v430 web panel

Contents

1 About this document **4**
1.1 Further documents 5
1.2 Notations and conventions 6
2 Safety instructions **7**
2.1 Basic safety instructions 7
2.2 Application as directed 8
2.3 Handling 9
3 Mechanical installation **10**
3.1 Dimensions 10
3.2 Mounting 11
4 Electrical installation **12**
5 Technical data **14**
5.1 Standards and operating conditions 14
5.1.1 Conformities and approvals 14
5.1.2 Protection of persons and device protection 14
5.1.3 EMC data 14
5.1.4 Environmental conditions 14
6 Environmental notes and recycling **15**

1 About this document

These instructions are valid for the product series of the v430 web panels:

Web panel				
Screen diagonal	**in**	**7**	**10.1**	**15.6**
Type code		V43AE70000000S	V43AEA0000000S	V43AEF0000000S

⚠WARNING!

Read this documentation carefully before starting any work.

▶ Please observe the safety instructions!

1.1 Further documents

Information and tools with regard to the Lenze products can be found on the Internet:
www.lenze.com → Downloads

1.2 Notations and conventions

Layout of the safety instructions

⚠DANGER!

Indicates an extremely hazardous situation. Failure to comply with this instruction will result in severe irreparable injury and even death.

⚠WARNING!

Indicates an extremely hazardous situation. Failure to comply with this instruction may result in severe irreparable injury and even death.

⚠CAUTION!

Indicates a hazardous situation. Failure to comply with this instruction may result in slight to medium injury.

NOTICE

Indicates a material hazard. Failure to comply with this instruction may result in material damage.

2 Safety instructions

2.1 Basic safety instructions

Disregarding the following basic safety instructions and safety information may lead to severe personal injury and damage to property!

- Only use the product as directed.
- Never commission the product in the event of visible damage.
- Never modify the product technically.
- Never commission the product before assembly has been completed.
- Never operate the product without the required covers.
- Connect/disconnect all pluggable connections only in deenergized condition!
- Only remove the product from the installation in the deenergized state.
- The product can – depending on their degree of protection – have live, movable or rotating parts during or after operation. Surfaces can be hot.
- Observe the specifications of the corresponding documentation. This is the condition for safe and trouble-free operation and the achievement of the specified product features.
- The procedural notes and circuit details given in the associated documentation are suggestions and their transferability to the respective application has to be checked. The manufacturer of the product does not take responsibility for the suitability of the process and circuit proposals.
- All work with and on the product may only be carried out by qualified personnel.
  IEC 60364 and CENELEC HD 384 define the qualifications of these persons:
  - They are familiar with installing, mounting, commissioning, and operating the product.
  - They have the corresponding qualifications for their work.
  - They know and can apply all regulations for the prevention of accidents, directives, and laws applicable at the place of use.

2.2 Application as directed

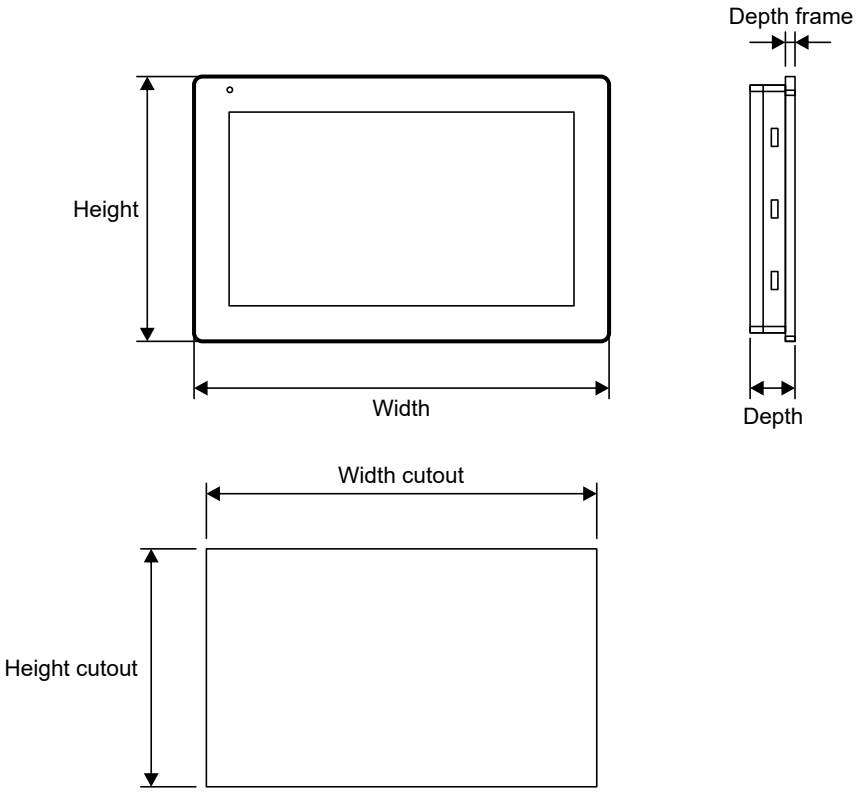
- The product is a professional equipment intended for use by trades, specific professions or industry and not for sale to the general public. IEC 60050 [IEV 161-05-05]
- To prevent personal injury and damage to property, higher-level safety and protection systems must be used!
- All transport locks must be removed.
- The product may only be operated under the specified operating conditions and in the specified mounting positions.
- The product is only suitable for installation in control cabinets and, depending on the protection class and version, for wall mounting or support arm mounting.
- The product may only be operated to implement control concepts, operating concepts or to display information.
- The product must not be operated in private areas, in potentially explosive atmospheres and in areas with harmful gases, oils, acids and radiation.

2.3 Handling

- Always keep the front panel of the product clean: The product may only be cleaned with a soft cloth and a neutral soap product. Do not use solvents!
- Do not use tools (e. g. screwdriver) to operate the product.

3 Mechanical installation

3.1 Dimensions



Web panel			V43AE7	V43AEA	V43AEF
Screen diagonal		**in**	**7**	**10.1**	**15.6**
Height		mm	147	197	267
Height		in	5.79	7.76	10.51
Width		mm	187	282	422
Width		in	7.36	11.10	16.61
Depth		mm	37	37	45
Depth		in	1.45	1.45	1.77
Depth frame		mm	8	8	10
Depth frame		in	0.31	0.31	0.39
Height cutout		mm	136	186	256
Height cutout		in	5.35	7.32	10.08
Width cutout		mm	176	271	411
Width cutout		in	6.93	10.67	16.18
Weight	m	kg	0.7	1.3	3.2
Weight	m	lb	1.54	2.9	7.1

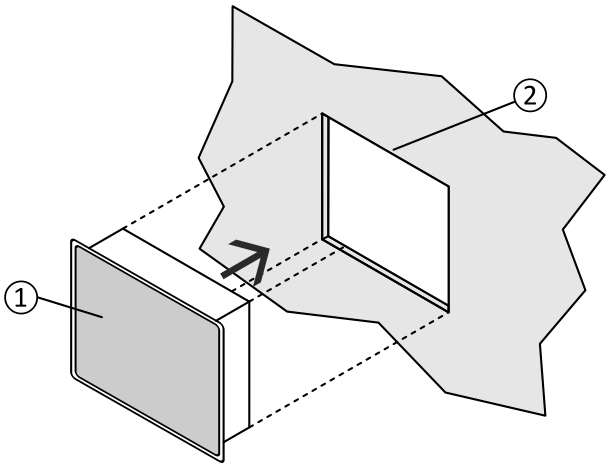
3.2 Mounting

NOTICE

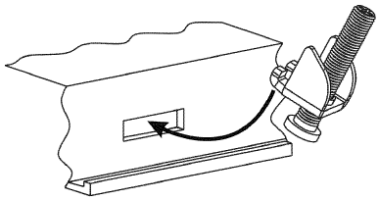
Improper installation

Possible consequence: Material damage

- Place the device so that it is not exposed to prolonged sunlight to avoid overheating the device.
- Make sure that the device does not come into contact with corrosive chemical compounds.
- Install the device in a housing that has at least protection class IP54 according to EN 60529.



1 Web panel 2 Mounting cutout



Tightening torque for holding clamp: 0.75 Nm / 6.6 lb-in

Required tool: Screwdriver PH2

4 Electrical installation

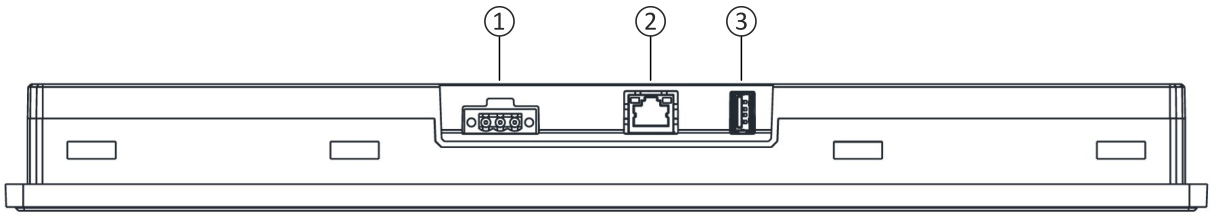
If the PE conductor is not supplied with the power supply, the PE potential must be connected to a grounding point near the mounting location.

Use a shielded network cable of category CAT 5 or higher for the network connection.

For the integrated hardware real-time clock, the devices are equipped with a rechargeable battery that cannot be replaced by the user.

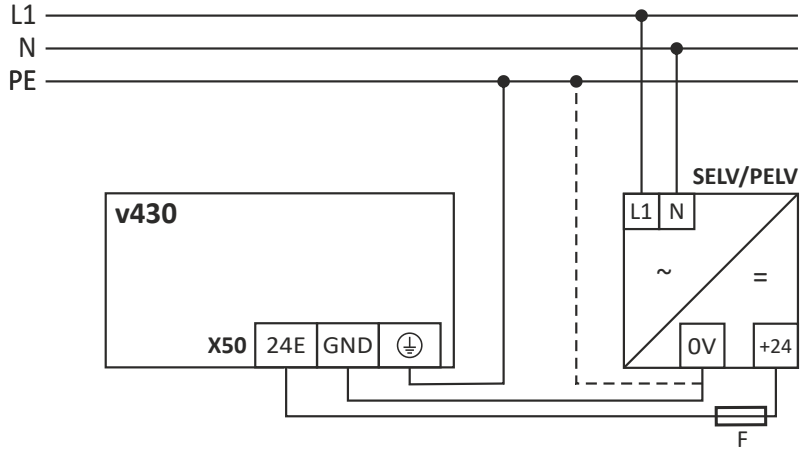
After installation, the rechargeable battery must first be charged for 48 hours via the power supply. When the rechargeable battery is fully charged, a backup time from 3 months for date and time at 25 °C is guaranteed.

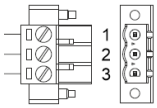
Connections on the underside of the device



1 Mains connection (X50)
2 Ethernet connection (X11)
3 USB connection (X61)

Wiring diagram



X50	Pin	Assignment	Connection type
	1	+24 V DC (18 ... 32 V DC)	3-pole socket with 0.2 in pitch
	2	GND	
	3	⏚	

Web panel			V43AE70000000S	V43AEA0000000S	V43AEF0000000S
Screen diagonal		**in**	**7**	**10.1**	**15.6**
Connection type			**Mains connection**		
Connection designation			**X50**		
Connection type			Pluggable		
Max. cable cross-section		mm²	4	4	4
Max. cable cross-section		AWG	12	12	12
Min. cable cross-section		mm²	0.25	0.25	0.25
Min. cable cross-section		AWG	24	24	24
Stripping length		mm	7	7	7
Stripping length		in	0.28	0.28	0.28
Tightening torque		Nm	0.5	0.5	0.5
Tightening torque		lb-in	4.4	4.4	4.4
Max. input power		W	9.6	12	18

5 Technical data

5.1 Standards and operating conditions

5.1.1 Conformities and approvals

Conformities			
CE	2011/65/EU		RoHS Directive
	2014/30/EU		EMC Directive
UKCA	S.I. 2012/3032		The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
	S.I. 2016/1091		The Electromagnetic Compatibility Regulations 2016
UL	UL 61010-1		Process Control Equipment
	UL/CSA/IEC 61010-2-201		

Our declarations and certificates contain further information. These can be found on the Lenze homepage in the download area of the technical documentation of the product:

www.Lenze.com → Downloads

5.1.2 Protection of persons and device protection

Degree of protection			
EN	EN IEC 60529	IP66 (front), IP20 (rear)	

5.1.3 EMC data

Noise emission			
Industrial premises	EN IEC 61000-6-4		
Noise immunity			
Industrial premises	EN IEC 61000-6-2		

5.1.4 Environmental conditions

Climate			
Operation	EN IEC 60068-2-14	-20 ... +60 °C	
Humidity	EN IEC 60068-2-30	Non-condensing	5 ... 85 % relative humidity
Storage	EN IEC 60068-2-1	-30 ... +80°C	
	EN IEC 60068-2-14		
Pollution			
	EN IEC 60664-1	Degree of pollution 2	
Vibration resistance			
Vibrations	EN IEC 60068-2-6	1 g	9 ... 150 Hz
		7 mm p-p	5 ... 9 Hz
Shock	EN IEC 60068-2-27	± 50 g, 11 ms	3 pulses per axis

6 Environmental notes and recycling

Lenze has been certified to the worldwide environmental management standard for many years (DIN EN ISO 14001). As part of our environmental policy and the associated climate responsibility, please note the following information on hazardous ingredients and the recycling of Lenze products and their packaging:

Lenze products are partly subject to the EU Directive on the restriction of certain hazardous substances in electrical and electronic equipment 2011/65/EU: RoHS Directive [UKCA: S.I. 2012/3032 - The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012] . This is documented accordingly in the EU declaration of conformity and with the CE mark.

Lenze products are not subject to EU Directive 2012/19/EU: Directive on waste electrical and electronic equipment (WEEE) [UKCA: S.I. 2013/3113 - The Waste Electrical and Electronic Equipment Regulations 2013] , but some contain batteries/rechargeable batteries in accordance with EU Directive 2006/66/EC: Battery Directive [UKCA: S.I. 2009/890 - The Waste Batteries and Accumulators Regulations 2009] . The disposal route, which is separate from household waste, is indicated by corresponding labels with the "crossed-out trash can".
Any batteries/rechargeable batteries included are designed to last the life of the product and do not need to be replaced or otherwise removed by the end user.

Lenze products are usually sold with cardboard or plastic packaging. This packaging complies with EU Directive 94/62/EC: Directive on packaging and packaging waste [UKCA: S.I. 1997/648 - The Producer Responsibility Obligations (Packaging Waste) Regulations 1997] .
The required disposal route is indicated by material-specific labels with the "recycling triangle".
Example: "21 - other cardboard"

REACH Lenze products are subject to REGULATION (EC) No 1907/2006: REACH Regulation [UKCA: S.I. 2008/2852 - The REACH Enforcement Regulations 2008] . When used as intended, exposure of substances to humans, animals and the environment is excluded.

Lenze products are industrial electrical and electronic products and are disposed of professionally. Both the mechanical and electrical components such as electric motors, gearboxes or inverters contain valuable raw materials that can be recycled and reused. Proper recycling and thus maintaining the highest possible level of recyclability is therefore important and sensible from an economic and ecological point of view.

- Coordinate professional disposal with your waste disposal company.
- Separate mechanical and electrical components, packaging, hazardous waste (e.g. gear oils) and batteries/rechargeable batteries wherever possible.
- Dispose of the separated waste in an environmentally sound and proper manner (no household waste or municipal bulky waste).

What?	Material	Disposal instructions
Pallets	Wood	Return to manufacturers, freight forwarders or reusable materials collection system
Packaging material	Paper, cardboard, pasteboard, plastics	Collect and dispose of separately
Products		
Electronic devices	Metal, plastics, circuit boards, heatsinks	As electronic waste give to professional disposer for recycling
Gearbox	Oil	Drain oil and dispose of separately
	Casting, steel, aluminium	Dispose as metal scrap
Motors	Casting, copper, rotors, magnets, potting compound	As engine scrap give to professional disposer for recycling
Dry-cell batteries/rechargeable batteries		As used batteries give to professional disposer for recycling

Further information on Lenze's environmental and climate responsibility and on the topic of energy efficiency can be found on the Internet:

www.Lenze.com → search word: "Sustainability"

Lenze SE
Postfach 101352 · 31763 Hameln
Hans-Lenze-Straße 1 · 31855 Aerzen
GERMANY

Hannover HRB 204803
Phone +49 5154 82-0
Fax +49 5154 82-2800
sales.de@lenze.com
www.lenze.com