

ISSUED BY: CZPETRN 04. 06. 2024

FOR APPROVAL



ABB s.r.o., ELDS BRNO  
Videnska 117  
CZ-619 00 BRNO

17.5 kV SWITCHGEAR TYPE UNIGEAR ZS1

CUSTOMER: ABB EE  
CUSTOMER REF. No.:  
ABB REF. No.: 1000057554

ABB PROJECT REALIZATION TEAM

PROJECT MANAGER: PETLACHOVA Kristyna  
PROJECT ENGINEER: JARUSEK Jakub  
DESIGN ENGINEER: TRNKA Petr

SWITCHGEAR GENERAL ARRANGEMENT

DURING THE INSTALLATION, COMMISSIONING PERIOD AND THE TIME OF OPERATION, CLIENT IS OBLIGED TO FOLLOW ALL INSTRUCTIONS AND RECOMMENDATION GIVEN BY MANUFACTURERS OF INDIVIDUAL INSTRUMENTS INSTALLED INSIDE SUPPLIED EQUIPMENT

Drawn by TRNKA Petr		Checked by BURDA Tomas		Released by SAFAR Petr		Project number 1000057554		Customer project number TENDER No.		Project name EE-10.5KV IRU CHP PLANT (EXTENSION)		Installation = K00					
Revision 04. 06. 2024		Name		Remark		Document number 1VLB057554-0003 04. 06. 2024 04. 06. 2024		Customer document number				Place of installation + GA					
						<div>ABB</div> <div>ABB s.r.o. ELDS Brno</div>		<div></div>		Page description COMMON DRAWINGS PROJECT TITLE PAGE		DCC & &EAA		Page A01		Pages 7	


© Copyright 2024 ABB. All rights reserved.

ISSUED BY: CZPETRN 04. 06. 2024

FOR APPROVAL

SHEET INDEX

PAGE	PAGE NAME	REVISION		
=K00+GA/A01	PROJECT TITLE PAGE			
=K00+GA/A02	SHEET INDEX			
=K00+GA/C02	SWITCHGEAR MECHANICAL DESIGN			
=K00+GA/F01	SWGR. FOOTPRINT			
=K00+GA/H01	SWGR. FOOTPRINT DETAILS			
=K00+GA/J01	SECTION VIEW DRAWINGS			
=K00+GA/L01	SECTION VIEW DRAWINGS			

Drawn by TRNKA Petr		Checked by BURDA Tomas		Released by SAFAR Petr		Project number 1000057554		Customer project number TENDER No.		Project name EE-10.5KV IRU CHP PLANT (EXTENSION)	Installation = K00		
Revision	04. 06. 2024	Name	Remark		Document number	1VLB057554-0003	Customer document number		Customer		Place of installation + GA		
					04. 06. 2024	04. 06. 2024					Page description COMMON DRAWINGS SHEET INDEX		
					 ABB s.r.o. ELDS Brno						DCC &	Page A02	Pages 7

ISSUED BY: CZPETRN 04. 06. 2024

FOR APPROVAL

F

© Copyright 2024 ABB. All rights reserved.

SWITCHGEAR MECHANICAL DESIGN

COATING COLOR	RAL 7035
Cu BARS DESIGN	
MAIN CIRCUIT Cu BARS COATING	No **)
BUSBAR PARTITIONING	Yes - according to internal standard
INSULATED T-OFFS AND BUSBARS	Yes ***)
LOW VOLTAGE COMPARTMENT	
LV COMPARTMENT DOORS DESIGN	Standard
MIMIC DIAGRAM	On relay
MIMIC DIAGRAM COLOR	N/A
LV ASSEMBLY PANEL MECH. DESIGN	Comb profiles
TOP CABLES ENTRY	PVC bushing
LOCKS	
LV COMPARTMENT DOORS CLOSING VERSION	T-Handle Double Bit 3.2 mm
BREAKER COMPARTMENT DOORS CLOSING VERS.	Handle Double Bit 5.2 mm
CABLE COMPARTMENT DOORS CLOSING VERSION	Handle Double Bit 5.2 mm
LABELS	
UNIT NAMEPLATES LANGUAGE 1st / 2nd	Estonian / No
UNIT NAMEPLATES DESIGN	Engraved – fixed by stainless stell
UNIT NAMEPLATES COLOR	Black letters/white background
DEVICES ON LV DOORS LABELS LANGUAGE 1st / 2nd	Estonian / No
DEVICES ON LV DOORS LABELS DESIGN	Engraved – fixed by stainless stell
DEVICES ON LV DOORS LABELS COLOR	Black letters/white background
DEVICES INSIDE LV COMP. LABELS LANG. 1st / 2nd	Estonian / No
DEVICES INSIDE LV COMP. LABELS DESIGN	Engraved – fixed by stainless stell
DEVICES INSIDE LV COMP. LABELS COLOR	Black letters/white background
WARNING LABELS LANGUAGE	English
WARNING LABELS DESIGN	Glue
OTHER PARAMETERS	
SHUTTERS PAINTING	Standard RAL7035

FINAL DOCUMENTATION

NUMBER OF HARDCOPIES/CD DISC/FTP	0/0/Yes
STRUCTURE	Per typical
FORMAT	Pdf + dwg
CTs, VTs ROUTINE TEST REPORTS LANGUAGE	English
CTs, VTs MAGNETIZATION CURVES REQUIRED	Yes
CTs, VTs CALIBRATION FOR TARIFF METERING REQ.	Yes
CTs, VTs CORRECTION CURVES REQUIRED	Yes
MEASUREMENT OF PARTIAL DISCHARGE	No

\*\*) BECAUSE OF TECHNICAL REASONS, SOME BARS CAN BE SILVERED ALSO IN CASE WHEN "NO" IS SELECTED.  
\*\*\*) BECAUSE OF TECHNICAL REASONS, SOME BARS CANNOT BE INSULATED ALSO IN CASE WHEN "YES" IS SELECTED.

Drawn by TRNKA Petr		Checked by BURDA Tomas		Released by SAFAR Petr		Project number 1000057554		Customer project number TENDER No.		Project name EE-10.5KV IRU CHP PLANT (EXTENSION)		Installation = K00			
Revision 04. 06. 2024		Name		Remark		Document number 1VLB057554-0001 04. 06. 2024 04. 06. 2024		Customer document number Customer				Place of installation +			
						<div>ABB</div> ABB s.r.o. ELDS Brno				Page description COMMON DRAWINGS GEN. SPECIFICATION OF SWGR.		DCC & &EEC		Page C02	Pages 7



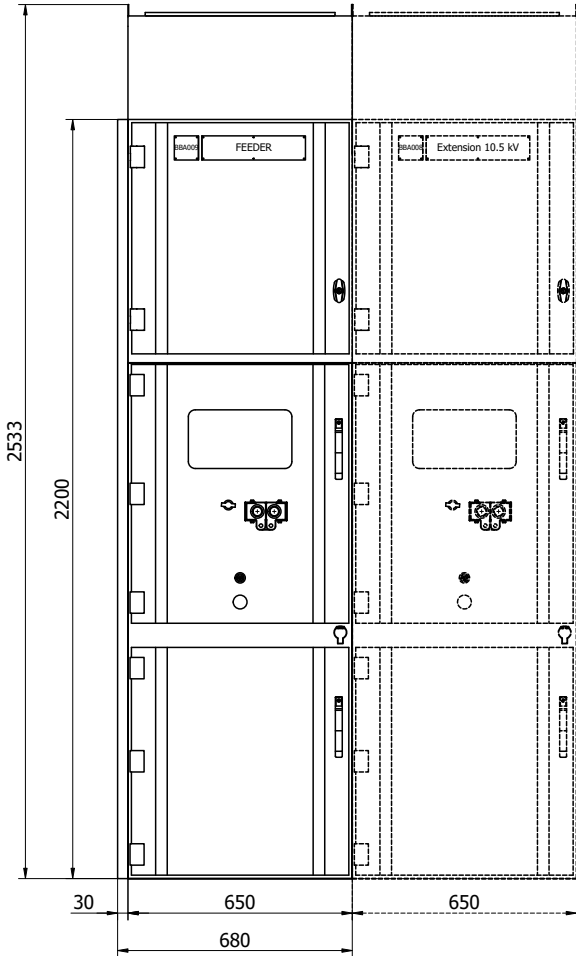
ABB s.r.o.  
ELDS Brno

ISSUED BY: CZPETRN 04.06.2024

FOR APPROVAL

F

Minimum switchgear room height - H: 3100 mm



PANEL	1	BBA009	1	BBA008
PANEL NAME	FEEDER		Extension 10.5 kV	
CB MECHANICAL CONTROL	On/off		On/off	
BUSBAR PARTITIONING	]		[	

Drawn by TRNKA Petr		Checked by BURDA Tomas		Released by SAFAR Petr		Project number 100057554		Customer project number TENDER No.		Project name EE-10.5KV IRU CHP PLANT (EXTENSION)		Installation = K00		
Revision 04.06.2024		Name		Remark		Document number 1VLB057554-0003		Customer document number		Customer		Place of installation + GA		
						04.06.2024 04.06.2024						Page description COMMON DRAWINGS FRONT VIEW		
						ABB s.r.o. ELDS Brno						DCC & &ELH Page F01 Pages 7		

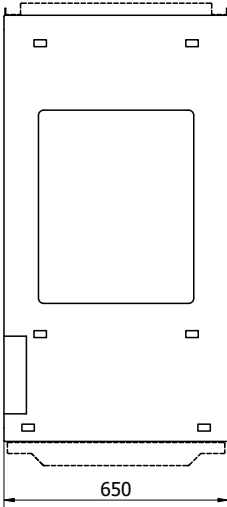
ISSUED BY: CZPETRN 04. 06. 2024

FOR APPROVAL

F

© Copyright 2024 ABB. All rights reserved.

Minimal distance between a wall and a panel must be for wall installation 100 mm (recommended 500 mm) lateral and on back side.



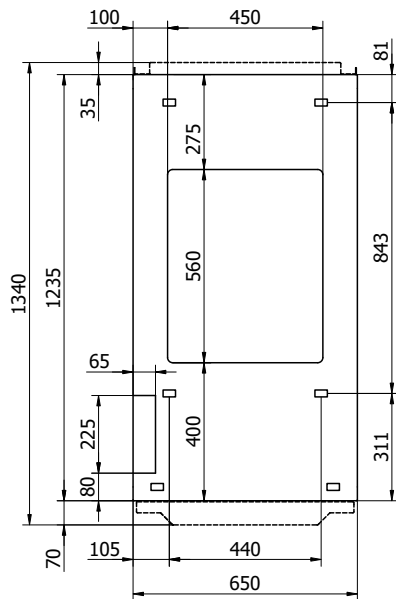
PANEL	1	BBA009
PANEL NAME	FEEDER	
MV CABLE	3x3x(1Cx630mm²)	
MV CABLEHOLDER SIZE	KHF 35 - 54 mm	
INTERLOCKING BETWEEN CABLE COMP. DOOR AND ES	Mechanical interlocking	
INTERLOCKING BETWEEN CB DOOR AND WITHDRAW. PART	Mechanical interlocking	
LOCK ON COVER FOR THE CB-RACK.-CRANK-INSERT. HOLE	Padlock	
LOCK ON COVER FOR THE ES-OPER.-LEVER-INSERT. HOLE	Padlock	

Drawn by TRNKA Petr		Checked by BURDA Tomas		Released by SAFAR Petr		Project number 1000057554	
Revision 04. 06. 2024		Name		Remark		Document number 1VLB057554-0003 04. 06. 2024	
						ABB s.r.o. ELDS Brno	

Customer project number	TENDER No.
Customer document number	
Customer	

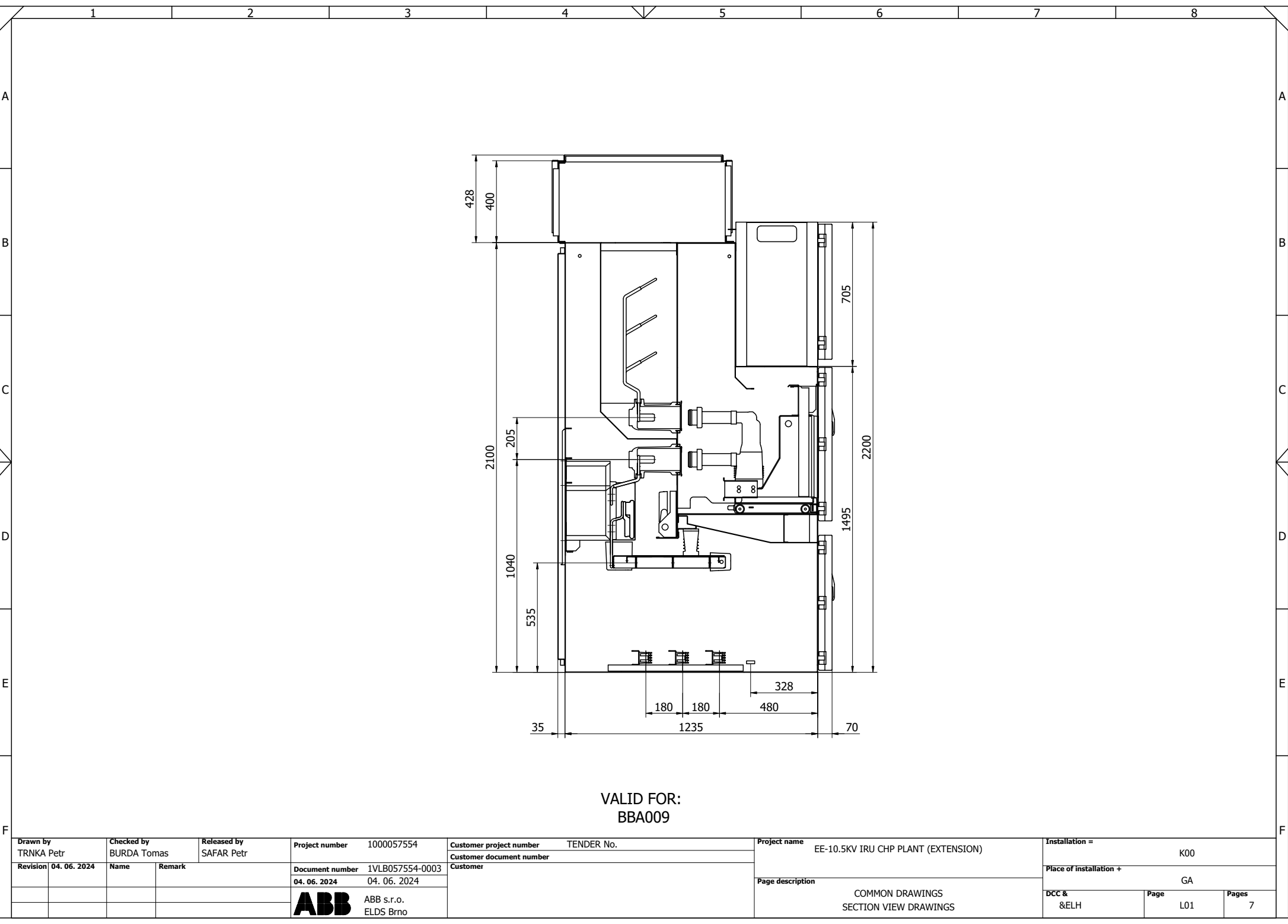
Project name EE-10.5KV IRU CHP PLANT (EXTENSION)		Installation = K00	
Page description COMMON DRAWINGS SWGR. FOOTPRINT		Place of installation + GA	
		DCC & &ELH	Page H01 Pages 7

Tolerances for laying the floor frame are:  
Evenness tolerance:  $\pm 1$  mm over a measuring length of 1 m  
Straightness tolerance: 1 mm per 1 m  
For more details refer to Installation, service and maintenance manual.



VALID FOR:  
BBA009

<b>Drawn by</b> TRNKA Petr		<b>Checked by</b> BURDA Tomas		<b>Released by</b> SAFAR Petr	<b>Project number</b> 1000057554	<b>Customer project number</b> TENDER No.	<b>Project name</b> EE-10.5KV IRU CHP PLANT (EXTENSION)	<b>Installation =</b>  K00		
<b>Revision</b>	04. 06. 2024	<b>Name</b>	<b>Remark</b>	<b>Document number</b> 1VLB057554-0003 04. 06. 2024    04. 06. 2024	<b>Customer document number</b>	<b>Customer</b>		<b>Place of installation +</b>		
								<b>Page description</b>  COMMON DRAWINGS SWGR. FOOTPRINT DETAILS		
								<b>DCC &amp; ELH</b>		
								<b>Page</b> J01		
								<b>Pages</b> 7		



VALID FOR:  
BBA009

Drawn by TRNKA Petr		Checked by BURDA Tomas		Released by SAFAR Petr		Project number 1000057554		Customer project number TENDER No.		Project name EE-10.5KV IRU CHP PLANT (EXTENSION)		Installation = K00			
Revision	04. 06. 2024	Name	Remark	Document number 1VLB057554-0003		Customer document number		Customer				Place of installation + GA			
				04. 06. 2024		04. 06. 2024				Page description COMMON DRAWINGS SECTION VIEW DRAWINGS		DCC & &ELH		Page L01	Pages 7



ABB s.r.o.  
ELDS Brno