WEPS160-26 – Single or 2 Phases input switching power supply

Main Features:

- High efficiency
- 1 or 2 phases input AC 187…528Vac
- Latched overload and short-circuit protection
- Excellent field reliability record
- Designed in according to EN12015, EN12016 for elevator use

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READ THIS CAREFULLY BEFORE INSTALLATION!	LEGGERE ATTENTAMENTE PRIMA DELL'INSTALLAZIONE!	A LIRE ATTENTIVEMENT AVANT L'INSTALLATION!
Before operating, read this document thoroughly and retain it for future reference. Non-respect of these instructions may reduce performances and safety of the devices and cause danger for people and property. The products must be installed, operated, serviced and maintained by qualified personnel in compliance with applicable standards and regulations. Don't open the device, it does not contain replaceable components, the tripping of the internal fuse (if included) is caused by an internal failure. Don't repair or modify the device, if malfunction or failure should occur during operation, send unit to the factory for inspection. No responsibility is assumed by Nextys SA for any consequences deriving from the use of this material.	Prima dell'installazione, leggere attentamente questo documento istruzioni e conservarle per future consultazioni. L'inosservanza delle presenti istruzioni può compromettere le caratteristiche e la sicurezza dell'apparecchio e causare pericolo per le persone e le cose. Il prodotto deve essere installato, utilizzato e riparato da personale qualificato e nel rispetto delle normative vigenti. Non aprire il prodotto, esso non contiene componenti sostituibili, il guasto del fusibile interno (se previsto) è causato da un guasto interno. Non tentare di riparare o modificare il prodotto, se durante il funzionamento si verificano guasti o anomalie, inviarlo al produttore per il controllo. Nextys SA non si assume nessuna responsabilità per qualunque conseguenza derivante dall'uso di questo materiale.	Lisez ces instructions avant l'installation, conservez ce manuel pour référence future. Défaut de se conformer à ces instructions peut affecter les caractéristiques et la sécurité du dispositif de danger et de causer aux personnes ou aux biens. Les produits doivent être installés, exploité et entretenus par personnel qualifié et en conformité avec les règlements. N'ouvrez pas le produit, il ne contient aucune pièce réparable, le déclenchement du fusible interne (le cas échéant) est causé par un défaut interne. Ne pas essayer de réparer ou modifier le produit ; si des défaillances se produisent pendant le fonctionnement ou les dysfonctionnements, le retourner au fabricant pour inspection. Nextys SA n'assume aucune responsabilité des conséquences éventuelles découlant de l'utilisation des produits.
CAUTION	**ATTENZIONE**	**AVVERTISSEMENT**
RISK OF BURNS, EXPLOSION, FIRE, ELECTRICAL SHOCK, PERSONAL INJURY. Never carry out work on live parts! Danger of fatal injury! The product's enclosure may be hot, allow time for cooling product before touching it. Do not allow liquids or foreign objects to enter into the products. To avoid sparks, do not connect or disconnect the device before having previously turned-off input power and wait for internal capacitors discharge (minimum 1 minute).	**RISCHIO USTIONI, ESPLOSIONE, INCENDIO, SCOSSA, LESIONI GRAVI.** Non effettuare mai operazioni sulle parti sotto tensione! Pericolo di lesioni letali! Il contenitore può scottare, lasciar quindi raffreddare il dispositivo prima di toccarlo. Non far entrare liquidi o oggetti estranei nel dispositivo. Per evitare scintille, non collegare o scollegare l'apparecchiatura prima di avere tolto tensione di ingresso e prima che sia avvenuta la scarica dei condensatori interni (min. 1 minuto).	**RISQUE DE BRULURES, EXPLOSION, INCENDIE, ELECTROCUTION, DOMMAGE AUX PERSONNES.** Ne jamais effectuer des opérations sur les parties sous tension! Danger de mort! Le récipient peut produire des brulures, le laisser refroidir avant de toucher l'appareil. Ne faites pas pénétrer des liquides ou des corps étrangers dans l'appareil. Pour éviter des étincelles, ne pas connecter ou déconnecter l'équipement jusqu'à ce que vous avez supprimé la tension d'entrée et avant qu'elle n'ait lieu de décharge des condensateurs internes (minimum 1 minute).

DECLARATION OF CONFORMITY

NEXTYS SA.
Via Luserte Sud 6, 6572 Quartino - Switzerland
Phone: +41-(0)91 840 14 46 / 840 14 48; Fax: +41-(0)91 840 14 47
E-mail: info@nextys.com

This Declaration of Conformity is suitable to the European Standard EN45014 "General criteria for supplier's declaration of conformity".
We declare under our sole responsibility that the device included in this box, has passed all processing inspections and the final test and it is in conformity with the product requirements, including all reference codes and supply specifications.

ROHS compliance: the product respects the EC requirements related to ROHS substances, according to "Restriction of Hazardous Substances" as per document 2011/65/UE
REACH compliance: the product respects the EC requirements related to REACH SVHC directive (EC) 1907/2006
Note: all the reported information comes from our suppliers, NEXTYS SA. has not run any test to evaluate if the specific elements are present.

All indicated devices are designed according to the latest Reference standards, if not expressly indicated through the official documents or files, they have been tested through our internal pre-compliance testing. Consult directly on www.nextys.com the reference standards applied to each model.

Code	**Description**
WEPS160-26	Single or 2 Phases Switching power supply IN 187 - 528Vac / OUT 26Vdc - 6A

Certifications and approvals	CE			RoHS 2011/65/EU	Pb lead-free

Reference standards	2014/35/EU	(Low Voltage Directive)
	2014/30/EU	(EMC directive)
	EN61010-1	(Safety Standard)
	EN61010-2-201	(Safety Standard)
	UL508	(Safety Standard)
	EN61000-6-2	(Generic immunity standard for industrial environments)
	- EN61000-4-2	(Electrostatic discharge immunity test)
	- EN61000-4-3	(Radiated, radio-frequency, electromagnetic field immunity test)
	- EN61000-4-4	(Electrical fast transient/burst immunity test)
	- EN61000-4-5	(Surge immunity test)
	- EN61000-4-11	(Voltage dips, short interruptions and voltage immunity test)
	EN12016	(Product Family Standard for Lifts, Escalators and Moving Walks – Immunity)
	EN61000-6-3	(Generic emission standard for residential environments)
	- EN55011	(CISPR11 - EMC)
	EN12015	(Product family standard for lifts, escalators and moving walks - Emission)

USER INSTRUCTIONS
1) Description: DIN rail mountable primary switched-mode power supply with 187...528Vac input, suitable for Single or 2 Phases main line.
2) Installation: use DIN-rails according to EN60715. Installation should be made vertically (see Fig.4). For better device stability fix the rail to the wall close to the point where the device is to be mounted. In order to guarantee sufficient convection, we recommend observing a minimum distance to other modules (see Fig.3). **Be sure to check that the mounting DIN rail is properly connected to earth (PE) before mounting the device** **WARNING: Do not insert/ remove any wire if the device is not fixed to the DIN rail.** The device is provided with a thermal protection; a limited air flow can cause the thermal protection tripping. The SMPS automatically restarts after cooling. To get normal operation reduce the temperature of the air surrounding the power supply, increase the ventilation or reduce the load (see Fig.8)
3) Connections: the device is equipped with pluggable screw terminals. To avoid sparks, do not connect or disconnect the connectors before having previously turned-off input power and waited for internal capacitors discharge (minimum 1 minute) In order to comply with international standard certification, use appropriate copper cables of indicated cross section, designed for an operating temperatures of: 60°C for ambient up to 45°C 75°C for ambient up to 60°C 90°C for ambient up to 70°C Strip the connecting ends of the wires according to the indication and ensure that all strands of a stranded wire enter the terminal connection (see Fig.5)
4) Input protection: the device input is provided with varistors against overvoltage. Input isn't provided with internal fuses, thus an external short circuit/overcurrent protection must be provided by the end user (see Fig.6). For operation on a single-phase or 2 phases system, a protection fuse on each phases must be provided. **Surge protection:** it is strongly recommended to provide external surge arresters (SPD) according to local regulations.
5) AC input connection: the device can be connected to single-phase AC lines with Uin 230Vac and 2 Phases line with Uin 187…528Vac (see Fig.7). Please connect first the PE.
6) Output connection: The device is suitable for **SELV** and **PELV** circuitry. Uout cannot be adjusted.
7) Output protection the device is protected against overload (OL) / short circuit (SC) / overvoltage (OV) / overtemperature (OT). Triggering of one of the protections is indicated by the red LED "ALARM" (see Fig.1). All protections are controlled by a latched off mode with the following behaviour. **OL behaviour:** When the current exceeds the rated current and stays above it for more than 5s, the protection is triggered is and the output is switched off latched. **SC behaviour:** When the output is short circuited the output is immediately switched off and latched off. **Output OV protection:** the output is protected against potential overvoltage due to internal malfunction; the output is immediately switched off and latched off. **OT protection:** turns off the device if the internal temperature exceeds a safe limit. The device is automatically restarted when the temperature decreases within normal limits. To recover the device to normal operation when the output is latched off, the mains must be turned off for more than 10 seconds and then turned on again. Before doing it please check the output load for short circuits or overloads.
8) Feeding DC motors: it is possible to feed DC motors considering that when a motor starts-up under effort its consumption is much higher than the nominal current and it can trigger overcurrent protection. **NOTE:** motors can generate high conducted noise on the DC line. Therefore it is not recommended to feed on the same line motors and equipment sensitive to noise.

Fig.1
Connections

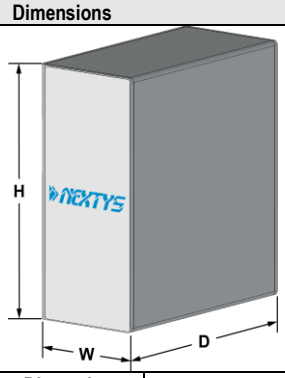
(1) AC input
(2) DC output (load)
(3) Green LED: Output OK
(4) Red LED: ALARM

Input AC Line:
Single Phase
- L1 = Line
- N = Neutral
- ⏚ = Earth ground

2 Phases
- L1 = Phase 1
- L2 = Phase 2
- ⏚ = Earth ground

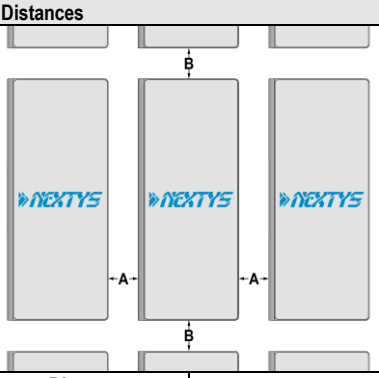
Output:
- + = Positive DC
- - = Negative DC

Fig.2
Dimensions



Dimension	mm
W	108.5
D	74.5
H	110.0

Fig.3
Distances



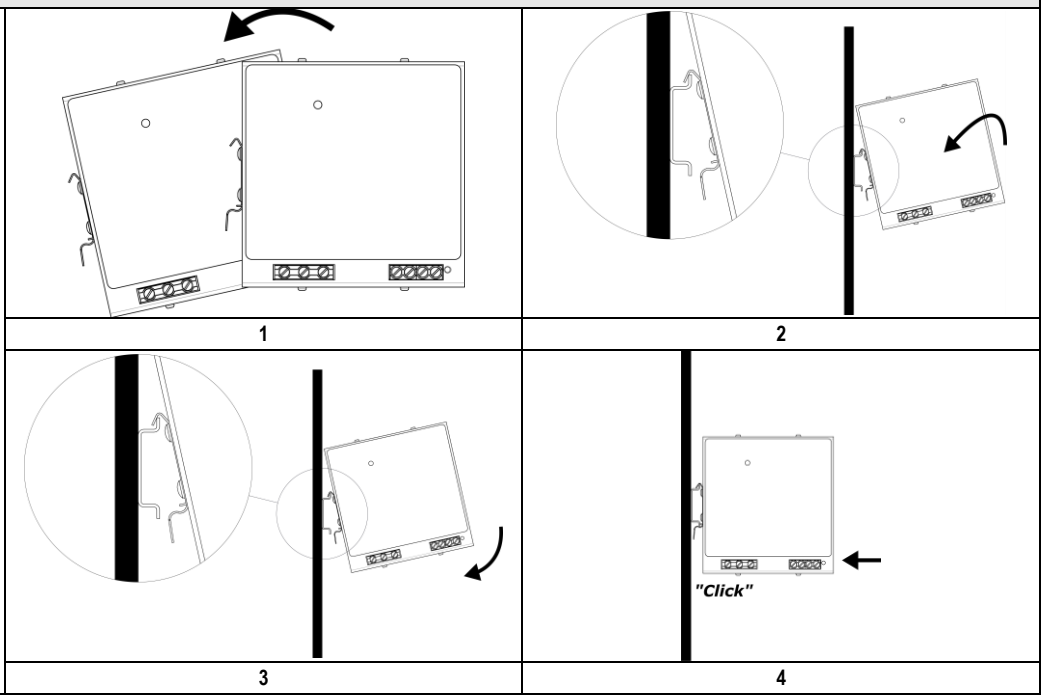
Distance	mm
A	50
B	50

Fig.4
Mounting / Dismounting Instructions

For DIN rail fastening according to IEC 60715 TH35-7.5(-15)
Mounting as shown in figure, with input terminals on lower side, with suitable cooling and maintaining a proper distance between adjacent devices as specified in the I.S. manual of each family.

Horizontal Mounting:

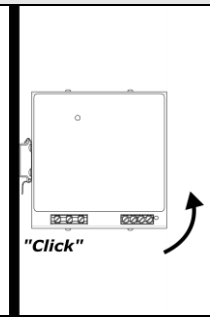
1. Tilt the unit slightly to the left.
2. Fit the unit over the top edge of the rail.
3. Slide it downward until it hits the stop.
4. Press against the bottom for locking.



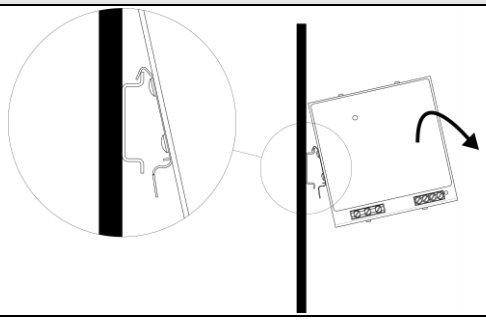
1 2 3 4

Dismounting:

1. Pull the unit from the bottom by tilting it upwards.
2. Tilt the unit upward
3. Unhook the unit from the rail



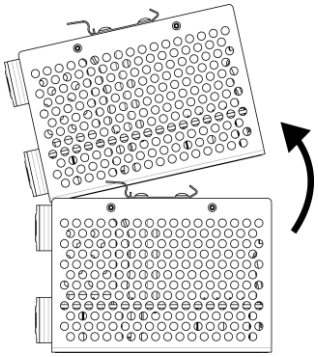
1 & 2



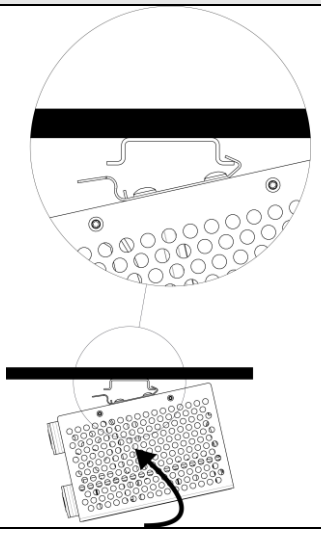
3

Vertical Mounting:

1. Tilt the unit slightly backwards on the right side
2. Fit the unit over on the right edge of the rail.
3. Slide the unit to the left until it hits the stops
4. Press against the left side for locking.



1



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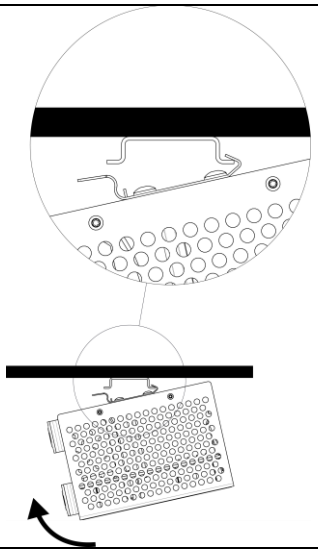

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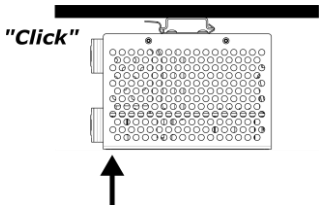
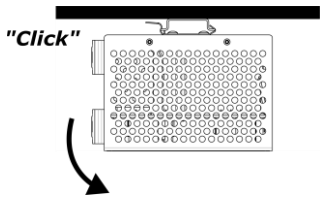


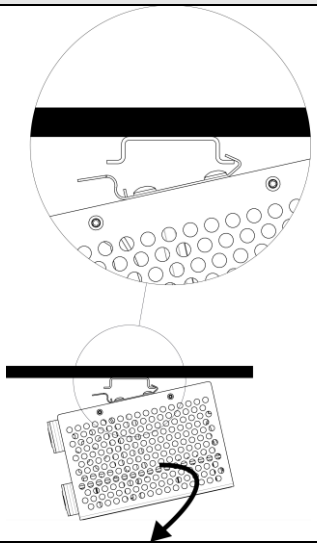
4

Dismounting:

1. Pull the unit from the left side by tilting it to the right
2. Tilt the unit to the right
3. Unhook the unit from the rail



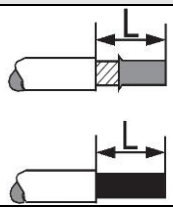
1 & 2



3

Fig.5
Recommended connecting cable

Recommended Tightening torque
0.5-0.6Nm
4.42-5.30 lbf in



Solid: 6mm² / 10AWG
Stranded: 4mm² / 10AWG
L: 8.0mm / 0.31in

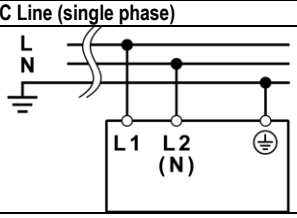
Fig.6
Input protection

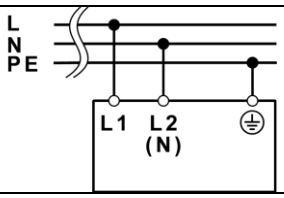
Fuses 4AT or MCB 6A C curve
For USA and Canada, use the fuse type closest to the European equivalent type.

Surge protection: it is strongly recommended to provide external surge arresters (SPD) according to local regulations.

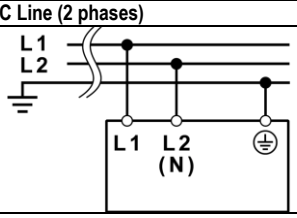
Fig.7
Input connections

AC Line (single phase)





AC Line (2 phases)



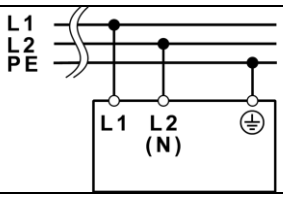


Fig.8
Environment

Operating temperature	Derating
- 40°C…50°C 5…95% r.H. non condensing Overtemperature protection	- 15W/°C over 45°C

Note:

- **Data may change without prior notice in order to improve the product.**
- **Please refer to the latest version of the "Instruction Manual" for each product by visiting *www.nextys.com***

See also the products below that can be used in conjunction with WEPS160-26 unit: *(accessory device)*

- **OR20** 20A Active ORing controller
- **OR50** 50A Active ORing controller
- **BU150U** 150J Buffer Module
- **MBC2K** 2000W Motor brake controller