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'South Australia's electricity transmission specialist'

IPS-Energy File Conversion Videos

Steps to Convert Common Relay Files to IPS-Energy File Format

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electranet.com.au



Facts about IPS-Energy:

- In order for a setting file to be uploaded in IPS-Energy, it should be converted first to a *file format* supported by IPS-Energy.
- > Every brand and type of relay requires it's own proprietary software to update and finalise settings before converting it to the required *file format*.
- Every brand and type of relay has it's own unique ways of conversion.
- IPS-Energy *file formats* differ per brand and type of relays.
- More often than not, the version of the relay setting should match to the relay pattern in IPS-Energy to prevent lost setting issues.
- > A video presentation is made to facilitate learning the steps in converting common relay files to the *file format* supported by IPS-Energy.









Common Digital Relay Brands in ElectraNet

- RMS > SEL >
- > ABB >
- > Siemens
- > **GE**
- **Micom** >



- **Eberle**
- > Alsthom

1000000000000

> Areva



COMMON RELAY FILES CONVERSION PROCESS







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How to Upload a Converted File?

Note:

IF YOU ARE WORKING WITH AN RSR, SKIP STEPS #1 – #7 AND GO STRAIGHT TO STEP #8.

How to upload a converted file?

<u>Note: IF YOU ARE WORKING WITH AN RSR, SKIP STEPS #1 – #7 AND</u> GO STRAIGHT TO STEP #8.

 Double click the selected asset in the Assets Window in Asset Explorer under Asset Management Module.

tion Explorer		Asse	ts						
ElectraNet	^		0	Location	Name	Asset Type	Serial Nr.	Manufa	A
		1		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	CROMPTON	244-02	R18545	Crompt	Contro
I II Annas Creek		2		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	CROMPTON	244-02	R18544	Crompt	Contro
E ₩ 132 KV	E	3		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	CROMPTON	244-02	R18546	Crompt	Contro
= 132kV Mobilong		4		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	RMS 2HSM5	2HSM	110993/40	RPL/E	Protect
= CB6065		5		ElectraNet/Angas Creek/132 KV/132kV Mobilong/	HEINEMAN	3CB_CF3	ETSA24990	HEINE	Protect
CB6066		6		ElectraNet/Angas Creek/132 KV/132kV Mobilong/	HEINEMAN	3CB_CF3	R12267	HEINE	Protect
🗖 = CB6163		7		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	IEE 604N	604N	NP 32	IEE	Protect
F1832 - Mannum		8		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	KRAUS & N	CA10	R18551	K&N	Protect
🔲 🔳 F1869 - Para		9		ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	KRAUS & N	CG8	R18548	K&N	Protect
- Transformer 1		10		ElectraNet/Angas Creek/132 KV/132kV Mobilong/	BROWN BO	NHSC	1125549	BBC	Protect
Transformer 2		11		ElectraNet/Angas Creek/132 KV/132kV Mobilong/	BROWN BO	NHSC	1159944	BBC	Protect
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바 H 址 AUX		•	0	ElectraNet/Angas Creek/132 KV/F1832 - Mannum/	SEL-421-1	SEL-421-1	2005139282	SEL	Protect
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1 II Back Calington									
A Baroota									
Hard Belalie									
I II Berri									
A Blanche									
□ 蒜 Blyth West									
A Brinkworth									

 Select "Relay Data" tab and click "Finder icon" for other versions of setting file, if required.



ElectraNet

3. Select the Relay Version applicable to your setting file. (When other version is required, otherwise skip this step)

4. Select "Relay Settings" Tab. Do not forgot to click "Yes" to save changes.

5. Click "Ok" to confirm changes.

Group	Manufacturer	Relay Model Name	Relay Version	Relay Description	Pattern Name	XRIO Data
Protection Device	SEL	SEL-351S-5 SEL-351S	005 006 008	Overcurrent Protectio	SEL-351S-5 SEL	
Protection Device	SEL	SEL-351S-6 101-105	101-105	Overcurrent Protectio	SEL-351S-6 SEL	
Protection Device	SEL	SEL-351S-7	-1	Overcurrent Protectio	SEL-351S-7	
Protection Device	SEL	SEL-352	-1	Breaker Failure Prote	SEL-352	
Protection Device	SEL	SEL-352-2 SEL-352-3	001 102	Breaker Failure Prote	SEL-352-2 SEL-3	
Protection Device	SEL	SEL-387 SEL-387-5	-1 3 4 101 102	Overcurrent Protectio	SEL-387 SEL-38	
Protection Device	SEL	SEL-387-5	004	Overcurrent Direction	SEL-387-5	
Protection Device	SEL	SEL-387E 002	002	Differential Protection	SEL-387E	
Protection Device	SEL	SEL-387E 003 101 102	003 101 102	Differential Protection	SEL-387E	
Protection Device	SEL	SEL-387E -1	-1	Differential Protection	SEL-387E	
Protection Device	SEL	SEL-387L	001	Differential Protection	SEL-387L	
Protection Device	SEL	SEL-411L-1	003	Line Differential Prote	SEL-411L-1	
Protection Device	SEL	SEL-421 SEL-421-1	002, 003, 004, 0	Line distance protecti	SEL-421 SEL-42	SEL421_12:
Protection Device	SEL	SEL-421-1_ENET			SEL-421-1_ENET	
Protection Device	SEL	SEL-421-3	012	Line distance protecti	SEL-421-3	
Protection Device	SEL	SEL-421-4 SEL-421-5	014 016	Line distance protecti	SEL-421-4 SEL-4	
Protection Device	SEL	SEL-421-5	014	Line distance protecti	SEL-421-4 SEL-4	
Protection Device	SEL	SEL-451-2	011	Overcurrent Protectio	SEL-451-2	
Protection Device	SEL	SEL-451-5	013 015	Overcurrent Protectio	SEL-451-5	
Protection Device	SEL	SEL-487B	001 003-006 008	Busbar Protection	SEL-487B	
			1	1		

Asset Object - ElectraNet/Angas Creek/132 KV/F1832 - Mannum//SEL-421-1 General Device Digital Device Relay Data Power System Data Relay Settings Nominal Relay Settings Relay Setting Comparison ElectraNet I RELEX logical model Other Versio AUX voltage SEL-421-3 \square 012 Relay Parameter Pattern 🔳 AC SEL-421-3 Hardware version Protection relay model option Digital relay data Base relay parameter set PC Software T 🔎 Communication ID (SCADA): Nominal value: 50 Hz Frequency . [A] Asset Object R101 2 Do you want save changes rmware History 23 IPS-ENERGY™ Database has been updated successfully ОК



6. Under the relay settings history window *Right click then select – "New" – "New Setting"* **from the pop-up menu.**

- 7. Click select the new setting row.
- 8. **Right click** on the Relay parameters window.

Occupier	Device	Digital I	Device	Relay Data F	ower!	System Data	Relay Settings	Nominal Relay Set	ings Re	lay Setting (Comparison	Bectra	Net For	mula			
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-0	Protection 5	5				Imported-Re	lay DECPLV	Voitages	Scaling	1			-	VE <td>Print="1" ing></td>	Print="1" ing>		
-6	Protection (5				Imported-Re	lay DNPADE	DNP Ad	iress	0							
-0	Breaker Mo	nitor											,	14 222 104	-		





8.1 Select "*Import Relay Parameters*" from the pop-up menu.

Note:

It is the **2nd selection** from the Import Action Menu.

All confirmation about native file?

answer is : NO

e Fi U	Show All Parameters Show Setting-Sheet Parameters Show All Columns Set Value to Infinity	er
	Enter Special Value Reset Value	
	Apply Value Compare	
	Import Relay Parameters (native)	
ms ms ms	Import User-Specific Relay Parameters ASPEN	
ms	View 🕨	
-	Parameter Statistics	
_	Copy XRiolD to Clipboard	
_	Export to Relay Setting File Export Table	
	🚔 NOTES 🛛 📮 COMMENTS	

move

9. On the pop-up window, **click folder icon** and find select the <u>converted file</u> to be uploaded. IPS should automatically recognise the file.

"Native File? - NO"

10. No Drama in Step 9? - Click OK.

Remarks:

If you get the warning notification on the right, THERE IS NOTHING TO WORRY.

It only means that IPS Relay Model database is not up-to-date to include this model type.

Click <u>"Close" and you are ready to proceed!</u>

Relay text file C:\temp\New	folder/Micom Areva Set File/MV	/E CB6554 S1 OK
P141 001 20	3_02_07.txt	Overwrite Base-Parameters Cancel
Properties		Data Reader
Asser Platay Asser Type Asser Type Asser Type Asser Yealow Yeal	ALSTOR MICON P141 P141 Feeder protection and control Electrative/Morphet Vale East/ Avers (ALSTON P141; Elec P141711a270050A 3765331 Digital - Microprocessor Parameter Sat Generated with medier (ALSTOI- ALSTOM P141_AL_005_JF_ENET Digital ALSTOM	Test data soder ALSTON CAPE ALSTON CAPE Abive set Detected language: Abive set Vistaryse Vistaryse
Mandheturer ALS Model Number (NLFB) 14 Name COI R. Model Info (RMI) P14 R. Version Ifo (RVI) P14 Senal List supported relay model/v RMI RVI Relay Software	P141711427050A COURIER P1417114270050A P141A4_0050_F	



11. Examine the Relay Parameter Statistic window that will pop up.

Visible parameters count should not be ZERO!

- If it is zero, it means that the version of the relay setting is different to that of you are using.
 Always use the initial file provided by your Authoriser!
- Otherwise, the process of converting the file is wrong. Please review the support videos.
- Else, contact the IPS administrator for quick help.

No dramas? Congratulations! You successfully uploaded the *required file format*. Click **Close**.

ElectraNet

This has an issue!



This is Ok!





12. Now complete the new setting row by assigning the following:

a. Setting Type:

Provisory – during relay application

Proper - once setting is approved

b. Setting Status:

Being Prepared – before application

In Service – Once applied to the relay

Archived - Setting superseded

13. <u>Right Click</u> on the box below verified on field and

select > <u>Stamp</u> >> <u>Set Verified on</u> to confirm the veracity of new setting revision.



🔯 Protection De	vice - Elec	traNet/Morph	ett Vale East/2	75 kV/CB65	554//ALSTO	OM MICOM P	141		-				1	-		
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Relay Sett	ings										403.8 411.4		5	THE POALES LINK POALES BITY EPOARS	() () () () () () () () () () () () () (
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					Imported-	Relay 0701	CB	Control by	Disabled							
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					Imported-	Relay 0703	Triș	p Pulse Time	500	ms						
					Imported-	Relay 0705	Ma	an Close Delay	10	s						
					Imported-	Relay 0706	CB	B Healthy Time	5	s				"1"		
					Imported-	Relay 0709	Re	eset Lockout by	CB Close						"255"	
					Imported-	Relay 070A	Ma	an Close RstDly	5	s			_	· · · · · · · ·	0", "25	5", "1"
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Parameter Set																1
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14. Right Click on "Parameter Set" at lower left corner of the screen and rename the "Parameter Set" to Ver.1, Ver.2, etc. to identify the new setting revision.

15. Right click on the Setting Row and select "Attachment.." to upload copies of the setting file in the **original file type** and the **converted file**. <u>Please rename the files to include the versions.</u>



16. Finally, click "Update/Close" or "Update" to save everything up.

- > To show that IPS has successfully updated the database, the confirmation window shall pop up.
- If you find that the saving process is taking longer time and a notification pops up along the way, just hit "OK" and the saving process will continue until the confirmation window is displayed.
- > In such case, a network performance may be the issue.

Update/Close Update	Close
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Questions?



We are more than happy to help... ©

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Thank you

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