

GIS ELK-04C/145 I&C Training

Level 4 Field Service Engineer Training

TRAINING CENTER CHINA – COURSE DESCRIPTION

PREPARED BY ZhiWu Wu	STATUS Approved	SECURITY LEVEL Internal		
APPROVED BY Sam-QingZhong Shen	APPROVAL DATE 2022-12-28			
OWNER Head of Training Function	DOCUMENT KIND Agenda			
TITLE GIS ELK-04C/145 I&C Training				
OWNING ORGANIZATION 2657-Service CN	DOCUMENT ID 2GHE004112	REV. B	LANG. en	PAGE 1/4

Course goal:

To acquire:

- ❖ basic knowledge about SP circuit breaker overhaul
- ❖ TK combined disconnector earthing switch overhaul
- ❖ Fast act earthing switch overhaul

The course covers GIS type ELK-04C/145kV

Main learning objectives:

- ❖ Safety introduction:
 - training center risks
 - safety requirements when working on electrical systems >1kV
- ❖ Practical training on SP circuit breaker
- ❖ Removal and reinstallation of MSD operating mechanism
- ❖ Re-coating of linear movement bushing
- ❖ Resistance measurement of arcing chambers
- ❖ overhaul of combined disconnector earthing switch
- ❖ overhaul of DES operating mechanism
- ❖ overhaul of FES fast acting earthing switch
- ❖ writing an overhaul report

Prerequisites:

- ❖ Good English skills (written and spoken)
- ❖ Attended the local required
- ❖ Health & Safety Training

Course type :

The training consists of both classroom lessons and hands-on practical sessions

This is a theoretical and practical training course.

Certification:

This training is part of the Field Service Engineer Certification program and is prerequisite to obtain Level 4 certification on:
"ELK-04C/145"

A certificate will be issued if the certification requirements are fulfilled as described in the Global PGHV- GIS certification process (1HC0127705)

Duration:

10 days

Enrolments:

Send your request to
cn-hvtraining@hitachienergy.com

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Day	Subject	Location
1	Welcome and introduction to training center	Classroom
	Health & Safety rules for PGHV-CN Training Centre visitors	
	Electromagnetic induction when working on high voltage switchgear	
	Introduction to product main components <ul style="list-style-type: none"> ❖ Circuit breaker type SP 	
2	Practical training	Training Field
	❖ Removal of MSD operating mechanism	
	❖ Opening of circuit breaker	
	❖ Dismounting of the arcing chambers	
3	Practical training	Training Field
	❖ overhauling the arcing chambers	
	❖ re-coating of the linear movement bushing	
	❖ re-assembling of SP circuit breaker	
4	Practical training	Training Field
	❖ re-assembling of SP circuit breaker	
	❖ resistance measurement on arcing chambers	
	❖ re-installation of arcing chambers	
5	Practical training	Training field
	❖ adjustment and re-installation of operating mechanism	
	week review	
	Q and A session	

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Practical Training		Training field
6	<ul style="list-style-type: none">❖ removal and re-installation of SP arcing chamber <p>Note: an overhaul of the SP arcing chamber is not foreseen</p>	
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Practical Training		Training field
7	<ul style="list-style-type: none">❖ removal of DES operating mechanisms❖ overhaul of module combined disconnector and earthing switch	
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Practical Training		Training field
8	<ul style="list-style-type: none">❖ overhaul of DES operating mechanisms❖ re-installation of DES operating mechanism❖ troubleshooting on DES operating mechanisms	
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Practical Training		Training field
9	<ul style="list-style-type: none">❖ removal of fast acting earthing switch❖ re-installation of FES operating mechanism❖ troubleshooting on FES operating mechanisms	
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Final tests		Classroom
10	Field service documentation	
Final Q and A session		

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