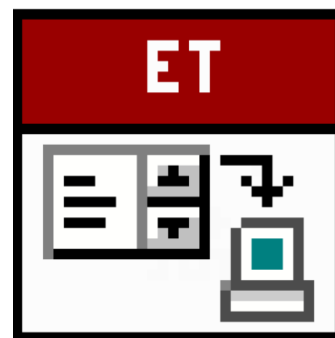
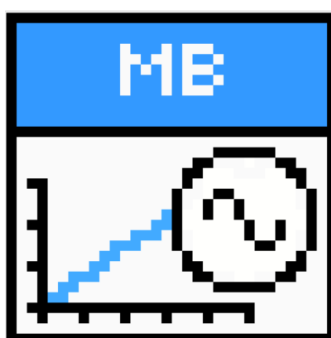
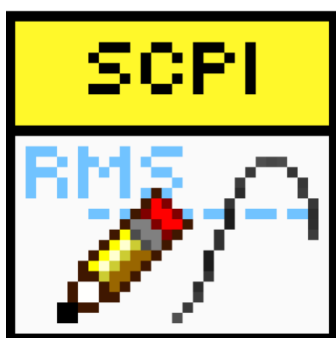




ELETRONICA PROFESSIONALE
PROFESSIONAL ELECTRONICS



POWER SUPPLY MANAGER DRIVER MANUAL

INDEX

1. INTRODUCTION	4
1.1. INSTALLATION	4
1.1.1. Requirements.....	4
1.1.2. Drivers Installation	4
2. PSM DRIVERS.....	4
2.1. TABLE OF DRIVER EXISTENCE ON THE VARIOUS TPS FAMILIES	5
2.2. TABLE OF DRIVER EXISTENCE ON THE VARIOUS PROTOCOLS	6
2.3. COMMON DRIVERS	7
2.3.1. PSM_Database.csv	7
2.3.2. Init.vi.....	7
2.3.3. Record initialization example.....	7
2.4. PROTOCOL ELETTRATEST DRIVERS	8
2.4.1. Initialization.vi	8
2.4.2. ReadID.vi	8
2.4.3. ReadOptions.vi	8
2.4.4. ReadAlarms.vi	8
2.4.5. ReadMode.vi	9
2.4.6. ReadSetPoint.vi	9
2.4.7. ReadOutput.vi	9
2.4.8. ReadPeakInfo.vi	9
2.4.9. ReadRMSInfo.vi	9
2.4.10. ReadWaveform.vi	10
2.4.11. SetDCType.vi.....	10
2.4.12. SetMode.vi	10
2.4.13. SetMultiMode.vi.....	11
2.4.14. SetF.vi	11
2.4.15. SetPH.vi	11
2.4.16. SetV.vi.....	12
2.4.17. SetOutput.vi	12
2.4.18. SetRampF.vi.....	12
2.4.19. SetRampV.vi	13
2.4.20. SetMultiRampV.vi.....	13
2.4.21. SetRampVF.vi.....	13
2.4.22. SetMultiRampVF.vi.....	14
2.4.23. SetPeakLim.vi	14
2.4.24. SetRMSLim.vi.....	14
2.4.25. SetAVGLim (Only for RPS)	15
2.4.26. SetRPSPeakLim (Only for RPS).....	15
2.4.27. ReadRPSLimits (Only for RPS).....	15
2.4.28. SetWaveform.vi.....	15
2.4.29. ReadWaveform.vi.....	15
2.4.30. Reset.vi	16
2.4.31. BusyWait.vi.....	16
2.5. PROTOCOL MODBUS DRIVERS	17
2.5.1.....	17
2.5.2. ReadID.vi	17
2.5.3. ReadOptions.vi	17

2.5.4.	ReadAlarms.vi	17
2.5.5.	ReadMode.vi	17
2.5.6.	ReadSetPoint.vi	18
2.5.7.	ReadOutput.vi	18
2.5.8.	ReadPeakInfo.vi	18
2.5.9.	ReadRMSInfo.vi	18
2.5.10.	SetMode.vi	18
2.5.11.	SetMultiMode.vi	19
2.5.12.	SetF.vi	19
2.5.13.	SetPH.vi	19
2.5.14.	SetV.vi	20
2.5.15.	SetOutput.vi	20
2.5.16.	SetRampF.vi	20
2.5.17.	SetRampV.vi	21
2.5.18.	SetMultiRampV.vi	21
2.5.19.	SetRampVF.vi	21
2.5.20.	SetMultiRampVF.vi	22
2.5.21.	SetPeakLim.vi	22
2.5.22.	SetRMSLim.vi	22
2.5.23.	BusyWait.vi	23
2.6.	PROTOCOL SCPI DRIVERS	24
2.6.1.	Initialization.vi	24
2.6.2.	ReadID.vi	24
2.6.3.	ReadOptions.vi	24
2.6.4.	ReadAlarms.vi	24
2.6.5.	ReadMode.vi	24
2.6.6.	ReadSetPoint.vi	25
2.6.7.	ReadOutput.vi	25
2.6.8.	ReadPeakInfo.vi	25
2.6.9.	ReadRMSInfo.vi	25
2.6.10.	ReadWaveform.vi	25
2.6.11.	SetMode.vi	26
2.6.12.	SetDCType.vi	26
2.6.13.	SetF.vi	26
2.6.14.	SetPH.vi	26
2.6.15.	SetV.vi	27
2.6.16.	SetOutput.vi	27
2.6.17.	SetRampF.vi	27
2.6.18.	SetRampV.vi	27
2.6.19.	SetPeakLim.vi	28
2.6.20.	SetRMSLim.vi	28
2.6.21.	SetWaveform.vi	28
2.6.22.	BusyWait.vi	28
3.	DRIVER INITIALIZATION EXAMPLE	29
4.	REVISION INDEX	29

1. INTRODUCTION

The PSM - Power Supply Manager is a LabView-made Software created to remotely control the Elettrotest power supplies.

The PSM comes with a full stack of new LabView drivers in three different protocols: Elettrotest, SCPI and ModBus.

The Drivers are built for LabView 2019 version.

1.1. INSTALLATION

1.1.1. Requirements

The LabView Drivers requires LabView version 2019 and higher.

1.1.2. Drivers Installation

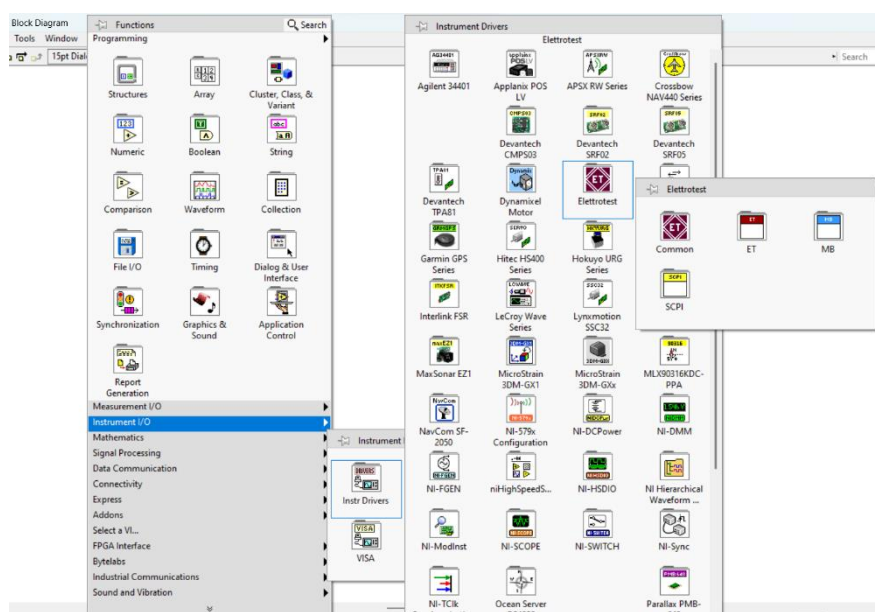
For installing the drivers on your device follow these instructions:

- Download the PSM drivers from the [Elettrotest Site](#)
- Unzip the folder and open them in the [VI Package Manager](#)
- Follow the instructions on the VI Package Manager and install the drivers
- Now it is possible to see the installed drivers in the block diagram palette and in the vi.lib path

2. PSM DRIVERS

After you have installed the drivers on your pc, those are directly available on the block diagram palette, under Instrument I/O -> Instr Drivers -> Elettrotest.

On the LabView Palette, the drivers are divided into four subcategories; one for each protocol and one, called “Common”, that can be used with each protocol.



2.1. TABLE OF DRIVER EXISTENCE ON THE VARIOUS TPS FAMILIES

Depending on the driver you want to use, check here under if it is possible to use the driver with the machine you intend to use.

Symbols Meaning:

✓: Driver usable

✗: Driver not usable

“Depends on protocol”: Depends on which protocol it is used

		POWER SUPPLY FAMILY					
		CPS	TPS	RPS	HPS	TPS/D	XPS
PSM DRIVERS	Init.vi	✓	✓	✓	✓	✓	✓
	Initialization.vi	✓	✓	✓	✓	✓	✓
	ReadID.vi	✓	✓	✓	✓	✓	✓
	ReadOptions.vi	✓	✓	✓	✓	✓	✓
	ReadAlarms.vi	✓	✓	✓	✓	✓	✓
	ReadMode.vi	✓	✓	✓	✓	✓	✓
	ReadSetPoint.vi	✓	✓	✓	✓	✓	✓
	ReadOutput.vi	✓	✓	✓	✓	✓	✓
	ReadPeakInfo.vi	✗	✗	✗	✗	✓	✓
	ReadRMSInfo.vi	✗	✗	✗	✗	✓	✓
	ReadWaveform	Depends on protocol		✗	Depends on protocol	✗	✗
	SetDCType	Depends on protocol					
	SetMode.vi	✓	✓	✓	✓	✓	✓
	SetMultiMode.vi	Depends on protocol					
	SetF.vi	✓	✓	✓	✓	✓	✓
	SetPH.vi	✓	✓	✓	✓	✓	✓
	SetV.vi	✓	✓	✓	✓	✓	✓
	SetOutput.vi	✓	✓	✓	✓	✓	✓
	SetRampV.vi	✓	✓	✓	✓	✓	✓
	SetRampF.vi	✓	✓	✓	✓	✓	✓
	SetRampVF.vi	✓	✓	✓	✓	✓	✓
	SetMultiRampV.vi	Depends on protocol					
	SetMultiRampVF.vi	Depends on protocol					
	SetPeakLim.vi	✗	✗	✗	✗	✓	✓
	SetRMSLim.vi	✗	✗	✗	✗	✓	✓
	SetRPSPeakLim.vi	✗	✗	✓	✗	✗	✗
	SetAVGLim.vi	✗	✗	✓	✗	✗	✗
	SetWaveform.vi	Depends on protocol		✗	Depends on protocol	✗	✗
	Reset.vi	Depends on protocol					
	BusyWait.vi	Depends on protocol					

2.2. TABLE OF DRIVER EXISTENCE ON THE VARIOUS PROTOCOLS

Depending on the driver and protocol you want to use, check here under if it is possible to use the driver with the protocol you intend to use.

		PROTOCOLS		
		Elettrotest	ModBus	SCPI
PSM DRIVERS	Initialization.vi	✓	✓	✓
	ReadID.vi	✓	✓ ⁽¹⁾	✓ ⁽¹⁾
	ReadOptions.vi	✓	✓	✓
	ReadAlarms.vi	✓	✓	✓
	ReadMode.vi	✓	✓	✓
	ReadSetPoint.vi	✓	✓	✓
	ReadOutput.vi	✓	✓	✓
	ReadPeakInfo.vi	✓	✓	✓
	ReadRMSInfo.vi	✓	✓	✓
	ReadWaveform	✓	✗	✓
	SetDCType	✓ ⁽²⁾	✗	✓ ⁽²⁾
	SetMode.vi	✓	✓	✓
	SetMultiMode.vi	✓	✓	✗
	SetF.vi	✓	✓	✓
	SetPH.vi	✓	✓	✓
	SetV.vi	✓	✓	✓
	SetOutput.vi	✓	✓	✓
	SetRampV.vi	✓	✓	✓
	SetRampF.vi	✓	✓	✓
	SetRampVF.vi	✓	✓	✗
	SetMultiRampV.vi	✓	✓	✗
	SetMultiRampVF.vi	✓	✓	✗
	SetPeakLim.vi	✓	✓	✓
	SetRMSLim.vi	✓	✓	✓
	SetRPSPeakLim.vi	✓	✗	✗
	SetAVGLim.vi	✓	✗	✗
	SetWaveform.vi	✓	✗	✓
	Reset.vi	✓	✗	✗
	BusyWait.vi	✓ ⁽³⁾	✓ ⁽³⁾	✓

¹⁾ For XPS and TPS/D families the Machine_Code and Power_Code has been introduced only after TPS/M/D fw rev.69, TPS/T/D fw rev.16, XPS/M & XPS/T fw rev.10182

²⁾ SetDCType can be used only with machine with Option $\pm V_{dc}$

³⁾ BusyWait can be used in all type of machine with SCPI, but only after TPS/M/D fw rev.69, TPS/T/D fw rev.16, XPS/M & XPS/T fw rev.10182 for ModBus and Elettrotest Protocol in the TPS/D and XPS machines.

2.3. COMMON DRIVERS

The common drivers allows to initialize the driver setup loading the machine's record from the database PSM_Database_xx_.csv

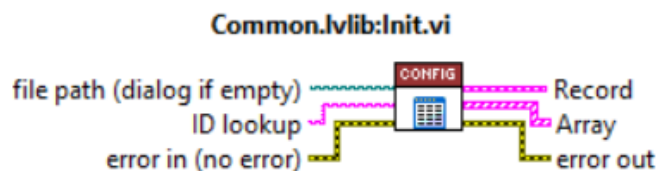
2.3.1. PSM_Database.csv

The PSM_Database_xx_.csv is a database which contains all the information of all the Elettrotest machines. When the Common library is installed, the database is installed in this path:

"C:\Program Files (x86)\National Instruments\LabVIEW 2019\vi.lib\Elettrotest\Common"

The database path has to be called in the file path of the init.vi driver beside the Instrument ID (*ID lookup*) to load the correct record of the instrument you want to control.

2.3.2. Init.vi



This vi initialize the record of the connected instrument reading it from the database.

The required inputs are:

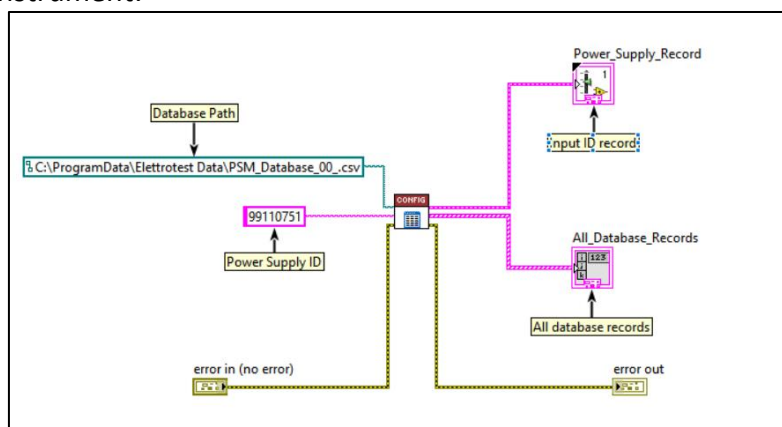
- **File path:** File path of the Elettrotest database. Usually is located in the Driver_LabView folder or into this path C:\ProgramData\Elettrotest Data\PSM_Database_00_
- **ID lookup:** It is the Elettrotest code of the power supply you want to control. Check the Driver_Example to find out which code you have to insert.

The outputs are:

- **Record:** is the cluster containing all the information of the selected instrument.
- **Array:** is an array of clusters containing all the records for all the elettrotest machine contained in the database.

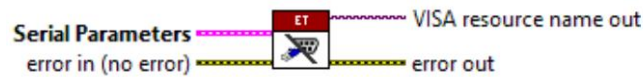
2.3.3. Record initialization example

This example shows you how to extrapolate the correct database record to control your power supply. The Power_Supply_Record cluster contains all the information needed by the drivers to fully control your instrument.



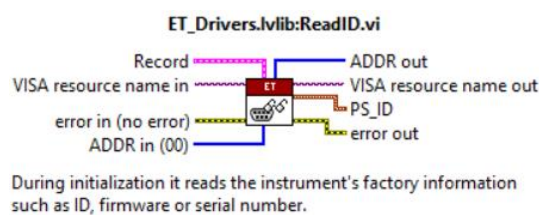
2.4. PROTOCOL ELETOTEST DRIVERS

2.4.1. Initialization.vi



Initializes connection between instrument and driver by allowing choice of serial or TCP connection.

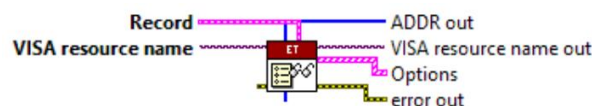
2.4.2. ReadID.vi



During initialization it reads the instrument's factory information such as ID, firmware or serial number.

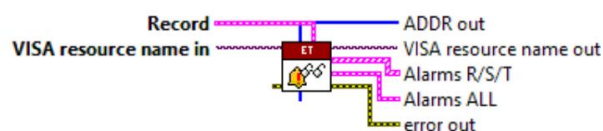
The PS_ID cluster contains all the information of the machine such as the Serial Number, Machine code, Power Code, Firmware Revision and date of fabrication.

2.4.3. ReadOptions.vi



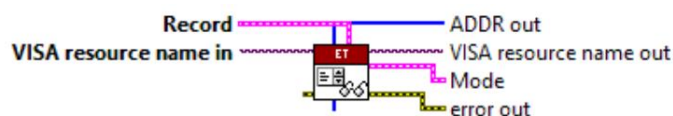
Reading of available and active options in the selected instrument.

2.4.4. ReadAlarms.vi



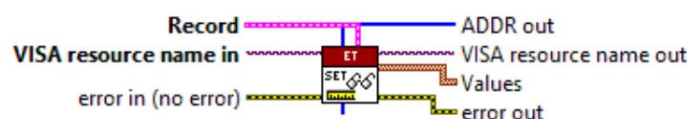
It reads alarms from the instrument and displays them on the screen as boolean indicators.

2.4.5. ReadMode.vi



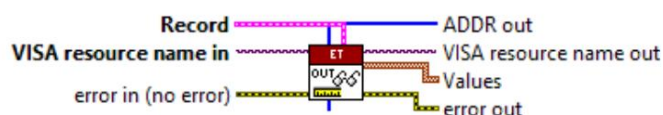
Acquires the mode and settings set in the instrument at the time of reading.

2.4.6. ReadSetPoint.vi



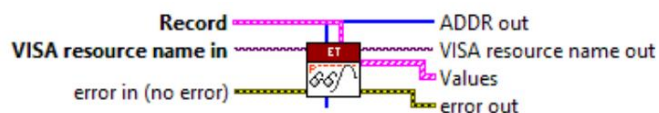
Reading values set as input to the instrument by the user.

2.4.7. ReadOutput.vi



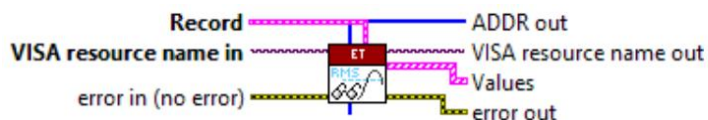
Reading the measurements acquired by the instrument.

2.4.8. ReadPeakInfo.vi



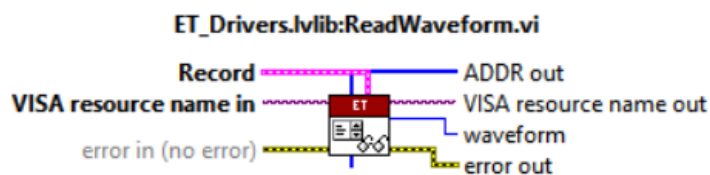
Acquisition of parameters on peak current limitation, such as activation and peak value.

2.4.9. ReadRMSInfo.vi



Acquisition of parameters on root mean square current limitation, such as activation, RMS value, SOF and delay.

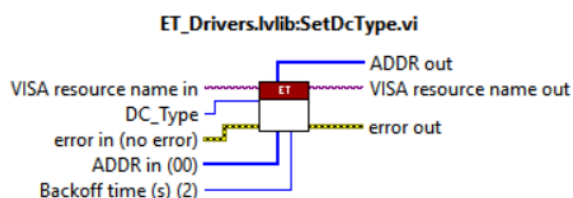
2.4.10. ReadWaveform.vi



Read the waveform type. The waveform can be:

- 0 = 10-80Hz
- 1 = 20-160Hz
- 2 = 30-240Hz
- 3 = 40-320Hz
- 4 = DC
- 5 = DC+ (only for generator with option Vdc)
- 6 = DC- (only for generator with option Vdc)

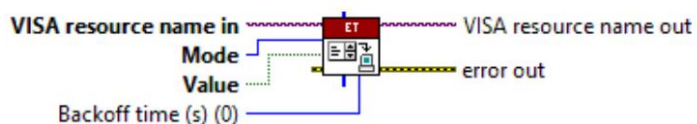
2.4.11. SetDcType.vi



Allows setting the machine in positive DC or negative DC (DC+/DC-).

This driver can be used only with machine with option Vdc.

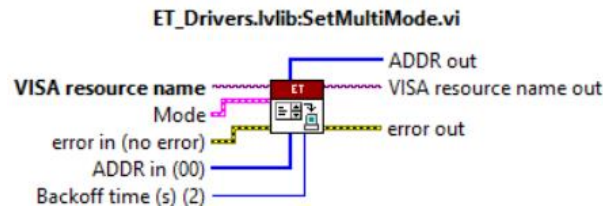
2.4.12. SetMode.vi



Allows setting once a time the instrument modes, such as Single/Three phase, 2/4 wire etc...

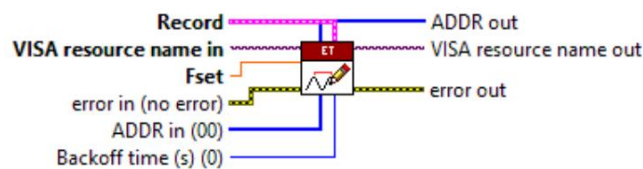
The selected mode must be allowed by the instrument. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.13. SetMultiMode.vi



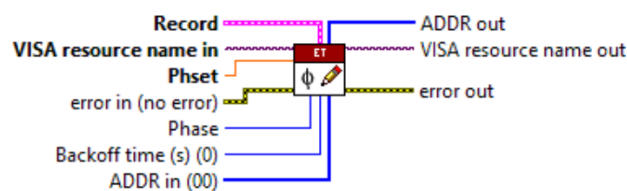
Allows setting the operating mode of the instrument such as remote control, maximum range or single/three phase mode in only **one** command. The input is a cluster containing all the modes. The modes combination must be allowed by the instrument.

2.4.14. SetF.vi



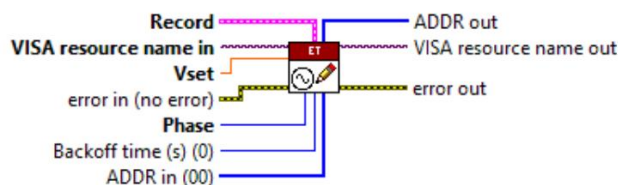
Sets the instantaneous frequency value set by user via control. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.15. SetPH.vi



Allows to set the phase offset of each of the three phases. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

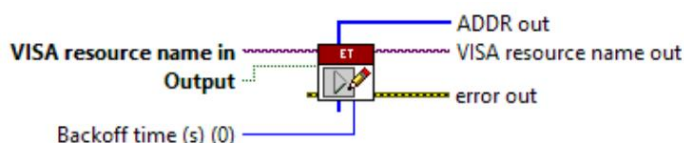
2.4.16. SetV.vi



Sets the instantaneous voltage value of the selected phase, or all of them at the same time, at same value.

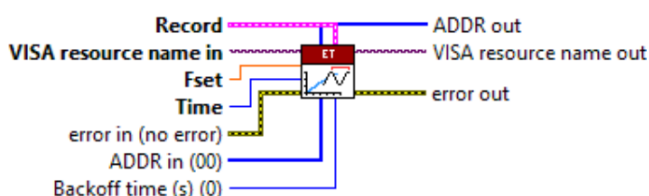
Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.17. SetOutput.vi



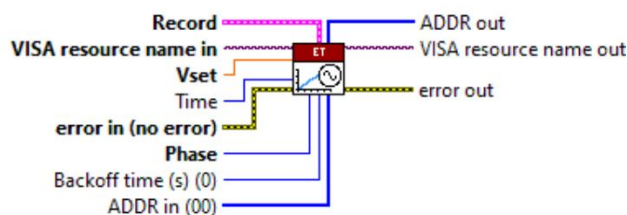
Allows to turn the output of the instrument on or off. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.18. SetRampF.vi



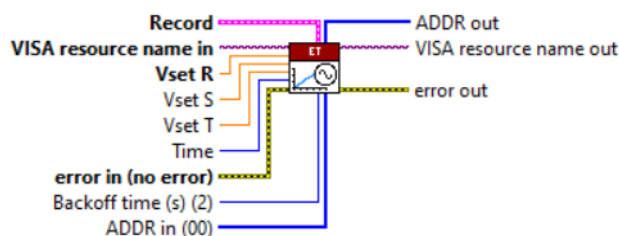
Sets the final value and duration of the frequency ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.19. SetRampV.vi



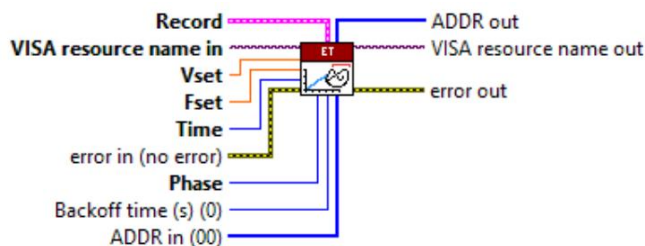
Sets the final value and duration of the voltage ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.20. SetMultiRampV.vi



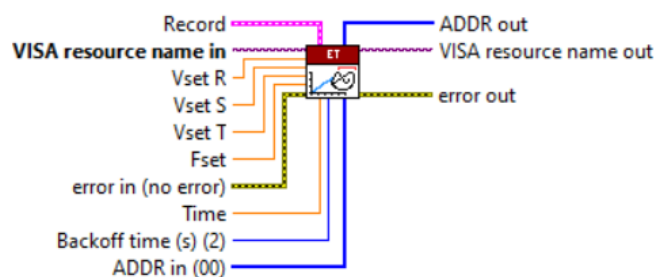
With this driver, it is possible to set the final value and duration of the voltage ramp independently for each phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.21. SetRampVF.vi



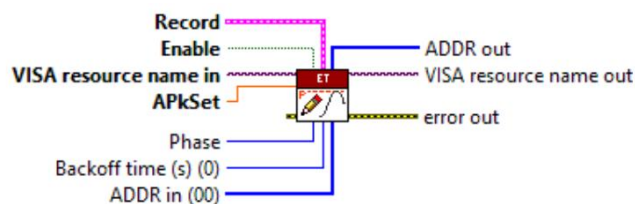
Sets the final value and duration of the mixed frequency and voltage ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.22. SetMultiRampVF.vi



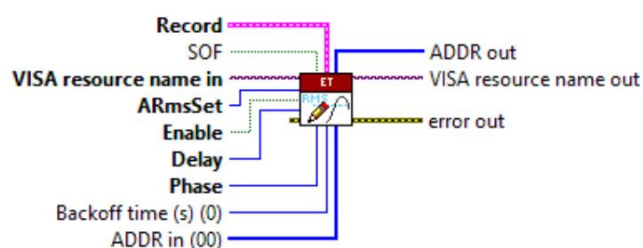
With this driver is possible to set the final value and duration of the voltage-frequency ramp independently for each phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default is 2s).

2.4.23. SetPeakLim.vi



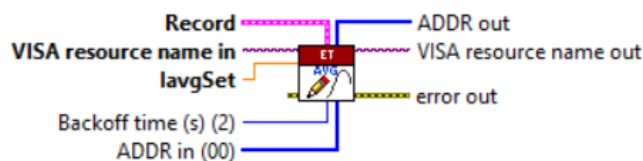
Turns peak limits on and off and sets the threshold value. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.24. SetRMSLim.vi



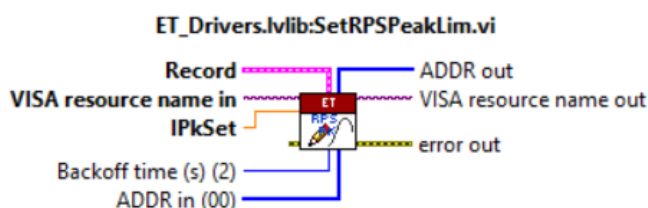
Allows to set the root mean square current limitation activation, threshold value, signaling delay and SOF activation (where applicable). Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.4.25. SetAVGLim (Only for RPS)



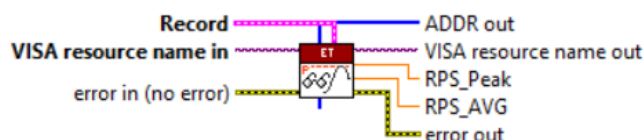
Allows to set the AVG current limitation on the RPS power supplies family.

2.4.26. SetRPSPeakLim (Only for RPS)



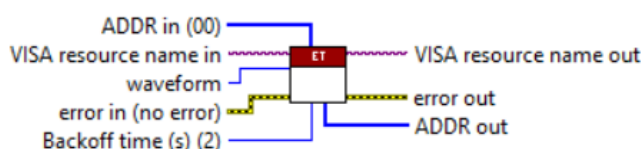
Allows to set the root mean square current limitation on the RPS families.
The function is always enabled.

2.4.27. ReadRPSLimits (Only for RPS)



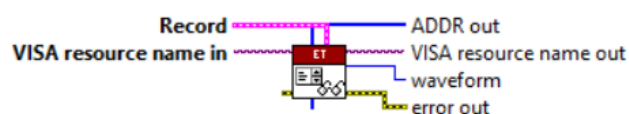
Allows to read the Peak and AVG limits setted [A] in the RPS power supply.

2.4.28. SetWaveform.vi



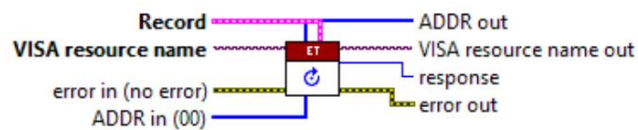
Allows to set the waveform type for set the output frequency on the 7-segment display machines.

2.4.29. ReadWaveform.vi



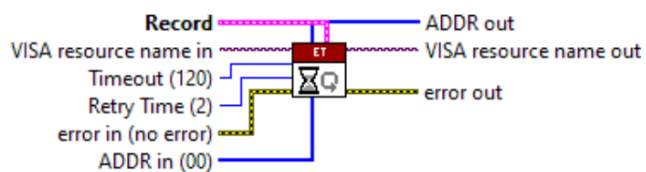
Allows to read the setted waveform.

2.4.30. Reset.vi



Restart the instrument.

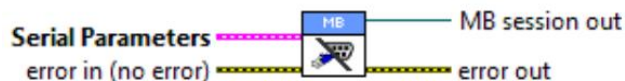
2.4.31. BusyWait.vi



Wait for the busy flag to go off. If the timeout expires before the busy goes off, give error.
If timeout is zero, do not wait and proceed

2.5. PROTOCOL MODBUS DRIVERS

2.5.1.



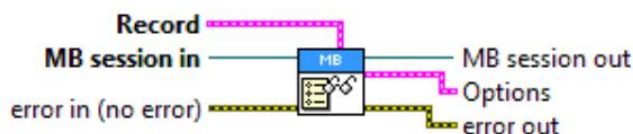
Initializes connection between instrument and driver by allowing choice of serial or TCP connection.

2.5.2. ReadID.vi



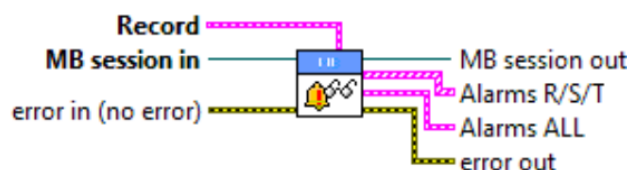
During initialization it reads the instrument's factory information such as ID, firmware or serial number.

2.5.3. ReadOptions.vi



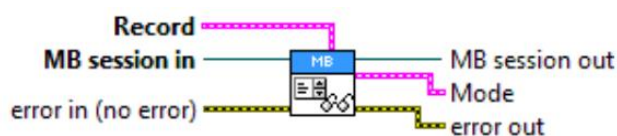
Reading of available and active options in the selected instrument.

2.5.4. ReadAlarms.vi



It reads alarms from the instrument and displays them on the screen as boolean indicators.

2.5.5. ReadMode.vi



Acquires the mode and settings set in the instrument at the time of reading.

2.5.6. ReadSetPoint.vi



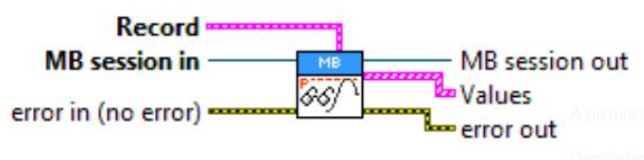
Reading values set as input to the instrument by the user.

2.5.7. ReadOutput.vi



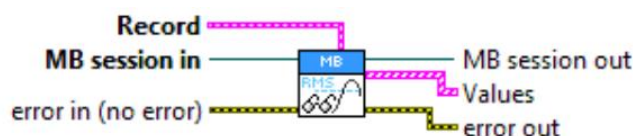
Reading the measurements acquired by the instrument.

2.5.8. ReadPeakInfo.vi



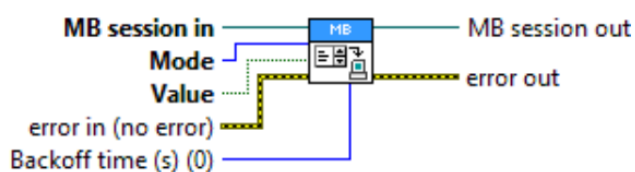
Acquisition of parameters on peak current limitation, such as activation and peak value.

2.5.9. ReadRMSInfo.vi



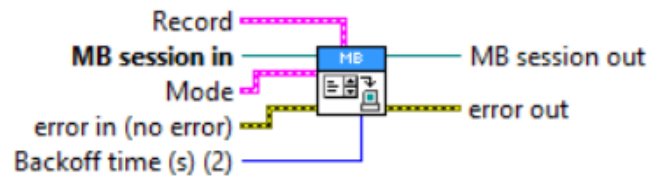
Acquisition of parameters on root mean square current limitation, such as activation, RMS value, SOF and delay.

2.5.10. SetMode.vi



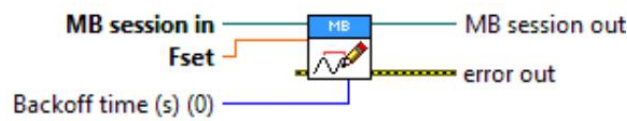
Allows setting once a time the instrument modes, such as Single/Three phase, 2/4 wire etc... The selected mode must be allowed by the instrument. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.11. SetMultiMode.vi



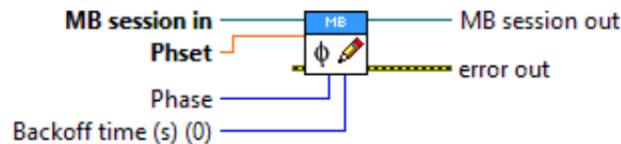
Allows setting the operating mode of the instrument such as remote control, maximum range or single/three phase mode in only **one** command. The input is a cluster containing all the modes. The modes combination must be allowed by the instrument.

2.5.12. SetF.vi



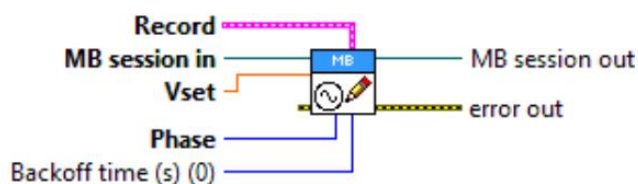
Sets the instantaneous frequency value set by user via control. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.13. SetPH.vi



Allows to set the phase offset of each of the three phases. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

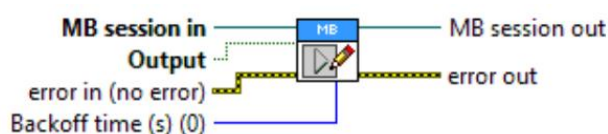
2.5.14. SetV.vi



Sets the instantaneous voltage value of the selected phase, or all of them at the same time, at same value.

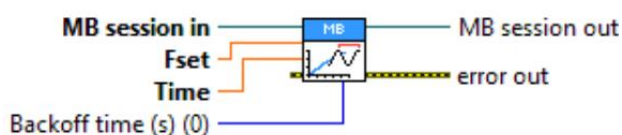
Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.15. SetOutput.vi



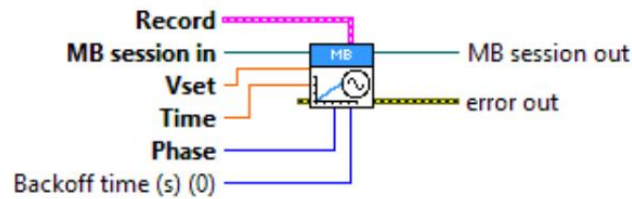
Allows to turn the output of the instrument on or off. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.16. SetRampF.vi



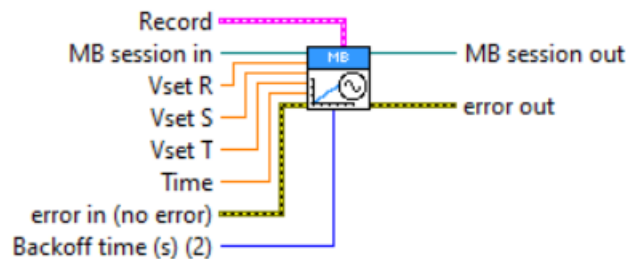
Sets the final value and duration of the frequency ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.17. SetRampV.vi



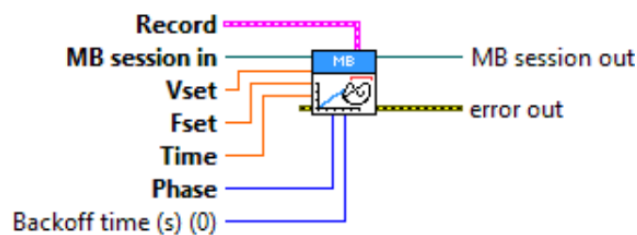
Sets the final value and duration of the voltage ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.18. SetMultiRampV.vi



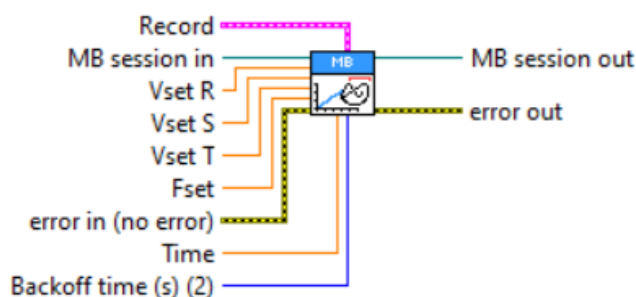
With this driver, it is possible to set the final value and duration of the voltage ramp independently for each phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.19. SetRampVF.vi



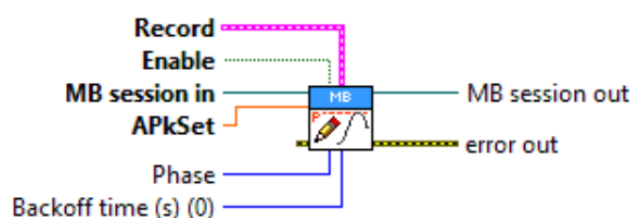
Sets the final value and duration of the mixed frequency and voltage ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.20. SetMultiRampVF.vi



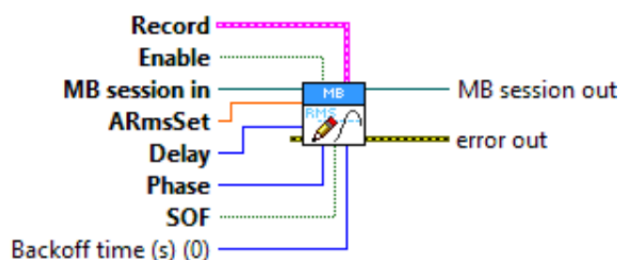
With this driver is possible to set the final value and duration of the voltage-frequency ramp independently for each phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default is 2s).

2.5.21. SetPeakLim.vi



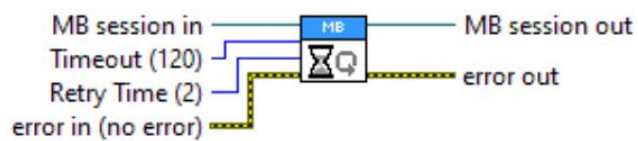
Turns peak limits on and off and sets the threshold value. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.5.22. SetRMSLim.vi



Allows to set the root mean square current limitation activation, threshold value, signaling delay and SOF activation (where applicable). Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

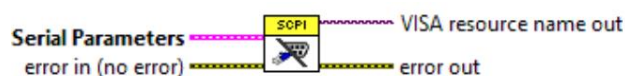
2.5.23. BusyWait.vi



Wait for the busy flag to go off. If the timeout expires before the busy goes off, give error.
If timeout is zero, do not wait and proceed

2.6. PROTOCOL SCPI DRIVERS

2.6.1. Initialization.vi



Initializes connection between instrument and driver by allowing choice of serial or TCP connection.

2.6.2. ReadID.vi



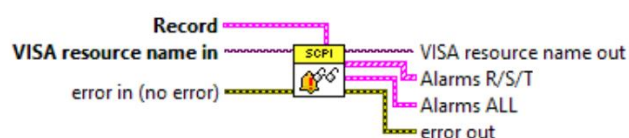
During initialization it reads the instrument's factory information such as ID, firmware or serial number.

2.6.3. ReadOptions.vi



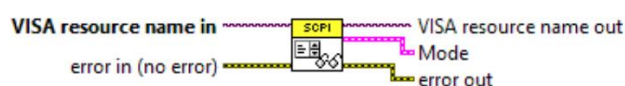
Reading of available and active options in the selected instrument.

2.6.4. ReadAlarms.vi



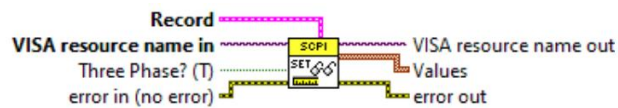
It reads alarms from the instrument and displays them on the screen as boolean indicators.

2.6.5. ReadMode.vi



Acquires the mode and settings set in the instrument at the time of reading.

2.6.6. ReadSetPoint.vi



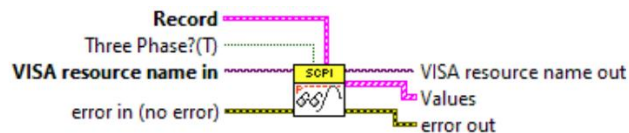
Reading values set as input to the instrument by the user.

2.6.7. ReadOutput.vi



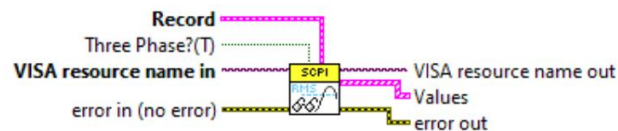
Reading the measurements acquired by the instrument.

2.6.8. ReadPeakInfo.vi



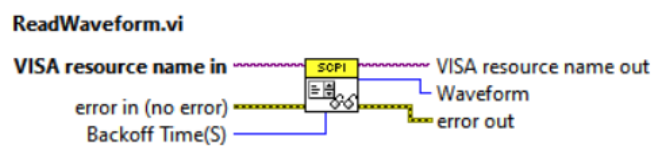
Acquisition of parameters on peak current limitation, such as activation and peak value.

2.6.9. ReadRMSInfo.vi



Acquisition of parameters on root mean square current limitation, such as activation, RMS value, SOF and delay.

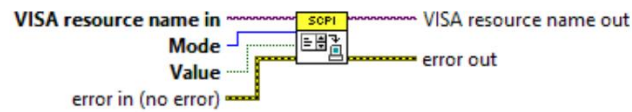
2.6.10. ReadWaveform.vi



Read the waveform type. The waveform can be:

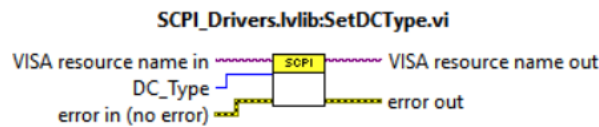
- 0 = 10-80Hz
- 1 = 20-160Hz
- 2 = 30-240Hz
- 3 = 40-320Hz
- 4 = DC
- 5 = DC+ (only for generator with option Vdc)
- 6 = DC- (only for generator with option Vdc)

2.6.11. SetMode.vi



Allows setting once a time the instrument modes, such as Single/Three phase, 2/4 wire etc...
The selected mode must be allowed by the instrument. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.12. SetDCType.vi



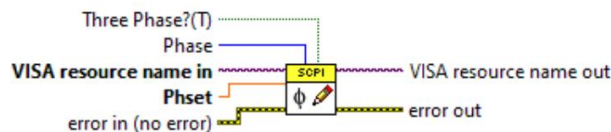
Allows setting the machine in positive DC or negative DC (DC+/DC-).
This driver can be used only with machine with option Vdc.

2.6.13. SetF.vi



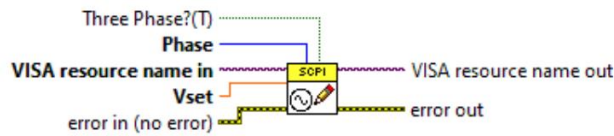
Sets the instantaneous frequency value set by user via control. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.14. SetPH.vi



Allows to set the phase offset of each of the three phases. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

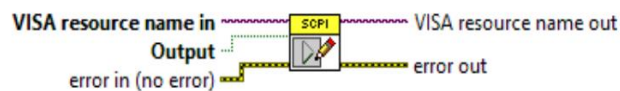
2.6.15. SetV.vi



Sets the instantaneous voltage value of the selected phase, or all of them at the same time, at same value.

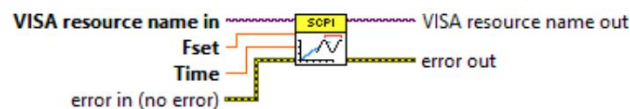
Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.16. SetOutput.vi



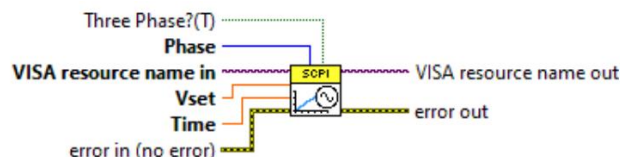
Allows to turn the output of the instrument on or off. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.17. SetRampF.vi



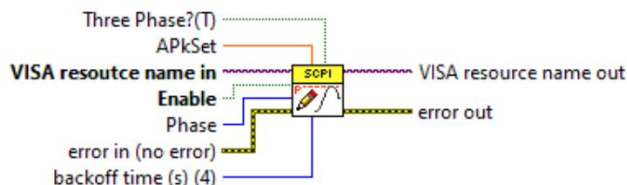
Sets the final value and duration of the frequency ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.18. SetRampV.vi



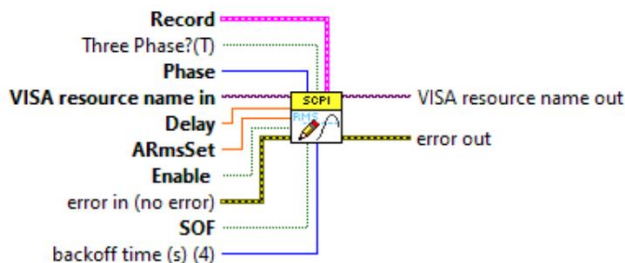
Sets the final value and duration of the voltage ramp for the selected phase. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.19. SetPeakLim.vi



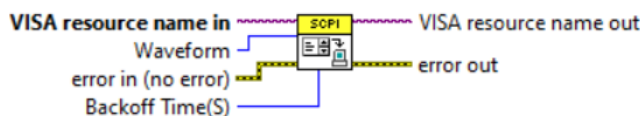
Turns peak limits on and off and sets the threshold value. Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.20. SetRMSLim.vi



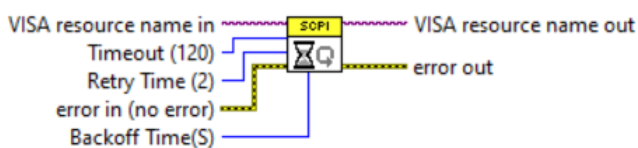
Allows to set the root mean square current limitation activation, threshold value, signaling delay and SOF activation (where applicable). Backoff time is the time to be awaited if the instrument is busy, before retrying (default does not retry and give error if busy).

2.6.21. SetWaveform.vi



Allows to set the waveform type for set the output frequency on the 7-segment display machines.

2.6.22. BusyWait.vi



Wait for the busy flag to go off. If the timeout expires before the busy goes off, give error. If timeout is zero, do not wait and proceed

3. DRIVER INITIALIZATION EXAMPLE

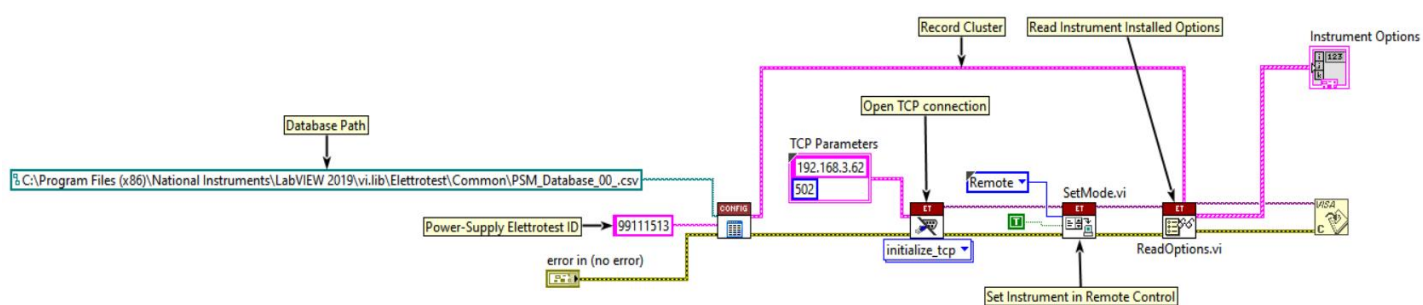
In the driver example below, we are trying to initialize the drivers to control a TPS/M/D 6000VA (Elettrotest ID: 99111513) using the Elettrotest protocol Drivers.

First we need to extrapolate the instrument record from the database. In order to do so, it is necessary to retrieve the machine's record from the init.vi driver of the common library.

Next you need to establish a connection between the PC and the instrument. In this case the instrument is connected via ethernet in the same subnet as the PC, so we must call the Initialize_tcp.vi driver which allows you to open a TCP connection between the instrument and the PC.

Once these two operations have been carried out, all the other drivers can be used. Remember to set the instrument to remote mode first to make the power supply accept remote commands

EXAMPLE TO INITIALIZE & REMOTE CONTROL A TPS/M/D 6KVA



4. REVISION INDEX

02_	Update for 425Vdc option (PM008.24)	05/03/24	A.Ferro	A.Ferro	R.Veronese
01_	ReadID.vi update for Elettrotest Protocol Init.vi info added	08/02/24	A.Ferro	A.Ferro	R.Veronese
00_	First Emission (UT003.22)	03/10/23	A.Ferro	A.Ferro	R.Veronese
Rev.	Description	Date	Author	Verified	Approved