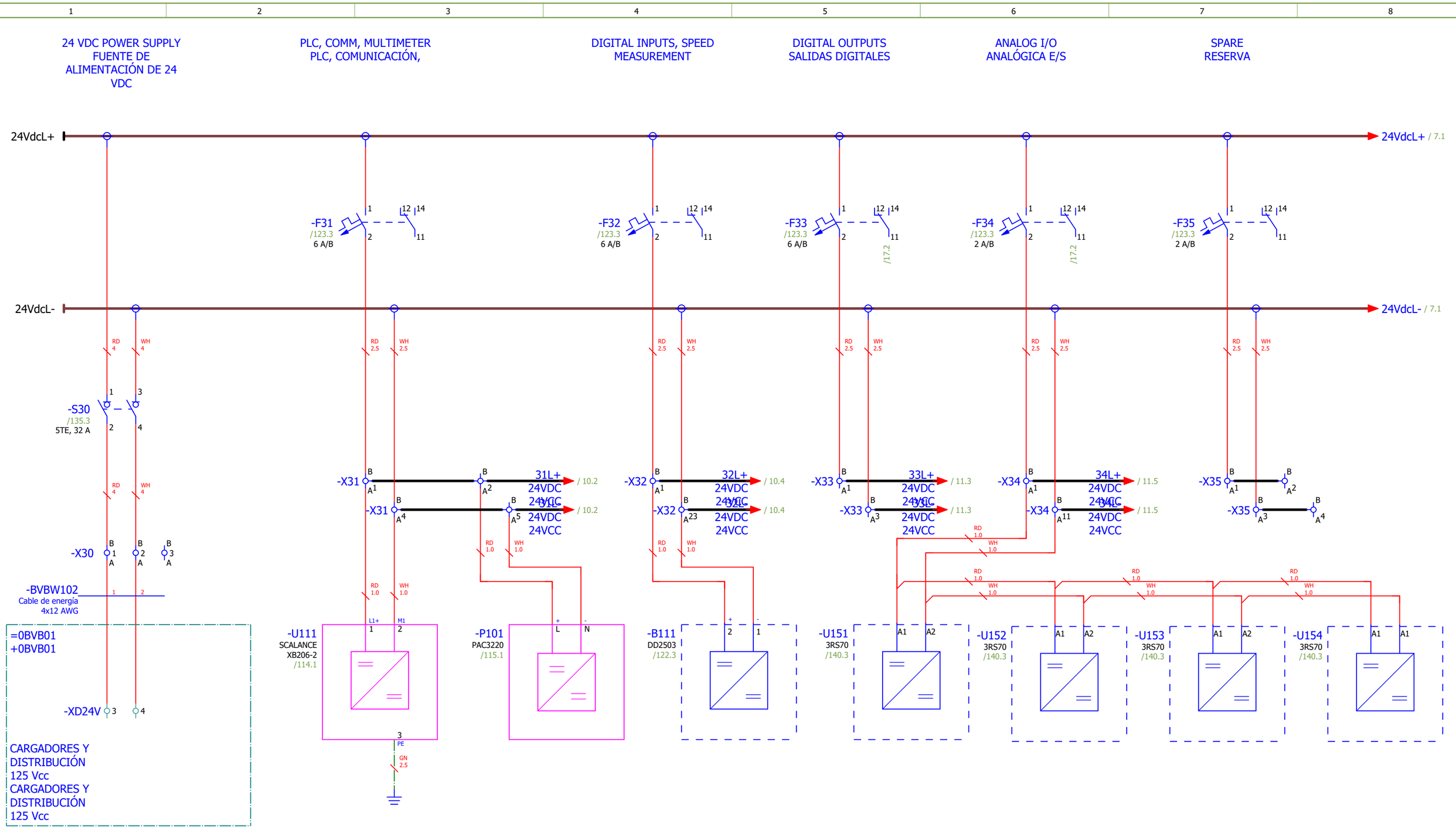

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Drawn:	Karlo Čotić								#G
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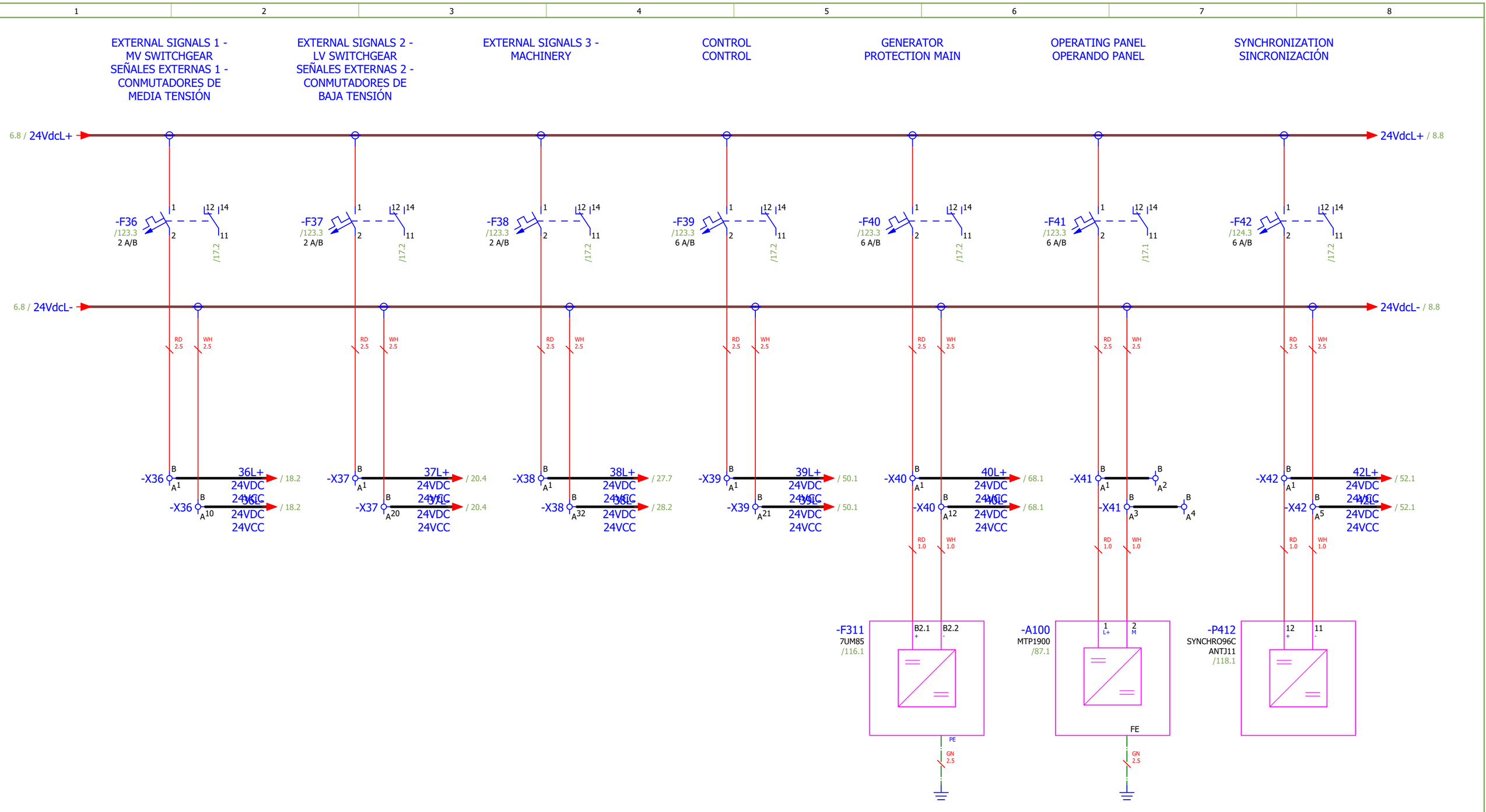

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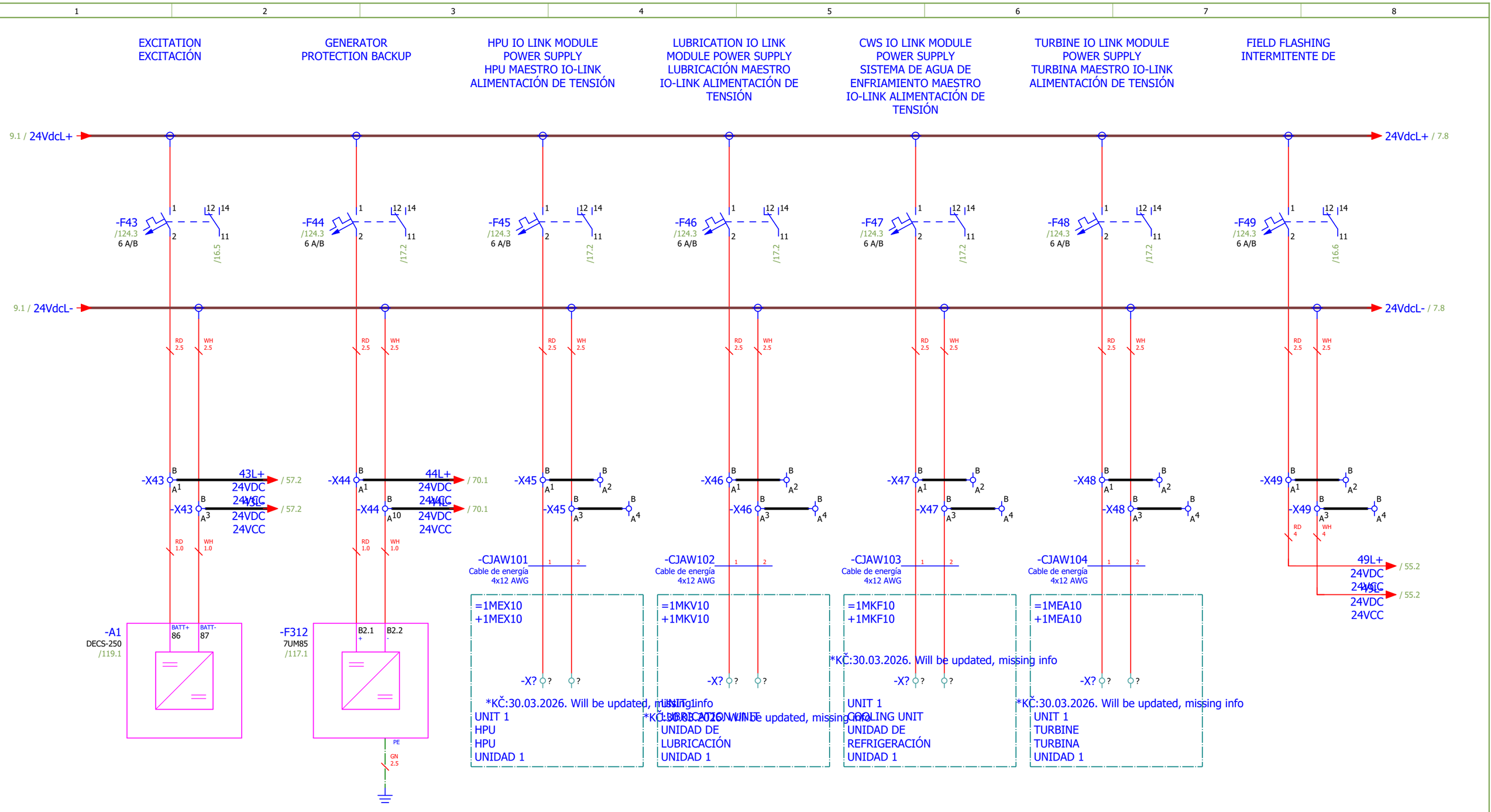

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Drawn:	Karlo Čotić								#G
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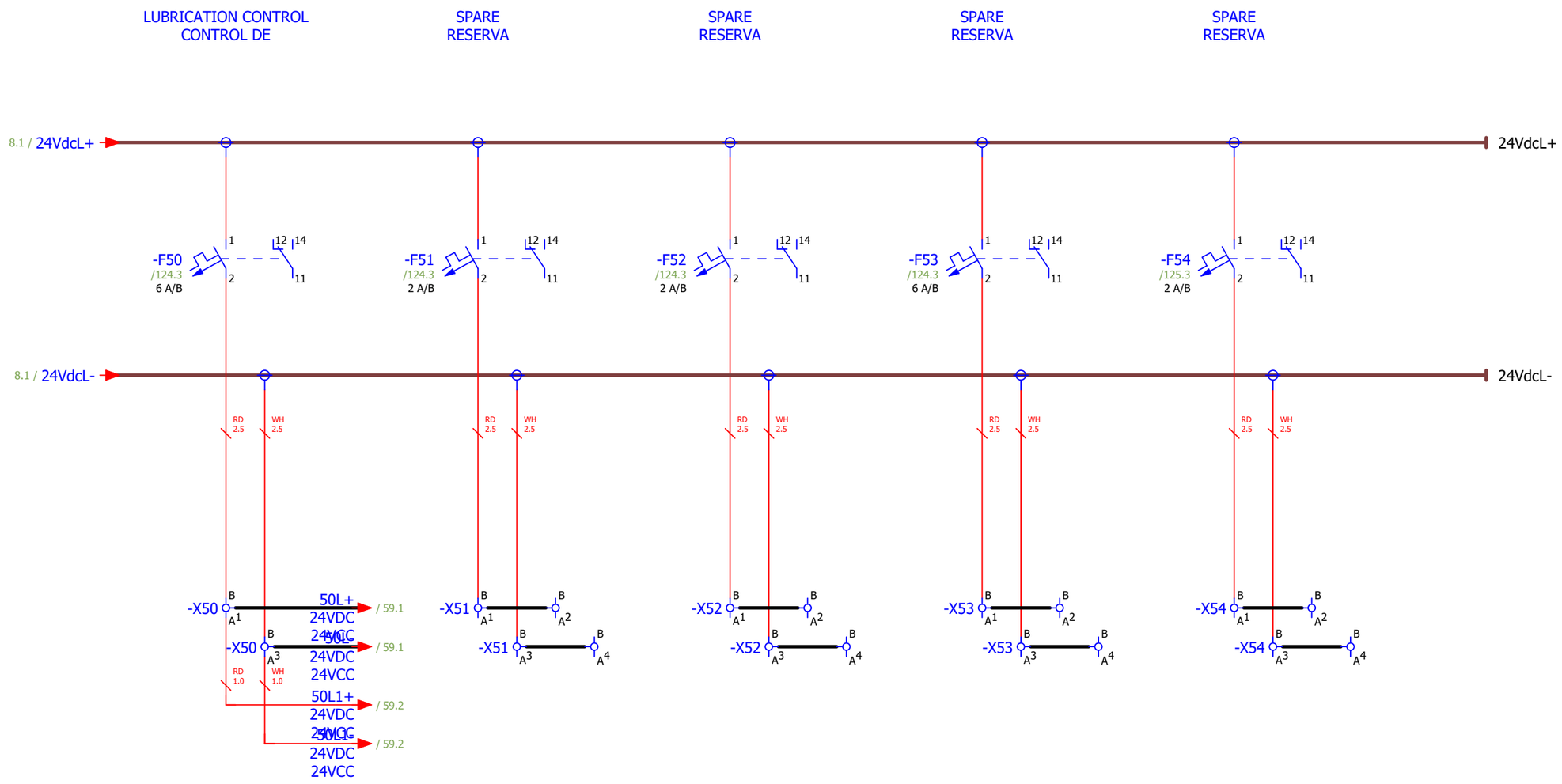

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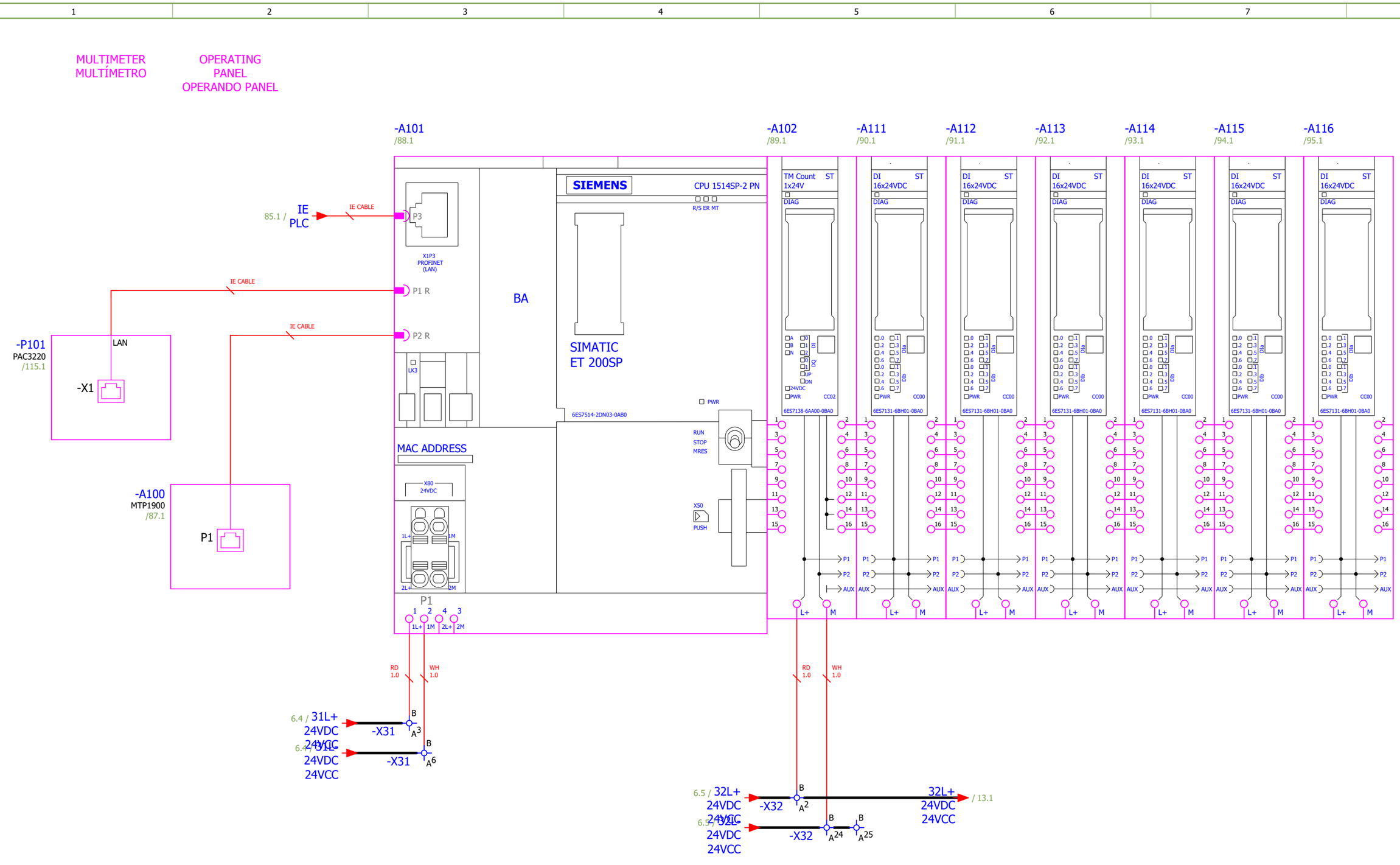

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Drawn:	Karlo Čotić								#MA
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: PLC CONFIGURATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 10
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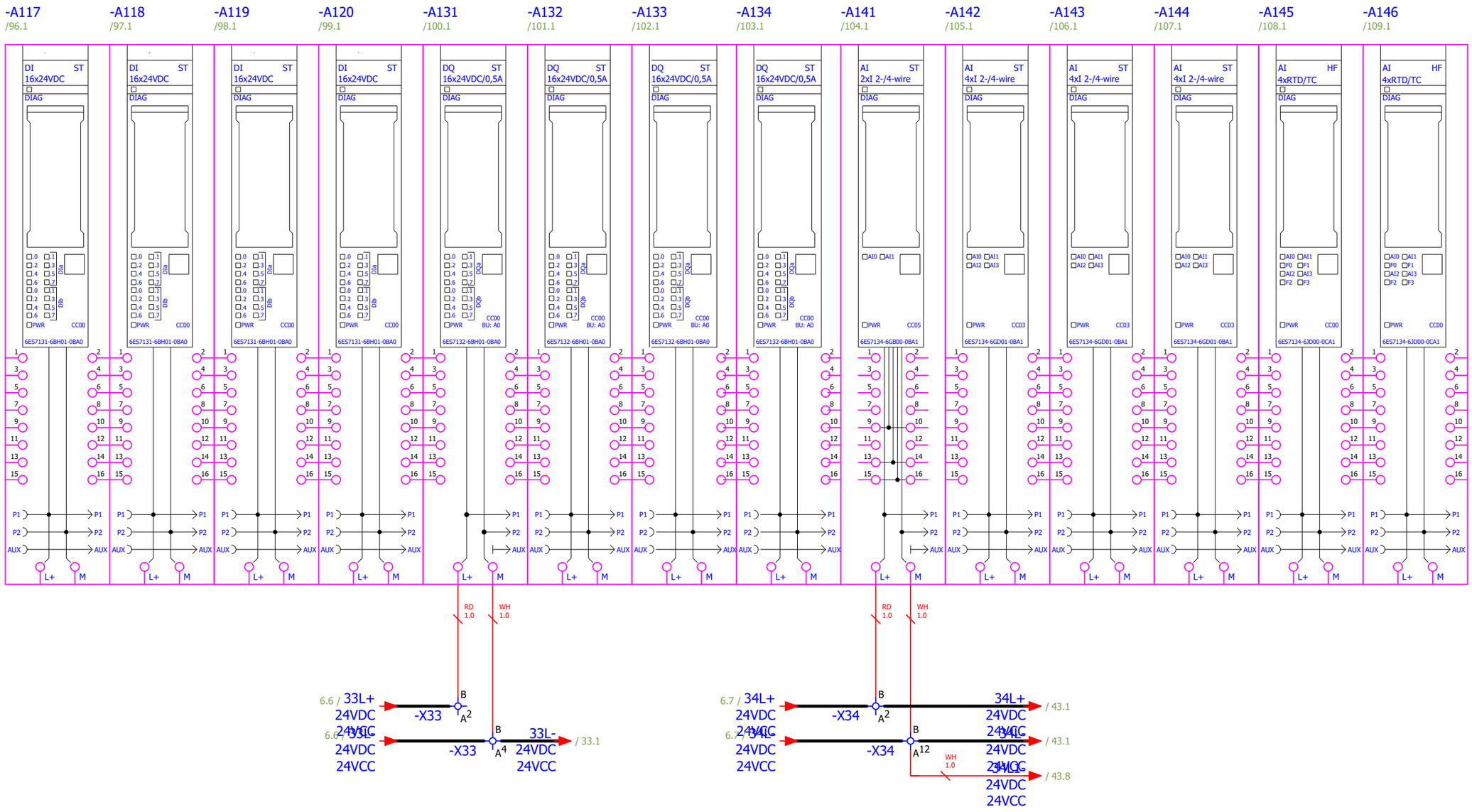

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Drawn:	Karlo Čotić								#MA
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: PLC CONFIGURATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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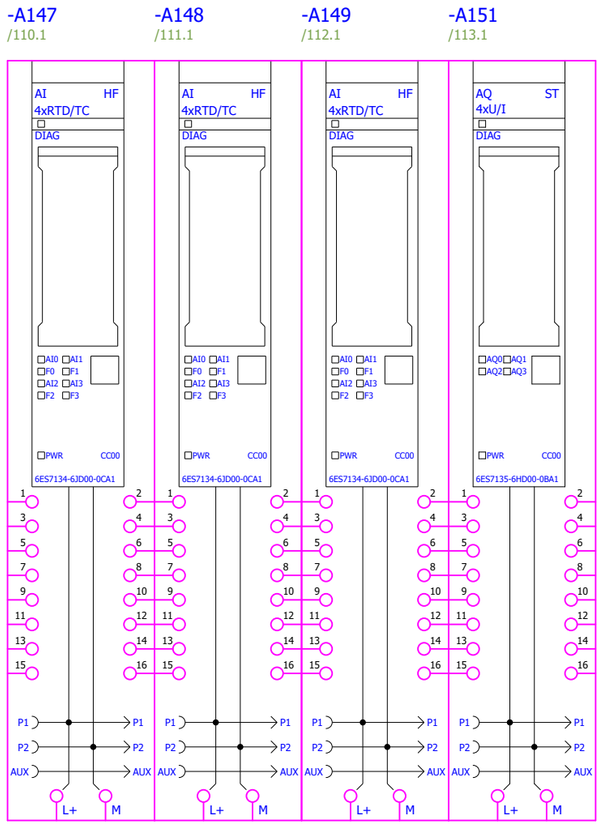

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Drawn:	Karlo Čotić Karlo Čotić								#MA
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: PLC CONFIGURATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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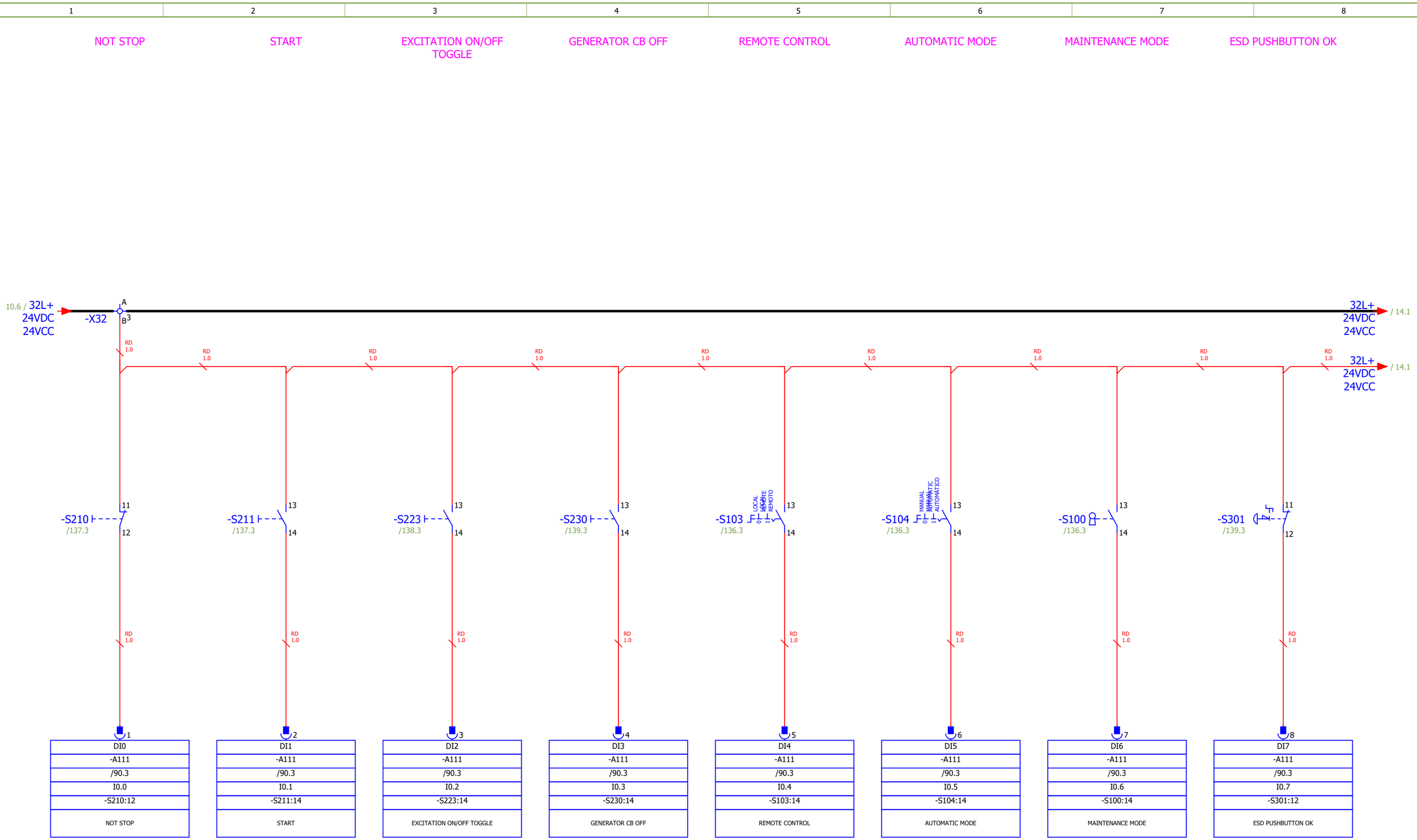

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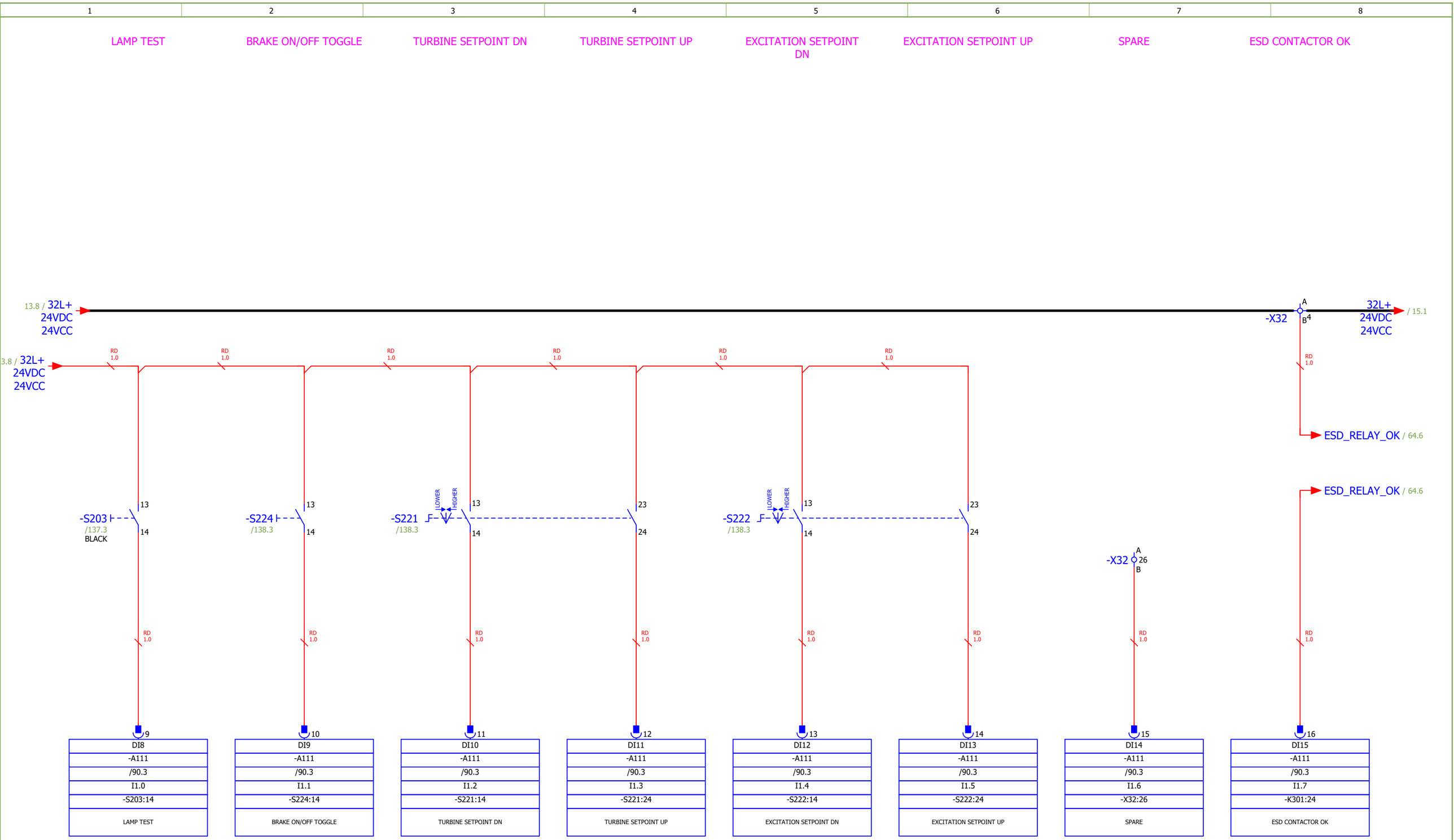

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: DIGITAL INPUTS: 1.0 - 1.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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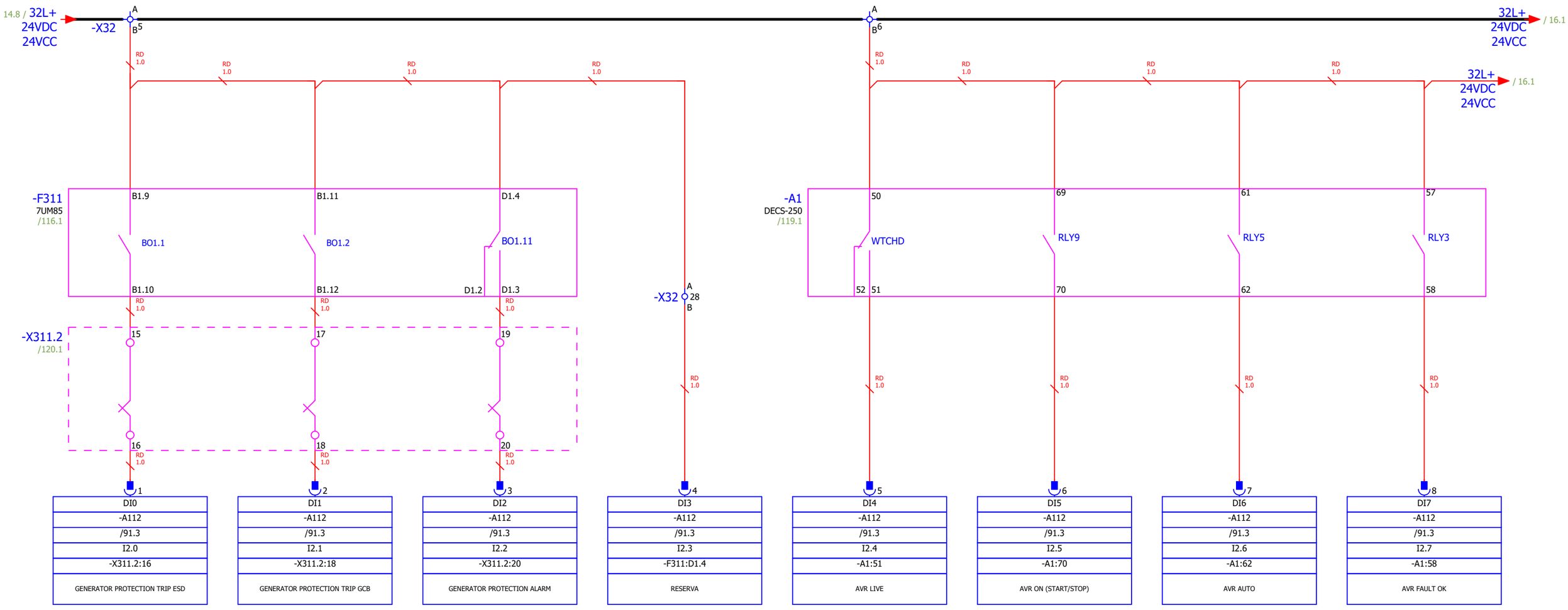
Sheet: 14
Next: 15

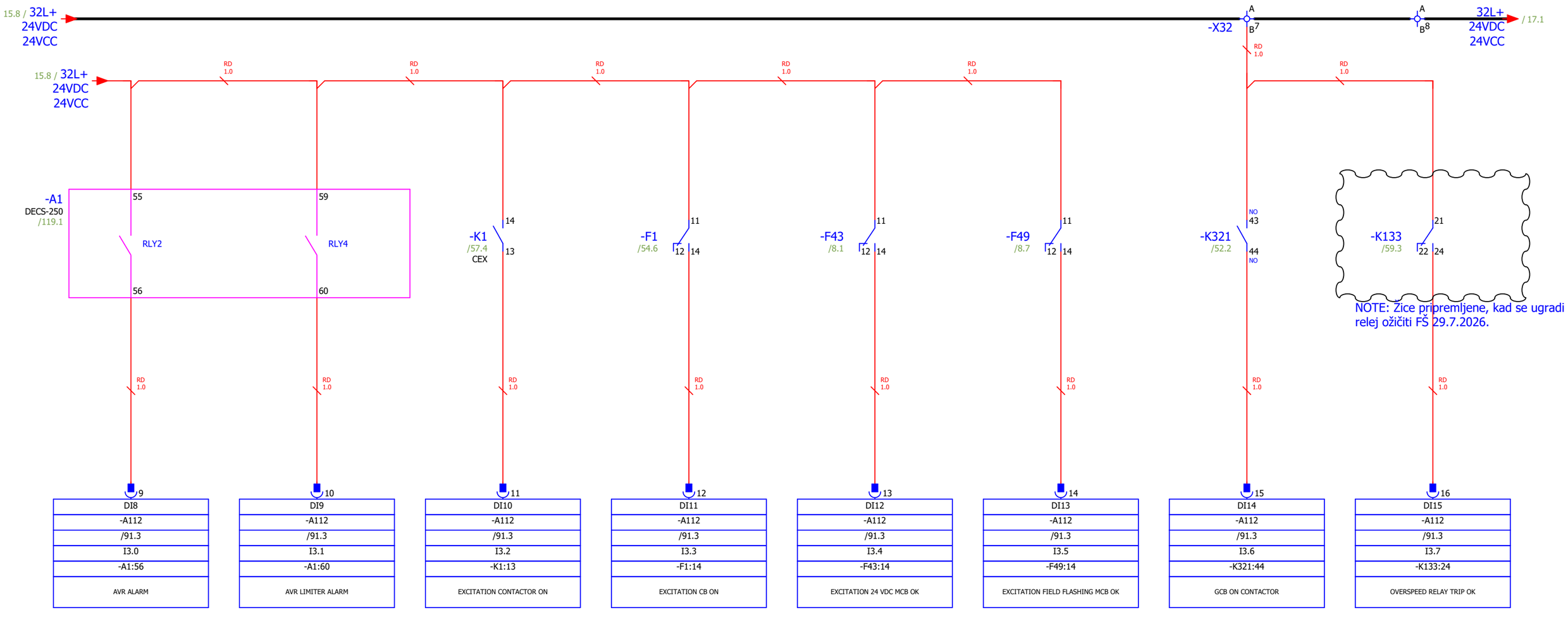
1	2	3	4	5	6	7	8
GENERATOR PROTECTION TRIP ESD	GENERATOR PROTECTION TRIP GCB	GENERATOR PROTECTION ALARM	RESERVA	AVR LIVE	AVR ON (START/STOP)	AVR AUTO	AVR FAULT OK



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić									#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: DIGITAL INPUTS: 2.0 - 2.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 15
Format:	A4								+1CJA01	Next: 16

Karlo Čotić
Patrik Kovač
Columbia
PCH NARE

1	2	3	4	5	6	7	8
AVR ALARM	AVR LIMITER ALARM	EXCITATION CONTACTOR ON	EXCITATION CB ON	EXCITATION 24 VDC MCB OK	EXCITATION FIELD FLASHING MCB OK	GCB ON CONTACTOR	OVERSPEED RELAY TRIP OK



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić									#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL INPUTS: 3.0 - 3.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 16
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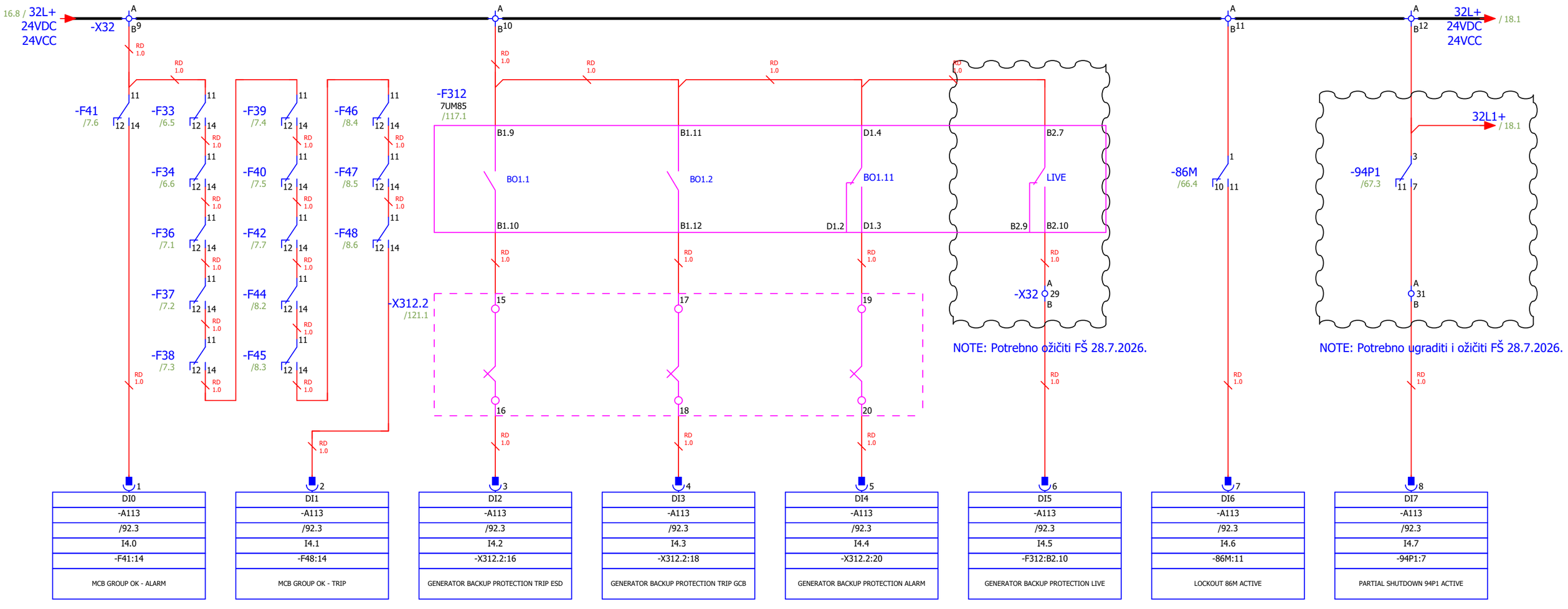
1	2	3	4	5	6	7	8
MCB GROUP OK - ALARM	MCB GROUP OK - TRIP	GENERATOR BACKUP PROTECTION TRIP ESD	GENERATOR BACKUP PROTECTION TRIP GCB	GENERATOR BACKUP PROTECTION ALARM	GENERATOR BACKUP PROTECTION LIVE	LOCKOUT 86M ACTIVE	PARTIAL SHUTDOWN 94P1 ACTIVE



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić									#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: DIGITAL INPUTS: 4.0 - 4.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 17
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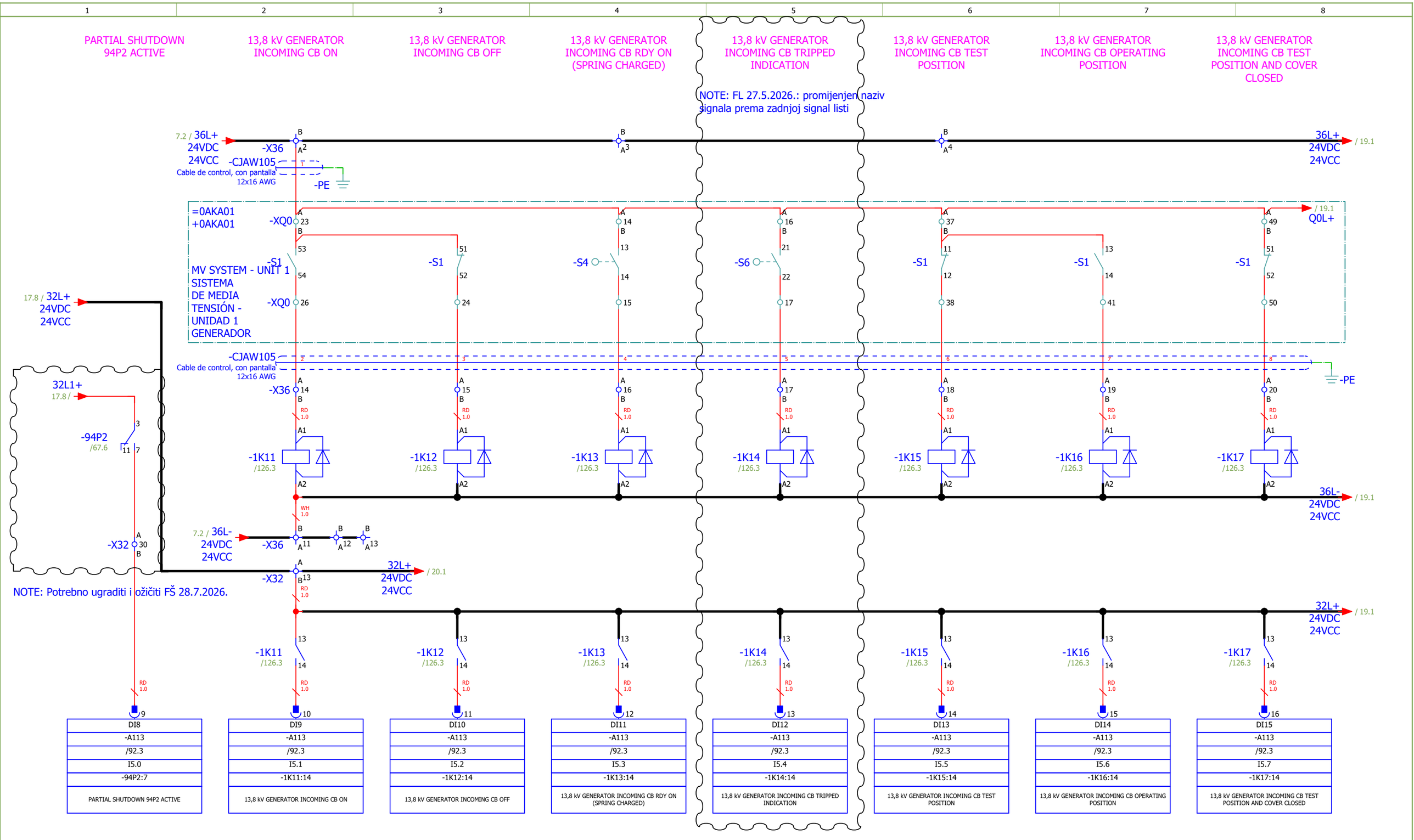

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: DIGITAL INPUTS: 5.0 - 5.7	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 18
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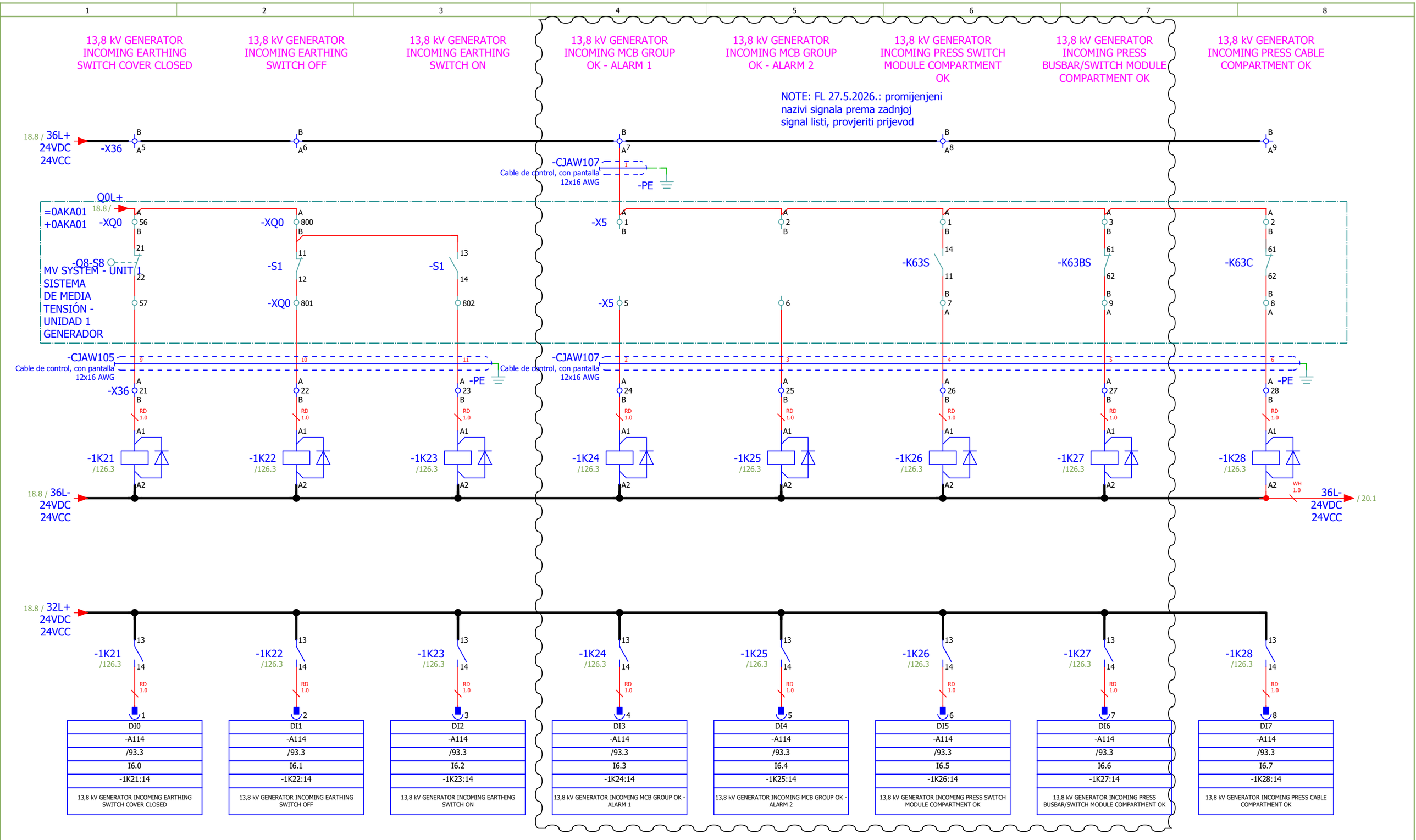

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: DIGITAL INPUTS: 6.0 - 6.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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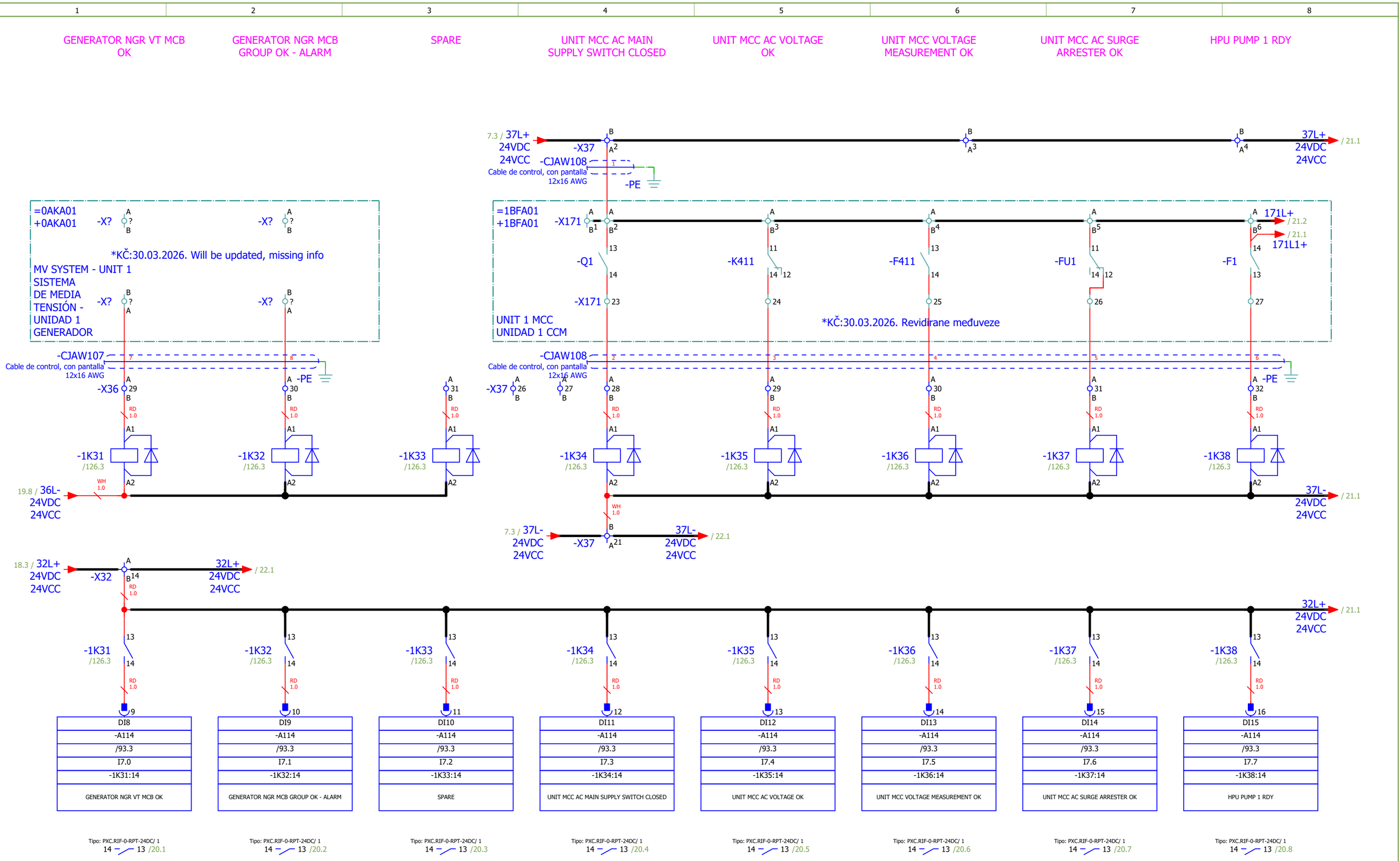

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#MB
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: DIGITAL INPUTS: 7.0 - 7.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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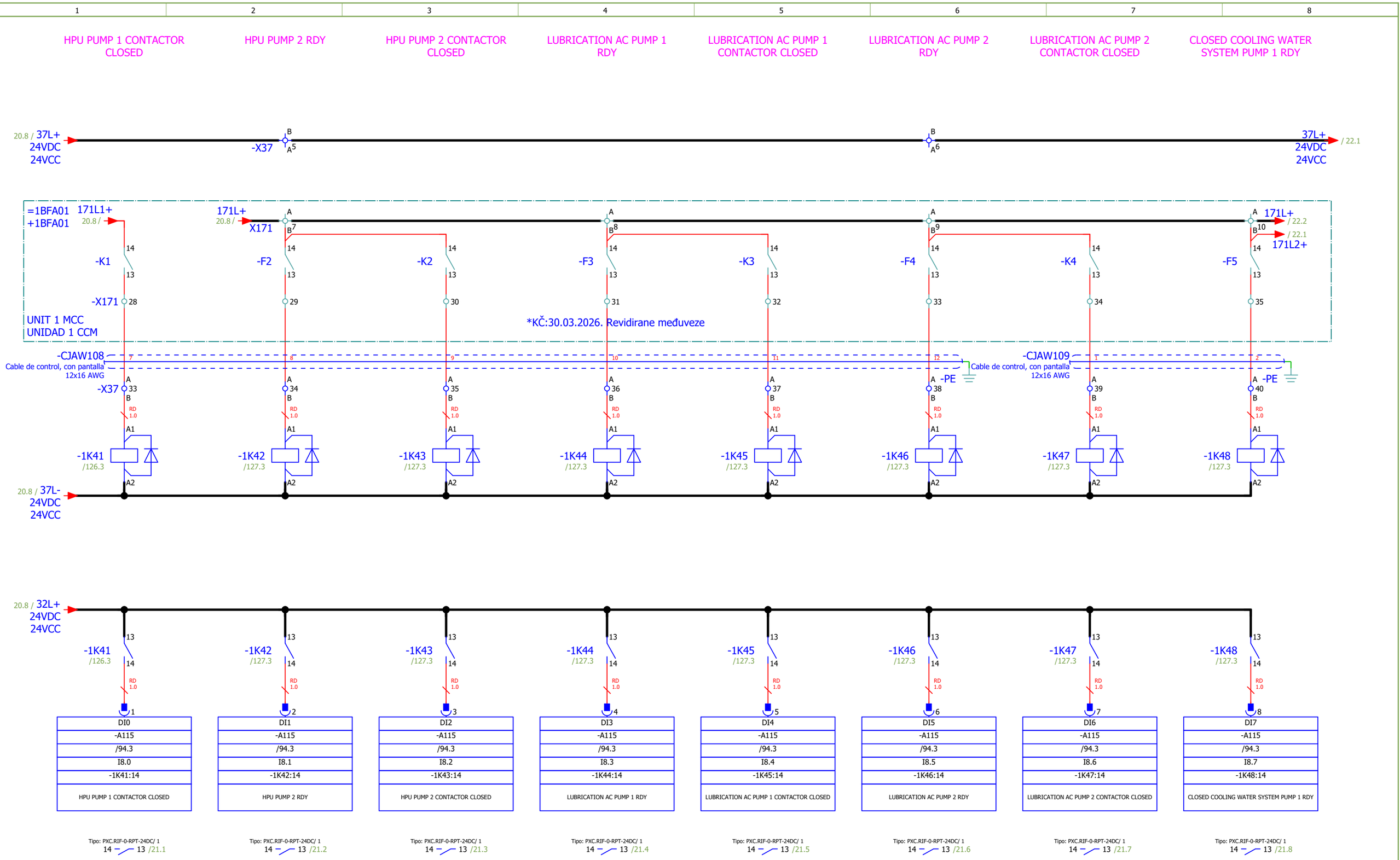

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL INPUTS: 8.0 - 8.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Approved:	Patrik Kovač Patrik Kovač								+1CJA01
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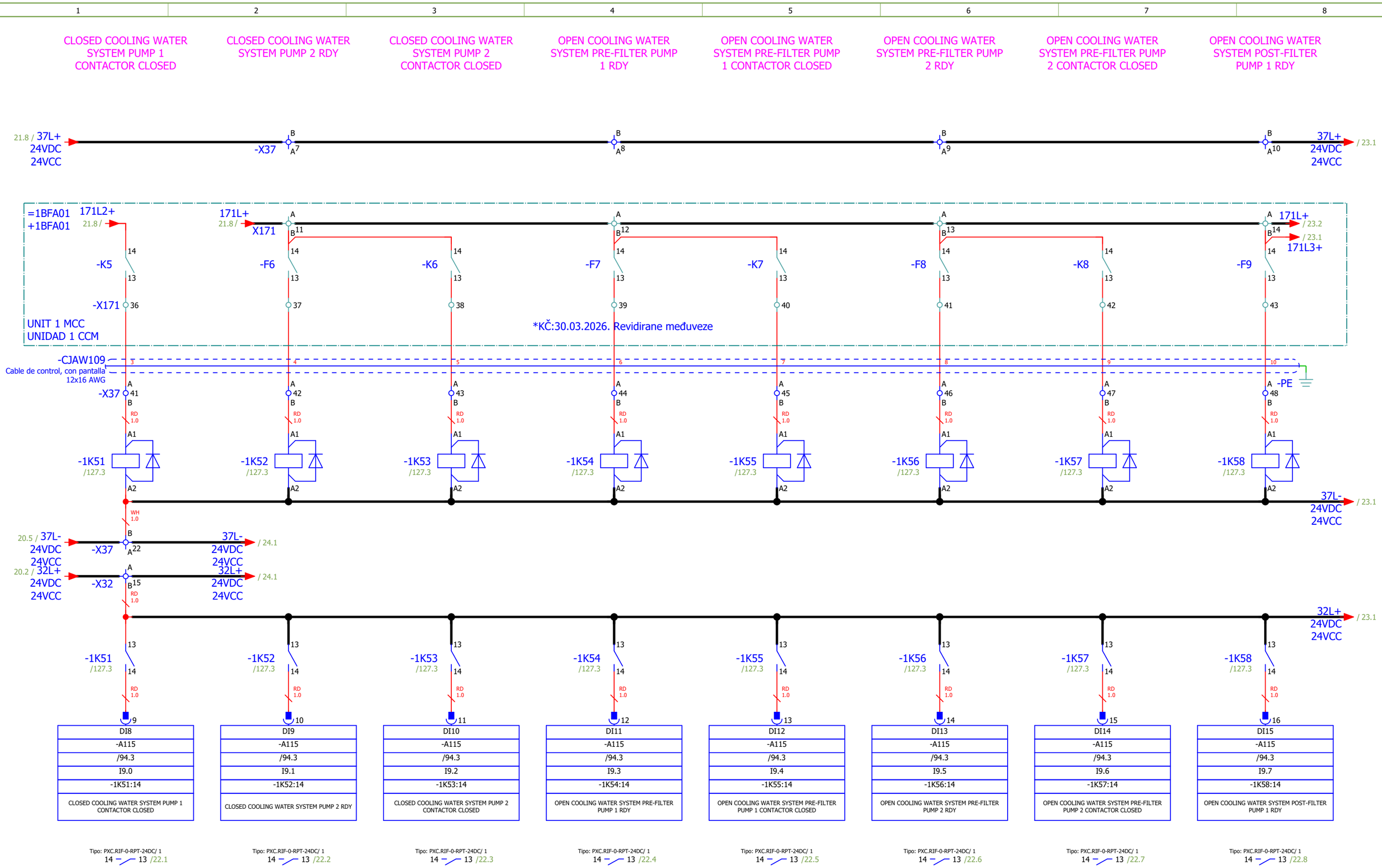

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: DIGITAL INPUTS: 9.0 - 9.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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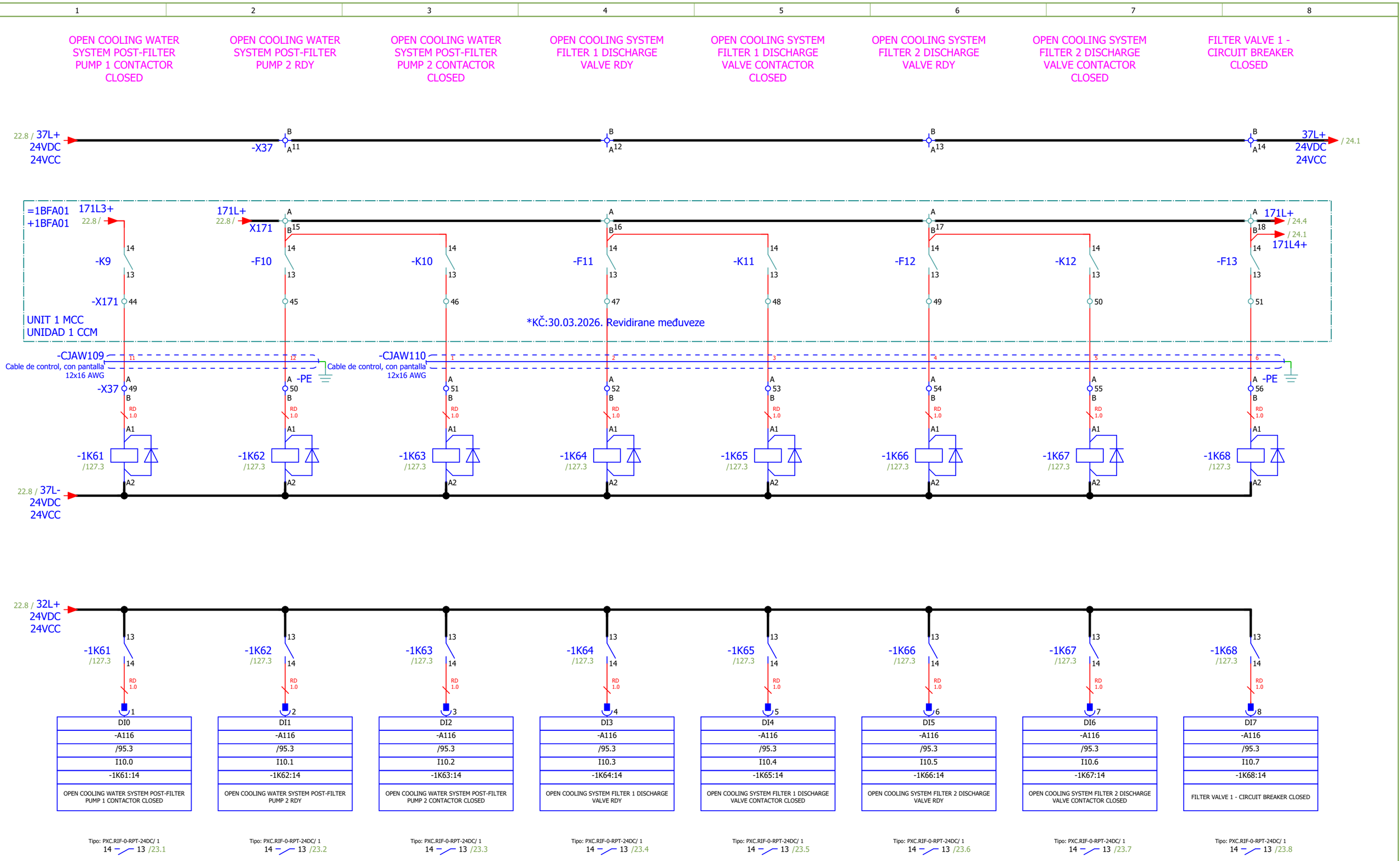

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: DIGITAL INPUTS: 10.0 - 10.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Approved:	Patrik Kovač Patrik Kovač								+1CJA01
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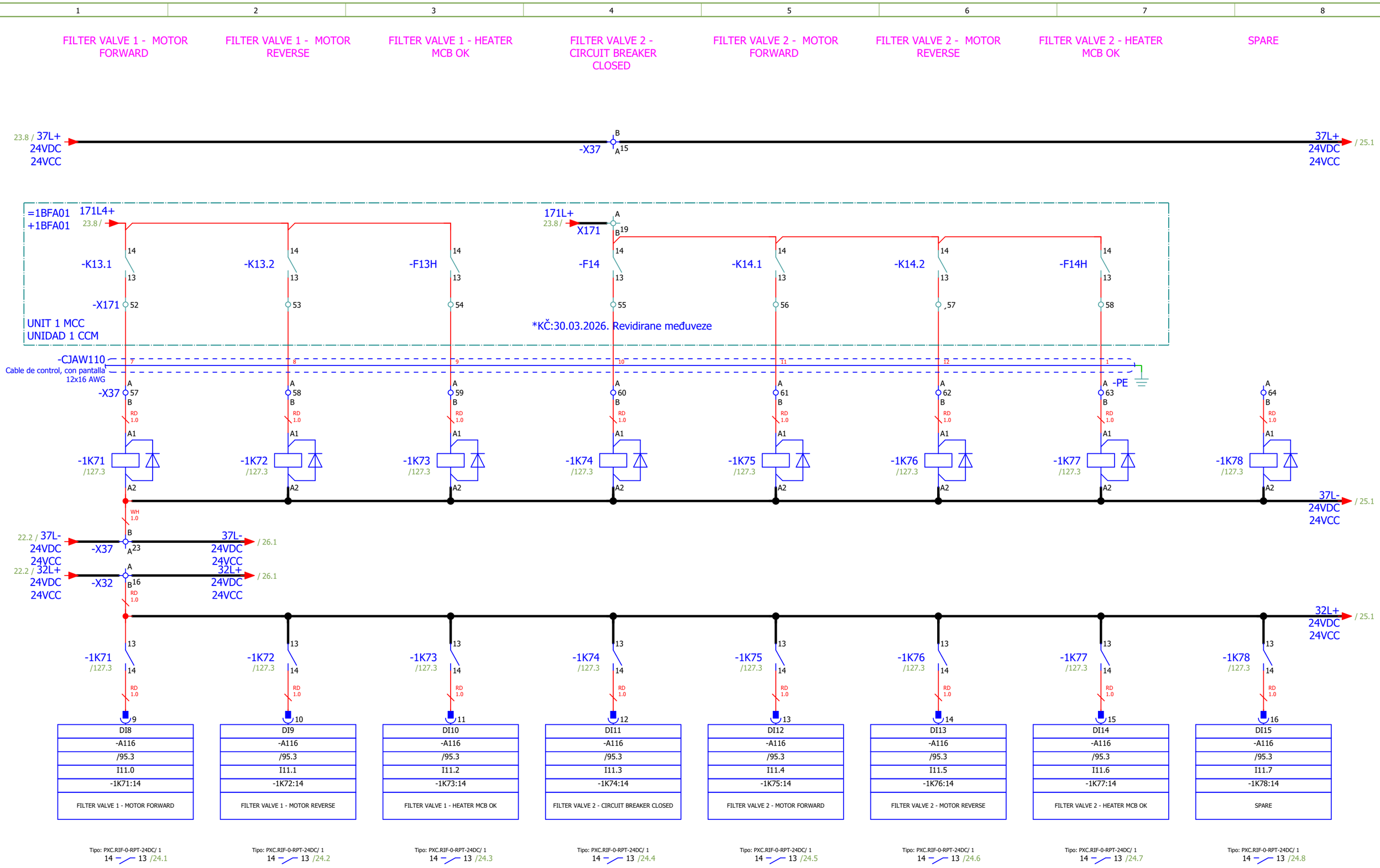

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: DIGITAL INPUTS: 11.0 - 11.7	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 24
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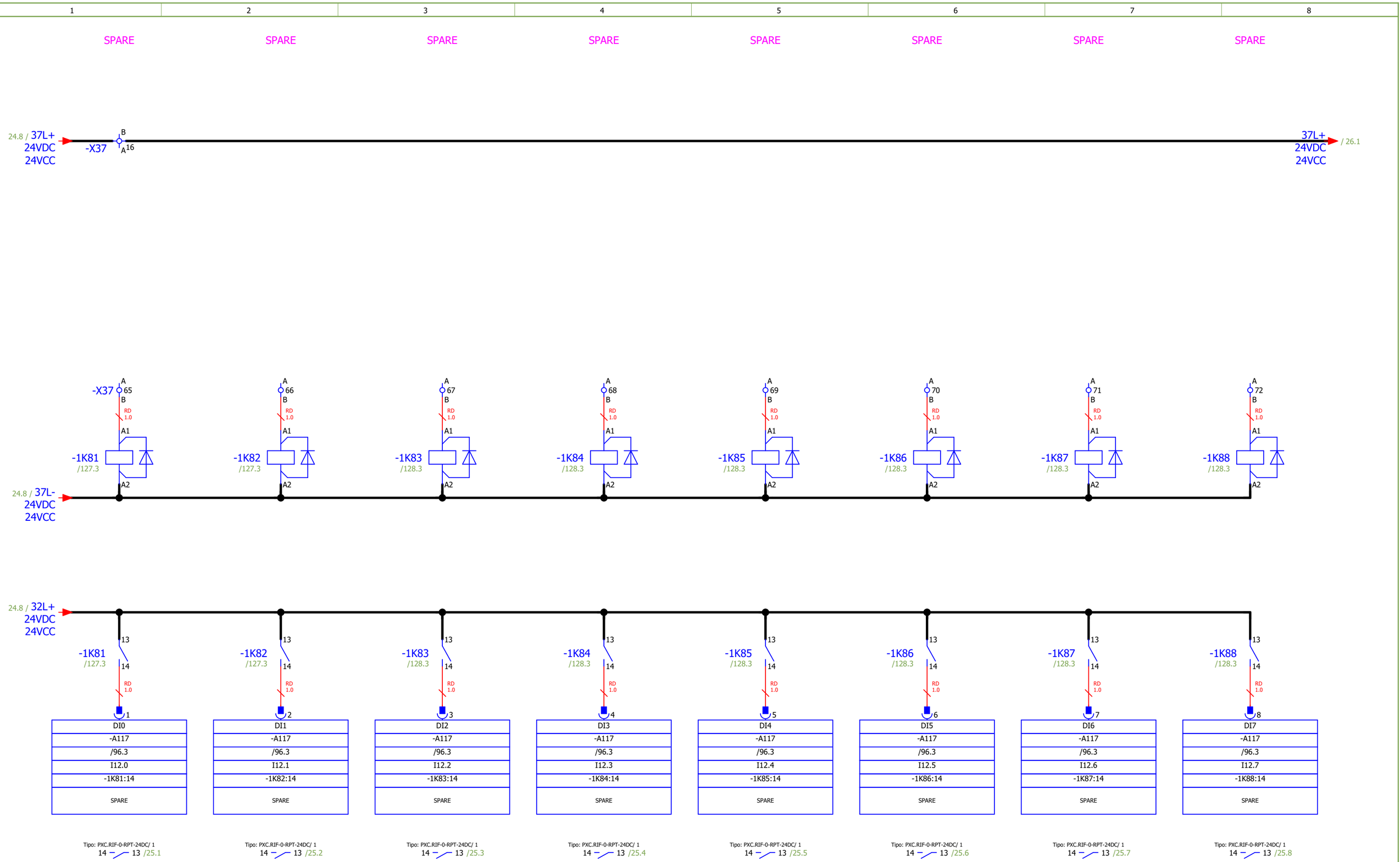

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: DIGITAL INPUTS: 12.0 - 12.7	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 25
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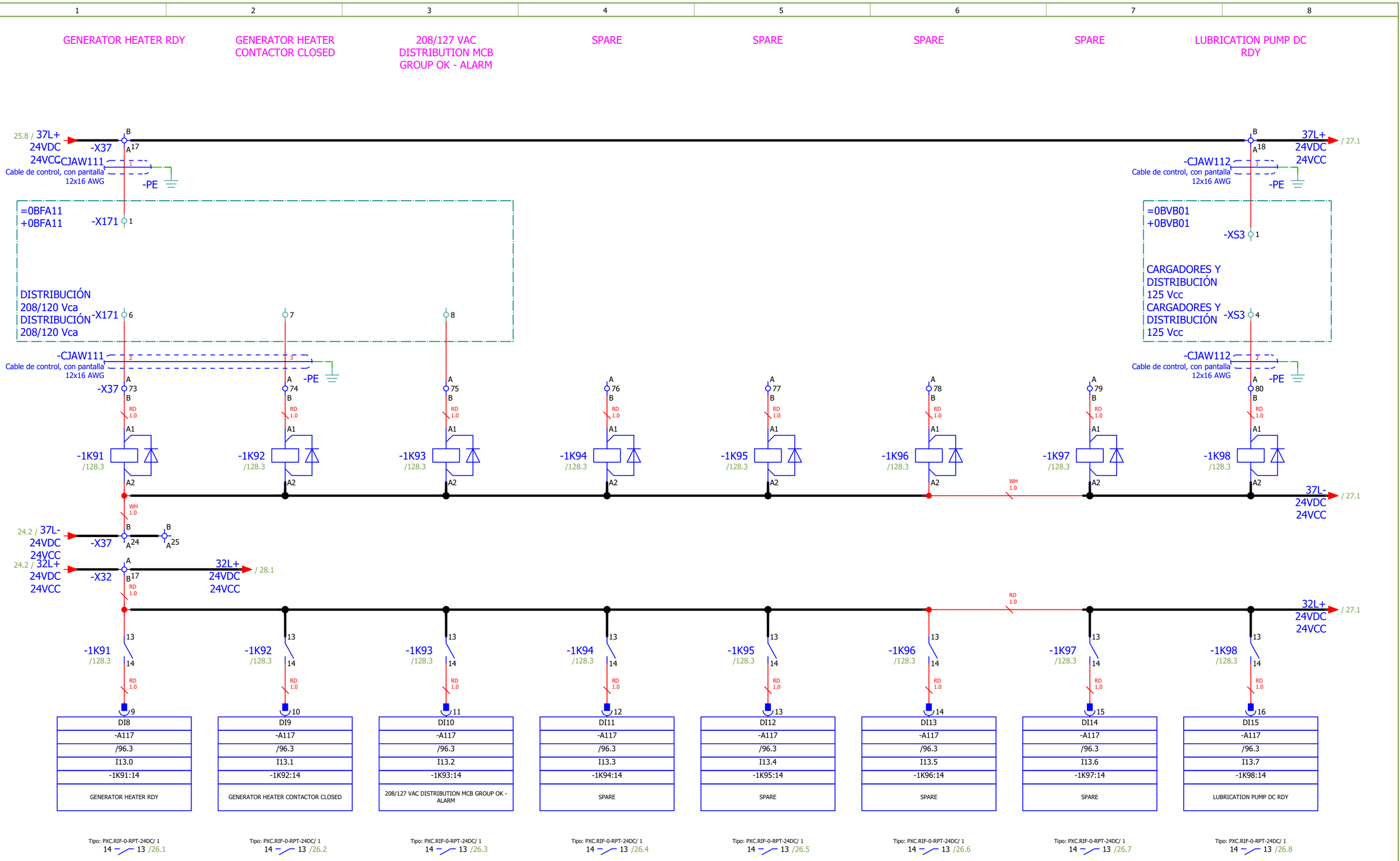

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
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Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: DIGITAL INPUTS: 13.0 - 13.7	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 26
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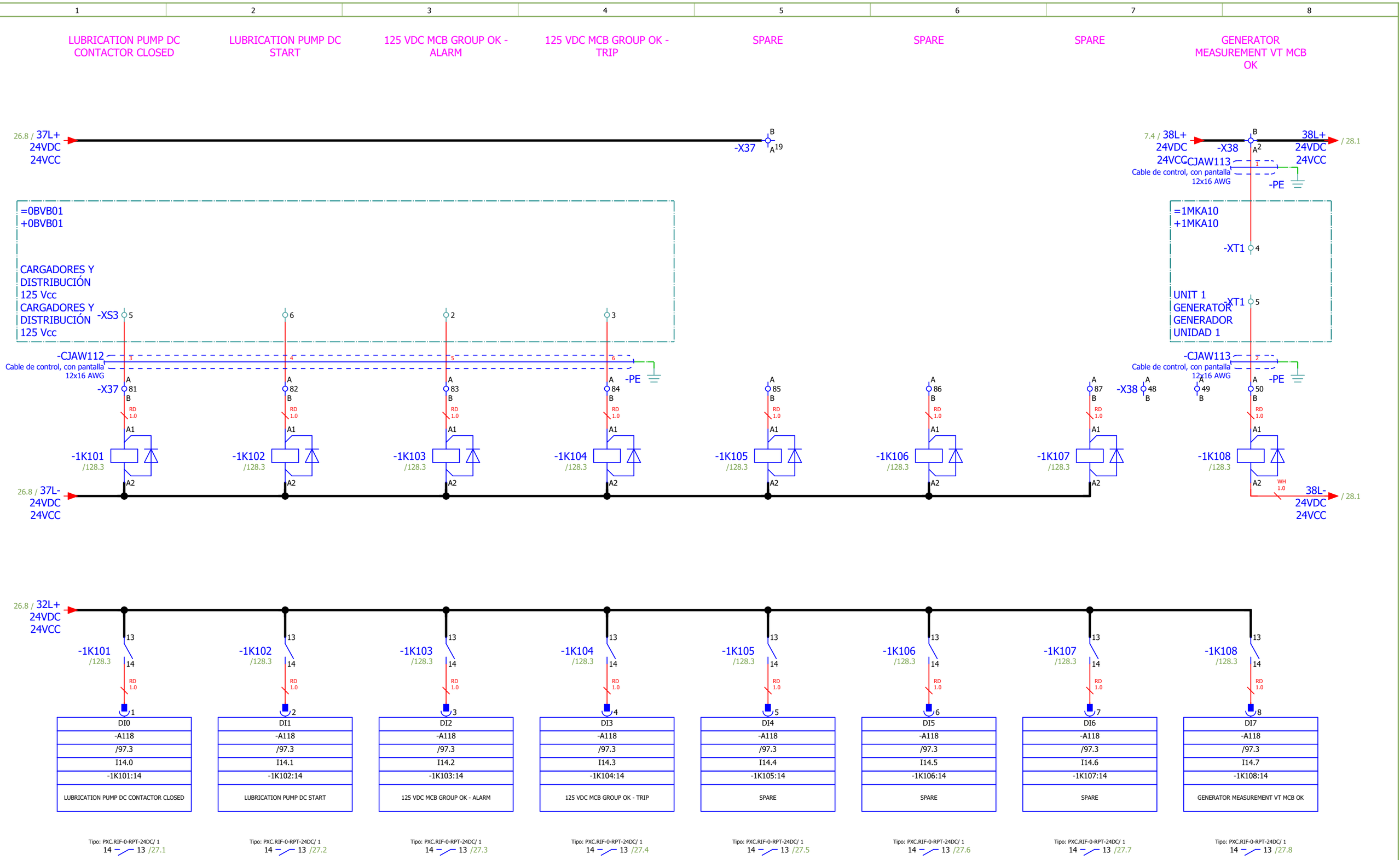

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: DIGITAL INPUTS: 14.0 - 14.7	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 27
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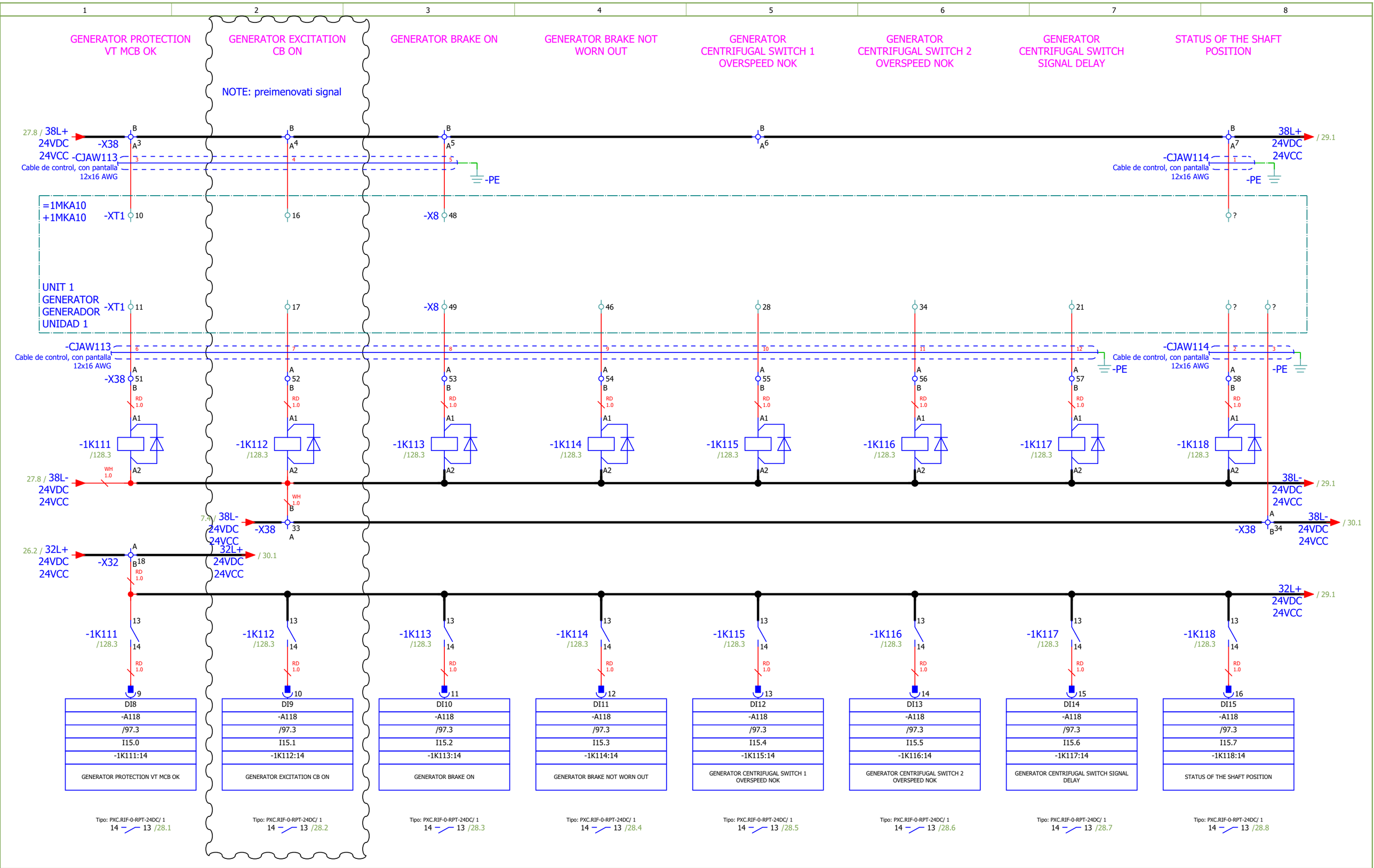

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#MB
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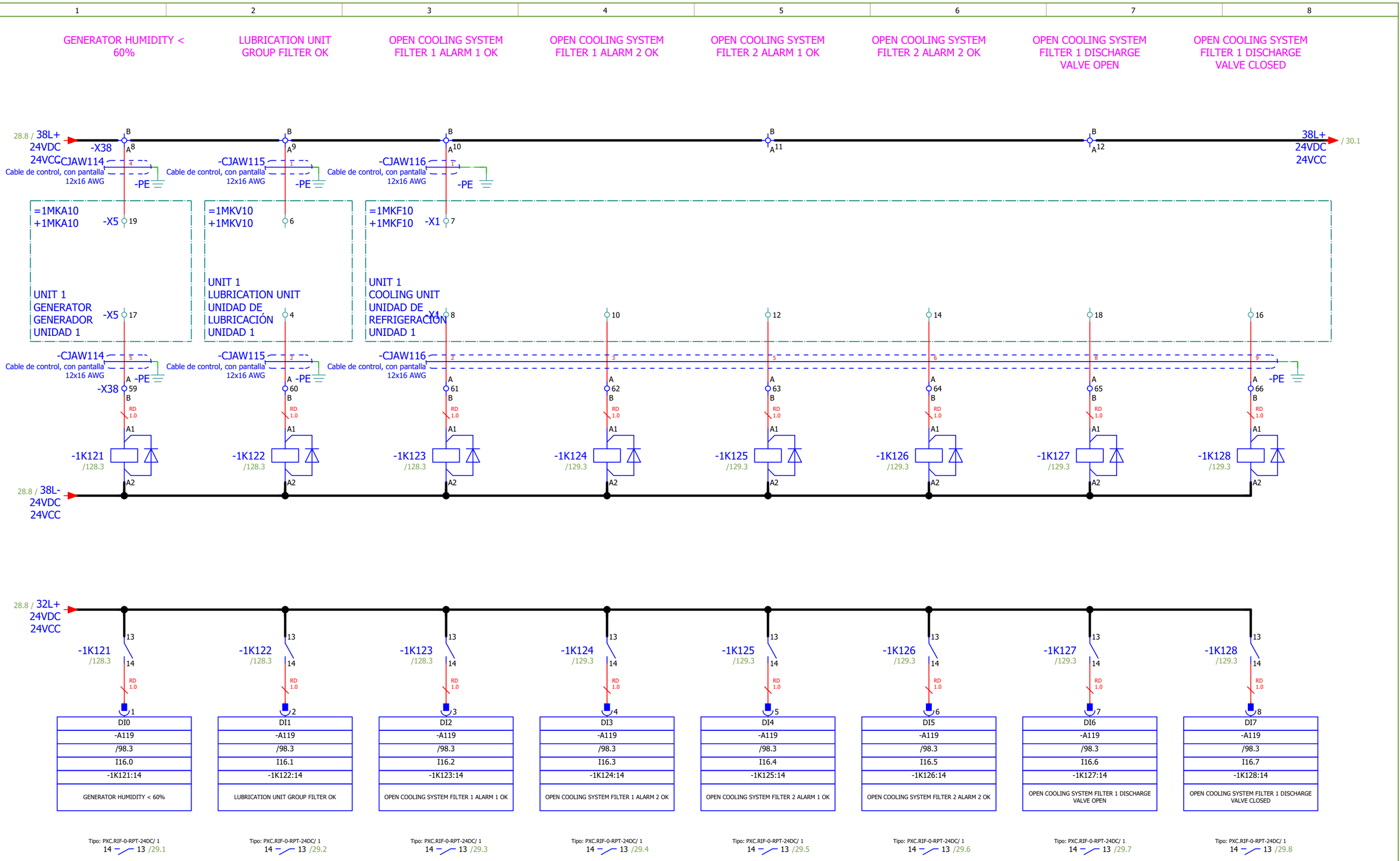

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić Karlo Cotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: DIGITAL INPUTS: 16.0 - 16.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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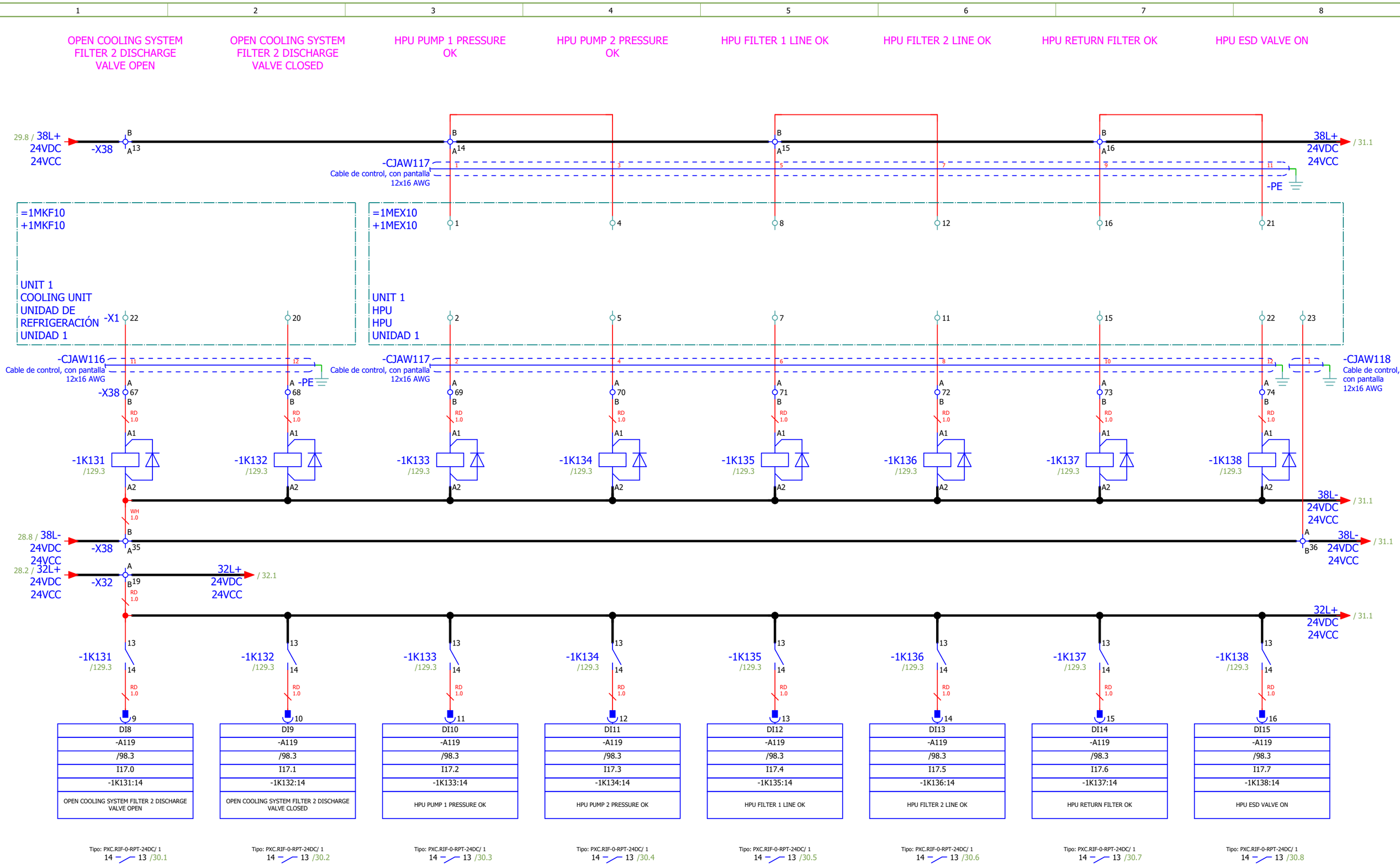

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
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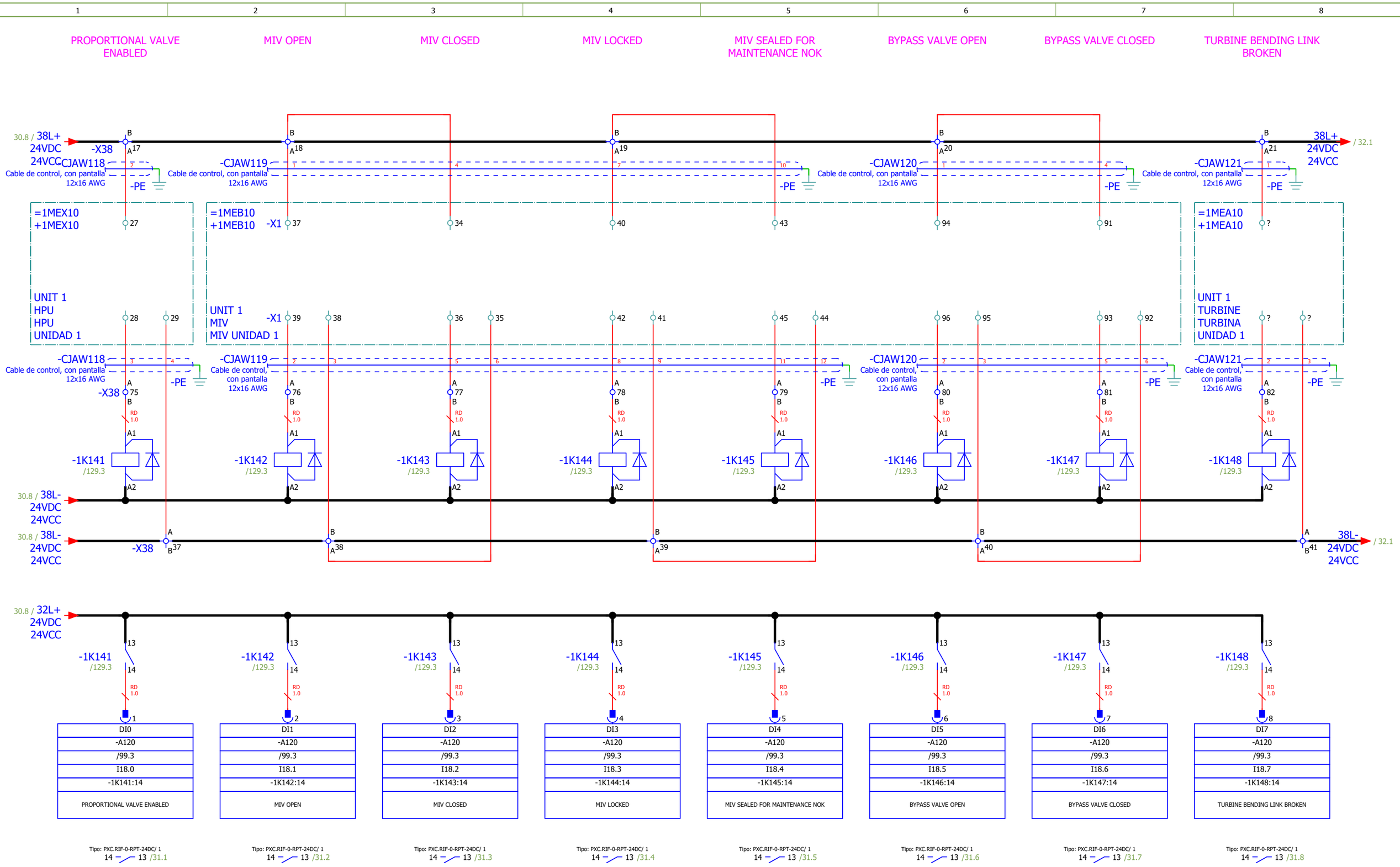
Karlo Čotić
Patrik Kovač
Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
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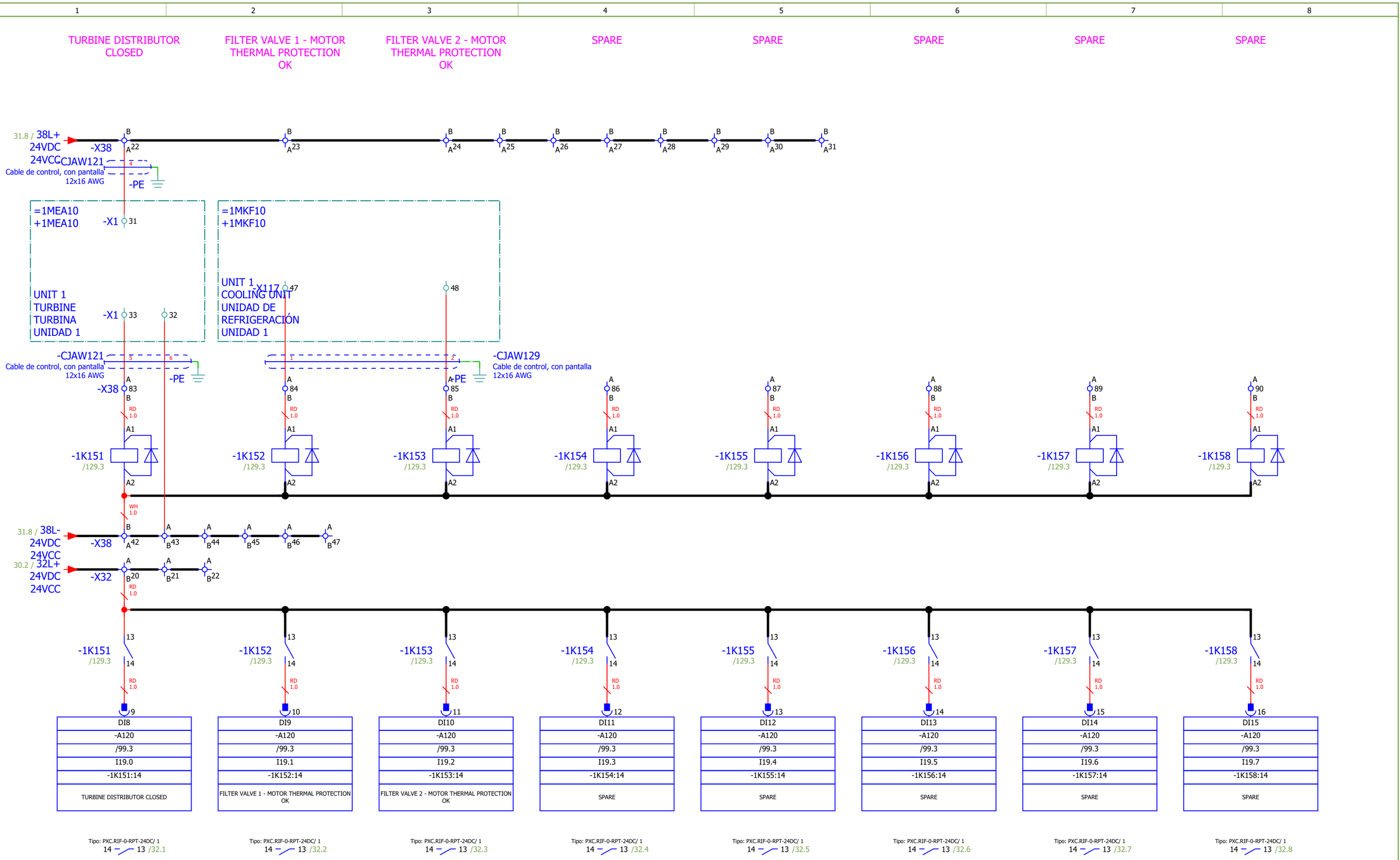

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
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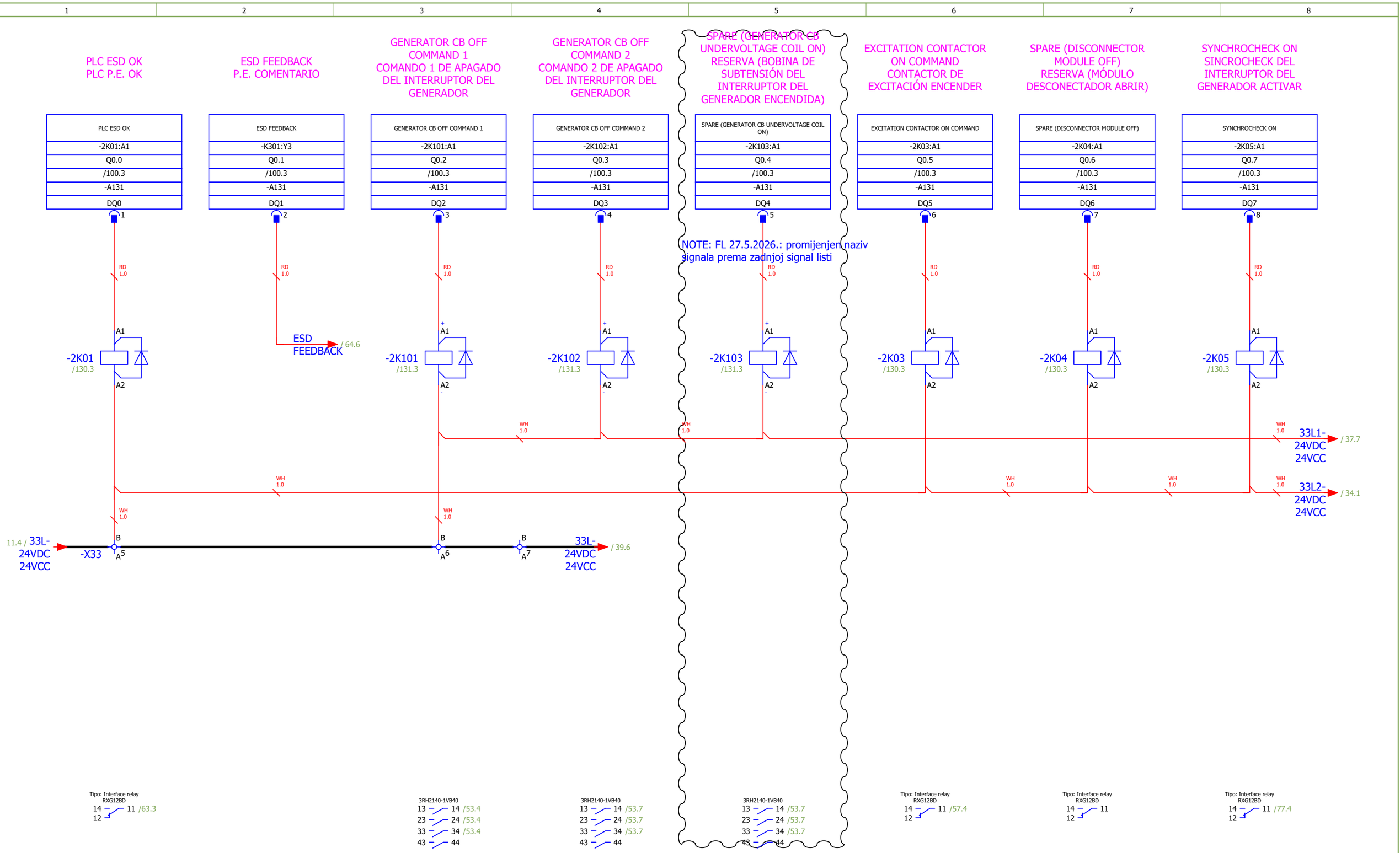
Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić Karlo Cotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: DIGITAL OUTPUTS: 0.0 - 0.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Approved:	Patrik Kovač Patrik Kovač								+1CJA01
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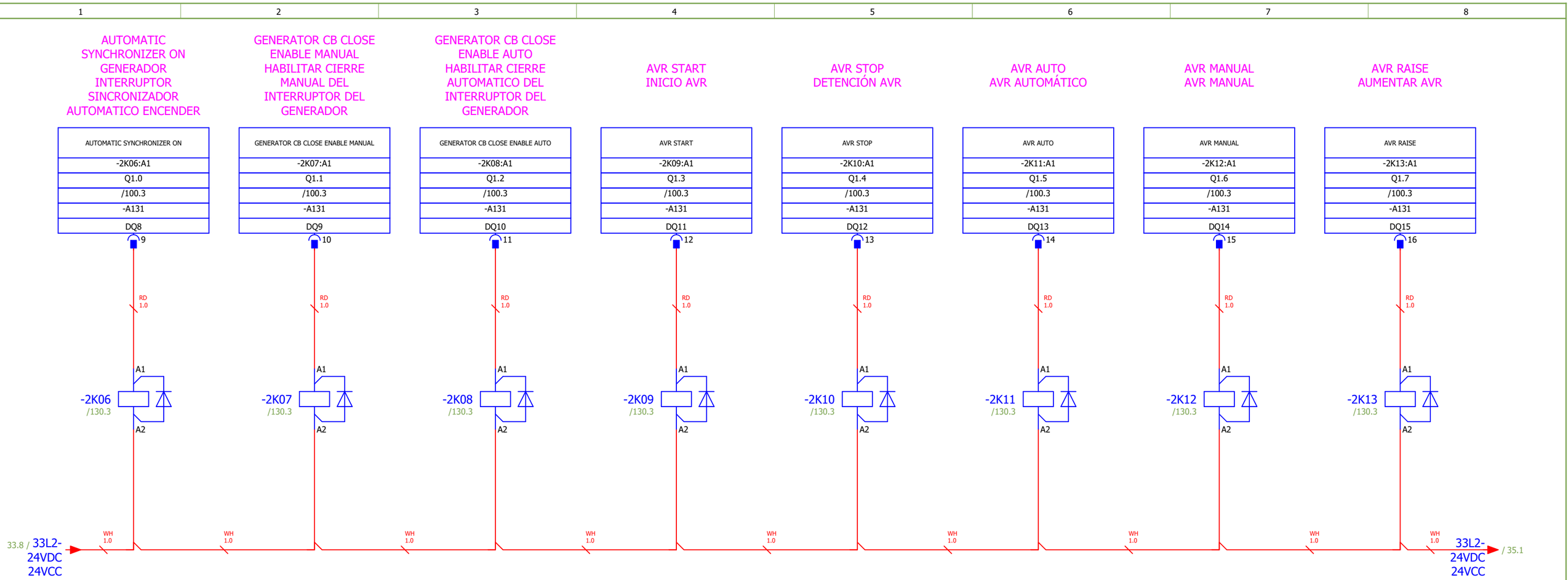

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić									#MB
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL OUTPUTS: 1.0 - 1.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 34
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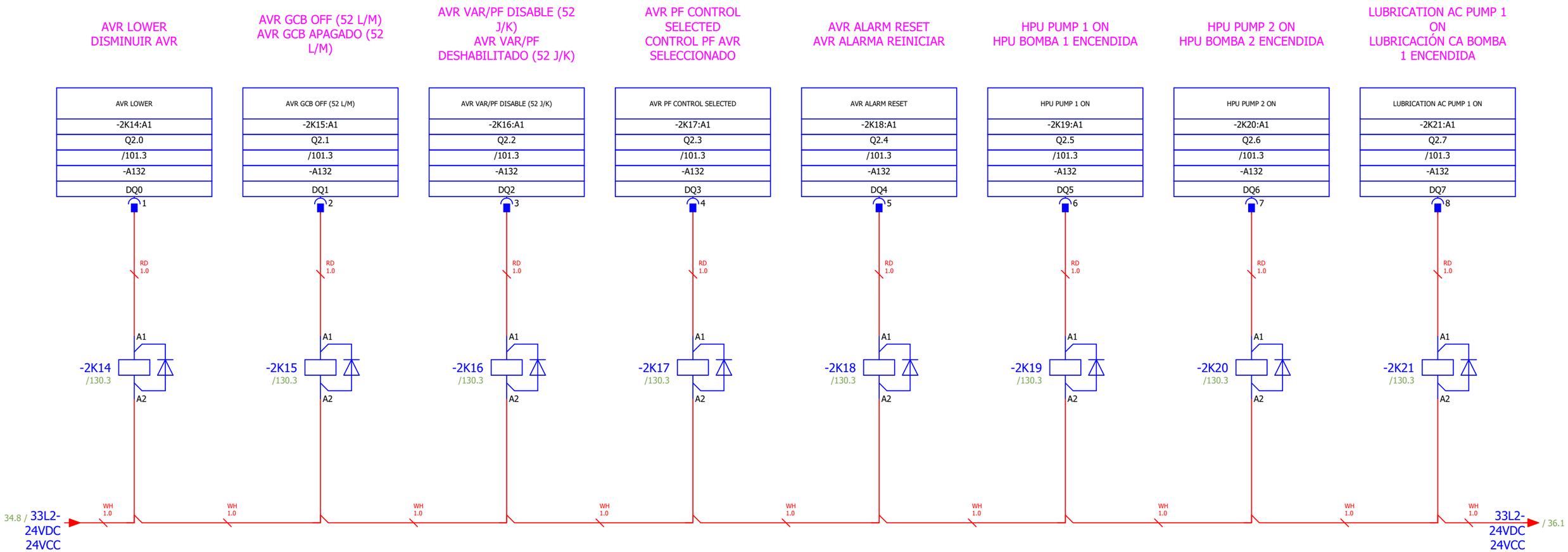

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić									#MB
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL OUTPUTS: 2.0 - 2.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 35
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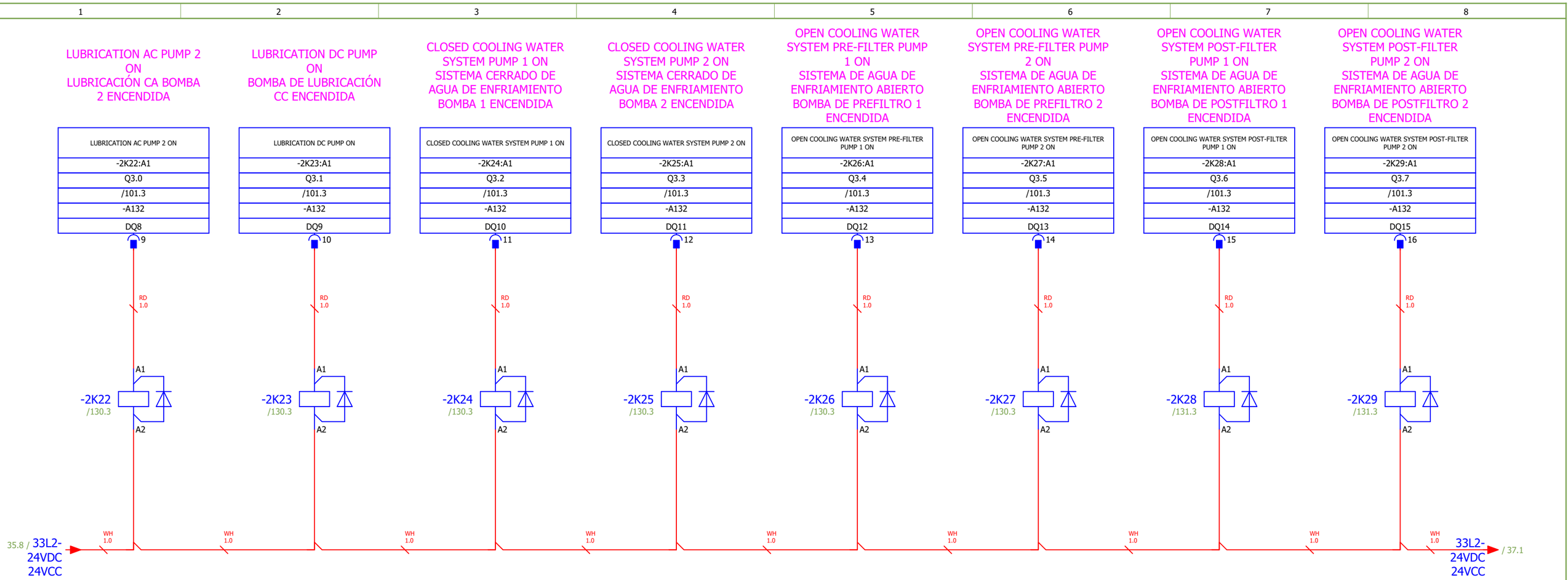

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić									#MB
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Columbia PCH NARE	Content: DIGITAL OUTPUTS: 3.0 -3.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 36
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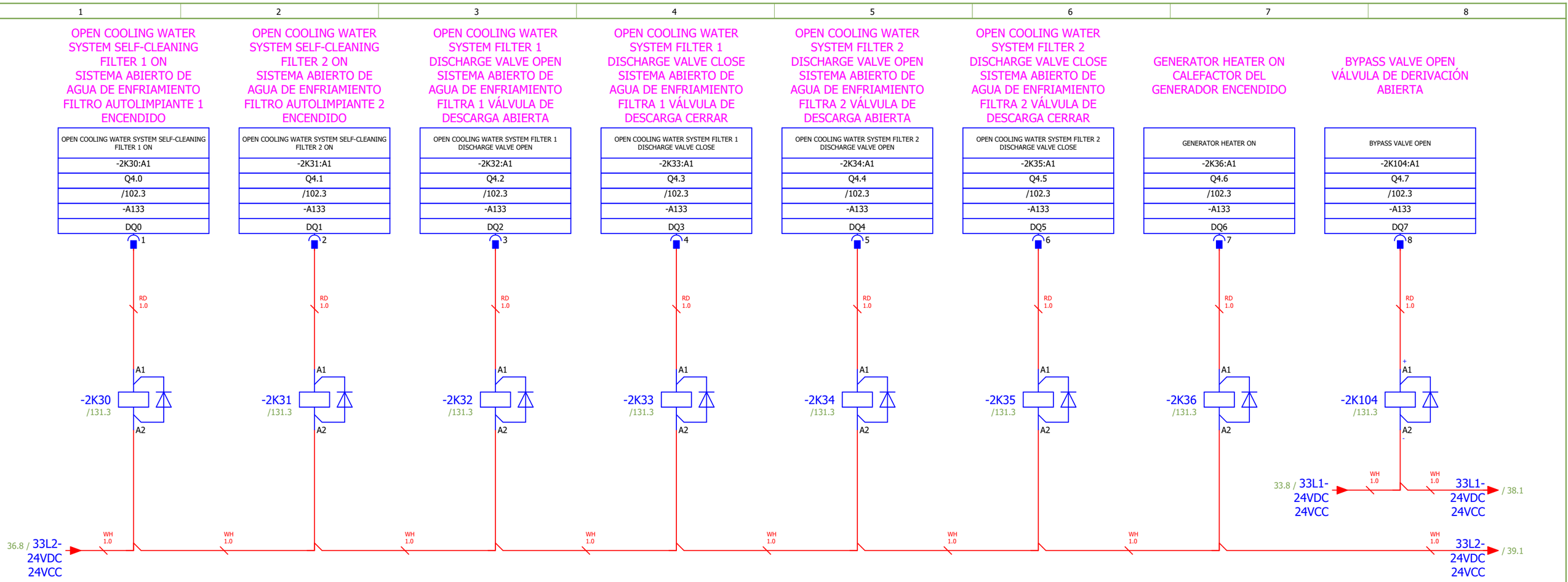

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL OUTPUTS: 4.0 - 4.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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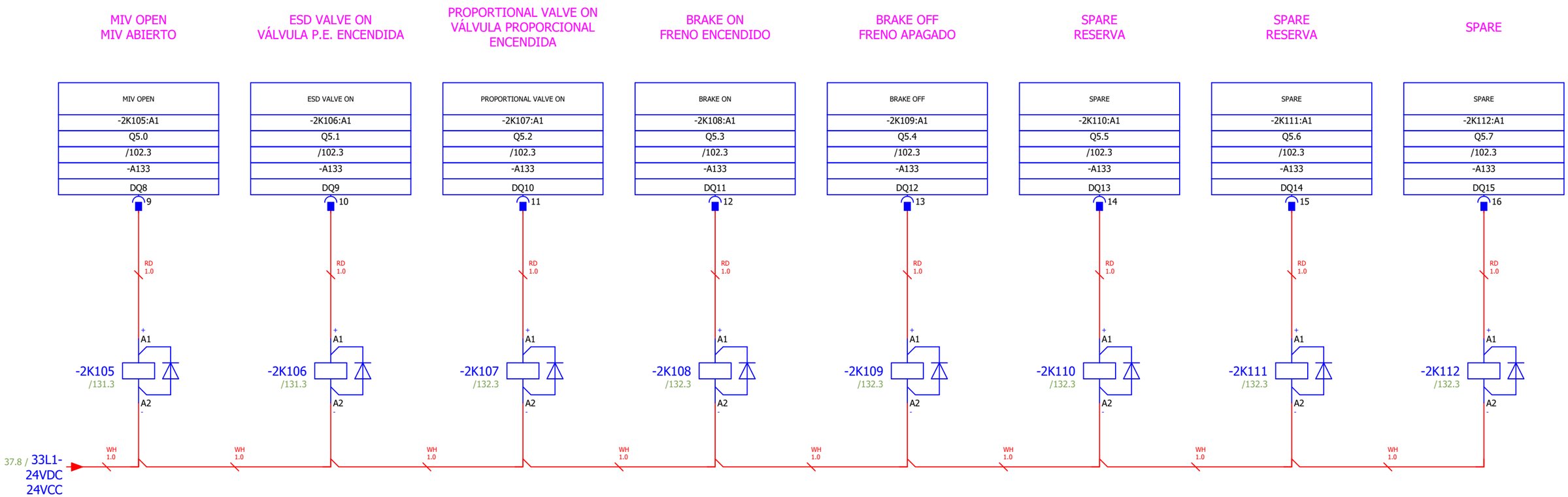

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić Karlo Cotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL OUTPUTS: 5.0 - 5.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Approved:	Patrik Kovač Patrik Kovač								+1CJA01
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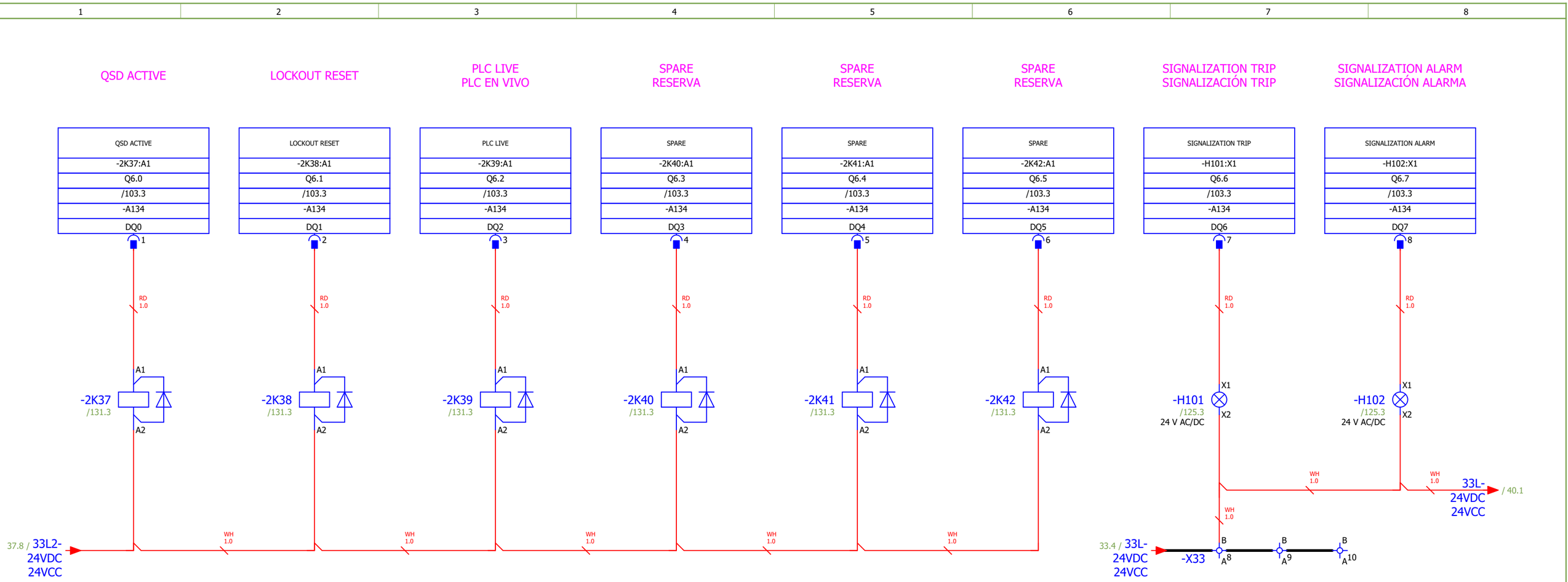

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL OUTPUTS: 6.0 - 6.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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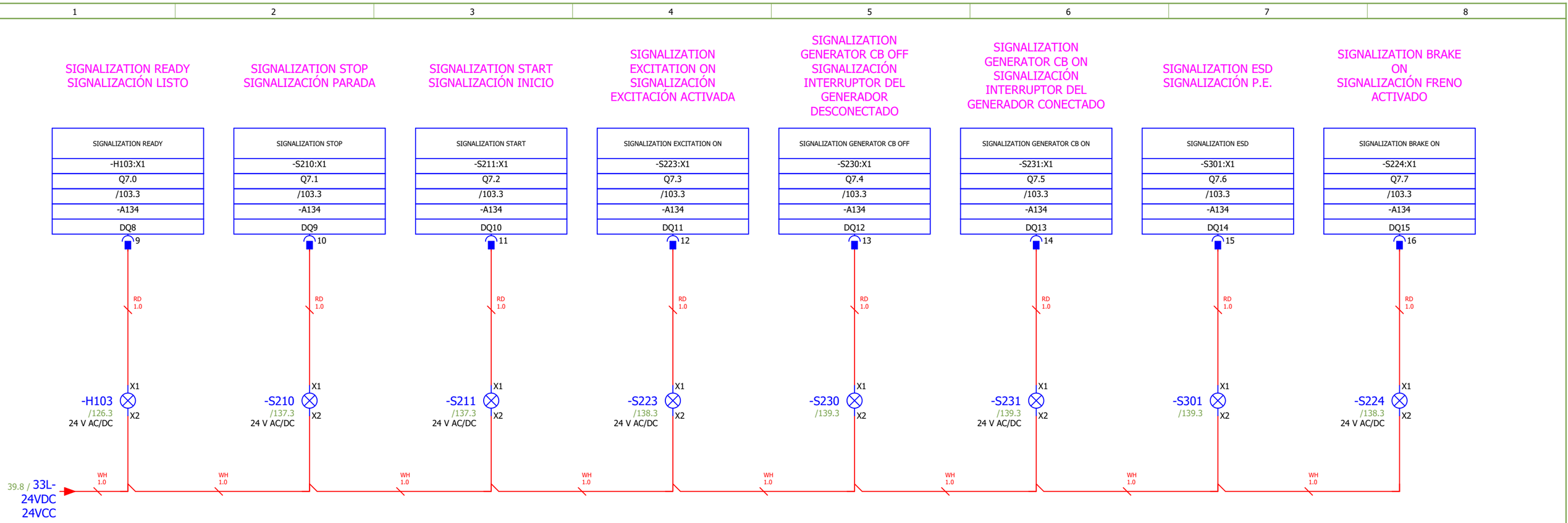

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: DIGITAL OUTPUTS: 7.0 - 7.7	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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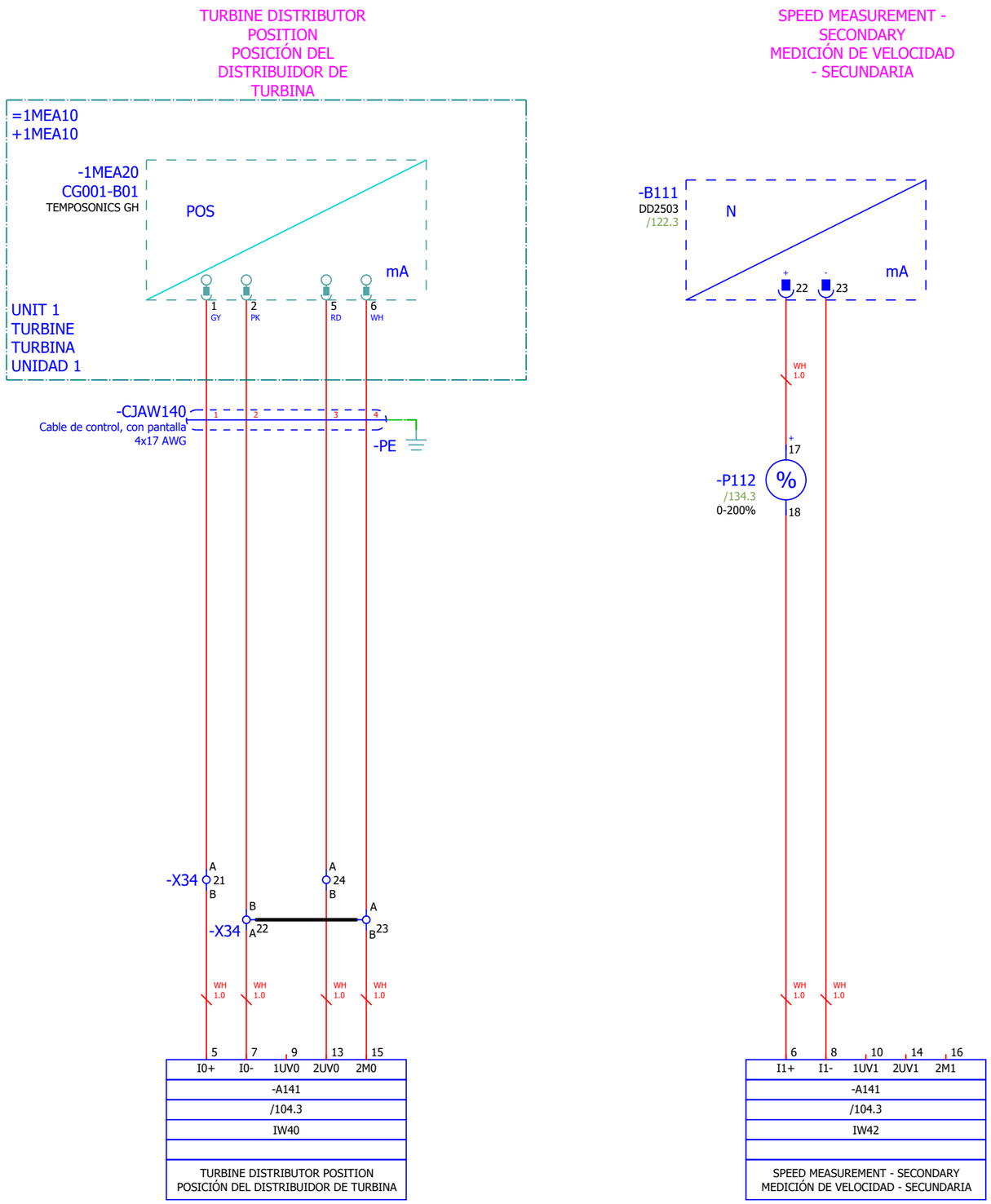

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: ANALOG INPUTS: 1 - 2	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Karlo Čotić
Patrik Kovač
Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE

Sheet: 41
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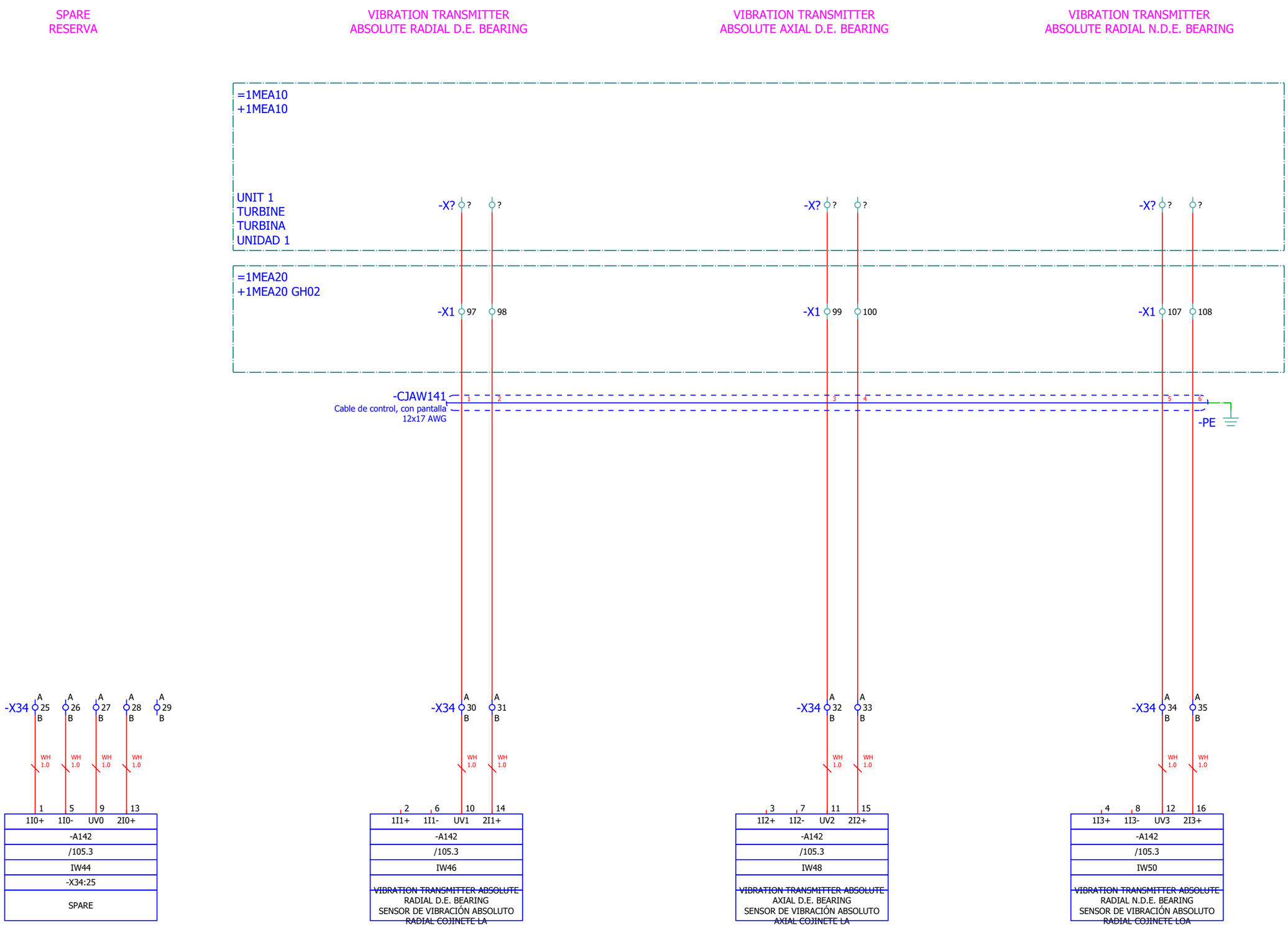

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#MB
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: ANALOG INPUTS: 3-6	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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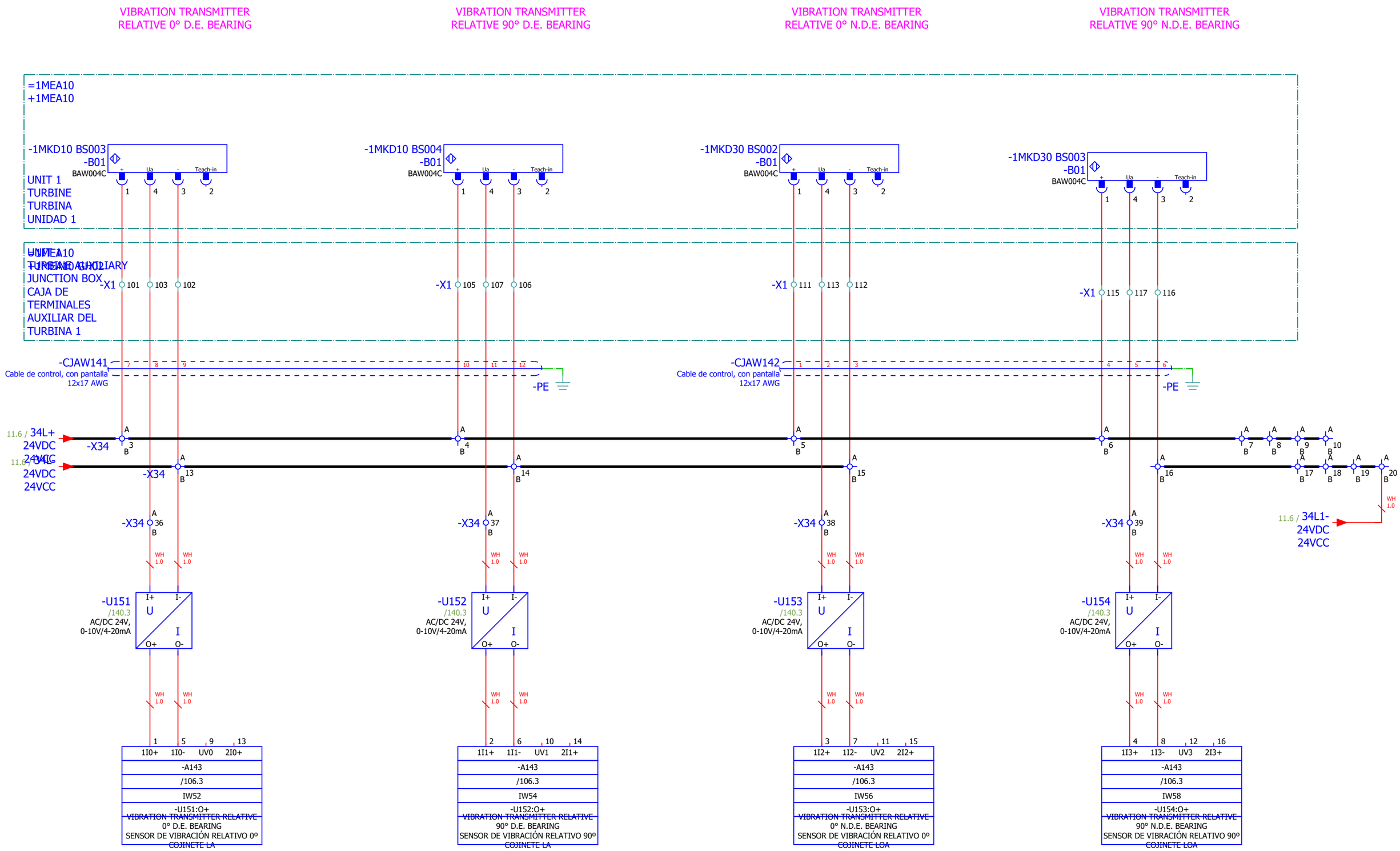

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: ANALOG INPUTS: 7-10	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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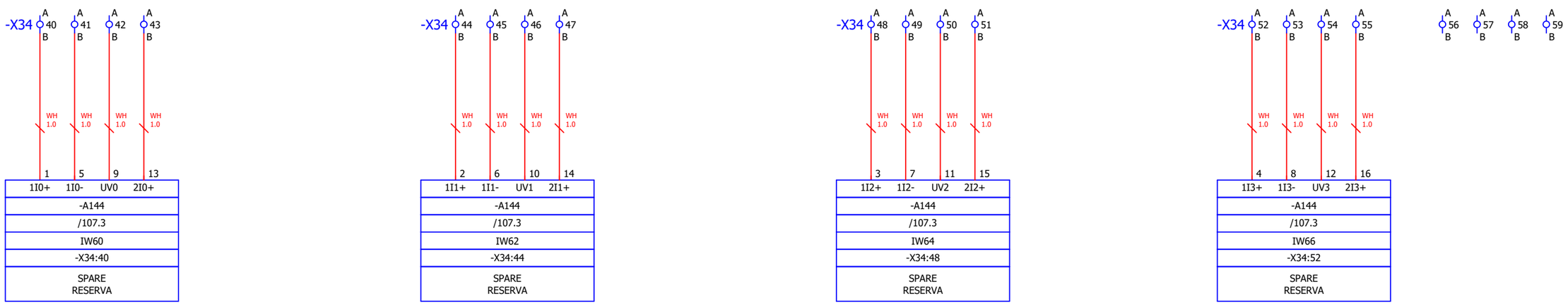
1	2	3	4	5	6	7	8

SPARE
RESERVA

SPARE
RESERVA

SPARE
RESERVA

SPARE
RESERVA



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić									#MB
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Columbia PCH NARE	Content: ANALOG INPUTS: 11-14	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 44
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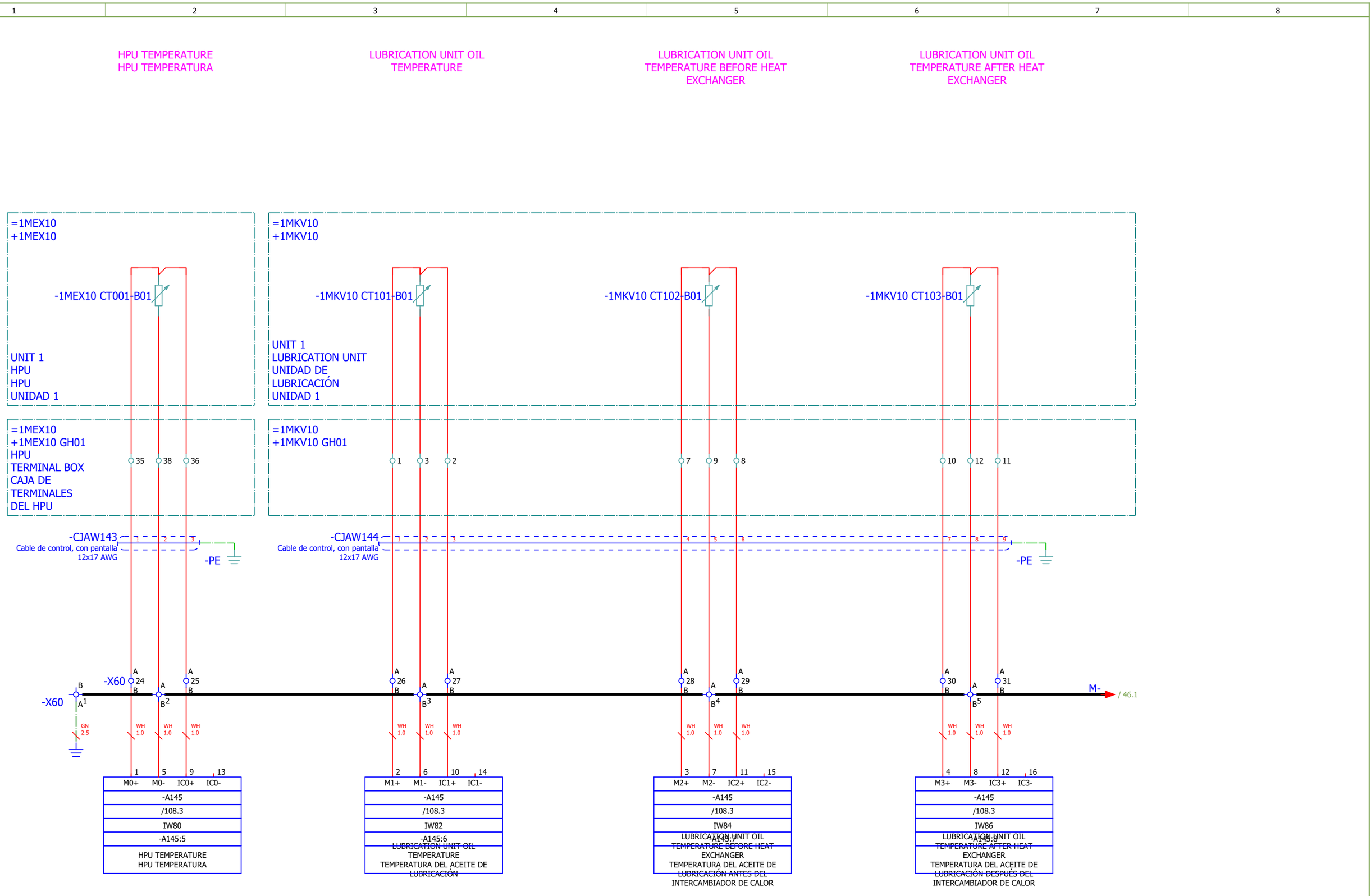

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: ANALOG INPUTS: 15-18	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 45
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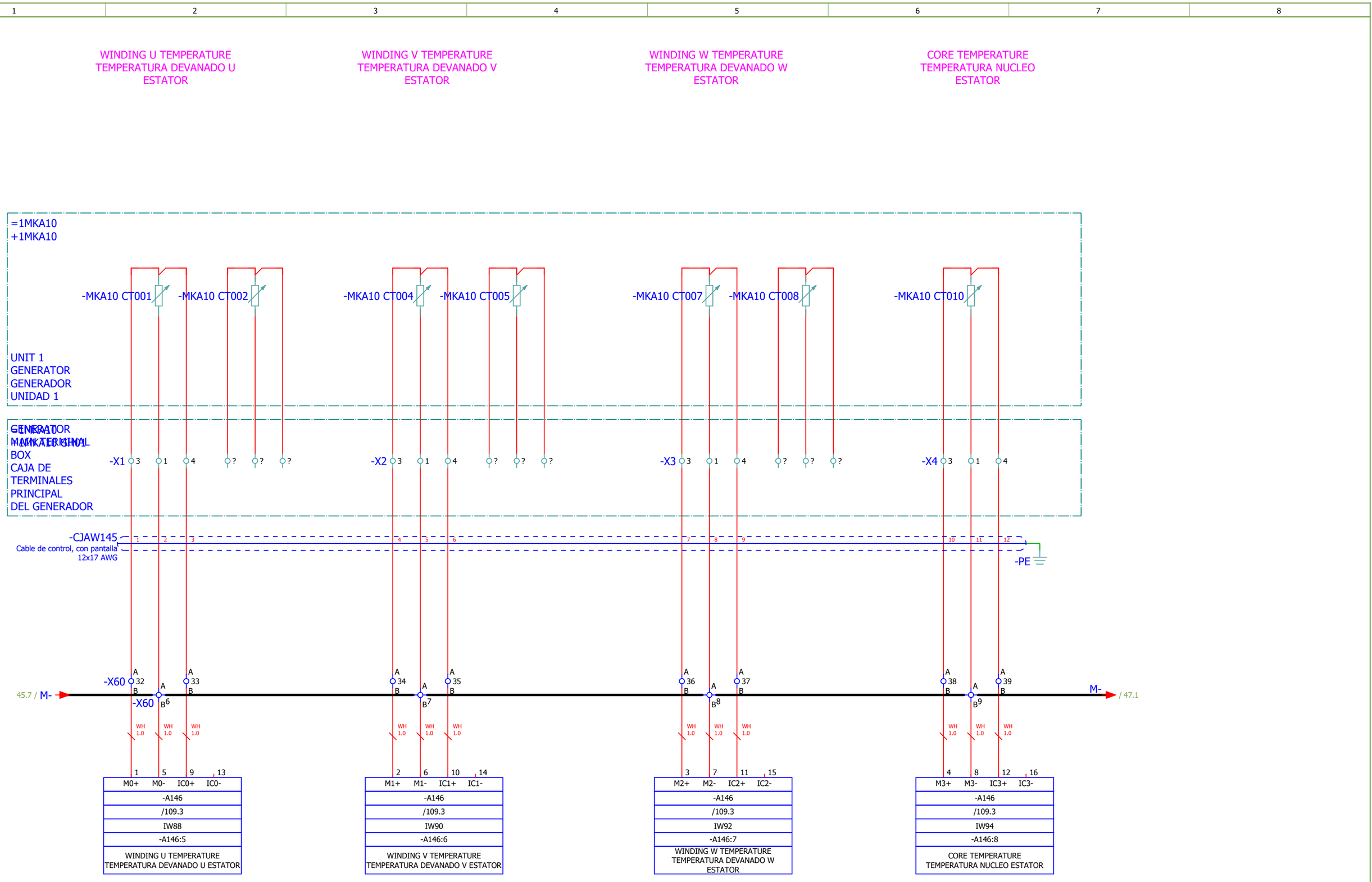

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: ANALOG INPUTS: 19-22	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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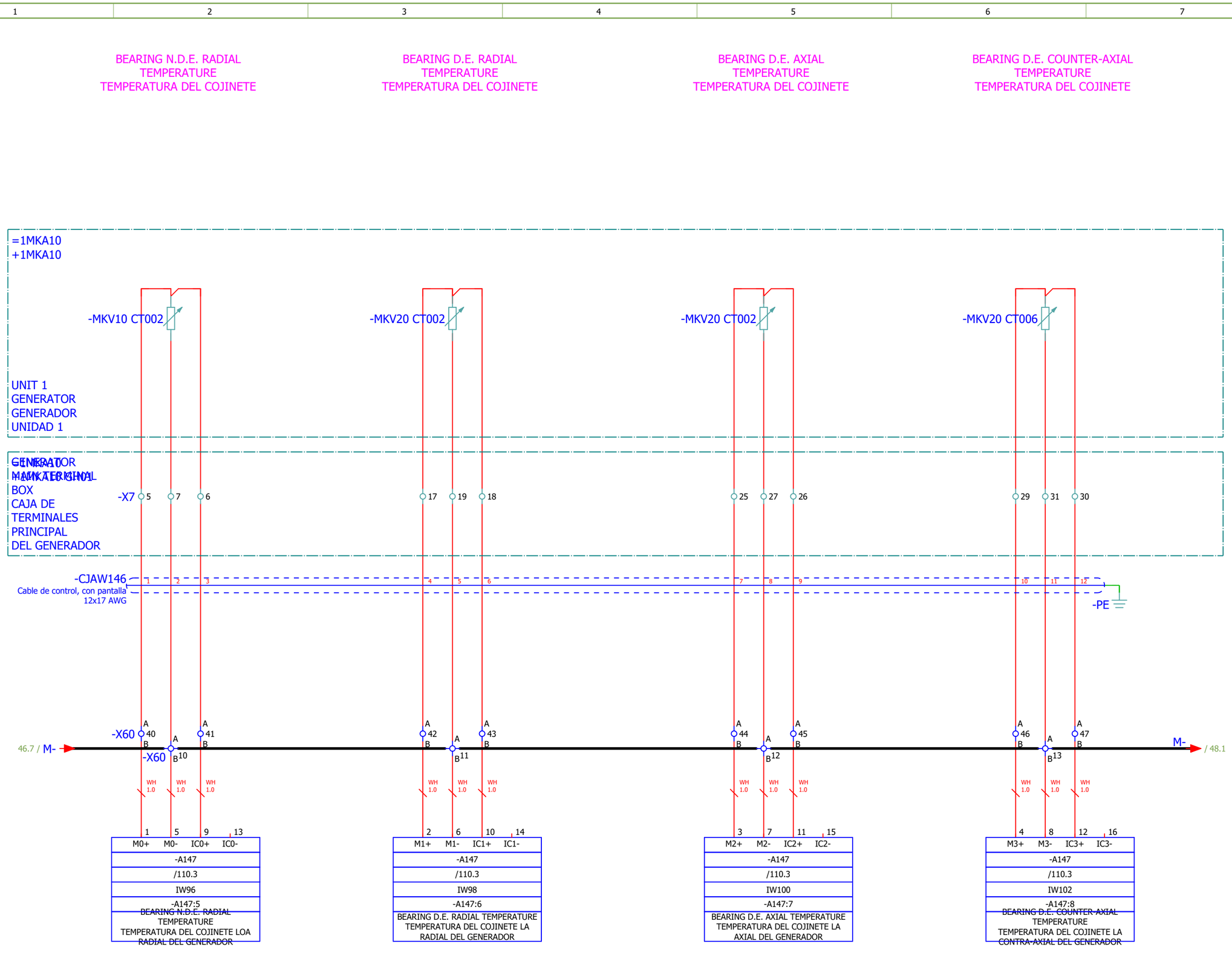

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: ANALOG INPUTS: 23-26	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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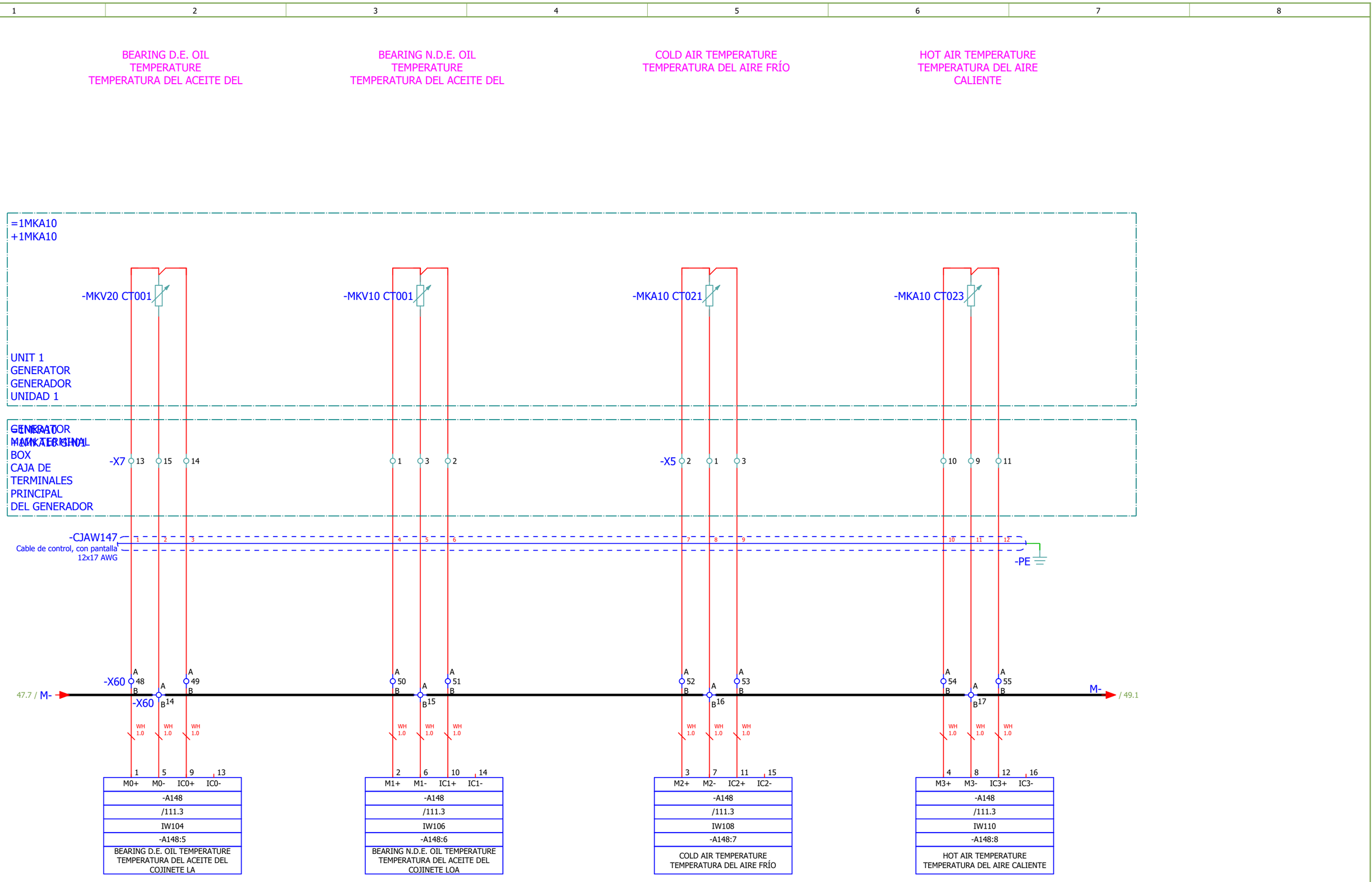

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: ANALOG INPUTS: 27-30	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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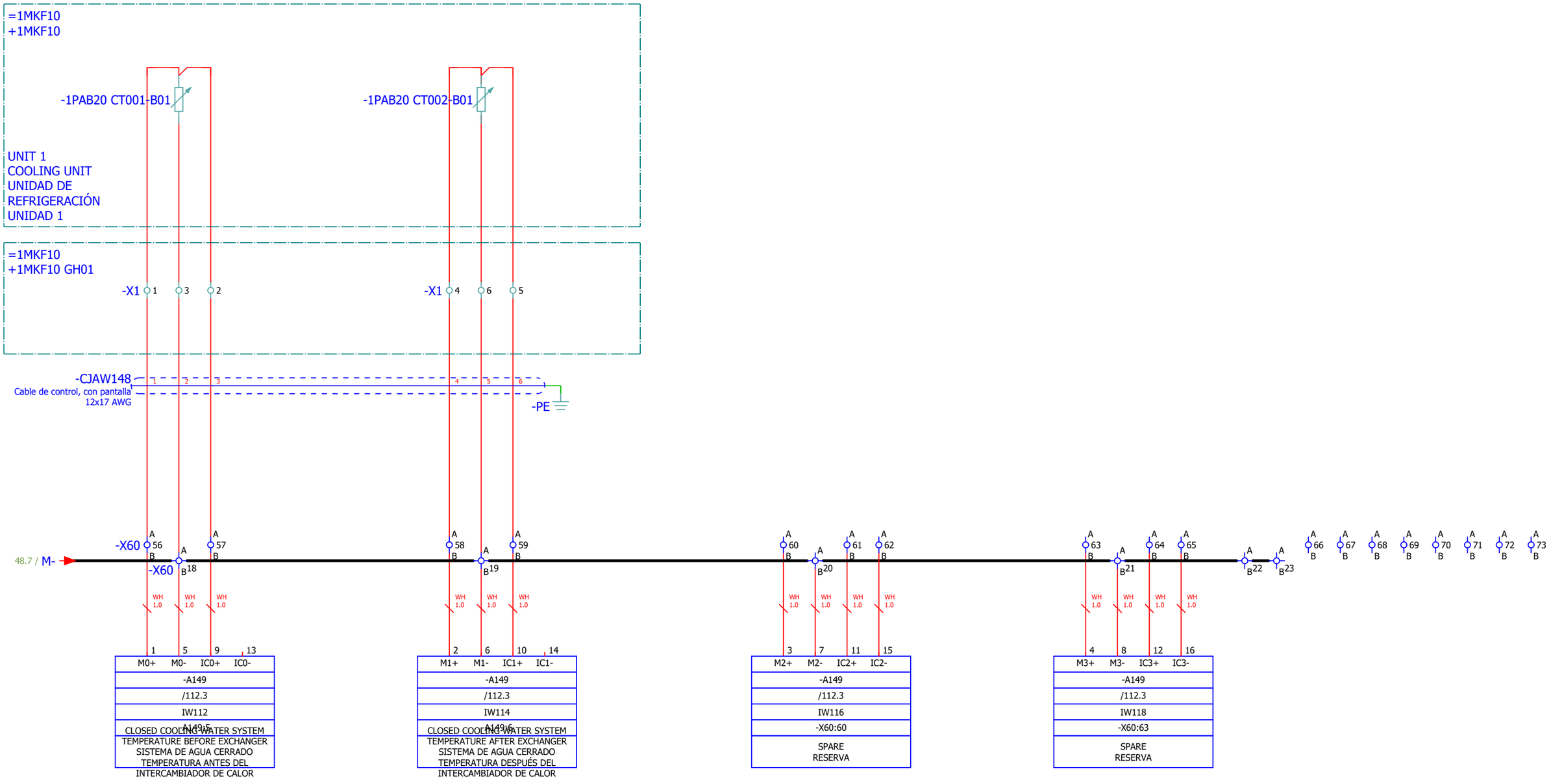
1	2	3	4	5	6	7	8

CLOSED COOLING WATER SYSTEM TEMPERATURE BEFORE EXCHANGER

CLOSED COOLING WATER SYSTEM TEMPERATURE AFTER EXCHANGER

SPARE
RESERVA

SPARE
RESERVA



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#MB
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: ANALOG INPUTS: 31-34	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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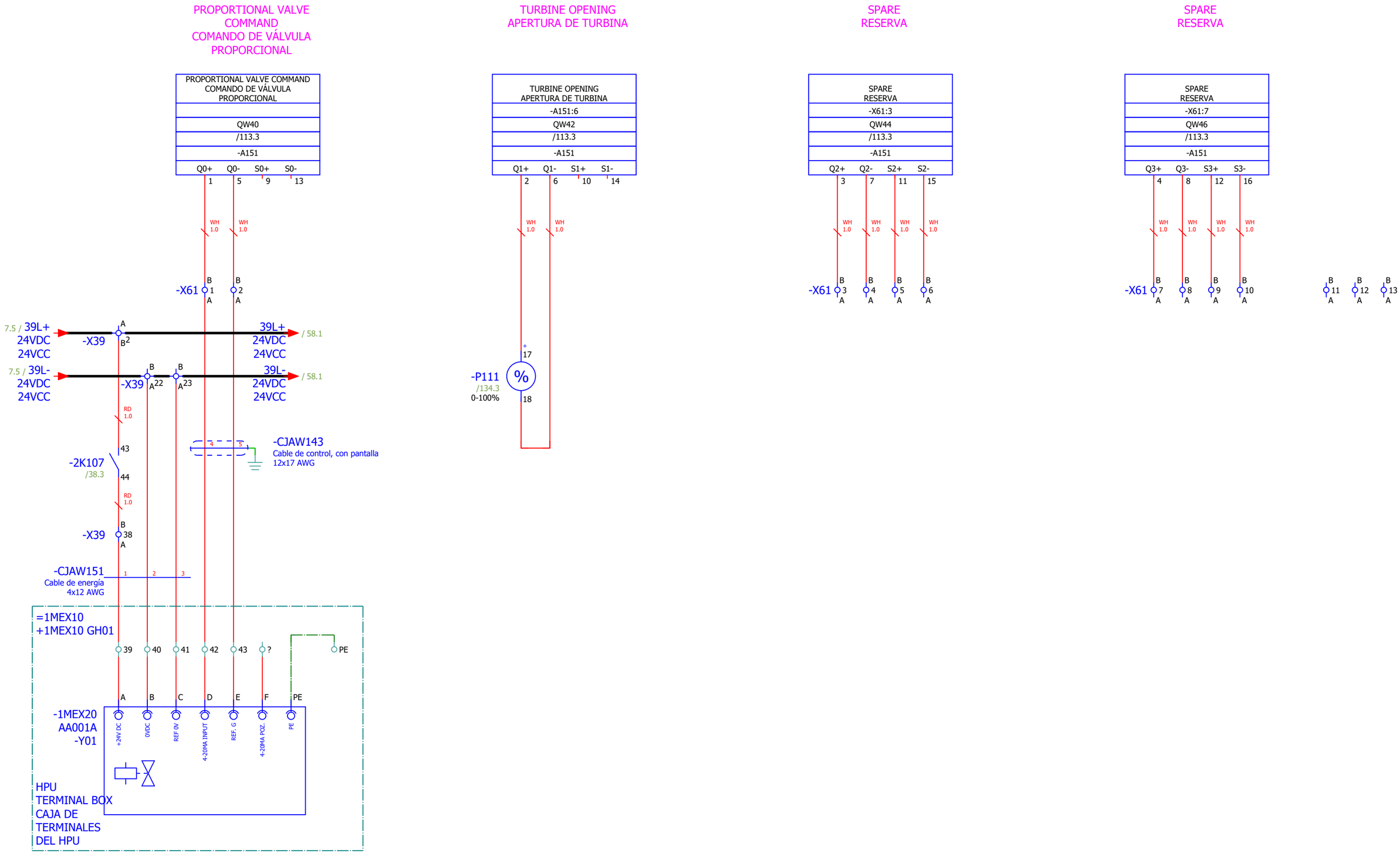

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: ANALOG OUTPUTS: 1 - 4	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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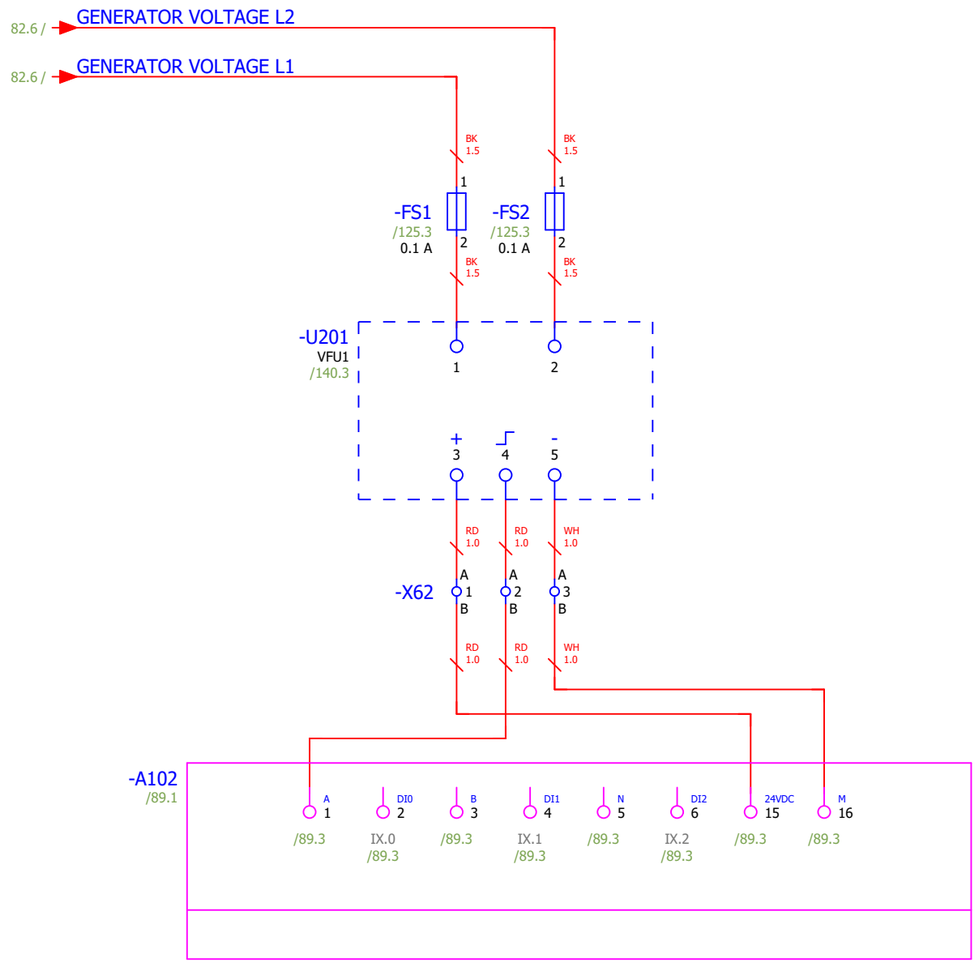
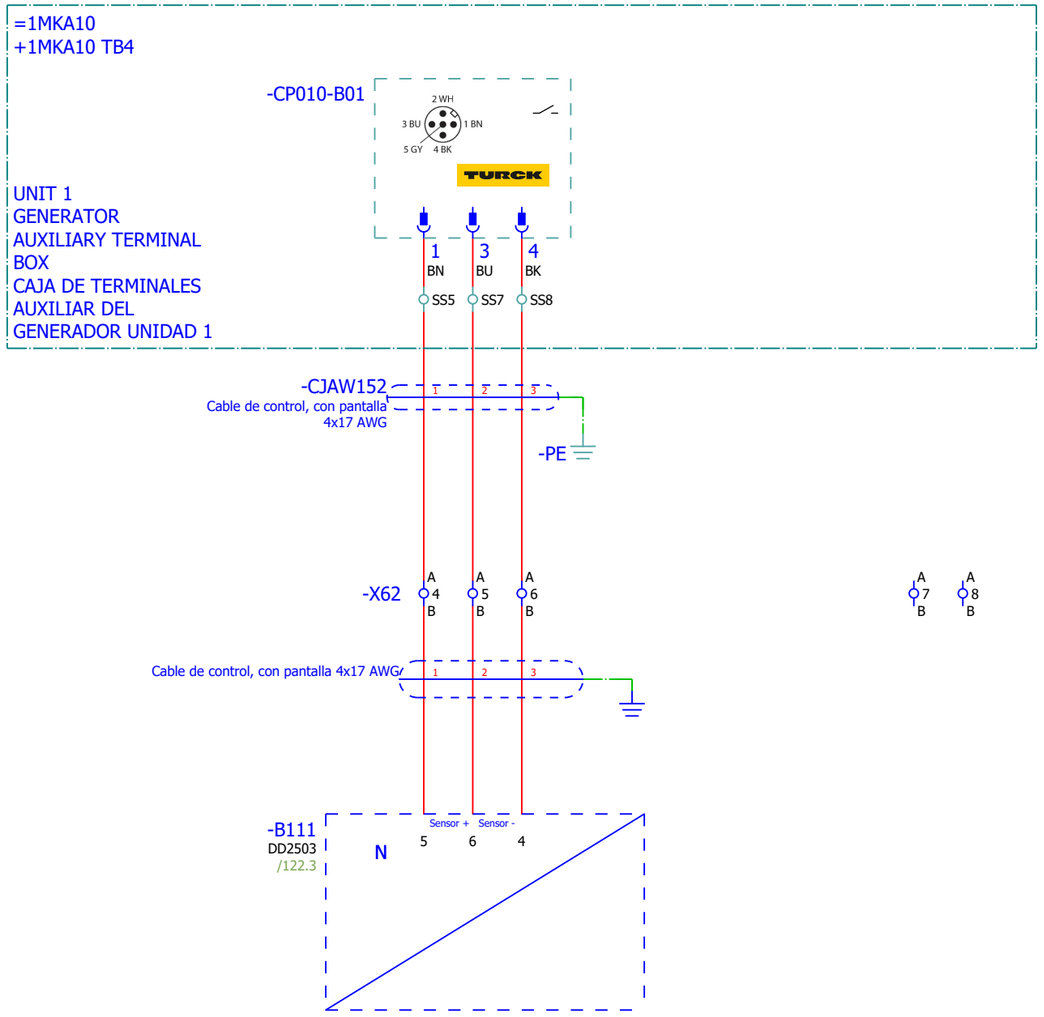
SPEED
MEASUREMENT 1
MEDICIÓN DE VELOCIDAD 1



SPEED
MEASUREMENT 2
MEDICIÓN DE VELOCIDAD 2



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: SPEED MEASUREMENT	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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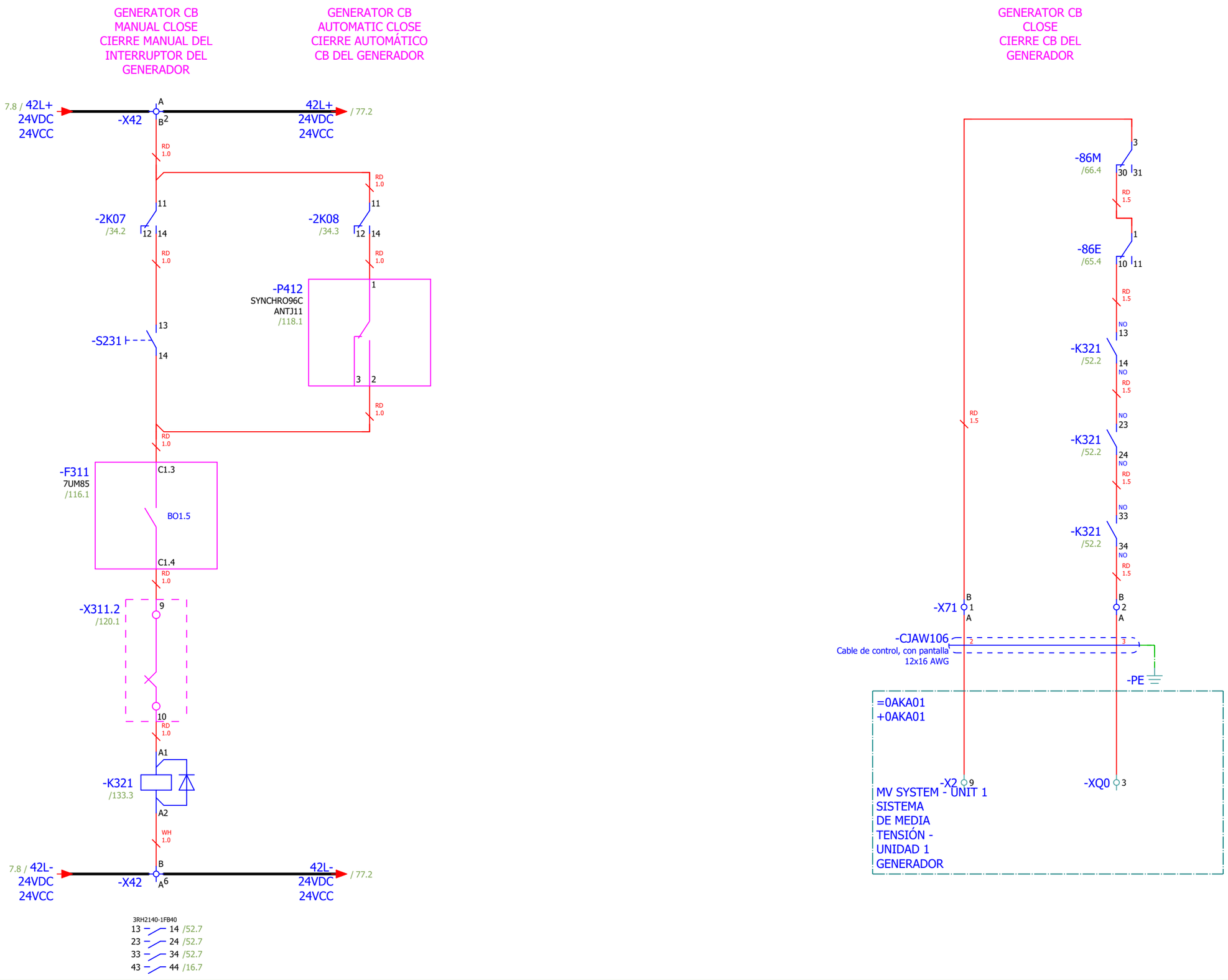

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: GENERATOR CB CONTROL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4			PCH NARE					+1CJA01

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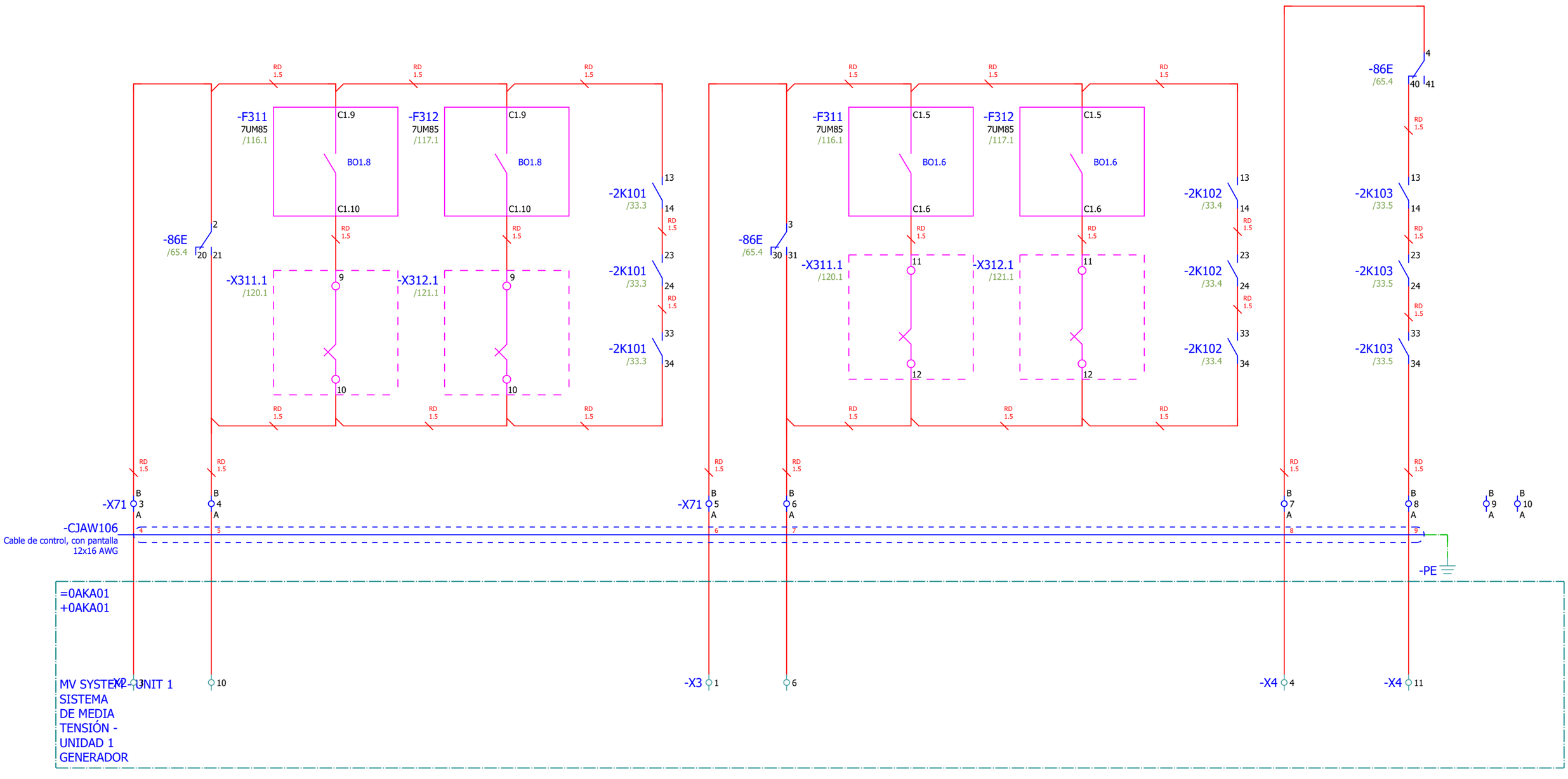
GENERATOR CB
OPEN 1
INTERRUPTOR DEL GENERADOR ABIERTO 1

GENERATOR CB
OPEN 2
INTERRUPTOR DEL GENERADOR ABIERTO 2

GENERATOR CB
UNDERVOLTAGE COIL OK
BOBINA DE SUBTENSIÓN CB DEL GENERADOR OK



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: GENERATOR CB CONTROL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

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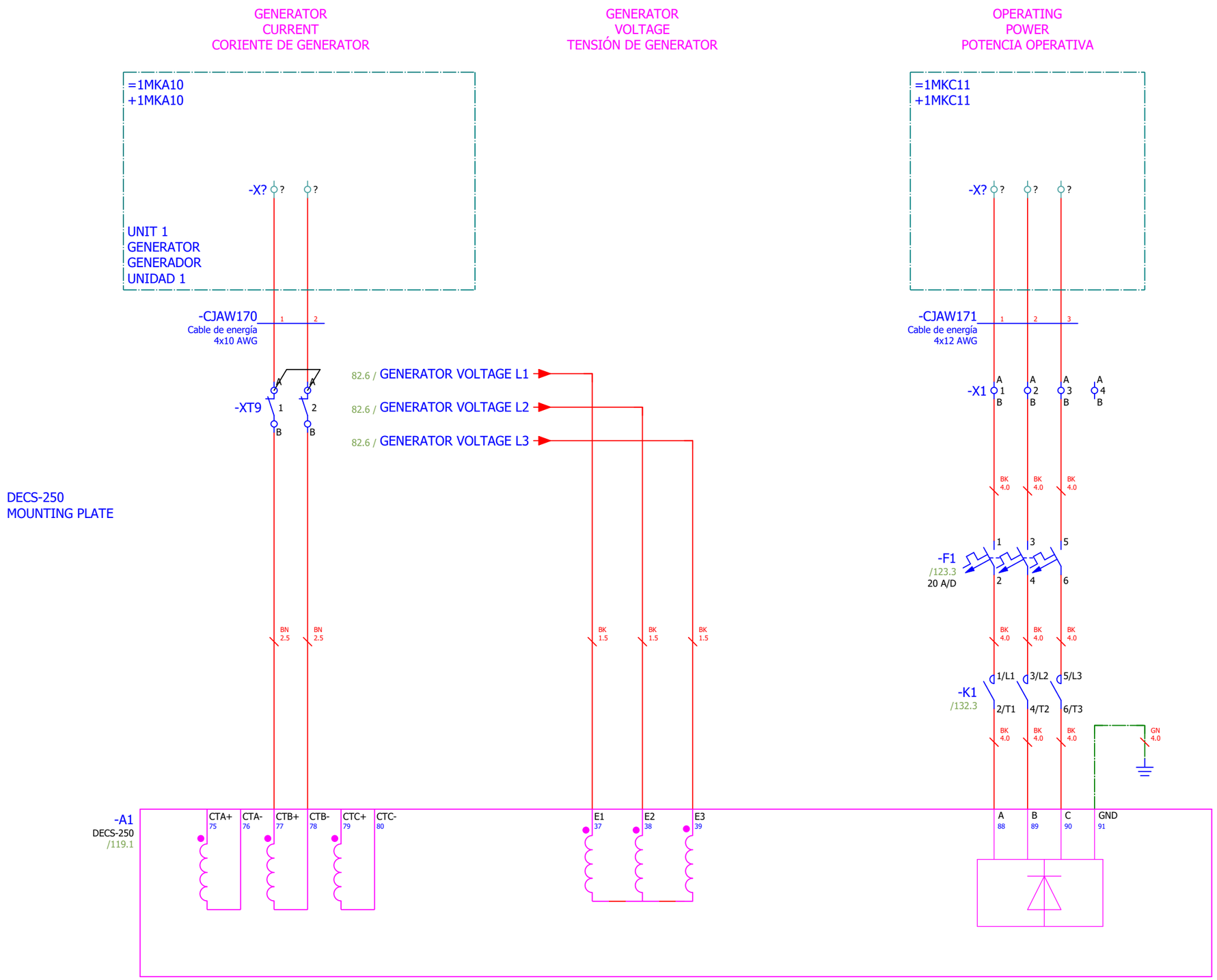

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: EXCITATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Karlo Čotić
Patrik Kovač
Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE

Sheet: 54
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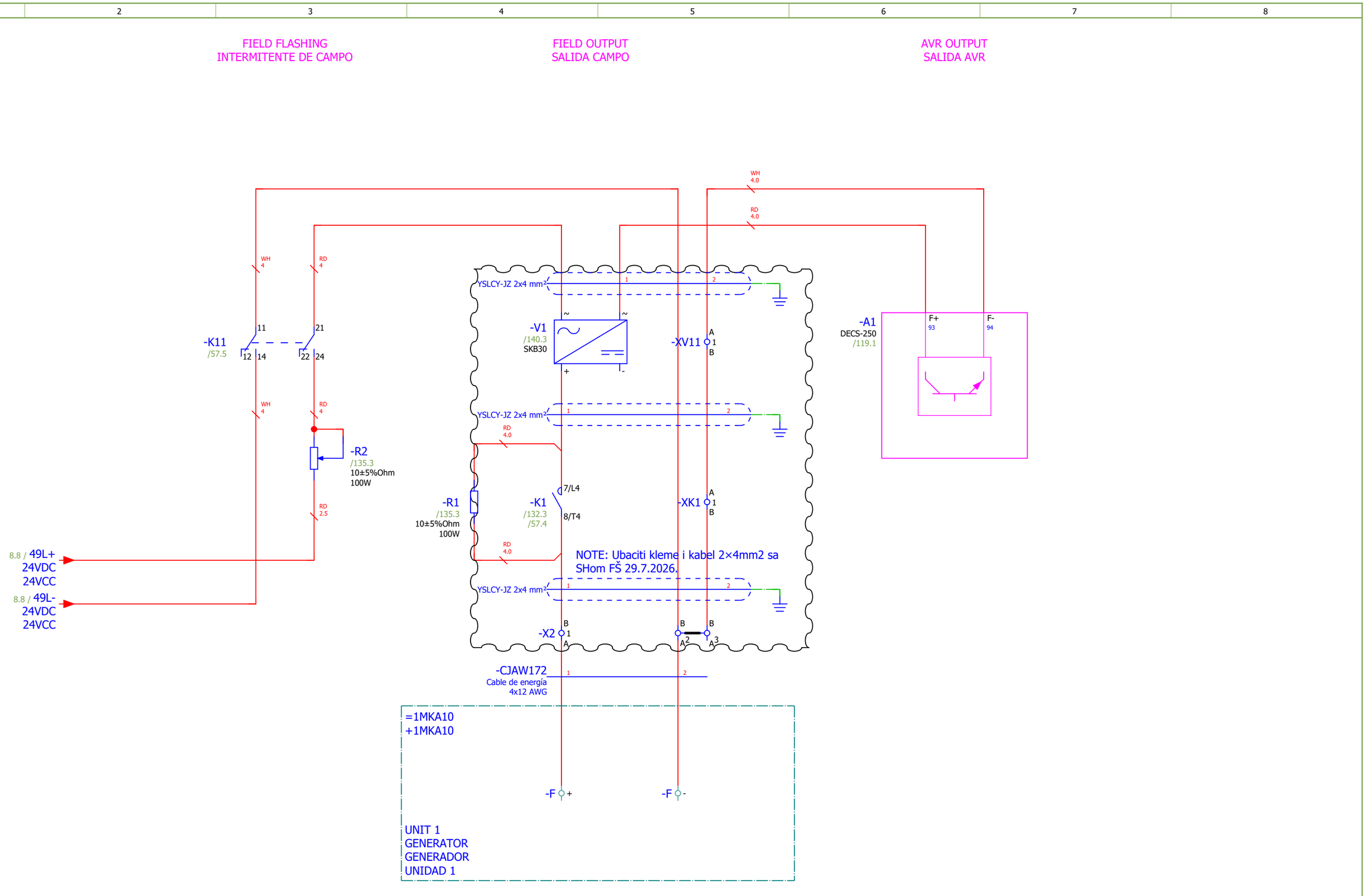

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: EXCITATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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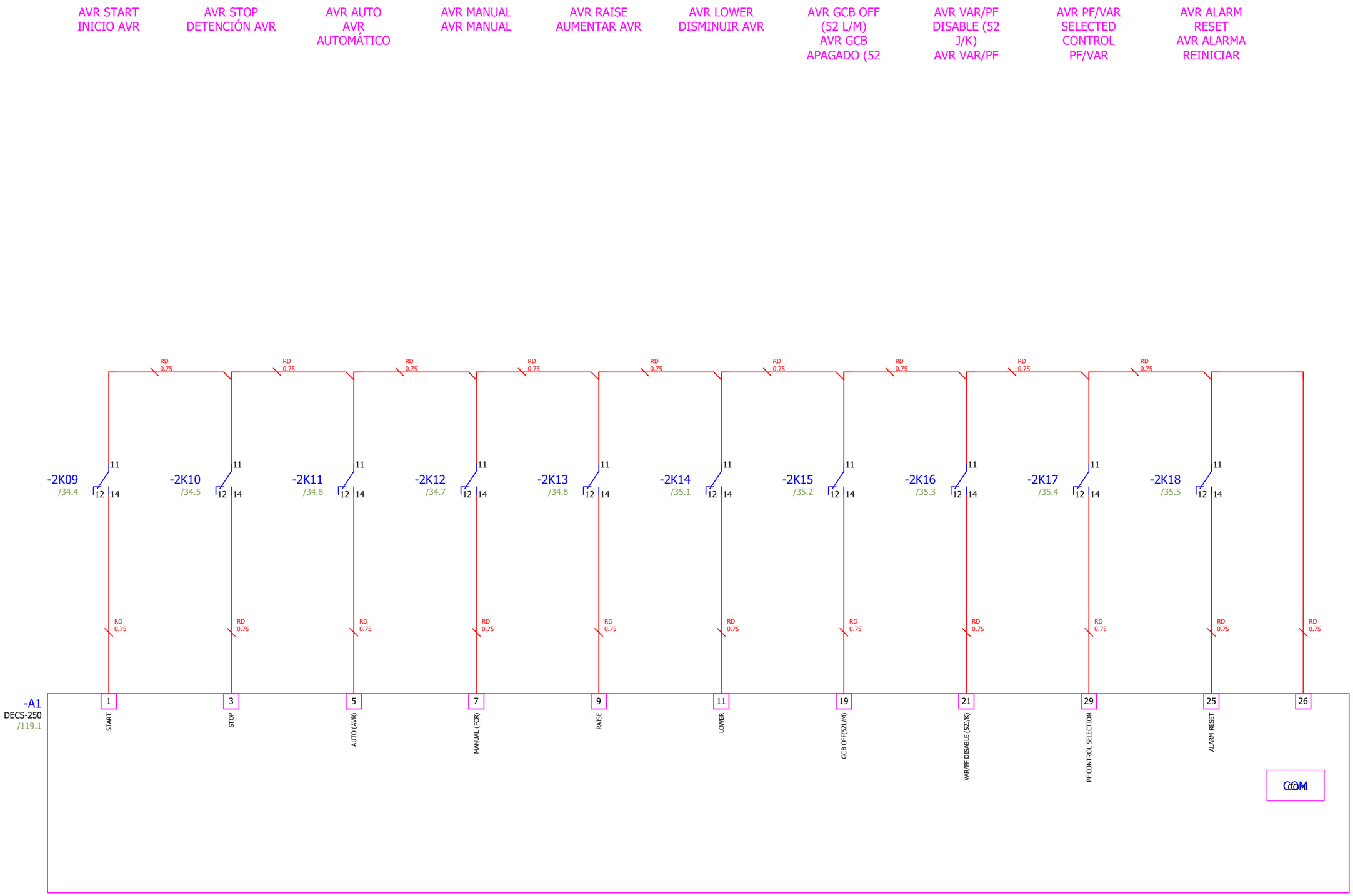

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: EXCITATION CONTROL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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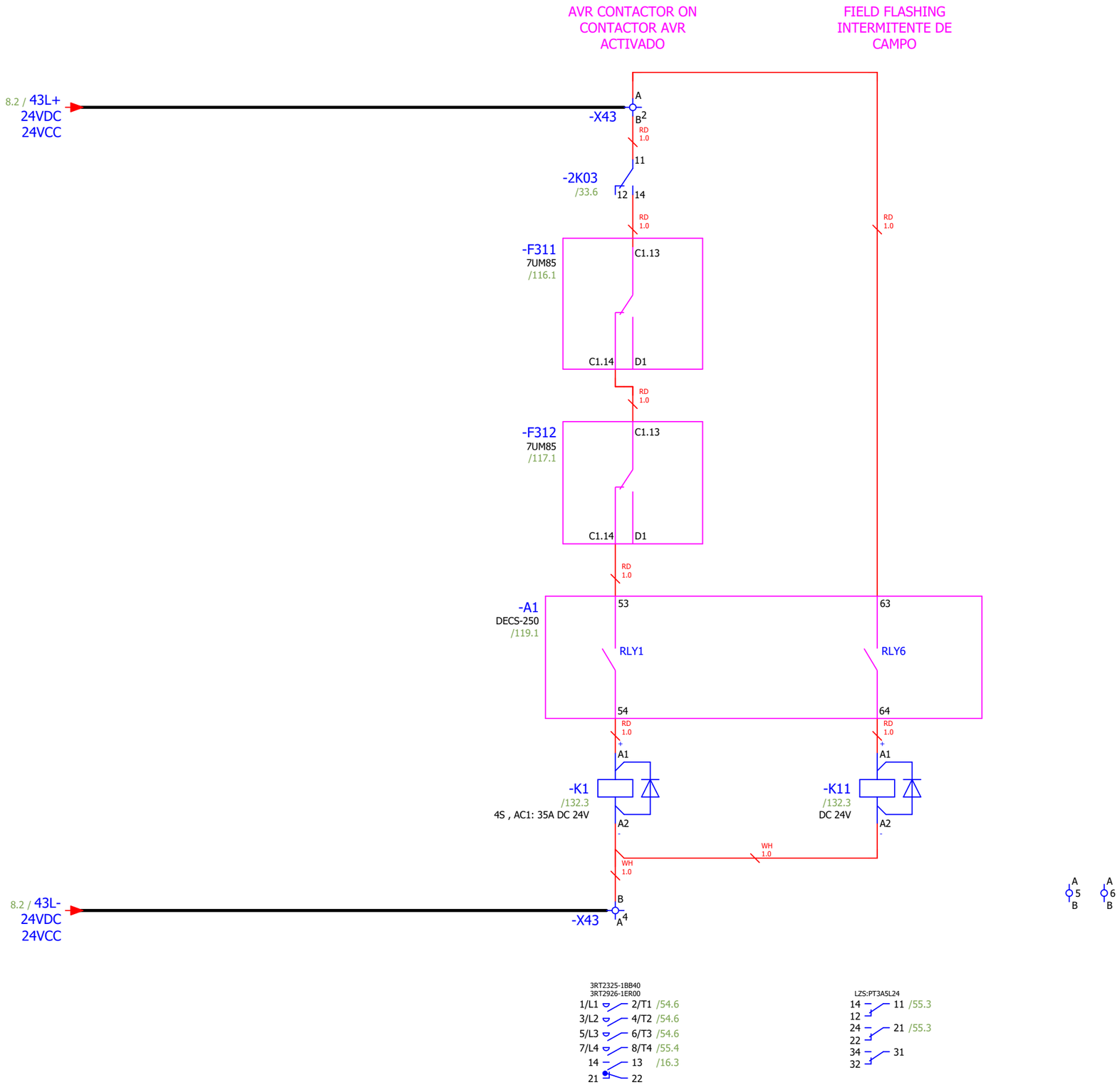

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić Karlo Cotić								#MC
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Columbia PCH NARE	Content: EXCITATION CONTROL	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 57
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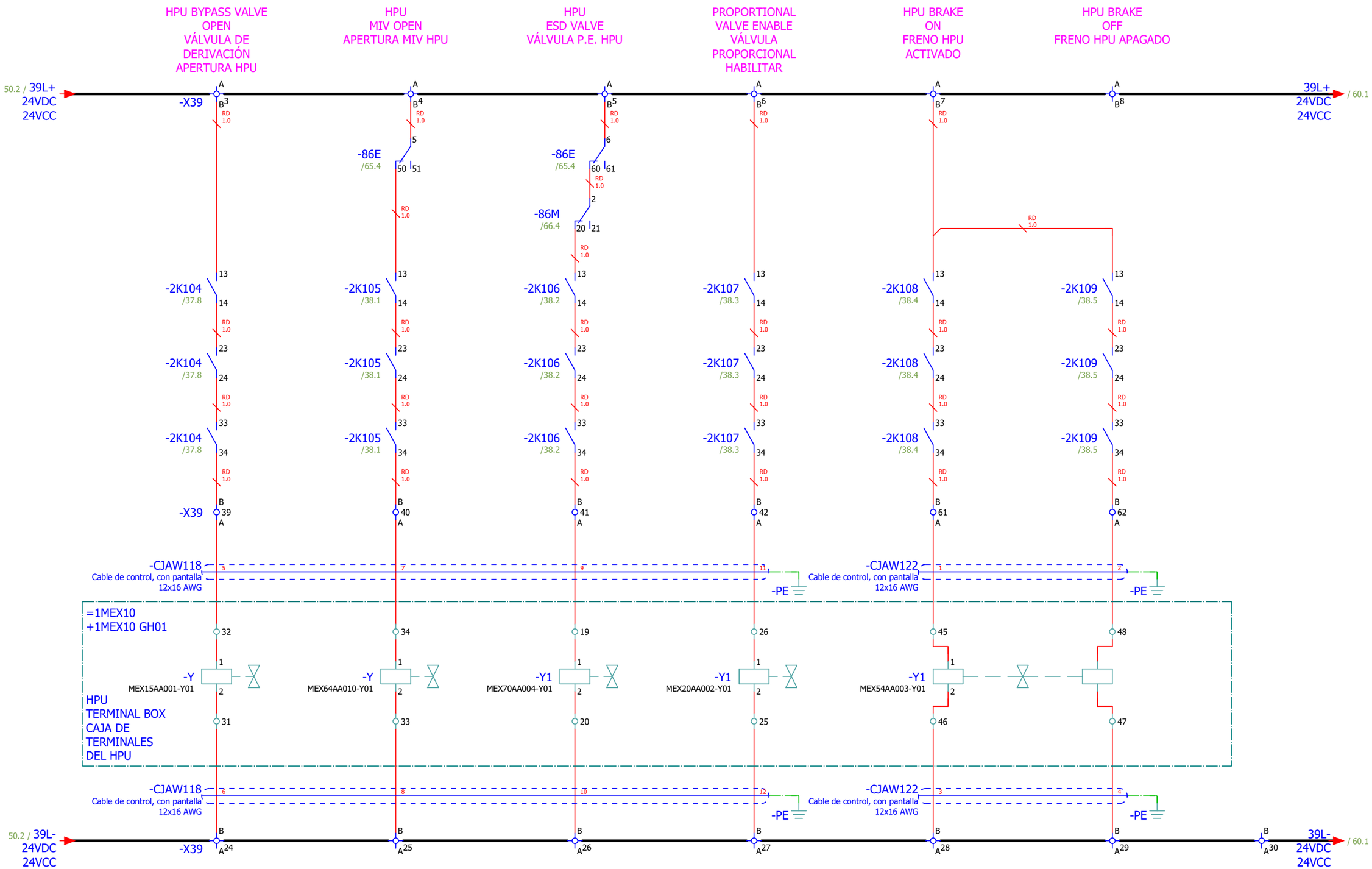

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: HPU CONTROL	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 58
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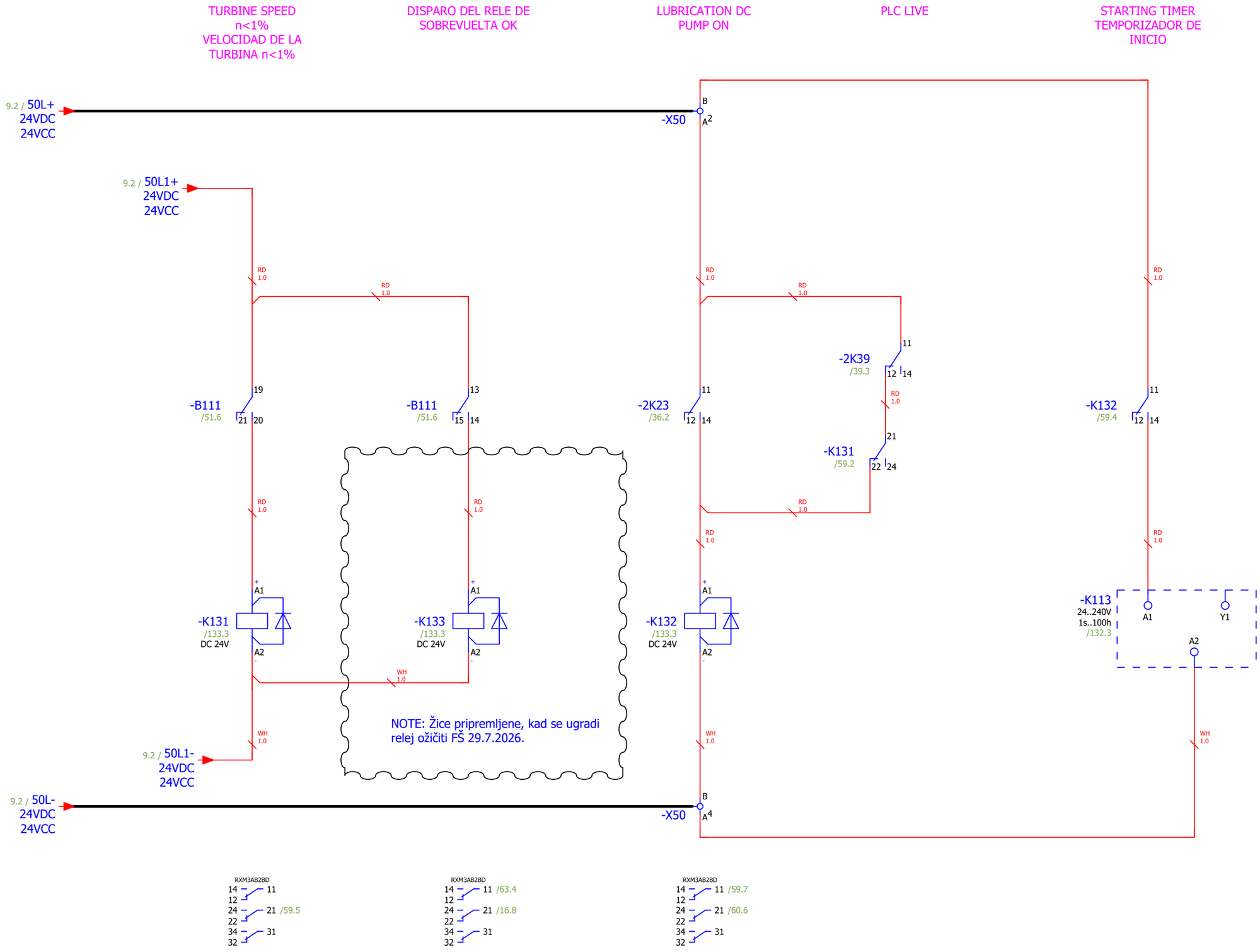

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: LUBRICATION DC CONTROL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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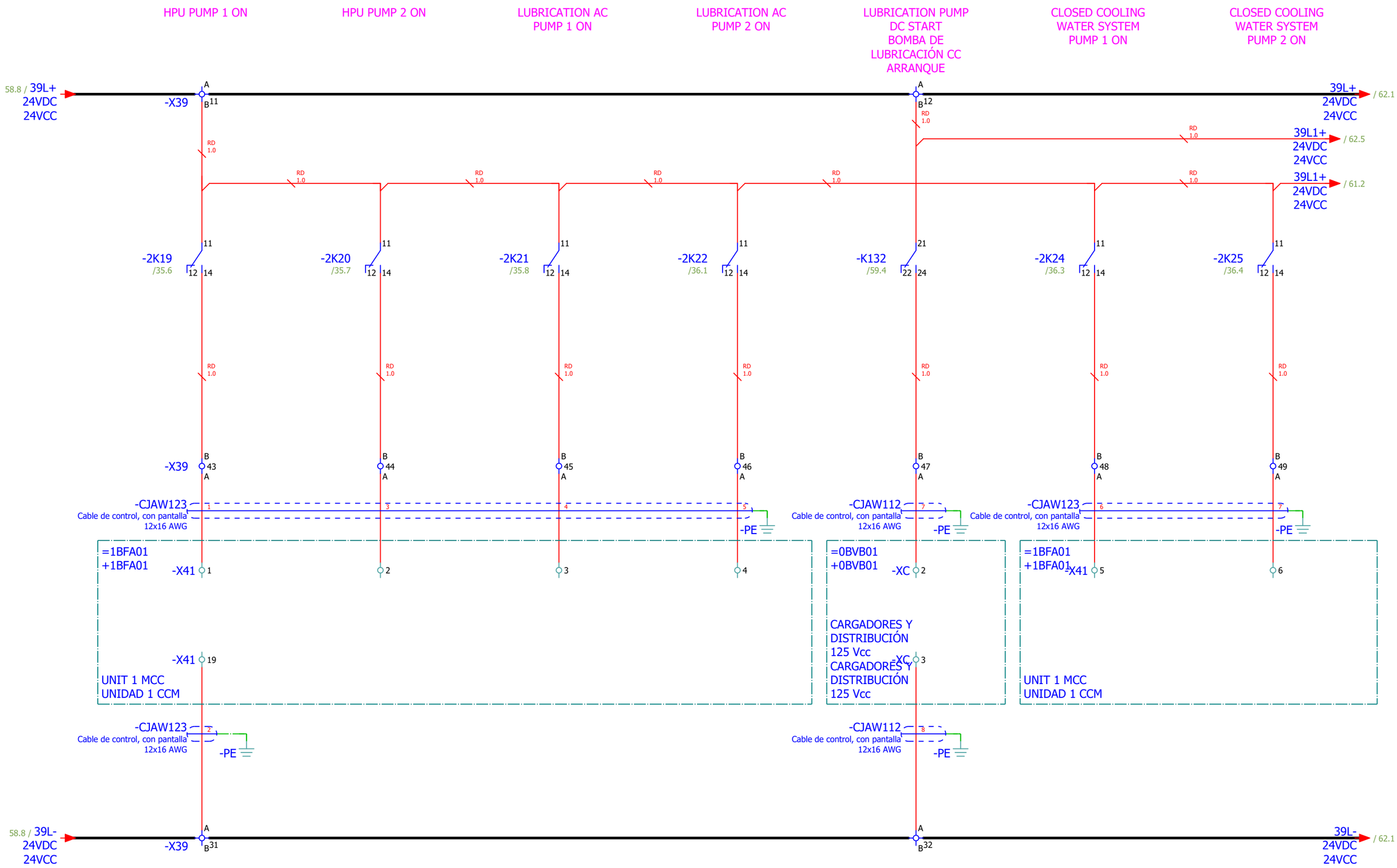

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: CONTROL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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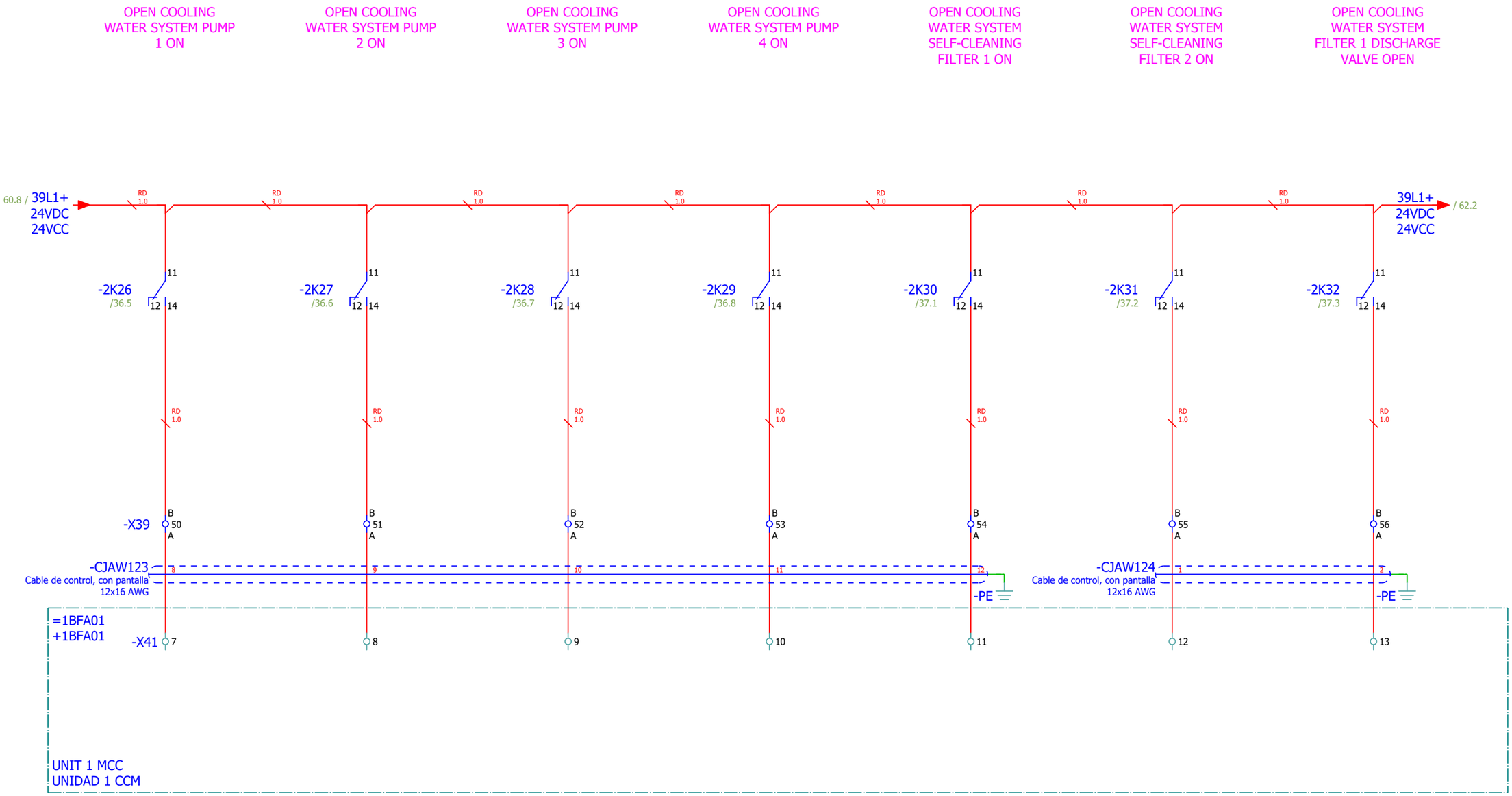

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#MC
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: CONTROL	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 61
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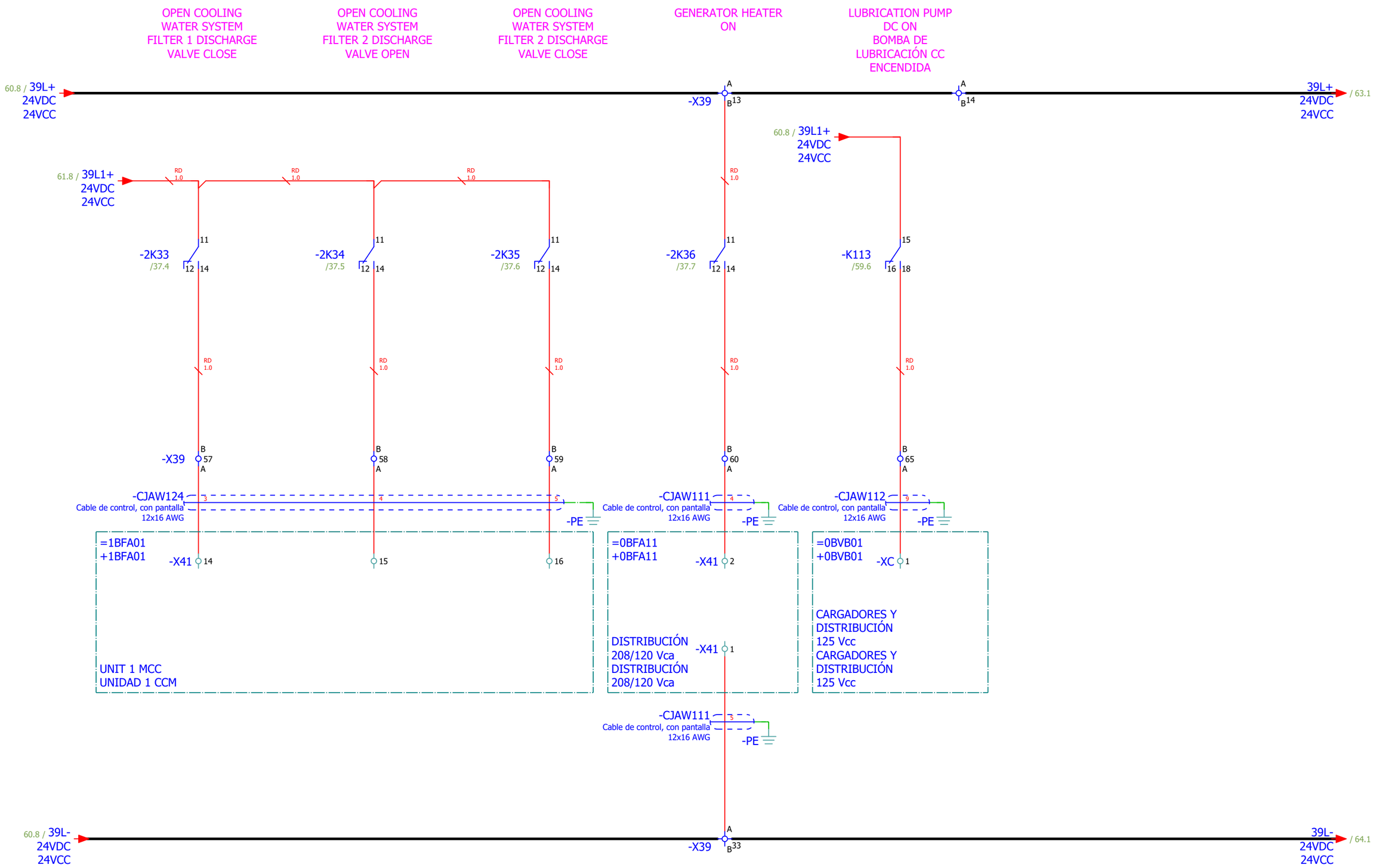

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić							#MC
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: CONTROL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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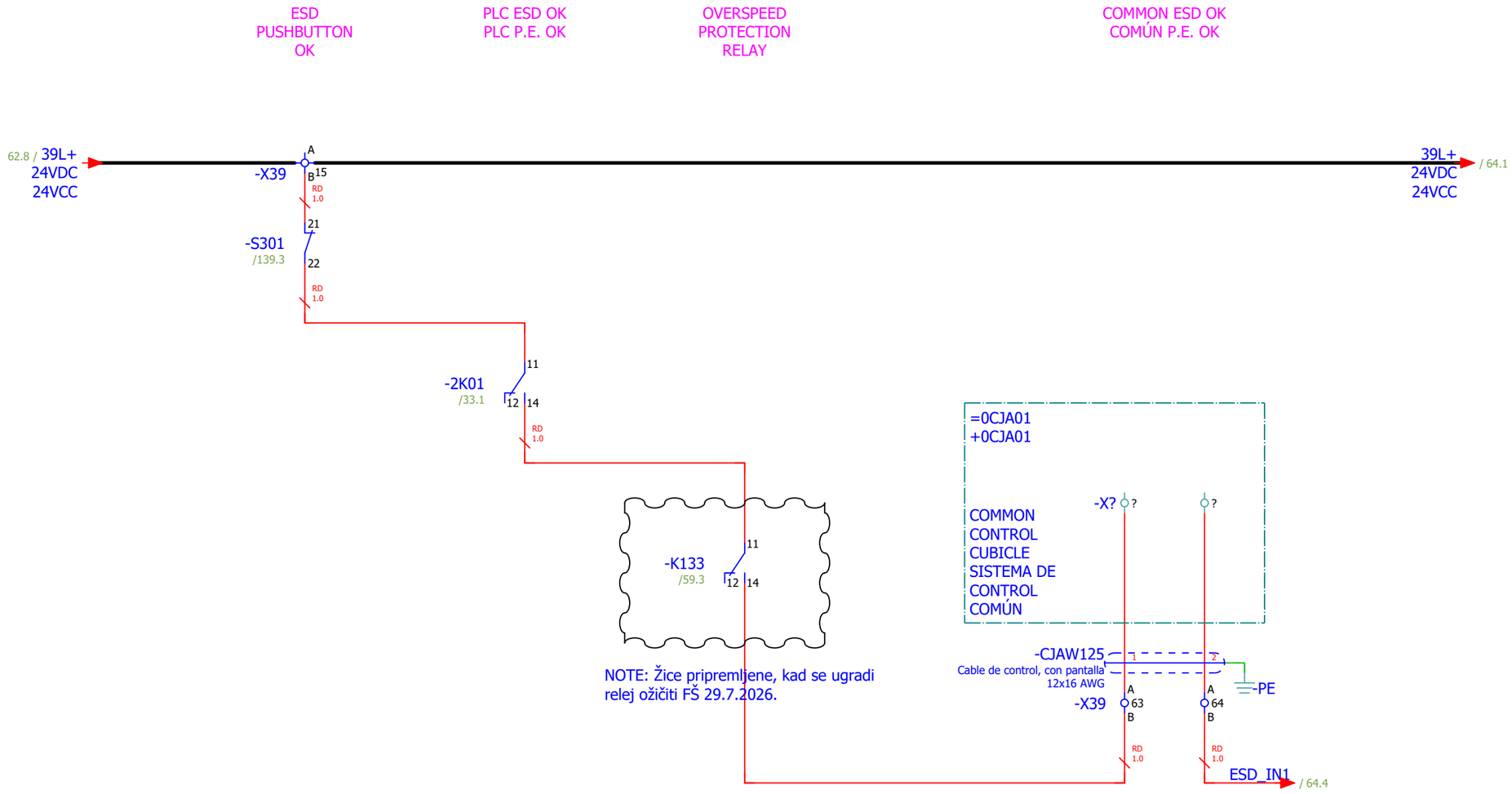

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NA
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Colombia PCH NARE	Content: EMERGENCY SHUTDOWN	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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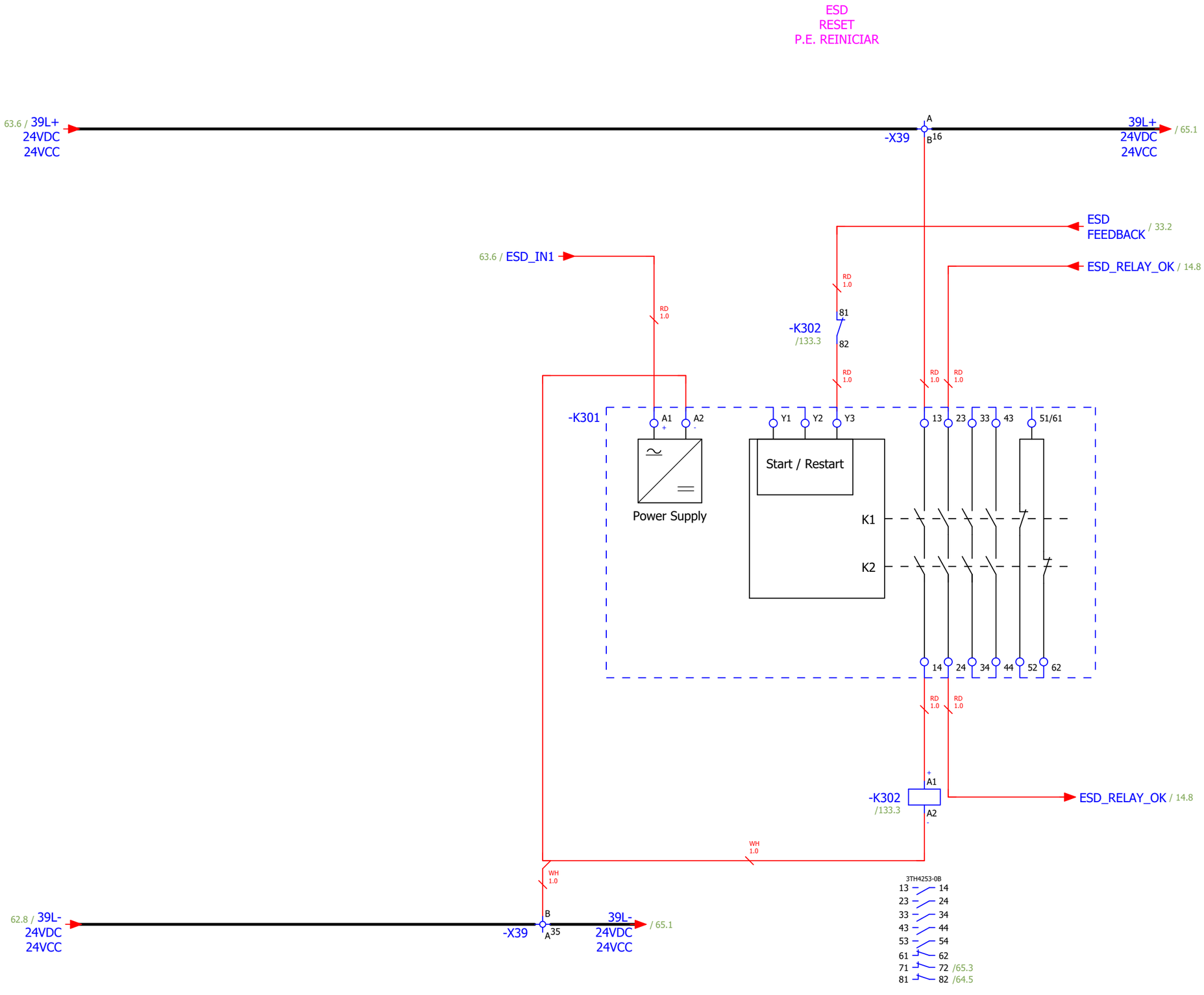

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NA
Approved:	Patrik Kovač		Object:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: EMERGENCY SHUTDOWN	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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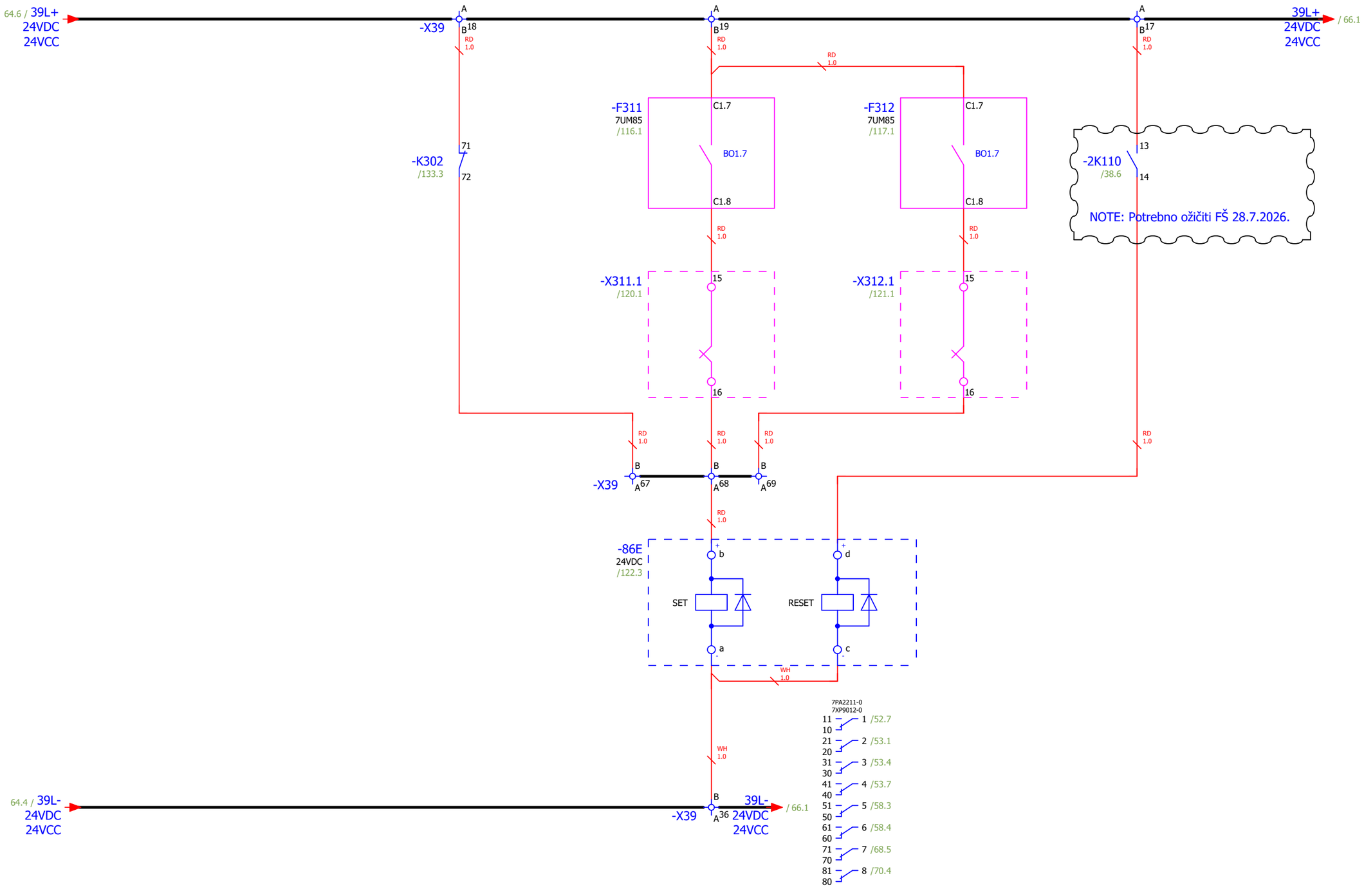
LOCKOUT RELAY
RELÉ MAESTRO DE DISPARO Y
BLOQUEO



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NA
Approved:	Patrik Kovač		Object:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE Columbia	Content: EMERGENCY SHUTDOWN	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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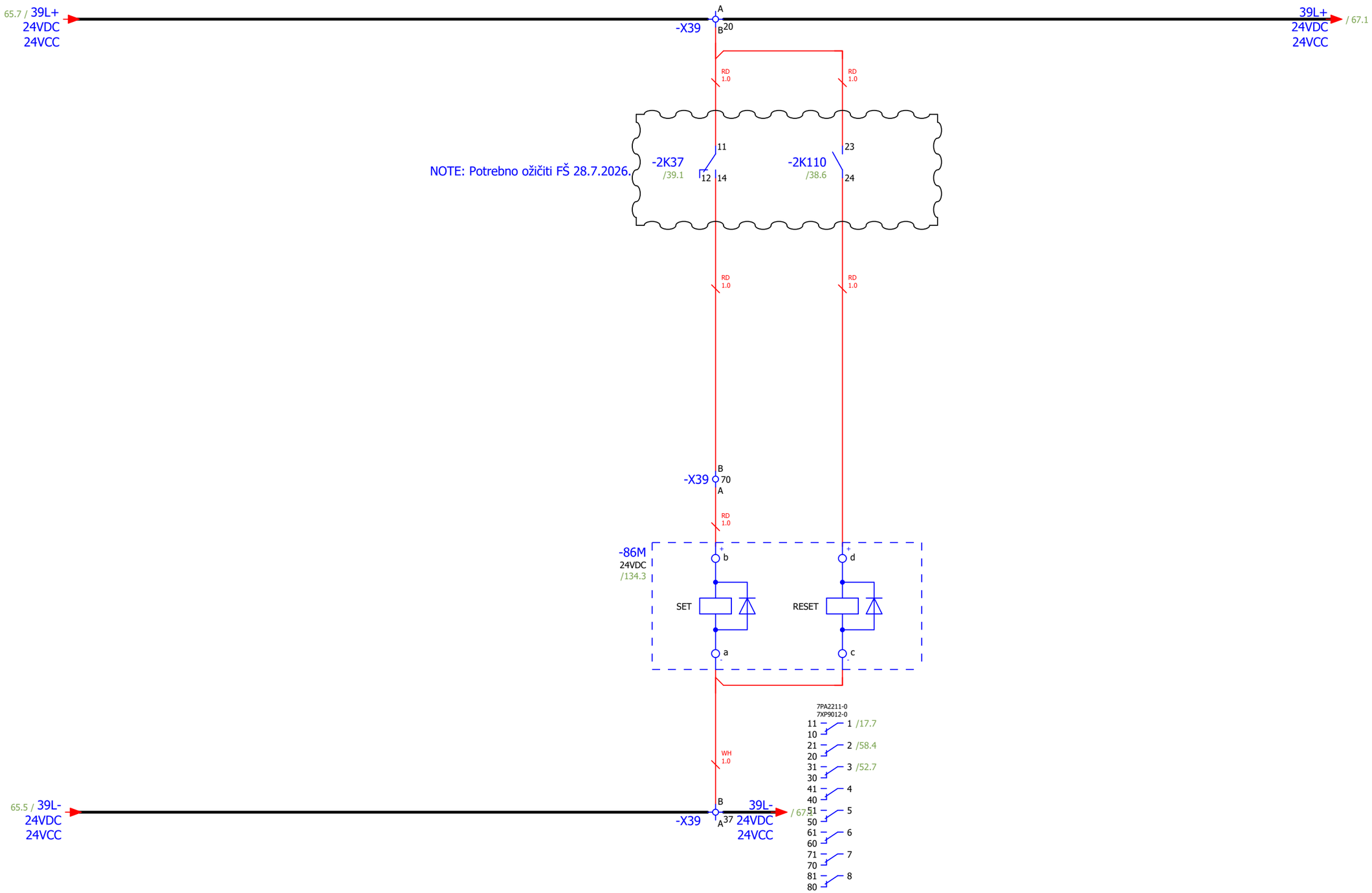
LOCKOUT RELAY MECHANICAL

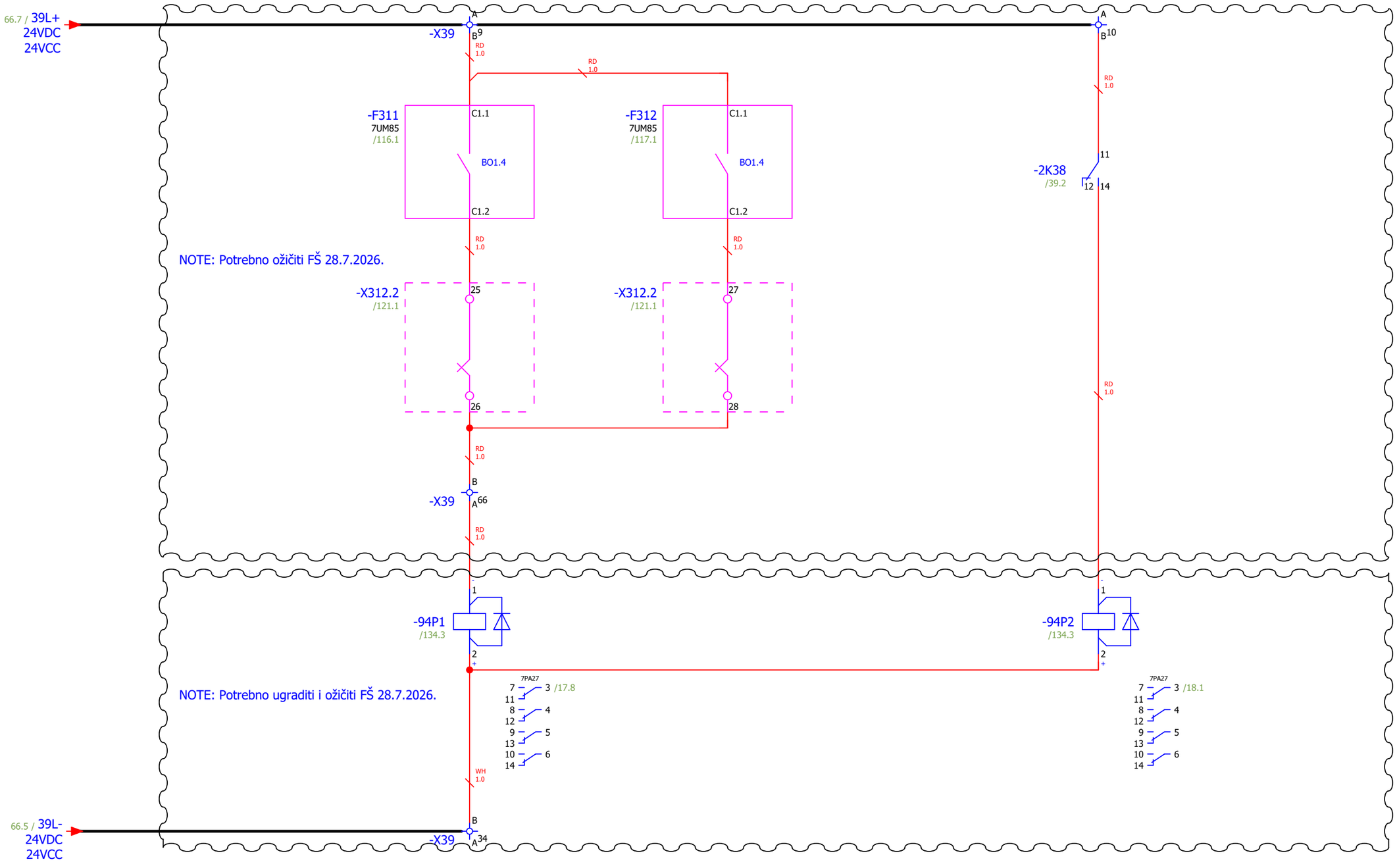


Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić									#NA
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: QUICK SHUTDOWN	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 66
Format:	A4								+1CJA01	Next: 67

Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE

PARTIAL SHUTDOWN RELAY 1
RELÉ DE PARO PARCIAL 1

PARTIAL SHUTDOWN RELAY 2
RELÉ DE PARO PARCIAL 2



NOTE: Potrebno ugraditi i ožičiti FŠ 28.7.2026.

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NA
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: PARTIAL SHUTDOWN	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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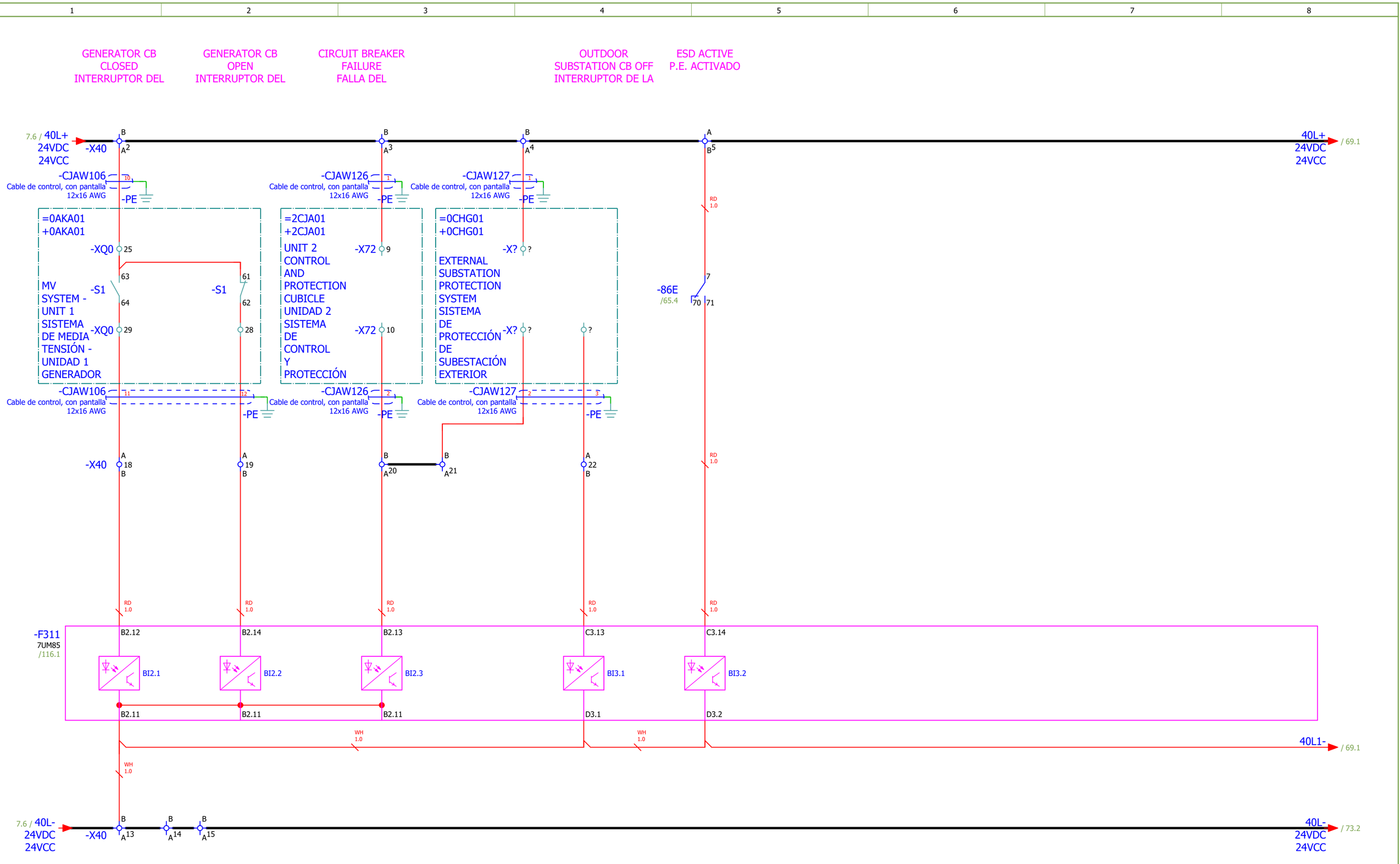

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: GENERATOR PROTECTION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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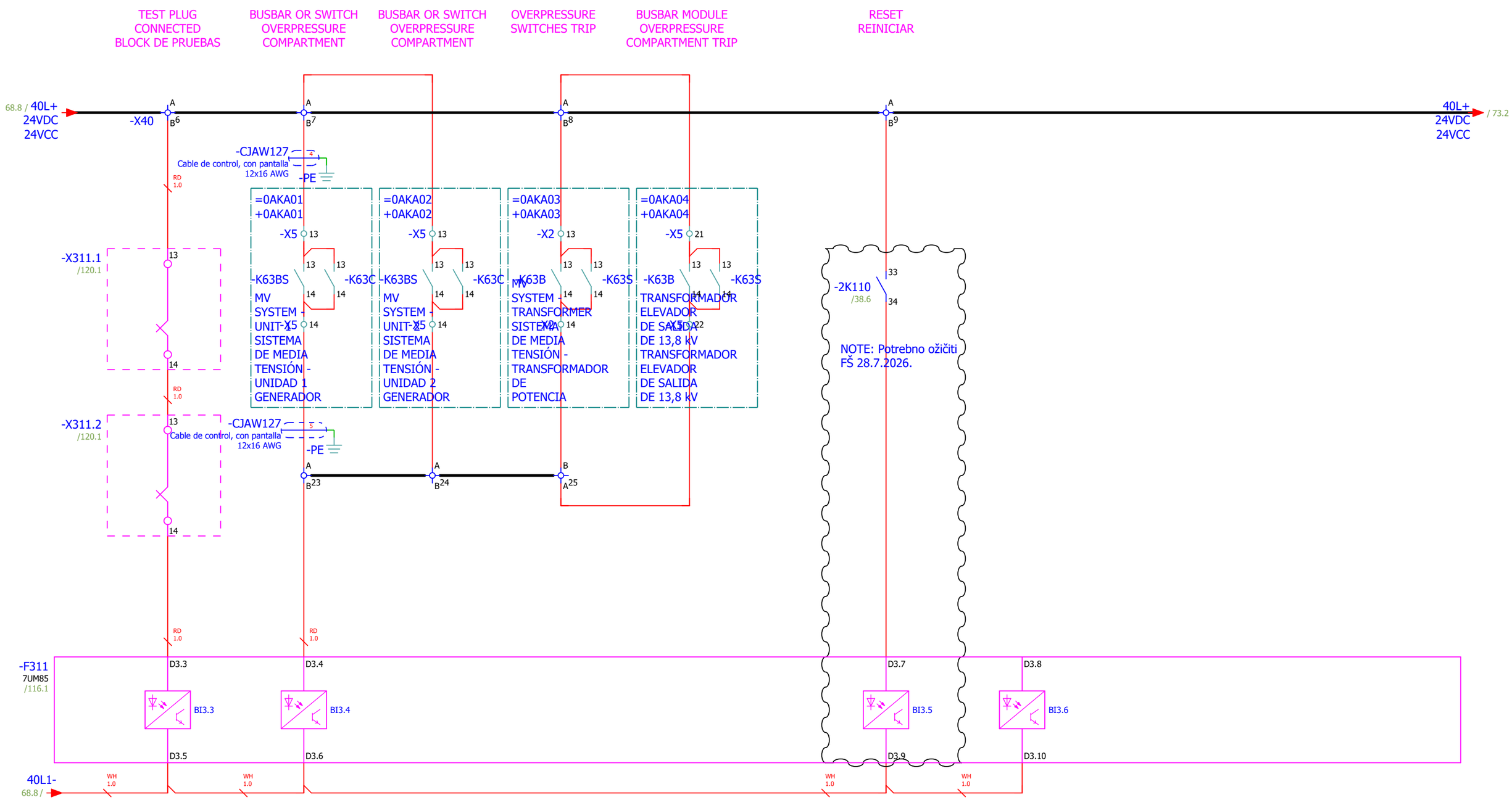

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: GENERATOR PROTECTION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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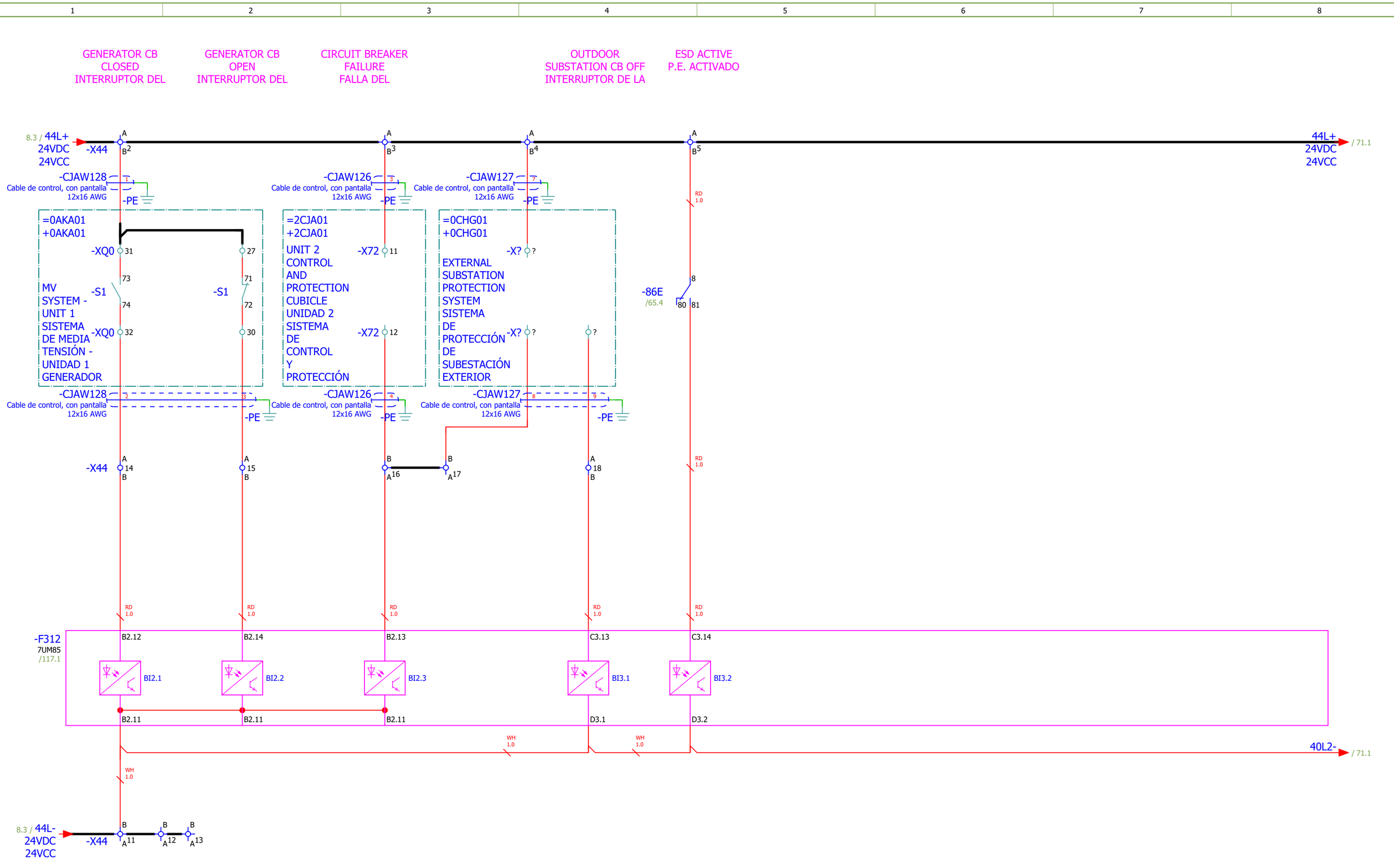

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NB
Approved:	Patrik Kovač		Object:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: GENERATOR PROTECTION - BACKUP	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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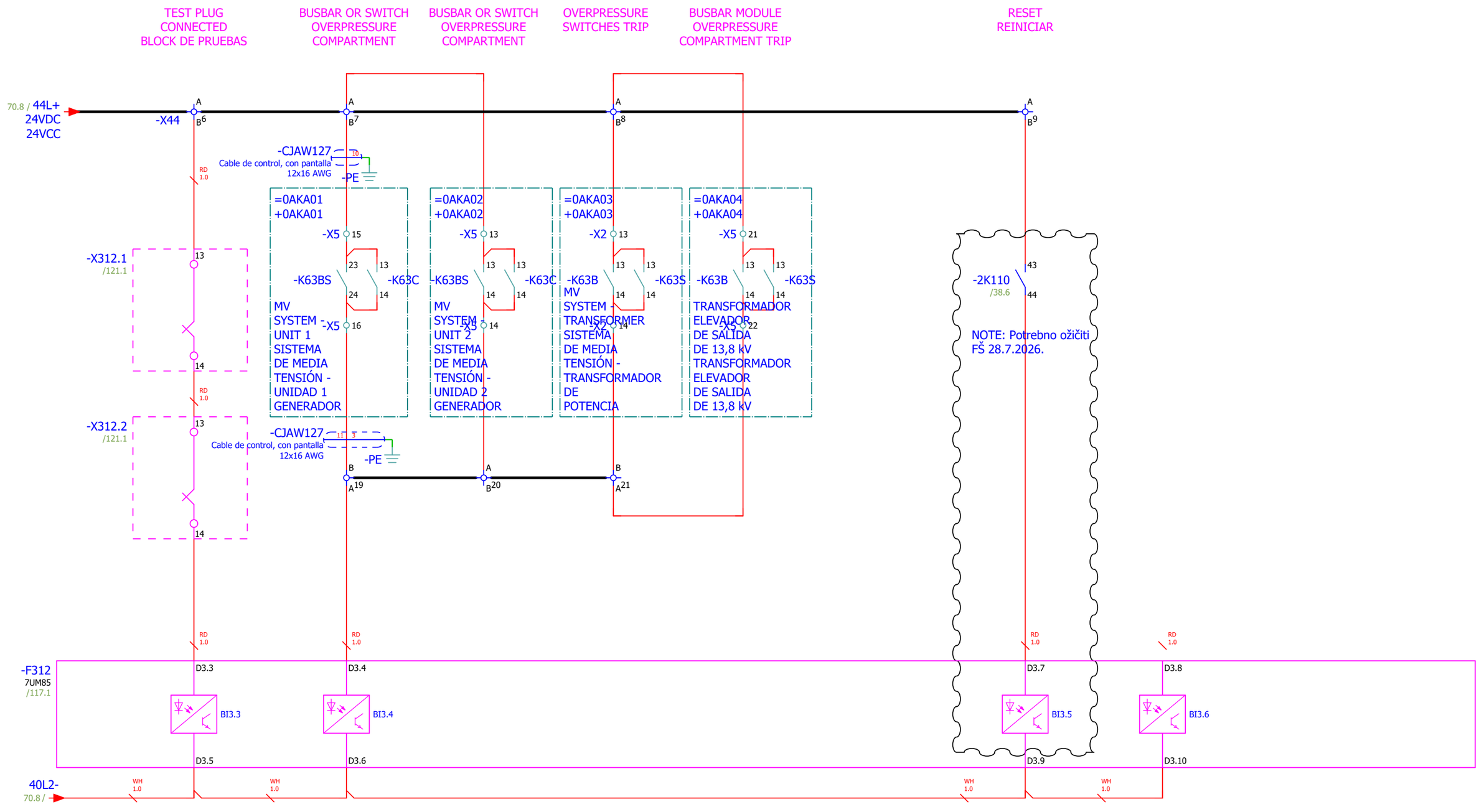
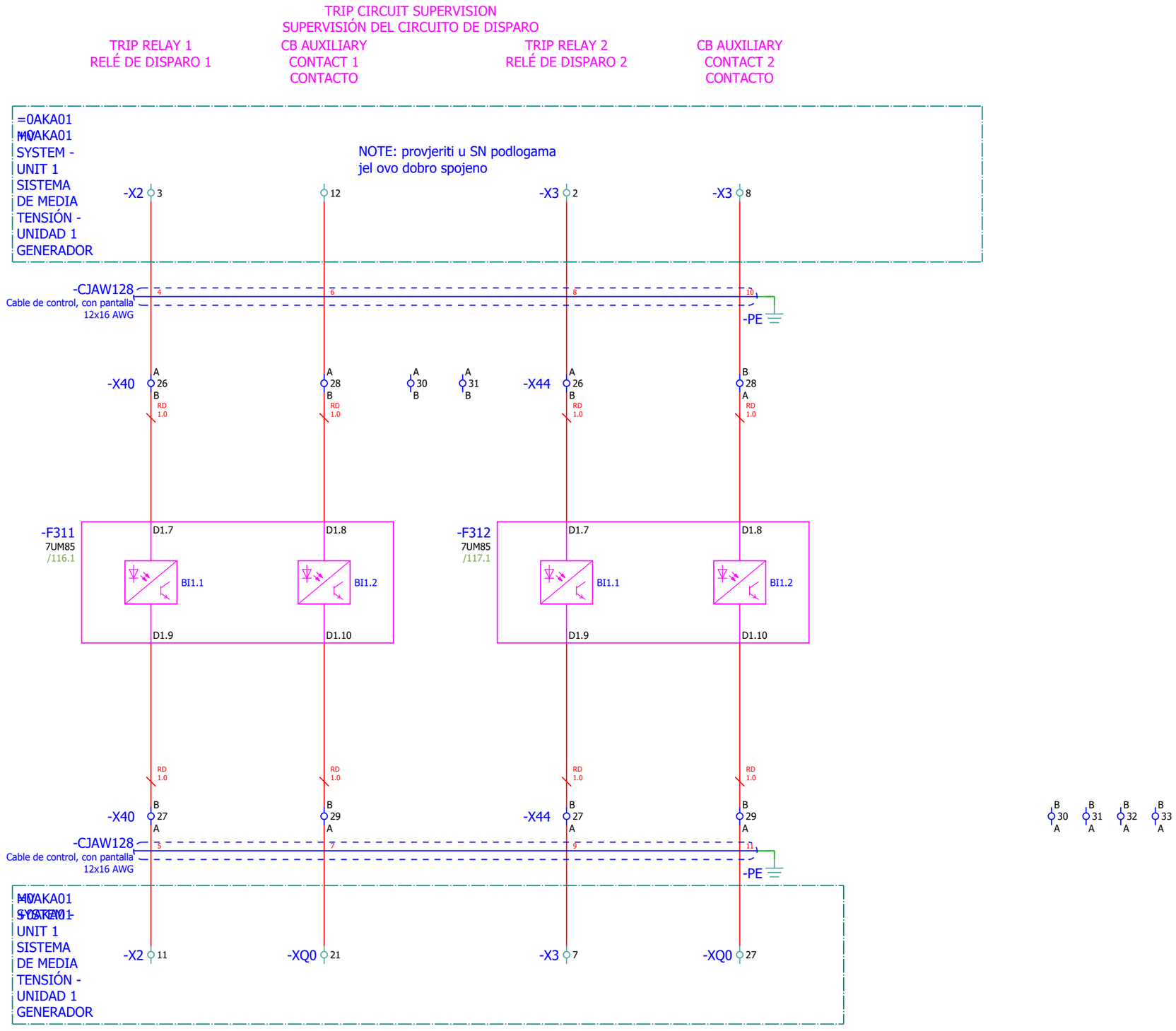


Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić								#NB
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Columbia Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: GENERATOR PROTECTION - BACKUP	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 71
Format:	A4							+1CJA01	Next: 72



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#NB
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: TRIP CIRCUIT SUPERVISION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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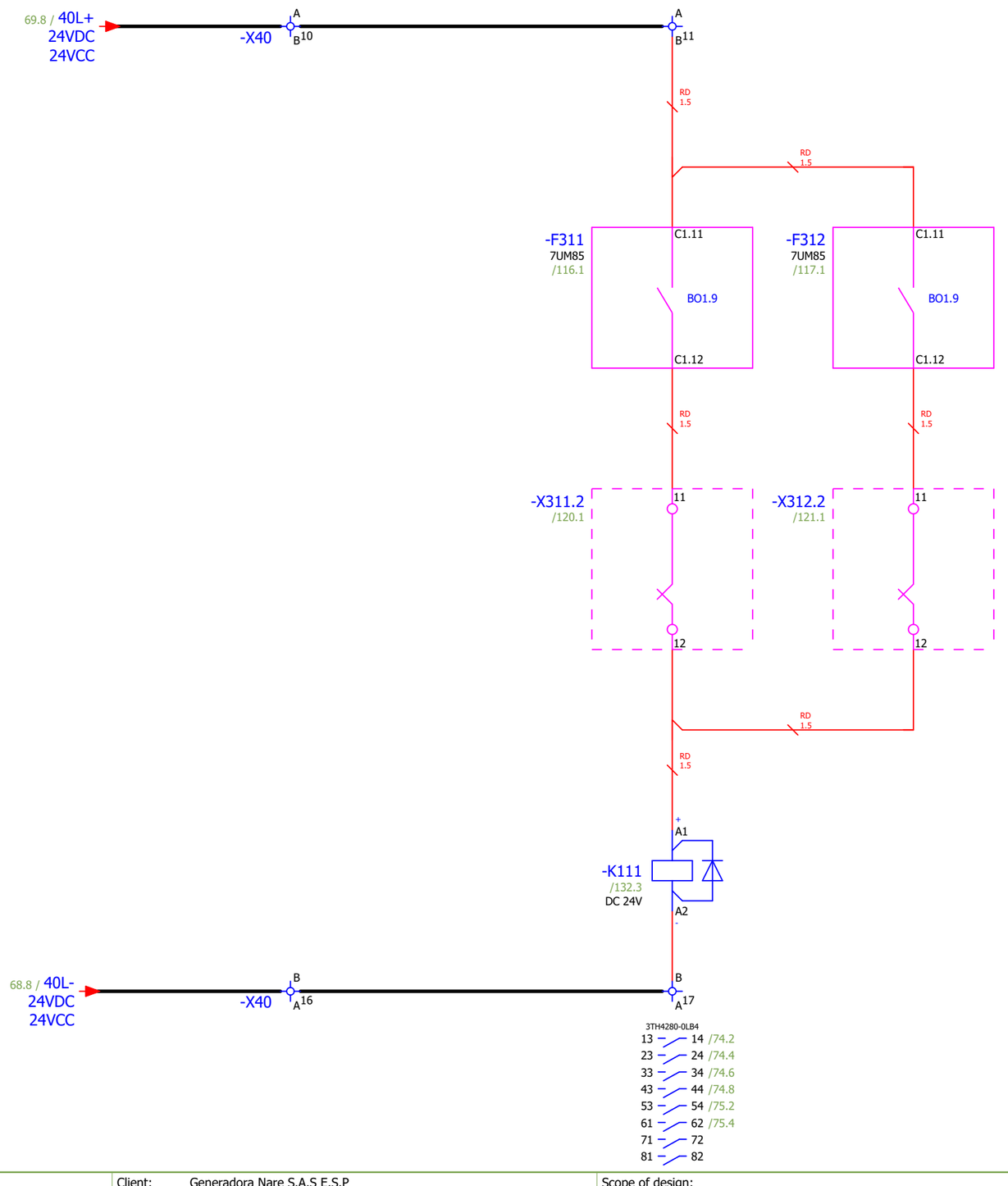
CIRCUIT BREAKER
FAILURE
FALLA DEL INTERRUPTOR



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#NC
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: GENERATOR PROTECTION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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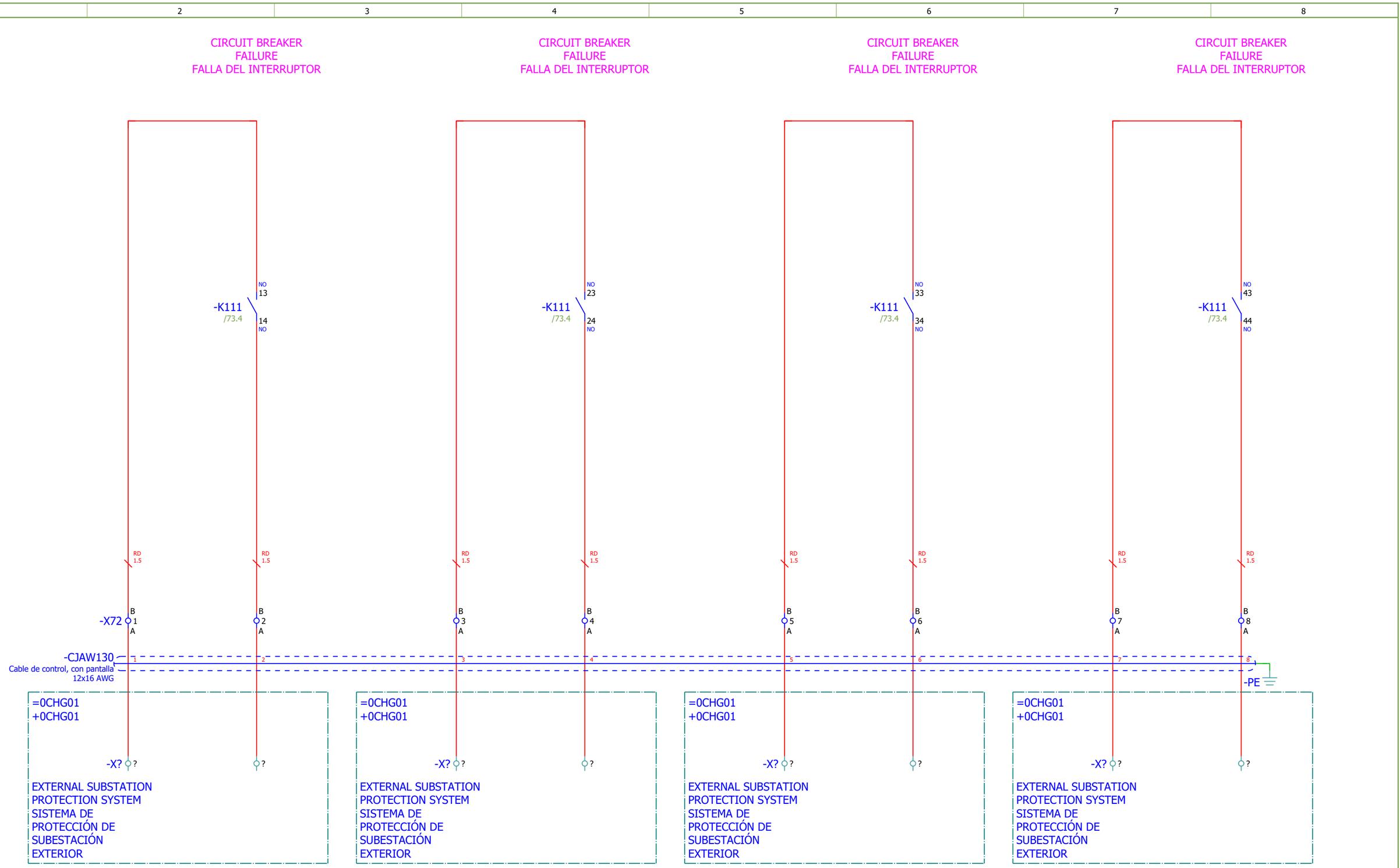

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić								#NC
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: GENERATOR PROTECTION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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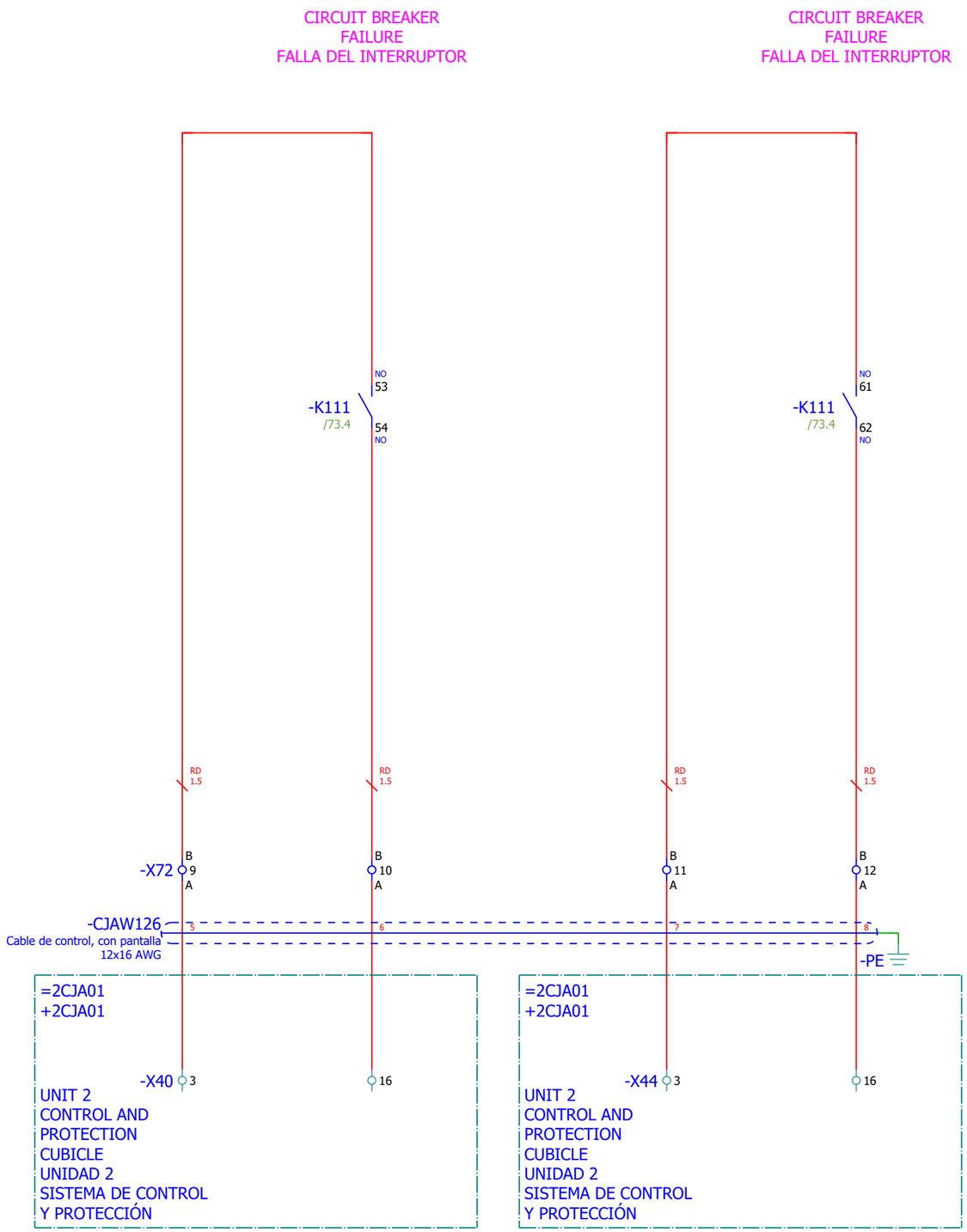

Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: GENERATOR PROTECTION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Approved:	Patrik Kovač Patrik Kovač								+1CJA01
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#NC

Sheet: 75

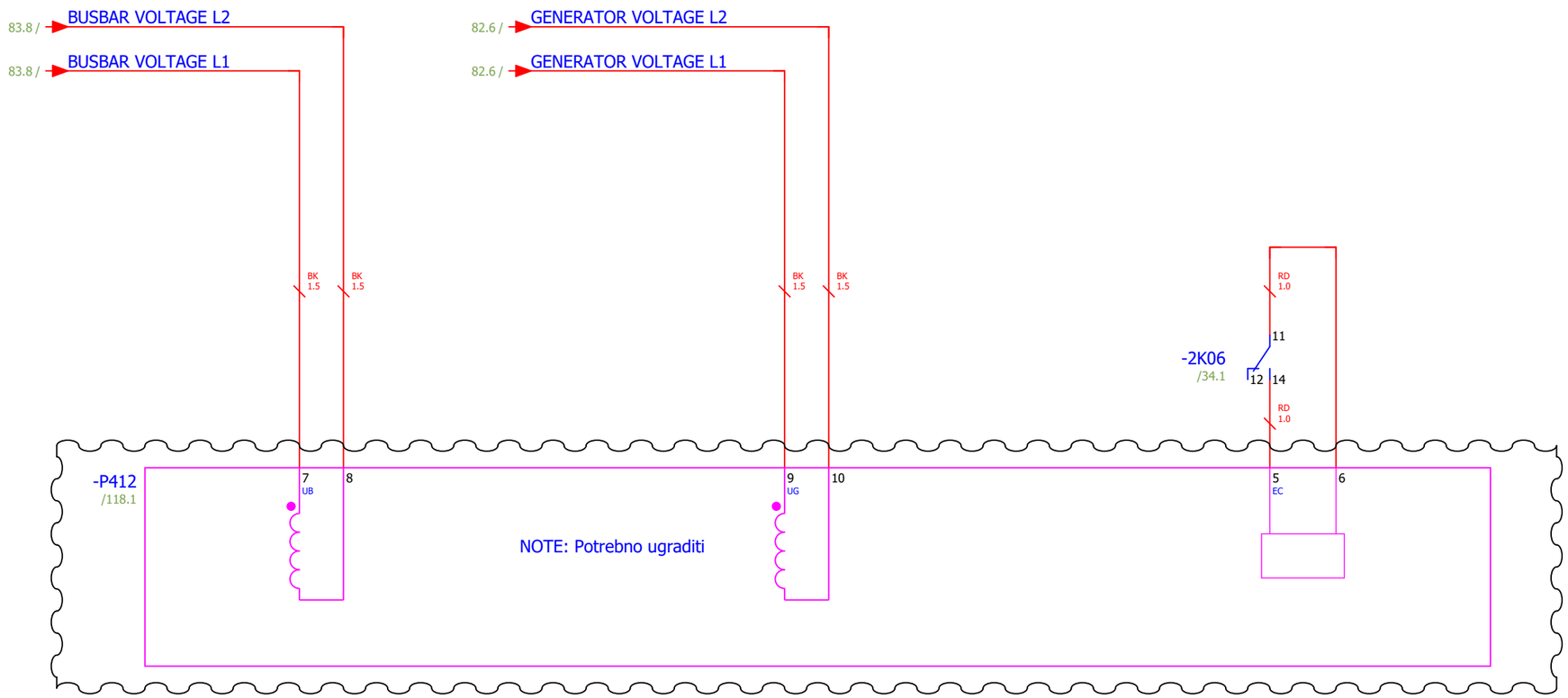
Next: 76

1	2	3	4	5	6	7	8

SYNCRONIZATION MAINS VOLTAGE MEASUREMENT
MEDICIÓN DE TENSIÓN DE RED

SYNCRONIZATION GENERATOR VOLTAGE MEASUREMENT
MEDICIÓN DE TENSIÓN DEL

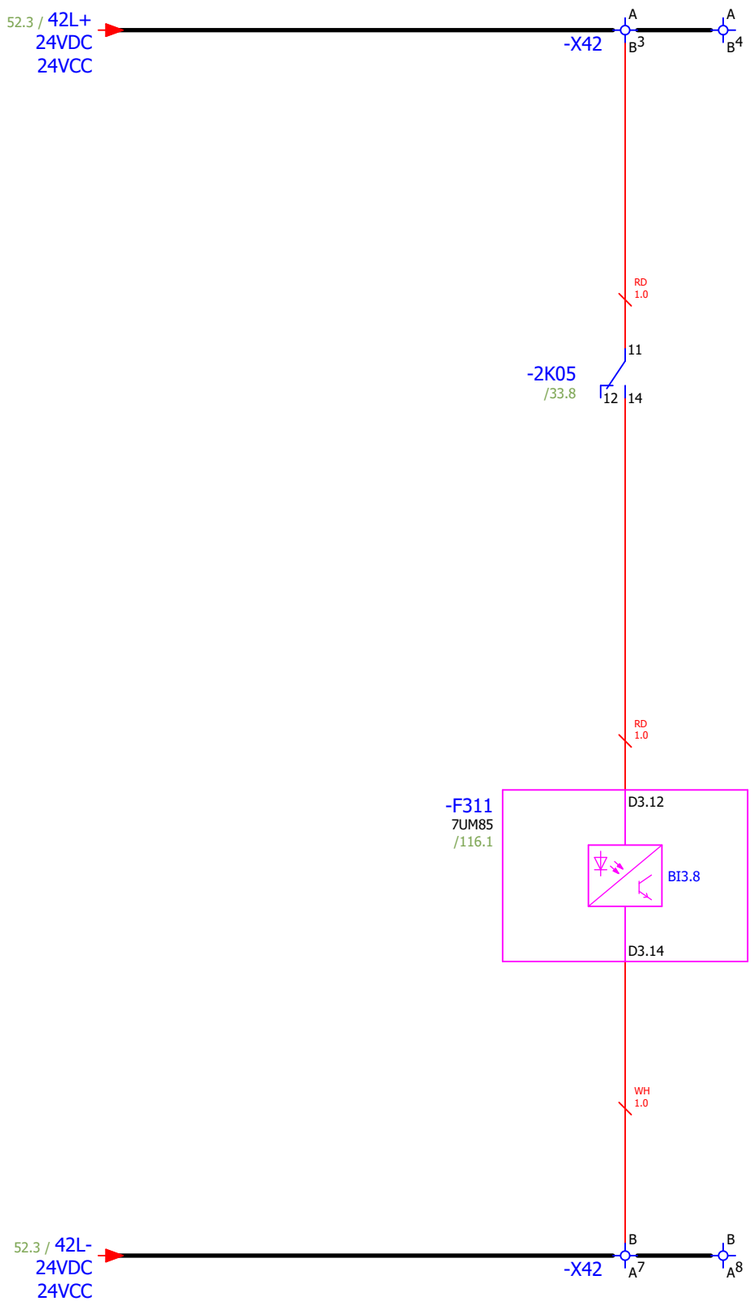
AUTOMATIC SYNCHRONIZER ON
SINCRONIZADOR AUTOMÁTICO ACTIVADO



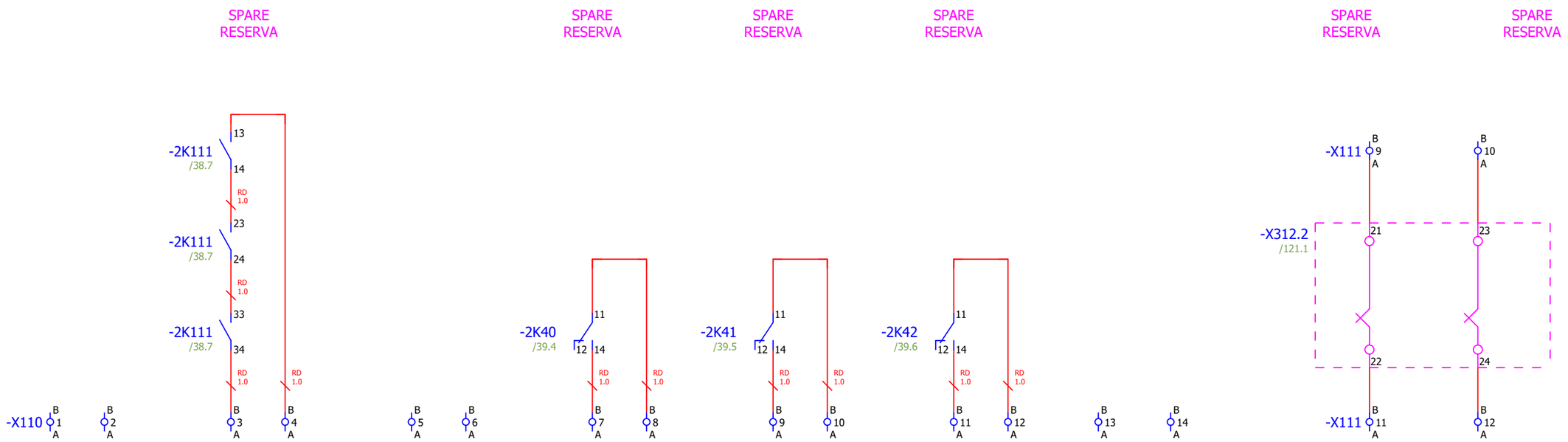
Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#P
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: SYNCHRONIZATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01

Sheet: 76
Next: 77

GENERATOR CB AUTOMATIC
SYNCHRONIZER ON
GENERADOR INTERRUPTOR

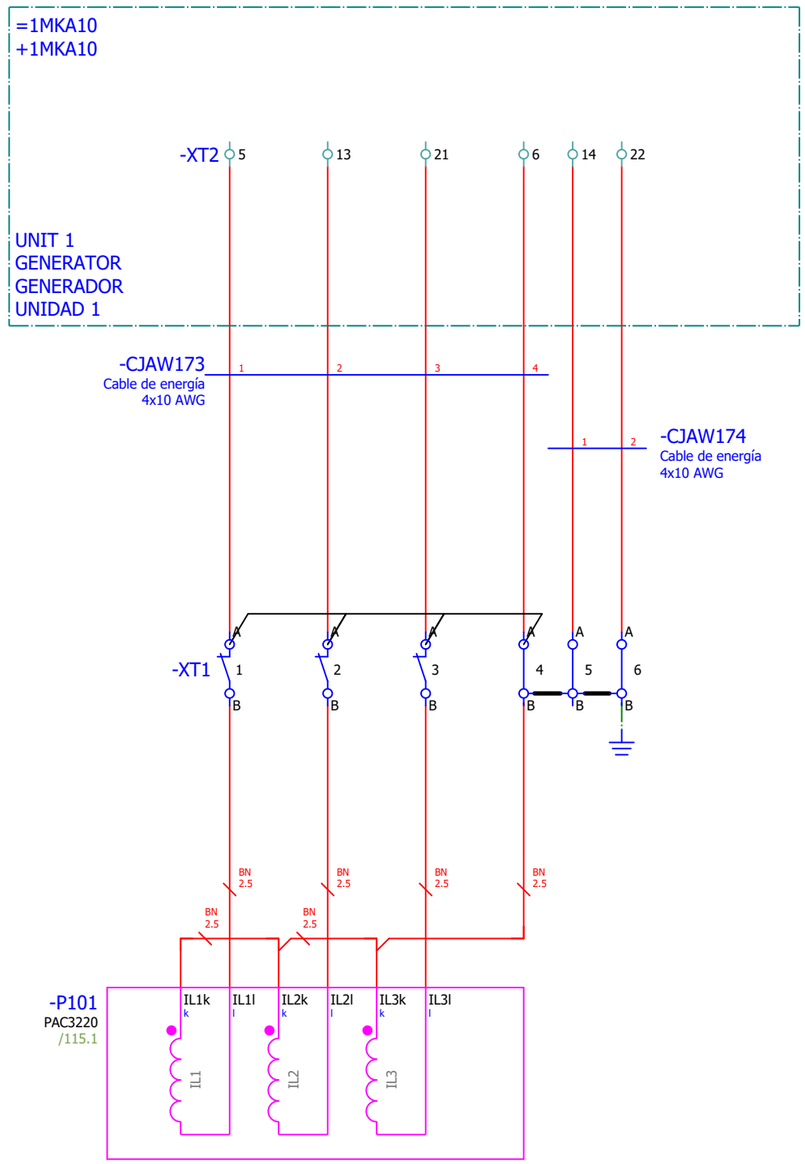


Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić									#P
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: SYNCHRONIZATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 77
Format:	A4								+1CJA01	Next: 78



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić								#QB
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Columbia PCH NARE	Content: SPARE CONTACTS	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 78
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia					+1CJA01	Next: 79

MULTIMETER
MULTÍMETRO



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#SA
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: CT CIRCUITS	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
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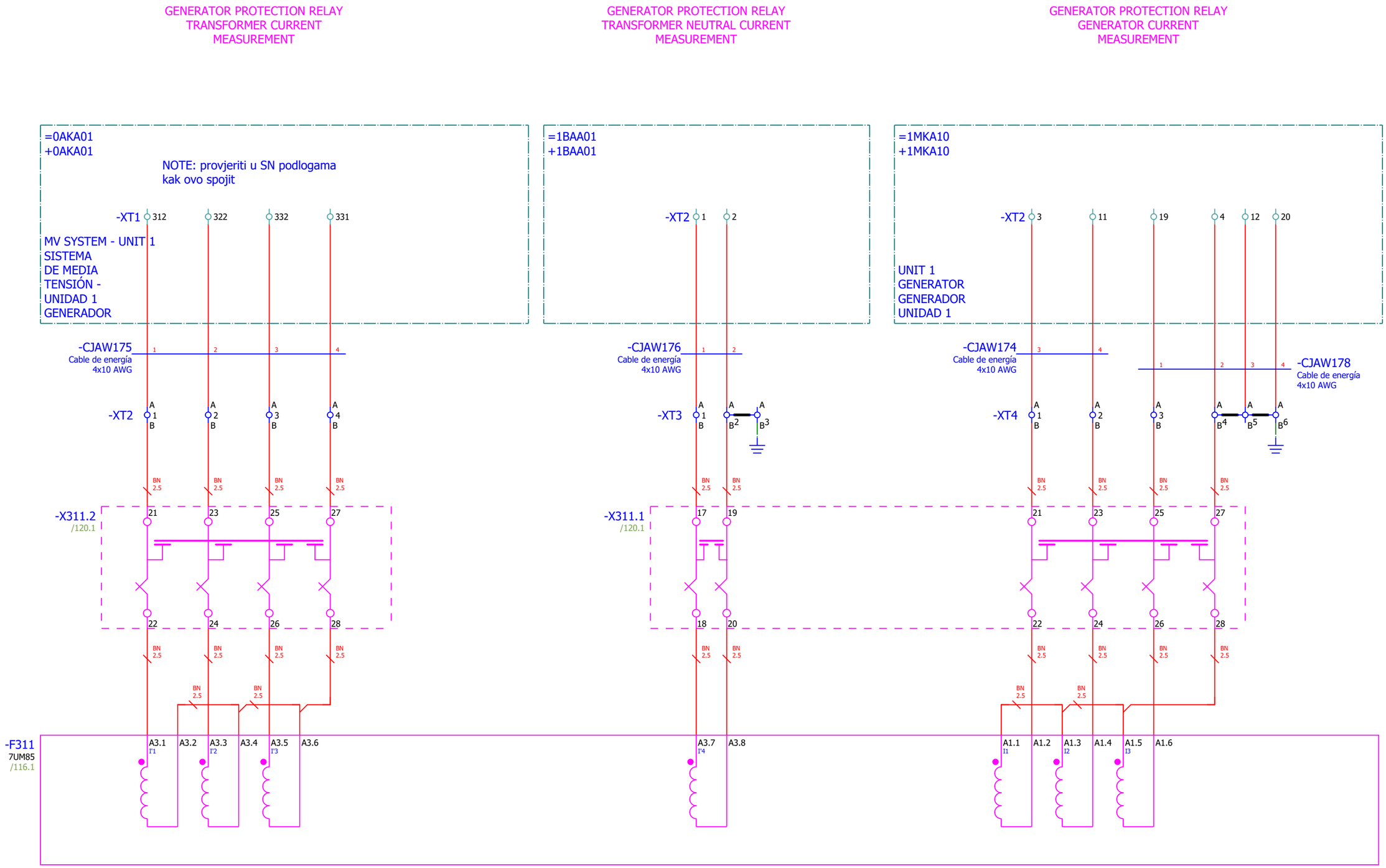
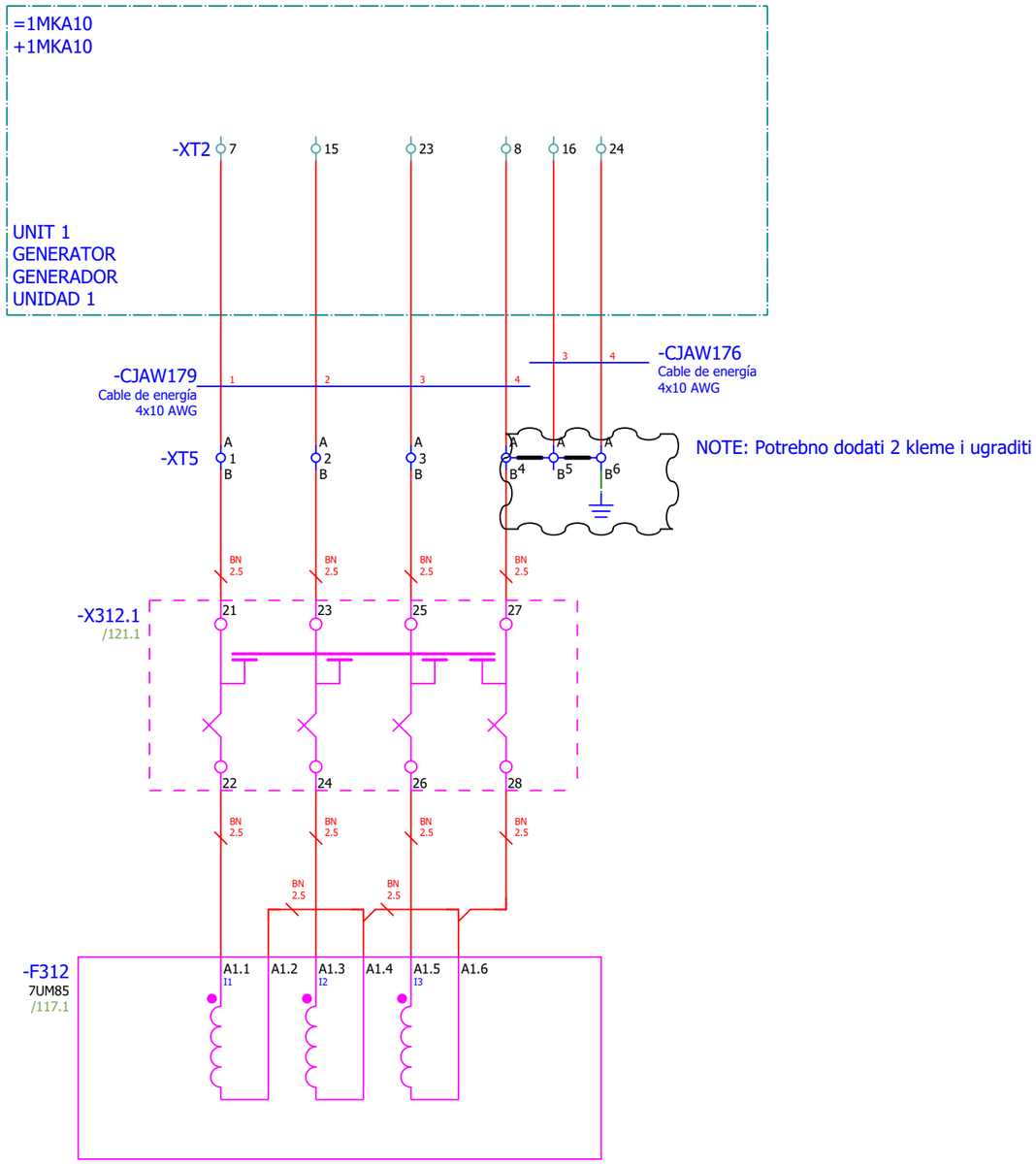


Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#SA
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: CT CIRCUITS	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 80
Format:	A4			Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE				+1CJA01	Next: 81

GENERATOR BACKUP PROTECTION
RELAY GENERATOR CURRENT
MEASUREMENT



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#SA
Approved:	Patrik Kovač		Object:	PCH NARE Columbia	Content: CT CIRCUITS	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE

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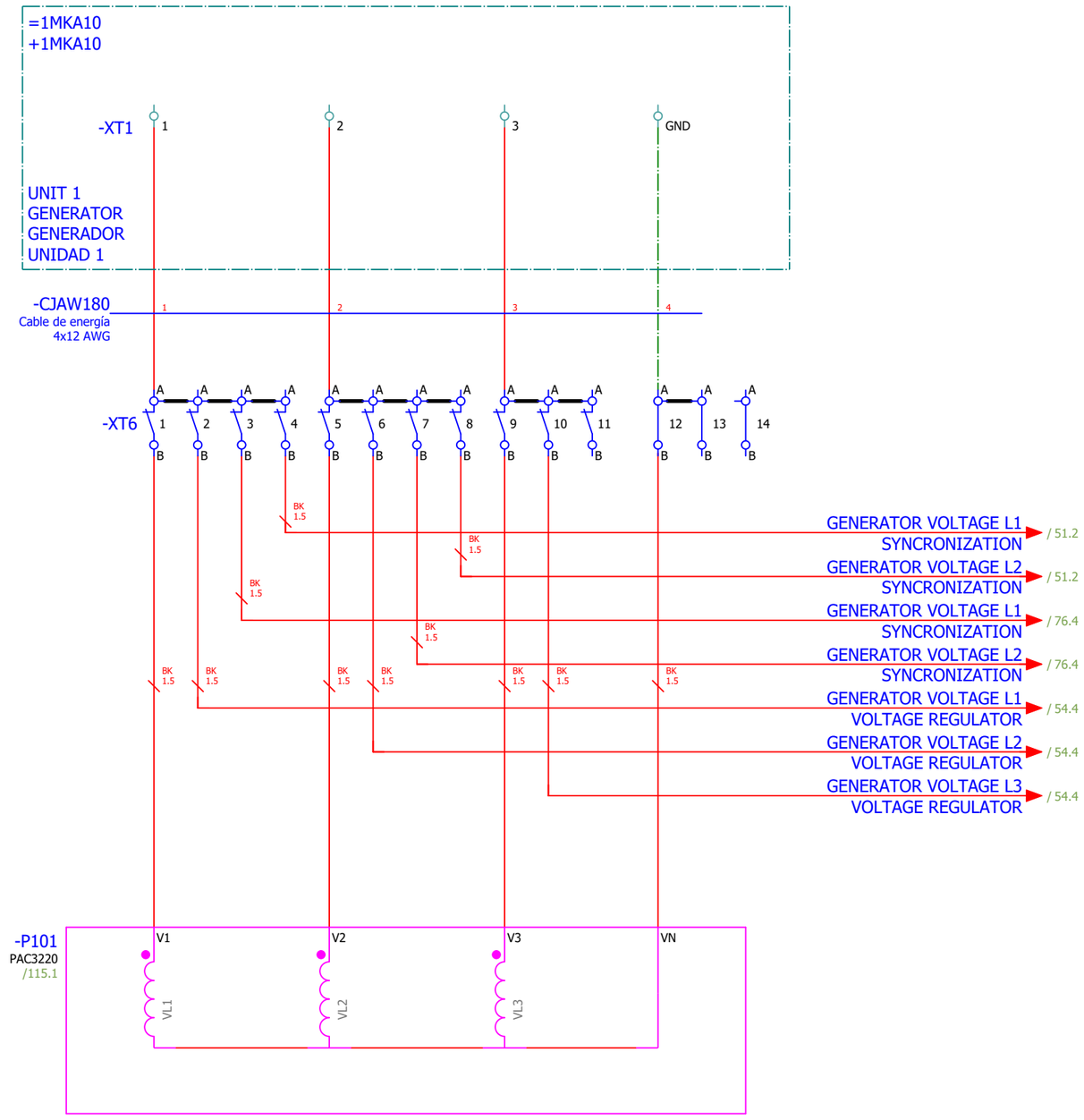
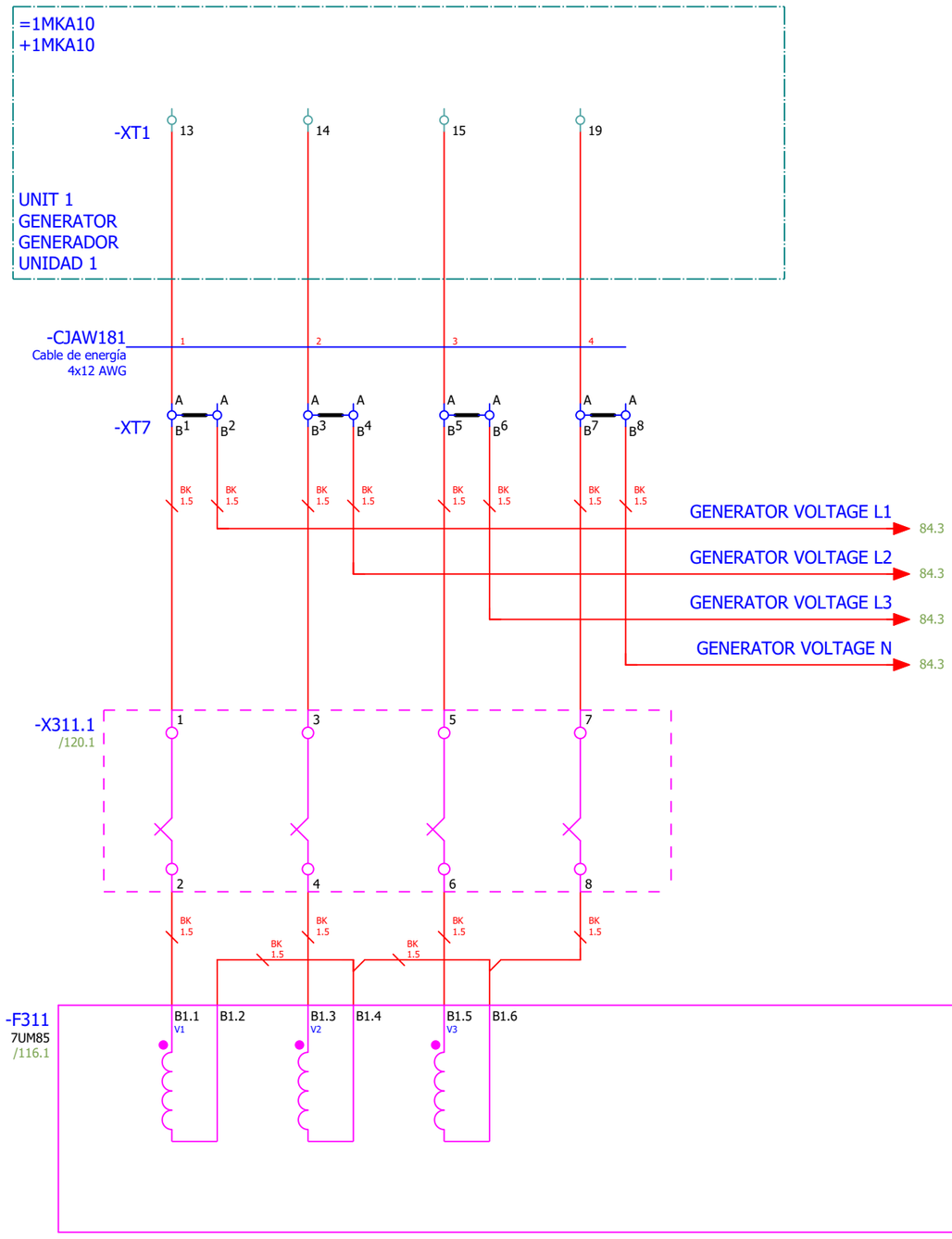
MULTIMETER
MULTÍMETRO



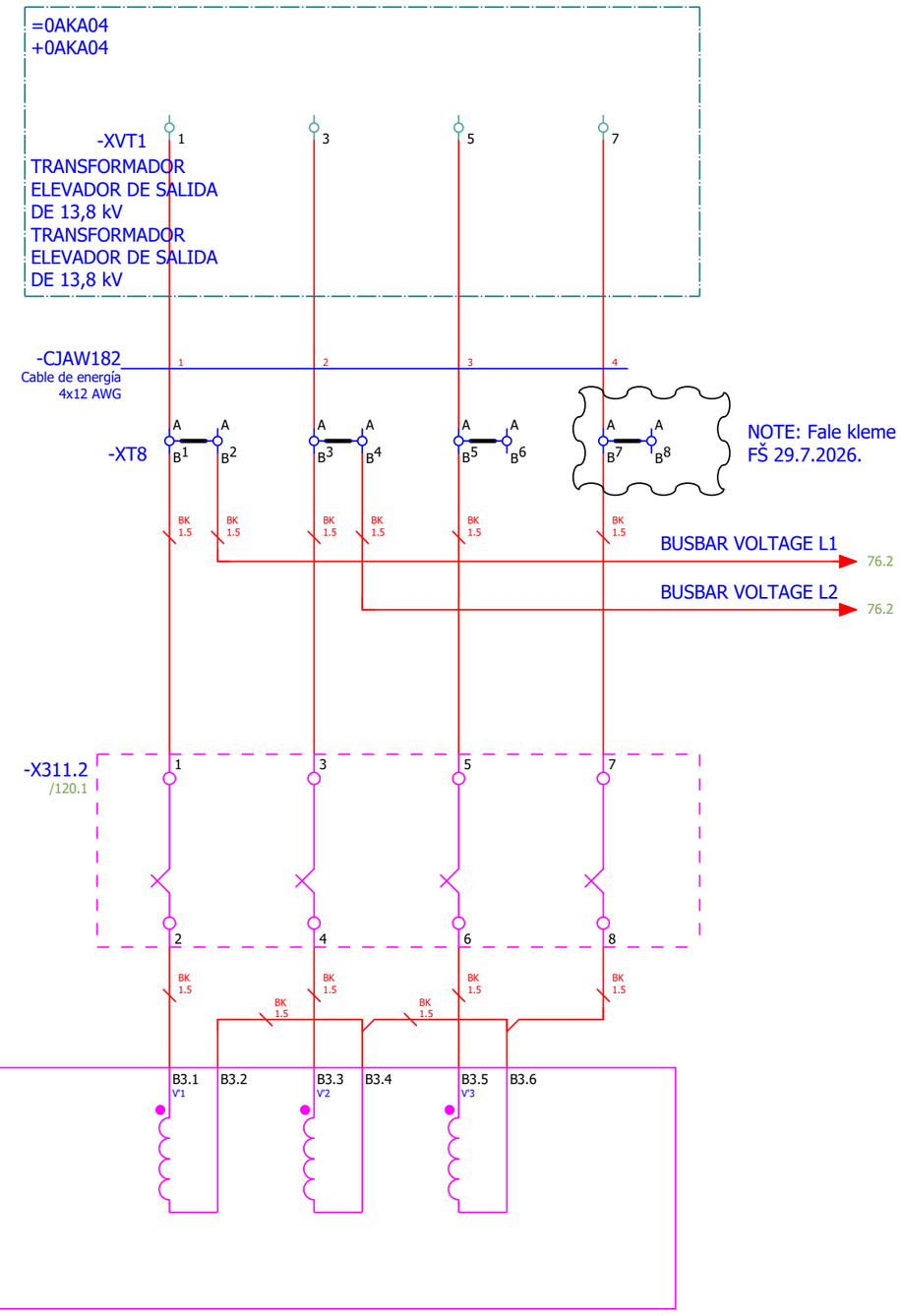
Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#SB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: VT CIRCUITS	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Sheet: 82
Next: 83

GENERATOR PROTECTION RELAY
GENERATOR VOLTAGE
MEASUREMENT



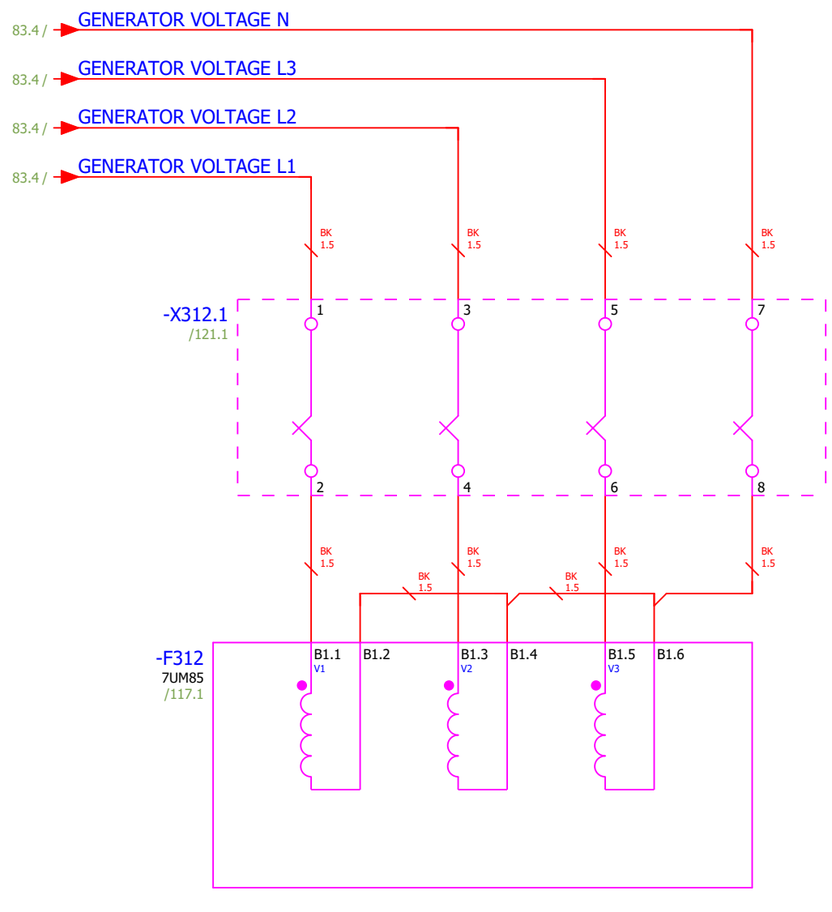
SYNCRONIZATION MAINS VOLTAGE
MEASUREMENT
MEDICIÓN DE TENSIÓN DE RED



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#SB
Approved:	Patrik Kovač		Object:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE Columbia	Content: VT CIRCUITS	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Sheet: 83
Next: 84

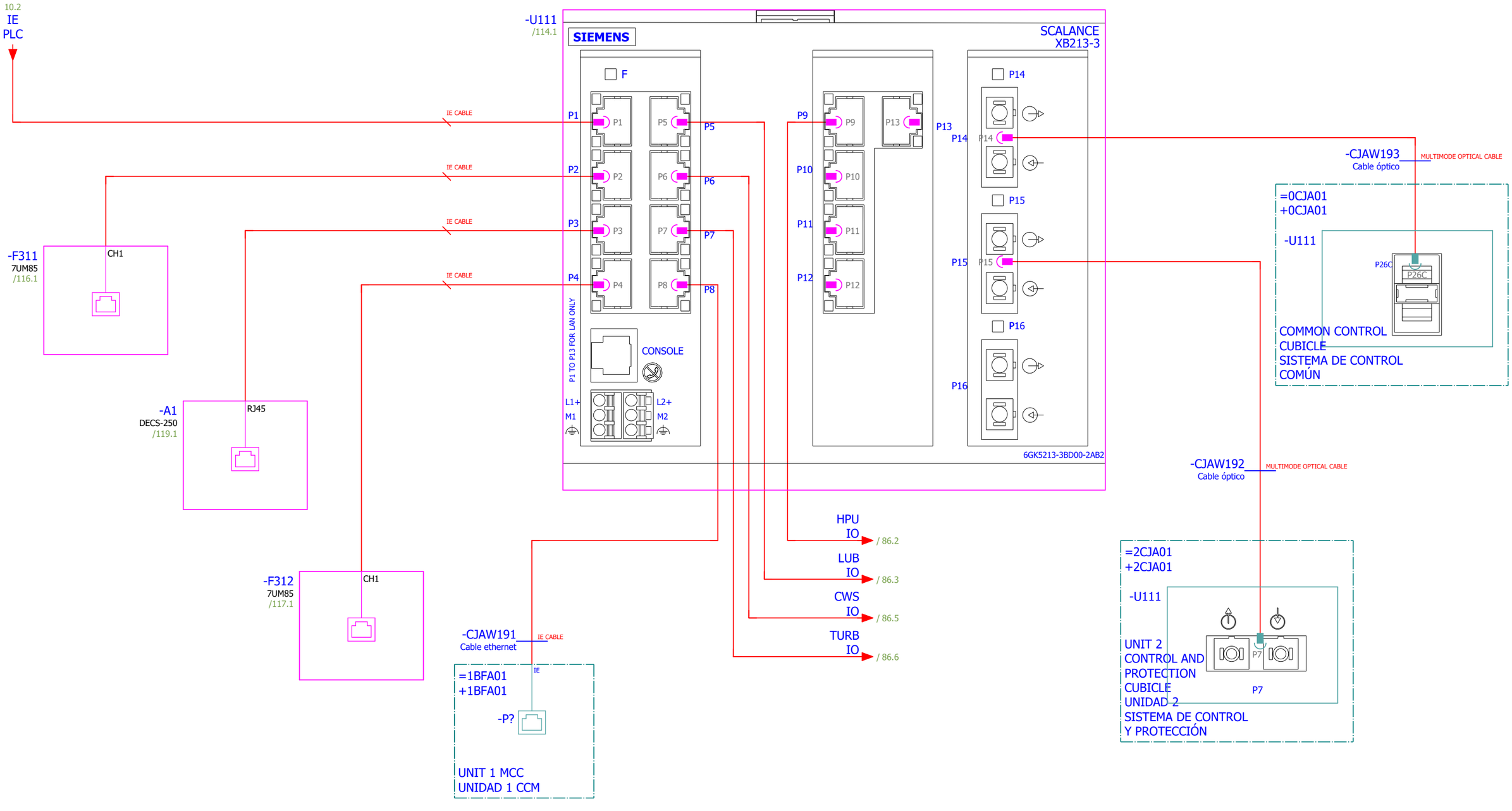
GENERATOR BACKUP PROTECTION
RELAY GENERATOR VOLTAGE
MEASUREMENT



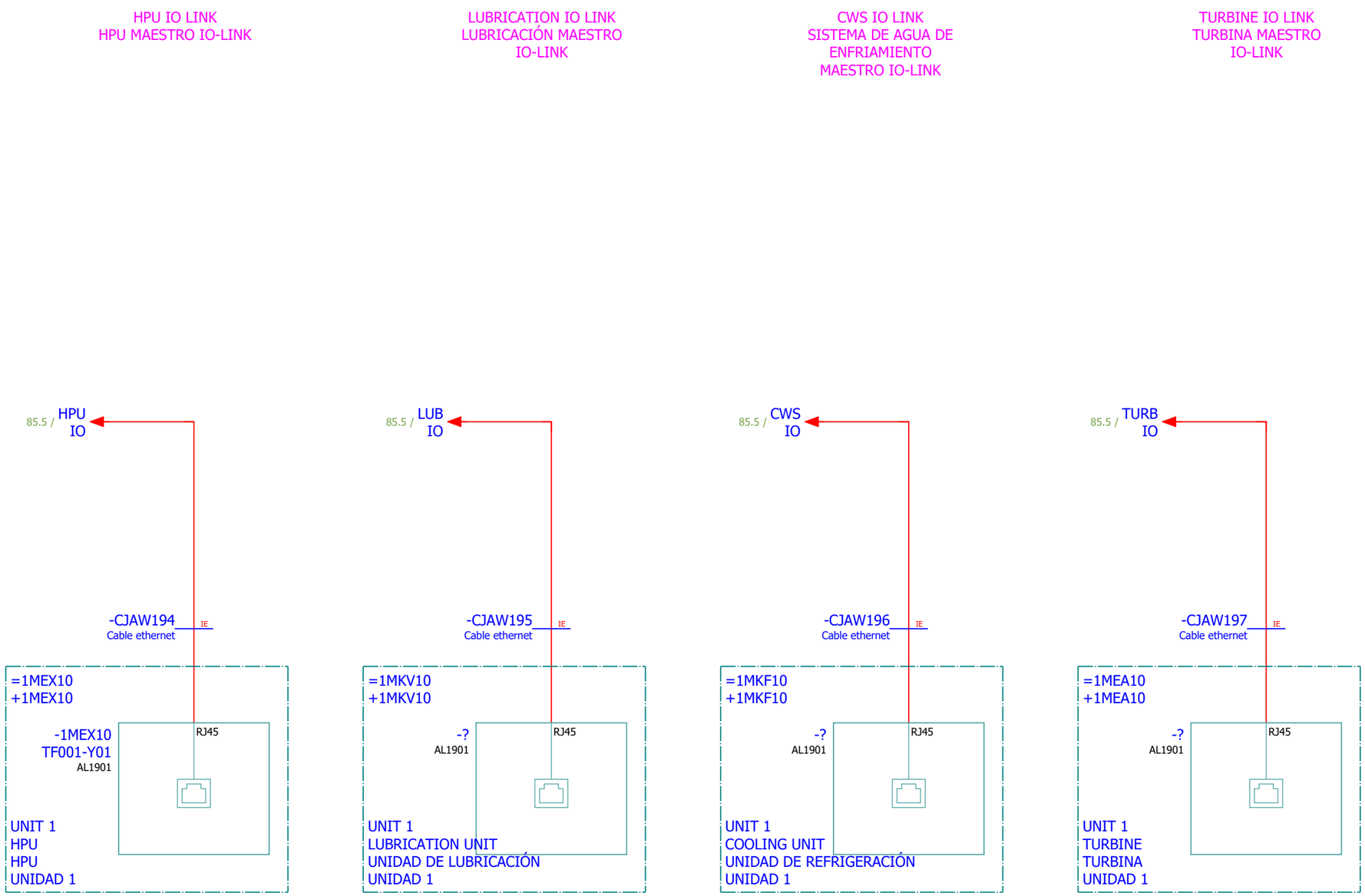
Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#SB
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: VT CIRCUITS	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4			PCH NARE Colombia					+1CJA01

Sheet: 84
Next: 85

1	2	3	4	5	6	7	8
PLC PLC	GENERATOR PROTECTION AND SYNCHRONIZATION PROTECCIÓN Y SINCRONIZACIÓN DEL GENERADOR	AVR AVR	MULTIMETER MULTÍMETRO	GENERATOR BACKUP PROTECTION PROTECCIÓN RESPALDO DEL GENERADOR		UNIT 2 UNIDAD 2	COMMON CUBICLE CUBÍCULO COMÚN



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design:	Project:	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić				Unit 1 control and protection cubicle	24028-DD	EE-02	221	01
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content:	Drawing designation:			#V
Format:	A4				COMMUNICATION	24028-DD-EE-02-221-01		=1CJA01	Sheet: 85
								+1CJA01	Next: 86

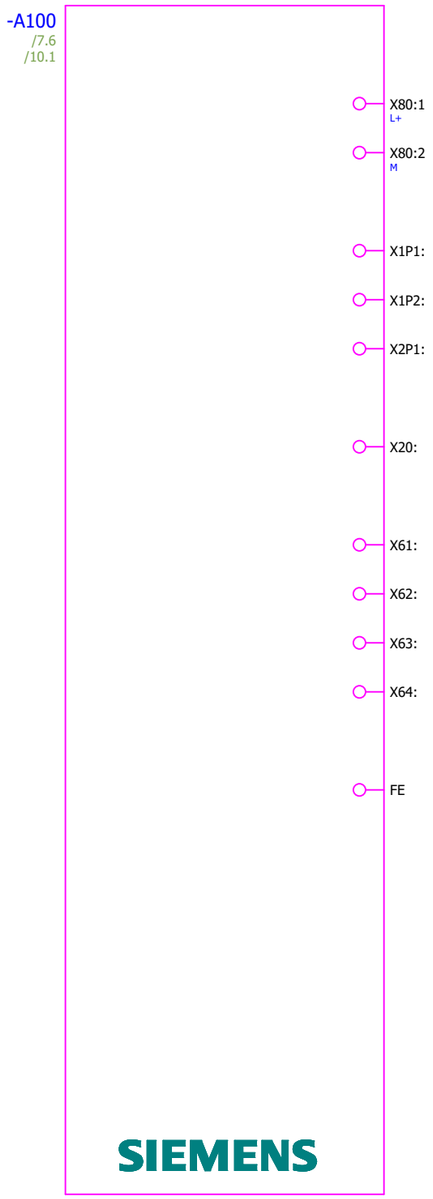


Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić								#V
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: COMMUNICATION	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Sheet: 86
Next: 87

1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 **1**	SIMATIC HMI MTP1900 Unified Comfort SIMATIC HMI MTP1900, Unified Comfort Panel, touch operation, 18.5" widescreen TFT display, 16 million colors, PROFINET interface, configurable as of WinCC Unified Comfort V16, contains open-source software, which is provided free of charge see enclosed DVD 6AV2128-3UB06-0AX1	Siemens	+1CJA01	-A100	

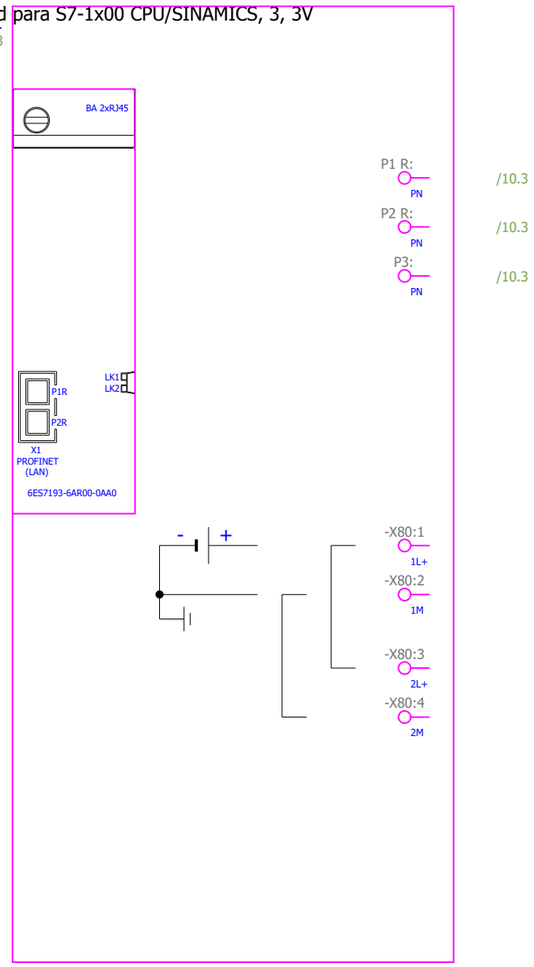


OPERATING PANEL
OPERANDO PANEL

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: HMI - TOUCH PANEL	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

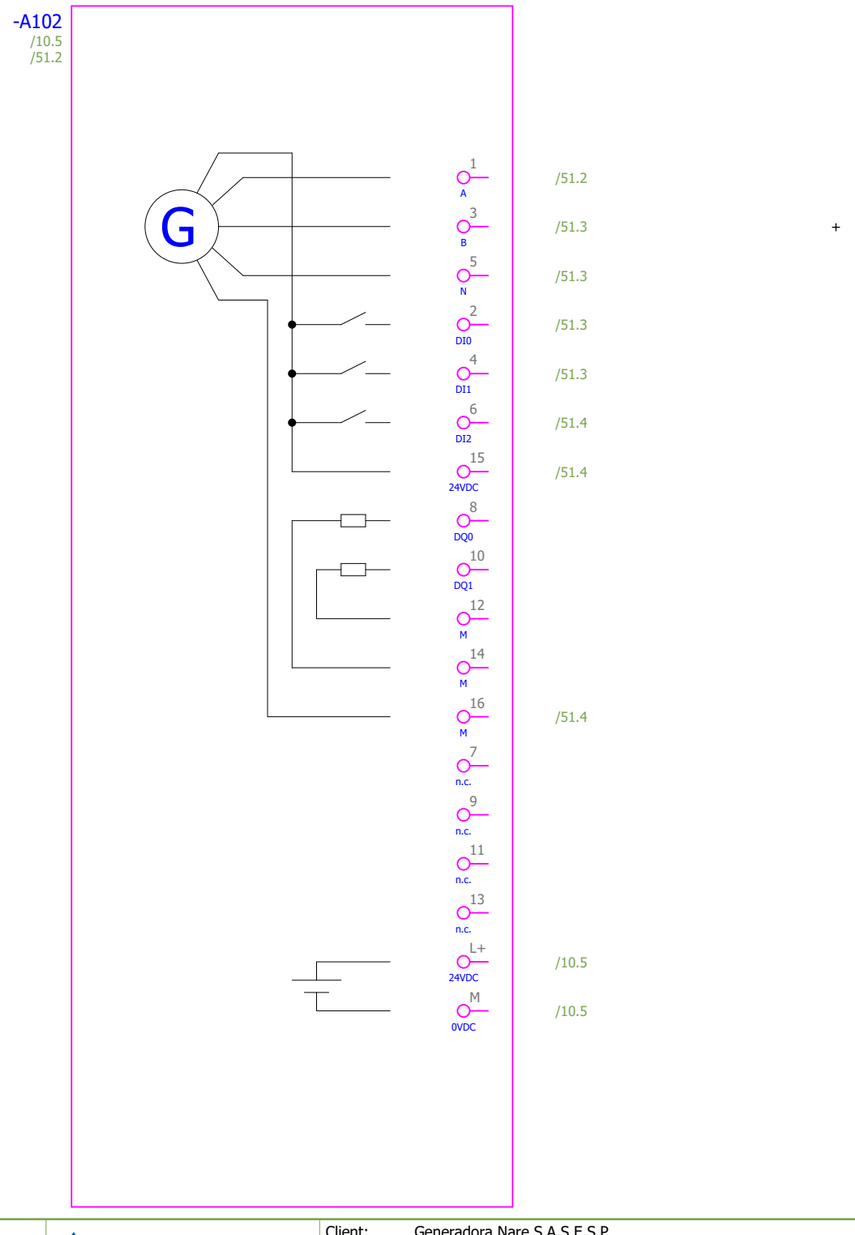
Sheet: 87
Next: 88

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	CPU 1514SP-2 PN, 600KB Prog.,3,5MB Data CPU 1514SP-2 PN, 600KB Prog., 3,5MB datos SIMATIC DP, CPU 1514SP-2 PN for ET 200SP, central processing unit with work memory 600 KB for program and 3.5 MB for data, 1st interface: PROFINET IRT with 2-port switch, 2nd interface: PROFINET RT, 6 ns bit performance, SIMATIC Memory Card required, 6ES7514-2DN03-0AB0 ET 200SP, Busadapter BA 2xRJ45 ET 200SP, Adaptador de bus BA 2xRJ45 Número de pedido: 6ES7193-6AR00-0AA0	Siemens	+1CJA01	-A101	
1	SIMATIC S7 Memory card 24 MB For S7-1x00 CPU				
1	SIMATIC S7 Tarjeta de memoria 24 MB para CPU S7-1x00 6ES7954-8LF04-0AA0 SIMATIC S7, memory cards for S7-1x00 CPU/SINAMICS, 3, 3V Flash, 24 MB SIMATIC S7, Memory Card para S7-1x00 CPU/SINAMICS, 3, 3V Flash, 24 MBytes				



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#Z
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 88
Format:	A4							+1CJA01	Next: 89

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 **1**	1 channel for 24V incremental encoder or pulse encoder Type: TM count 1x 24 V Counter module Order No.: 6ES7138-6AA01-0BA0 Baseunit Type A0, BU15-P16+A0+2D Unidad base Tipo A0, BU15-P16+A0+2D Número de pedido: 6ES7193-6BP00-0DA0	Siemens	+1CJA01	-A102	



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić							#Z
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Colombia PCH NARE	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01

Sheet: 89
Next: 90

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A111	

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

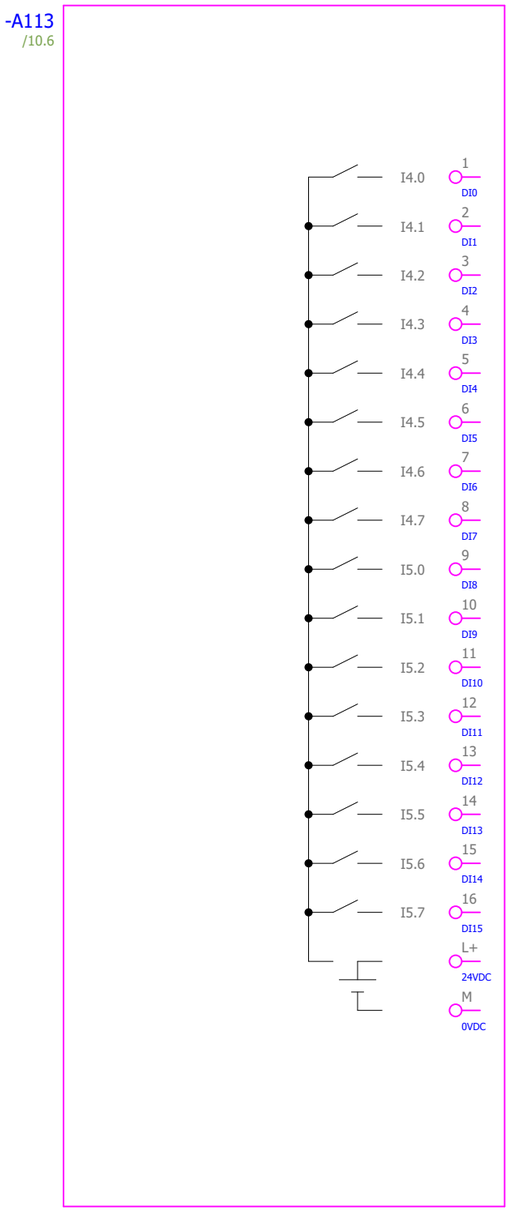
Sheet: 90
Next: 91

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A112	

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

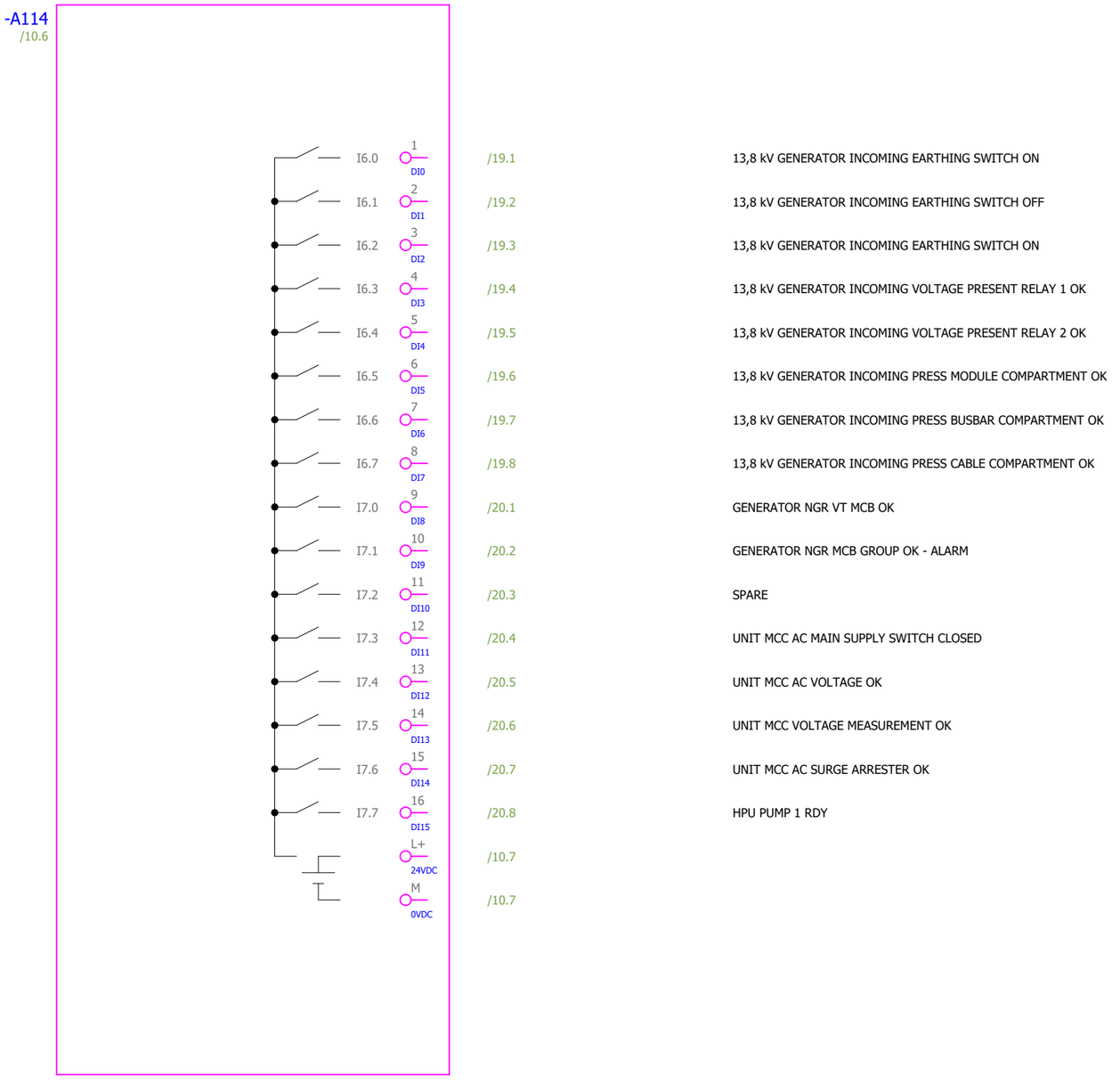
Sheet: 91
Next: 92

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0	Siemens	+1CJA01	-A113	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



MCB GROUP OK - ALARM
MCB GROUP OK - TRIP
GENERATOR BACKUP PROTECTION TRIP ESD
GENERATOR BACKUP PROTECTION TRIP GCB
GENERATOR BACKUP PROTECTION ALARM
GENERATOR BACKUP PROTECTION LIVE
SPARE
SPARE
SPARE
13,8 kV GENERATOR INCOMING CB ON
13,8 kV GENERATOR INCOMING CB OFF
13,8 kV GENERATOR INCOMING CB RDY ON (SPRING CHARGED)
13,8 kV GENERATOR INCOMING CB SPRING TRIP INDICATION
13,8 kV GENERATOR INCOMING CB TEST POSITION
13,8 kV GENERATOR INCOMING CB OPERATING POSITION
13,8 kV GENERATOR INCOMING EARTHING SWITCH OFF

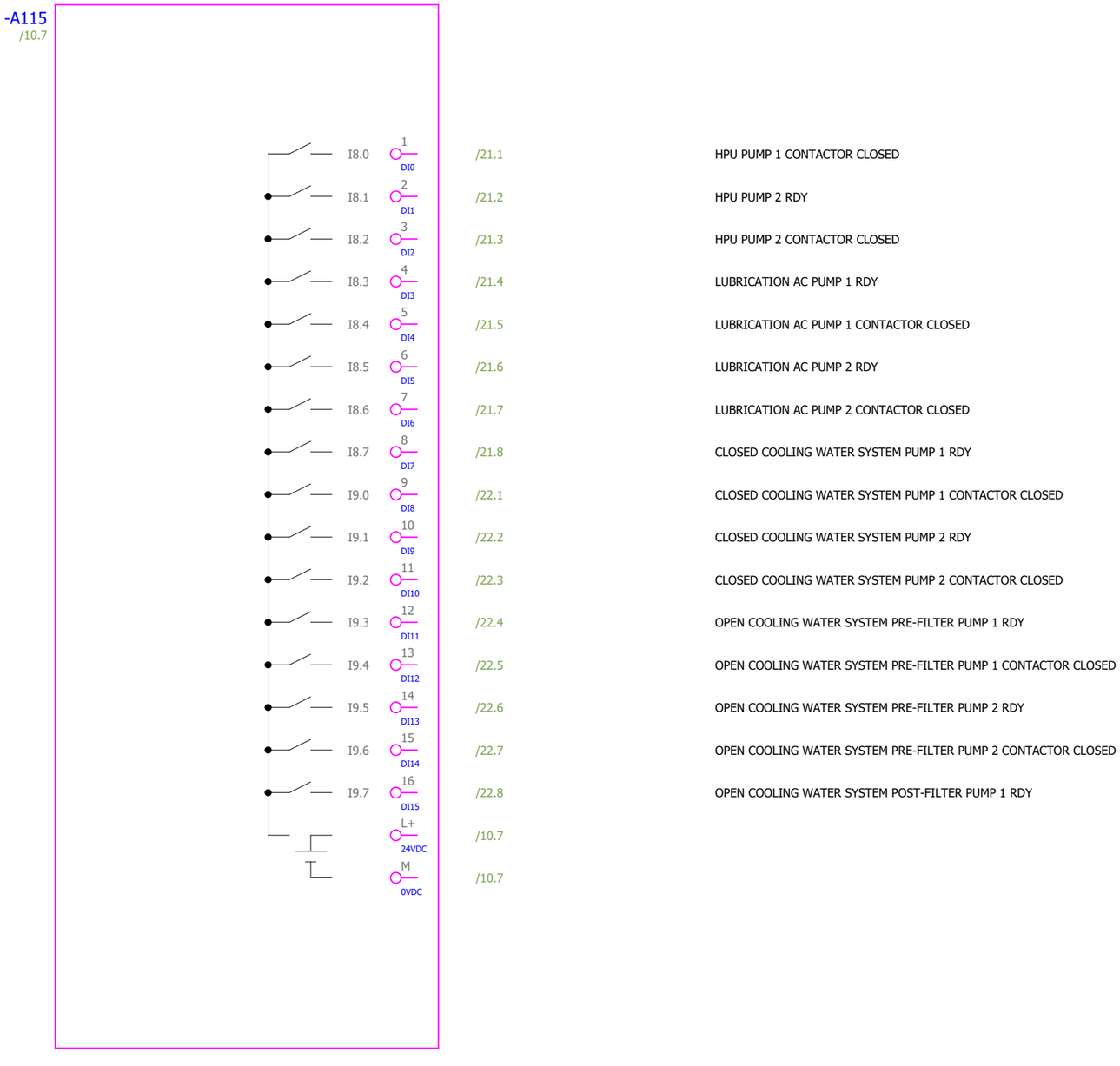
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A114	



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

Sheet: 93
Next: 94

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A115	



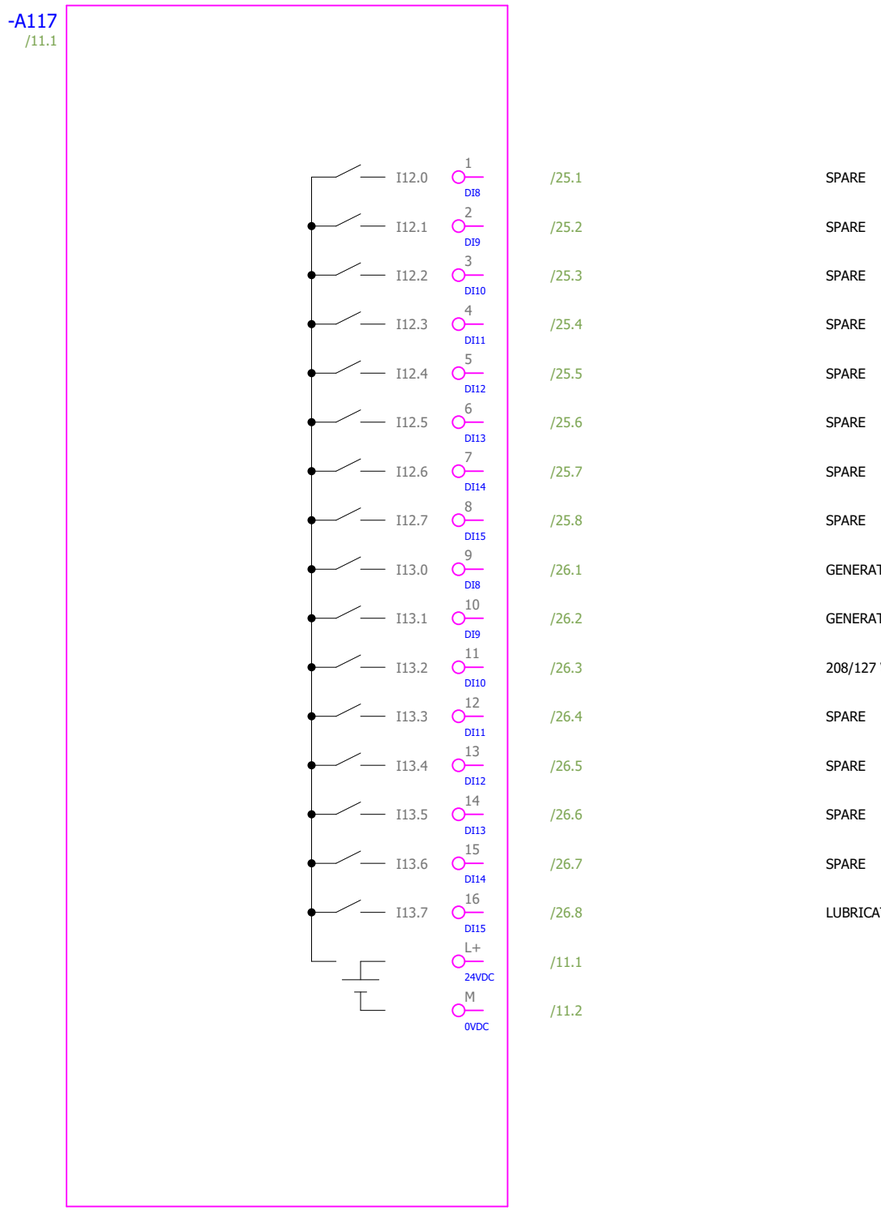
Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01

Karlo Čotić
Patrik Kovač
Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0	Siemens	+1CJA01	-A116	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić								#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 95
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01	Next: 96

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A117	

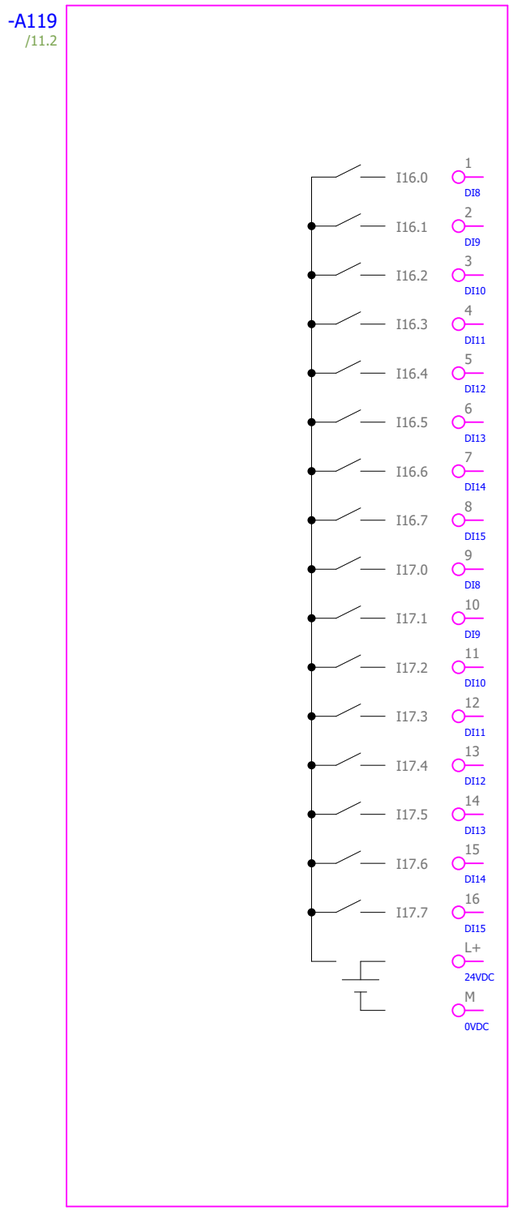


Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A118	

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

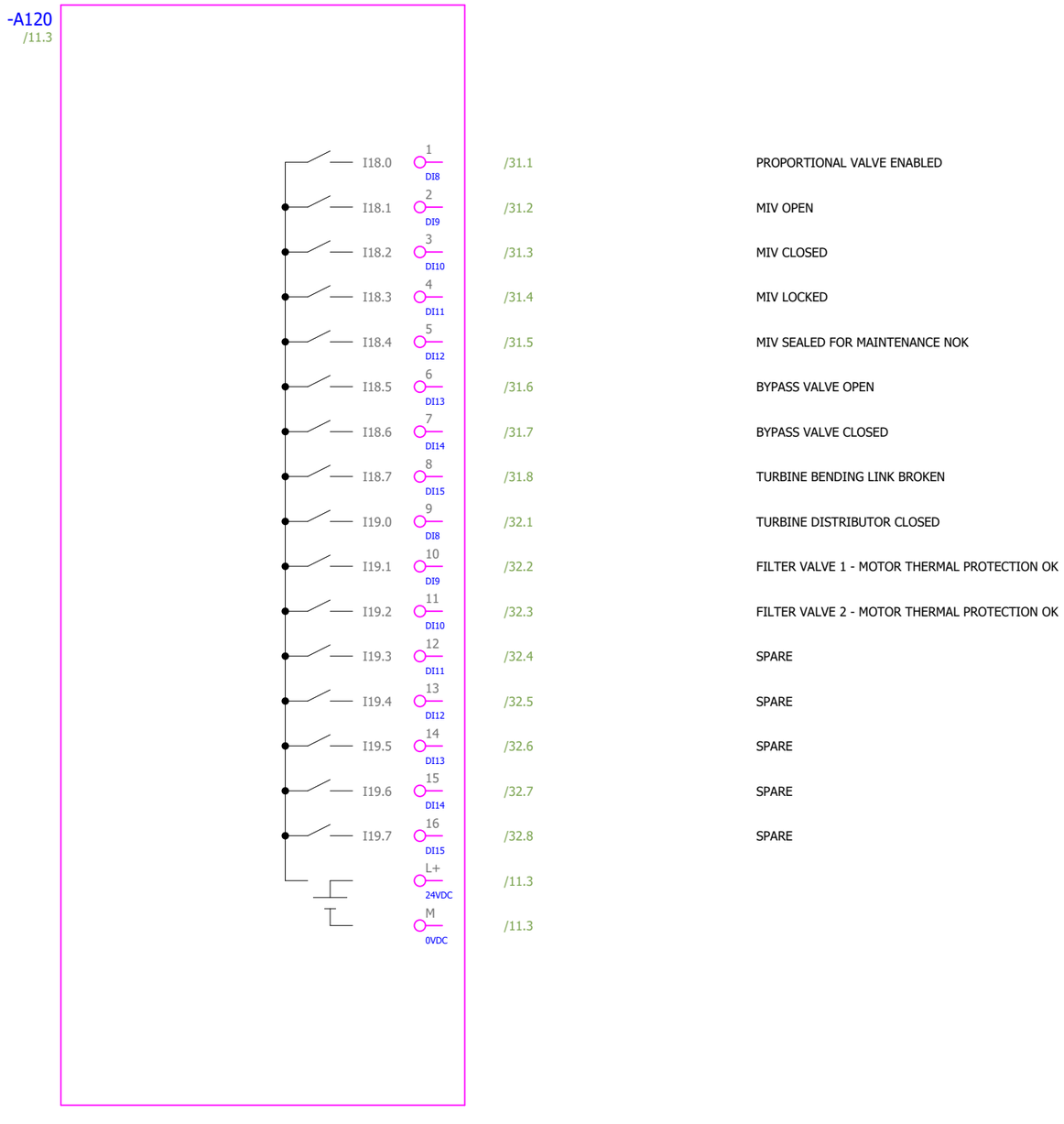
Sheet: 97
Next: 98

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A119	



/29.1	I16.0	GENERATOR HUMIDITY < 60%
/29.2	I16.1	LUBRICATION UNIT GROUP FILTER OK
/29.3	I16.2	OPEN COOLING SYSTEM FILTER 1 ALARM 1 OK
/29.4	I16.3	OPEN COOLING SYSTEM FILTER 1 ALARM 2 OK
/29.5	I16.4	OPEN COOLING SYSTEM FILTER 2 ALARM 1 OK
/29.6	I16.5	OPEN COOLING SYSTEM FILTER 2 ALARM 2 OK
/29.7	I16.6	OPEN COOLING SYSTEM FILTER 1 DISCHARGE VALVE OPEN
/29.8	I16.7	OPEN COOLING SYSTEM FILTER 1 DISCHARGE VALVE CLOSED
/30.1	I17.0	OPEN COOLING SYSTEM FILTER 2 DISCHARGE VALVE OPEN
/30.2	I17.1	OPEN COOLING SYSTEM FILTER 2 DISCHARGE VALVE CLOSED
/30.3	I17.2	HPU PUMP 1 PRESSURE OK
/30.4	I17.3	HPU PUMP 2 PRESSURE OK
/30.5	I17.4	HPU FILTER 1 LINE OK
/30.6	I17.5	HPU FILTER 2 LINE OK
/30.7	I17.6	HPU RETURN FILTER OK
/30.8	I17.7	HPU ESD VALVE ON
/11.2	L+	
/11.3	M	

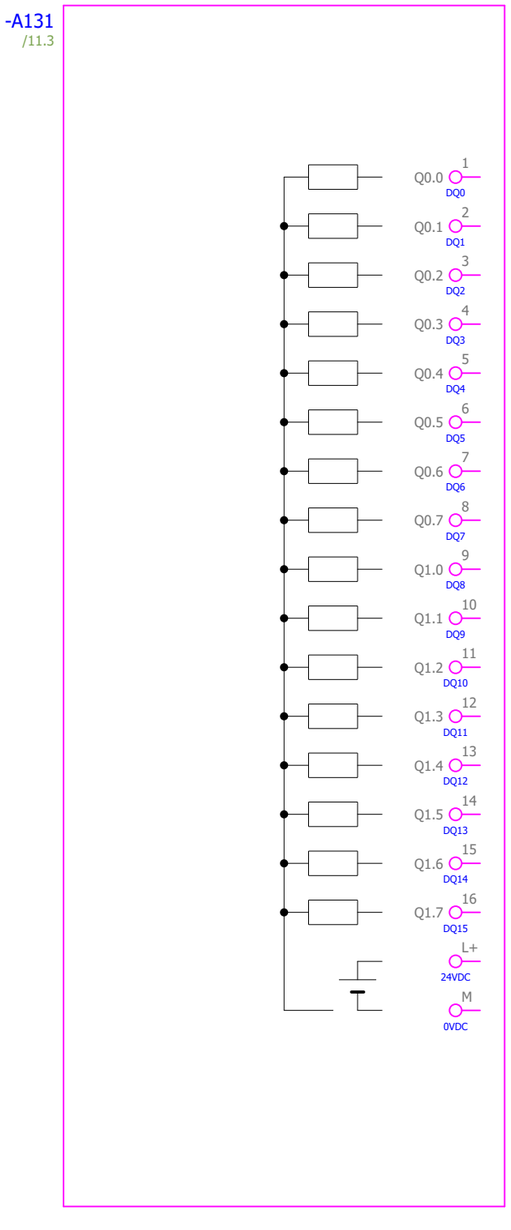
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: DI 16X24V DC Standard Order No.: 6ES7131-6BH01-0BA0 Número de pedido: 6ES7131-6BH01-0BA0	Siemens	+1CJA01	-A120	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

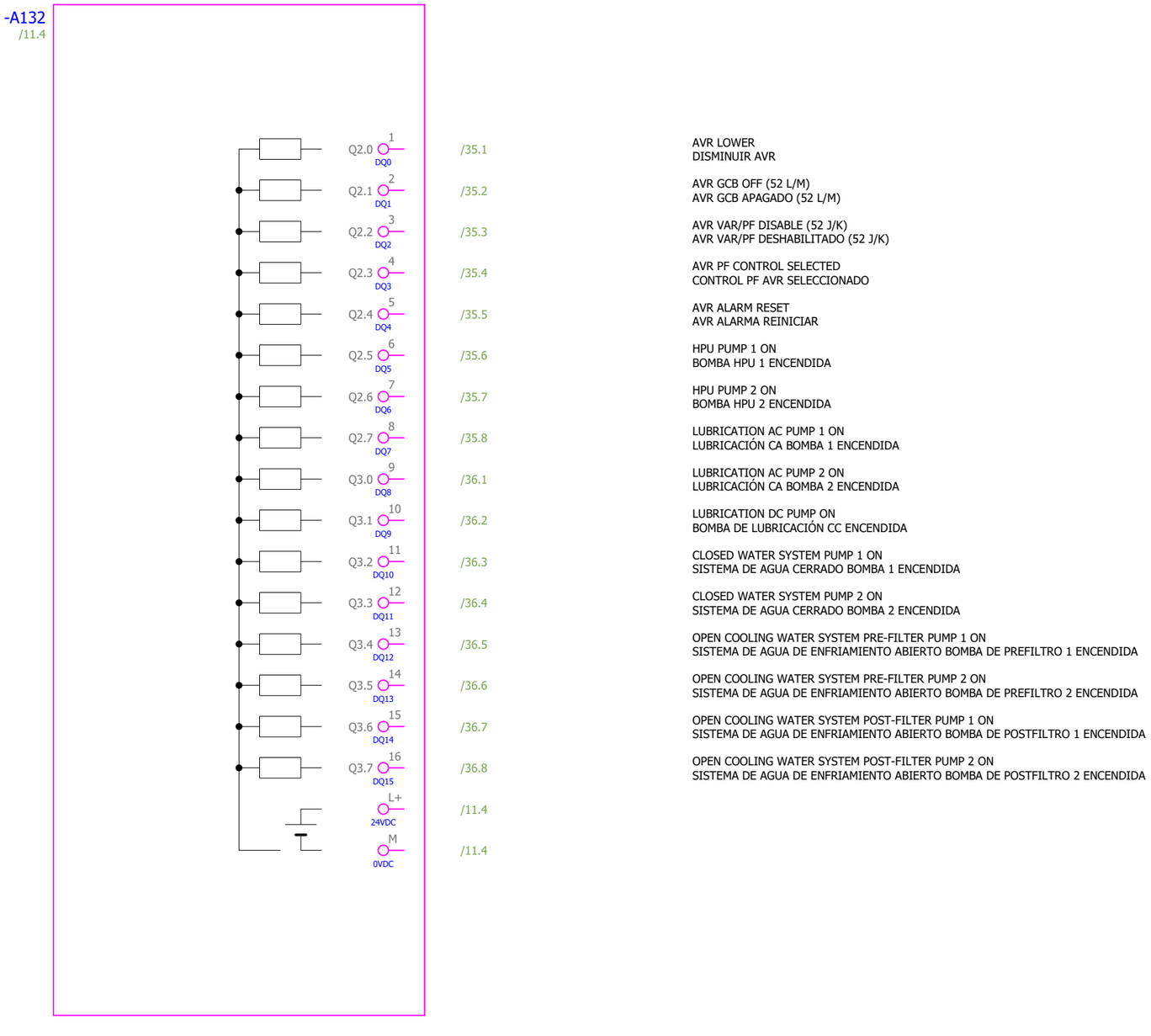
Sheet: 99
Next: 100

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: DQ 16x 24V DC/0,5A Número de pedido: 6ES7132-6BH01-0BA0	Siemens	+1CJA01	-A131	
1 1	Baseunit Type A0, BU15-P16+A0+2D Unidad base Tipo A0, BU15-P16+A0+2D Número de pedido: 6ES7193-6BP00-0DA0				



Q0.0	/33.1	PLC ESD OK PLC P.E. OK
Q0.1	/33.2	ESD FEEDBACK P.E. COMENTARIO
Q0.2	/33.3	GENERATOR CB OFF COMMAND 1 COMANDO 1 DE APAGADO DEL INTERRUPTOR DEL GENERADOR
Q0.3	/33.4	GENERATOR CB OFF COMMAND 2 COMANDO 2 DE APAGADO DEL INTERRUPTOR DEL GENERADOR
Q0.4	/33.5	GENERATOR CB UNDERVOLTAGE COIL ON BOBINA DE SUBTENSIÓN DEL INTERRUPTOR DEL GENERADOR ENCENDIDA
Q0.5	/33.6	EXCITATION CONTACTOR ON COMMAND CONTACTOR DE EXCITACIÓN ENCENDIDO
Q0.6	/33.7	SPARE (DISCONNECTOR MODULE OFF) RESERVA (MÓDULO DESCONECTADOR ABRIR)
Q0.7	/33.8	SYNCHROCHECK ON SINCROCHECK DEL INTERRUPTOR DEL GENERADOR ACTIVAR
Q1.0	/34.1	AUTOMATIC SYNCHRONIZER ON GENERADOR INTERRUPTOR SINCRONIZADOR AUTOMATICO ENCENDER
Q1.1	/34.2	GENERATOR CB CLOSE ENABLE MANUAL HABILITAR CIERRE MANUAL DEL INTERRUPTOR DEL GENERADOR
Q1.2	/34.3	GENERATOR CB CLOSE ENABLE AUTO HABILITAR CIERRE AUTOMATICO DEL INTERRUPTOR DEL GENERADOR
Q1.3	/34.4	AVR START INICIO AVR
Q1.4	/34.5	AVR STOP DETENCIÓN AVR
Q1.5	/34.6	AVR AUTO AVR AUTOMÁTICO
Q1.6	/34.7	AVR MANUAL AVR MANUAL
Q1.7	/34.8	AVR RAISE AUMENTAR AVR
L+	/11.3	
M	/11.3	

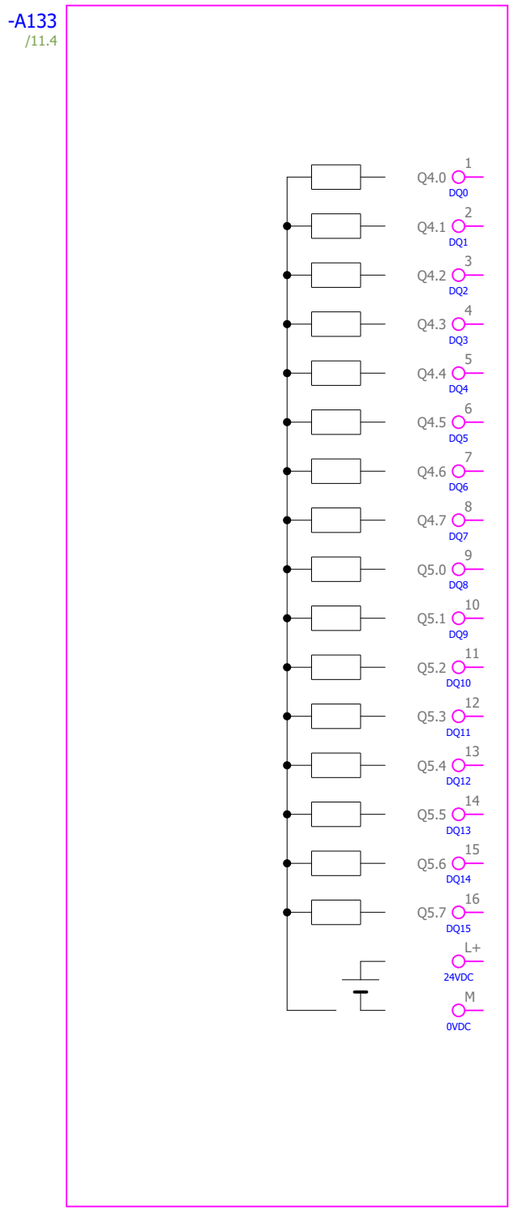
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DQ 16x 24V DC/0,5A Número de pedido: 6ES7132-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A132	



Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01

Sheet: 101
Next: 102

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: DQ 16x 24V DC/0,5A Número de pedido: 6ES7132-6BH01-0BA0 Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0	Siemens	+1CJA01	-A133	



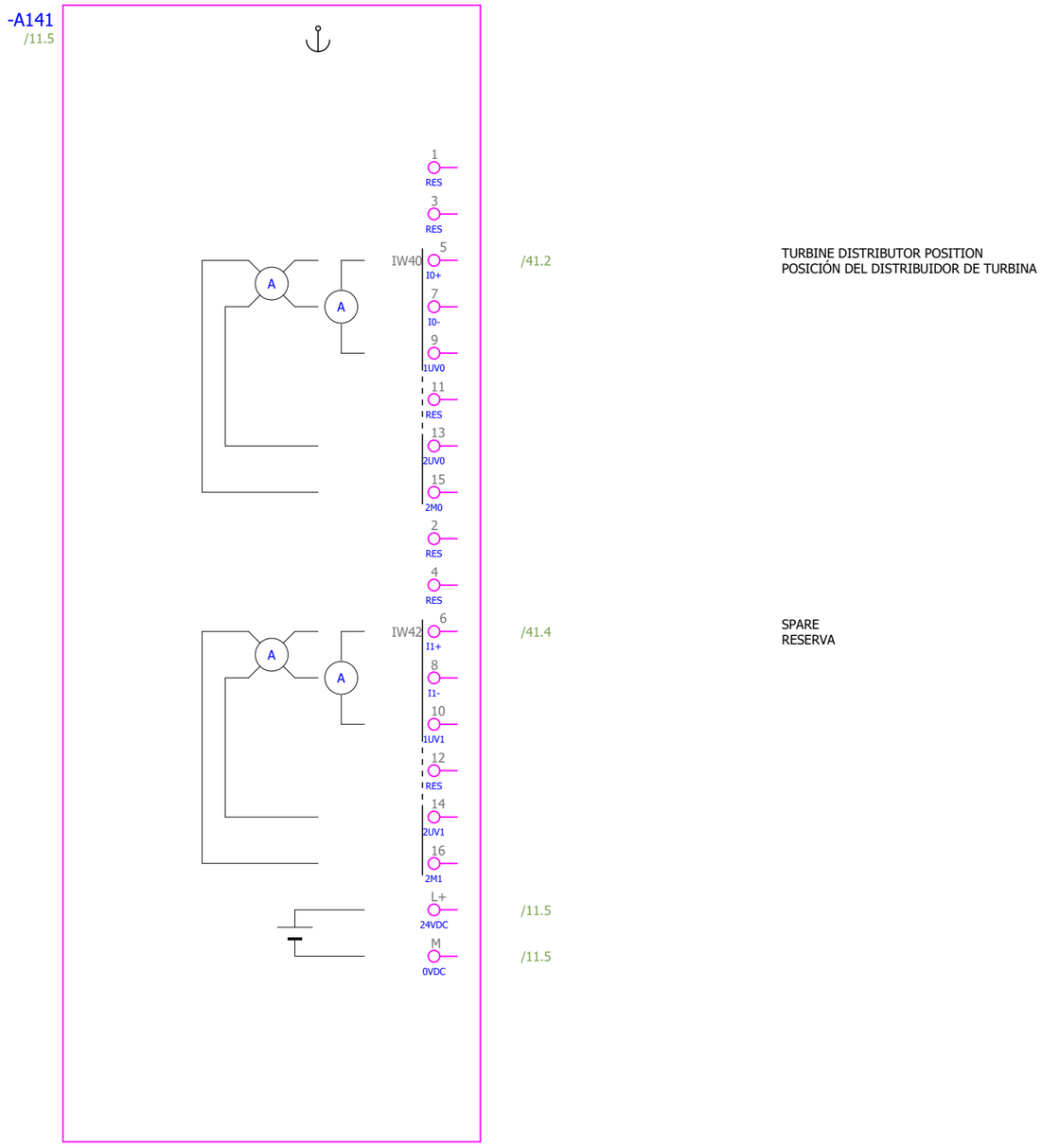
/37.1	OPEN COOLING WATER SYSTEM SELF-CLEANING FILTER 1 ON SISTEMA ABIERTO DE AGUA DE ENFRIAMIENTO FILTRO AUTOLIMPIANTE 1 ENCENDIDO
/37.2	OPEN COOLING WATER SYSTEM SELF-CLEANING FILTER 2 ON SISTEMA ABIERTO DE AGUA DE ENFRIAMIENTO FILTRO AUTOLIMPIANTE 2 ENCENDIDO
/37.3	OPEN COOLING WATER SYSTEM FILTER 1 DISCHARGE VALVE OPEN SISTEMA ABIERTO DE AGUA DE ENFRIAMIENTO FILTRA 1 VÁLVULA DE DESCARGA ABIERTA
/37.4	OPEN COOLING WATER SYSTEM FILTER 1 DISCHARGE VALVE CLOSE SISTEMA ABIERTO DE AGUA DE ENFRIAMIENTO FILTRA 1 VÁLVULA DE DESCARGA CERRAR
/37.5	OPEN COOLING WATER SYSTEM FILTER 2 DISCHARGE VALVE OPEN SISTEMA ABIERTO DE AGUA DE ENFRIAMIENTO FILTRA 2 VÁLVULA DE DESCARGA ABIERTA
/37.6	OPEN COOLING WATER SYSTEM FILTER 2 DISCHARGE VALVE CLOSE SISTEMA ABIERTO DE AGUA DE ENFRIAMIENTO FILTRA 2 VÁLVULA DE DESCARGA CERRAR
/37.7	GENERATOR HEATER ON CALEFACTOR DEL GENERADOR ENCENDIDO
/37.8	BYPASS VALVE OPEN VÁLVULA DE DERIVACIÓN ABIERTA
/38.1	MIV OPEN MIV ABIERTO
/38.2	ESD VALVE ON VÁLVULA P.E. ENCENDIDA
/38.3	PROPORTIONAL VALVE ON VÁLVULA PROPORCIONAL ENCENDIDA
/38.4	BRAKE ON FRENO ENCENDIDO
/38.5	BRAKE OFF FRENO APAGADO
/38.6	SPARE RESERVA
/38.7	SPARE RESERVA
/38.8	SPARE RESERVA
/11.4	
/11.4	

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: DQ 16x 24V DC/0,5A Número de pedido: 6ES7132-6BH01-0BA0	Siemens	+1CJA01	-A134	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE Colombia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01

Sheet: 103
Next: 104

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Type: AI 2XI 2-/4-WIRE Standard Número de pedido: 6ES7134-6GB00-0BA1 Baseunit Type A0, BU15-P16+A0+2D Unidad base Tipo A0, BU15-P16+A0+2D Número de pedido: 6ES7193-6BP00-0DA0	Siemens	+1CJA01	-A141	

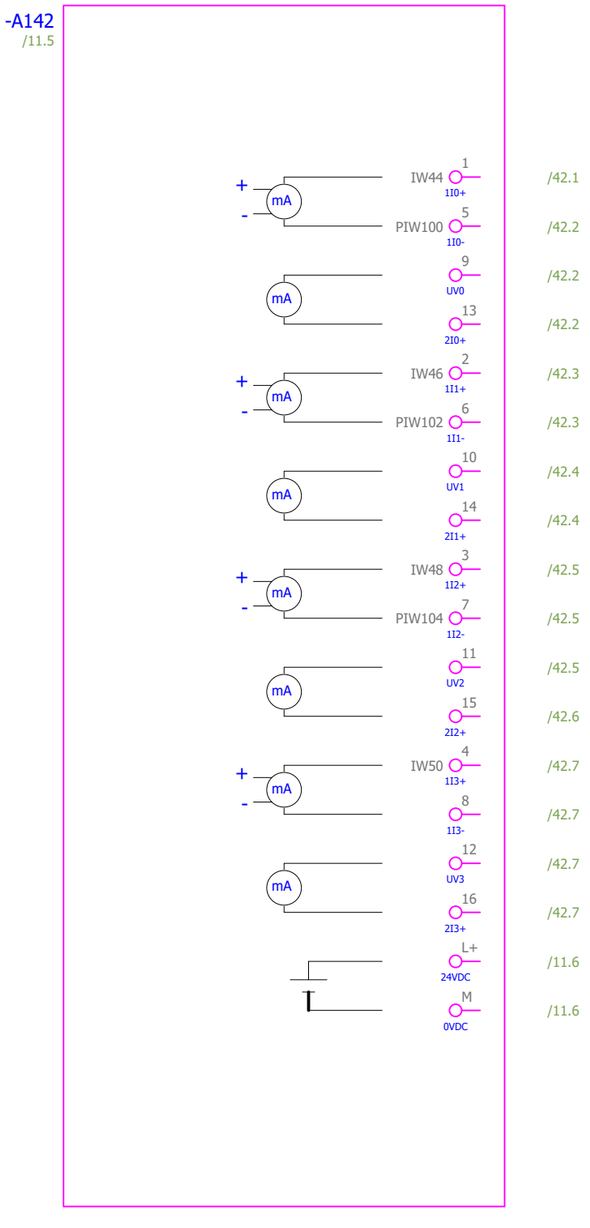


TURBINE DISTRIBUTOR POSITION
POSICIÓN DEL DISTRIBUIDOR DE TURBINA

SPARE
RESERVA

Date: 2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn: Karlo Čotić								#Z
Approved: Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01	Sheet: 104
Format: A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01	Next: 105

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: AI 4XI 2-/4-WIRE Standard Número de pedido: 6ES7134-6GD01-0BA1	Siemens	+1CJA01	-A142	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



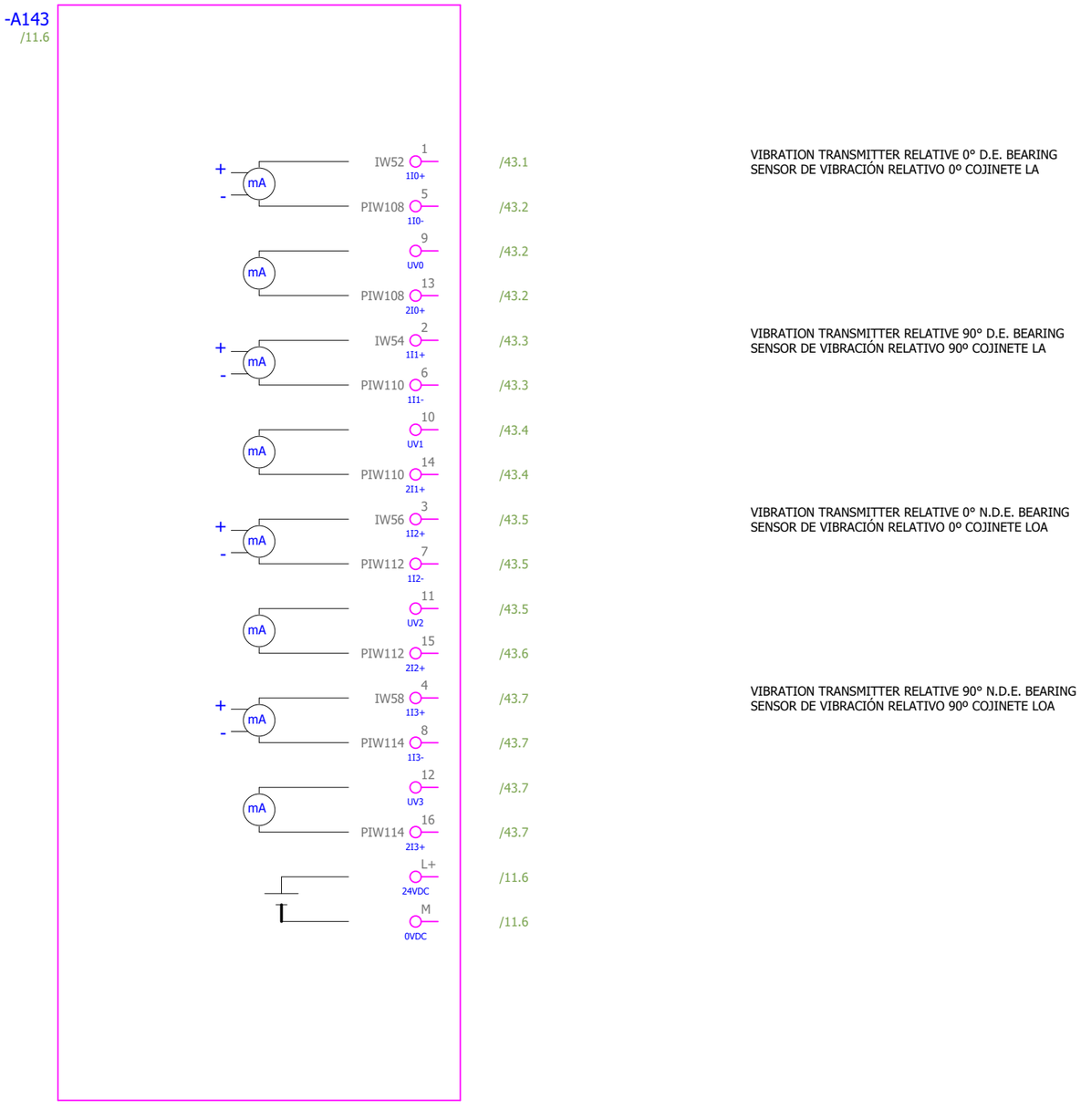
SPEED MEASUREMENT - SECONDARY
MEDICIÓN DE VELOCIDAD - SECUNDARIA

VIBRATION TRANSMITTER ABSOLUTE RADIAL D.E. BEARING
SENSOR DE VIBRACIÓN ABSOLUTO RADIAL COJINETE LA

VIBRATION TRANSMITTER ABSOLUTE AXIAL D.E. BEARING
SENSOR DE VIBRACIÓN ABSOLUTO AXIAL COJINETE LA

VIBRATION TRANSMITTER ABSOLUTE RADIAL N.D.E. BEARING
SENSOR DE VIBRACIÓN ABSOLUTO RADIAL COJINETE LOA

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: AI 4XI 2-/4-WIRE Standard	Siemens			
	Número de pedido: 6ES7134-6GD01-0BA1		+1CJA01	-A143	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B				
	Número de pedido: 6ES7193-6BP00-0BA0				



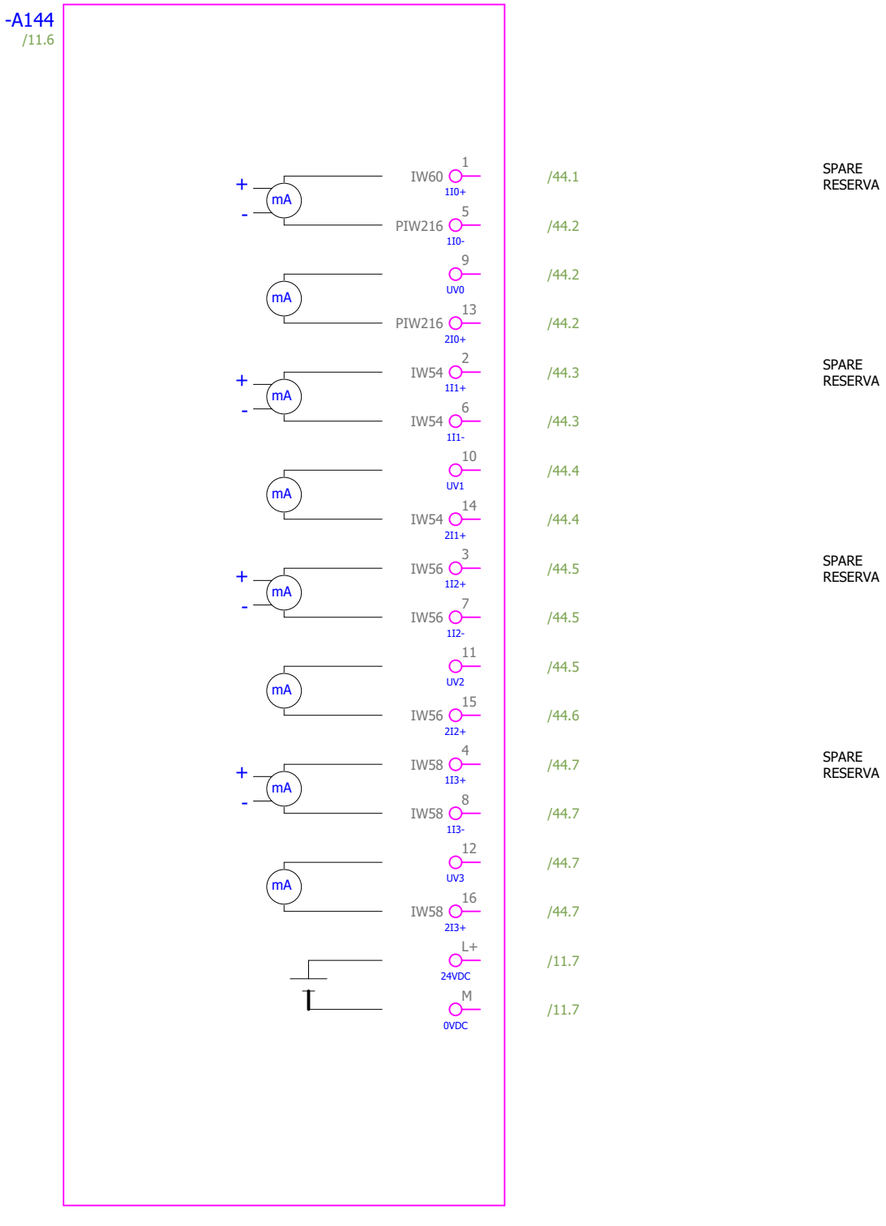
VIBRATION TRANSMITTER RELATIVE 0° D.E. BEARING
SENSOR DE VIBRACIÓN RELATIVO 0º COJINETE LA

VIBRATION TRANSMITTER RELATIVE 90° D.E. BEARING
SENSOR DE VIBRACIÓN RELATIVO 90º COJINETE LA

VIBRATION TRANSMITTER RELATIVE 0° N.D.E. BEARING
SENSOR DE VIBRACIÓN RELATIVO 0º COJINETE LOA

VIBRATION TRANSMITTER RELATIVE 90° N.D.E. BEARING
SENSOR DE VIBRACIÓN RELATIVO 90º COJINETE LOA

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	Type: AI 4XI 2-/4-WIRE Standard	Siemens			
	Número de pedido: 6ES7134-6GD01-0BA1		+1CJA01	-A144	
1	Baseunit Type A0, BU15-P16+A0+2B				
1	Unidad base Tipo A0, BU15-P16+A0+2B				
	Número de pedido: 6ES7193-6BP00-0BA0				



SPARE
RESERVA

SPARE
RESERVA

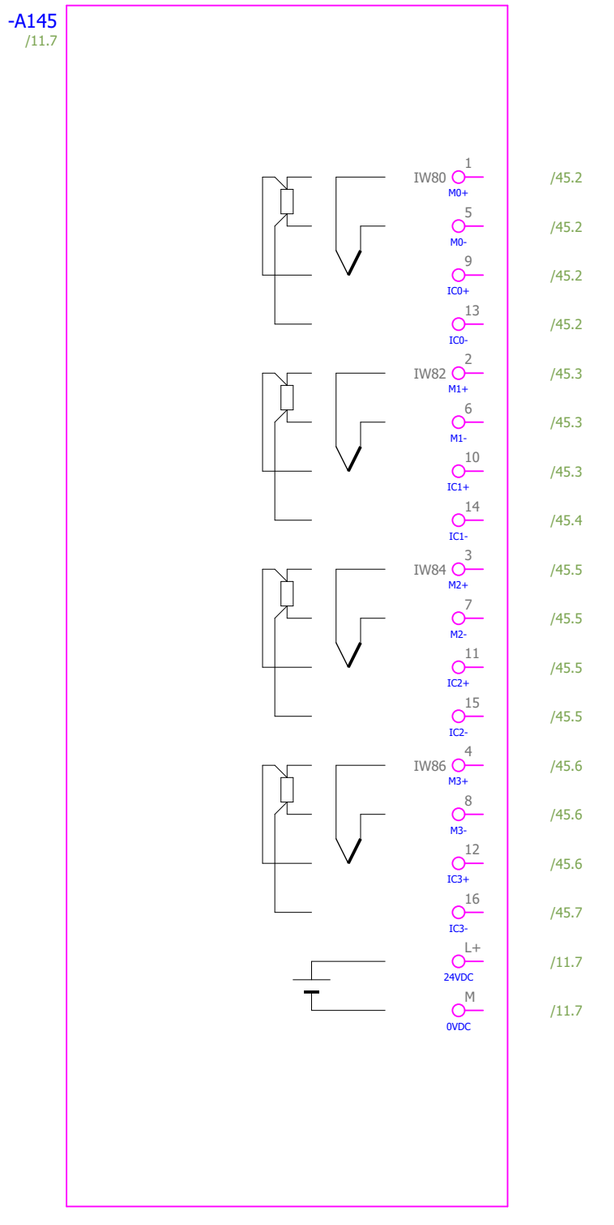
SPARE
RESERVA

SPARE
RESERVA

Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01

Karlo Čotić
Patrik Kovač
Generadora Nare S.A.S E.S.P
Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia
PCH NARE

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1	Type: AI 4xRTD/TC High Feature Order No.: 6ES7134-6JD00-0CA1 6ES7134-6JD00-0CA1	Siemens	+1CJA01	-A145	
1	Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



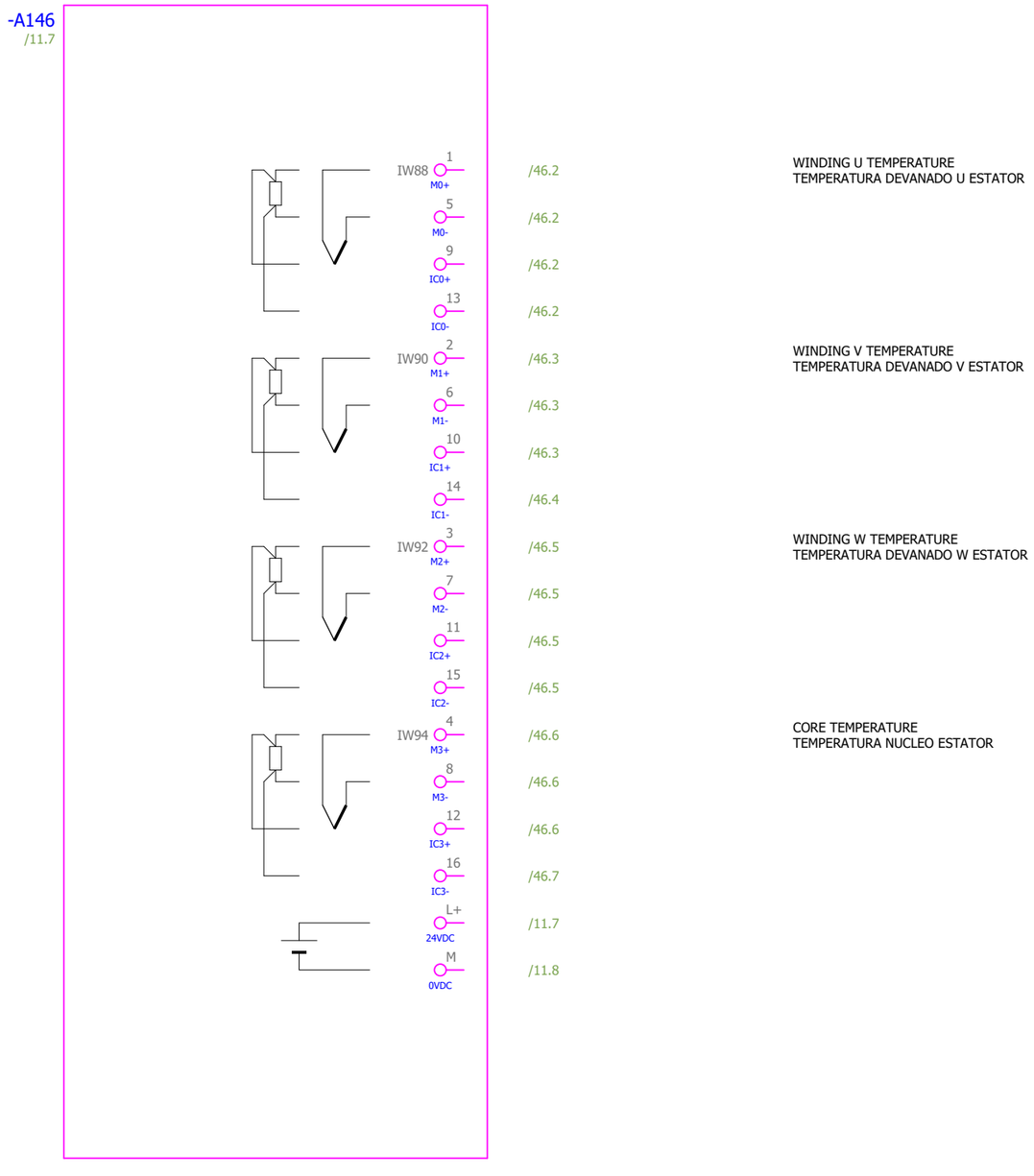
HPU TEMPERATURE
HPU TEMPERATURA

LUBRICATION UNIT OIL TEMPERATURE
TEMPERATURA DEL ACEITE DE LUBRICACIÓN

LUBRICATION UNIT OIL TEMPERATURE BEFORE HEAT EXCHANGER
TEMPERATURA DEL ACEITE DE LUBRICACIÓN ANTES DEL INTERCAMBIADOR DE CALOR

LUBRICATION UNIT OIL TEMPERATURE AFTER HEAT EXCHANGER
TEMPERATURA DEL ACEITE DE LUBRICACIÓN DESPUÉS DEL INTERCAMBIADOR DE CALOR

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1	Type: AI 4xRTD/TC High Feature Order No.: 6ES7134-6JD00-0CA1 6ES7134-6JD00-0CA1	Siemens	+1CJA01	-A146	
1	Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



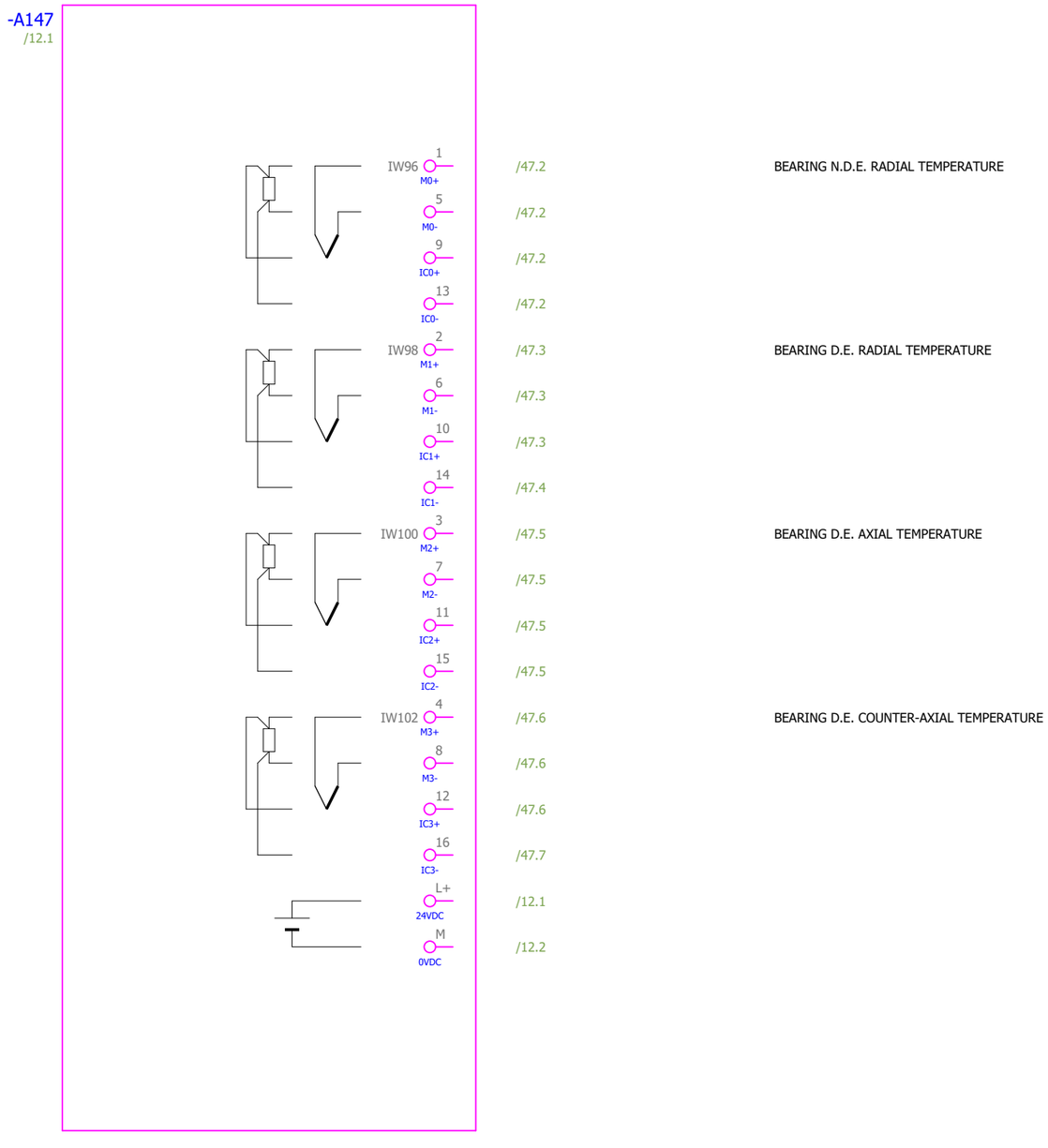
WINDING U TEMPERATURE
TEMPERATURA DEVANADO U ESTATOR

WINDING V TEMPERATURE
TEMPERATURA DEVANADO V ESTATOR

WINDING W TEMPERATURE
TEMPERATURA DEVANADO W ESTATOR

CORE TEMPERATURE
TEMPERATURA NUCLEO ESTATOR

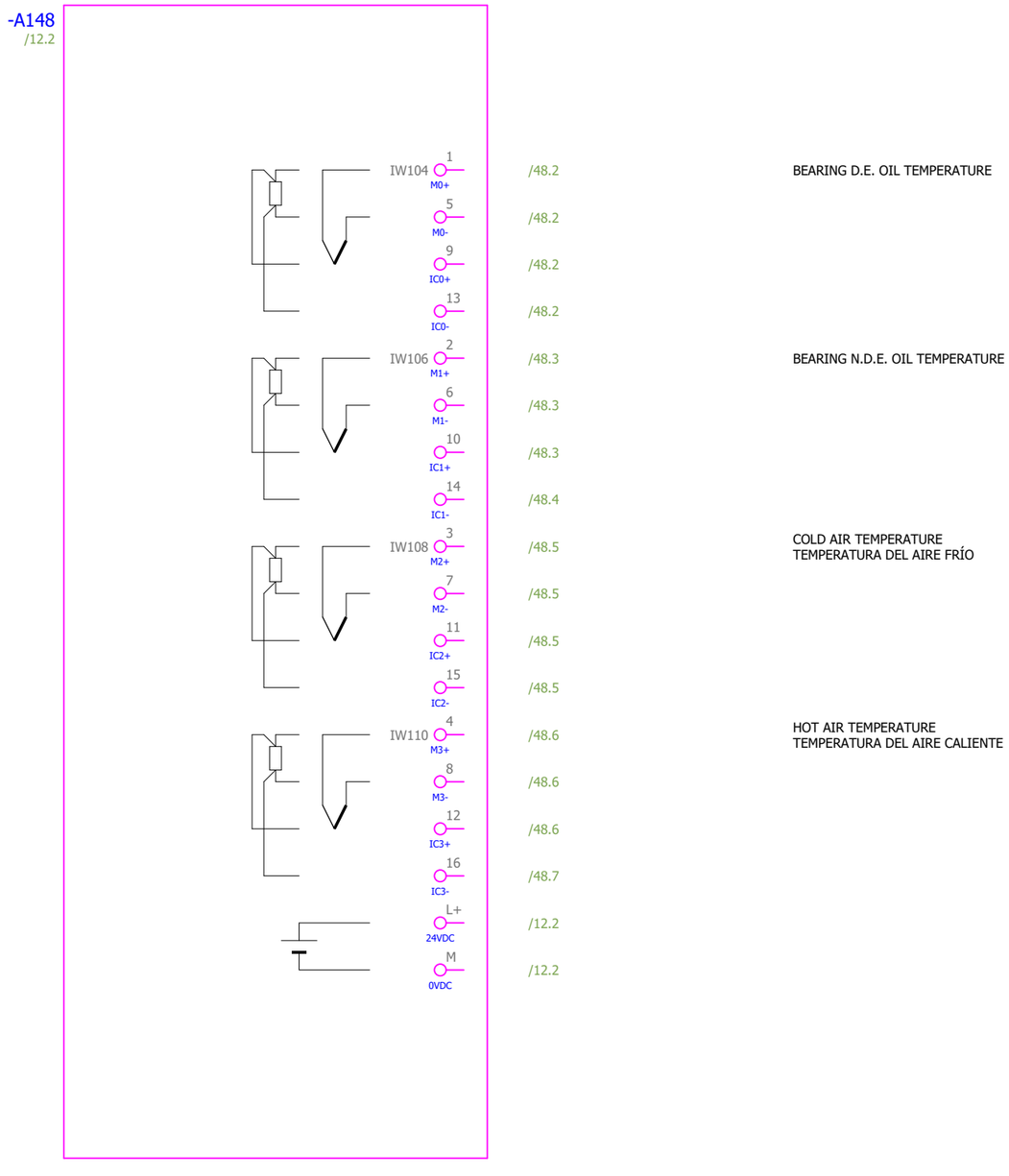
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1	Type: AI 4xRTD/TC High Feature Order No.: 6ES7134-6JD00-0CA1 6ES7134-6JD00-0CA1	Siemens	+1CJA01	-A147	
1	Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



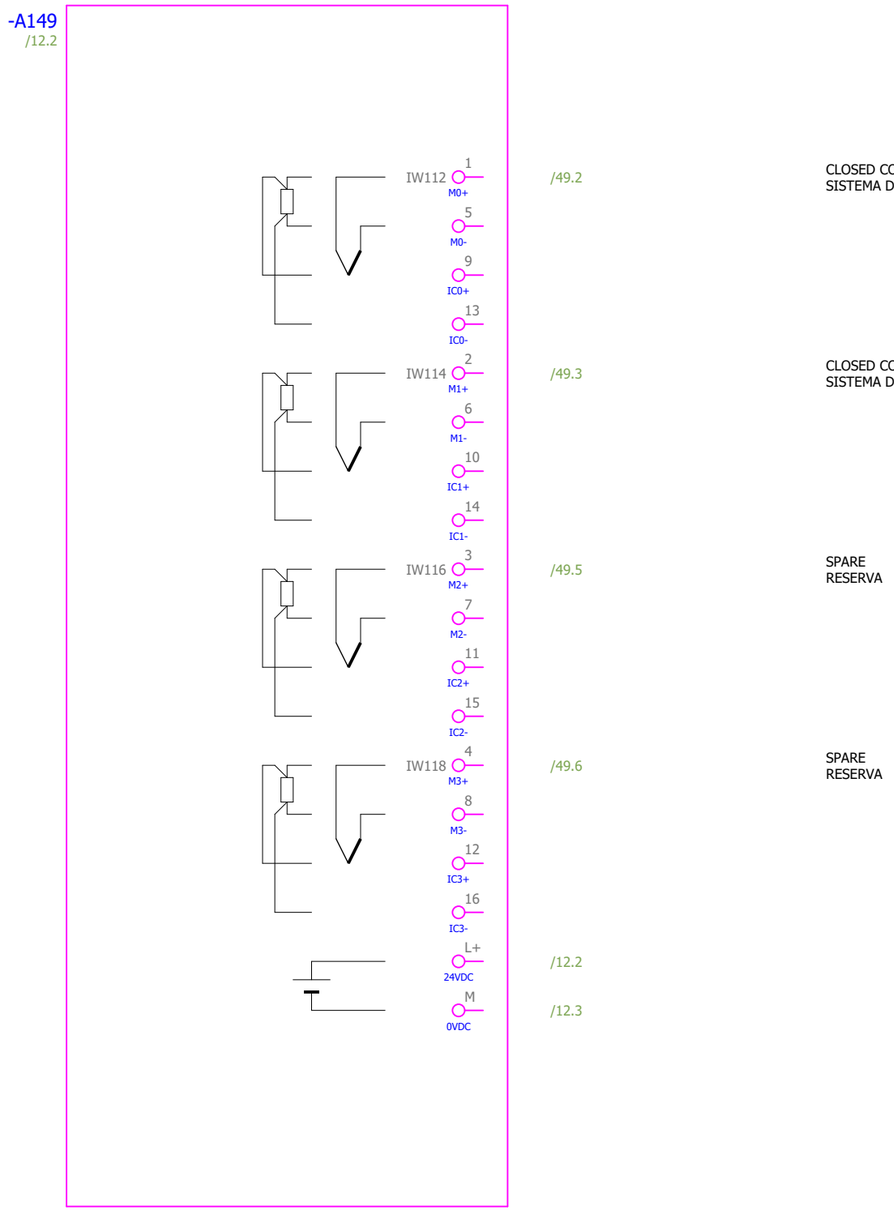
Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4							+1CJA01
								Sheet: 110
								Next: 111

Columbia
PCH NARE

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1	Type: AI 4xRTD/TC High Feature Order No.: 6ES7134-6JD00-0CA1 6ES7134-6JD00-0CA1	Siemens	+1CJA01	-A148	
1	Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1	Type: AI 4xRTD/TC High Feature Order No.: 6ES7134-6JD00-0CA1 6ES7134-6JD00-0CA1	Siemens	+1CJA01	-A149	
1	Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



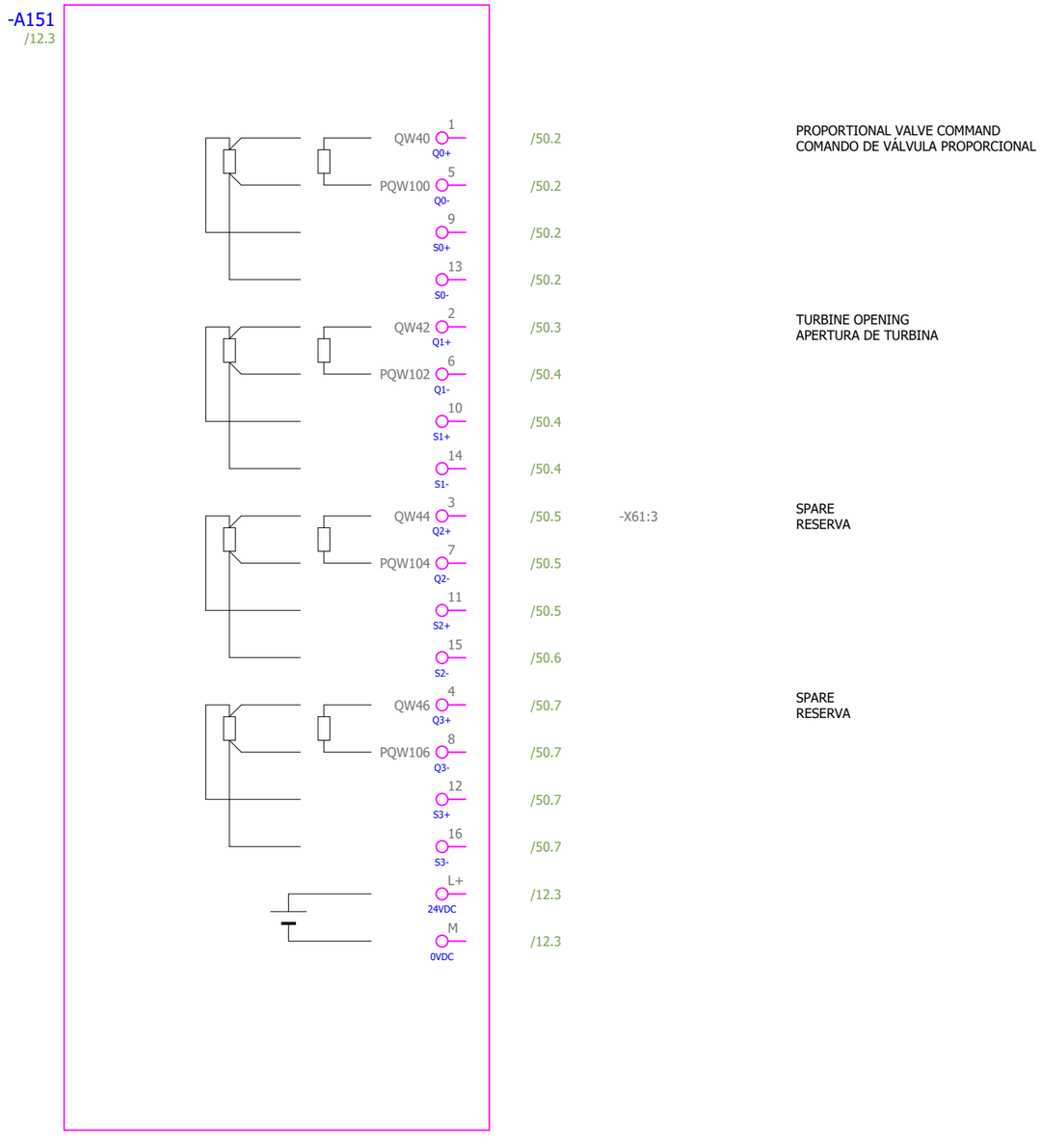
CLOSED COOLING WATER SYSTEM TEMPERATURE BEFORE EXCHANGER
SISTEMA DE AGUA CERRADO TEMPERATURA ANTES DEL INTERCAMBIADOR DE CALOR

CLOSED COOLING WATER SYSTEM TEMPERATURE AFTER EXCHANGER
SISTEMA DE AGUA CERRADO TEMPERATURA DESPUÉS DEL INTERCAMBIADOR DE CALOR

SPARE
RESERVA

SPARE
RESERVA

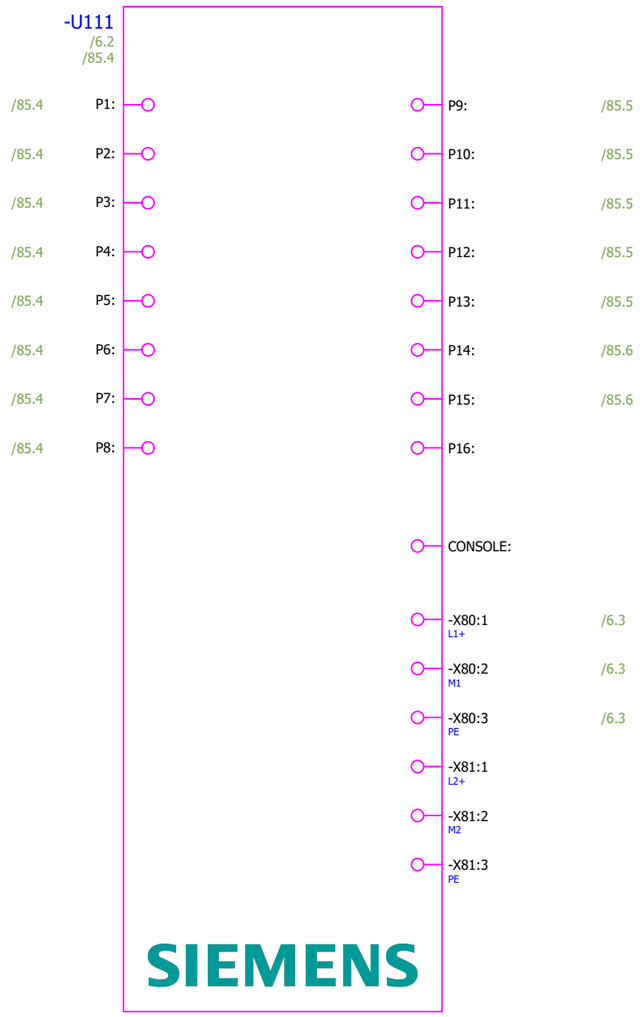
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
	~~Type: AQ 4XU/I Standard~~				
	Tipo: AQ 4XU/I Estándar Número de pedido: 6ES7135-6HD00-0BA1	Siemens	+1CJA01	-A151	
1					
1	Baseunit Type A0, BU15-P16+A0+2B Unidad base Tipo A0, BU15-P16+A0+2B Número de pedido: 6ES7193-6BP00-0BA0				



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić ~~Karlo Čotić~~								#Z
Approved:	Patrik Kovač ~~Patrik Kovač~~		Object:	PCH NARE ~~Generadora Nare S.A.S E.S.P~~ ~~Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia~~ ~~PCH NARE~~	Content: PLC OVERVIEW	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

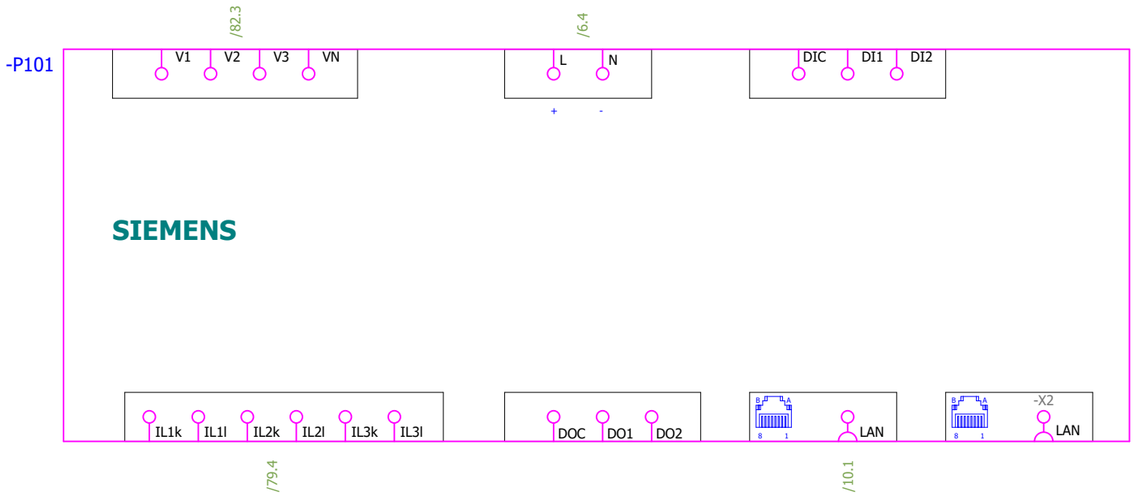
Sheet:	113
Next:	114

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	SCALANCE XB213-3 MANAGEABLE LAYER 2 IE-SWITCH 13X 10/100 MBITS/S RJ45 PORTS 3X MM FO SC-PORT 1X CONSOLE PORT DIAGNOSTICS-LED REDUNDANT POWER SUPPLY TEMP.-RANGE 0 DGR C UP TO +60 DGR C; DIN RAIL MOUNTING PROFINET IO-DEVICE ETHERNET/IP CERTIFICATE 6GK5213-3BD00-2AB2	Siemens	+1CJA01	-U111	



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Columbia PCH NARE	Content: ETHERNET SWITCH	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 114
Format:	A4			Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia				+1CJA01	Next: 115

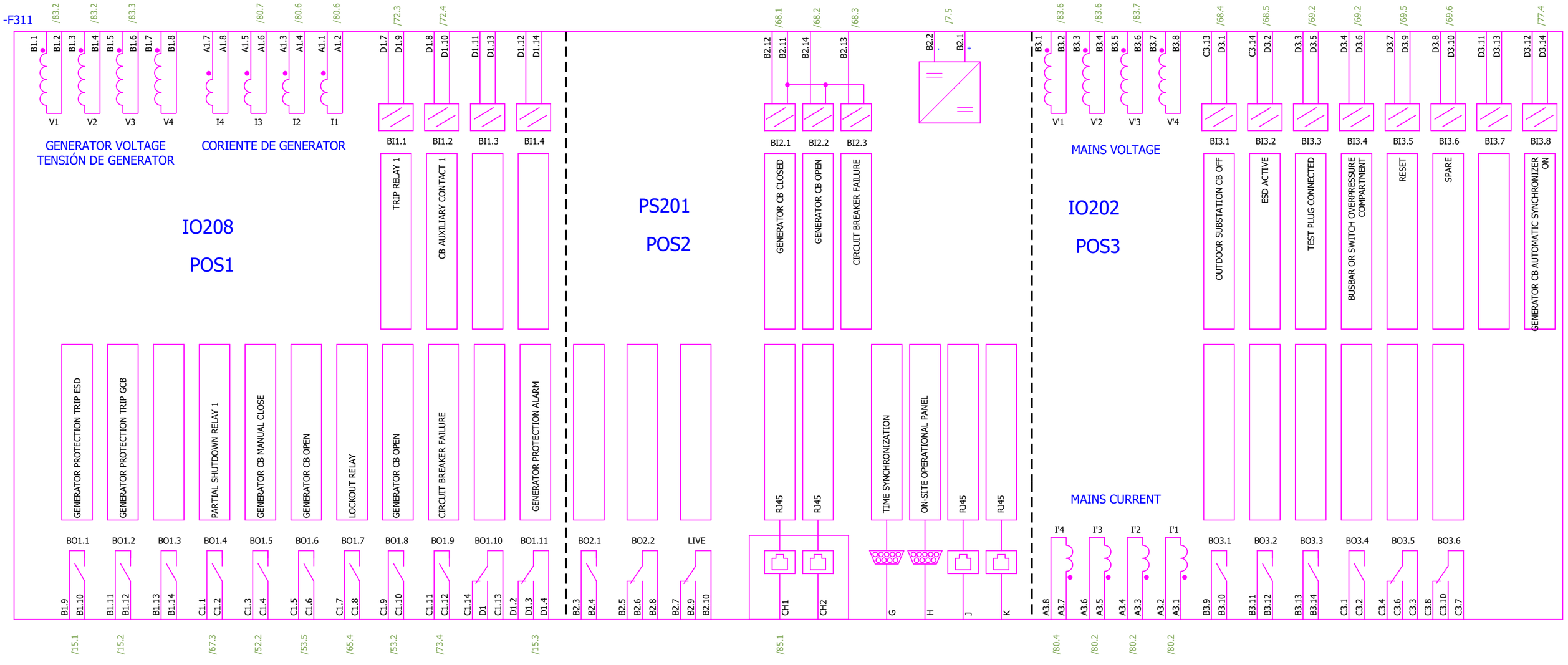
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Power supply: 24 ... 60 VDC LCD 96x96mm Type: SENTRON PAC3220 Order No.: 7KM3220-1BA01-1EA0	Siemens	+1CJA01	-P101	



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić								#Z
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: MULTIMETER	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Sheet: 115
Next: 116

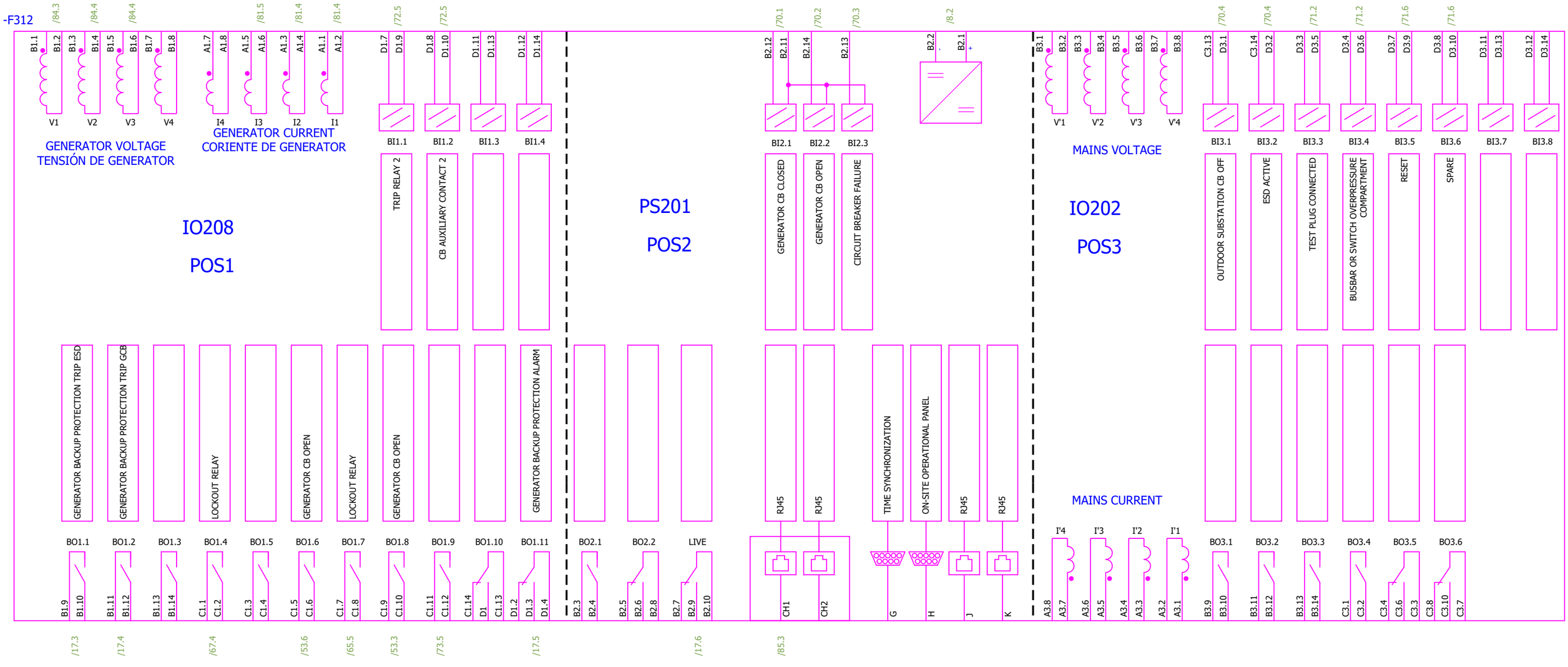
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	7UM85 Generator Protection Modules in 19" row 1: IO208, PS201, IO202 Order No.: P1L481175	Siemens	+1CJA01	-F311	



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić Karlo Cotić		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: GENERATOR PROTECTION RELAY - 7UM85	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Approved:	Patrik Kovač Patrik Kovač								+1CJA01
Format:	A4								

#Z
Sheet: 116
Next: 117

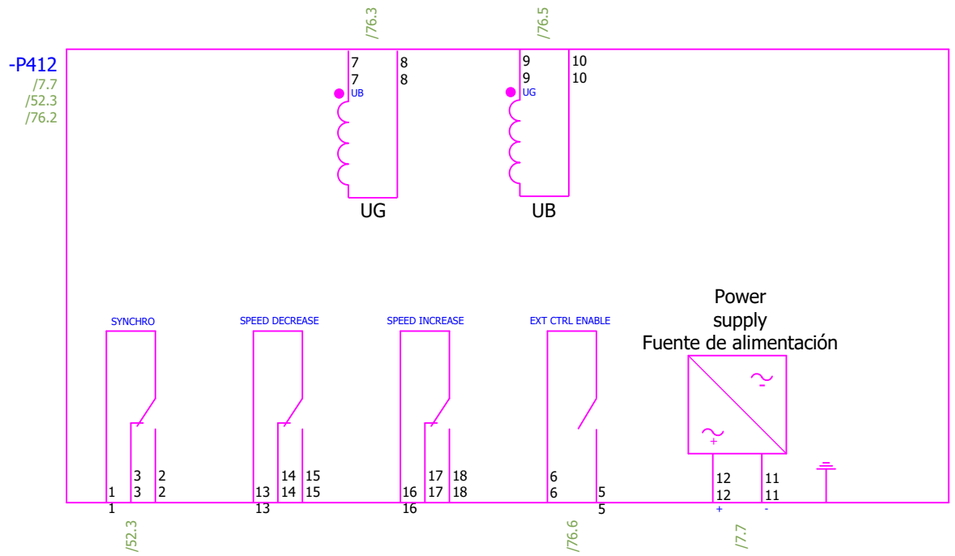
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	7UM85 Generator Protection Modules in 19" row 1: IO208, PS201, IO202 Order No.: P1L346665	Siemens	+1CJA01	-F312	



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Cotić								#Z
Approved:	Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: BACKUP GENERATOR PROTECTION RELAY - 7UM85	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

Sheet: 117
Next: 118

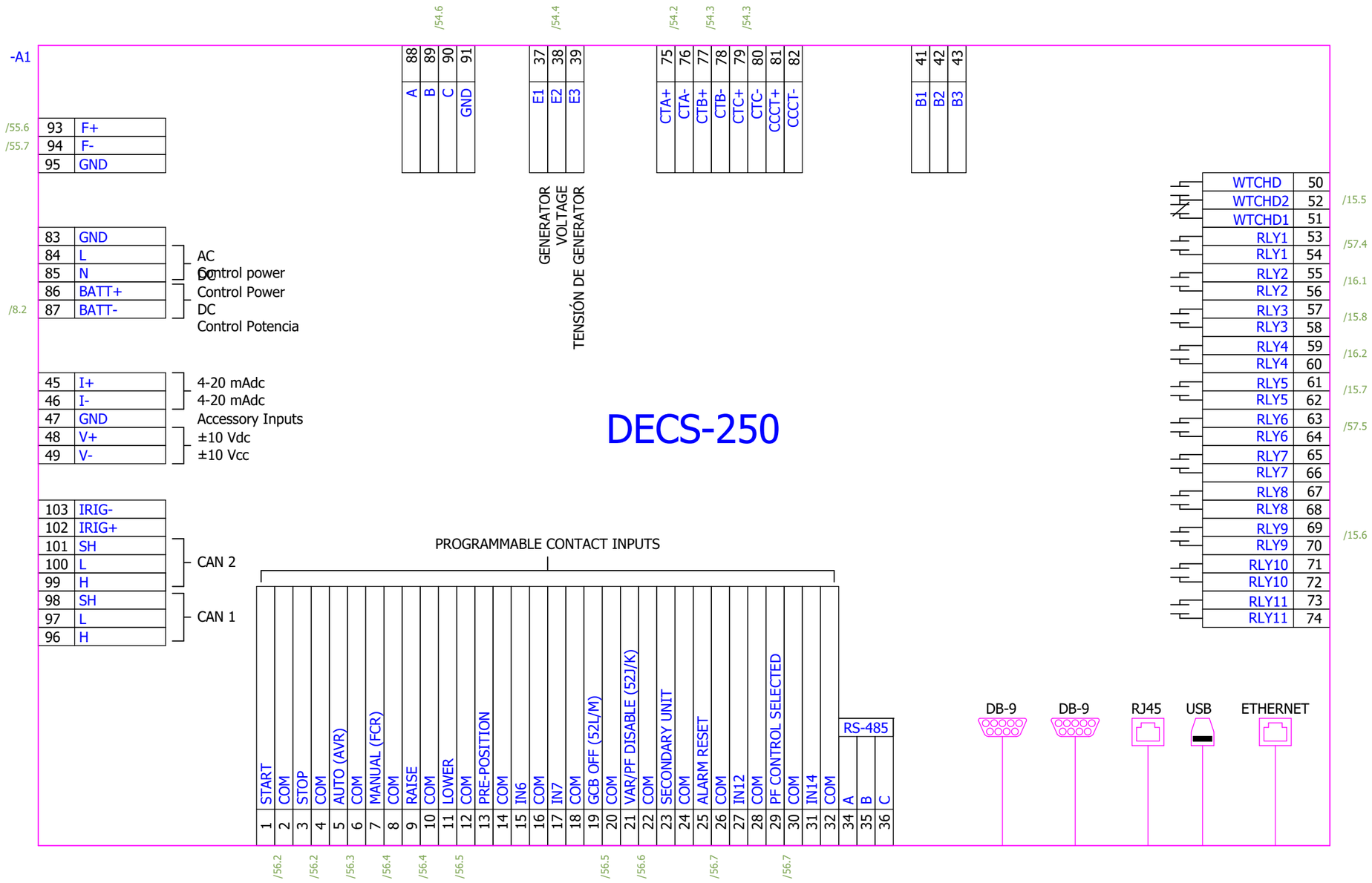
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 **1**	Sincronoscope for manual sincronization Scale: 360° Displayed voltage: 380V Measured voltage: 380V Aux power supply: 24VDC Type: Synchro 96C Order number: ANTJ11	IME	+1CJA01	-P412	



Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: AUTOMATIC SYNCHRONIZER	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4								+1CJA01

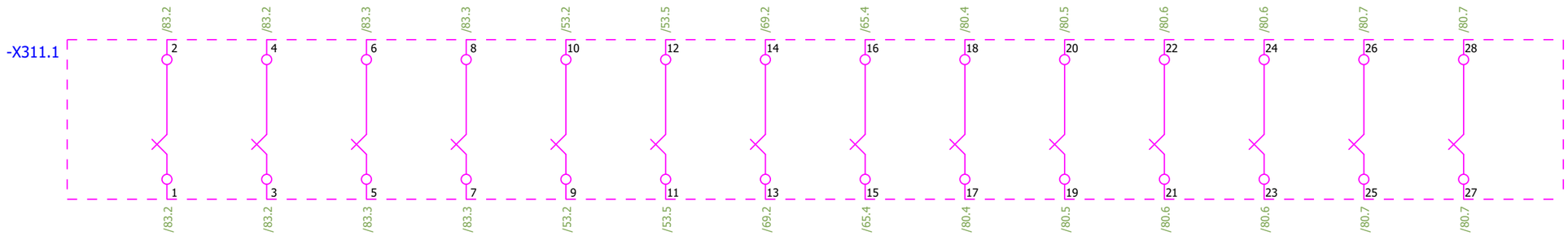
Sheet: 118
Next: 119

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Automatic voltage regulator DECS-250 Digital excitation control system Type: DECS-250 Order No.: DECS-250 LP1SN1N	Bassler Electric			

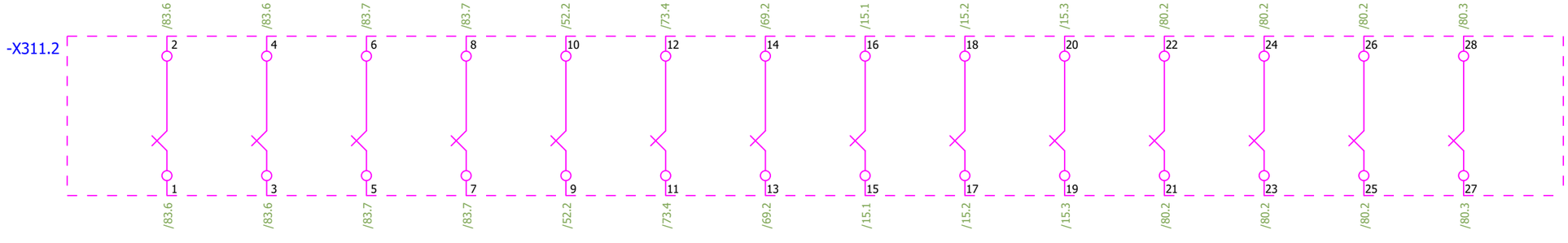


Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01	
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Columbia PCH NARE	Content: AUTOMATIC VOLTAGE REGULATOR - DECS-250	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01 +1CJA01	Sheet: 119 Next: 120
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia						

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Siemens Reyrolle test block Part no.: 7XG2220-1AA00-0AA0 Size E2 case (2RMLG01) Vertical mounting	Siemens	+1CJA01	-X311.1	



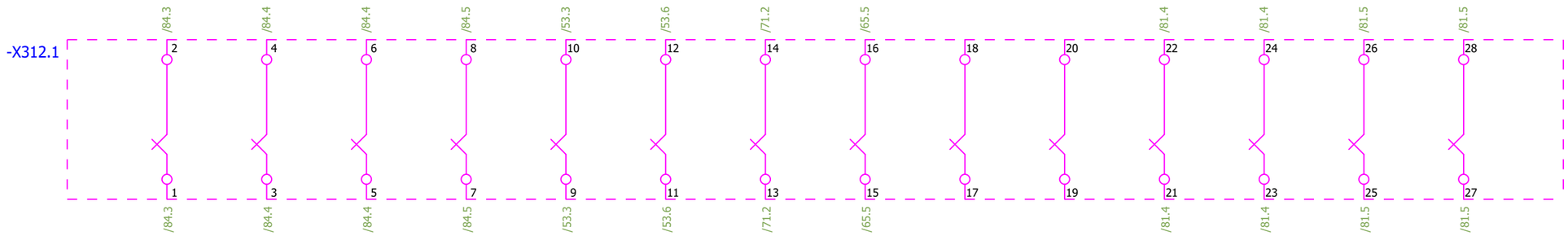
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Siemens Reyrolle test block Part no.: 7XG2220-1AA00-0AA0 Size E2 case (2RMLG01) Vertical mounting	Siemens	+1CJA01	-X311.2	



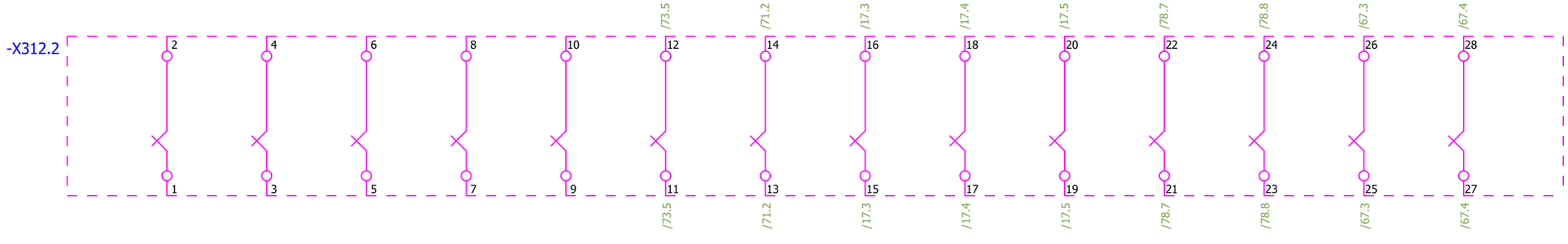
Date:	2025-09-26	SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: TEST SWITCH	Drawing designation: 24028-DD-EE-02-221-01			=1CJA01
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01

Sheet: 120
Next: 121

Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Siemens Reyrolle test block Part no.: 7XG2220-1AA00-0AA0 Size E2 case (2RMLG01) Vertical mounting	Siemens	+1CJA01	-X312.1	

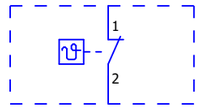


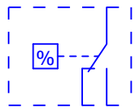
Qty. (pcs)	Equipment technical description	Manufacturer	Location (= / +)	Designation (-)	Symbol Position in shematics (Page, column)
1 1	Siemens Reyrolle test block Part no.: 7XG2220-1AA00-0AA0 Size E2 case (2RMLG01) Vertical mounting	Siemens	+1CJA01	-X312.2	

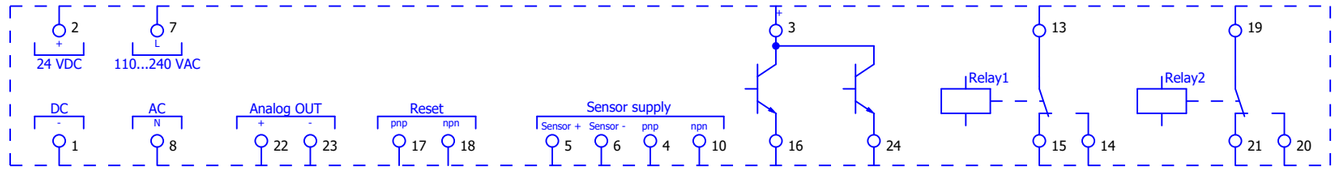


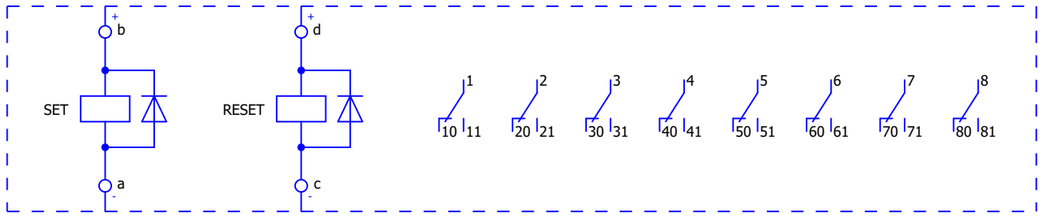
Date:	2025-09-26	SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder: EE-02	Drawing: 221	Revision: 01
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Columbia PCH NARE	Content: TEST SWITCH	Drawing designation: 24028-DD-EE-02-221-01		=1CJA01	Sheet: 121
Format:	A4			Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia				+1CJA01	Next: 122

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)
1	Thermostat Thermostat, NC contact 0...+60°C Type: THR02 Order No.: THR02	Alfa Electric	+1CJA01	-B101	/4.6
1	Hygrostat, Rated Voltage 120-240 V AC, Rated Current 10-5A 10-90 %RF Order No.: IGR35F	Fanndis	+1CJA01	-B102	/4.6
1	Speed monitoring relay Nominal voltage: 110...240VAC (50...60Hz)/27Hz (tip. 24VDC) 2 relay outputs, 2 transistor outputs Analog output: 0/4...20mA Impuls inputs: pnp/npn, NAMUR (24V) Input frequency (max): 5kHz Setting range: 1...60000 imp/min (0.1...1000Hz)	IFM	+1CJA01	-B111	/6.5 /41.4 /51.7 /59.3 /59.2
1	Fast lock-out relay FAST LOCK-OUT RELAY 8 CHANGE OVER CONTACTS OPERATING TIME 10MS AUXILIARY VOLTAGE: 24/30V DC WITH RESET PUSHBUTTON WITHOUT SOCKET Type: 7PA2211-0 Order No.: 7PA2211-0 Socket for surface mounting Type: 7XP9012-0 SOCKET FOR SURFACE MOUNTING FOR 7PA22, 7PA26 AND THREE-PHASE 7PA30, 7TS15 AND 7TS16 RELAY	Siemens	+1CJA01	-86E	/65.4
2	Cubicle lightning LED Lamps - 120/230 V AC - 10W Order No.: Número de pedido: NSYLAMT5LD2	Schneider Electric	+1CJA01	-E101	/4.4
			+1CJA01	-E102	/4.5



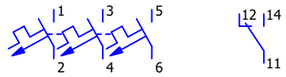
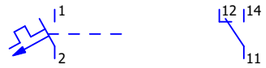
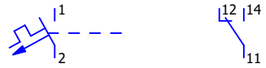
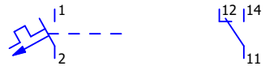




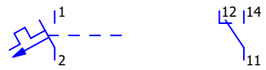
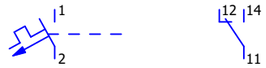
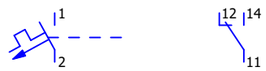


Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:	
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: Device tag List	Drawing designation:			=1CJA01	Sheet: 122
Format:	A4							+1CJA01	Next: 123

1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	CIRCUIT BREAKER 10KA 3POL D20 Miniature circuit breaker 400 V 10kA, 3-pole, D, 20A, D=70 mm Order No.: 5SY4320-8 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
1			+1CJA01	-F1	/54.6	/16.4
	Miniature circuit breaker, 10kA, 1-pole, B, 6A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4106-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
			+1CJA01	-F31	/6.3	
			+1CJA01	-F32	/6.4	
3			+1CJA01	-F33	/6.5	/17.2
	Disyuntor miniatura 10 kA, 1 polo, B, 2 A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4102-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
			+1CJA01	-F34	/6.6	/17.2
			+1CJA01	-F35	/6.7	
			+1CJA01	-F36	/7.1	/17.2
			+1CJA01	-F37	/7.2	/17.2
5			+1CJA01	-F38	/7.3	/17.2
	Miniature circuit breaker, 10kA, 1-pole, B, 6A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4106-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
			+1CJA01	-F39	/7.4	/17.2
			+1CJA01	-F40	/7.5	/17.2
			+1CJA01	-F41	/7.6	/17.1

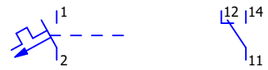
1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	Miniature circuit breaker, 10kA, 1-pole, B, 6A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4106-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
			+1CJA01	-F42	/7.7	/17.2
			+1CJA01	-F43	/8.1	/16.5
			+1CJA01	-F44	/8.2	/17.2
			+1CJA01	-F45	/8.3	/17.2
			+1CJA01	-F46	/8.4	/17.2
			+1CJA01	-F47	/8.5	/17.2
			+1CJA01	-F48	/8.6	/17.2
			+1CJA01	-F49	/8.7	/16.6
12			+1CJA01	-F50	/9.1	
	Disyuntor miniatura 10 kA, 1 polo, B, 2 A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4102-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
			+1CJA01	-F51	/9.2	
2			+1CJA01	-F52	/9.3	
	Miniature circuit breaker, 10kA, 1-pole, B, 6A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4106-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens				
1			+1CJA01	-F53	/9.4	

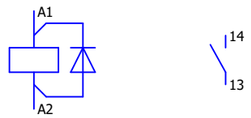
Date:		SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: Device tag List	Drawing designation:			=1CJA01
Format:	A4								+1CJA01

Sheet: 124
Next: 125

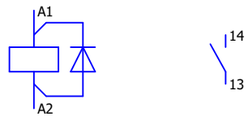
1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)
	Disyuntor miniatura 10 kA, 1 polo, B, 2 A 230/400 V 10kA, D=70 mm Order No.: Número de pedido: 5SY4102-6 Interruptor de corriente auxiliar Type: Número de pedido: 5ST3016 1 C/O Montable	Siemens			
1			+1CJA01	-F54	/9.5
	Cartridge Fuses FSF 5X20 250V 100mA Order No.: 693-0034.1506 UT 4-HESI (5X20) Type: 3046032 Fuse modular terminal block, fuse type: Glass / ceramics / ..., fuse type: G / 5 x 20, nom. voltage: 500 V, nominal current: 6.3 A, connection method: Screw connection, Rated cross section: 4 mm2, cross section: 0.14 mm2- 6 mm2, mounting type: NS 35/7.5, NS 35/15, color: black				
			+1CJA01	-FS1	/51.3
2			+1CJA01	-FS2	/51.3
	INDICATOR LIGHT, RED Indicator lights, 22 mm, round, metal, shiny, red, lens, smooth, with holder, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-6AA20-1AA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens			
1			+1CJA01	-H101	/39.7
	INDICATOR LIGHT, YELLOW Indicator lights, 22 mm, round, metal, shiny, yellow, lens, smooth, with holder, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-6AA30-1AA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens			
1			+1CJA01	-H102	/39.8

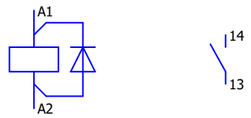
1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
1	INDICATOR LIGHT, WHITE Indicator lights, 22 mm, round, metal, shiny, white, lens, smooth, with holder, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-6AA60-1AA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens				
			+1CJA01	-H103	/40.1	
	Relé auxiliar Módulo de relé preensamblado con conexión push-in, compuesto por: Base de relé con expulsor y relé de contacto de potencia. Tipo de contacto: 1 contacto N/A. Tensión de entrada: 24 V DC. Order No.: Número de pedido: 2903361	Phoenix Contact				
			+1CJA01	-1K11	/18.2	/18.2
			+1CJA01	-1K12	/18.3	/18.3
			+1CJA01	-1K13	/18.4	/18.4
			+1CJA01	-1K14	/18.5	/18.5
			+1CJA01	-1K15	/18.6	/18.6
			+1CJA01	-1K16	/18.7	/18.7
			+1CJA01	-1K17	/18.8	/18.8
			+1CJA01	-1K21	/19.1	/19.1
			+1CJA01	-1K22	/19.2	/19.2
			+1CJA01	-1K23	/19.3	/19.3
			+1CJA01	-1K24	/19.4	/19.4
			+1CJA01	-1K25	/19.5	/19.5
			+1CJA01	-1K26	/19.6	/19.6
			+1CJA01	-1K27	/19.7	/19.7
			+1CJA01	-1K28	/19.8	/19.8
			+1CJA01	-1K31	/20.1	/20.1
			+1CJA01	-1K32	/20.2	/20.2
			+1CJA01	-1K33	/20.3	/20.3
			+1CJA01	-1K34	/20.4	/20.4
			+1CJA01	-1K35	/20.5	/20.5
			+1CJA01	-1K36	/20.6	/20.6
			+1CJA01	-1K37	/20.7	/20.7
			+1CJA01	-1K38	/20.8	/20.8
			+1CJA01	-1K41	/21.1	/21.1

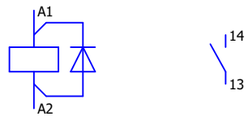
1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	Relé auxiliar Módulo de relé preensamblado con conexión push-in, compuesto por: Base de relé con expulsor y relé de contacto de potencia. Tipo de contacto: 1 contacto N/A. Tensión de entrada: 24 V DC. Order No.: Número de pedido: 2903361	Phoenix Contact				
			+1CJA01	-1K42	/21.2	/21.2
			+1CJA01	-1K43	/21.3	/21.3
			+1CJA01	-1K44	/21.4	/21.4
			+1CJA01	-1K45	/21.5	/21.5
			+1CJA01	-1K46	/21.6	/21.6
			+1CJA01	-1K47	/21.7	/21.7
			+1CJA01	-1K48	/21.8	/21.8
			+1CJA01	-1K51	/22.1	/22.1
			+1CJA01	-1K52	/22.2	/22.2
			+1CJA01	-1K53	/22.3	/22.3
			+1CJA01	-1K54	/22.4	/22.4
			+1CJA01	-1K55	/22.5	/22.5
			+1CJA01	-1K56	/22.6	/22.6
			+1CJA01	-1K57	/22.7	/22.7
			+1CJA01	-1K58	/22.8	/22.8
			+1CJA01	-1K61	/23.1	/23.1
			+1CJA01	-1K62	/23.2	/23.2
			+1CJA01	-1K63	/23.3	/23.3
			+1CJA01	-1K64	/23.4	/23.4
			+1CJA01	-1K65	/23.5	/23.5
			+1CJA01	-1K66	/23.6	/23.6
			+1CJA01	-1K67	/23.7	/23.7
			+1CJA01	-1K68	/23.8	/23.8
			+1CJA01	-1K71	/24.1	/24.1
			+1CJA01	-1K72	/24.2	/24.2
			+1CJA01	-1K73	/24.3	/24.3
			+1CJA01	-1K74	/24.4	/24.4
			+1CJA01	-1K75	/24.5	/24.5
			+1CJA01	-1K76	/24.6	/24.6
			+1CJA01	-1K77	/24.7	/24.7
			+1CJA01	-1K78	/24.8	/24.8
			+1CJA01	-1K81	/25.1	/25.1
			+1CJA01	-1K82	/25.2	/25.2

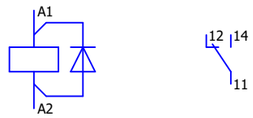
1	2	3	4	5	6	7	8

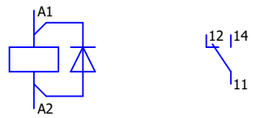
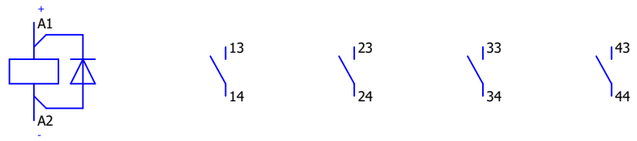
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	Relé auxiliar Módulo de relé preensamblado con conexión push-in, compuesto por: Base de relé con expulsor y relé de contacto de potencia. Tipo de contacto: 1 contacto N/A. Tensión de entrada: 24 V DC. Order No.: Número de pedido: 2903361	Phoenix Contact				
			+1CJA01	-1K83	/25.3	/25.3
			+1CJA01	-1K84	/25.4	/25.4
			+1CJA01	-1K85	/25.5	/25.5
			+1CJA01	-1K86	/25.6	/25.6
			+1CJA01	-1K87	/25.7	/25.7
			+1CJA01	-1K88	/25.8	/25.8
			+1CJA01	-1K91	/26.1	/26.1
			+1CJA01	-1K92	/26.2	/26.2
			+1CJA01	-1K93	/26.3	/26.3
			+1CJA01	-1K94	/26.4	/26.4
			+1CJA01	-1K95	/26.5	/26.5
			+1CJA01	-1K96	/26.6	/26.6
			+1CJA01	-1K97	/26.7	/26.7
			+1CJA01	-1K98	/26.8	/26.8
			+1CJA01	-1K101	/27.1	/27.1
			+1CJA01	-1K102	/27.2	/27.2
			+1CJA01	-1K103	/27.3	/27.3
			+1CJA01	-1K104	/27.4	/27.4
			+1CJA01	-1K105	/27.5	/27.5
			+1CJA01	-1K106	/27.6	/27.6
			+1CJA01	-1K107	/27.7	/27.7
			+1CJA01	-1K108	/27.8	/27.8
			+1CJA01	-1K111	/28.1	/28.1
			+1CJA01	-1K112	/28.2	/28.2
			+1CJA01	-1K113	/28.3	/28.3
			+1CJA01	-1K114	/28.4	/28.4
			+1CJA01	-1K115	/28.5	/28.5
			+1CJA01	-1K116	/28.6	/28.6
			+1CJA01	-1K117	/28.7	/28.7
			+1CJA01	-1K118	/28.8	/28.8
			+1CJA01	-1K121	/29.1	/29.1
			+1CJA01	-1K122	/29.2	/29.2
			+1CJA01	-1K123	/29.3	/29.3

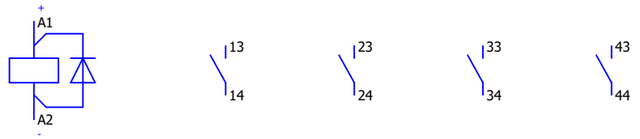
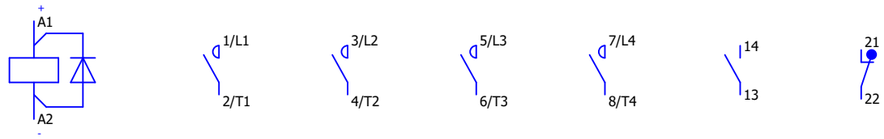
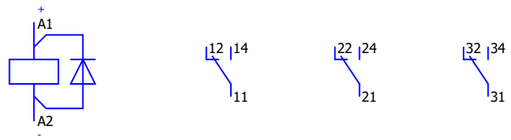
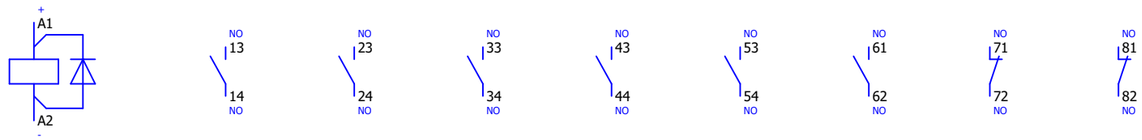
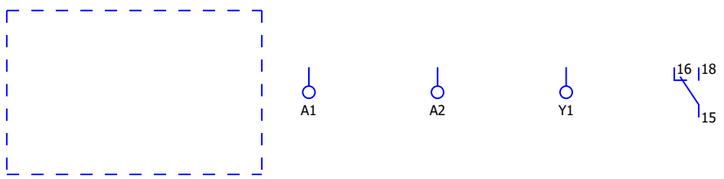
1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	Relé auxiliar Módulo de relé preensamblado con conexión push-in, compuesto por: Base de relé con expulsor y relé de contacto de potencia. Tipo de contacto: 1 contacto N/A. Tensión de entrada: 24 V DC. Order No.: Número de pedido: 2903361	Phoenix Contact				
			+1CJA01	-1K124	/29.4	/29.4
			+1CJA01	-1K125	/29.5	/29.5
			+1CJA01	-1K126	/29.6	/29.6
			+1CJA01	-1K127	/29.7	/29.7
			+1CJA01	-1K128	/29.8	/29.8
			+1CJA01	-1K131	/30.1	/30.1
			+1CJA01	-1K132	/30.2	/30.2
			+1CJA01	-1K133	/30.3	/30.3
			+1CJA01	-1K134	/30.4	/30.4
			+1CJA01	-1K135	/30.5	/30.5
			+1CJA01	-1K136	/30.6	/30.6
			+1CJA01	-1K137	/30.7	/30.7
			+1CJA01	-1K138	/30.8	/30.8
			+1CJA01	-1K141	/31.1	/31.1
			+1CJA01	-1K142	/31.2	/31.2
			+1CJA01	-1K143	/31.3	/31.3
			+1CJA01	-1K144	/31.4	/31.4
			+1CJA01	-1K145	/31.5	/31.5
			+1CJA01	-1K146	/31.6	/31.6
			+1CJA01	-1K147	/31.7	/31.7
			+1CJA01	-1K148	/31.8	/31.8
			+1CJA01	-1K151	/32.1	/32.1
			+1CJA01	-1K152	/32.2	/32.2
			+1CJA01	-1K153	/32.3	/32.3
			+1CJA01	-1K154	/32.4	/32.4
			+1CJA01	-1K155	/32.5	/32.5
			+1CJA01	-1K156	/32.6	/32.6
			+1CJA01	-1K157	/32.7	/32.7
119			+1CJA01	-1K158	/32.8	/32.8

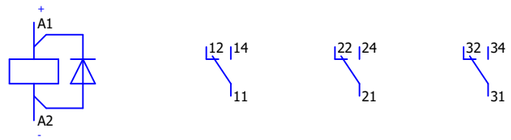
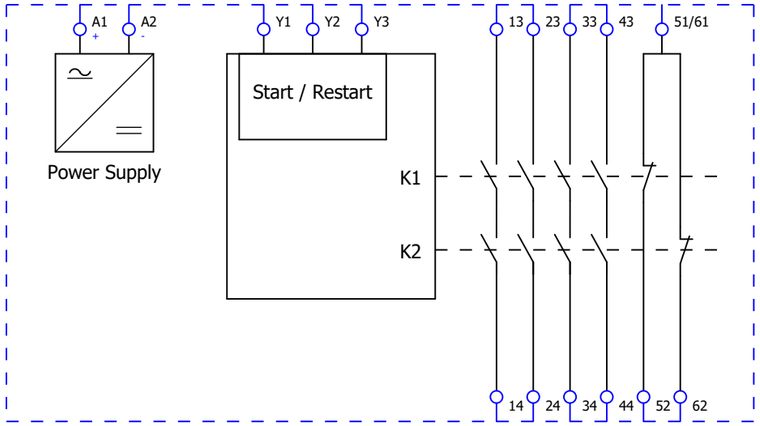
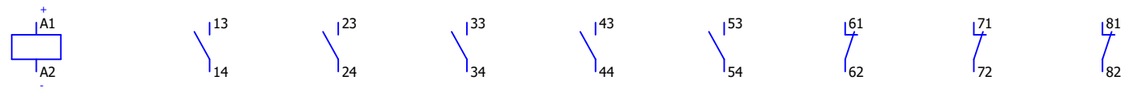
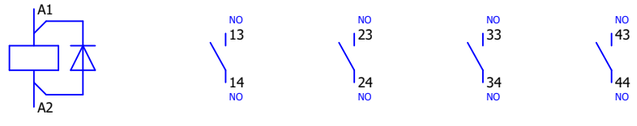
1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	Relé enchufable - Tensión de control nominal: 24 V CC, - Corriente de contacto nominal: 10 A, - Contactos: 1 C/O Order No.: Número de pedido: RXG12BD Harmony, módulo de protección Type: RXG12BD Harmony, diodo, para todos los conectores, 6…230 V CC Número de pedido: RZM040W Harmony, zócalo push-in con abrazadera Type: SE.RXG12BD+RZM040W+RGZE05P para relés RXG1, 10 A, terminales push-in, contacto separado Número de pedido: RGZE05P					
			+1CJA01	-2K01	/33.1	/63.3
			+1CJA01	-2K03	/33.6	/57.4
			+1CJA01	-2K04	/33.7	
			+1CJA01	-2K05	/33.8	/77.4
			+1CJA01	-2K06	/34.1	/76.6
			+1CJA01	-2K07	/34.2	/52.2
			+1CJA01	-2K08	/34.3	/52.3
			+1CJA01	-2K09	/34.4	/56.2
			+1CJA01	-2K10	/34.5	/56.2
			+1CJA01	-2K11	/34.6	/56.3
			+1CJA01	-2K12	/34.7	/56.3
			+1CJA01	-2K13	/34.8	/56.4
			+1CJA01	-2K14	/35.1	/56.5
			+1CJA01	-2K15	/35.2	/56.5
			+1CJA01	-2K16	/35.3	/56.6
			+1CJA01	-2K17	/35.4	/56.7
			+1CJA01	-2K18	/35.5	/56.7
			+1CJA01	-2K19	/35.6	/60.2
			+1CJA01	-2K20	/35.7	/60.3
			+1CJA01	-2K21	/35.8	/60.4
			+1CJA01	-2K22	/36.1	/60.5
			+1CJA01	-2K23	/36.2	/59.4
			+1CJA01	-2K24	/36.3	/60.6
			+1CJA01	-2K25	/36.4	/60.7
			+1CJA01	-2K26	/36.5	/61.2
			+1CJA01	-2K27	/36.6	/61.3

1	2	3	4	5	6	7	8
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)		
	Relé enchufable - Tensión de control nominal: 24 V CC, - Corriente de contacto nominal: 10 A, - Contactos: 1 C/O Order No.: Número de pedido: RXG12BD Harmony, módulo de protección Type: RXG12BD Harmony, diodo, para todos los conectores, 6…230 V CC Número de pedido: RZM040W Harmony, zócalo push-in con abrazadera Type: SE.RXG12BD+RZM040W+RGZE05P para relés RXG1, 10 A, terminales push-in, contacto separado Número de pedido: RGZE05P						
			+1CJA01	-2K28	/36.7	/61.4	
			+1CJA01	-2K29	/36.8	/61.5	
			+1CJA01	-2K30	/37.1	/61.6	
			+1CJA01	-2K31	/37.2	/61.6	
			+1CJA01	-2K32	/37.3	/61.7	
			+1CJA01	-2K33	/37.4	/62.2	
			+1CJA01	-2K34	/37.5	/62.3	
			+1CJA01	-2K35	/37.6	/62.4	
			+1CJA01	-2K36	/37.7	/62.5	
			+1CJA01	-2K37	/39.1	/66.4	
			+1CJA01	-2K38	/39.2	/67.6	
			+1CJA01	-2K39	/39.3	/59.5	
			+1CJA01	-2K40	/39.4	/78.4	
			+1CJA01	-2K41	/39.5	/78.5	
41			+1CJA01	-2K42	/39.6	/78.5	
	COUPL.CONT.RELAY,4NO,DC24V,DIODE COUPLING CONTACTOR RELAY, 4NO, DC 24V, 0.85...1.85*US, W/ INTEGRATED DIODE, SIZE S00, SCREW TERMINAL Order No.: Número de pedido: 3RH2140-1VB40	Siemens					
			+1CJA01	-2K101	/33.3 /53.4	/53.4 /53.4	
			+1CJA01	-2K102	/33.4 /53.7	/53.7 /53.7	
			+1CJA01	-2K103	/33.5 /53.7	/53.7 /53.7	
			+1CJA01	-2K104	/37.8 /58.2	/58.2 /58.2	
			+1CJA01	-2K105	/38.1 /58.3	/58.3 /58.3	
			+1CJA01	-2K106	/38.2 /58.4	/58.4 /58.4	

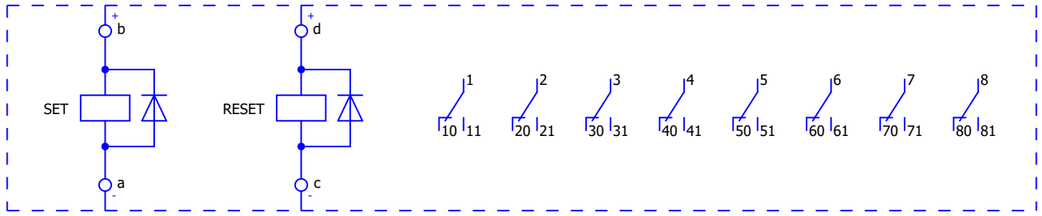
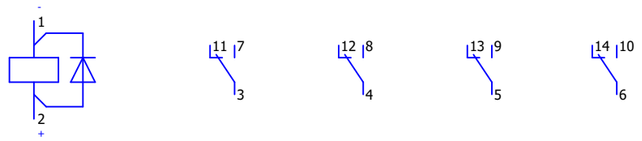
1	2	3	4	5	6	7	8
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)		
12	COUPL.CONT.RELAY,4NO,DC24V,DIODE COUPLING CONTACTOR RELAY, 4NO, DC 24V, 0.85...1.85*US, W/ INTEGRATED DIODE, SIZE S00, SCREW TERMINAL Order No.: Número de pedido: 3RH2140-1VB40	Siemens					
			+1CJA01	-2K107	/38.3	/58.5	/58.5	/58.5	/50.1
			+1CJA01	-2K108	/38.4	/58.6	/58.6	/58.6	
			+1CJA01	-2K109	/38.5	/58.7	/58.7	/58.7	
			+1CJA01	-2K110	/38.6	/65.6	/66.5	/69.5	/71.6
			+1CJA01	-2K111	/38.7	/78.2	/78.2	/78.2	
			+1CJA01	-2K112	/38.8				
1	SIRIUS Auxiliary contactor 4NO Contactor, AC1: 35A DC 24V 4-pole, 4NO, Size: S0, Screw terminal 1NO+1NC integrated Order No.: 3RT2325-1BB40 SIRIUS Surge suppressor Type: 3RT2926-1ER00 Surge Suppressor, Diode Combination, DC 24 V, For Motor Contactors Size S0	Siemens					
			+1CJA01	-K1	/57.4	/54.6	/54.6	/54.6	/55.4	/16.3
1	Plug-in relay -3 C/O 24 V DC Plug-in relay: Nominal coil voltage: 24VDC complete unit 3 W Order No.: LZS:PT3A5L24	Siemens					
			+1CJA01	-K11	/57.5	/55.3	/55.3		
1	Contactor relay Contactor relay, 62E, DIN EN 50011, 8NO, screw terminal DC operation 24 V DC Order No.: 3TH4280-0BB4	Siemens					
			+1CJA01	-K111	/73.4	/74.2	/74.4	/74.6	/74.8	/75.2	/75.4
1	Multifunction Timer Relay - 24...240V AC/DC - 1 C/O time delay relay 10 functions - 1 s..100 h - 24..240 V AC - 1 OC Order No.: RE17RMMU	Schneider Electric					
			+1CJA01	-K113	/59.6	/59.7	/59.7	/59.7	/62.6

Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:	
Drawn:	Karlo Čotić								#Z
Approved:	Patrik Kovač		Object: PCH NARE Columbia	Content: Device tag List	Drawing designation:			=1CJA01	Sheet: 132
Format:	A4		Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE					+1CJA01	Next: 133

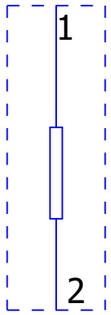
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)								
	Pomoćni relej -nazivni napon svitka: 24V DC, -nazivna struja kontakata: 10A, -kontakti: 3 x C/O Order No.: RXM3AB2BD												
			+1CJA01	-K131	/59.2		/59.5						
			+1CJA01	-K132	/59.4	/59.7	/60.6						
3			+1CJA01	-K133	/59.3	/63.4	/16.8						
	Harmony Safety Automation Estop or guard ,Harmony XPS, connected to supply terminals 24 V AC/DC , no inputs, spring Order No.: XPSBAC14AC	Schneider Electric											
			+1CJA01	-K301	/64.4								
	Contactor relay Contactor relay, 53E, DIN EN 50011, 5NO + 3NC, screw terminal DC operation 24 V DC Order No.: 3TH4253-0B	Siemens											
1			+1CJA01	-K302	/64.5						/65.3	/64.5	
	SIRIUS contactor relay Contactor relay, 4NO, 24VDC, with integrated diode, size S00, screw terminal Order No.: 3RH2140-1FB40	Siemens											
1			+1CJA01	-K321	/52.2	/52.7	/52.7	/52.7	/16.7				

Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić Karlo Čotić							#Z
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: Device tag List	Drawing designation:			=1CJA01
Format:	A4							+1CJA01

Sheet: 133
Next: 134

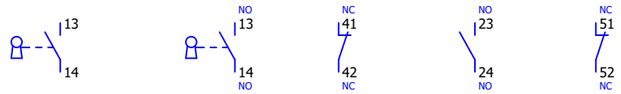
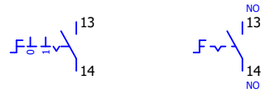
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)
	Fast lock-out relay FAST LOCK-OUT RELAY 8 CHANGE OVER CONTACTS OPERATING TIME 10MS AUXILIARY VOLTAGE: 24/30V DC WITH RESET PUSHBUTTON WITHOUT SOCKET Type: 7PA2211-0 Order No.: 7PA2211-0 Socket for surface mounting Type: 7XP9012-0 SOCKET FOR SURFACE MOUNTING FOR 7PA22, 7PA26 AND THREE-PHASE 7PA30, 7TS15 AND 7TS16 RELAY	Siemens			
1			+1CJA01	-86M	/66.4
	Monostable fast trip relay -4 C/O 24 V DC FAST TRIP RELAY 4 CHANGE OVER CONTACTS OPERATING TIME 8MS AUXILIARY VOLTAGE: 24/30V DC RELAY WITHOUT SOCKET Order No.: LZS:PT5A5L24	Siemens			
			+1CJA01	-94P1	/67.3 /17.8
2			+1CJA01	-94P2	/67.6 /18.1
	analog panel meter Scale: 0-100% Input signal: 4-20mA Order No.: MA19LN A900K000008	LUMEL			
1			+1CJA01	-P111	/50.3
	analog panel meter Scale: 0-200% Input signal: 4-20mA Order No.: MA19LN A900X000008	LUMEL			
1			+1CJA01	-P112	/41.4

1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)	
	Wire wound resistor Nominal resistance: 10±5% Ohm Power rating: 100W Type: RSSD20117A10R0JB15 Resistor Mounting Bracket Type: ACCRF2EKN Fixed Resistor Mounting Bracket for Wire-Wound Resistors Resistor Mounting Bracket Type: ACCRF2EKN Fixed Resistor Mounting Bracket for Wire-Wound Resistors	Vishay				
			+1CJA01	-R1	/55.4	
2			+1CJA01	-R2	/55.3	
	Heater Rated power: 100W Input voltage: 110-250V Order No.: Número de pedido: HT100	Alfa Electric				
			+1CJA01	-R101	/4.6	
2			+1CJA01	-R102	/4.7	
	OFF SWITCH 32A 2S OFF switch 32 A 2 NO Terminal 6 mm2 Order No.: Número de pedido: 5TE8212	Siemens				
			+1CJA01	-S10	/5.4	/5.4
2			+1CJA01	-S30	/6.1	/6.1

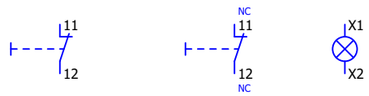
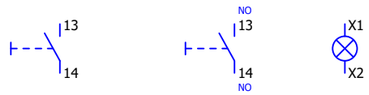
Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: Device tag List	Drawing designation:			=1CJA01 Sheet: 135
Format:	A4							+1CJA01 Next: 136

Karlo Čotić
Patrik Kovač
Columbia
PCH NARE

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)
1	KEY-OPERATED SWITCH RONIS, O-I RONIS key-operated switch, 22 mm, round, metal, shiny, lock number SB30, with 2 keys, 2 switch positions O-I, latching, actuating angle 90°, 10:30h/13:30h, key removal O+I, with holder, 1 NO+1 NC, screw terminal, possible special locks: 3SB31, 421, 455 Order No.: 3SU1150-4BF11-1FA0 CONTACT MODULE 1NO+1NC Type: 3SU1400-1AA10-1FA0 Contact module with 2 contact elements, 1 NO+1 NC, screw terminal, for front plate mounting Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens			
			+1CJA01	-S100	/13.7
2	Door contact Limit switch, Limit switches XC Standard, XCKN, metal end plunger, 1NC+1 NO, snap, Pg1 Order No.: Número de pedido: XCKN2110G11	Schneider Electric			
			+1CJA01	-S101	/4.4
			+1CJA01	-S102	/4.5
2	SELECTOR SWITCH, O-I, BLACK, WHITE Selector switch, illuminable, 22 mm, round, metal, shiny, white, selector switch, short, 2 switch positions O-I, latching, actuating angle 90°, 10:30h/13:30h, with holder, 1 NO, screw terminal Order No.: 3SU1150-2BF60-1BA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens			
			+1CJA01	-S103	/13.5
			+1CJA01	-S104	/13.6

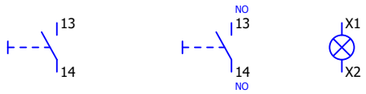
Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:	
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Columbia Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: Device tag List	Drawing designation:			=1CJA01	Sheet: 136
Format:	A4							+1CJA01	Next: 137

1	2	3	4	5	6	7	8

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)
1	PUSHBUTTON, BLACK Pushbutton, 22 mm, round, metal, shiny, black, pushbutton, flat, momentary contact type, 1 NO, screw terminal Order No.: 3SU1150-0AB10-1BA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens	+1CJA01	-S203	 /14.1
1	ILLUMINATED PUSHBUTTON, RED Illuminated pushbutton, 22 mm, round, metal, shiny, red, pushbutton, flat, momentary contact type, with holder, 1 NC, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-0AB20-1CA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens	+1CJA01	-S210	 /13.1 /40.2
1	ILLUMINATED PUSHBUTTON, GREEN Illuminated pushbutton, 22 mm, round, metal, shiny, green, pushbutton, flat, momentary contact type, with holder, 1 NO, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-0AB40-1BA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens	+1CJA01	-S211	 /13.2 /40.3

Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia Columbia PCH NARE	Content: Device tag List	Drawing designation:			=1CJA01
Format:	A4							+1CJA01

Sheet: 137
Next: 138

1	2	3	4	5	6	7	8
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)		
	SELECTOR SWITCH, I>O<II, WHITE Selector switch, illuminable, 22 mm, round, metal, shiny, white, selector switch, short, 3 switch positions I>O<II, momentary contact type, actuating angle 2x45°, 10:30h/12h/13:30h Order No.: 3SU1052-2BM60-0AA0 Contact module with 1 contact element, 1 NO Type: 3SU1400-1AA10-1BA0 Contact module with 1 contact element, 1 NO, screw terminal, for front plate mounting Contact module with 1 contact element, 1 NO Type: 3SU1400-1AA10-1BA0 Contact module with 1 contact element, 1 NO, screw terminal, for front plate mounting HOLDER Type: 3SU1550-0AA10-0AA0 Holder for 3 modules, universal, plastic/metal Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens					
			+1CJA01	-S221	/14.3 /14.4		
2			+1CJA01	-S222	/14.5 /14.6		
	ILLUMINATED PUSHBUTTON, WHITE Illuminated pushbutton, 22 mm, round, metal, shiny, white, pushbutton, flat, momentary contact type, with holder, 1 NO, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-0AB60-1BA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens					
			+1CJA01	-S223	/13.3 /40.4		
2			+1CJA01	-S224	/14.2 /40.8		

Date:		SINTAKSA A Voith Company	Client:	Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić Karlo Čotić								#Z
Approved:	Patrik Kovač Patrik Kovač		Object:	PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE Colombia	Content: Device tag List	Drawing designation:			=1CJA01 Sheet: 138
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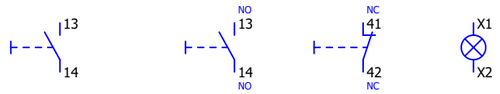
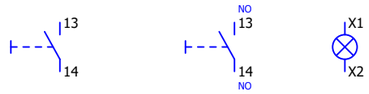
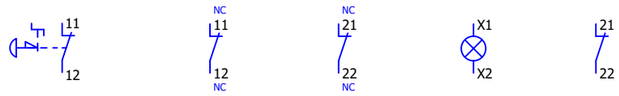
1	2	3	4	5	6	7	8
Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)		
1	ILLUMINATED PUSHBUTTON, RED Illuminated pushbutton, 22 mm, round, metal, shiny, red, pushbutton, flat, momentary contact type, with holder, 1 NO+1 NC, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-0AB20-1FA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens	+1CJA01	-S230	 /13.4 /40.5			
1	ILLUMINATED PUSHBUTTON, GREEN Illuminated pushbutton, 22 mm, round, metal, shiny, green, pushbutton, flat, momentary contact type, with holder, 1 NO, LED module with integrated LED 24 V AC/DC, screw terminal Order No.: 3SU1152-0AB40-1BA0 Label holder Type: 3SU1900-0AH10-0AA0 Label holder, 22mm, flat, Frame rounded off at the bottom black, for labeling plate 17.5 mm x 27 mm, for gluing	Siemens	+1CJA01	-S231	 /52.2 /40.6			
1	ILL. EM. STOP MUSHR. PUSHBUTTON,40MM,RED EMERGENCY STOP mushroom pushbutton, illuminable, 22 mm, round, metal, shiny, red, 40 mm, positive latching, Rotate-to-unlatch Order No.: Número de pedido: 3SU1051-1HB20-0AA0 SOPORTE, MODULO DE CONTACTOS 1NC,1NC Type: 3SU1550-1AA10-1PA0 soporte para 3 módulos, metal, 1NC, 1NC, borne de tornillo Número de pedido: 3SU1550-1AA10-1PA0 LED-MODUL, ROJO Type: 3SU1401-1BB20-1AA0 MODULO LED CON LED 24V AC/DC INTEGRADO, ROJO, BORNES DE TORNILLO, PARA FIJACION EN PLACA FRONTAL Número de pedido: 3SU1401-1BB20-1AA0 COLLAR DE PROTECCION Type: 3SU1900-0DY30-0AA0 COLLAR DE PROTECCION PARA PULSADOR SETA DE PARO EMEG., SIN O CON CERRADURA RONIS, AMARILLO, PLASTICO Número de pedido: 3SU1900-0DY30-0AA0	Siemens	+1CJA01	-S301	 /13.8 /40.7 /63.2			

Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design: Unit 1 control and protection cubicle	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Content: Device tag List	Drawing designation:		=1CJA01	Sheet: 139
Format:	A4						+1CJA01	Next: 140

Karlo Čotić
Patrik Kovač
Columbia
PCH NARE

Qty. (pcs)	Equipment technical description	Manufacturer	Location (+)	Designation (-)	Symbol Position in shematics (Page, column)							
	SIGNAL CONVERTER 0-10V/4-20MA 24VUC Separation amplifier 24 V AC/DC, 3-way separation input: 0-10 V output: 4-20 mA screw terminal Order No.: 3RS7000-1DE00	Siemens				A1	A2	I+	I-	O+	O-	
			+1CJA01	-U151	/43.1	/6.5	/6.6	/43.1	/43.2	/43.1	/43.2	
			+1CJA01	-U152	/43.3	/6.6	/6.6	/43.3	/43.3	/43.3	/43.3	
			+1CJA01	-U153	/43.5	/6.7	/6.7	/43.5	/43.5	/43.5	/43.5	
4			+1CJA01	-U154	/43.7	/6.8		/43.7	/43.7	/43.7	/43.7	/6.8
	Frequency converter Frequency converter with electrical isolation for measuring the speed from the residual voltage of the generator in connection with a speed transducer. Order No.: VFU1	Voith Hydro				1	2	3	4	5		
1			+1CJA01	-U201	/51.3	/51.3	/51.3	/51.3	/51.3	/51.3		
	SKB 30/12 A1, Bridge Rectifier Module, 15A 1200V, 4-Pin G 35 SKB 30/12 A1, Bridge Rectifier Module, 15A 1200V, 4-Pin G 35 Order No.: SKB30/12A1											
			+1CJA01	-V1	/55.4							
	Socket outlet for distribution board Socket, for USA and other countries, Pin connector pattern type AB 15A, connection method: Screw connection, color: gray, nom. voltage: 125 V AC (60 Hz), nominal current: 15 A, for mounting on a DIN rail in the service interface or direct mounting, standards/specifications: UL 508, Country marking: USA Order No.: Número de pedido: 0804152	Phoenix Contact				L	PE	N				
1			+1CJA01	-X101	/4.2							

Date:		SINTAKSA A Voith Company	Client: Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia	Scope of design:	Project: 24028-DD	Folder:	Drawing:	Revision:
Drawn:	Karlo Čotić							#Z
Approved:	Patrik Kovač		Object: PCH NARE Generadora Nare S.A.S E.S.P Oficina 1113, Torre 1, Cl 7 Sur #42-70, Medellín, Colombia PCH NARE	Content: Device tag List	Drawing designation:			=1CJA01 Sheet: 140
Format:	A4							+1CJA01 Next: =2CJA01+2CJA01/1

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