

## Data Sheet | Item Number: 855-501/150-000

Current and voltage tap up to 50 mm<sup>2</sup>; Primary rated current: 150 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 0.5; fused

<https://www.wago.com/855-501/150-000>



### Short description:

WAGO's Current and Voltage Tap for 50 mm<sup>2</sup> (0/1 AWG) high-current through terminal blocks provides the ideal basis for successful energy management,

because current and voltage are required wherever electrical power is measured. A combination of current transformer and voltage tap, this solution can be quickly and easily mounted into the jumper slot of WAGO's 50 mm<sup>2</sup> (1/0 AWG) high-current through terminal block.

An integrated fuse reliably protects downstream energy meters. An integrated current transformer (conversion ratio: 150 A/1 A) allows precise current measurement per EN 61869-2 (accuracy class: 0.5).

The current output connectors are marked with S1 (black) and S2 (red). Both termination and removal of fine-stranded conductors is performed via push-buttons. The 4-pole configuration (2 x S1 and 2 x S2) provides the following advantages:

- Current transformer (S1 and S2) can be short circuited via jumper (2000-402)
- Direct 'Y' point jumper on current transformer

The voltage is connected using a redundant terminal block. Additionally, the current and voltage tap can be marked either using continuous marking strips or via WMB Multi Marking System.

### Features:

- Power data can be directly tapped into the power supply
- Easy installation – simply insert the tap into the jumper slot of the 50 mm<sup>2</sup> (1/0 AWG) high-current through terminal block
- Integrated current transformer (150 A/1 A)
- Accuracy class: 0.5
- Fuse-protected voltage path

### Notes

Note

Suitable for 2-conductor through terminal blocks for DIN-rail mounting (285-150; 285-154)  
Suitable for 2-conductor through terminal blocks with mounting flanges (285-141; 285-144)  
Spare fuse: WAGO 855-8020

### Technical data

#### Input

Measured variable	Voltage Current
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#### Input – current transformer

Rated continuous thermal current $I_{cth}$	150 A
Rated short-time thermal current $I_{th}$	9 kA / 1 s
Rated surge current $I_{dyn}$	22.5 kA
Rated frequency	50 ... 60 Hz
Primary rated current	150 A

### Output – current transformer

Secondary rated current	1 A
Rated power $S_r$	0.2 VA

### Output – voltage tap

Fuse (voltage path)	2 A; 450 V; F; 70 kA; 5 x 25 mm (WAGO 855-8020)
Rated Voltage	400 VAC

### Measurement Error

Accuracy class	0.5
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### Safety and protection

Overvoltage category	III
Pollution degree	2
Protection type	IP20
Test voltage	3 kVAC; 50 Hz; 1 min
Highest voltage for equipment $U_m$	720 $V_{rms}$ AC

### Connection Data

Feedthrough for measurement conductor	$\varnothing \leq 12$ mm
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#### Connection 1

Connection type	Current output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 250 Series
Strip length	8.5 ... 9.5 mm / 0.33 ... 0.37 inches
Solid conductor	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG

#### Connection 2

Connection type	Voltage output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2624 Series
Strip length	10 ... 12 mm / 0.39 ... 0.47 inches
Solid conductor	0.2 ... 6 mm <sup>2</sup> / 24 ... 10 AWG
Fine-stranded conductor	0.2 ... 6 mm <sup>2</sup> / 24 ... 10 AWG

### Physical data

Width	20 mm / 0.787 inches
Height	68 mm / 2.677 inches
Depth	57 mm / 2.244 inches

### Mechanical data

Mounting type	via 2-conductor high-current through terminal block's jumper slot
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### Material data

Housing material	PA 66
Fire load	0 MJ
Weight	66 g

### Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-25 ... +70 °C
Relative humidity	5 ... 85 % (without condensation)
Operating altitude (max.)	2000 m

### Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61869-2 EN 60947-7-3

### Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	NL
Customs tariff number	85043180888

### Product Classification

UNSPSC	39121006
eCl@ss 10.0	27-21-09-02
eCl@ss 9.0	27-21-09-02
ETIM 9.0	EC002048
ETIM 10.0	EC002048
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03082

#### Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance			↓
855-501/150-000			

Documentation

Bid Text			
855-501/150-000	19.02.2019	xml 8.48 KB	↓
855-501/150-000	09.08.2018	docx 21.53 KB	↓

Instruction Leaflet		
Current and voltage tap for the 2-conductor through terminal block of the 855 series	pdf 1312.52 KB	↓
Aufsteck-Stromwandler	pdf 1438.11 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models	↓
855-501/150-000	

CAE data	
EPLAN Data Portal	↓
855-501/150-000	
ZUKEN Portal	↓
855-501/150-000	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Fuse

1.1.1.1 Fuse



[Item No.: 855-8020](#)  
Miniature fuse; 5 x 25 mm; with indicator

1.1.2 Installation

1.1.2.1 Current transformer terminal block



[Item No.: 2007-8876](#)  
Compact terminal block; for 3-phase current transformer circuit; 6,00 mm<sup>2</sup>; multicoloured



[Item No.: 2007-8873](#)  
Compact terminal block; for current and voltage transformers; 6,00 mm<sup>2</sup>; multicoloured



[Item No.: 2007-8874](#)  
Compact terminal block; for current and voltage transformers; 6,00 mm<sup>2</sup>; multicoloured



[Item No.: 2007-8875](#)  
Compact terminal block; for current transformer circuit; 6,00 mm<sup>2</sup>; multicoloured



[Item No.: 2007-8877](#)  
Compact terminal block; for current transformer circuit; 6,00 mm<sup>2</sup>; multicoloured

### 1.1.3 Marking

#### 1.1.3.1 Marker



**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; white



**Item No.: 793-502**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 793-566**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 793-503**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 793-504**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 793-505**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 793-506**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 2009-115**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

#### 1.1.3.2 Marking strip



**Item No.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



**Item No.: 210-831**

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



**Item No.: 210-832**

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

### 1.1.4 Signal conditioner

#### 1.1.4.1 Current Signal Conditioner



**Item No.: 857-550**

Current signal conditioner; Current input signal; Current and voltage output signal; Digital output; Configuration via software; Supply voltage: 24 VDC; 6 mm module width; 2,50 mm<sup>2</sup>

#### 1.1.4.2 Power Measurement Module



**Item No.: 2857-570/024-001**

3-Phase Power Measurement Module; 3x277/480 V/1 A; Modbus RTU; Digital output; Configuration via software; Supply voltage: 24 VDC

## 1.1.5 Terminal blocks

### 1.1.5.1 Through terminal block



**Item No.: 285-154**

2-conductor through terminal block; 50 mm<sup>2</sup>; lateral marker slots; only for DIN 35 x 15 rail; POWER CAGE CLAMP; 50,00 mm<sup>2</sup>; blue



**Item No.: 285-150**

2-conductor through terminal block; 50 mm<sup>2</sup>; lateral marker slots; only for DIN 35 x 15 rail; POWER CAGE CLAMP; 50,00 mm<sup>2</sup>; gray



**Item No.: 285-144**

2-conductor through terminal block; 50 mm<sup>2</sup>; lateral marker slots; with fixing flanges; POWER CAGE CLAMP; 50,00 mm<sup>2</sup>; blue



**Item No.: 285-141**

2-conductor through terminal block; 50 mm<sup>2</sup>; lateral marker slots; with fixing flanges; POWER CAGE CLAMP; 50,00 mm<sup>2</sup>; gray

## 1.1.6 Tool

### 1.1.6.1 Operating tool



**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### Installation



Installation via jumper slot



Feedthrough for primary conductors

## Conductor termination



Push-in CAGE CLAMP® connection technology

## Security



Integrated fuse