



ELETRONICA PROFESSIONALE
PROFESSIONAL ELECTRONICS



XPS/T

EN

USER MANUAL

ITA

MANUALE UTENTE

**READ AND SAVE
THESE INSTRUCTIONS**

**LEGGI E CONSERVA
QUESTE ISTRUZIONI**

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datāTec



SAFETY WARNINGS

The manufacturer urges users to read the user manual for our products before installation. The installation must be carried out by qualified technical staff. The non-observance of the warnings in this manual can cause electric shocks, even fatal ones.

Please find some general safety warnings below.

- This equipment must be connected to the mains supply using the appropriate safety devices. Please consult the relevant paragraph 5, in this manual.
- XPS must be connected to safety ground through the correct connections. The non-observance or the degradation of this earth connection can lead to electric shocks, even fatal ones. As regards the correct connection modes, please refer to the information contained in paragraph 4.
- Disconnect XPS from the mains before any work on the equipment and on the connected power loads.
- Before touching the load or the output connector make sure that the power supply on the device has been disconnected for at least 5 minutes. This is the time necessary in order for the capacitors inside the device to discharge. The non-observance of this discharge time can lead to electric shocks, even fatal ones.
- Avoid heavy shocks to the equipment (especially during transport) or exposure to extreme weather conditions.
- Any damage to the product due to transportation, incorrect installation or improper use is not covered by the guarantee supplied by the manufacturer.
- Do not use the equipment in explosive environments or in the presence of dust, acids or corrosive and/or inflammable gases.
- Tampering with or dismantling any component in the equipment will void the warranty automatically.
- Do not operate or store under conditions where condensing may occur or where conductive debris may enter in the case.
- Keep the ventilation holes on the front and rear free from obstruction.
- **Do not make dielectric strengths test on the input or output of the equipment. Contact Elettrotest if you need to do specific test**



The manufacturer declines all responsibility for damage to people or things caused by an improper use of its products.



ELECTRIC RISK

There are dangerous voltages inside XPS and over the output connector.

The non-observance of the warnings suggest in this manual can lead to electric shocks, even fatal ones.



OVERHEATING RISK

In the case of a ventilation system failure, the metal parts of the inverter may reach high temperatures (in some cases higher than 70°C).

DISPOSAL



INFORMATION FOR USERS ON THE CORRECT HANDLING OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

In reference to European Union directive 2012/19/EU issued on 24 July 2012 and the related national legislation, please note that:

- WEEE cannot be disposed of as municipal waste and such waste must be collected and disposed of separately;
- the public or private waste collection systems defined by local legislation must be used. In addition, the equipment can be returned to the manufacturer at the end of its working life when buying new equipment;
- the equipment may contain hazardous substances: the improper use or incorrect disposal of such may have negative effects on human health and on the environment;
- the symbol (crossed-out wheeled bin) shown on the product or on the packaging and on the instruction sheet indicates that the equipment must be disposed of separately;
- in the event of illegal disposal of electrical and electronic waste, the penalties are specified by local waste disposal legislation.

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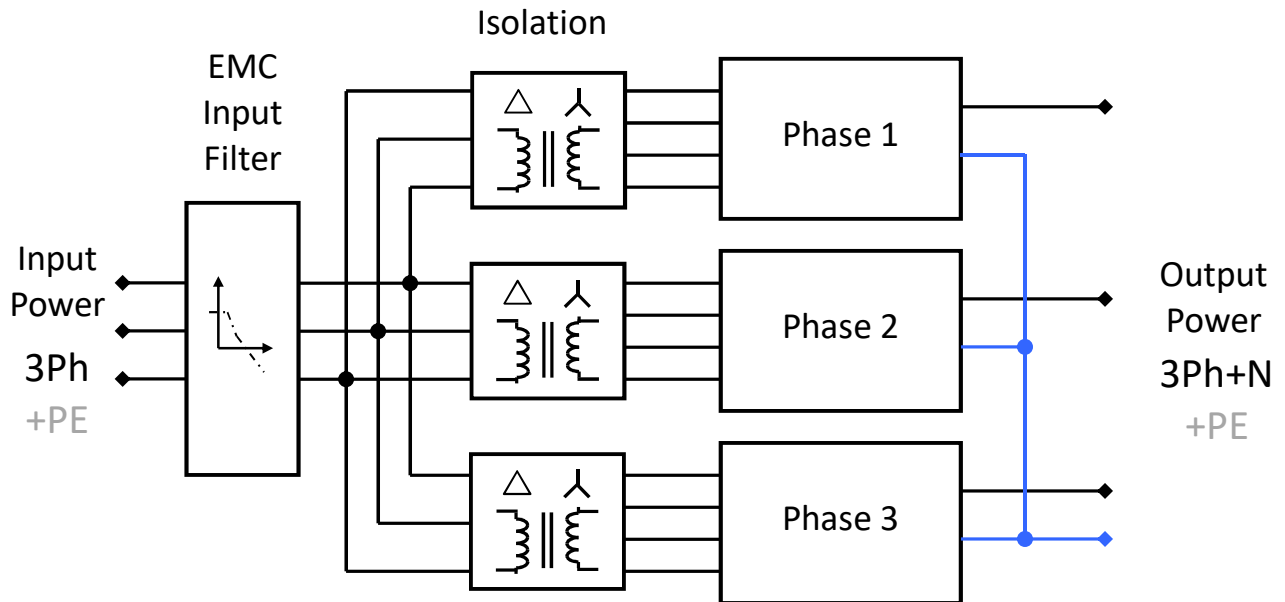
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1. INTRODUCTION

XPS is a power source that supplies sinusoidal stable voltage. Its output voltage is adjustable in frequency, amplitude and phase.

It also has the ability to generate very precise and stabilized DC voltage.



1.1. MAIN FEATURES

1.1.1. Output voltage

The output voltage is guaranteed perfectly DC or sinusoidal, with a distortion of less than 0.3% regardless of the load. The value of output voltage is kept perfectly stable within 0.1% with linear load and a full load.

The load that XPS is able to drive can vary from a pure capacity to a pure inductance.

The output voltage is adjustable with continuity from zero to full scale.

XPS can in fact provide the nominal power at various full scales and this allows the XPS to adapt himself to the disparate needs of the user, without having heavy limitations on the output current. Furthermore XPS is capable to keep the voltage stable also with time variable loads, as for example the pulsating loads. In fact XPS recovers the distortion of the waveform within 0.3 % with linear load and the amplitude of the voltage within 0.1% in less than half period.

Furthermore, XPS can bear a short circuit for an indefinite time without suffering any consequence.

1.1.2. Output frequency

In AC configuration XPS allows the regulation of the output frequency from 10 to 1000Hz at maximum voltage.

This output frequency can be regulated with continuity within the above mentioned range of frequencies and it has a stability of 0.01% with respect to the set frequency.

1.1.3. User interface

XPS is intended to have an user friendly interface. It is also featured the possibility of an host computer control, thus allowing to perform tests automatically. XPS allows various usage selections: wires drop compensation, working frequency. Furthermore, XPS gives the user clear information on the status of the output. Set voltage and set frequency are monitored and the output voltage is read with a precision of 0.3%.

The user is also warned in case of over current obtainable by the XPS, or in case of high loss in the wires, that should not exceed 5% of the set voltage.

We underline again that XPS automatically limits the maximum allowed current, avoiding damages to the equipment; the only consequence is that, in this case, it is not guaranteed the precision of the output waveform neither the accuracy of the output voltage.

The user can set the output voltage through the LCD touchscreen, the same possibility is valid for the setting of the frequency and the phase.

The above possibility makes the XPS very flexible in those applications where it is requested a continuous variation of the two regulated magnitudes, around a given values.

1.1.4. General performances

All the following features are valid within the range of the normal operating limits; they are not valid during the limitation of the output current

PARAMETER	VALUE
Distortion of the output waveform ⁽¹⁾	<0.3%
Stability of the output voltage	<0.1%
Accuracy of the output voltage	<0.5%
Recovery-time of the output waveform	<50us
Maximum compensated drop on wires	5% f.s.
Recovery time of RMS	<200ms

⁽¹⁾With linear load.

1.1.5. General specifications

The voltage is referred phase to neutral, with neutral connected to the earth.

PARAMETER	VALUE
Output Frequency Range	DC or 10Hz - 1000Hz
Phase Resolution	1°
Frequency Resolution	0.1Hz
Frequency Precision and Time Stability	100ppm
Output Voltage	300Vac - 425Vdc
Output Voltage Resolution	AC 0.1% f.s. DC 0.05% f.s.
Operating Temperature	0°C - 35°C

1.2. MODELS

The following tables show all the characteristics of both types:

	XPS/T 18K36S	XPS/T 30K60S	XPS/T 67K90S
GENERAL			
Dimensions	1560 x 930 x 755 mm	1560 x 930 x 755 mm	1800 x 1200 x 800 mm
Dimensions with rolls and crane support	1785 x 930 x 755 mm	1785 x 930 x 755 mm	2082 x 1200 x 800 mm
Weight	740Kg	740Kg	1300Kg
Area floor	0.59m ²	0.59m ²	0.96m ²
Floor landing (approx)	1260Kg/m ²	1260Kg/m ²	1230Kg/m ²
Operating Temperature	0°C - 35°C		
User Interface	7" Touch Screen Display		
Communication Interface	RS232, RS485 Modbus protocol, LAN		
Protection	Overtemperature, Overvoltage, Undervoltage, Inverter, Overvoltage PE		
Current Limitation	Programmable and selectable from INSTANTANEOUS & RMS & SOF		
Efficiency	Better than 88% at full power		
INPUT			
Input Voltage ⁽²⁾	400Vac ± 10% 3PH		
Input Frequency	45-65Hz		
Input Current	60A Continuous 120A Max	80A Continuous 160A Max	160A Continuous 220A Max
3-PHASE ISOLATED OUTPUT			
Output Voltage AC (Line to Neutral)	0 - 300 Vrms		
Output Voltage DC (Line to Neutral)	0 - 425 ⁽³⁾ Vdc		
Output DC Offset	<50 mVdc		
Output Noise	<500 mVrms		
Maximum Output Power AC	18000 VA	30000 VA	67500 VA
Maximum Output Power DC	18000 W	30000 W	67500 W
Maximum Output Power AC for each phase	6000 ⁽⁴⁾ VA	10000 ⁽⁴⁾ VA	22500 ⁽⁴⁾ VA
Maximum Output Power DC for each phase	6000 ⁽⁴⁾ W	10000 ⁽⁴⁾ W	22500 ⁽⁴⁾ W
Maximum Output Current Continuous	20 ⁽⁴⁾ Arms	32 ⁽⁴⁾ Arms	75 ⁽⁴⁾ Arms
Maximum Output Current Inrush (for 3 secs)	40 ⁽⁴⁾ Arms	64 ⁽⁴⁾ Arms	100 ⁽⁴⁾ Arms
Output Frequency	DC & 10 - 1000 Hz		
Slew Rate	3 V/μs		
Output Voltage Stability	<0.1%		
Output Voltage Accuracy (respect the full range voltage)	<0.5%		
THD ⁽⁵⁾	<0.3%		
Recovery-Time of Output Waveform	<50 μs		
Maximum Compensated Drop (respect setting voltage)	5%		
Recovery-Time of Drop on Wires	<200 ms		
Response-Time to the Square Waveform	~135 μs		

⁽²⁾ other voltages on request

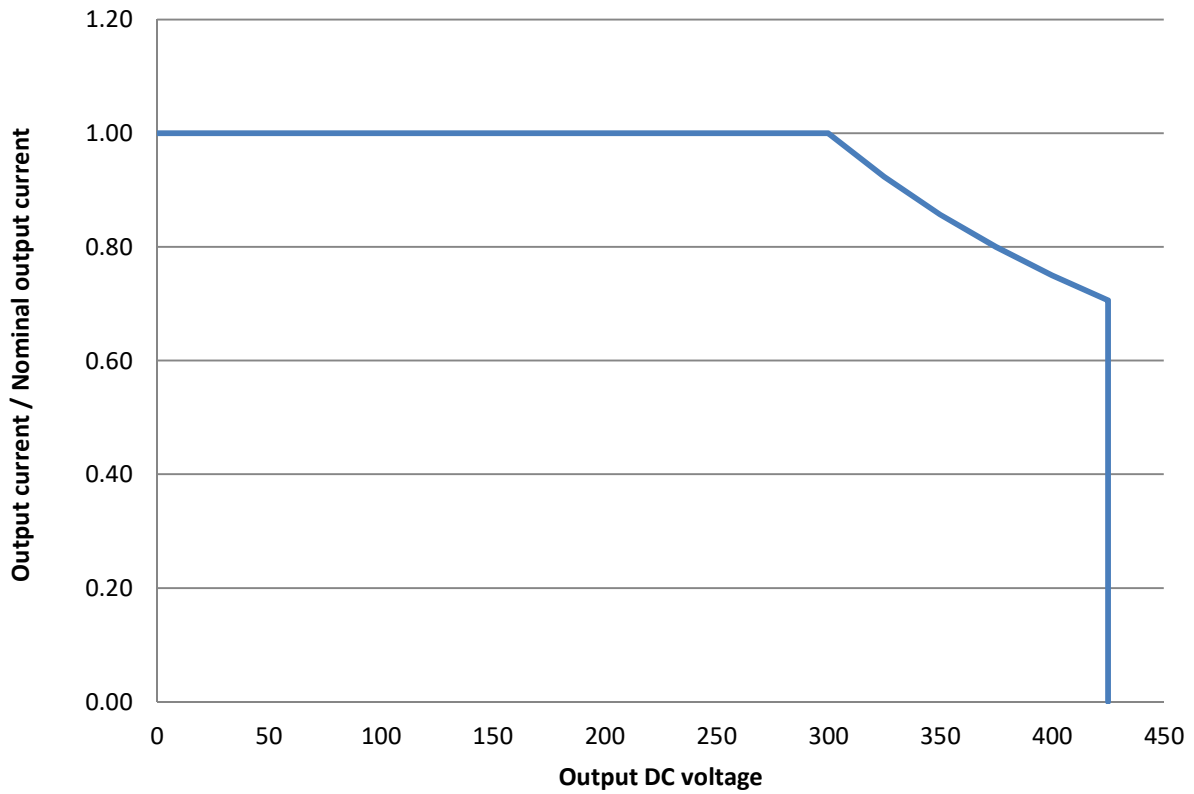
⁽³⁾ current derating required for voltage > 300Vdc, see the attached figure

⁽⁴⁾ with single phase option (available on request) multiply for three this values

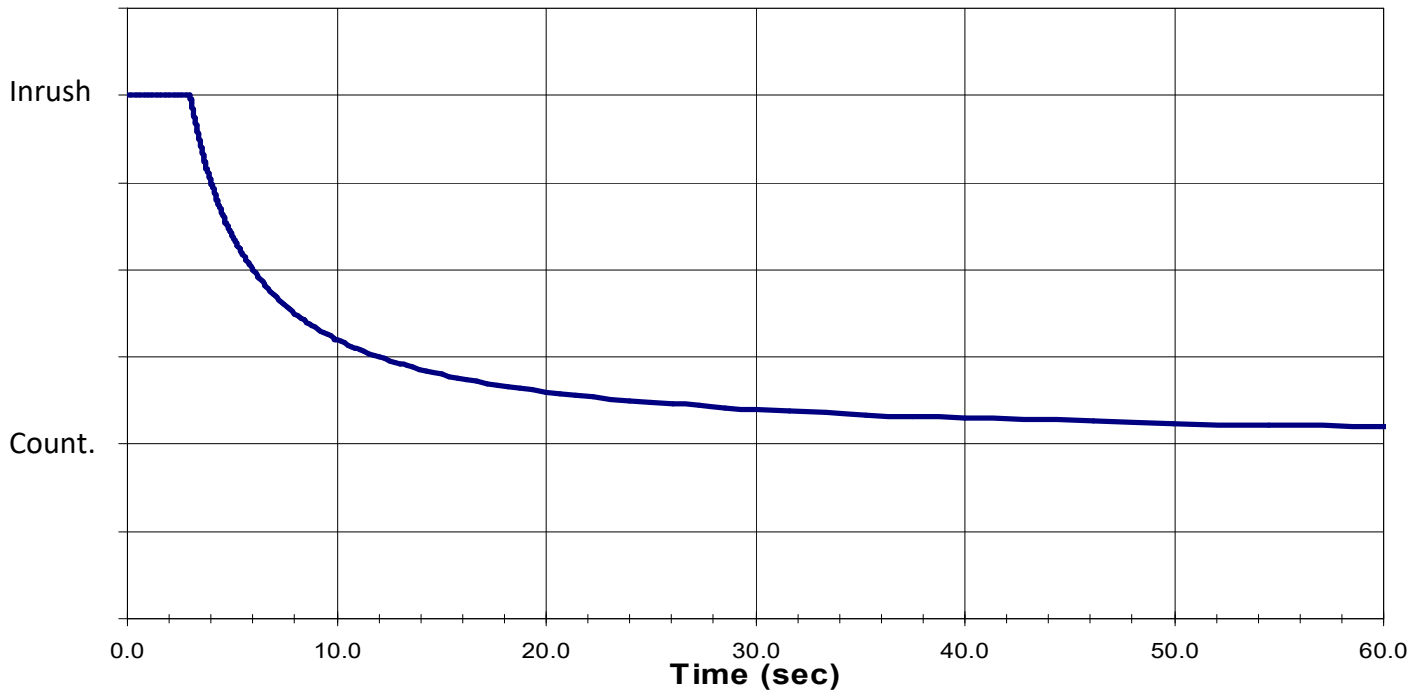
⁽⁵⁾ at nominal voltage with linear load

1.3. TECHNICAL SPECIFICATIONS

1.3.1. MAXIMUM OUTPUT CURRENT VS OUTPUT DC VOLTAGE

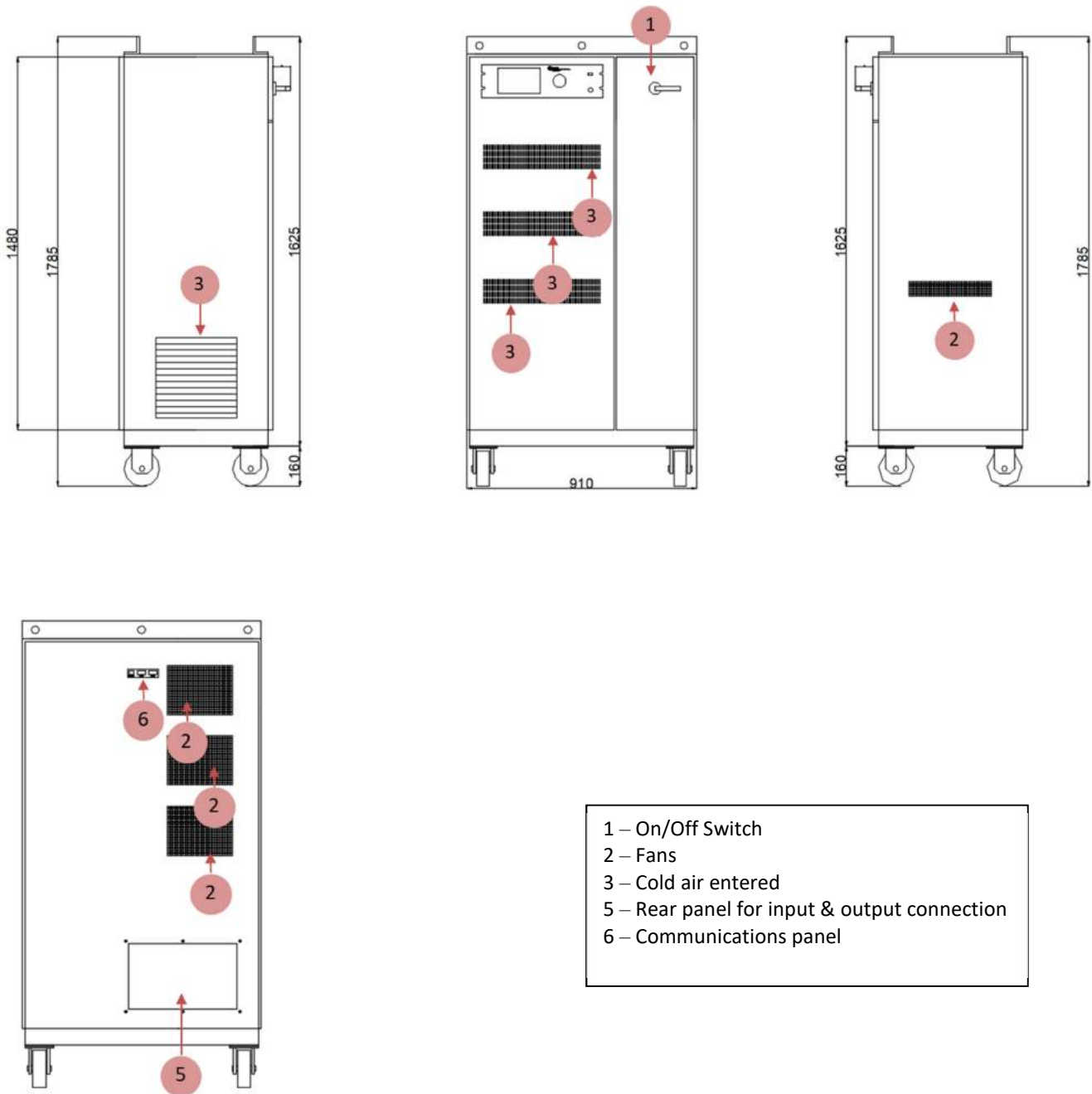


1.3.2. INRUSH CURRENT VS TIME



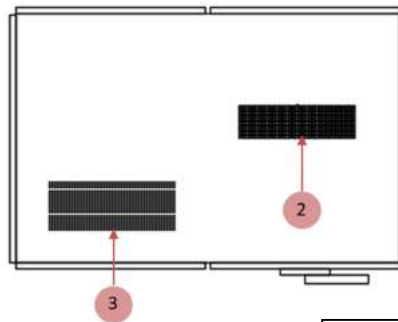
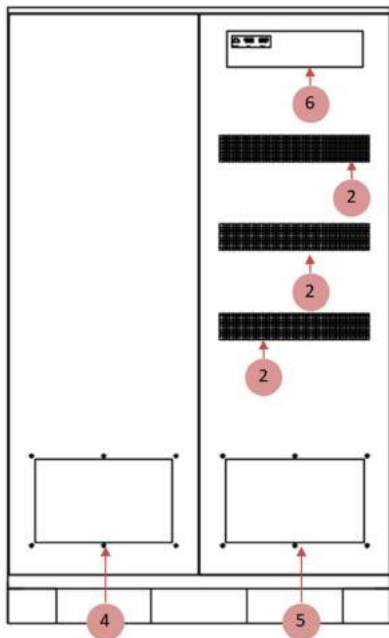
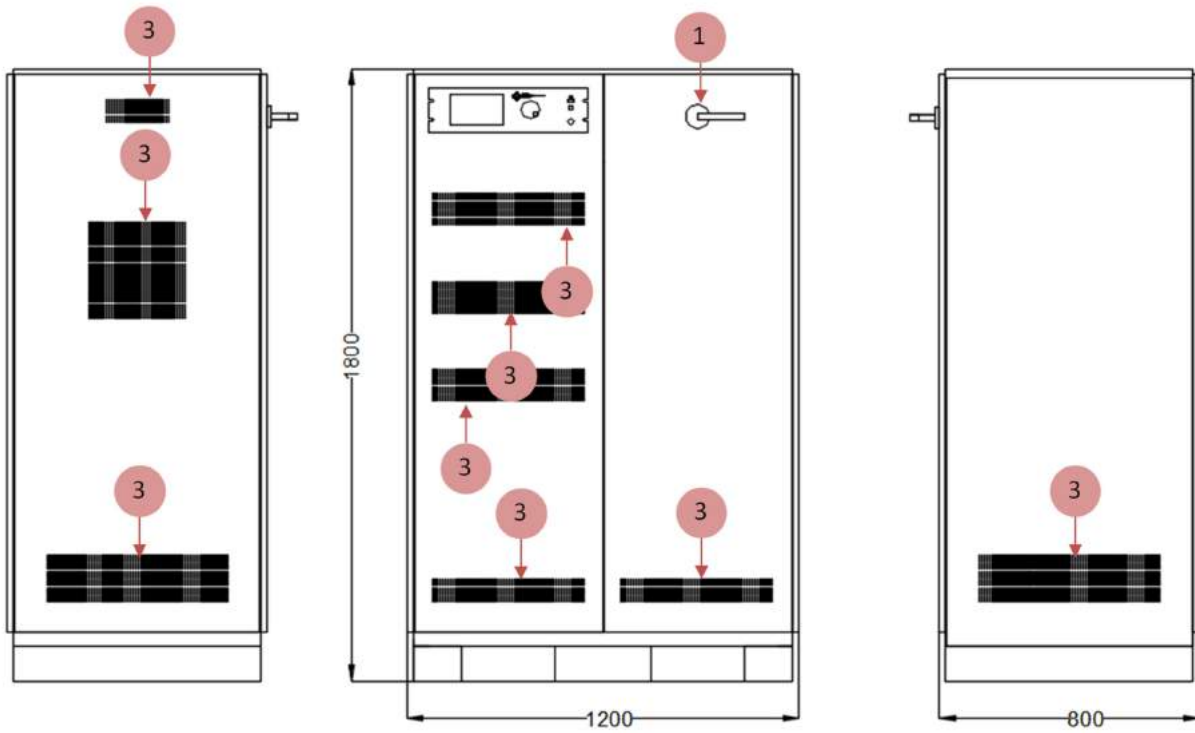
1.4. MECHANICAL DRAWINGS

1.4.1. XPS/T 18KVA & XPS/T 30KVA



- 1 – On/Off Switch
- 2 – Fans
- 3 – Cold air entered
- 5 – Rear panel for input & output connection
- 6 – Communications panel

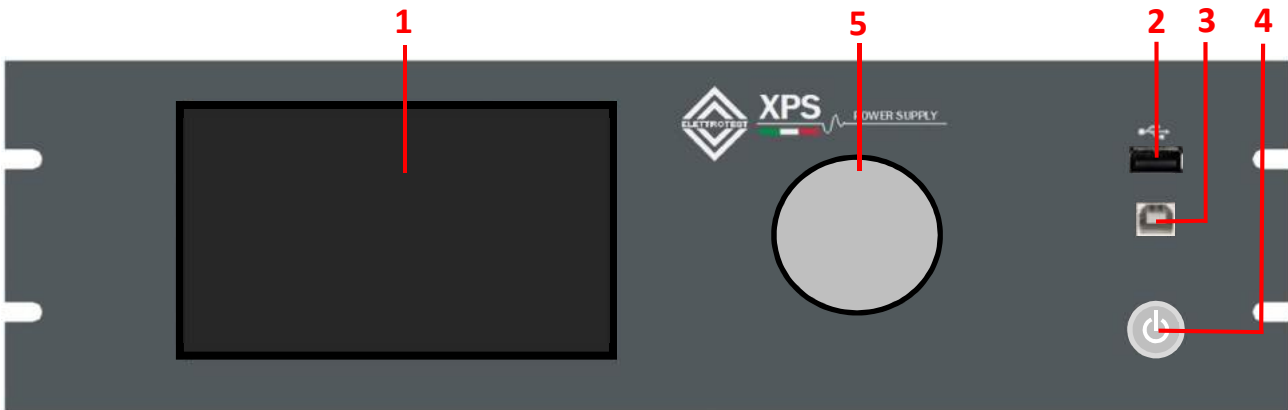
1.4.2. XPS/T 67KVA



- 1 – On/Off Switch
- 2 – Fans
- 3 – Cold air entered
- 4 – Rear panel for input connection
- 5 – Rear panel for output connection
- 6 – Communications panel

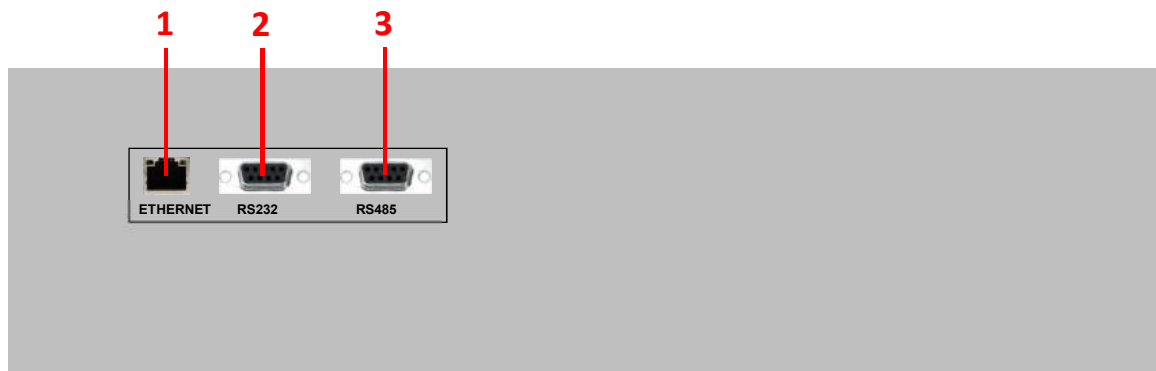
1.5. NOTES FOR USERS

1.5.1. FRONT PANEL



Item	Name	Description
1	Touch Screen	Input programming data or options by using touch screen interface
2	USB Type A Interface	USB Type A for storage key
3	USB Type B Interface	USB type B for upgrade firmware
4	Power Switch	Press this button to switch on/off power part
5	Knob	Rotate to change the selected data

1.5.2. REAR PANEL



Item	Name	Description
1	Ethernet Interface	This interface is used for remote control via Ethernet cable
2	RS232 Interface	This interface is used for remote control via RS232 cable
3	RS485 Interface	This interface is used for remote control via RS485 cable

You can select the interface from the touch panel

2. INSTALLATION



2.1. GENERAL NOTES

2.1.1. INSPECTION

After unpacking the product, please inspect any damage that may have occurred during the shipment. Save all packing materials in case the product has to be returned one day. If any damage is found, please file a claim with the carrier immediately. Do not return the product to the factory without obtaining the prior Return Merchandise Authorization (RMA) acceptance from ELETTROTEST S.P.A.

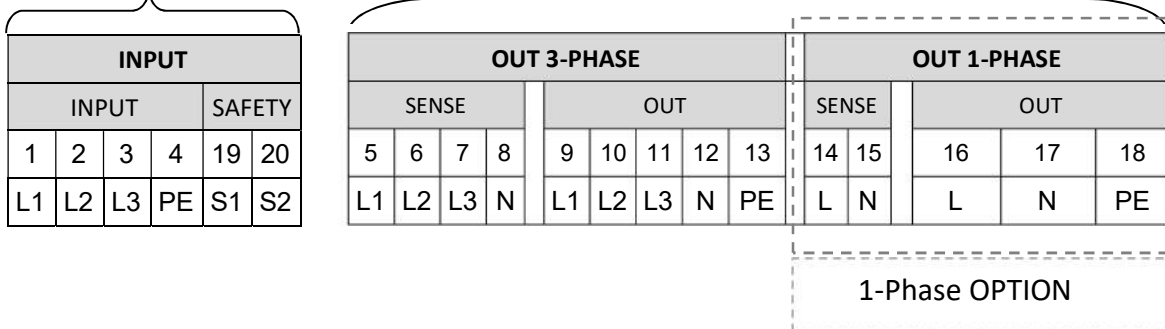
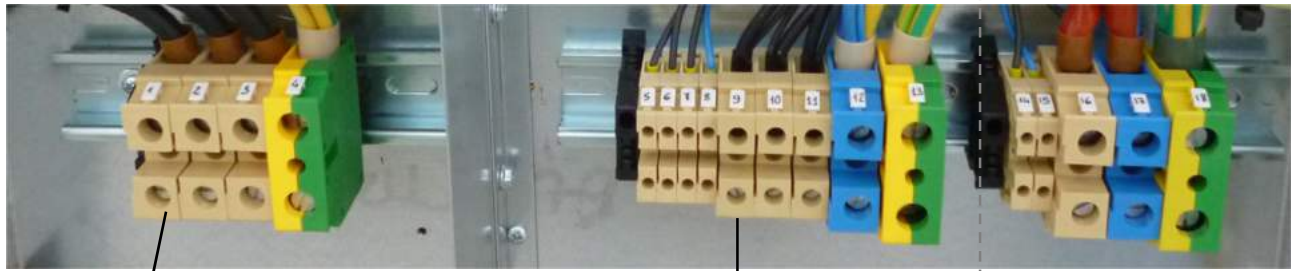
2.1.2. POWER CABLING

Take off the rear pannel

- Connect a supply cable 3P+T of adequate size to support the current of the model.
- Connect the load cable of correct size to support the maximum current load 3-phase and 1-phase if the option is installed.
- In case connect the sense cable, 3-phase and 1-phase if the option is installed.
- At the end, close the rear panel.

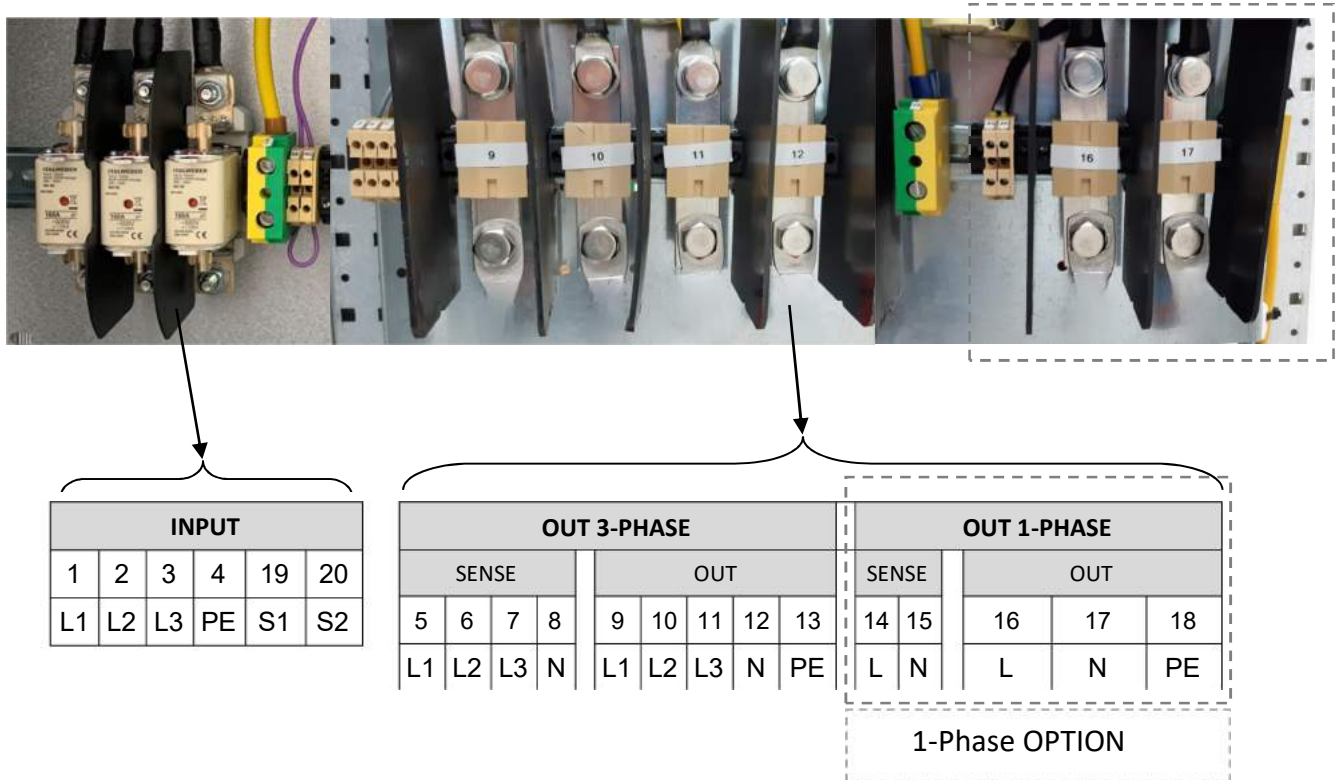
The signal part and the power part have not to cabled together.

2.1.3. XPS/T 18KVA & XPS/T 30KVA



Number	Description	Type
1,2,3	Input Power Line	Cabur CB610
4	Principal Earth	Cabur TO310
19,20	Safety Contact	Cabur CB240
5,6,7,8	Output 3-Phase Sense	Cabur CB240
9,10,11	Output 3-Phase L1,L2,L3	Cabur CB510
12	Output 3-Phase N	Cabur CBX62
13	Output 3-Phase Earth	Cabur TO310
14,15	Output 1-Phase Sense	Cabur CB240
16	Output 1-Phase L	Cabur CB610
17	Output 1-Phase N	Cabur CBX62
18	Output 1-Phase Earth	Cabur TO310

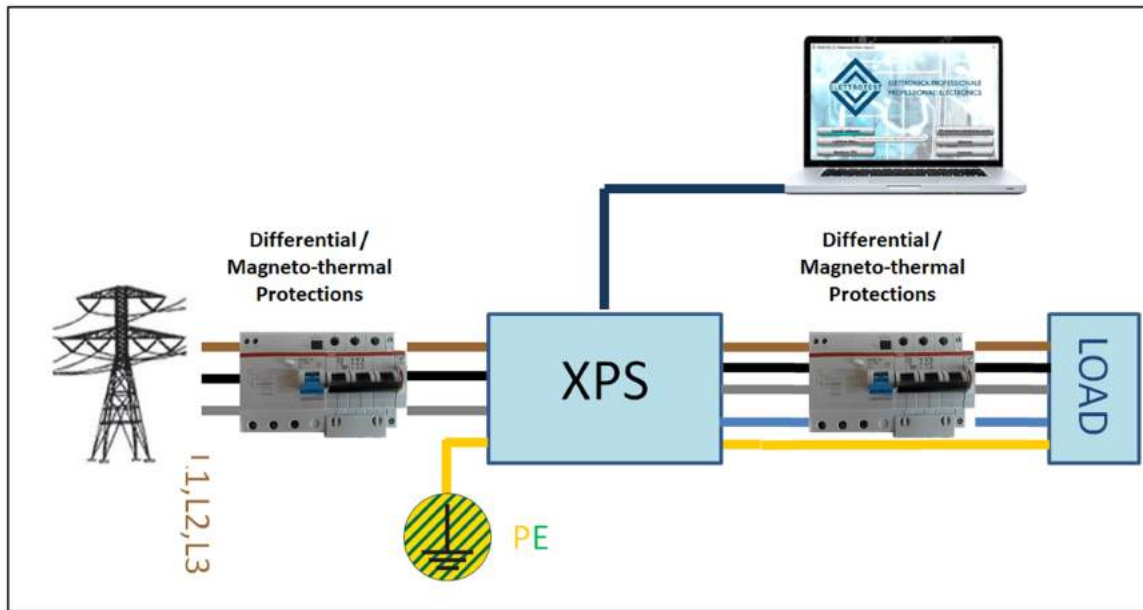
2.1.4. XPS/T 67KVA



Number	Description	Type
1,2,3	Input power line	Italweber 2503210 (M8)
4	Principial Earth	Cabur TO310
19,20	Safety Contact	Cabur CB240
5,6,7,8	Output 3-Phase Sense	Cabur CB240
9,10,11	Output 3-Phase L1,L2,L3	Cabur ACB185
12	Output 3-Phase N	Cabur ACB185
13	Output 3-Phase Earth	Cabur TO310
14,15	Output 1-Phase Sense	Cabur CB240
16	Output 1-Phase L	Cabur ACB185
17	Output 1-Phase N	Cabur ACB185
18	Output 1-Phase Earth	Cabur TO310

2.2. PROTECTION DEVICE

2.2.1. GENERAL DIAGRAM



1 – PHASE

2.2.2. RCD PROTECTION

A residual-current device (RCD), or residual-current circuit breaker (RCCB), is a device that instantly breaks an electric circuit to prevent serious harm from an ongoing electric shock. It's recommended to **use B type** RCD with a earth leakage current of **30 mA** according to the nominal input characteristic (see section 1.2). The machine can absorb more than 100mA at high frequency, be secure the RCD has the filter for high frequency.

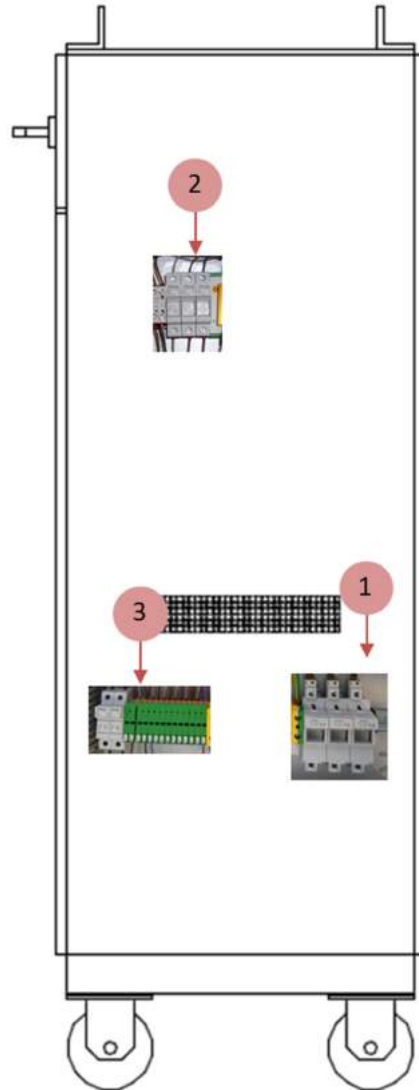
2.2.3. MAGNETO-THERMAL PROTECTION

The Magneto-thermal circuit breaker protect the input line from short circuits. Generally depends on the load and on the connection (section and length of the cable). It is recommended to use a magneto-thermal protection with **type C** curve according to the nominal input characteristic (see section 1.2).

2.2.4. LINE FUSES

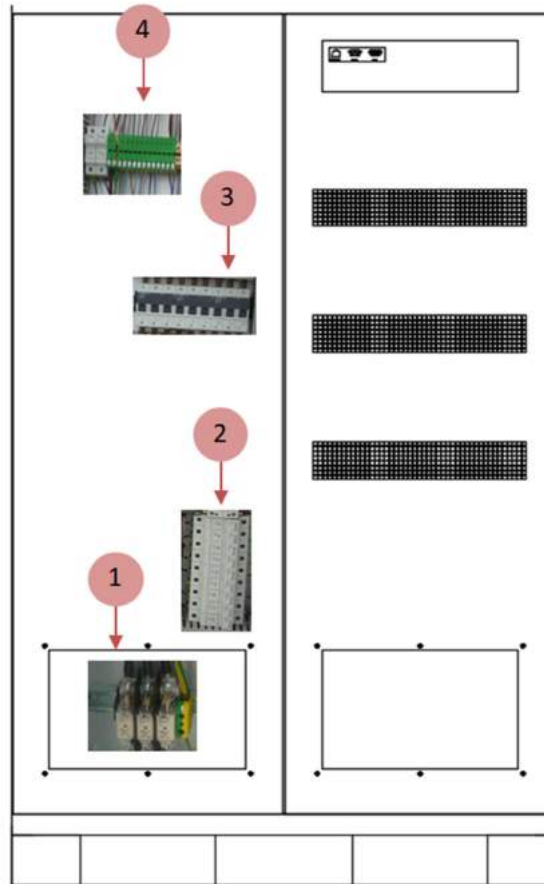
Fuses can be used to protect power line of the XPS. It's recommended to use delayed fuses according to the nominal input characteristic (see section 1.2).

2.2.5. INTERNAL FUSES XPS/T 18KVA & XPS/T 30KVA



Item	Name	Description	Size	Current	Type	Voltage
1	F1, F2, F3	Mainline Input	22x58	80A	GG	500V
2	F4, F5, F6	Main Pre-Charge	10x38	1A	AM	500V
3	F7, F8	Input Aux Transformer	10x38	4A	AM	500V
3	F9, F10	Output Aux Transformer	5x20	6.3A	AT	250V
3	F10, F11	Display	5x20	3.15A	AT	250V
3	F13, F14	Aux Supply Phase 1	5x20	2.5A	AT	250V
3	F15, F16	Aux Supply Phase 2	5X20	2.5A	AT	250V
3	F17, F18	Aux Supply Phase 3	5X20	2.5A	AT	250V
3	F19, F20	Cabinet Ventilation	5x20	2.5A	AT	250V
3	F21, F22	Safety Circuit	5x20	1A	AT	250V

2.2.6. INTERNAL FUSES XPS/T 67KVA



Item	Name	Description	Size	Current	Type	Voltage
1	F1, F2, F3	Mainline Input	NH00	160A	GG	500V
3	F4, F5, F6	Input Phase 1	14x51	50A	GG	400V
3	F7, F8, F9	Input Phase 2	14x51	50A	GG	400V
3	F10, F11, F12	Input Phase 3	14x51	50A	GG	400V
2	F13, F14, F15	Pre-charge Phase 1	10x38	1A	AM	500V
2	F16, F17, F18	Pre-charge Phase 2	10x38	1A	AM	500V
2	F19, F20, F21	Pre-charge Phase 3	10x38	1A	AM	500V
4	F22, F23	Input Aux Transformer	10x38	4A	AM	500V
4	F24, F25	Output Aux Transformer	5x20	6.3A	AT	250V
4	F26, F27	Display	5x20	3.15A	AT	250V
4	F28, F29	Aux Supply Phase 1	5x20	2.5A	AT	250V
4	F30, F31	Aux Supply Phase 2	5X20	2.5A	AT	250V
4	F32, F33	Aux Supply Phase 3	5X20	2.5A	AT	250V
4	F34, F35	Cabinet Ventilation	5x20	2.5A	AT	250V
4	F36, F37	Safety Circuit	5x20	1A	AT	250V

2.2.7. ACCESSORY XPS/T/18KVA & XPS/T/30KVA

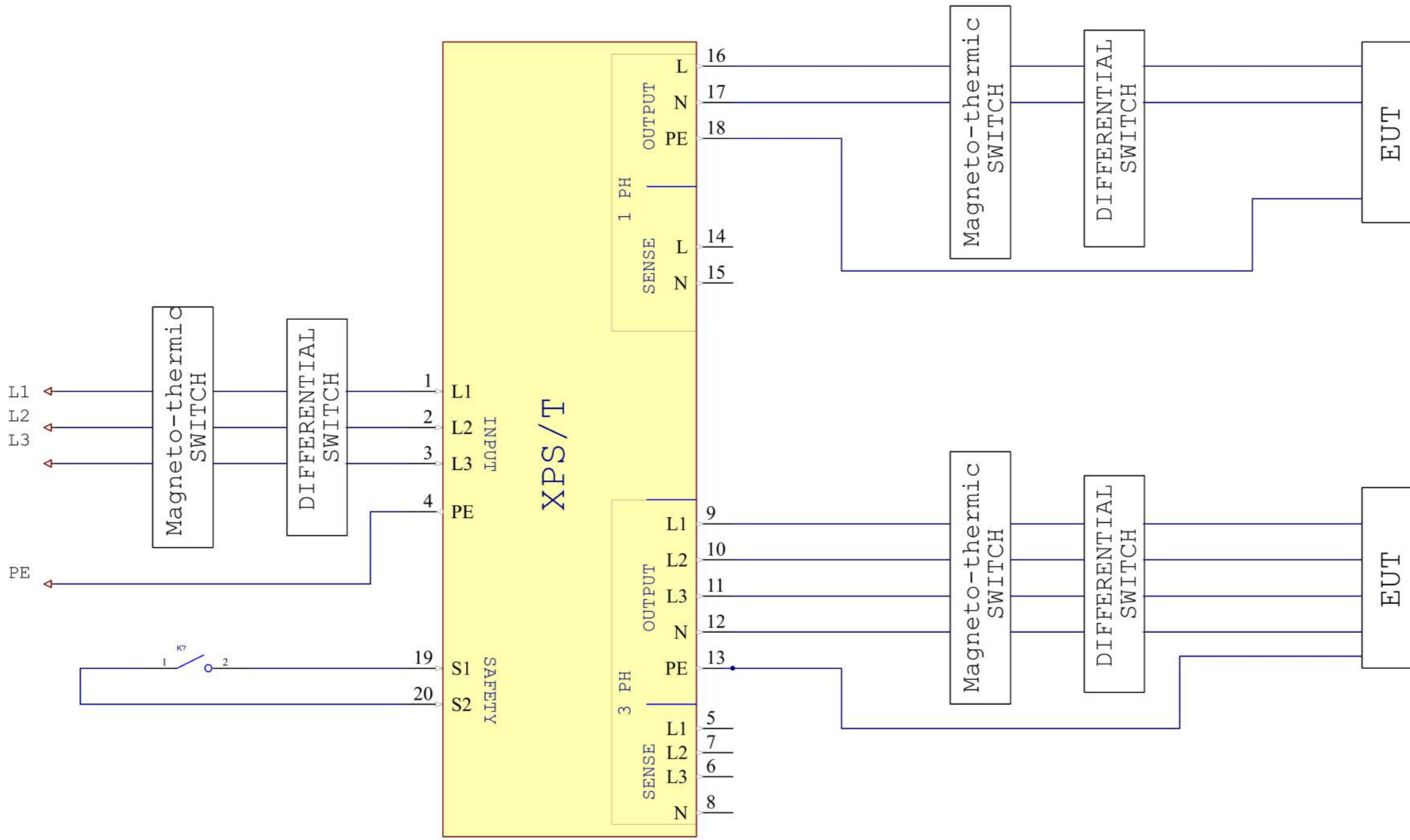
Item	Description	Pcs
1	FUSE 22x58 80A GG 500V	2
1	FUSIBILE 10x38 1A AM 500V	2
3	FUSIBILE 10x38 4A AM 500V	2
4	FUSIBILE 5x20 6.3A AT 250V	2
5	FUSIBILE 5x20 2.5A AT 250V	2
6	FUSIBILE 5x20 1A AT 250V	2
7	USB KEY	1

2.2.8. ACCESSORY XPS/T/67KVA

Item	Description	Pcs
1	FUSE NH00 160A GG 500V	2
2	FUSIBILE 14x51 50A GG	2
3	FUSIBILE 10x38 4A AM 500V	2
4	FUSIBILE 5x20 6.3A AT 250V	2
5	FUSIBILE 5x20 2.5A AT 250V	2
6	FUSIBILE 5x20 1A AT 250V	2
7	USB KEY	1

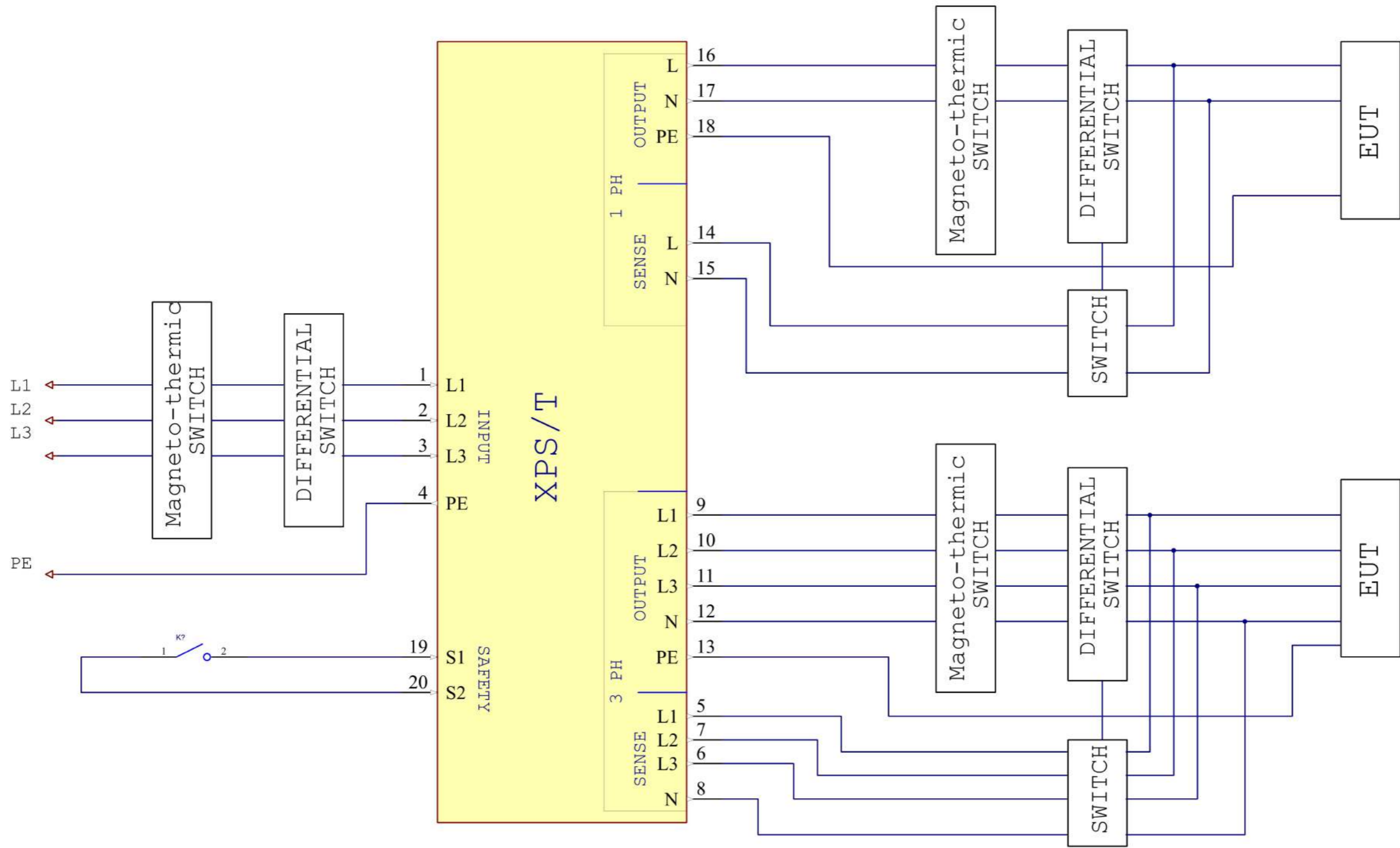
2.3. WIRING DIAGRAM

2.3.1. 2 WIRE CONFIGURATION



INPUT						SENSE 3				OUTPUT 3 PH					SENSE 1		OUTPUT 1 PH		
1	2	3	4	19	20	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L1	L2	L2	PE	S1	S2	L1	L2	L3	N	L1	L2	L3	N	E	L	N	L	N	PE

2.3.2. 4 WIRE CONFIGURATION



INPUT						SENSE 3				OUTPUT 3 PH					SENSE 1		OUTPUT 1 PH		
1	2	3	4	19	20	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L1	L2	L2	PE	S1	S2	L1	L2	L3	N	L1	L2	L3	N	E	L	N	L	N	PE

3. REMOTE CONTROL

3.1. Control software

XPS can be remotely controlled via RS232, RS485, TCP/IP communication according to a copyrighted free protocol or SCPI. For further details on protocol, see the specific manual.

3.2. RS232 serial cable

Use a serial cable according to the standard defined in the figure below.

WIRING CONNECTION			
PC		XPS	
DB9 Poles Female		DB9 Poles Male	
2	↔	2	
3	↔	3	
5	↔	5	

3.3. RS485 pinout

It is 2 wire configuration

DB9 Poles Female	
1:	B
2:	A
5:	GND

4. LOCAL OPERATION

The product can support local operation or remote operation enabled via complete communication interfaces, such as RS232, RS485, Ethernet.

In this section, the local operation enabled via the 7-inch touch screen on the front panel will be described.

The product is configured for local operation when it is turned on.

4.1. POWER ON

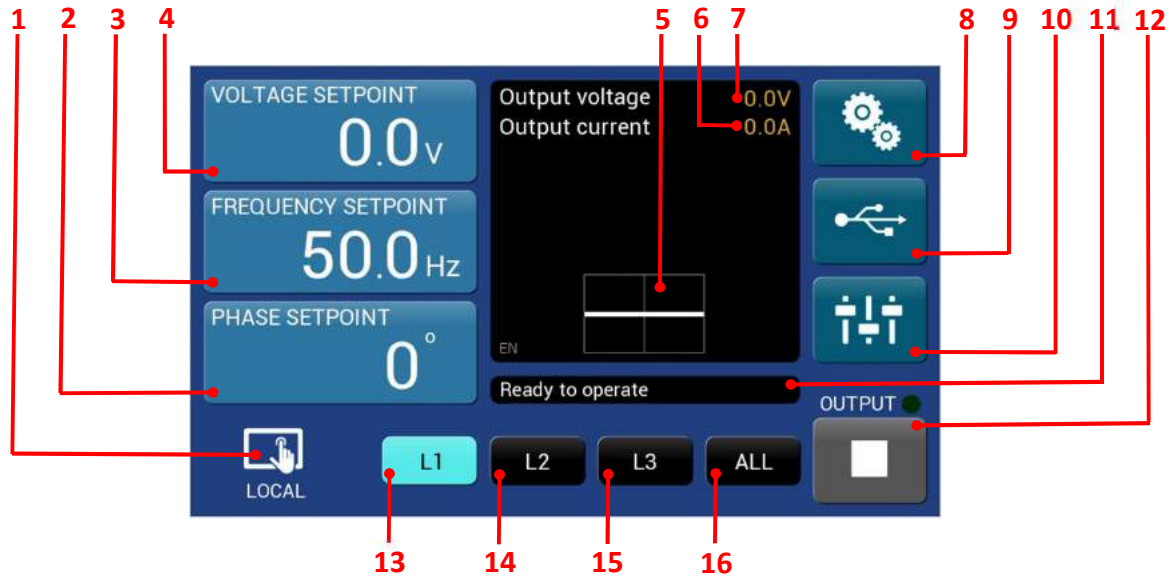
Apply power to the unit and turn the ON/OFF switch (see section 1.4) in position 1; in this condition the touch screen on the front panel will light up and:

- if the power switch (see section 1.5.1) is in position OFF, XPS will not start and the user must press it to start the boot process
- if the power switch (see section 1.5.1) is in position ON, will be displayed the boot page with logo and the revision of firmware installed and the start up procedure will be completed with the home page view



4.2. HOME PAGE

When the user turns on the XPS, the touchscreen shows the HOME PAGE after the startup procedure. The XPS starts at the factory default configuration (for the first start) or at the last stored setting.



Item	Name	Description
1	Local/Remote Icon	Displays if the XPS is in Local or Remote mode
2	Phase Setpoint button	Allows to set the phase value of the selected line
3	Frequency Setpoint button	Allows to set the frequency value
4	Voltage Setpoint button	Allows to set the voltage value
5	Wave display	Displays the waveform (AC or DC)
6	Output Current	Displays the value of output current
7	Output Voltage	Displays the value of output voltage
8	General Settings button	Allows access to the settings menu page
9	USB button	Allows access to the USB menu page
10	Slide button	Allows access to special functions page
11	Information bar	Displays information for the user
12	Output button	Allows to enable the output
13	L1 button	Allows to modify the L1 setpoint only
14	L2 button	Allows to modify the L2 setpoint only
15	L3 button	Allows to modify the L3 setpoint only
16	All button	Allows to apply the same setpoint to all phases

4.3. VOLTAGE SETPOINT

By clicking on the button **FREQUENCY SETPOINT 50.0 Hz**, the “VOLTAGE SETPOINT” button will be colored to confirm the choice and a numeric keyboard will appear to manually set the voltage value.



Then press “Enter” to confirm the new setting.

4.4. FREQUENCY SETPOINT

By clicking on the button **PHASE SETPOINT 0°**, the “FREQUENCY SETPOINT” button will be colored to confirm the choice and a numeric keyboard will appear to manually set the frequency value.



Then press “Enter” to confirm the new setting.


4.5. PHASE SETPOINT

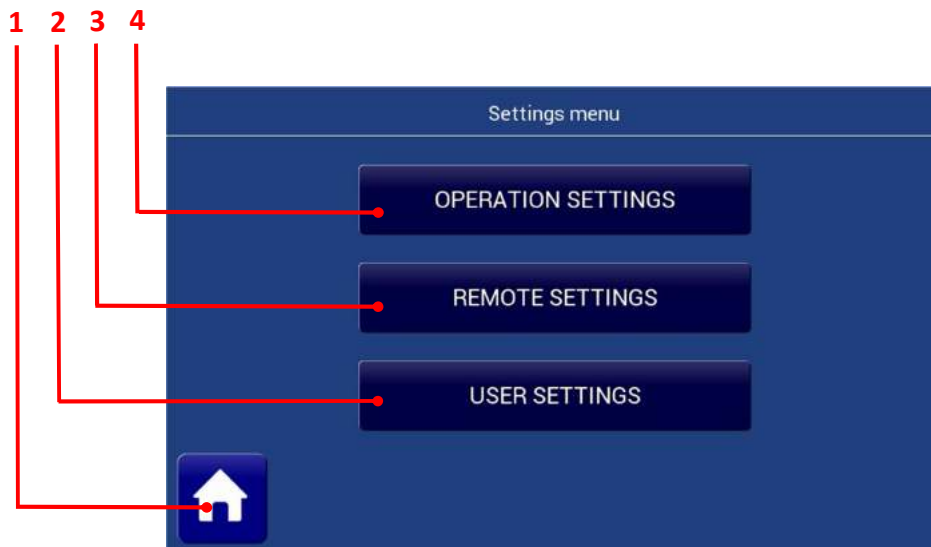
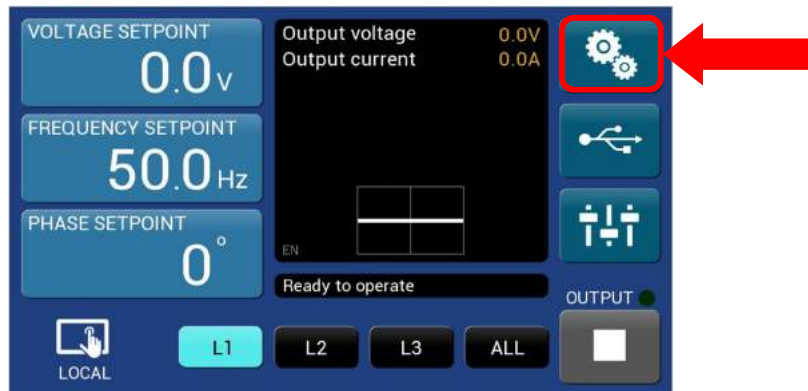
By clicking on the button **VOLTAGE SETPOINT 0.0 V**, the “PHASE SETPOINT” button will be colored to confirm the choice and a numeric keyboard will appear to manually set the phase value.



Then press “Enter” to confirm the new setting.


4.6. SETTINGS MENU

By clicking on the button , allows to access the Settings Menu page



Item	Name	Description
1	Home button	Allows to come back to the Home page
2	User Setting button	Allows to access the User Settings page
3	Remote Setting button	Allows to access the Remote Settings page
4	Operation Setting button	Allows to access the Operation Settings page

4.6.1. OPERATION SETTINGS

By clicking on the general OPERATION SETTING button  , allows to access the Operation setting menu page



Item	Name	Description
1	Home button	Allows to come back to the Home page
2	SENSE BUTTON	Allow to change the sense mode from <ul style="list-style-type: none"> • 2-WIRE • 4-WIRE
3	RANGE MODE BUTTON	THIS MACHINE HAS ONLY HIGH RANGE
4	OUTPUT MODE BUTTON	Allow to change the range mode from <ul style="list-style-type: none"> • 3-PHASE • 1-PHASE
5	AC/DC MODE BUTTON	Allow to change the AC/DC mode from <ul style="list-style-type: none"> • DC • AC
6	CURRENT MODE	THIS MACHINE HAS ONLY COUNTINUOUS MODE

4.6.1.1. SENSE MODE

The output voltage's stabilization behave in the same way in both the configurations on the XPS output terminals (2 wire) and on a possible long distance outlet (4 wire), to eliminate the fall in voltage due to cable connections. To operate the long distance stabilization first connect the opposite terminals on the back of the machine following the indications at the voice INSTALLATION. The choice of the kind of long distance stabilization can be operated by pushing the buttons SENSE, the 4WIRE and 2WIRE configuration is indicated with a LED. Note that the XPS corrects voltage drop on wires up to 5% of set voltage to prevent any overheating of the line, exceeded this limit, the XPS does not guarantee that the value of output voltage is equal to the voltage setting and It displays an error signal (see VOLTAGE ALARMS).

4.6.1.2. OUTPUT MODE


If the machine has this options you can select 1-phase or 3-phase. In 1-phase mode the machine supply all the power in only one phase.

The output power is variable to type of the load, for resistive load the is nominal power, for inductor load is greater of the nominal power, for capacitor load is less of the nominal power.

4.6.1.3. AC/DC

The XPS is able to supply AC and DC voltage with the limit you can find on the chart 1.6, each phase are independent so it is possible to supply three different AC or DC voltage for each phase.

4.6.2. REMOTE SETTINGS

By clicking on the general REMOTE SETTING button , allows to access the settings menu page, this page depends from the serial output (ETHERNET / RS232 / RS485), down there is a table with the available protocol in the different interface

Protocol	RS232		RS485		Ethernet	
	Available	Speed	Available	Speed	Available	Mode
Elettrotest	Yes	1200 9600 19200			Yes (*)	TCP server Virtual com
SCPI	Yes	1200 9600 19200			Yes (*)	TCP server Virtual com
Modbus RTU			Yes	1200 9600 19200	Yes(*)	TCP server Virtual com
Modbus TCPIP					Yes	TCP server Virtual com

(*) – The same protocol is encapsulated on TCP communication

4.6.2.1. ETHERNET settings

Remote settings

SERIAL OUTPUT	ETHERNET	OPERATION MODE	TCP SERVER
PROTOCOL	MODBUS TCP	IP ADDRESS	192.168.1.2
		SUBNET MASK	255.255.255.0
		GATEWAY	192.168.1.1



4.6.2.2. RS 232 settings

Remote settings

SERIAL OUTPUT	RS232
PROTOCOL	ELETTROTEST
BAUD RATE	9600 bps



4.6.2.3. RS485 settings

Remote settings

SERIAL OUTPUT	RS485
PROTOCOL	MODBUS RTU
BAUD RATE	9600 bps
ADDRESS	1



4.6.3. USER SETTINGS



By clicking on the general USER SETTING button , allows to access the settings menu page

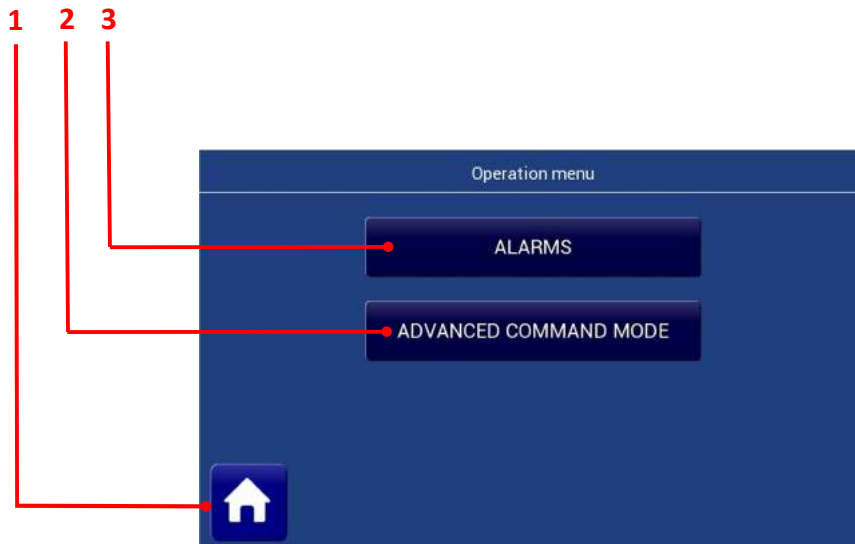
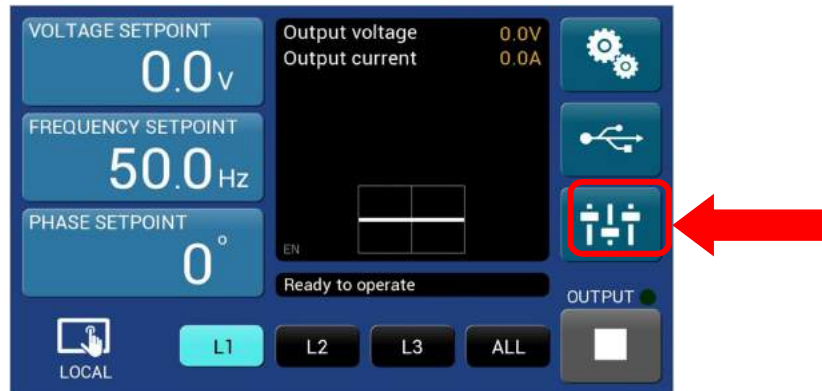


Figure 8.11

Item	Name	Description
1	Home button	Allows to come back to the Home page
2	Sound Feedback button	Allows to enable o disable sound feedback
3	Brightness button	Allows to change the display brightness
4	Language button	Allows to change the menu language
5	Theme button	Allows to change the interface colours

4.7. OPERATION MENU

By clicking on the button  , allows to access the Operation menu page

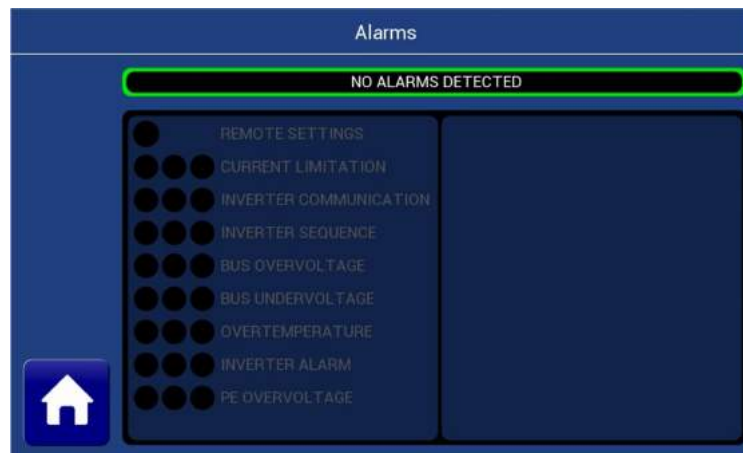


Item	Name	Description
1	Home button	Allows to come back to the Home page
2	Advanced command mode ⁽¹⁾	Allows to access the Advanced command mode page
3	Alarms button	Allows to access the Alarm page

⁽¹⁾ Only for Elettrotest use.

4.7.1. ALARMS

By clicking on the button , allows to access the Alarms page



4.7.1.1. REMOTE SETTING

The alarm appears when there is problem with the connection board

4.7.1.2. CURRENT LIMITATION

XPS works a control of the output current and this allows it to support for an indefinite time the output short circuit. In case of loads that absorb a current superior than the nominal one XPS works a limitation of the same current. In case of current limitation the output wave is no more guaranteed and so it will show an harmonic distortion.

Not linear loads with an overload less than the nominal one but with a very high crest factor current allow the current defence.

4.7.1.3. INVERTER COMMUNICATION

The alarm appears when there is problem on the communication between the inverter and the display.

4.7.1.4. INVERTER SEQUENCE

The alarm appears when there is problem on inverter startup procedure

4.7.1.5. BUS OVERVOLTAGE & UNDERVOLTAGE

XPS can work with network voltage variations of $\pm 10\%$, if these limits are exceeded XPS stops and show the alarm.

If the network voltage is too low XPS stops and the **UNDERVOLTAGE** alarm is on.

If the network voltage is too high XPS stops and the **OVERVOLTAGE** alarm is on.

4.7.1.6. OVERTEMPERATURE

The alarm appears in case of high temperature inside of XPS.

4.7.1.7. INVERTER ALARM

In case of bad operations of the overload sections (inverter) XPS stops and the **INVERTER** alarm is active

5. GUARANTEE

The instrument is guarantee for one year in all his mechanical and electronic components.

Naturally are not admitted handlings not anticipated in the present handbook.

The instrument has consigned complete of CERTIFICATE of CALIBRATION, that guarantees the integrity of the same.

Such document must accompany the apparatus in case of periodic verification always.

Elettrotec Spa is committed to a program of continuous improvement of products and information to the customer.

Therefore, the company reserves the right to make changes to the documentation and specifications without notice and assumes no responsibility for any incorrect information.

Rel.	Date	Descriptions
0.2	20/11/20	Update front panel menu
0.1	23/07/20	Update
0.0	07/06/20	First emission