

Estudio para análisis de falla EAF 563/2024

“Desconexión forzada de barra 23 kV N°1 de S/E Las Canteras”

Fecha de Emisión: 24-12-2024

1. Descripción pormenorizada de la perturbación

a. Fecha y Hora de la falla

Fecha	03/12/2024
Hora	05:36
Consumos desconectados (MW)	1.12
Demanda previa del sistema (MW)	8889.16
Porcentaje de desconexión	0.013 %
Calificación Apagón	No aplica (porcentaje de desconexión < 10%)

b. Identificación instalación afectada

Nombre de la instalación	Las Canteras / SE001T0487
Tipo de instalación	Subestación
Tensión nominal	110/23 kV
Segmento	Transmisión Zonal
Propietario instalación afectada	Edgeconnex Chile V SpA
RUT	77.394.032-0
Representante Legal	Tomás Kubick Orrego
Dirección	Av. El Bosque Central N°92, piso 8, Las Condes, Región Metropolitana.

c. Identificación del elemento fallado

Nombre del elemento afectado	Interruptor 52E1 de S/E Las Canteras / IM01T0487PA014T0487SE001T0487
Propietario elemento fallado	Edgeconnex Chile V SpA
RUT	77.394.032-0
Representante Legal	Tomás Kubick Orrego
Dirección	Av. El Bosque Central N°92, piso 8, Las Condes, Región Metropolitana.

d.1 Origen y causa de la falla

Se produjo la apertura intempestiva del interruptor 52ET1 de S/E Las Canteras, asociado a la barra 23 kV N°1 de dicha subestación, por medio de la operación de su protección de sobrecorriente de fase.

La empresa Edgeconnex Chile V SpA indica que el origen de la falla fue a causa de un felino doméstico que redujo la distancia dieléctrica entre la aislación y la estructura metálica del interruptor 52E1 de la mencionada subestación.

d.2 Fenómeno Físico:

ANI1: Acción de animales, roedores o pájaros (por contacto directo u otro).

Las empresas Edgeconnex Chile V SpA entregan los siguientes antecedentes probatorios para acreditar el fenómeno físico declarado:

- Registro Fotográfico con fecha, hora y coordenadas UTM del punto de falla.
- Número de veces que la instalación se ha visto afectada por esta causa, con o sin afectación de suministro.

d.3 Reiteración:

Reiteración Fenómeno Físico en la instalación afectada: Esta instalación no ha sido afectada por el mismo fenómeno físico durante los últimos 24 meses móviles.

Reiteración Fenómeno Físico en instalaciones del mismo propietario: No se han producido fallas en instalaciones del mismo propietario con un mismo fenómeno físico, durante los últimos 24 meses móviles.

Cantidad de fallas (sin importar Fenómeno Físico) en la misma instalación: No se han producido fallas en la misma instalación afectada durante los últimos 24 meses móviles.

d.4 Fenómeno eléctrico

PR51: Protección de sobrecorriente temporizada de fase.

e. Detalles de la instalación, equipo o elemento donde se produjo la falla

El elemento donde se originó la falla corresponde al interruptor 52E1 de S/E Las Canteras, el cual, según lo informado por su propietario en la plataforma Infotécnica del Coordinador, es marca Ningbo Doweij, modelo OVCB-36, con una capacidad de ruptura asimétrica de 31 kA, y con entrada en operación en el año 2024.

f. Ubicación urbana o rural según DS 327/1997

La empresa Edgeconnex Chile V SpA indica "Urbano".

g. Proposición del propietario respecto del origen de la falla

Fuerza mayor.

h. Comuna donde se presenta la falla

13303: Tiltil.

i. Fecha de entrega de la información al Coordinador

Coordinado	Informe de 48 horas (18-11-2024)	Informe de 5 días (21-11-2024)
Edgeconnex Chile V SpA (Edgeconnex)	05-12-2024	10-12-2024

2. Descripción del equipamiento afectado

a. Sistema de Generación

b. Sistema de Transmisión

Elemento Afectado	Segmento	Tramo	Hora Desc.	Hora Norm.
Las Canteras	ST Zonal	Barra 23 kV N°1	05:36	21:19

- Los horarios señalados corresponden a lo informado por la empresa Edgeconnex Chile V SpA.

c. Consumos

Sub-Estación	Alimentador/ Paño	Comuna	Pérdida de Consumo (MW)	% consumo pre-falla	Clientes Afectados	H. Desc.	H. Dispon.	H. Norm.
Las Canteras	Data Center 1 / E1	-	0.28	0.003	1	05:36	21:19	21:19
Las Canteras	Data Center 2 / E2	-	0.28	0.003		05:36	21:19	21:19
Las Canteras	Data Center 3 / E3	-	0.28	0.003		05:36	21:19	21:19
Las Canteras	Data Center 4 / E4	-	0.28	0.003		05:36	21:19	21:19

Total: 1.12 MW 0.013 % 1

- Los montos y horarios señalados corresponden a lo informado por la empresa Edgeconnex Chile V SpA.

3. Estimación de la energía no suministrada

Sub-Estación	Alimentador/ Paño	Empresa	Tipo de Cliente	Pérdida de Consumo (MW)	Tiempo Indispon. (h)	Tiempo Desc. (h)	ENS (MWh)
Las Canteras	Data Center 1 / E1	Edgeconnex	Libre	0.28	15.72	15.72	4.4
Las Canteras	Data Center 2 / E2	Edgeconnex	Libre	0.28	15.72	15.72	4.4
Las Canteras	Data Center 3 / E3	Edgeconnex	Libre	0.28	15.72	15.72	4.4
Las Canteras	Data Center 4 / E4	Edgeconnex	Libre	0.28	15.72	15.72	4.4

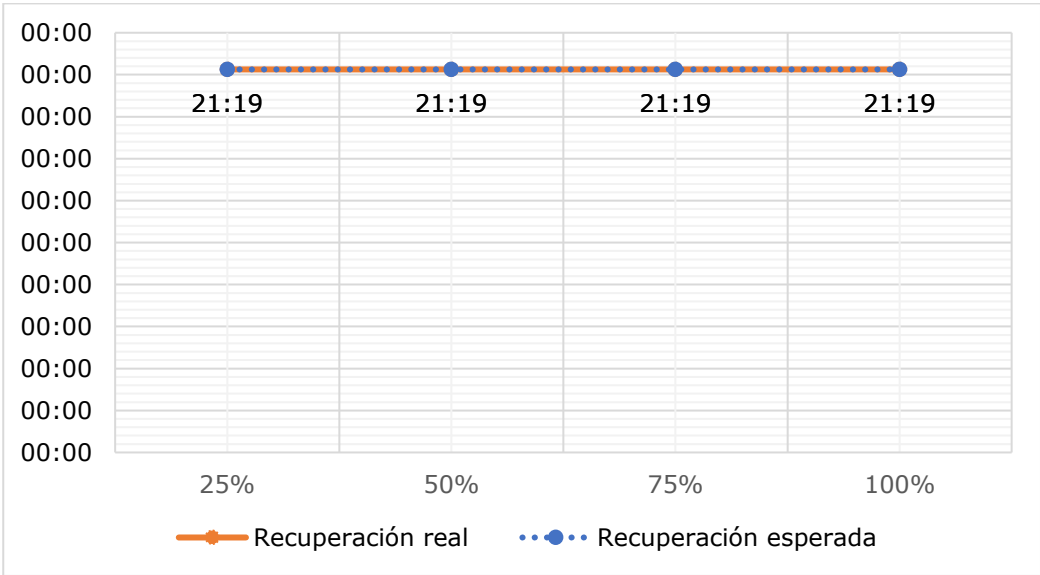
Clientes Regulados : MWh

Clientes Libres : 17.6 MWh

Total : 17.6 MWh

- Los montos señalados corresponden a lo informado por la empresa Edgeconnex Chile V SpA.

- Curva de recuperación esperada v/s recuperación real.



No se observan diferencias entre los horarios de recuperación esperada y la recuperación real para los distintos consumos afectados.

- Velocidad promedio de recuperación.

Rango	Potencia (MW)	Tiempo recuperación (h)	Velocidad de recuperación (MW/h)
Primer 80 %	0.90	15.72	0.06
Último 20 %	0.22	15.72	0.01
100 % Total	1.12	15.72	0.07

4. Descripción de las configuraciones en los momentos previo y posterior a la falla

Demanda del sistema previo a la falla: 8889.16 MW

Regulación de Frecuencia

Control distribuido de frecuencia en el Sistema Eléctrico Nacional, previo a la falla, mediante las centrales El Toro (U1, U2, U3 y U4), Mejillones (CTM3 y IEM), Ralco (U1 y U2) y Rapel (U1 y U2).

Estado y configuración previo a la falla

Las instalaciones de transmisión se encontraban en servicio normal en los momentos previos a la desconexión forzada.

Otros antecedentes relevantes

Según lo informado por la empresa Edgeconnex Chile V SpA:

"A las 05:35 horas del martes 03 de diciembre del 2024, se produjo la operación intempestiva del interruptor 52ET1 de S/E Las Canteras, accionada por la actuación de la función de sobre corriente de tiempo definido programada en el relé marca EFACEC modelo TPU T500 asociado al transformador de poder 110/23 kV N°1, afectando momentáneamente los consumos de los alimentadores 23 kV, Data Center 1, Data Center 2, Data Center 3 y Data Center 4.

El área de mantenimiento transmisión, al momento de realizar la inspección en terreno de los equipos afectados, pudo localizar e identificar el fenómeno físico causante de la indisponibilidad eléctrica, el cual correspondió a un felino doméstico (gato) que trepó sobre el interruptor de poder 52E1, acortando la distancia dieléctrica entre los puntos energizados de los bushing del interruptor con la estructura metálica soportante de éstos, produciéndose en consecuencia, el respectivo cortocircuito trifásico. Lo anterior, provoca un fulgor de energía que contamina el aislamiento del interruptor 52E1 y el desconectador lado línea 89E1-2”.

En función de los antecedentes presentados a la fecha de emisión del presente EAF, se solicitará la siguiente información a la empresa Edgeconnex Chile V SpA:

- Aclaración del punto de falla específico en la estructura del interruptor 52E1 de S/E Las Canteras, esto es del lado barra (entre el desconectador 89E1-1 y los bushing del lado fuente del interruptor) o del lado línea (entre el desconectador 89E1-2 y los bushing del lado carga del interruptor), para efectos de identificar los TTCC que detectaron la falla y justificar el motivo de no haber operado la protección de sobrecorriente asociada al paño E1 en lugar de aquella asociada al paño ET1.
- Envío de los registros oscilográficos del relé del paño E1 de S/E Las Canteras en formato COMTRADE, y envío de sus registros de eventos en formato de texto y formato COMTRADE, junto con el correspondiente análisis en función de sus ajustes.
- Comunas afectadas por la interrupción del suministro en cada alimentador.

De forma complementaria, se adjuntan los informes de falla de instalaciones ingresados en el sistema del Coordinador Eléctrico Nacional por Edgeconnex Chile V SpA (Anexo N°1) y otros antecedentes aportados por la misma empresa (Anexo N°2).

Acciones preventivas y/o correctivas

- a) La instalación afectada no cuenta con una auditoría, plan de acción u otro tipo de mantenimiento en curso.
- b) Acciones correctivas a corto plazo:

La empresa Edgeconnex Chile V SpA indica las siguientes acciones correctivas:

“Como medida correctiva inmediata, se procede a limpiar la aislación de los equipos afectados y se realizan pruebas de aislamiento, verificando que los equipos pueden ser energizados nuevamente.

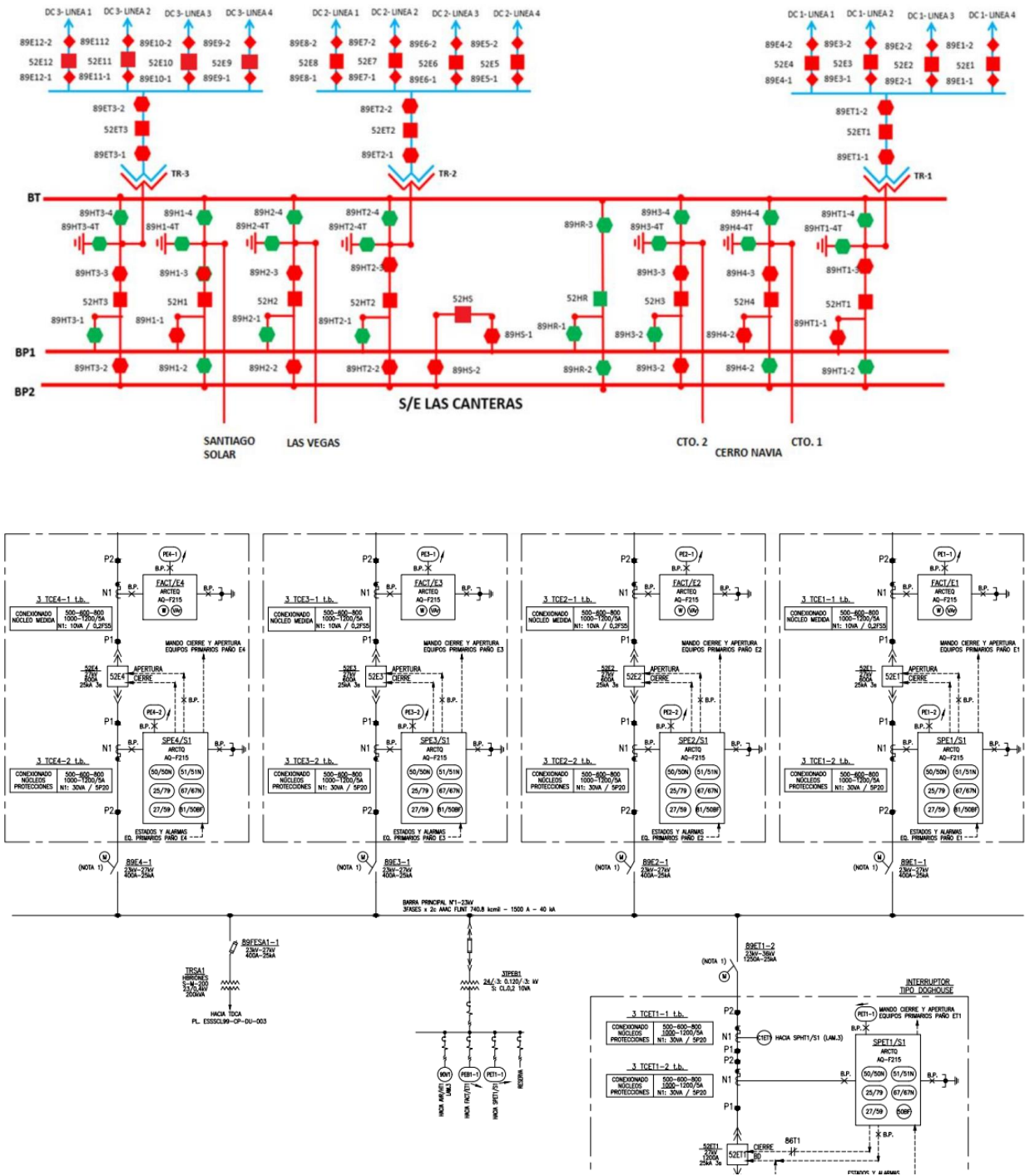
A modo de recaudo, se revisó la totalidad de aislamiento de la subestación sin encontrar daño evidente en otros equipos de S/E Las Canteras.

Como medida de mitigación, se procede a instalar cinta aislante en los conectores del interruptor 52E1 para reducir el riesgo de cortocircuitos”.

- c) Acciones correctivas a largo plazo:

La empresa Edgeconnex Chile SpA no indica acciones correctivas.

Diagrama simplificado de las instalaciones previo a la falla



5. Cronología de eventos y la descripción de las causas de los eventos

Hora	Involucrado	Evento
05:36	Edgeconnex	Apertura automática del interruptor 52ET1 de S/E Las Canteras, por la operación de la función de sobrecorriente de fase, desconectando los consumos asociados a la barra 23 kV N°1 de la mencionada S/E.

- Horas, maniobras y eventos señalados corresponden a lo informado por la Edgeconnex Chile V SpA.

6. Normalización del servicio

Fecha	Involucrado	Hora	Acción
03/12/2024	Edgeconnex	09:31	Apertura de los desconectadores 89ET1-1 (presenta problemas en su operación) y 89ET1-2 de S/E Las Canteras, como preparativo para la revisión de la instalación.
03/12/2024	Edgeconnex	12:02	Personal de mantenimiento inicia limpieza y pruebas al interruptor 52E1 de S/E Las Canteras, así como limpieza al desconectador 89E1-2 de la misma S/E.
03/12/2024	Edgeconnex	16:45	Desconexión del transformador N°1 110/23 kV de S/E Las Canteras mediante un Curso Forzoso, SD N°2024121436, para la revisión del mecanismo del desconectador 89ET1-1 de dicha S/E.
03/12/2024	Edgeconnex	20:37	Energización en vacío del transformador N°1 110/23 kV de S/E Las Canteras tras culminación de reparación en el paño E1 en 23 kV y normalización del desconectador 89ET1-1 de dicha S/E.
03/12/2024	Edgeconnex	21:19	Cierre del interruptor 52ET1 de S/E Las Canteras, energizando los paños E1, E2, E3 y E4 de la mencionada S/E, normalizando el esquema operativo de dicha instalación.

- Horas, maniobras y eventos señalados corresponden a lo informado por la empresa Edgeconnex Chile V SpA.

ANEXO N°1

Informe de trabajo y falla de instalaciones ingresados en el sistema del
Coordinador Eléctrico Nacional por la empresa EDGECONNEX CHILE V
SPA

 Resumen

Fecha de envío al Coordinador Eléctrico : 04-12-2024 00:04

Finalizado

Número:

2024005319

Solicitante:

SSCL99

Empresa:

EDGECONNEX CHILE V SPA

Tipo de Origen:

Externo

SubEstación:

S/E LAS CANTERAS

Falla Sobre:

pañó

Elementos

Tipo: panos - S/E LAS CANTERAS ET1
Nombre : S/E LAS CANTERAS ET1
Fecha Perturbacion : 03-12-2024 05:36
Fecha Normaliza : 03-12-2024 21:19
Protección : sobrecorriente de fases
Interruptor : 52ET1
Consumo : 1.2
Comentario : -

¿Produce otra indisponibilidad?

No

Zona Afectada

Metropolitana

Comuna

Santiago

Tipo Causa

Causa Definitiva
Causa Principal
Falla ocasionada por animales, roedores o pájaros (por contacto directo u otro)

Comentarios Tipo Causa:

Operacion automatica de 52ET1 por electrocucion de gato en barra 23kV.

Causas

-Fenómeno Físico: Acción de animales, roedores o pájaros (por contacto directo u otro).
-Elemento: Conjunto aislación SE

- Fenómeno Eléctrico:** Protección de sobrecorriente temporizada de fase
- Operación de los interruptores:** Opera según lo esperado

Comentarios Causas:

- Fenómeno Físico:** Operacion automatica de 52ET1 por electrocucion de gato en barra 23kV.
- Elemento:** Operacion automatica de 52ET1 por electrocucion de gato en barra 23kV.
- Fenómeno Eléctrico:** .
- Operación de los interruptores:** .

Observaciones:

- Observaciones:** Consumos respaldados por sistema de generacion interna.
- Acciones Inmediatas:** enviar operador a la subestacion y solicitar revision de protecciones.
- Hechos Sucedidos:** Operacion automatica de 52ET1 por electrocucion de gato en barra 23kV.
- Acciones Correctivas a Corto Plazo:** .
- Acciones Correctivas a Largo Plazo:** .

Afecta SSCC:

No

Afecta Medidores:

No

Afecta Protecciones:

No

Consumo:

Libre

Distribuidoras Afectadas

EDGECONNEX CHILE V SPA / Perd. Estm. de Potencia: 1.2 / Región : Metropolitana / Clientes Afectados: 1

Retorno Automatico:

No Tiene Retorno Automático

Fecha / Hora Perturbación de la Solicitud:

03-12-2024 05:36

Fecha / Hora Estimada Retorno:

03-12-2024 21:19

Fecha / Hora Efectiva Retorno (Ingreso CDC):

03-12-2024 21:19

 Archivos Subidos

Archivo	Fecha Subida
 IF-TX-82_03-12-2024 O.A 52ET1 Las Canteras.zip (/informe_fallas/download_file/674fc4dfad651f67356fb9af/IF-TX-82_03-12-2024 O.A 52ET1 Las Canteras.zip)	10/12/2024 21:50:19

ANEXO N°2

Otros antecedentes aportados por la empresa EDGECONNEX CHILE V
SPA

Informe de Falla

Empresa

EDGECONNEX CHILE V SPA

Código de identificación

IF-TX-82

Versión

1

Operación Automática de Interruptor 23 kV 52ET1 en S/E Las Canteras.

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1. OBJETO

Aportar la información solicitada por el Coordinador Eléctrico Nacional (CEN), debido a una desconexión intempestiva o limitación en las instalaciones de Edgeconnex Chile V SpA, de acuerdo con lo exigido por el procedimiento DO “Informe de falla de los Coordinados”.

2. ANTECEDENTES GENERALES

2.1. Detalles de la instalación fallada

Propietario Instalación Afectada:	Edgeconnex Chile V SpA
RUT Propietario:	77.394.032-0
Representante Legal Propietario:	Tomás Kubick Orrego
Dirección Propietario:	Av. El Bosque Central N° 92, piso 8, Las Condes, Región Metropolitana

Nombre Instalación:	S/E Las Canteras
Tipo de Instalación:	Subestación
Tensión de Línea:	110/23 kV
Segmento:	Transmisión Zonal (Tz)
Tipo de Elemento Fallado:	Aislación
Elemento o Equipo Fallado:	Interrupor (ID16309)

2.2. Resumen del evento

Referencia Informe CEN	2024005319
Fecha inicio:	03/12/2024
Hora inicio:	05:35:57
Fecha término:	03/12/2024
Hora término:	21:19:02
Duración:	15 horas, 43 minutos y 05 segundos
Equipos afectados:	Interrupor 23 kV 52ET1 de S/E Las Canteras
Consumo interrumpido:	1.12 MW
Porcentaje de Desconexión	100%
Comuna donde se origina la falla:	Tiltil
Comunas afectadas por la falla	No aplica
Proposición causa de la falla	Fuerza mayor
Fenómeno Físico	ANI1 (Acción de animales, roedores o pájaros)
Elemento	PR6 (Interrupores)
Fenómeno Eléctrico	SO50 (Sobre corriente instantánea de fase)
Modo	13 (Opera según lo esperado)

Reiteración (SI/NO).	NO
N° de reiteración fenómeno físico	0
Cantidad de fallas	0
Ubicación urbana o rural (DS327, Título IX, Art. 25°)	Alimentador Data Center 1: Urbana Alimentador Data Center 2: Urbana Alimentador Data Center 3: Urbana Alimentador Data Center 4: Urbana

2.3. Descripción de la operación.

Operación automática del interruptor 23 kV 52ET1 asociado al Transformador 110/23 kV N°1 de S/E Las Canteras, afectando los consumos de Edgeconnex.

2.4. Cronología de eventos.

05:35:57 hrs. Operación automática del interruptor 23 kV 52ET1 en S/E Las Canteras, asociado al Transformador 110/23 kV N°1, afectando los consumos de Edgeconnex.

Nota: Los consumos afectados fueron respaldados a través de grupo electrógeno.

08:15 hrs. S/E Las Canteras: personal en terreno reporta falla en paño E1 en 23 kV asociado a Alimentador "Data Center 1" causado por un animal (gato), produciendo descargas en bushing lado línea del interruptor 52E1. Además, reporta que el interruptor 52ET1 se encuentra abierto en patio y que el desconectador lado línea 89E1-2 presenta muestras de descarga por la falla.

09:31 hrs. S/E Las Canteras: abiertos desconectadores 23 kV 89ET1-1 Y 89ET1-2 como maniobra de seguridad requerida para revisión de la instalación por parte del personal de mantenimiento. El desconectador 89ET1-1 presenta problema en su accionamiento.

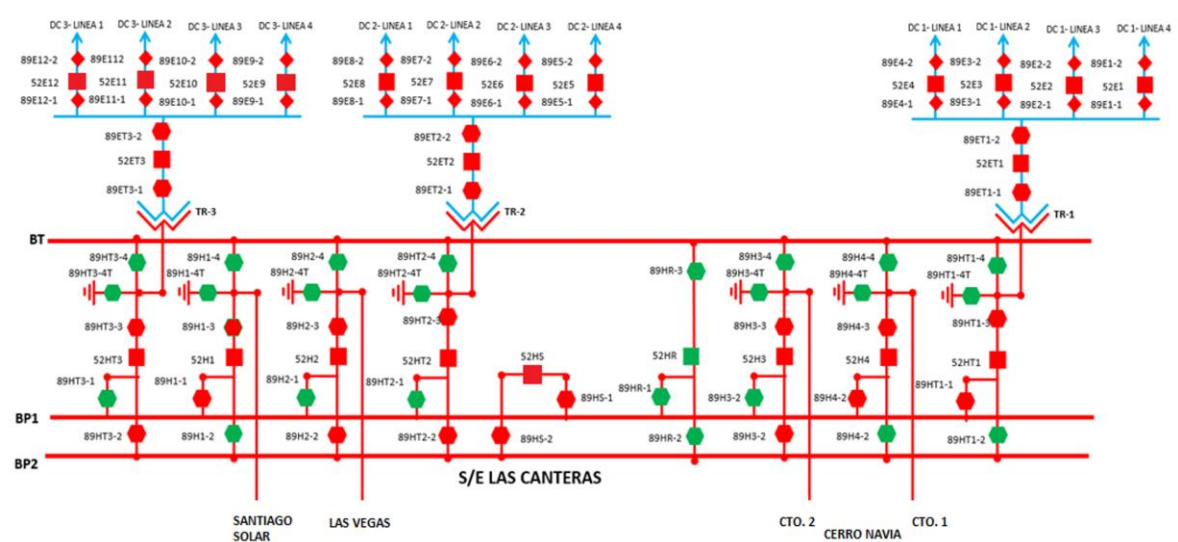
12:02 hrs. S/E Las Canteras: personal de mantenimiento inicia limpieza y pruebas al interruptor 52E1, así como limpieza al desconectador 89E1-2.

16:45:23 hrs. S/E Las Canteras: desconectado el Transformador 110/23 kV N°1 por Curso Forzoso (SD 2024121436) para revisión de mecanismo del desconectador 89ET1-1.

20:37:20 hrs. S/E Las Canteras: energizado en vacío el Transformador 110/23 kV N°1 en coordinación con el CEN tras culminación de reparación en paño E1 en 23 kV y normalización del desconectador 89ET1-1. El interruptor 52ET1 se mantiene abierto.

21:19:02 hrs. S/E Las Canteras: cerrado interruptor 23 kV 52ET1 en coordinación con el CEN y Edgeconnex, energizando los paños E1, E2, E3 y E4 en 23 kV, normalizando el esquema operativo de la subestación.

2.5. Esquema topológico sistema afectado.



2.6. Detalle de consumos afectados

Instalaciones afectadas	Detalle				Horarios		
Subestación	Instalación				Hora desconexión	Hora recuperación	Duración (hh:mm:ss)
Las Canteras	Barra 23 kV N°1				03-12-2024 05:35:57	03-12-2024 21:19:02	15:43:05
Subestaciones	Instalación	Alimentador	NEMA	MW	Hora desconexión	Hora recuperación	Duración (hh:mm:ss)
Las Canteras	Barra 23 kV N°1	Data Center 1	E1	0,28	03-12-2024 05:35:57	03-12-2024 21:19:02	15:43:05
		Data Center 2	E2	0,28	03-12-2024 05:35:57	03-12-2024 21:19:02	15:43:05
		Data Center 3	E3	0,28	03-12-2024 05:35:57	03-12-2024 21:19:02	15:43:05
		Data Center 4	E4	0,28	03-12-2024 05:35:57	03-12-2024 21:19:02	15:43:05
Total				1,12			

La información contenida en la tabla de indisponibilidad, ha sido elaborada considerando la medición de los equipos de medida dispuestos en los paños asociados al evento de referencia, por lo que la inyección de los PMGD's no se encuentra considerada.

3. EVENTOS SCADA

Los eventos registrados por el sistema SCADA se encuentran en el archivo **Eventos SCADA.xls** adjunto a este informe.

4. PROTECCIONES

4.1. Análisis de la actuación del esquema de protecciones

En base al análisis del registro oscilográfico obtenido del relé EFACEC modelo TPU T500, asociado al paño del transformador N°1 110/23 kV de S/E Las Canteras, se puede concluir que la señal de trip es originada por la actuación de la función de sobre corriente de tiempo definido (50) ajustada en el equipo de protección.

A continuación, se pueden observar las corrientes que produjeron la señal de disparo, las cuales se pueden apreciar en el archivo COMTRADE generado por el equipo de protección.

Corrientes de falla (RMS) – EFACEC TPU T500			
Ia (A)	Ib (A)	Ic (A)	In (A)
7444	7106	7188	628

4.2. Ajustes

Se adjunta al informe, el Print-Out del equipo de protección.

4.3. Registros Oscilográficos (UTC ± 00:00)

En el presente apartado, se exponen los registros oscilográficos con las señales analógicas y digitales más relevantes, sin embargo, se encuentran anexados los COMTRADES donde se pueden visualizar la totalidad de las señales.

- EFACEC TPU T500, Sistema 1 TR1 (S/E Las Canteras):



4.4. Registro Eventos (UTC $\pm$ 00:00)

- EFACEC TPU T500, Sistema 1 TR1 (S/E Las Canteras):

Tal y como se aprecia en el archivo adjunto “index_event-log_9_12_2024” extraído el día 09-12-2024 del relé marca EFACEC modelo TPU T500, los eventos del día 03-12-2024 fueron sobre escritos por nuevos eventos, por lo que no es posible presentar el registro asociado a la perturbación en comento.

5. ANTECEDENTES RELEVANTES

5.1. Información Mantenimiento Subestaciones de Poder.

A las 05:35 horas del martes 03 de diciembre del 2024, se produjo la operación intempestiva del interruptor 52ET1 de S/E Las Canteras, accionada por la actuación de la función de sobre corriente de tiempo definido programada en el relé marca EFACEC modelo TPU T500 asociado al transformador de poder 110/23 kV N°1, afectando momentáneamente los consumos de los alimentadores 23 kV, Data Center 1, Data Center 2, Data Center 3 y Data Center 4.

El área de mantenimiento transmisión, al momento de realizar la inspección en terreno de los equipos afectados, pudo localizar e identificar el fenómeno físico causante de la indisponibilidad eléctrica, el cual correspondió a un felino doméstico (gato) que trepó sobre el interruptor de poder 52E1, acortando la distancia dieléctrica entre los puntos energizados de los bushing del interruptor con la estructura metálica soportante de éstos, produciéndose en consecuencia, el respectivo cortocircuito trifásico. Lo anterior, provoca un fulgor de energía que contamina el aislamiento del interruptor 52E1 y el desconectador lado línea 89E1-2.



Figura 1: Gato causante de la indisponibilidad.



Figura 2: Bushing del interruptor 52E1.

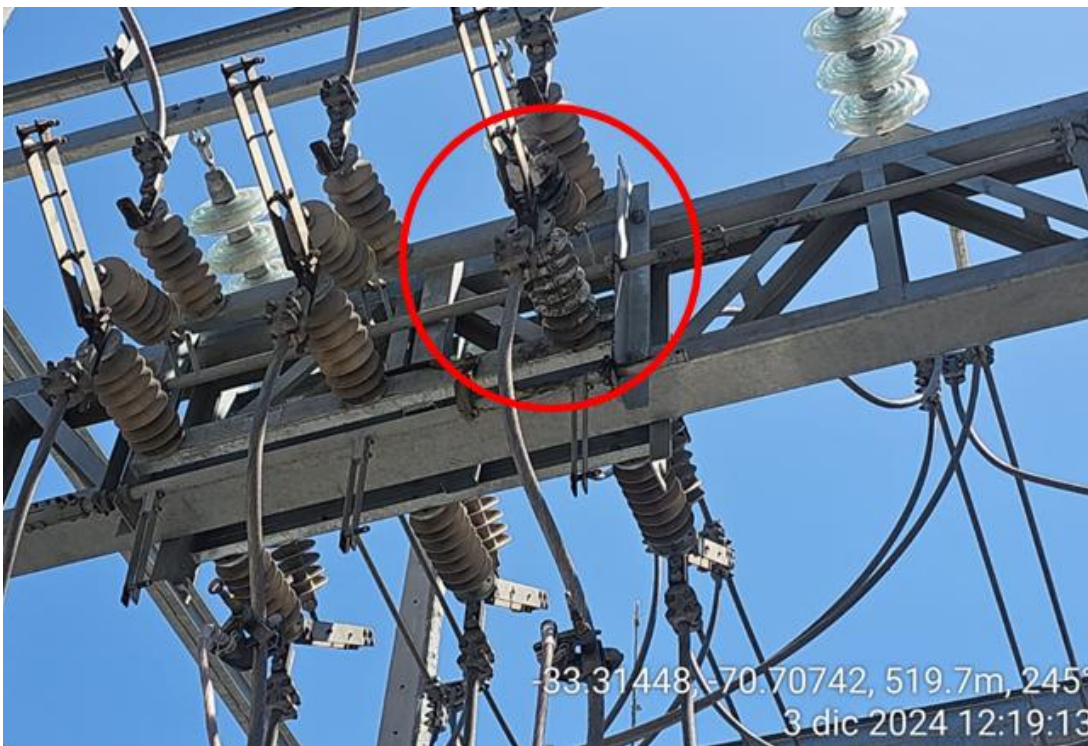


Figura 3: Aislación afectada del desconectador lado línea 89E1-2.

Como medida correctiva inmediata, se procede a limpiar la aislación de los equipos afectados y se realizan pruebas de aislamiento, verificando que los equipos pueden ser energizados nuevamente.



Figura 4: Limpieza aislación 52E1.



Figura 5: Limpieza aislación 89E1-2.

A modo de recaudo, se revisó la totalidad de aislamiento de la subestación sin encontrar daño evidente en otros equipos de S/E Las Canteras.

Como medida de mitigación, se procede a instalar cinta aislante en los conectores del interruptor 52E1 para reducir el riesgo de cortocircuitos.

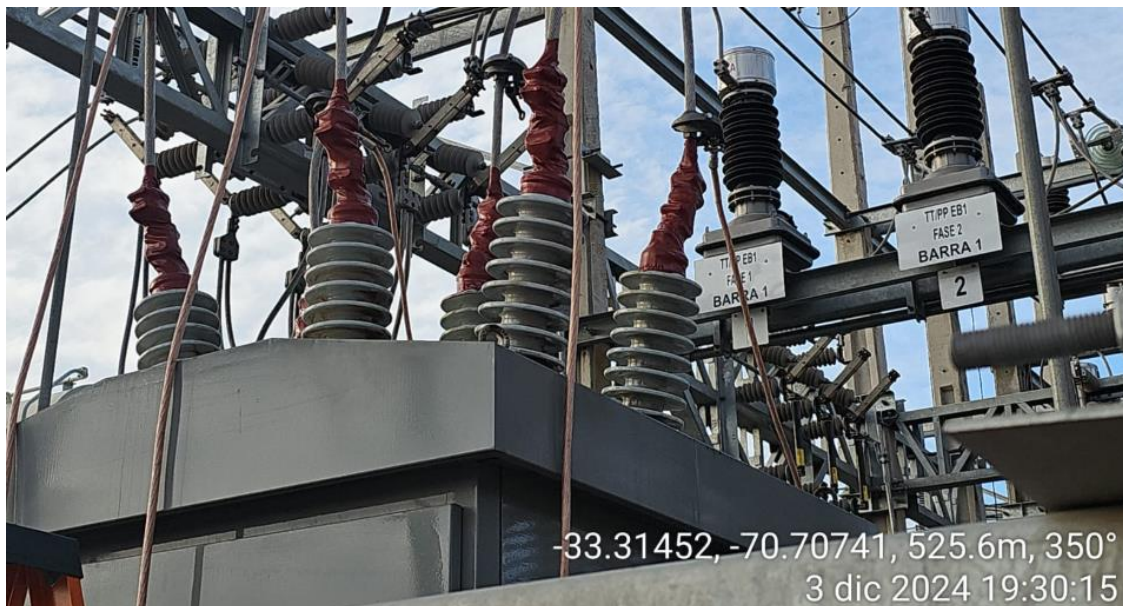


Figura 6: Conectores cubiertos por cinta aislante.

5.2. Mantenimiento de los últimos 24 meses a la subestación Las Canteras

Es del caso indicar que la subestación fue puesta en servicio el año 2024 y los equipos afectados en esta indisponibilidad, tienen su mantenimiento programado dentro de tres años posteriores a la entrada en servicio de la subestación, por lo que el próximo mantenimiento preventivo corresponde realizarlo en el año 2027.

HIST_TIMESTAMP	TEXT	CATEGORY	AREA	EXCDEF	LOCATION	EVENT	RTU_TIME	MS	BAD_RTU_TM	ABNRM	COMPID	PRIOR	
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	206	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	221	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	226	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	246	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	251	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	256	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	261	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	276	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	281	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	296	0	0	1	LCT.TR110.TR	4
03/12/2024 05:35:58d	Op 27/59 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	245	0	1	LCT.SALA_CS	4	
03/12/2024 05:35:58d	Alarma Comun 1 ALARMA	ALARMTA	QTSTC	S224	LCT	0	03/12/2024 0	280	0	1	LCT.SALA_CS	7	
03/12/2024 05:35:58d	Alarma Comun 2 ALARMA	ALARMTA	QTSTC	S224	LCT	0	03/12/2024 0	297	0	1	LCT.SALA_CS	7	
03/12/2024 05:35:58d	Bloqueo 2a Armonica HT1.SP1 TR-1 ALARMA	ALARMAA	QTSTC	S224	LCT	0	03/12/2024 0	306	0	1	LCT.TR110.TR	4	
03/12/2024 05:36:00d	Int.23kV S2HT1 TR-1 ABIERTO	ALARMTA	QTSTC	S224	LCT	0	03/12/2024 0	602	0	1	LCT.IN023.IN	1	
03/12/2024 05:36:00d	Disparo General Protection ET1 TR-1 ALARMA	ALARMTA	QTSTC	S224	LCT	0	03/12/2024 0	573	0	1	LCT.TR110.TR	2	
03/12/2024 05:36:00d	Disparo General Protection ET1 TR-1 NORMAL	ALARMTA	QTSTC	S202	LCT	1	03/12/2024 0	641	0	0	1	LCT.TR110.TR	2
03/12/2024 05:36:00d	Bloqueo 2a Armonica HT1.SP1 TR-1 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	316	0	0	1	LCT.TR110.TR	4
03/12/2024 05:36:00d	Disparo SC Fases Et.1 Lado MT HT1.SP1 TR ALARMA	ALARMTA	QTSTC	S224	LCT	0	03/12/2024 0	598	0	1	LCT.TR110.TR	2	
03/12/2024 05:36:00d	Disparo General Protection ET1 TR-1 ALARMA	ALARMTA	QTSTC	S224	LCT	0	03/12/2024 0	673	0	1	LCT.TR110.TR	2	
03/12/2024 05:36:00d	Disparo General Protection ET1 TR-1 NORMAL	ALARMTA	QTSTC	S202	LCT	1	03/12/2024 0	690	0	0	1	LCT.TR110.TR	2
03/12/2024 05:36:00d	Disparo SC Fases Et.1 Lado MT HT1.SP1 TR NORMAL	ALARMTA	QTSTC	S202	LCT	1	03/12/2024 0	638	0	0	1	LCT.TR110.TR	2
03/12/2024 05:36:00d	Op 27/59 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	985	0	0	LCT.SALA_CS	4	
03/12/2024 05:36:02d	Alarma Comun 1 NORMAL	ALARMTA	QTSTC	S202	LCT	1	03/12/2024 0	895	0	0	LCT.SALA_CS	7	
03/12/2024 05:36:02d	Alarma Comun 2 NORMAL	ALARMTA	QTSTC	S202	LCT	1	03/12/2024 0	912	0	0	LCT.SALA_CS	7	
03/12/2024 07:12:44d	SENDING DEMAND SCAN REQUEST FOR THE STATUS POINT Int.110kV S2HT1 TR-1 BY SZAPATA	OPERATOR	QTSTC	SR1337	LCT	1	03/12/2024 0	0	0	0	LCT.IN110.IN	8	
03/12/2024 09:17:17d	IN_DATA1_L4 ABIERTO	ALARMTA	QTSTC	S224	LCT	1	03/12/2024 0	0	0	0	LCT.IN.IN_DA1	1	
03/12/2024 09:17:17d	IN_DATA1_L4 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QTSTC	SR1225	LCT	1	03/12/2024 0	0	0	0	LCT.IN.IN_DA1	8	
03/12/2024 09:17:50d	CTBC Subiendo Tap TR-2 ALARMA	ALARMSB	QTSTC	S224	LCT	1	03/12/2024 0	341	0	0	1	LCT.TR110.TR	5
03/12/2024 09:17:51d	Accionamiento CTBC TR-2 ALARMA	ALARMSA	QTSTC	S224	LCT	1	03/12/2024 0	560	0	0	1	LCT.TR110.TR	5
03/12/2024 09:17:51d	CTBC Bajando Tap TR-2 ALARMA	ALARMSB	QTSTC	S224	LCT	1	03/12/2024 0	467	0	0	1	LCT.TR110.TR	5
03/12/2024 09:17:51d	Senalización Par/Impar CTBC TR-2 ALARMA	ALARMAA	QTSTC	S224	LCT	1	03/12/2024 0	874	0	0	1	LCT.TR110.TR	4
03/12/2024 09:17:55d	CTBC Bajando Tap TR-2 NORMAL	ALARMSB	QTSTC	S202	LCT	1	03/12/2024 0	404	0	0	1	LCT.TR110.TR	5
03/12/2024 09:17:55d	Accionamiento CTBC TR-2 NORMAL	ALARMSA	QTSTC	S202	LCT	1	03/12/2024 0	727	0	0	1	LCT.TR110.TR	5
03/12/2024 09:17:55d	CTBC Subiendo Tap TR-2 NORMAL	ALARMSB	QTSTC	S202	LCT	1	03/12/2024 0	480	0	1	LCT.TR110.TR	5	
03/12/2024 09:28:15d	DESCONECTADOR 89HT1-1 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	208	0	1	LCT.DE023.DE	1	
03/12/2024 09:28:18d	DESCONECTADOR 89HT1-1 ABIERTO ABIERTO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	830	0	1	LCT.DE023.DE	1	
03/12/2024 09:28:35d	DESCONECTADOR 89HT1-1 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	332	0	1	LCT.DE023.DE	1	
03/12/2024 09:28:38d	DESCONECTADOR 89HT1-1 ABIERTO CERRADO	ALARMB1	QTSTC	S202	LCT	1	03/12/2024 0	872	0	0	LCT.DE023.DE	1	
03/12/2024 09:28:44d	DESCONECTADOR 89HT1-1 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	794	0	1	LCT.DE023.DE	1	
03/12/2024 09:28:47d	DESCONECTADOR 89HT1-1 ABIERTO ABIERTO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	344	0	1	LCT.DE023.DE	1	
03/12/2024 09:28:59d	DESCONECTADOR 89HT1-1 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	191	0	1	LCT.DE023.DE	1	
03/12/2024 09:29:03d	DESCONECTADOR 89HT1-1 ABIERTO CERRADO	ALARMB1	QTSTC	S202	LCT	1	03/12/2024 0	765	0	0	LCT.DE023.DE	1	
03/12/2024 09:29:31d	DESCONECTADOR 89HT1-1 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	245	0	1	LCT.DE023.DE	1	
03/12/2024 09:29:17d	DESCONECTADOR 89HT1-1 ABIERTO ABIERTO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	992	0	1	LCT.DE023.DE	1	
03/12/2024 09:31:21d	DESCONECTADOR 89HT1-2 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	212	0	1	LCT.DE023.DE	1	
03/12/2024 09:31:23d	DESCONECTADOR 89HT1-2 ABIERTO ABIERTO	ALARMB1	QTSTC	S224	LCT	0	03/12/2024 0	298	0	1	LCT.DE023.DE	1	
03/12/2024 09:50:57d	CTBC Subiendo Tap TR-2 ALARMA	ALARMSB	QTSTC	S224	LCT	1	03/12/2024 0	950	0	0	1	LCT.TR110.TR	5
03/12/2024 09:50:58d	Accionamiento CTBC TR-2 ALARMA	ALARMSA	QTSTC	S224	LCT	1	03/12/2024 0	184	0	0	1	LCT.TR110.TR	5
03/12/2024 09:50:58d	CTBC Bajando Tap TR-2 ALARMA	ALARMSB	QTSTC	S224	LCT	1	03/12/2024 0	92	0	0	1	LCT.TR110.TR	5
03/12/2024 09:51:01d	Senalización Par/Impar CTBC TR-2 NORMAL	ALARMAA	QTSTC	S202	LCT	1	03/12/2024 0	606	0	0	1	LCT.TR110.TR	4
03/12/2024 09:51:02d	Accionamiento CTBC TR-2 NORMAL	ALARMSA	QTSTC	S202	LCT	1	03/12/2024 0	327	0	0	1	LCT.TR110.TR	5
03/12/2024 09:51:02d	CTBC Subiendo Tap TR-2 NORMAL	ALARMSB	QTSTC	S202	LCT	1	03/12/2024 0	75	0	0	1	LCT.TR110.TR	5
03/12/2024 09:51:02d	CTBC Bajando Tap TR-2 NORMAL	ALARMSB	QTSTC	S202	LCT	1	03/12/2024 0	0	0	0	1	LCT.TR110.TR	5
03/12/2024 10:07:55d	Authorized by user: GURDANET@SCADA	TAGGING	QTSTC	TGLOG003	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:07:55d	Created by: GURDANET@SCADA Created For: GURDANET@SCADA	TAGGING	QTSTC	TGLOG005	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:07:55d	Tag: 1 [TCHQTS6619028] Type: DO NOT OPERATE Placed on: LCT.DE023.DE_BA1_TR1.AC	TAGGING	QTSTC	TGLOG001	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:08:19d	Authorized by user: GURDANET@SCADA	TAGGING	QTSTC	TGLOG005	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:08:19d	Created by: GURDANET@SCADA Created For: GURDANET@SCADA	TAGGING	QTSTC	TGLOG005	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:08:19d	Tag: 1 [TCHQTS6619043] Type: DO NOT OPERATE Placed on: LCT.DE023.DE_TR1.AC	TAGGING	QTSTC	TGLOG001	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:08:31d	Authorized by user: GURDANET@SCADA	TAGGING	QTSTC	TGLOG003	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:08:31d	Removed by: GURDANET@SCADA Removed For: GURDANET@SCADA	TAGGING	QTSTC	TGLOG007	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:08:31d	Tag: 1 [TCHQTS6619043] Type: DO NOT OPERATE Removed from: LCT.DE023.DE_TR1.AC	TAGGING	QTSTC	TGLOG001	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:09:15d	DESCONECTADOR 89HT1-1 ABIERTO STATUS REMOVED BY GURDANET CURRENT STATUS ABIERTO	OPERATOR	QTSTC	SR1210	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:09:17d	DESCONECTADOR 89HT1-1 ABIERTO TRANSITO	ALARMB1	QTSTC	S224	LCT	1	03/12/2024 0	992	0	1	LCT.DE023.DE	1	
03/12/2024 10:09:17d	DESCONECTADOR 89HT1-1 ABIERTO STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS TRANSITO	OPERATOR	QTSTC	SR1224	LCT	1	03/12/2024 1	0	0	0	LCT.DE023.DE	8	
03/12/2024 10:09:36d	IN_DATA1_L3 ABIERTO	ALARMTA	QTSTC	S224	LCT	1	03/12/2024 1	0	0	0	LCT.IN.IN_DA1	1	
03/12/2024 10:09:36d	IN_DATA1_L3 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QTSTC	SR1225	LCT	1	03/12/2024 1	0	0	0	LCT.IN.IN_DA1	8	
03/12/2024 10:09:46d	IN_DATA1_L2 ABIERTO	ALARMTA	QTSTC	S224	LCT	1	03/12/2024 1	0	0	0	LCT.IN.IN_DA1	1	
03/12/2024 10:09:46d	IN_DATA1_L2 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QTSTC	SR1225	LCT	1	03/12/2024 1	0	0	0	LCT.IN.IN_DA1	8	
03/12/2024 10:09:55d	IN_DATA1_L1 ABIERTO	ALARMTA	QTSTC	S224	LCT	1	03/12/2024 1	0	0	0	LCT.IN.IN_DA1	1	
03/12/2024 10:09:55d	IN_DATA1_L1 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QTSTC	SR1225	LCT	1	03/12/2024 1	0	0	0	LCT.IN.IN_DA1	8	
03/12/2024 10:10:09d	Desc.23kV BA1 - L4 ABIERTO	ALARMB1	QTSTC	S224	LCT	1	03/12/2024 1	0	0	1	LCT.DE.DE_BA	1	
03/12/2024 10:10:09d	Desc.23kV BA1 - L4 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QTSTC	SR1225	LCT	1	03/12/2024 1	0	0	0	LCT.DE.DE_BA	8	
03/12/2024 10:10:16d	Desc.23kV DATA1 - L4 ABIERTO	ALARMB1	QTSTC	S224	LCT	1	03/12/2024 1	0	0	1	LCT.DE.DE_DJ	1	
03/12/2024 10:10:16d	Desc.23kV DATA1 - L4 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QTSTC	SR1225	LCT	1	03/12/2024 1	0	0	0	LCT.DE.DE_DJ	8	
03/12/2024 10:11:49d	Authorized by user: GURDANET@SCADA	TAGGING	QTSTC	TGLOG003	LCT	1	03/12/2024 1	0	0	0	LCT.DE.DE_BA	8	
03/12/2024 10:11:49d	Created by: GURDANET@SCADA Created For: GURDANET@SCADA	TAGGING	QTSTC	TGLOG005	LCT	1	03/12/2024 1	0	0	0	LCT.DE.DE_BA	8	
03/12/2024 10:11:49d	Tag: 1 [TCHQTS6619115] Type: DO NOT OPERATE Placed on: LCT.DE.DE_BA1_L4.AC	TAGGING	QTSTC	TGLOG001	LCT	1	03/12/2024 1	0	0	0	LCT.DE.DE_BA	8	
03/12/2024 12:07:54d	CTBC Subiendo Tap TR-2 ALARMA	ALARMSB	QTSTC	S224	LCT	1	03/12/2024 1	212	0	0	1	LCT.TR110.TR	5
03/12/2024 12:07:54d	Accionamiento CTBC TR-2 ALARMA	ALARMSA	QTSTC	S224	LCT	1	03/12/2024 1	446	0	0	1	LCT.TR110.TR	5
03/12/2024 12:07:54d	CTBC Bajando Tap TR-2 ALARMA	ALARMSB	QTSTC	S224	LCT	1	03/12/2024 1	354	0	0	1	LCT.TR110.TR	5
03/12/2024 12:07:54d	Senalización Par/Impar CTBC TR-2 ALARMA	ALARMAA	QTSTC	S224	LCT	1	03/12/2024 1	683	0	0	1	LCT.TR110.TR	4
03/12/2024 12:07:56d	CTBC Bajando Tap TR-2 NORMAL	ALARMSB	QTSTC	S202	LCT	1	03/12/2024 1	256	0	0	1	LCT.TR110.TR	5
03/12/2024 12:07:56d	CTBC Subiendo Tap TR-2 NORMAL	ALARMSB	QTSTC	S202	LCT	1	03/12/2024 1	331	0	0	1	LCT.TR110.TR	5
03/12/2024 12:07:57d	Accionamiento CTBC TR-2 NORMAL	ALARMSA	QTSTC	S202	LCT	1	03/12/2024 1	580	0	0	1	LCT.TR110.TR	5

03/12/2024 16:46:37d	Permiso 52HT1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	921	0	0	LCT:IN10.IN.	4
03/12/2024 16:46:37d	Permiso 52HT1 HT1.DER abierto NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	921	0	0	LCT:DE10.DE	4
03/12/2024 16:46:37d	Permiso 89HT1-3T HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	921	0	0	LCT:DE10.DE	4
03/12/2024 16:46:37d	Permiso 89HT1-3T HT1.DER abierto NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	921	0	0	LCT:DE10.DE	4
03/12/2024 16:46:37d	Permiso 89HT1-4T HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	921	0	0	LCT:DE10.DE	4
03/12/2024 16:47:45d	Desc.110KV 89HT1-1 TRANSITO BY GURDANET	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	375	0	1	LCT:DE10.DE	1
03/12/2024 16:47:46d	Desc.110KV 89HT1-1 ABIERTO BY SCADA	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	943	0	1	LCT:DE10.DE	1
03/12/2024 16:47:46d	Permiso 52HT1 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	375	0	0	LCT:IN10.IN.	4
03/12/2024 16:47:46d	Permiso 52HT1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	943	0	0	LCT:IN10.IN.	4
03/12/2024 16:47:46d	Permiso 89HT1-1T HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	943	0	0	LCT:DE10.DE	4
03/12/2024 16:47:46d	Permiso 89HT1-1T HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	375	0	0	LCT:DE10.DE	4
03/12/2024 16:47:46d	Permiso 89HT1-2 HT1.DER abierto NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	943	0	0	LCT:DE10.DE	4
03/12/2024 16:47:46d	Permiso 89HT1-2 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	375	0	0	LCT:DE10.DE	4
03/12/2024 16:47:46d	Permiso 89HT1-2 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	943	0	0	LCT:DE10.DE	4
03/12/2024 16:57:20d	Desbloqueo Enclavamientos HT1.DER NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	48	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:20d	Desbloqueo Enclavamientos HT1.DER NORMAL	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	110	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:21d	Desbloqueo Enclavamientos HT1.DER NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	2902	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:21d	Desbloqueo Enclavamientos HT1.DER NORMAL	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	540	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:30d	Permiso 52HT1 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	692	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:39d	Sel./R Gab 52HT1 LOCAL	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	882	0	1	LCT:IN10.IN.	5
03/12/2024 16:57:39d	Permiso 52HT1 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	692	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:56d	Sel./R Gab 52HT1 TRANSITO	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	49	0	1	LCT:IN10.IN.	5
03/12/2024 16:57:56d	Sel./R Gab 52HT1 REMOTO	ALARMSB	QCTSTC	S202	LCT	1	03/12/2024	188	0	0	LCT:IN10.IN.	5
03/12/2024 16:57:56d	Permiso 52HT1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	188	0	0	LCT:IN10.IN.	4
03/12/2024 16:57:56d	Permiso 52HT1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	188	0	0	LCT:IN10.IN.	4
03/12/2024 16:58:11d	Permiso 52HT1 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	806	0	0	LCT:IN10.IN.	4
03/12/2024 16:58:11d	Sel./R Gab 52HT1 LOCAL	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	932	0	1	LCT:IN10.IN.	5
03/12/2024 16:58:11d	Permiso 52HT1 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	806	0	0	LCT:IN10.IN.	4
03/12/2024 16:58:21d	Permiso 89HT1-1 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Sel./R Gab 89HT1 LOCAL	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	537	0	1	LCT:DE10.DE	5
03/12/2024 16:58:22d	Permiso 89HT1-1 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-1 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-1 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-2 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-2 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-3 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-3 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-3 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-4 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-4 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-4 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-4 HT1.DER abierto BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:22d	Permiso 89HT1-4 HT1.DER cerrado BLOQUEADO	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	371	0	0	LCT:DE10.DE	4
03/12/2024 16:58:37d	Op.TM Cal/Alum 52HT1 ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	500	0	1	LCT:IN10.IN.	4
03/12/2024 16:58:42d	Op.TM Motor 52HT1 ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	485	0	1	LCT:IN10.IN.	4
03/12/2024 16:58:44d	Falla Motor 52HT1 ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	708	0	1	LCT:IN10.IN.	4
03/12/2024 16:58:45d	Falla Motor 52HT1 NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	854	0	0	LCT:IN10.IN.	4
03/12/2024 16:58:45d	Op.TM Motor 52HT1 NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	854	0	0	LCT:IN10.IN.	4
03/12/2024 16:58:45d	Op.TM Cal/Alum 52HT1 NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	854	0	0	LCT:IN10.IN.	4
03/12/2024 16:58:45d	Op.Cuadro de Alarmas HT1.DER ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	854	0	1	LCT:IN10.IN.	7
03/12/2024 16:58:51d	Superv.Bobina 1 HT1.DER ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	244	0	1	LCT:IN10.IN.	4
03/12/2024 16:58:52d	Superv.Bobina 1 HT1.DER ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	734	0	1	LCT:IN10.IN.	4
03/12/2024 16:59:53d	Authorized by user: GURDANET@SCADA	TAGGING	QCTSTC	TGLOG003	LCT	1	03/12/2024	0	0	0	LCT:IN10.IN.	8
03/12/2024 16:59:53d	Created By: GURDANET@SCADA Created For: GURDANET@SCADA	TAGGING	QCTSTC	TGLOG005	LCT	1	03/12/2024	0	0	0	LCT:IN10.IN.	8
03/12/2024 16:59:53d	Tag: 1 (TCHQTS661F089) Type: DO NOT OPERATE Placed on: POINT LCT IN110 IN_TR1 AC	TAGGING	QCTSTC	TGLOG001	LCT	1	03/12/2024	0	0	0	LCT:IN10.IN.	8
03/12/2024 19:32:50d	DESCONECTOR 89ET1-1 ABIERTO ABIERTO	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	689	0	1	LCT:DE03.DE	8
03/12/2024 19:32:50d	DESCONECTOR 89ET1-1 ABIERTO STATUS RESTORED BY GURDANET CURRENT STATUS ABIERTO	OPERATOR	QCTSTC	SR1210	LCT	1	03/12/2024	0	0	0	LCT:DE03.DE	8
03/12/2024 20:18:21d	Desc. 23KV DE_TRSA STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	QCTSTC	SR1225	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_TR	8
03/12/2024 20:24:11d	Authorized by user: GURDANET@SCADA	TAGGING	QCTSTC	TGLOG003	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:24:11d	Removed By: GURDANET@SCADA Removed For: GURDANET@SCADA	TAGGING	QCTSTC	TGLOG007	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:24:11d	Tag: 1 (TCHQTS6619115) Type: DO NOT OPERATE Removed from: POINT LCT DE_DE_BA1_L4 AC	TAGGING	QCTSTC	TGLOG001	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:27:36d	Desc. 23KV BA1 - L1 ABIERTO	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	0	0	1	LCT:DE_DE_BA	1
03/12/2024 20:27:36d	Desc. 23KV BA1 - L1 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QCTSTC	SR1225	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:27:42d	Desc. 23KV BA1 - L2 ABIERTO	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	0	0	1	LCT:DE_DE_BA	1
03/12/2024 20:27:58d	Desc. 23KV BA1 - L2 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QCTSTC	SR1225	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:27:58d	Desc. 23KV BA1 - L3 ABIERTO	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	0	0	1	LCT:DE_DE_BA	1
03/12/2024 20:27:58d	Desc. 23KV BA1 - L3 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QCTSTC	SR1225	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:28:20d	Desc. 23KV BA1 - L4 ABIERTO	ALARMB1B	QCTSTC	S224	LCT	1	03/12/2024	0	0	1	LCT:DE_DE_BA	1
03/12/2024 20:28:20d	Desc. 23KV BA1 - L4 STATUS MANUAL ENTRY BY GURDANET WAS CERRADO IS ABIERTO	OPERATOR	QCTSTC	SR1225	LCT	1	03/12/2024	0	0	0	LCT:DE_DE_BA	8
03/12/2024 20:30:12d	Op.TM Control 52HT1 ALARMA	ALARMAA	QCTSTC	S224	LCT	1	03/12/2024	542	0	1	LCT:IN10.IN.	4
03/12/2024 20:30:12d	Op.Cuadro de Alarmas HT1.DER NORMAL	ALARMB7A	QCTSTC	S202	LCT	1	03/12/2024	523	0	0	LCT:IN10.IN.	7
03/12/2024 20:30:14d	Superv.Bobina 2 HT1.DER NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	491	0	0	LCT:IN10.IN.	4
03/12/2024 20:30:14d	Superv.Bobina 3 HT1.DER NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	101	0	0	LCT:IN10.IN.	4
03/12/2024 20:30:14d	Op.TM Control 52HT1 NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	89	0	0	LCT:IN10.IN.	4
03/12/2024 20:30:16d	Sel./R Gab 52HT1 TRANSITO	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	499	0	1	LCT:DE_DE_BA	5
03/12/2024 20:30:17d	Sel./R Gab 52HT1 REMOTO	ALARMSB	QCTSTC	S202	LCT	1	03/12/2024	614	0	0	LCT:IN10.IN.	5
03/12/2024 20:30:17d	Permiso 52HT1 HT1.DER abierto NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	614	0	0	LCT:IN10.IN.	4
03/12/2024 20:30:17d	Permiso 52HT1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	614	0	0	LCT:IN10.IN.	4
03/12/2024 20:30:22d	Sel./R Gab 89HT1 ERROR	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	828	0	1	LCT:DE10.DE	5
03/12/2024 20:30:22d	Sel./R Gab 89HT1 REMOTO	ALARMSB	QCTSTC	S224	LCT	1	03/12/2024	735	0	0	LCT:DE10.DE	5
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER abierto NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER abierto NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL	ALARMAA	QCTSTC	S202	LCT	1	03/12/2024	828	0	0	LCT:DE10.DE	4
03/12/2024 20:30:22d	Permiso 89HT1-1 HT1.DER cerrado NORMAL											

03/12/2024 20:37:23d	Permisivo 89HT1-4 HT1.DER abierto BLOQUEADO	ALARM4A	CQTSTC	S224	LCT	1	03/12/2024 2	724	0	0	LCT.DE110.DE	4
03/12/2024 20:37:23d	Permisivo 89HT1-4 HT1.DER cerrado BLOQUEADO	ALARM4A	CQTSTC	S224	LCT	1	03/12/2024 2	724	0	0	LCT.DE110.DE	4
03/12/2024 20:37:23d	Resorte Descargado 52HT1 ALARMA	ALARM4C	CQTSTC	S224	LCT	0	03/12/2024 2	717	0	1	LCT.IN110.IN	4
03/12/2024 20:37:27d	Resorte Descargado 52HT1 NORMAL	ALARM4C	CQTSTC	S202	LCT	1	03/12/2024 2	143	0	0	LCT.IN110.IN	4
03/12/2024 20:37:28d	Permisivo 52HT1 HT1.DER cerrado NORMAL	ALARM4A	CQTSTC	S202	LCT	1	03/12/2024 2	143	0	0	LCT.IN110.IN	4
03/12/2024 20:37:28d	Permisivo 52HT1 HT1.DER cerrado BLOQUEADO	ALARM4A	CQTSTC	S224	LCT	1	03/12/2024 2	149	0	0	LCT.IN110.IN	4
03/12/2024 20:37:28d	Resorte Descargado 52HT1 ALARMA	ALARM4C	CQTSTC	S224	LCT	0	03/12/2024 2	149	0	1	LCT.IN110.IN	4
03/12/2024 20:37:28d	Permisivo 52HT1 HT1.DER cerrado NORMAL	ALARM4A	CQTSTC	S202	LCT	1	03/12/2024 2	194	0	0	LCT.IN110.IN	4
03/12/2024 20:37:28d	Resorte Descargado 52HT1 NORMAL	ALARM4C	CQTSTC	S202	LCT	1	03/12/2024 2	194	0	0	LCT.IN110.IN	4
03/12/2024 20:38:22d	LCT.IN023.IN_TR1.AC.CERRAR CONTROL ACTION FAILED BECAUSE OF COMMUNICATION FAILURE.	CONTROL	CQTSTC	CLA004	LCT	1	03/12/2024 2	0	0	0	LCT.IN023.IN	8
03/12/2024 20:46:02d	Desc.23KV BA1 - L1 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	1
03/12/2024 20:46:02d	Desc.23KV BA1 - L1 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	8
03/12/2024 20:46:05d	Desc.23KV BA1 - L4 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	1
03/12/2024 20:46:05d	Desc.23KV BA1 - L4 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	8
03/12/2024 20:46:08d	Desc.23KV BA1 - L3 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	1
03/12/2024 20:46:08d	Desc.23KV BA1 - L3 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	8
03/12/2024 20:46:10d	Desc.23KV BA1 - L2 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	1
03/12/2024 20:46:10d	Desc.23KV BA1 - L2 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_BA	8
03/12/2024 20:46:14d	IN_DATA1_L4 CERRADO	ALARM1A	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	1
03/12/2024 20:46:14d	IN_DATA1_L4 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	8
03/12/2024 20:46:18d	IN_DATA1_L3 CERRADO	ALARM1A	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	1
03/12/2024 20:46:18d	IN_DATA1_L3 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	8
03/12/2024 20:46:28d	IN_DATA1_L2 CERRADO	ALARM1A	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	1
03/12/2024 20:46:28d	IN_DATA1_L2 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	8
03/12/2024 20:46:35d	IN_DATA1_L1 CERRADO	ALARM1A	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	1
03/12/2024 20:46:35d	IN_DATA1_L1 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.IN.IN_DA	8
03/12/2024 20:47:12d	LCT.IN023.IN_TR1.AC.CERRAR CONTROL ACTION FAILED BECAUSE OF COMMUNICATION FAILURE.	CONTROL	CQTSTC	CLA004	LCT	1	03/12/2024 2	0	0	0	LCT.IN023.IN	8
03/12/2024 20:55:24d	Desc.23KV DATA1 - L4 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	1
03/12/2024 20:55:24d	Desc.23KV DATA1 - L4 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	8
03/12/2024 20:55:31d	Desc.23KV DATA1 - L3 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	1
03/12/2024 20:55:31d	Desc.23KV DATA1 - L3 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	8
03/12/2024 20:55:36d	Desc.23KV DATA1 - L2 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	1
03/12/2024 20:55:36d	Desc.23KV DATA1 - L2 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	8
03/12/2024 20:55:44d	Desc.23KV DATA1 - L1 CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	1
03/12/2024 20:55:44d	Desc.23KV DATA1 - L1 STATUS MANUAL ENTRY BY GURDANET WAS ABIERTO IS CERRADO	OPERATOR	CQTSTC	SRL225	LCT	1	03/12/2024 2	0	0	0	LCT.DE.DE_DA	8
03/12/2024 20:56:18d	LCT.IN023.IN_TR1.AC.CERRAR CONTROL ACTION FAILED BECAUSE OF COMMUNICATION FAILURE.	CONTROL	CQTSTC	CLA004	LCT	1	03/12/2024 2	0	0	0	LCT.IN023.IN	8
03/12/2024 21:07:47d	DESCONECTOR 89ET1-1 ABIERTO TRANSITO	ALARM1B	CQTSTC	S224	LCT	0	03/12/2024 2	324	0	1	LCT.DE023.DE	1
03/12/2024 21:07:50d	DESCONECTOR 89ET1-1 ABIERTO ABIERTO	ALARM1B	CQTSTC	S224	LCT	0	03/12/2024 2	936	0	1	LCT.DE023.DE	1
03/12/2024 21:08:18d	DESCONECTOR 89ET1-1 ABIERTO TRANSITO	ALARM1B	CQTSTC	S224	LCT	0	03/12/2024 2	853	0	1	LCT.DE023.DE	1
03/12/2024 21:08:21d	DESCONECTOR 89ET1-1 ABIERTO CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	283	0	0	LCT.DE023.DE	1
03/12/2024 21:08:47d	LCT.IN023.IN_TR1.AC.CERRAR CONTROL ACTION FAILED BECAUSE OF COMMUNICATION FAILURE.	CONTROL	CQTSTC	CLA004	LCT	1	03/12/2024 2	0	0	0	LCT.IN023.IN	8
03/12/2024 21:11:14d	LCT.IN023.IN_TR1.AC.CERRAR CONTROL ACTION FAILED BECAUSE OF COMMUNICATION FAILURE.	CONTROL	CQTSTC	CLA004	LCT	1	03/12/2024 2	0	0	0	LCT.IN023.IN	8
03/12/2024 21:12:16d	DESCONECTOR 89ET1-1 ABIERTO TRANSITO	ALARM1B	CQTSTC	S224	LCT	0	03/12/2024 2	675	0	1	LCT.DE023.DE	1
03/12/2024 21:12:20d	DESCONECTOR 89ET1-1 ABIERTO ABIERTO	ALARM1B	CQTSTC	S224	LCT	0	03/12/2024 2	284	0	1	LCT.DE023.DE	1
03/12/2024 21:18:33d	DESCONECTOR 89ET1-1 ABIERTO TRANSITO	ALARM1B	CQTSTC	S224	LCT	0	03/12/2024 2	329	0	1	LCT.DE023.DE	1
03/12/2024 21:18:37d	DESCONECTOR 89ET1-1 ABIERTO CERRADO	ALARM1B	CQTSTC	S202	LCT	1	03/12/2024 2	790	0	0	LCT.DE023.DE	1
03/12/2024 21:19:03d	Int.23KV 52ET1 TR-1 TRANSITO	ALARM1A	CQTSTC	S224	LCT	1	03/12/2024 2	230	0	1	LCT.IN023.IN	1
03/12/2024 21:19:04d	Int.23KV 52ET1 TR-1 CERRADO By GURDANET	ALARM1A	CQTSTC	S202	LCT	1	03/12/2024 2	238	0	0	LCT.IN023.IN	1

Operational Settings

Bay - TPU_T500_HT1

Device

Model	TPU T500
Manufacturer	EFACEC
Order Code	TPU T500-2-1-B-2-C-B-B-B-X-E-E-F-J-X-X-X-Q-X-X-X-6-XXXX-6-1-CXXX-A2B2C2D2E3F2
Configuration Version	1.250
Parameter Revision	1.2
File Name	C:\Users\997182.EFACEC\Downloads\SE_COLINA\CONF_COLINA\231207_COLINA\COLINA\COLINA\Substation\HT1\TPU_T500_HT1\Settings\current.aset
File Date	2023-12-29 12:50:15.831266700
Export Date	2023-12-29 12:51:47.527827

Logical Device CTRL

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.0

Function CBCtrl1

52HT1

Setting	Description	Values
OpenCmdDelay	Delay for open command	Group 1: 0 s Group 2: 0 s Group 3: 0 s Group 4: 0 s Group 5: 0 s Group 6: 0 s Group 7: 0 s Group 8: 0 s
CloseCmdDelay	Delay for close command	Group 1: 0 s Group 2: 0 s Group 3: 0 s Group 4: 0 s Group 5: 0 s Group 6: 0 s Group 7: 0 s Group 8: 0 s
BypassTime	Bypass timeout	Group 1: 180 s Group 2: 180 s Group 3: 180 s Group 4: 180 s Group 5: 180 s Group 6: 180 s Group 7: 180 s Group 8: 180 s
ManSyncTime	Maximum allowed synchronism check time for manual close operation	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms

		Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
AutSyncTime	Maximum allowed synchronism check time for automatic close operation	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms

Function CB3PhAdv1 52HT1

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 200 ms Group 2: 200 ms Group 3: 200 ms Group 4: 200 ms Group 5: 200 ms Group 6: 200 ms Group 7: 200 ms Group 8: 200 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 200 ms Group 2: 200 ms Group 3: 200 ms Group 4: 200 ms Group 5: 200 ms Group 6: 200 ms Group 7: 200 ms Group 8: 200 ms
NumCloseRetries	Number of close retries for automatic commands	Group 1: 1 Group 2: 1 Group 3: 1 Group 4: 1 Group 5: 1 Group 6: 1 Group 7: 1 Group 8: 1
CloseRetryInterval	Time interval between reclose retries	Group 1: 15 s Group 2: 15 s Group 3: 15 s Group 4: 15 s Group 5: 15 s Group 6: 15 s Group 7: 15 s Group 8: 15 s
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE

		Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpenStartTime	Maximum allowed time for movement to start in an opening operation	Group 1: 100 ms Group 2: 100 ms Group 3: 100 ms Group 4: 100 ms Group 5: 100 ms Group 6: 100 ms Group 7: 100 ms Group 8: 100 ms
MaxCloseStartTime	Maximum allowed time for movement to start in a closing operation	Group 1: 100 ms Group 2: 100 ms Group 3: 100 ms Group 4: 100 ms Group 5: 100 ms Group 6: 100 ms Group 7: 100 ms Group 8: 100 ms
MaxOpenOpTime	Maximum allowed time for opening operation	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxCloseOpTime	Maximum allowed time for closing operation	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
OpenOpTimeCorr	Opening operation time correction	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
CloseOpTimeCorr	Closing operation time correction	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000

		Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000
SwitchCurrExponent	Exponent for switched currents sum	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
MaxSwitchCurrSum	Maximum allowed squared switched currents sum	Group 1: 100.0 kA² Group 2: 100.0 kA ² Group 3: 100.0 kA ² Group 4: 100.0 kA ² Group 5: 100.0 kA ² Group 6: 100.0 kA ² Group 7: 100.0 kA ² Group 8: 100.0 kA ²
RatedOpCurr	Rated operational current	Group 1: 1.0 kA Group 2: 1.0 kA Group 3: 1.0 kA Group 4: 1.0 kA Group 5: 1.0 kA Group 6: 1.0 kA Group 7: 1.0 kA Group 8: 1.0 kA
MaxOpRated	Number of supported opening operations at rated current	Group 1: 10000 Group 2: 10000 Group 3: 10000 Group 4: 10000 Group 5: 10000 Group 6: 10000 Group 7: 10000 Group 8: 10000
MaxFaultCurr	Maximum interruptable fault current	Group 1: 10.0 kA Group 2: 10.0 kA Group 3: 10.0 kA Group 4: 10.0 kA Group 5: 10.0 kA Group 6: 10.0 kA Group 7: 10.0 kA Group 8: 10.0 kA
MaxOpFault	Number of supported opening operations at maximum fault current	Group 1: 100 Group 2: 100 Group 3: 100 Group 4: 100 Group 5: 100 Group 6: 100 Group 7: 100 Group 8: 100
RefCurrMult	Rated operational current multiplier used as reference for contact wear monitoring	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0

		Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
WearMonitCriterion	Contact wear monitoring criterion	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
WearWarningLevel	Contact wear warning level	Group 1: 5 Group 2: 5 Group 3: 5 Group 4: 5 Group 5: 5 Group 6: 5 Group 7: 5 Group 8: 5
WearAlarmLevel	Contact wear alarm level	Group 1: 1 Group 2: 1 Group 3: 1 Group 4: 1 Group 5: 1 Group 6: 1 Group 7: 1 Group 8: 1

Function SW1 89HT1-1

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE

		Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW2 89HT1-2

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms

		Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW3 89HT1-3

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms

		Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW4
89HT1-4

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF

		Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

52ET1

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 200 ms Group 2: 200 ms Group 3: 200 ms Group 4: 200 ms Group 5: 200 ms Group 6: 200 ms Group 7: 200 ms Group 8: 200 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 200 ms Group 2: 200 ms Group 3: 200 ms Group 4: 200 ms Group 5: 200 ms Group 6: 200 ms Group 7: 200 ms Group 8: 200 ms
NumCloseRetries	Number of close retries for automatic commands	Group 1: 1 Group 2: 1 Group 3: 1 Group 4: 1 Group 5: 1 Group 6: 1 Group 7: 1 Group 8: 1
CloseRetryInterval	Time interval between reclose retries	Group 1: 15 s Group 2: 15 s Group 3: 15 s Group 4: 15 s Group 5: 15 s Group 6: 15 s Group 7: 15 s Group 8: 15 s
IntermediateState	Show intermediate position	Group 1: HIDE Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpenStartTime	Maximum allowed time for movement to start in an opening operation	Group 1: 100 ms Group 2: 100 ms

		Group 3: 100 ms Group 4: 100 ms Group 5: 100 ms Group 6: 100 ms Group 7: 100 ms Group 8: 100 ms
MaxCloseStartTime	Maximum allowed time for movement to start in a closing operation	Group 1: 100 ms Group 2: 100 ms Group 3: 100 ms Group 4: 100 ms Group 5: 100 ms Group 6: 100 ms Group 7: 100 ms Group 8: 100 ms
MaxOpenOpTime	Maximum allowed time for opening operation	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxCloseOpTime	Maximum allowed time for closing operation	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
OpenOpTimeCorr	Opening operation time correction	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
CloseOpTimeCorr	Closing operation time correction	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000
SwitchCurrExponent	Exponent for switched currents sum	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0

		Group 7: 2.0 Group 8: 2.0
MaxSwitchCurrSum	Maximum allowed squared switched currents sum	Group 1: 100.0 kA² Group 2: 100.0 kA ² Group 3: 100.0 kA ² Group 4: 100.0 kA ² Group 5: 100.0 kA ² Group 6: 100.0 kA ² Group 7: 100.0 kA ² Group 8: 100.0 kA ²
RatedOpCurr	Rated operational current	Group 1: 1.0 kA Group 2: 1.0 kA Group 3: 1.0 kA Group 4: 1.0 kA Group 5: 1.0 kA Group 6: 1.0 kA Group 7: 1.0 kA Group 8: 1.0 kA
MaxOpRated	Number of supported opening operations at rated current	Group 1: 10000 Group 2: 10000 Group 3: 10000 Group 4: 10000 Group 5: 10000 Group 6: 10000 Group 7: 10000 Group 8: 10000
MaxFaultCurr	Maximum interruptable fault current	Group 1: 10.0 kA Group 2: 10.0 kA Group 3: 10.0 kA Group 4: 10.0 kA Group 5: 10.0 kA Group 6: 10.0 kA Group 7: 10.0 kA Group 8: 10.0 kA
MaxOpFault	Number of supported opening operations at maximum fault current	Group 1: 100 Group 2: 100 Group 3: 100 Group 4: 100 Group 5: 100 Group 6: 100 Group 7: 100 Group 8: 100
RefCurrMult	Rated operational current multiplier used as reference for contact wear monitoring	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
WearMonitCriterion	Contact wear monitoring criterion	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
WearWarningLevel	Contact wear warning level	Group 1: 5 Group 2: 5

		Group 3: 5 Group 4: 5 Group 5: 5 Group 6: 5 Group 7: 5 Group 8: 5
WearAlarmLevel	Contact wear alarm level	Group 1: 1 Group 2: 1 Group 3: 1 Group 4: 1 Group 5: 1 Group 6: 1 Group 7: 1 Group 8: 1

Function SW5 89ET1-1

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: HIDE Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms

		Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW6
89ET1-2

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: HIDE Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 10000 ms Group 2: 10000 ms

		Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 10000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW1T 89HT1-1T

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE

		Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW3T
89HT1-3T

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms

		Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function SW4T 89HT1-4T

Setting	Description	Values
AdaptivePulse	Adaptive pulse	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
MinOpenCmdTime	Minimum open command pulse time	Group 1: 2000 ms Group 2: 10000 ms

		Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MinCloseCmdTime	Minimum close command pulse time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
IntermediateState	Show intermediate position	Group 1: SHOW Group 2: HIDE Group 3: HIDE Group 4: HIDE Group 5: HIDE Group 6: HIDE Group 7: HIDE Group 8: HIDE
FilterTime	Intermediate position filtering time	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxStartTime	Maximum allowed time for movement to start	Group 1: 1000 ms Group 2: 1000 ms Group 3: 1000 ms Group 4: 1000 ms Group 5: 1000 ms Group 6: 1000 ms Group 7: 1000 ms Group 8: 1000 ms
MaxOpTime	Maximum allowed time for operation	Group 1: 2000 ms Group 2: 10000 ms Group 3: 10000 ms Group 4: 10000 ms Group 5: 10000 ms Group 6: 10000 ms Group 7: 10000 ms Group 8: 10000 ms
MaxOpCounter	Maximum allowed opening operations	Group 1: 5000 Group 2: 5000 Group 3: 5000 Group 4: 5000 Group 5: 5000 Group 6: 5000 Group 7: 5000 Group 8: 5000

Function CAM_TAP
No description available

Setting	Description	Values
DIF_MAX		Group 1: 0 Group 2: 0

		Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
DIF_MIN		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
VOLTAJE_MIN		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
VOLTAJE_REF		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
DIF_MAX_RAPIDA		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
DIF_MIN_RAPIDA		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
TIEMPO_NORMAL		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0
CORRIENTE_MAX		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0

		Group 7: 0 Group 8: 0
TIEMPO_RAPIDO		Group 1: 0 Group 2: 0 Group 3: 0 Group 4: 0 Group 5: 0 Group 6: 0 Group 7: 0 Group 8: 0

Function Settings

No description available

Setting	Description	Values
SettingUnominal		Group 1: 66.4 Group 2: 66.4 Group 3: 66.4 Group 4: 66.4 Group 5: 66.4 Group 6: 66.4 Group 7: 66.4 Group 8: 66.4
SettingUnominalErro		Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1

Logical Device PROT

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.2

Function EarthOC3

Directional Earth Overcurrent

Setting	Description	Values
General > MeasMode	Measurement mode used	Group 1: DFT Group 2: DFT Group 3: DFT Group 4: DFT Group 5: DFT Group 6: DFT Group 7: DFT Group 8: DFT
General > DirectionAngle	Characteristic direction angle	Group 1: 0.0 deg Group 2: 0.0 deg Group 3: 0.0 deg Group 4: 0.0 deg Group 5: 0.0 deg Group 6: 0.0 deg Group 7: 0.0 deg Group 8: 0.0 deg
General > MinUpolValue	Minimum polarizing voltage (pu of primary rated phase-to-earth voltage)	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05

		Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
General > MinIpValue	Minimum polarizing current	Group 1: 0.07 Group 2: 0.07 Group 3: 0.07 Group 4: 0.07 Group 5: 0.07 Group 6: 0.07 Group 7: 0.07 Group 8: 0.07
General > NegSeqDirOperation	Negative sequence polarization	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > VTFailAction	Action on voltage transformer failure	Group 1: TRIP Group 2: TRIP Group 3: TRIP Group 4: TRIP Group 5: TRIP Group 6: TRIP Group 7: TRIP Group 8: TRIP
General > HarmonicOperationValue	Harmonic operation threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
General > PhCurrRestraintSlope	Phase current restraint slope	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Stage 1 > St1Operation	Stage 1 operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1HarmonicOperation	Stage 1 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF

		Group 8: OFF
Stage 1 > St1Direction	Stage 1 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 1 > St1DropType	Stage 1 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 1 > St1DropDelay	Stage 1 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 1 > St1Iop	Stage 1 operation threshold	Group 1: 0.1 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 1 > St1MaxColdLoadMult	Stage 1 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 1 > St1Top	Stage 1 operation delay time	Group 1: 400 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Operation	Stage 2 operation	Group 1: OFF Group 2: OFF Group 3: OFF

		Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2HarmonicOperation	Stage 2 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2Direction	Stage 2 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 2 > St2DropType	Stage 2 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 2 > St2DropDelay	Stage 2 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Iop	Stage 2 operation threshold	Group 1: 4.0 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 2 > St2MaxColdLoadMult	Stage 2 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0

		Group 8: 1.0
Stage 2 > St2Top	Stage 2 operation delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Operation	Stage 3 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3HarmonicOperation	Stage 3 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3Direction	Stage 3 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 3 > St3Curve	Stage 3 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 3 > St3TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3DropType	Stage 3 reset type	Group 1: INSTANTANEOUS Group 2:

		INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 3 > St3DropDelay	Stage 3 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Iop	Stage 3 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 3 > St3MaxColdLoadMult	Stage 3 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3Top	Stage 3 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 3 > St3TimeAdder	Stage 3 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MaxTime	Stage 3 maximum operation time	Group 1: 5800 ms Group 2: 5800 ms Group 3: 5800 ms Group 4: 5800 ms Group 5: 5800 ms Group 6: 5800 ms Group 7: 5800 ms

		Group 8: 5800 ms
Stage 3 > St3MinTime	Stage 3 minimum operation time	Group 1: 1200 ms Group 2: 1200 ms Group 3: 1200 ms Group 4: 1200 ms Group 5: 1200 ms Group 6: 1200 ms Group 7: 1200 ms Group 8: 1200 ms
Stage 3 > St3Istart	Stage 3 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Operation	Stage 4 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4HarmonicOperation	Stage 4 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4Direction	Stage 4 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 4 > St4Curve	Stage 4 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 4 > St4TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0

		Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4DropType	Stage 4 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 4 > St4DropDelay	Stage 4 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Iop	Stage 4 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 4 > St4MaxColdLoadMult	Stage 4 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Top	Stage 4 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 4 > St4TimeAdder	Stage 4 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms

		Group 8: 0 ms
Stage 4 > St4MaxTime	Stage 4 maximum operation time	Group 1: 5800 ms Group 2: 5800 ms Group 3: 5800 ms Group 4: 5800 ms Group 5: 5800 ms Group 6: 5800 ms Group 7: 5800 ms Group 8: 5800 ms
Stage 4 > St4MinTime	Stage 4 minimum operation time	Group 1: 1200 ms Group 2: 1200 ms Group 3: 1200 ms Group 4: 1200 ms Group 5: 1200 ms Group 6: 1200 ms Group 7: 1200 ms Group 8: 1200 ms
Stage 4 > St4Istart	Stage 4 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0

Function TrfDiff1 Transformer Differential

Setting	Description	Values
General > PrimaryWindingType	Primary winding type	Group 1: DELTA Group 2: WYE Group 3: WYE Group 4: WYE Group 5: WYE Group 6: WYE Group 7: WYE Group 8: WYE
General > SecondaryWindingType	Secondary winding type	Group 1: WYE Group 2: WYE Group 3: WYE Group 4: WYE Group 5: WYE Group 6: WYE Group 7: WYE Group 8: WYE
General > TertiaryWindingType	Tertiary winding type	Group 1: WYE Group 2: WYE Group 3: WYE Group 4: WYE Group 5: WYE Group 6: WYE Group 7: WYE Group 8: WYE
General > SecondaryVectorGroup	Secondary vector group	Group 1: 30 DEGREES LAG Group 2: 0 DEGREES Group 3: 0 DEGREES Group 4: 0 DEGREES Group 5: 0 DEGREES Group 6: 0 DEGREES

		Group 7: 0 DEGREES Group 8: 0 DEGREES
General > TertiaryVectorGroup	Tertiary vector group	Group 1: 0 DEGREES Group 2: 0 DEGREES Group 3: 0 DEGREES Group 4: 0 DEGREES Group 5: 0 DEGREES Group 6: 0 DEGREES Group 7: 0 DEGREES Group 8: 0 DEGREES
General > TransformerType	Transformer type	Group 1: TRANSFORMER Group 2: TRANSFORMER Group 3: TRANSFORMER Group 4: TRANSFORMER Group 5: TRANSFORMER Group 6: TRANSFORMER Group 7: TRANSFORMER Group 8: TRANSFORMER
General > PrimaryVoltage	Primary winding voltage	Group 1: 110 kV Group 2: 400.0 kV Group 3: 400.0 kV Group 4: 400.0 kV Group 5: 400.0 kV Group 6: 400.0 kV Group 7: 400.0 kV Group 8: 400.0 kV
General > SecondaryVoltage	Secondary winding voltage	Group 1: 23 kV Group 2: 220.0 kV Group 3: 220.0 kV Group 4: 220.0 kV Group 5: 220.0 kV Group 6: 220.0 kV Group 7: 220.0 kV Group 8: 220.0 kV
General > TertiaryVoltage	Tertiary winding voltage	Group 1: 10.0 kV Group 2: 10.0 kV Group 3: 10.0 kV Group 4: 10.0 kV Group 5: 10.0 kV Group 6: 10.0 kV Group 7: 10.0 kV Group 8: 10.0 kV
General > RemoveI0	Remove I0 from currents	Group 1: ON Group 2: ON Group 3: ON Group 4: ON Group 5: ON Group 6: ON Group 7: ON Group 8: ON
General > TestMode	Function in test mode	Group 1: OFF Group 2: OFF

		Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Operation	Stage 1 operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1lop	Stage 1 operation threshold	Group 1: 10 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 2 > St2Operation	Stage 2 operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2MinCurrValue	Stage 2 minimum operation threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Stage 2 > St2Slope1Value	Slope 1 of the stage 2 characteristic	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Stage 2 > St2Slope2Value	Slope 2 of the stage 2 characteristic	Group 1: 0.7 Group 2: 0.5 Group 3: 0.5 Group 4: 0.5 Group 5: 0.5 Group 6: 0.5 Group 7: 0.5 Group 8: 0.5
Stage 2 > St2SlopeSwitchValue	Restraint current where the slope switches	Group 1: 15 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0

		Group 7: 1.0 Group 8: 1.0
Stage 2 > St2RestraintMode	Active restraint modes	Group 1: 2H, 5H AND WAVEFORM Group 2: 2H AND WAVEFORM Group 3: 2H AND WAVEFORM Group 4: 2H AND WAVEFORM Group 5: 2H AND WAVEFORM Group 6: 2H AND WAVEFORM Group 7: 2H AND WAVEFORM Group 8: 2H AND WAVEFORM
Stage 2 > St2Ratio2h	Second harmonic operation threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Stage 2 > St2CrossBlock2h	Second harmonic crossed block	Group 1: ONE-OF-THREE Group 2: ONE-OF-THREE Group 3: ONE-OF-THREE Group 4: ONE-OF-THREE Group 5: ONE-OF-THREE Group 6: ONE-OF-THREE Group 7: ONE-OF-THREE Group 8: ONE-OF-THREE
Stage 2 > St2CrossBlock2hTime	Duration of second harmonic crossed block	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Ratio5h	Fifth harmonic operation threshold	Group 1: 0.3 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Stage 2 > St2CrossBlock5h	Fifth harmonic crossed block	Group 1: ONE-OF-THREE

		Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
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Function CTSup1

CT Supervision

Setting	Description	Values
Operation	Operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
LatchedOp	Latched operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Fail3PhOp	Three phase fail detection operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
IresOp	Residual current operation threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
IresRef	Residual reference current threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
UresRef	Residual reference voltage threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Iload	Load current	Group 1: 0.5

		Group 2: 0.5 Group 3: 0.5 Group 4: 0.5 Group 5: 0.5 Group 6: 0.5 Group 7: 0.5 Group 8: 0.5
I2I1	Operational unbalance current	Group 1: 0.4 Group 2: 0.4 Group 3: 0.4 Group 4: 0.4 Group 5: 0.4 Group 6: 0.4 Group 7: 0.4 Group 8: 0.4
I2I1loc2	Local current2 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1loc2	Local current2 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem1	Remote current1 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem1	Remote current1 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem2	Remote current2 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem2	Remote current2 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1

		Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem3	Remote current3 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem3	Remote current3 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem4	Remote current4 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem4	Remote current4 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
SupTime	Supervision time delay	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Imin	Minimum monitoring current	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
MonitorTime	Monitoring time	Group 1: 3000 ms Group 2: 3000 ms Group 3: 3000 ms Group 4: 3000 ms Group 5: 3000 ms Group 6: 3000 ms Group 7: 3000 ms Group 8: 3000 ms

CT Supervision

Setting	Description	Values
Operation	Operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
LatchedOp	Latched operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Fail3PhOp	Three phase fail detection operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
IresOp	Residual current operation threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
IresRef	Residual reference current threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
UresRef	Residual reference voltage threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Iload	Load current	Group 1: 0.5 Group 2: 0.5 Group 3: 0.5 Group 4: 0.5 Group 5: 0.5 Group 6: 0.5 Group 7: 0.5 Group 8: 0.5
I2I1	Operational unbalance current	Group 1: 0.4 Group 2: 0.4

		Group 3: 0.4 Group 4: 0.4 Group 5: 0.4 Group 6: 0.4 Group 7: 0.4 Group 8: 0.4
I2I1loc2	Local current2 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1loc2	Local current2 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem1	Remote current1 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem1	Remote current1 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem2	Remote current2 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem2	Remote current2 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem3	Remote current3 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05

		Group 7: 0.05 Group 8: 0.05
I1rem3	Remote current3 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
I2I1rem4	Remote current4 unbalance	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
I1rem4	Remote current4 load current	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
SupTime	Supervision time delay	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Imin	Minimum monitoring current	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
MonitorTime	Monitoring time	Group 1: 3000 ms Group 2: 3000 ms Group 3: 3000 ms Group 4: 3000 ms Group 5: 3000 ms Group 6: 3000 ms Group 7: 3000 ms Group 8: 3000 ms

Logical Device PROT_W1

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.0

Function PhaseOC1

Phase Overcurrent

Setting	Description	Values
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General > MeasMode	Measurement mode used	Group 1: DFT Group 2: DFT Group 3: DFT Group 4: DFT Group 5: DFT Group 6: DFT Group 7: DFT Group 8: DFT
General > Polarization	Polarization type	Group 1: SEQUENCE Group 2: SEQUENCE Group 3: SEQUENCE Group 4: SEQUENCE Group 5: SEQUENCE Group 6: SEQUENCE Group 7: SEQUENCE Group 8: SEQUENCE
General > PolarizationVoltages	Voltages to be used for directionality	Group 1: ACCORDING TO CONFIGURATION Group 2: ACCORDING TO CONFIGURATION Group 3: ACCORDING TO CONFIGURATION Group 4: ACCORDING TO CONFIGURATION Group 5: ACCORDING TO CONFIGURATION Group 6: ACCORDING TO CONFIGURATION Group 7: ACCORDING TO CONFIGURATION Group 8: ACCORDING TO CONFIGURATION
General > DirectionAngle	Characteristic direction angle	Group 1: 45.0 deg Group 2: 45.0 deg Group 3: 45.0 deg Group 4: 45.0 deg Group 5: 45.0 deg Group 6: 45.0 deg Group 7: 45.0 deg Group 8: 45.0 deg
General > VTFailAction	Action on voltage transformer failure	Group 1: TRIP Group 2: TRIP Group 3: TRIP Group 4: TRIP Group 5: TRIP Group 6: TRIP Group 7: TRIP Group 8: TRIP
General > HarmonicOperationValue	Harmonic operation threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2

		Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
General > HarmonicCrossBlock	Harmonic crossed block	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Operation	Stage 1 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1HarmonicOperation	Stage 1 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Direction	Stage 1 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 1 > St1DropType	Stage 1 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 1 > St1DropDelay	Stage 1 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms

Stage 1 > St1Iop	Stage 1 operation threshold	Group 1: 4.0 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 1 > St1MaxColdLoadMult	Stage 1 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 1 > St1Top	Stage 1 operation delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Operation	Stage 2 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2HarmonicOperation	Stage 2 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2Direction	Stage 2 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 2 > St2DropType	Stage 2 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS

		Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 2 > St2DropDelay	Stage 2 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Iop	Stage 2 operation threshold	Group 1: 4.0 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 2 > St2MaxColdLoadMult	Stage 2 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 2 > St2Top	Stage 2 operation delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Operation	Stage 3 operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3HarmonicOperation	Stage 3 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3Direction	Stage 3 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR

Stage 3 > St3Curve	Stage 3 curve type	Group 1: IEC NI Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 3 > St3TMS	Stage 3 time multiplier	Group 1: 0.15 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3DropType	Stage 3 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 3 > St3DropDelay	Stage 3 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Iop	Stage 3 operation threshold	Group 1: 1.2 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 3 > St3MaxColdLoadMult	Stage 3 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0

		Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3Top	Stage 3 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 3 > St3TimeAdder	Stage 3 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MaxTime	Stage 3 maximum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MinTime	Stage 3 minimum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Istart	Stage 3 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Operation	Stage 4 operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4HarmonicOperation	Stage 4 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4Direction	Stage 4 direction	Group 1: NON-DIR

		Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 4 > St4Curve	Stage 4 curve type	Group 1: IEC DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 4 > St4TMS	Stage 4 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4DropType	Stage 4 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 4 > St4DropDelay	Stage 4 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Iop	Stage 4 operation threshold	Group 1: 11.25 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0

		Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 4 > St4MaxColdLoadMult	Stage 4 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Top	Stage 4 operation delay time	Group 1: 100 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 4 > St4TimeAdder	Stage 4 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4MaxTime	Stage 4 maximum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4MinTime	Stage 4 minimum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Istart	Stage 4 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0

Function EarthOC1
Directional Earth Overcurrent

Setting	Description	Values
General > MeasMode	Measurement mode used	Group 1: DFT Group 2: DFT Group 3: DFT Group 4: DFT Group 5: DFT

		Group 6: DFT Group 7: DFT Group 8: DFT
General > DirectionAngle	Characteristic direction angle	Group 1: 0.0 deg Group 2: 0.0 deg Group 3: 0.0 deg Group 4: 0.0 deg Group 5: 0.0 deg Group 6: 0.0 deg Group 7: 0.0 deg Group 8: 0.0 deg
General > MinUpolValue	Minimum polarizing voltage (pu of primary rated phase-to-earth voltage)	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
General > MinIpolValue	Minimum polarizing current	Group 1: 0.07 Group 2: 0.07 Group 3: 0.07 Group 4: 0.07 Group 5: 0.07 Group 6: 0.07 Group 7: 0.07 Group 8: 0.07
General > NegSeqDirOperation	Negative sequence polarization	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > VTFailAction	Action on voltage transformer failure	Group 1: TRIP Group 2: TRIP Group 3: TRIP Group 4: TRIP Group 5: TRIP Group 6: TRIP Group 7: TRIP Group 8: TRIP
General > HarmonicOperationValue	Harmonic operation threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
General > PhCurrRestraintSlope	Phase current restraint slope	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
Stage 1 > St1Operation	Stage 1 operation	Group 1: ON

		Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1HarmonicOperation	Stage 1 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Direction	Stage 1 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 1 > St1DropType	Stage 1 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 1 > St1DropDelay	Stage 1 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 1 > St1Iop	Stage 1 operation threshold	Group 1: 0.1 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 1 > St1MaxColdLoadMult	Stage 1 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0

		Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 1 > St1Top	Stage 1 operation delay time	Group 1: 100 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Operation	Stage 2 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2HarmonicOperation	Stage 2 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2Direction	Stage 2 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 2 > St2DropType	Stage 2 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 2 > St2DropDelay	Stage 2 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Iop	Stage 2 operation threshold	Group 1: 4.0

		Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 2 > St2MaxColdLoadMult	Stage 2 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 2 > St2Top	Stage 2 operation delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Operation	Stage 3 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3HarmonicOperation	Stage 3 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3Direction	Stage 3 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 3 > St3Curve	Stage 3 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME

		TIME Group 8: ANSI DEF TIME
Stage 3 > St3TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3DropType	Stage 3 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 3 > St3DropDelay	Stage 3 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Iop	Stage 3 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 3 > St3MaxColdLoadMult	Stage 3 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3Top	Stage 3 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 3 >	Stage 3 constant time adder	Group 1: 0 ms

St3TimeAdder		Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MaxTime	Stage 3 maximum operation time	Group 1: 5800 ms Group 2: 5800 ms Group 3: 5800 ms Group 4: 5800 ms Group 5: 5800 ms Group 6: 5800 ms Group 7: 5800 ms Group 8: 5800 ms
Stage 3 > St3MinTime	Stage 3 minimum operation time	Group 1: 1200 ms Group 2: 1200 ms Group 3: 1200 ms Group 4: 1200 ms Group 5: 1200 ms Group 6: 1200 ms Group 7: 1200 ms Group 8: 1200 ms
Stage 3 > St3Istart	Stage 3 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Operation	Stage 4 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4HarmonicOperation	Stage 4 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4Direction	Stage 4 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 4 > St4Curve	Stage 4 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF

		TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 4 > St4TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4DropType	Stage 4 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 4 > St4DropDelay	Stage 4 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Iop	Stage 4 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 4 > St4MaxColdLoadMult	Stage 4 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Top	Stage 4 operation delay time	Group 1: 400 ms

		Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 4 > St4TimeAdder	Stage 4 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4MaxTime	Stage 4 maximum operation time	Group 1: 5800 ms Group 2: 5800 ms Group 3: 5800 ms Group 4: 5800 ms Group 5: 5800 ms Group 6: 5800 ms Group 7: 5800 ms Group 8: 5800 ms
Stage 4 > St4MinTime	Stage 4 minimum operation time	Group 1: 1200 ms Group 2: 1200 ms Group 3: 1200 ms Group 4: 1200 ms Group 5: 1200 ms Group 6: 1200 ms Group 7: 1200 ms Group 8: 1200 ms
Stage 4 > St4Istart	Stage 4 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0

Function CBFail3Ph1 Three-Phase Circuit Breaker Failure

Setting	Description	Values
General > Operation	Operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > Criterion	Criterion	Group 1: CURRENT OR CB POSITION Group 2: CURRENT OR CB POSITION Group 3: CURRENT OR CB POSITION Group 4: CURRENT OR CB POSITION Group 5: CURRENT

		OR CB POSITION Group 6: CURRENT OR CB POSITION Group 7: CURRENT OR CB POSITION Group 8: CURRENT OR CB POSITION
General > lopStart	Pickup current detector threshold	Group 1: 0.1 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
General > lop	Reset current detector threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
General > AdditionalCriterion	Additional criterion	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > AddCritIopStart	Additional criterion current threshold	Group 1: 0.5 Group 2: 0.5 Group 3: 0.5 Group 4: 0.5 Group 5: 0.5 Group 6: 0.5 Group 7: 0.5 Group 8: 0.5
General > AddCritIResStart	Additional criterion, residual current threshold	Group 1: 0.3 Group 2: 0.3 Group 3: 0.3 Group 4: 0.3 Group 5: 0.3 Group 6: 0.3 Group 7: 0.3 Group 8: 0.3
General > AddCritI2Start	Additional criterion, negative sequence current threshold	Group 1: 0.3 Group 2: 0.3 Group 3: 0.3 Group 4: 0.3 Group 5: 0.3 Group 6: 0.3 Group 7: 0.3 Group 8: 0.3
Stage 1 > St1TripEnable	Enable retrip	Group 1: THREE-POLE Group 2: OFF Group 3: OFF Group 4: OFF

		Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1TPTripDelay	Retrip delay	Group 1: 10 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2TPTripDelay	External trip delay	Group 1: 200 ms Group 2: 150 ms Group 3: 150 ms Group 4: 150 ms Group 5: 150 ms Group 6: 150 ms Group 7: 150 ms Group 8: 150 ms

Function VTSup1 VT Supervision

Setting	Description	Values
Operation	Operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
UresOp	Residual voltage threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
IresOp	Residual current threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
U2op	Negative sequence voltage threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
I2op	Negative sequence current threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2

		Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
LatchTime	Latch time for asymmetrical detection	Group 1: 2000 ms Group 2: 2000 ms Group 3: 2000 ms Group 4: 2000 ms Group 5: 2000 ms Group 6: 2000 ms Group 7: 2000 ms Group 8: 2000 ms
Umin	Minimum three-phase voltage	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
Ivar	Maximum phase current variation	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
MeasEvaluation	Measurement evaluation enabled	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
EvaluationTime	Evaluation time	Group 1: 3000 ms Group 2: 3000 ms Group 3: 3000 ms Group 4: 3000 ms Group 5: 3000 ms Group 6: 3000 ms Group 7: 3000 ms Group 8: 3000 ms
Imin	Minimum current of at least one phase	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2

Logical Device PROT_W2

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.0

Function PhaseOC2

Phase Overcurrent

Setting	Description	Values
General > MeasMode	Measurement mode used	Group 1: DFT Group 2: DFT Group 3: DFT Group 4: DFT Group 5: DFT Group 6: DFT Group 7: DFT Group 8: DFT
General > Polarization	Polarization type	Group 1: SEQUENCE Group 2: SEQUENCE Group 3: SEQUENCE Group 4: SEQUENCE Group 5: SEQUENCE Group 6: SEQUENCE Group 7: SEQUENCE Group 8: SEQUENCE
General > PolarizationVoltages	Voltages to be used for directionality	Group 1: ACCORDING TO CONFIGURATION Group 2: ACCORDING TO CONFIGURATION Group 3: ACCORDING TO CONFIGURATION Group 4: ACCORDING TO CONFIGURATION Group 5: ACCORDING TO CONFIGURATION Group 6: ACCORDING TO CONFIGURATION Group 7: ACCORDING TO CONFIGURATION Group 8: ACCORDING TO CONFIGURATION
General > DirectionAngle	Characteristic direction angle	Group 1: 45.0 deg Group 2: 45.0 deg Group 3: 45.0 deg Group 4: 45.0 deg Group 5: 45.0 deg Group 6: 45.0 deg Group 7: 45.0 deg Group 8: 45.0 deg
General > VTFailAction	Action on voltage transformer failure	Group 1: TRIP Group 2: TRIP Group 3: TRIP Group 4: TRIP Group 5: TRIP Group 6: TRIP Group 7: TRIP Group 8: TRIP
General > HarmonicOperationValu	Harmonic operation threshold	Group 1: 0.2 Group 2: 0.2

e		Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
General > HarmonicCrossBlock	Harmonic crossed block	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Operation	Stage 1 operation	Group 1: ON Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1HarmonicOperation	Stage 1 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Direction	Stage 1 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 1 > St1DropType	Stage 1 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 1 > St1DropDelay	Stage 1 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms

		Group 7: 0 ms Group 8: 0 ms
Stage 1 > St1Iop	Stage 1 operation threshold	Group 1: 1.2 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 1 > St1MaxColdLoadMult	Stage 1 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 1 > St1Top	Stage 1 operation delay time	Group 1: 400 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Operation	Stage 2 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2HarmonicOperation	Stage 2 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2Direction	Stage 2 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 2 > St2DropType	Stage 2 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS

		Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 2 > St2DropDelay	Stage 2 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Iop	Stage 2 operation threshold	Group 1: 4.0 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 2 > St2MaxColdLoadMult	Stage 2 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 2 > St2Top	Stage 2 operation delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Operation	Stage 3 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3HarmonicOperation	Stage 3 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3Direction	Stage 3 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR

		Group 7: NON-DIR Group 8: NON-DIR
Stage 3 > St3Curve	Stage 3 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 3 > St3TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3DropType	Stage 3 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 3 > St3DropDelay	Stage 3 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Iop	Stage 3 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 3 > St3MaxColdLoadMult	Stage 3 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0

		Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3Top	Stage 3 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 3 > St3TimeAdder	Stage 3 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MaxTime	Stage 3 maximum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MinTime	Stage 3 minimum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Istart	Stage 3 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Operation	Stage 4 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4HarmonicOperation	Stage 4 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF

		Group 7: OFF Group 8: OFF
Stage 4 > St4Direction	Stage 4 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 4 > St4Curve	Stage 4 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 4 > St4TMS	Stage 4 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4DropType	Stage 4 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 4 > St4DropDelay	Stage 4 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Iop	Stage 4 operation threshold	Group 1: 2.0 Group 2: 2.0

		Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 4 > St4MaxColdLoadMult	Stage 4 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Top	Stage 4 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 4 > St4TimeAdder	Stage 4 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4MaxTime	Stage 4 maximum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4MinTime	Stage 4 minimum operation time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Istart	Stage 4 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0

Function EarthOC2
Directional Earth Overcurrent

Setting	Description	Values
General > MeasMode	Measurement mode used	Group 1: DFT Group 2: DFT

		Group 3: DFT Group 4: DFT Group 5: DFT Group 6: DFT Group 7: DFT Group 8: DFT
General > DirectionAngle	Characteristic direction angle	Group 1: 0.0 deg Group 2: 0.0 deg Group 3: 0.0 deg Group 4: 0.0 deg Group 5: 0.0 deg Group 6: 0.0 deg Group 7: 0.0 deg Group 8: 0.0 deg
General > MinUpolValue	Minimum polarizing voltage (pu of primary rated phase-to-earth voltage)	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
General > MinIpolValue	Minimum polarizing current	Group 1: 0.07 Group 2: 0.07 Group 3: 0.07 Group 4: 0.07 Group 5: 0.07 Group 6: 0.07 Group 7: 0.07 Group 8: 0.07
General > NegSeqDirOperation	Negative sequence polarization	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > VTFailAction	Action on voltage transformer failure	Group 1: TRIP Group 2: TRIP Group 3: TRIP Group 4: TRIP Group 5: TRIP Group 6: TRIP Group 7: TRIP Group 8: TRIP
General > HarmonicOperationValue	Harmonic operation threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
General > PhCurrRestraintSlope	Phase current restraint slope	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1

		Group 7: 0.1 Group 8: 0.1
Stage 1 > St1Operation	Stage 1 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1HarmonicOperation	Stage 1 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1Direction	Stage 1 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 1 > St1DropType	Stage 1 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 1 > St1DropDelay	Stage 1 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 1 > St1Iop	Stage 1 operation threshold	Group 1: 0.1 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 1 > St1MaxColdLoadMult	Stage 1 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0

		Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 1 > St1Top	Stage 1 operation delay time	Group 1: 400 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Operation	Stage 2 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2HarmonicOperation	Stage 2 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 2 > St2Direction	Stage 2 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 2 > St2DropType	Stage 2 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 2 > St2DropDelay	Stage 2 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms

		Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2Iop	Stage 2 operation threshold	Group 1: 4.0 Group 2: 4.0 Group 3: 4.0 Group 4: 4.0 Group 5: 4.0 Group 6: 4.0 Group 7: 4.0 Group 8: 4.0
Stage 2 > St2MaxColdLoadMult	Stage 2 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 2 > St2Top	Stage 2 operation delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Operation	Stage 3 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3HarmonicOperation	Stage 3 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 3 > St3Direction	Stage 3 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 3 > St3Curve	Stage 3 curve type	Group 1: ANSI DEF TIME Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME

		Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 3 > St3TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3DropType	Stage 3 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 3 > St3DropDelay	Stage 3 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3Iop	Stage 3 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 3 > St3MaxColdLoadMult	Stage 3 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 3 > St3Top	Stage 3 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms

		Group 7: 400 ms Group 8: 400 ms
Stage 3 > St3TimeAdder	Stage 3 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 3 > St3MaxTime	Stage 3 maximum operation time	Group 1: 5800 ms Group 2: 5800 ms Group 3: 5800 ms Group 4: 5800 ms Group 5: 5800 ms Group 6: 5800 ms Group 7: 5800 ms Group 8: 5800 ms
Stage 3 > St3MinTime	Stage 3 minimum operation time	Group 1: 1200 ms Group 2: 1200 ms Group 3: 1200 ms Group 4: 1200 ms Group 5: 1200 ms Group 6: 1200 ms Group 7: 1200 ms Group 8: 1200 ms
Stage 3 > St3Istart	Stage 3 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Operation	Stage 4 operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4HarmonicOperation	Stage 4 harmonic block operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 4 > St4Direction	Stage 4 direction	Group 1: NON-DIR Group 2: NON-DIR Group 3: NON-DIR Group 4: NON-DIR Group 5: NON-DIR Group 6: NON-DIR Group 7: NON-DIR Group 8: NON-DIR
Stage 4 > St4Curve	Stage 4 curve type	Group 1: ANSI DEF TIME

		Group 2: ANSI DEF TIME Group 3: ANSI DEF TIME Group 4: ANSI DEF TIME Group 5: ANSI DEF TIME Group 6: ANSI DEF TIME Group 7: ANSI DEF TIME Group 8: ANSI DEF TIME
Stage 4 > St4TMS	Stage 3 time multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
Stage 4 > St4DropType	Stage 4 reset type	Group 1: INSTANTANEOUS Group 2: INSTANTANEOUS Group 3: INSTANTANEOUS Group 4: INSTANTANEOUS Group 5: INSTANTANEOUS Group 6: INSTANTANEOUS Group 7: INSTANTANEOUS Group 8: INSTANTANEOUS
Stage 4 > St4DropDelay	Stage 4 reset delay time	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4Iop	Stage 4 operation threshold	Group 1: 2.0 Group 2: 2.0 Group 3: 2.0 Group 4: 2.0 Group 5: 2.0 Group 6: 2.0 Group 7: 2.0 Group 8: 2.0
Stage 4 > St4MaxColdLoadMult	Stage 4 maximum cold load pickup multiplier	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0

		Group 7: 1.0 Group 8: 1.0
Stage 4 > St4Top	Stage 4 operation delay time	Group 1: 400 ms Group 2: 400 ms Group 3: 400 ms Group 4: 400 ms Group 5: 400 ms Group 6: 400 ms Group 7: 400 ms Group 8: 400 ms
Stage 4 > St4TimeAdder	Stage 4 constant time adder	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 4 > St4MaxTime	Stage 4 maximum operation time	Group 1: 5800 ms Group 2: 5800 ms Group 3: 5800 ms Group 4: 5800 ms Group 5: 5800 ms Group 6: 5800 ms Group 7: 5800 ms Group 8: 5800 ms
Stage 4 > St4MinTime	Stage 4 minimum operation time	Group 1: 1200 ms Group 2: 1200 ms Group 3: 1200 ms Group 4: 1200 ms Group 5: 1200 ms Group 6: 1200 ms Group 7: 1200 ms Group 8: 1200 ms
Stage 4 > St4Istart	Stage 4 minimum start current	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0

Function CBFail3Ph2

Three-Phase Circuit Breaker Failure

Setting	Description	Values
General > Operation	Operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > Criterion	Criterion	Group 1: CURRENT OR CB POSITION Group 2: CURRENT OR CB POSITION Group 3: CURRENT OR CB POSITION

		Group 4: CURRENT OR CB POSITION Group 5: CURRENT OR CB POSITION Group 6: CURRENT OR CB POSITION Group 7: CURRENT OR CB POSITION Group 8: CURRENT OR CB POSITION
General > IopStart	Pickup current detector threshold	Group 1: 1.0 Group 2: 1.0 Group 3: 1.0 Group 4: 1.0 Group 5: 1.0 Group 6: 1.0 Group 7: 1.0 Group 8: 1.0
General > Iop	Reset current detector threshold	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
General > AdditionalCriterion	Additional criterion	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
General > AddCritIopStart	Additional criterion current threshold	Group 1: 0.5 Group 2: 0.5 Group 3: 0.5 Group 4: 0.5 Group 5: 0.5 Group 6: 0.5 Group 7: 0.5 Group 8: 0.5
General > AddCritIResStart	Additional criterion, residual current threshold	Group 1: 0.3 Group 2: 0.3 Group 3: 0.3 Group 4: 0.3 Group 5: 0.3 Group 6: 0.3 Group 7: 0.3 Group 8: 0.3
General > AddCritI2Start	Additional criterion, negative sequence current threshold	Group 1: 0.3 Group 2: 0.3 Group 3: 0.3 Group 4: 0.3 Group 5: 0.3 Group 6: 0.3 Group 7: 0.3 Group 8: 0.3
Stage 1 > St1TripEnable	Enable retrip	Group 1: OFF Group 2: OFF

		Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
Stage 1 > St1TPTripDelay	Retrip delay	Group 1: 0 ms Group 2: 0 ms Group 3: 0 ms Group 4: 0 ms Group 5: 0 ms Group 6: 0 ms Group 7: 0 ms Group 8: 0 ms
Stage 2 > St2TPTripDelay	External trip delay	Group 1: 150 ms Group 2: 150 ms Group 3: 150 ms Group 4: 150 ms Group 5: 150 ms Group 6: 150 ms Group 7: 150 ms Group 8: 150 ms

Function VTSup2

VT Supervision

Setting	Description	Values
Operation	Operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
UresOp	Residual voltage threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
IresOp	Residual current threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
U2op	Negative sequence voltage threshold	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
I2op	Negative sequence current threshold	Group 1: 0.2 Group 2: 0.2

		Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2
LatchTime	Latch time for asymmetrical detection	Group 1: 2000 ms Group 2: 2000 ms Group 3: 2000 ms Group 4: 2000 ms Group 5: 2000 ms Group 6: 2000 ms Group 7: 2000 ms Group 8: 2000 ms
Umin	Minimum three-phase voltage	Group 1: 0.05 Group 2: 0.05 Group 3: 0.05 Group 4: 0.05 Group 5: 0.05 Group 6: 0.05 Group 7: 0.05 Group 8: 0.05
Ivar	Maximum phase current variation	Group 1: 0.1 Group 2: 0.1 Group 3: 0.1 Group 4: 0.1 Group 5: 0.1 Group 6: 0.1 Group 7: 0.1 Group 8: 0.1
MeasEvaluation	Measurement evaluation enabled	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
EvaluationTime	Evaluation time	Group 1: 3000 ms Group 2: 3000 ms Group 3: 3000 ms Group 4: 3000 ms Group 5: 3000 ms Group 6: 3000 ms Group 7: 3000 ms Group 8: 3000 ms
Imin	Minimum current of at least one phase	Group 1: 0.2 Group 2: 0.2 Group 3: 0.2 Group 4: 0.2 Group 5: 0.2 Group 6: 0.2 Group 7: 0.2 Group 8: 0.2

Logical Device MEAS

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.0

Function Meas3Ph1
MEDIAS PRIMARIO

Setting	Description	Values
InvertOrientation	Invert power orientation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
PowerFactorSign	Power factor sign	Group 1: ACTIVE POWER Group 2: ACTIVE POWER Group 3: ACTIVE POWER Group 4: ACTIVE POWER Group 5: ACTIVE POWER Group 6: ACTIVE POWER Group 7: ACTIVE POWER Group 8: ACTIVE POWER

Function Meas1Ph1
CORRIENTE NEUTRO

Setting	Description	Values
InvertOrientation	Invert power orientation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
PowerFactorSign	Power factor sign	Group 1: ACTIVE POWER Group 2: ACTIVE POWER Group 3: ACTIVE POWER Group 4: ACTIVE POWER Group 5: ACTIVE POWER Group 6: ACTIVE POWER Group 7: ACTIVE POWER Group 8: ACTIVE POWER

Logical Device RCD
No description available

Active Group	1
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Number of Groups	8
Parameter Revision	1.0

Function DstRcd1
Disturbance Recorder

Setting	Description	Values
Operation	Operation	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
TriggerSource	Trigger source	Group 1: BOTH Group 2: BOTH Group 3: BOTH Group 4: BOTH Group 5: BOTH Group 6: BOTH Group 7: BOTH Group 8: BOTH
Retrigger	Retrigger enable	Group 1: OFF Group 2: OFF Group 3: OFF Group 4: OFF Group 5: OFF Group 6: OFF Group 7: OFF Group 8: OFF
PreFaultTime	Record pre-fault time	Group 1: 100 ms Group 2: 100 ms Group 3: 100 ms Group 4: 100 ms Group 5: 100 ms Group 6: 100 ms Group 7: 100 ms Group 8: 100 ms
PostFaultTime	Record post-fault time	Group 1: 200 ms Group 2: 200 ms Group 3: 200 ms Group 4: 200 ms Group 5: 200 ms Group 6: 200 ms Group 7: 200 ms Group 8: 200 ms
MaxTime	Record max time	Group 1: 3000 ms Group 2: 3000 ms Group 3: 3000 ms Group 4: 3000 ms Group 5: 3000 ms Group 6: 3000 ms Group 7: 3000 ms Group 8: 3000 ms
ManualTrgTime	Record max time for manual trigger	Group 1: 3000 ms Group 2: 3000 ms Group 3: 3000 ms Group 4: 3000 ms Group 5: 3000 ms Group 6: 3000 ms

		Group 7: 3000 ms Group 8: 3000 ms
HighTrgLev1	Analogue channel 1 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev2	Analogue channel 2 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev3	Analogue channel 3 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev4	Analogue channel 4 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev5	Analogue channel 5 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev6	Analogue channel 6 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev7	Analogue channel 7 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev8	Analogue channel 8 high trigger value	Group 1: 999999.9 Group 2: 999999.9

		Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev9	Analogue channel 9 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev10	Analogue channel 10 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev11	Analogue channel 11 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev12	Analogue channel 12 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev13	Analogue channel 13 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev14	Analogue channel 14 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev15	Analogue channel 15 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9

		Group 7: 999999.9 Group 8: 999999.9
HighTrgLev16	Analogue channel 16 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev17	Analogue channel 17 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev18	Analogue channel 18 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev19	Analogue channel 19 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev20	Analogue channel 20 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev21	Analogue channel 21 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev22	Analogue channel 22 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev23	Analogue channel 23 high trigger value	Group 1: 999999.9 Group 2: 999999.9

		Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
HighTrgLev24	Analogue channel 24 high trigger value	Group 1: 999999.9 Group 2: 999999.9 Group 3: 999999.9 Group 4: 999999.9 Group 5: 999999.9 Group 6: 999999.9 Group 7: 999999.9 Group 8: 999999.9
LowTrgLev1	Analogue channel 1 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev2	Analogue channel 2 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev3	Analogue channel 3 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev4	Analogue channel 4 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev5	Analogue channel 5 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev6	Analogue channel 6 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0

		Group 7: 0.0 Group 8: 0.0
LowTrgLev7	Analogue channel 7 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev8	Analogue channel 8 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev9	Analogue channel 9 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev10	Analogue channel 10 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev11	Analogue channel 11 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev12	Analogue channel 12 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev13	Analogue channel 13 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev14	Analogue channel 14 low trigger value	Group 1: 0.0 Group 2: 0.0

		Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev15	Analogue channel 15 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev16	Analogue channel 16 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev17	Analogue channel 17 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev18	Analogue channel 18 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev19	Analogue channel 19 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev20	Analogue channel 20 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev21	Analogue channel 21 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0

		Group 7: 0.0 Group 8: 0.0
LowTrgLev22	Analogue channel 22 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev23	Analogue channel 23 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
LowTrgLev24	Analogue channel 24 low trigger value	Group 1: 0.0 Group 2: 0.0 Group 3: 0.0 Group 4: 0.0 Group 5: 0.0 Group 6: 0.0 Group 7: 0.0 Group 8: 0.0
TriggerValue1	Digital channel 1 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue2	Digital channel 2 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue3	Digital channel 3 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue4	Digital channel 4 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue5	Digital channel 5 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue6	Digital channel 6 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue7	Digital channel 7 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue8	Digital channel 8 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue9	Digital channel 9 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue10	Digital channel 10 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue11	Digital channel 11 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue12	Digital channel 12 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE

		Group 7: NONE Group 8: NONE
TriggerValue13	Digital channel 13 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue14	Digital channel 14 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue15	Digital channel 15 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue16	Digital channel 16 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue17	Digital channel 17 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue18	Digital channel 18 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue19	Digital channel 19 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue20	Digital channel 20 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue21	Digital channel 21 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue22	Digital channel 22 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue23	Digital channel 23 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue24	Digital channel 24 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue25	Digital channel 25 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue26	Digital channel 26 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue27	Digital channel 27 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE

		Group 7: NONE Group 8: NONE
TriggerValue28	Digital channel 28 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue29	Digital channel 29 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue30	Digital channel 30 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue31	Digital channel 31 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue32	Digital channel 32 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue33	Digital channel 33 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue34	Digital channel 34 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue35	Digital channel 35 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue36	Digital channel 36 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue37	Digital channel 37 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue38	Digital channel 38 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue39	Digital channel 39 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue40	Digital channel 40 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue41	Digital channel 41 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue42	Digital channel 42 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE

		Group 7: NONE Group 8: NONE
TriggerValue43	Digital channel 43 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue44	Digital channel 44 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue45	Digital channel 45 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue46	Digital channel 46 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue47	Digital channel 47 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue48	Digital channel 48 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue49	Digital channel 49 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue50	Digital channel 50 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue51	Digital channel 51 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue52	Digital channel 52 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue53	Digital channel 53 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue54	Digital channel 54 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue55	Digital channel 55 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue56	Digital channel 56 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue57	Digital channel 57 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE

		Group 7: NONE Group 8: NONE
TriggerValue58	Digital channel 58 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue59	Digital channel 59 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue60	Digital channel 60 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue61	Digital channel 61 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue62	Digital channel 62 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue63	Digital channel 63 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue64	Digital channel 64 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue65	Digital channel 65 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue66	Digital channel 66 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue67	Digital channel 67 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue68	Digital channel 68 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue69	Digital channel 69 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue70	Digital channel 70 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue71	Digital channel 71 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue72	Digital channel 72 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE

		Group 7: NONE Group 8: NONE
TriggerValue73	Digital channel 73 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue74	Digital channel 74 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue75	Digital channel 75 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue76	Digital channel 76 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue77	Digital channel 77 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue78	Digital channel 78 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue79	Digital channel 79 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue80	Digital channel 80 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue81	Digital channel 81 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue82	Digital channel 82 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue83	Digital channel 83 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue84	Digital channel 84 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue85	Digital channel 85 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue86	Digital channel 86 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue87	Digital channel 87 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE

		Group 7: NONE Group 8: NONE
TriggerValue88	Digital channel 88 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue89	Digital channel 89 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue90	Digital channel 90 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue91	Digital channel 91 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue92	Digital channel 92 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue93	Digital channel 93 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue94	Digital channel 94 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue95	Digital channel 95 trigger option	Group 1: NONE Group 2: NONE

		Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE
TriggerValue96	Digital channel 96 trigger option	Group 1: NONE Group 2: NONE Group 3: NONE Group 4: NONE Group 5: NONE Group 6: NONE Group 7: NONE Group 8: NONE

Logical Device IO

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.0

Logical Device DIAGNOSTIC

No description available

Active Group	1
Number of Groups	8
Parameter Revision	1.0