

Field Service Engineer Training (Level 4) ELK-14 SD

TRAINING CENTER SWITZERLAND - COURSE DESCRIPTION

PREPARED BY	STATUS	SECURITY LEVEL			
Jenisija Karunakaran	Draft	Internal			
APPROVED BY	APPROVAL DATE				
OWNER	DOCUMENT KIND				
Head of Training Center	Agenda				
TITLE					
GIS-L4-ELK 14_SD-Training Agenda					
OWNING ORGANIZATION	DOCUMENT ID	REV.	LANG.	PAGE	
CH-Zurich-2657-Field Service		A	en	1/4	
Hitachi Energy © 2022 Hitachi Energy. All rights reserved.					



This is an in- depth training about the product series ELK-14 SD and its component.

Course goal:

To acquire:

- Basic knowledge about SD circuit breaker
- Advanced knowledge about the HMB 1 drive 1st generation
- TW, TY Disconnector, DSK and parts exchange
- Earthing switch EM14 and FAES EM14, DSK and parts exchange
- BAC/ BAE drive replacement and readjustment of the active parts and link system
- Re-commissioning abilities

Main learning objectives:

- Safety introduction
 - Training center risk
 - Safety requirements when
 Working on electrical system > 1KV
- Removal and re-installation of HMB operating Mechanism
- Adjustments HMB drive / circuit breaker
- DSK exchange circuit breaker type SD
- Resistance measurement of arcing chamber
- DSK exchange and parts replacement for the TW and TY Disconnectors, EM and EB Earthing switch
- Alignment gear link system
- Re-commissioning of the circuit breaker-> time and speed
- Trouble shooting cases
- Writing an overhaul report

Prerequisites:

- Good English skill
- On-site experience
- Crane operating license
- SF6 Gas-handling course with certificate (Only for Europe)

IT infrastructure

- Please ensure you have "Admin rights" on your notebook.
- Participants must bring their own notebook and PSE (Safety shoes)

This is a theoretical and practical training course.

Certification:

A confirmation will be issued after successful participation in this course, as part of the certification process.

Within a 24 months period, an on-site assessment must be carried out along with a final review to complete certification.

Duration:

10 days

Enrolments:

Send your request to

GIS-GCB Training@hitachienergy.com

STATUS	SECURITY LEVEL	DOCUMENT ID	REV.	LANG.	PAGE
Approved	Internal	2GHE009980	Α	en	2/4

* Training Introduction / Presentation	
 Health and Safety Induction Hitachi Energy GIS-Product Portfolio Introduction to GIS main components Practical training Removing of HMB operating mechanism from Explanation and Execution trouble shooting Practical training Open the circuit breaker and perform DSK exch Closing the circuit breaker openings, realignment The HMB 1 drive. Installation of the HMB 1drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	
 Health and Safety Induction Hitachi Energy GIS-Product Portfolio Introduction to GIS main components Practical training Removing of HMB operating mechanism from Explanation and Execution trouble shooting Open the circuit breaker and perform DSK exch Closing the circuit breaker openings, realignmen The HMB 1 drive. Installation of the HMB 1drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	Ε
Practical training	Ō
Practical training Practical training Practical training Open the circuit breaker and perform DSK exch Closing the circuit breaker openings, realignment The HMB 1 drive. Installation of the HMB 1 drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches.	Classroom
Practical training Try, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Read active parts	Ö
Practical training Open the circuit breaker and perform DSK exch Closing the circuit breaker openings, realignmer The HMB 1 drive. Installation of the HMB 1 drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Re and active parts	
Practical training Open the circuit breaker and perform DSK exch Closing the circuit breaker openings, realignmer The HMB 1 drive. Installation of the HMB 1 drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Re and active parts	the circuit breaker ases of the HMB 1
 Open the circuit breaker and perform DSK exch. Closing the circuit breaker openings, realignment The HMB 1 drive. Installation of the HMB 1 drive. Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	ases of the HMB 1
 Closing the circuit breaker openings, realignment The HMB 1 drive. Installation of the HMB 1 drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	
 Closing the circuit breaker openings, realignment The HMB 1 drive. Installation of the HMB 1 drive Practical training TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	nae te
Practical training Ty, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts	t with
 TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	o Li
 TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	Training center
 TY, TW Disconnector. Remove and overhaul the Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Reand active parts 	<u> </u>
 Execute trouble shooting cases. DSK replacement of disconnector switches. Practical training Reconnect and adjustment the gear linkage. Read active parts 	
Practical training Reconnect and adjustment the gear linkage. Reand active parts	BAC drive 5
Practical training ❖ Reconnect and adjustment the gear linkage. Re and active parts	cen
 Reconnect and adjustment the gear linkage. Re and active parts 	- bu
 Reconnect and adjustment the gear linkage. Re and active parts 	Training center
 Reconnect and adjustment the gear linkage. Re and active parts 	Ė
and active parts	
•	alignment of each phase
5 * Manual Operation of all switches.	Training center/ Classroom
_	ວ ຄົຕ
	ainir Cla
Week review	T = E

STATUS	SECURITY LEVEL	DOCUMENT ID	REV.	LANG.	PAGE
Approved	Internal	2GHE009980	Α	en	3/4
© 2022 Hitachi Energy, All rights recoved					

Day	Subject	Location
6	 Practical training ❖ Removal of the EB, EM earthing and fast earthing switch drives ❖ Overhaul the drives and execute trouble shooting cases 	Training center
7	Practical Training ❖ DSK of the EB, EM earthing switches ❖ Re-installation of the drive. Manual operation of all switches	Training center
8	Practical Training	Training center
9	 Practical Training ❖ Continuation of re-commissioning ❖ Finalization and, if necessary, repetition of individual sections ❖ Writing a field service report 	Training center Classroom
10	Field service documentation / Exam Q and A session / Certification Process End of training	Classroom

The content and duration of each segment are variable

STATUS	SECURITY LEVEL	DOCUMENT ID	REV.	LANG.	PAGE
Approved	Internal	2GHE009980	Α	en	4/4
© 2022 Hitachi Energy All rights reser					All rights reserved