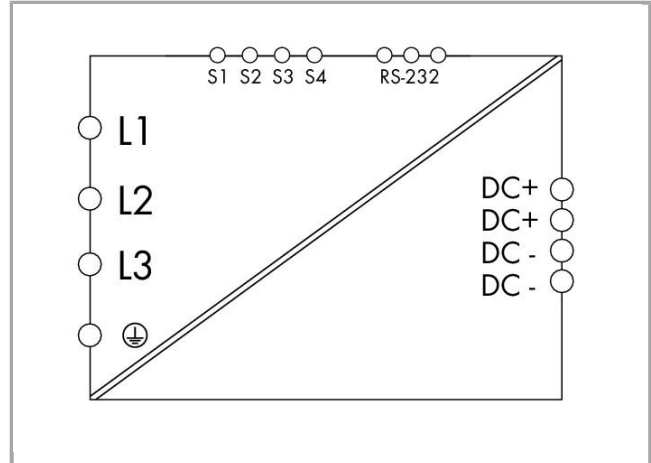


Data sheet | Item number: 787-854

Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal

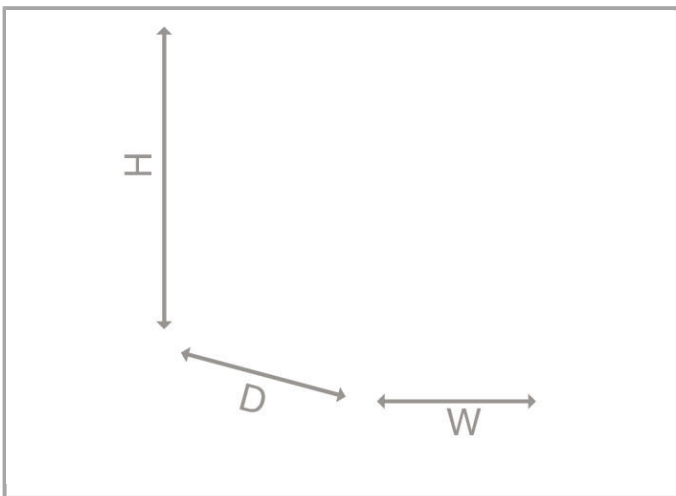


www.wago.com/787-854



RoHS Compliant

BOMcheck.net



Item description

Features:

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- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 serial interface
- Four signal outputs

Data

Technical Data

Input

Phases	2 3
Nominal input voltage $U_{i\text{nom}}$	(2 / 3) x AC 400 ... 500 V
Input voltage range	(2 / 3) x AC 340 ... 550 V; DC 480 ... 780 V
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC)
Discharge current	$\leq 1 \text{ mA}$
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (changeable via software/display)
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 22.8 ... 28.8 V (adjustable)
Factory preset	DC 24 V
Nominal output current $I_{o\text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Adjustment accuracy	$\leq 1 \%$
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ typ.
Overload behavior	Adjustable (constant current/fuse mode)
PowerBoost	DC 60 A (4 s); DC 50 A (16 s)
TopBoost	DC 100 A (50 ms)

Signaling and communication

Signaling	1 x LED DC OK (green)
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	1 x LED warning (yellow) 1 x LED error (red) LCD 4 x signal output (24 VDC, max. 25 mA) 1 x RS-232 interface
Operation status indicator	LED green (DC OK) LED yellow (warning) LED red (error)
Communication	RS-232 serial interface

Efficiency/Power losses:

Power loss P_v	≤ 7 W (no load); ≤ 61.5 W (nominal load)
Efficiency	93.6 %

Fuse protection:

Internal fuse	3 x T 3.2 A / 440 VAC
External fuse (required)	an external DC fuse required for DC input voltage
External fuse (recommended)	3 x circuit breakers 6 A, 10 A, 16 A, characteristic: B or C or motor circuit breakers, setpoint: 3.2 A, setting range: 2.5 ... 4 A

Safety and protection:

Insulation voltage (PRI-SEC)	DC 4.242 kV
Isolation voltage (PRI-GND)	DC 2.2 kV
Insulation voltage (SEC-GND)	DC 0.7 kV
Protection class	I
Protection class	IP20 (per EN 60529)
Feedback voltage	\leq DC 35 V
Overvoltage category	II
Transient protection, primary	Varistor
Short circuit protection	Yes
No-load proof	Yes
Parallel operation	Yes
Series connection	Yes
MTBF	$> 500,000$ h (per IEC 61709)

Connection data

Connection type (1)	Input
Connection technology	CAGE CLAMP®
WAGO terminal	WAGO 231 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG



Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Connection type (2)	Output
Connection technology 2	Push-in CAGE CLAMP®
WAGO terminal 2	WAGO 831 Series
Solid conductor (2)	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor (2)	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length (2)	13 ... 15 mm / 0.51 ... 0.59 inch
Connection type (3)	Signaling
Connection technology 3	CAGE CLAMP®
WAGO terminal 3	WAGO 733 Series
Solid conductor (3)	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor (3)	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Strip length (3)	5 ... 6 mm / 0.2 ... 0.24 inch

Geometrical Data

Width	128 mm / 5.039 inch
Height	171 mm / 6.732 inch
Length from upper-edge of DIN-35 rail	205 mm / 8.071 inch
Note on dimensions	Height including female connector

Mechanical data

Type of mounting	DIN-35 rail (EN 60715) in 2 positions
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Material Data

Weight	2300 g
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Environmental Requirements

Surrounding air (operating) temperature	-25 ... 55 °C (Device start at -40 °C type-tested)
Surrounding air (storage) temperature	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 45 °C)
Pollution degree	2
Climatic category	3K3 (per EN 60721)

Standards and specifications



Conformity marking	CE
Standards/specifications	EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Commercial data

Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4045454909895
Customs Tariff No.	85044082900







Approvals / Certificates

















UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 60950-1	E255815
	UL Underwriters Laboratories Inc.	UL 508	E255817

Compatible products

Marking accessories

	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type	www.wago.com/2009-110
	Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-002
	Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-006
	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-007
	Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-012

	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-017
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-023
	Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-024
	Item no.: 2009-135 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-135
	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-002
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-006
	Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-007
	Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-012
	Item no.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-023
	Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-024
	Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive	www.wago.com/210-831
	Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive	www.wago.com/210-832
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card	www.wago.com/248-501
	Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	www.wago.com/248-501/000-002



Item no.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-005



Item no.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-006



Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-007



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-012



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-017



Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-023



Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501



Item no.: 793-501/000-002
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-002



Item no.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-005



Item no.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-006



Item no.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-007



Item no.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-012



Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-017



Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-023



Item no.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-024

**Item no.: 793-5501**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501

**Item no.: 793-5501/000-002**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-002

**Item no.: 793-5501/000-005**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-005

**Item no.: 793-5501/000-006**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-006

**Item no.: 793-5501/000-007**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-007

**Item no.: 793-5501/000-012**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-012

**Item no.: 793-5501/000-017**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-017

**Item no.: 793-5501/000-023**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-023

**Item no.: 793-5501/000-024**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-024

tools**Item no.: 210-719**

Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm www.wago.com/210-719

**Item no.: 210-720**

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm www.wago.com/210-720

**Item no.: 210-721**

Operating tool with partially insulated shaft; Type 3, blade (5.5 x 0.8) mm www.wago.com/210-721

ferrule**Item no.: 216-201**

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated www.wago.com/216-201

**Item no.: 216-202**

















Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated www.wago.com/216-202












**Item no.: 216-203**

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated www.wago.com/216-203

**Item no.: 216-204**

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated www.wago.com/216-204

	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated	www.wago.com/216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated	www.wago.com/216-206
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated	www.wago.com/216-207
	Item no.: 216-208 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-208
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-244
	Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-246
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-262
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-264
	Item no.: 216-266 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-266
	Item no.: 216-267 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-267
	Item no.: 216-284	

	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-284
	Item no.: 216-286 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-286
	Item no.: 216-287 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-287
	Item no.: 216-288 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-288
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	www.wago.com/216-322
General accessories		
	Item no.: 761-9005 USB adapter; with 1m connection cable	www.wago.com/761-9005
	Item no.: 787-890 RS-232 communication cable; Length 1.8 m	www.wago.com/787-890
Mounting adapter		
	Item no.: 787-895 EPSITRON® wall mount adapter; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail	www.wago.com/787-895
	Item no.: 787-896 Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail	www.wago.com/787-896
	Item no.: 787-897 Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail	www.wago.com/787-897

Downloads

Documentation

Bid Text

787-854	Apr 4, 2012	doc	Download
Stromversorgung EPSITRON		37.9 kB	

Instruction Leaflet

Primary Switch Mode Power Supply EPSITRON-PRO-Power		pdf	Download
DC 24 V, 40 A, SELV, Line Monitor		525.5 kB	



Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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Libraries

Library

Connection of 787 Series power supplies	V1.3.0	zip	Download
The WagoLib787_01.lib library makes function blocks and visualization objects available which can be used to display information from the WAGO 787 Series power supply modules.	May 14, 2014	562.7 kB	

Engineering-Software

Software for Interface-Products

759-850 Configuration Software, for parameterizing 787-850, 787-852 and 787-854 Power Supplies	1.10.16 May 24, 2011	zip 532.7 kB	Download
Software 759-851, zur Visualisierung der Stromversorgungen 787-850, 787-852 und 787-854	1.4.5 Nov 11, 2009	zip 842.9 kB	Download

Configuration and Commissioning Software

Used for line length calculation	1.3.4	zip	Download
The conductor length calculation assists in planning the secondary fuse protection for conductors to power supply devices from the EPSITRON® PRO power family (787-8xx) as well as EPSITRON(R) CLASSIC Power family (787-16xx). After choosing a 787-8xx and 787-16xx power supply unit, the desired conductor size and associated fuse can be selected. The software tool then calculates the maximum conductor length at which the fuse functions correctly, while also considering the conductor and transfer resistances. The user can select a base load.	Mar 20, 2017	125.5 kB	

CAD/CAE - Smart Data

CAD data

3D Download 787-854	URL	Download
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Product family

EPSITRON PRO Power

EPSITRON® PRO POWER: Professional and Efficient Power Supply with Extra Power

[Show all products from the family](#)

Subject to changes.

WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.