Pro S Track Busway





SMART ENERGY FOR THE FUTURE

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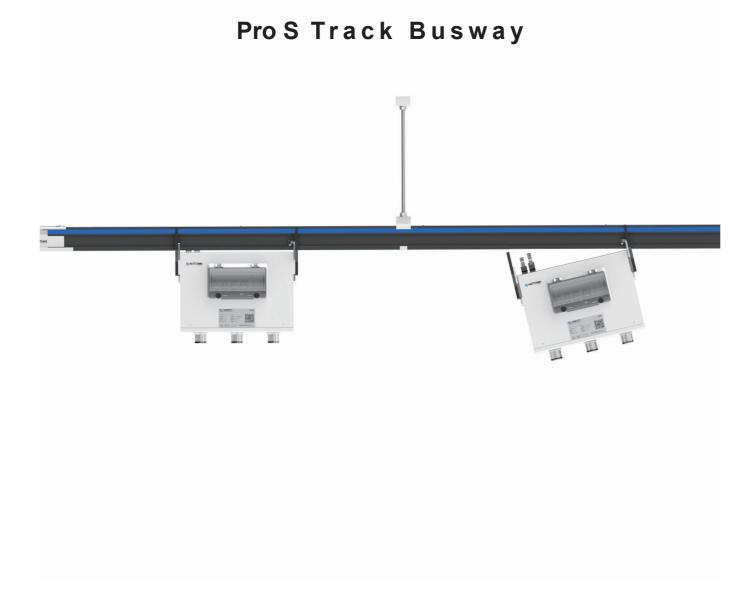
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Pro S 202304

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Smart Energy for the Future

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METOMN



Company Profile

Wetown Electric (SH. 688226) mainly covers two business segments: power distribution and new energy, and is committed to providing highquality solutions and services for customers in power, new energy, data communication, rail transit, industrial manufacturing and other industries

Core value: Customer Orientation, Innovation and Foresight, Accountability Capability & advantage

Dedicated in electric product development and manufacturing for over 30 years, with the key business: busway, switchboard, electrical components, PV ribbon, copper/aluminum conductors;

 Large scale of intelligent manufacturing system and complete industrial chains in busway industry;

- Comprehensive international certifications including KEMA, ASTA, UL, CE;
- "Well-known Trademark in China" and "the Most influential national brand in electrical industry".

Global coverage

Wetown has wide global coverage with thousands of installation basis in over forty countries including South-east Asia, India, Middle East, Africa, Russia, Europe, Latin America, Australia etc.

| ISO 9001 | ISO 14001 | OHSA 18001 |
|-------------|---------------|---------------|
| SA 8000 | GB/T 27922 | GB/T 29490 |
| UL | KEMA | ASTA |
| EAC | CIDET | RoHS |
| Cac | CE | • |

System Overview

The Pro S track busway can meet the power demand of 160-1000A, and the current of the tapoff unit circuit breaker frame is from 16A-125A,The product structure adopts a 3P5W system, and the output include single circuit, 3-circuit, 6-circuit and other specifications.

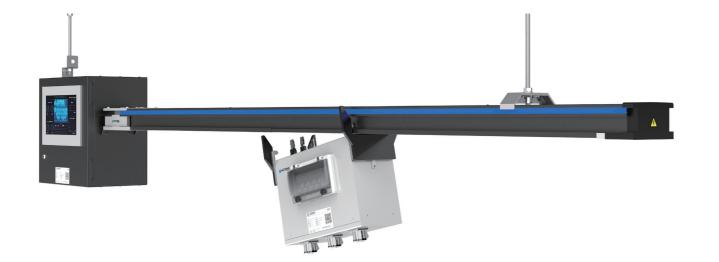
The whole series of products are compatible with the tap-off unit, and the originality realizes the structural of the slide rail type tap-off unit. The installation of the tap-off unit is automatically locked, and the entire length of the busway can be plugged in to take power. The elastic joint completely eliminates the risk of the traditional joint fastening bolt loosening. Pro S series products are suitable for a variety of indoor scenarios, such as data centers, light industrial plants, medical buildings and other occasions, with the advantages of low temperature rise, good heat dissipation, high power distribution efficiency, flexible branching, stable and reliable.







Product Features





Track busway

- Busway 160A-1000A
- Tap-off unit 16A-100A
- Insertion at any position of linear segment
- Full range of ultra-low temperature rise
- Elastic fixation of joint
- Telemetry, remote signaling, remote regulation and remote control



Elastic contact joint (patent)

- Integral installation
- No risk of loosening
- Automatic contact pressure balancing
- Installation error redundancy

Product Features

Plug in power at any position

- Fully pluggable
- Millimeter adjustment
- Take power freely

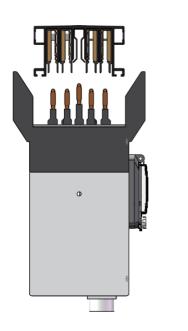
Original slide rail tap-off unit

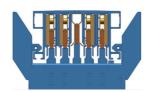
- Easy hanging and arbitrary sliding
- Automatic locking without tools
- Single person operation, fast completion





Product Features





Safe and reliable joint

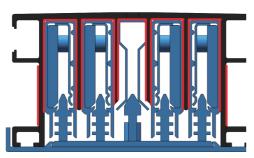
- Double side contact self limiting
- Automatic locking in place (patent)
- PE pin comes out first

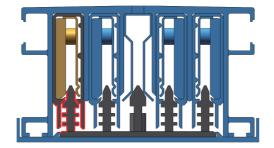
Excellent thermal conductivity and heat dissipation

- Heat dissipation area increased to 150%
- Heat dissipation effect increased by 30%

Safe structural design

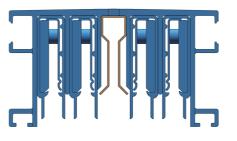
- No risk of interphase short circuit
- The maximum creepage distance is 60mm





Expandable grounding system

- Independent PE expandable (up to 100%)
- Installation position can be customized



Modular product structure design

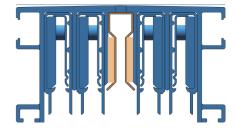
- Common to busway standard parts
- Universal for all series of tap-off units
- Flexible application scenarios

Flexible adjustment and customization

- Plug in assembly
- Standard groove sealing strip
- Snap closure plate



Product Features





WETOWN

Product Features

Intelligent solutions

- GB/T 7251.8-2020
- Telemetry, remote signaling, remote regulation and remote control
- Cloud background and APP real-time operation

Overview



Real-Time Measurement And Control

General parameters

| Conductor | T2 electrolytic copper | |
|---|--|--|
| Enclosure | Aluminum magnesium silicon alloy | |
| Conductor surface finish | Full-length silver plating | Can be changed according to user requirement |
| Enclosure finish | Epoxy resin powder electrostatic spraying | Can be changed according to user requirement |
| Structural properties | | |
| Busway | IP42 | |
| Tap-off unit | IP42 | |
| Wire system | 3L+N+PE | |
| Tap-off unit output | Single circuit Three-circuit Six-circuit | Configure according to user requirements |
| Normal use conditions | | |
| Place of use | Household | |
| Ambient temperature low | -5 ℃ | |
| Ambient temperature high | + 50 °C | |
| Ambient air temperature - maximum daily mean temperature | + 35 ℃ | |
| Maximum relative humidity | Relative humidity nmt 50% at 40°C | |
| Environmental pollution level | Grade 2 | |
| Installation site altitude | ≤ 2000m | |
| Installation mode | Horizontal mounted, can be hoisted or moun | ted in cable slots under floor |
| Product certification | | |
| 250Aac-1000Aac/315Adc-1600Adc ful | I range of bus KEMA-KEUR and CE certification | on |
| 16-100A full range of tap-off units DEK | RA and CE certification | |
| 250Aac-1000Aac busbar and 16-100A | tap-off unit CCC Type II voluntary certification | |
| 315Adc-1600Adc busbar CQC low-vol | age DC complete switchgear safety certification | on |
| GB/T 7251.8 Intelligent Complete Equi | pment Certification | |
| YD 5083 Class 9 seismic certification | | |
| IEC 60068-3-3 zone4 seismic certifica | ion | |

Technical Parameter



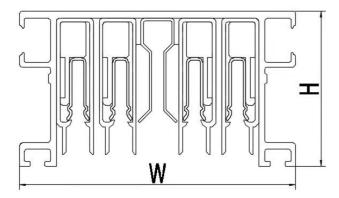
Technical Parameter

Busway parameters

| Alternating current (AC) current class A | | 250 | 400* | 400** | 500 | 630 | 800 | 1000 |
|---|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| Direct current (DC) current class A | | 400 | 630 | | 800 | 1000 | 1200 | 1600 |
| Bus section height H/mm | | | 7 | 0 | | | 78 | 95 |
| Bus section width W/mm | | | | 12 | 20 | | | |
| Rated short-time withstand current kA (CCC) | | 10 | | 30 | | | 40 | 50 |
| Rated peak withstand current kA(CCC) | | 17 | | | 63 | | 80 | 105 |
| Rated short-time withstand current kA (KEMA-KEUR) | | 10 | | - | 20 | 30 | 40 | 50 |
| Rated peak withstand current kA (KEMA-KEUR) | | 17 | | - | 40 | 63 | 80 | 105 |
| Rated working voltage (without tap-off unit) V | 1000 | | | | | | | |
| Rated working voltage (with tap-off unit) V | | | | 4(| 00 | | | |
| Rated insulation voltage (without tap-off unit) V | 1000 | | | | | | | |
| Rated insulation voltage (with tap-off unit) V | | | | 50 | 00 | | | |
| Rated impulse withstand voltage (without tap-off unit) kV | V 8 | | | | | | | |
| Rated impulse withstand voltage (with tap-off unit) kV | 6(63A and below)/4(63-125A) | | | | | | | |
| Resistance R20 (mΩ/m) | - | 0.3591 | 0.2298 | 0.1436 | 0.1149 | 0.0912 | 0.0718 | 0.0575 |
| Reactance X (mΩ/m) | - | 0.267 | 0.1709 | 0.1068 | 0.0854 | 0.0678 | 0.0534 | 0.0427 |
| Impedance Z20 (mΩ/m) | - | 0.4475 | 0.2864 | 0.179 | 0.1432 | 0.1136 | 0.0895 | 0.0716 |

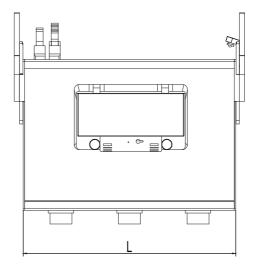
400* is an economic type with low short-term resistance; 400** is a high-short-time performance type; 400** only has CCC certification, and other AC and DC specifications have KEMA-KEUR, CE and CCC/CQC certification

X of 630A busbar is measured value, R20 and Z20 are calculated values, and R20, X and Z20 of other current levels are theoretically calculated values



Tap-off unit parameters

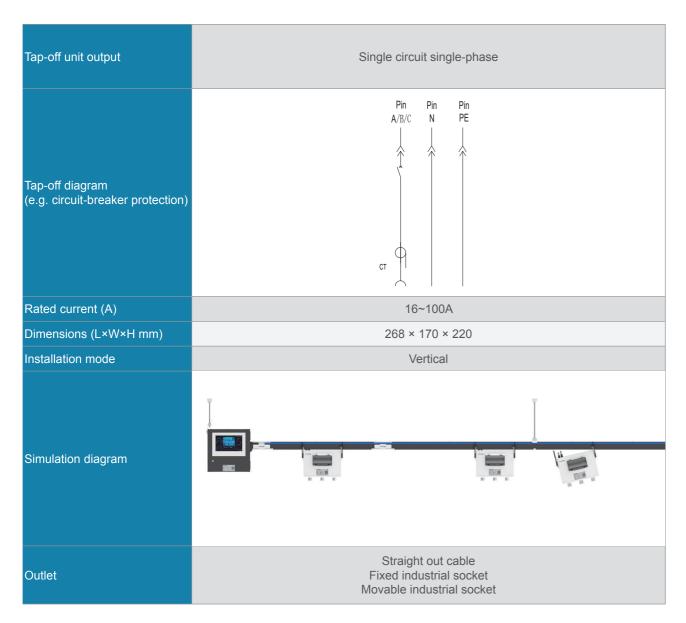
| Frame current of tap-off unit circuit breaker A | 16~63A | 80~125A | |
|--|---------------------|---------|--|
| Tap-off unit height (H/mm) | 220 | | |
| Connector box thickness (W/mm) | 128 | | |
| Tap-off unit length (3-way output tap-off unit) (L/mm) | 336* | 550* | |
| Intelligent module (U, I, GB/T 7251.8-2020) | 51.8-2020) Optional | | |
| Intelligent module (U, I, T, GB/T 7251.8-2020) | Optional | | |
| Tap-off unit output channel Standard 3-way, optional single-way, 6-way | | | |
| Tap-off unit output form Standard fixed socket, optional active socket or cable terminal | | | |
| Tap-off unit installation form Vertical/Horizontal | | | |
| *The length and dimension of the tap-off unit may vary according to the configuration | | | |

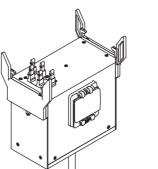


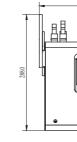
Technical Parameter



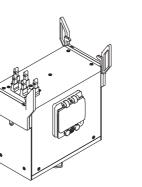
Outline dimension drawing of tap-off unit

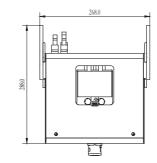




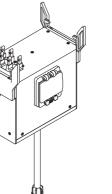


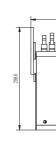
Straight out cable

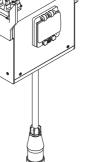




Fixed industrial socket

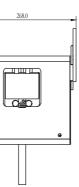






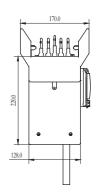
Movable industrial socket

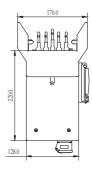
Note:The standard configuration is three-circuit single-phase, which can be customized according to user requirements.

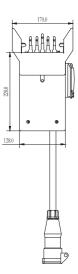








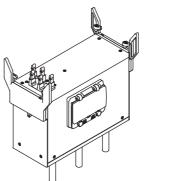






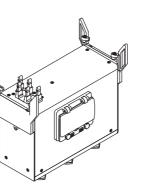
Outline dimension drawing of tap-off unit

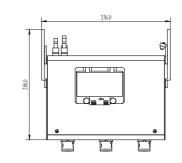
| Tap-off unit output | Three-circuit single-phase |
|--|--|
| Tap-off diagram (e.g. circuit-breaker protection) | Pin Pin Pin Pin Pin Pin A B C N PE A A B A |
| Rated current (A) | 16~100A |
| Dimensions (L×W×H mm) | 336 × 170 × 220 |
| Installation mode | Vertical |
| Simulation diagram | |
| Outlet | Straight out cable Fixed industrial socket Movable industrial socket |



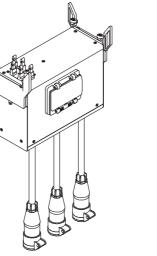




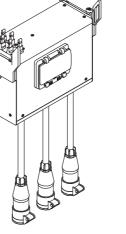




Fixed industrial socket

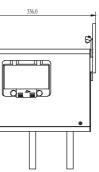




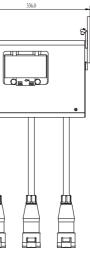




Function Unit

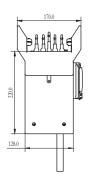


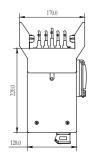


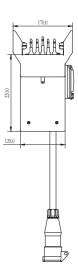


Movable industrial socket

Note: The standard configuration is three-circuit single-phase, which can be customized according to user requirements.

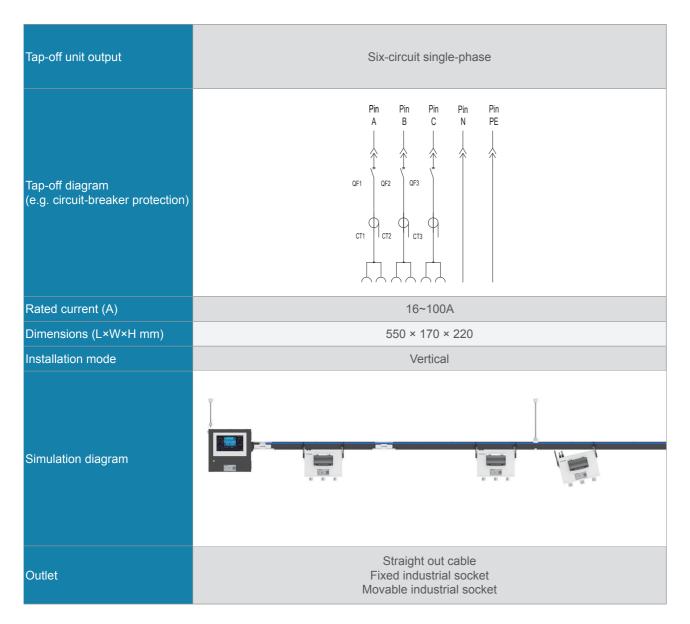


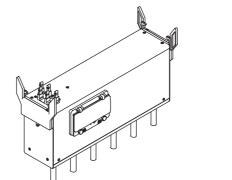


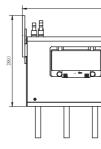




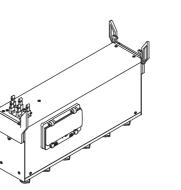
Outline dimension drawing of tap-off unit

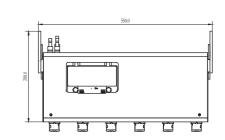




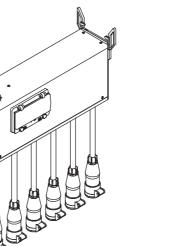


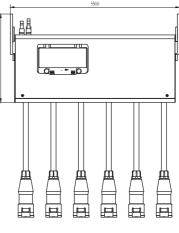
Straight out cable





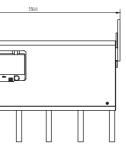
Fixed industrial socket

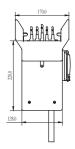


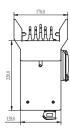


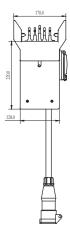
Movable industrial socket

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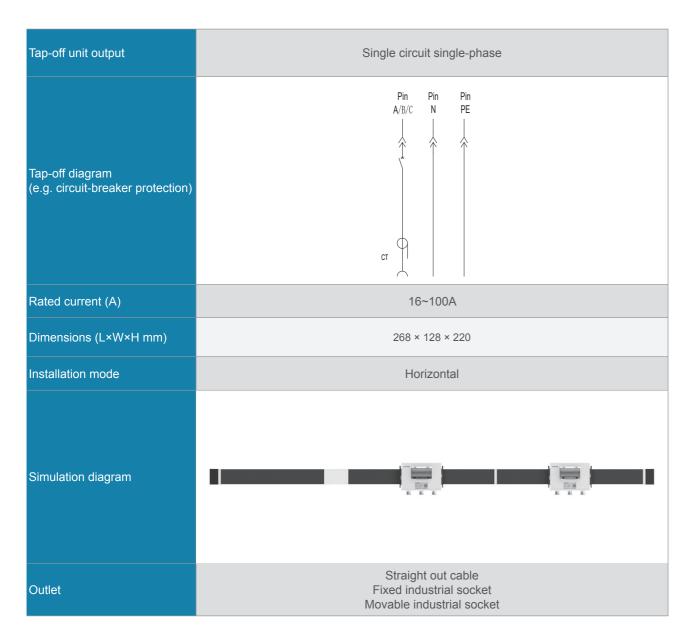


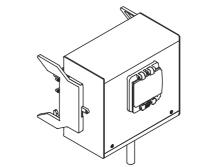


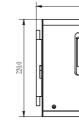




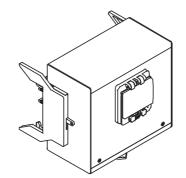
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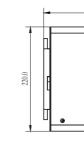




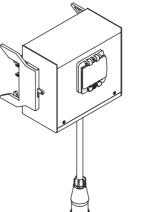


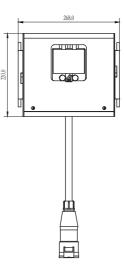
Straight out cable

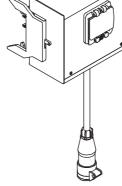




Fixed industrial socket

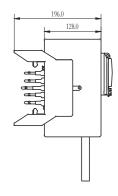




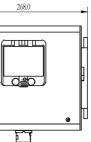


Movable industrial socket

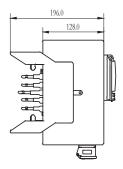
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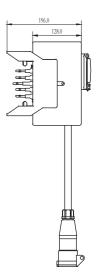






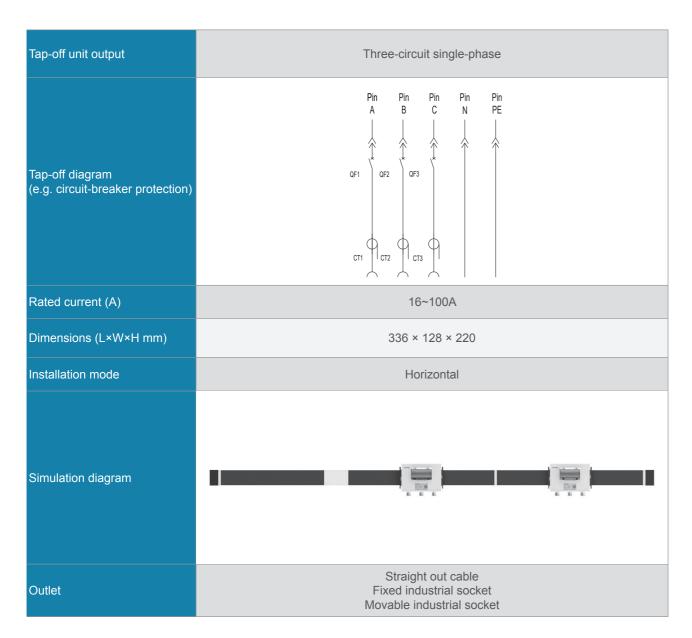


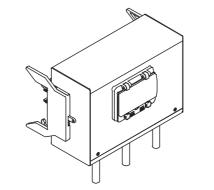






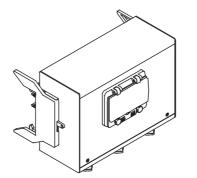
Outline dimension drawing of tap-off unit





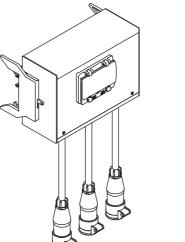


Straight out cable



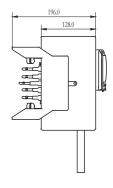


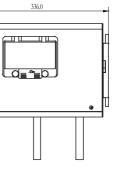
Fixed industrial socket



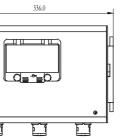


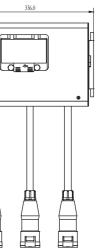
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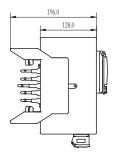


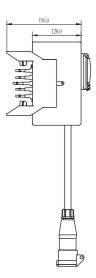






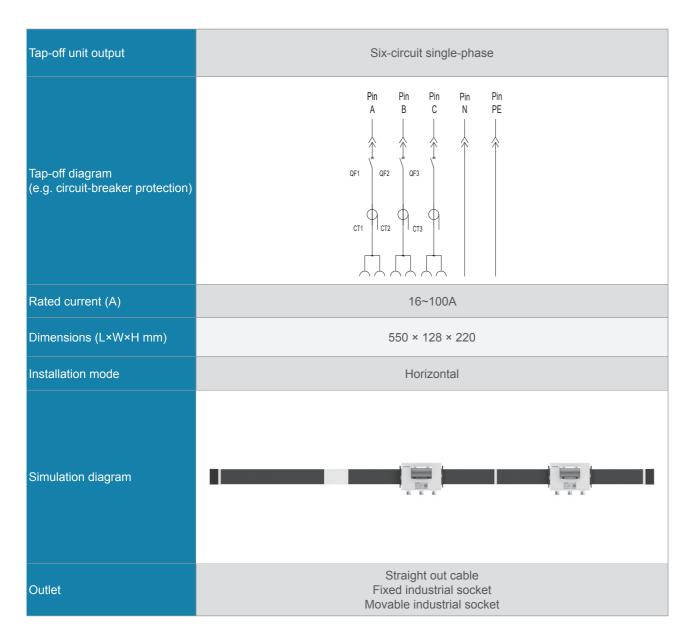
Movable industrial socket

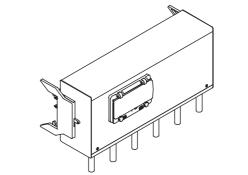


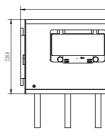




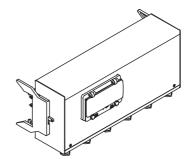
Outline dimension drawing of tap-off unit





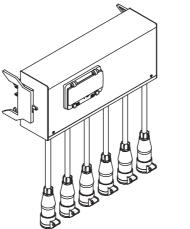


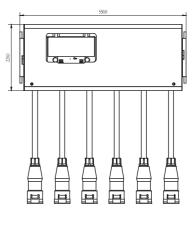


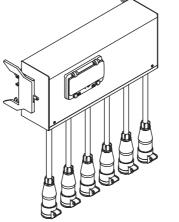




Fixed industrial socket



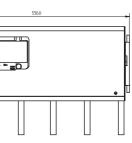


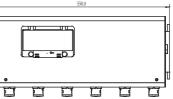




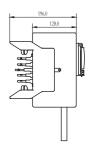
Movable industrial socket

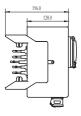
Note: The standard configuration is three-circuit single-phase, which can be customized according to user requirements.

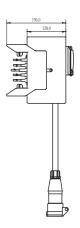




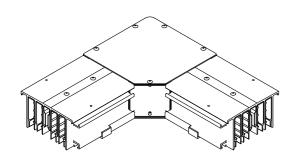


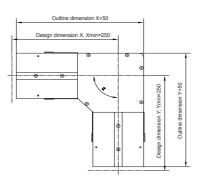






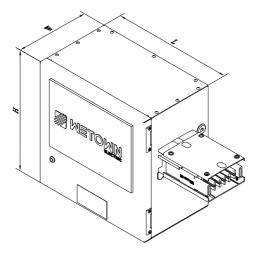




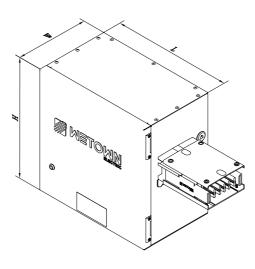


Noted:Customizable angle

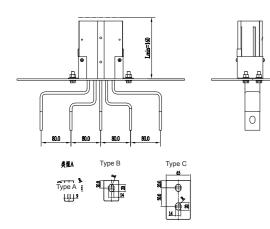
Feeder box with touch screen



Feeder box without touch screen

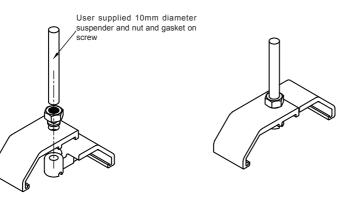


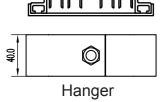




Flange end

125.0





35.0



WETOWN

Intelligent Monitoring Module

The functions of electric energy and temperature monitoring devices are listed below.

Function description of electric energy monitoring device IBT403-M1:

| | IBT403-M1 Functional Table |
|----------------------|--|
| | Phase/Line Voltage |
| | Current |
| | Active/reactive power |
| Measuring function | Apparent power |
| measuring function | Power Factor |
| | Mains Frequency |
| | Voltage/Current total distortion rate |
| | Fundamental voltage/current |
| | Positive/reverse with/without power |
| Metering function | Apparent energy |
| | Fundamental Forward/Reverse Active/Reactive Energy |
| | Daily extreme data recording (phase voltage, line voltage, current, power, power factor, grid frequency) |
| Extreme Value Record | Monthly extreme data recording (phase voltage, line voltage, current, power, power factor, grid frequency) |
| | Annual Extreme Value Data Recording (Phase Voltage, Line Voltage, Current, Power, Power Factor, Mains |
| | Frequency) |
| Data storage | Electrical parameters according to storage (phase/line voltage, current, active/reactive power, apparent power, power factor, grid frequency, voltage/current total distortion rate, fundamental voltage/current, forward/reverse active/reactive power, apparent power) |
| | Power data storage (forward/reverse with/without power, apparent power) |
| | Alarm information storage (voltage, current, active power, reactive power, power factor, grid frequency) |
| Parameter Settings | Threshold, Variation Ratio, and Other Parameter Settings |

Function description of temperature monitoring device IBT403-T1:

| IBT403-T1 Functional Form | | |
|---------------------------|--|--|
| Measuring function | Four-way temperature measurement | |
| | Daily Temperature Extreme Data Logging | |
| Extreme Value Record | Monthly Extreme Temperature Data Logging | |
| | Annual Extreme Temperature Data Record | |
| Data ataraga | Temperature Data Storage | |
| Data storage | Alarm information storage | |
| Parameter Settings | Alarm Temperature Value Setting | |

| | IBT403-M1 Technical S |
|--|---|
| Working environment | |
| Operating Temperature | 20 ° C to 60 ° C |
| Storage Temperature | 25 ° C to 70 ° C |
| Relative humidity | ≤ 93% |
| Operating Altitude | ≤ 2500m |
| Protection Class | IP20 |
| Insulation | Insulation resistance betw 100 MΩ |
| Pressure resistance | Voltage and current signal shall be AC2kV for 1 min, flashover. |
| Electromagnetic compatibility | |
| Antistatic interference | Level 3 |
| Radiated resistance to radio frequency electromagnetic fields | Level 3 |
| Electrical fast transient/burst immunity | Level 3 |
| Anti-surge interference | Level 3 |
| Voltage Input | |
| Range | Range 3 × 220V/380V |
| Resolution | 0.1V |
| Overpressure | Continuous 1.2 times, inst |
| Current Input | |
| Range | External Current Transform |
| Communication Interface COM1 | |
| Physical interface | RS 485 |
| Communication port | Accessible to moving-ring |
| Communication Rate | 9600, 19200 bps |
| Communication Protocol | Modbus-RTU |
| Communication Interface COM2 | |
| Physical interface | RS 485 |
| Communication port | Accessible to moving-ring |
| Communication Rate | 9600, 19200 bps |
| Communication Protocol | Modbus-RTU |
| | |

Intelligent monitoring module

Specification Sheet

mer

g or touchscreen or other communications equipment

g or touchscreen or other communications equipment

WETOWN

Intelligent Monitoring Module

IBT403-T1 Technical Specifications:

| | IBT403-T1 Technical Specification Sheet |
|---|--|
| Working environment | |
| Operating Temperature | 20 ° C to 60 ° C |
| Storage Temperature | 25 ° C to 70 ° C |
| Relative humidity | ≤ 93% |
| Operating Altitude | ≤ 2500m |
| Protection Class | IP20 |
| Insulation | Insulation resistance between terminal and conductive parts of ENCLOSURE not less than 100 $\ensuremath{M\Omega}$ |
| Pressure resistance | Voltage and current signal input, relay output, RS 485 communication, switching input shall be AC2kV for 1 min, leakage current shall be less than 2 mA, without breakdown or flashover. |
| Electromagnetic compatibility | |
| Antistatic interference | Level 3 |
| Radiated resistance to radio frequency electromagnetic fields | Level 3 |
| Electrical fast transient/burst immunity | Level 3 |
| Anti-surge interference | Level 3 |
| Temperature measurement | |
| Number of Input Routes | 4 way |
| Measuring range | -20 to 120 ° C |
| Measuring accuracy | ±1°C |
| Communication Interface COM1 | |
| Physical interface | Accessible to moving-ring or touchscreen or other communications equipment |
| Communication Rate | 9600, 19200 bps |
| Communication Protocol | Modbus-RTU |
| Communication Interface COM2 | |
| Physical interface | Accessible to moving-ring or touchscreen or other communications equipment |
| Communication Rate | 9600, 19200 bps |
| Communication Protocol | Modbus-RTU |
| | |

IBT403-M1 Appearance Overview



AL TOPLES AL A A COM AL A COM

| Powe |
|--------|
| indic |
| 1. Po |
| 2. Ru |
| 3. Co |
| 4. Ala |
| Com |
| 2 RS4 |
| Volta |
| Curre |
| Softv |
| Insta |
| |

2 RS485



Intelligent monitoring module

IBT403-M1

- er supply: AC220V
- cator light:
- ower indicator light
- unning indicator light
- ommunication indicator light
- larm indicator light
- nmunication port:
- 5485
- age access port
- rent access port
- tware upgrade interface
- allation method: guide rail installation

IBT403-T1

- Power supply: AC220V
- indicator light:
- 1. Power indicator light
- 2. Running indicator light
- 3. Communication indicator light
- 4. Alarm indicator light
- Communication port:
- Temperature measurement resistor access port
- Software upgrade interface
- Installation method: guide rail installation

METOMN

Product Code

Pro S straight

Example:

PRS024252-3

PRS064252-1.5

| | | | PRS | 02 42 52 - 0 |
|----------------------|---------------------------------|---|-----|--------------|
| | Poducts series | | Î | |
| PRS | Pro S Busway | | | |
| | | | | |
| | Current class | | | |
| 02 | 250A | _ | | |
| 04 | 400A | | | |
| 05 | 500A | | | |
| 06 | 630A | | | |
| 08 | 800A | | | |
| 10 | 1000A | | | |
| | IP | | | |
| 42 | IP42 | | | |
| | | | | |
| Phas | e number/wire system | | | |
| 52 | 3P5W | | | |
| | | | | |
| | (m) | | | |
| | usway length (m) | | | |
| 0.2 | 0.2m (Minimum length of feeder) | 7 | | |
| 3 | 3m | | | |
| (In 0.01 increments) | | | | |

Pro S elbow

Example:

PRSLL064252-X0.25Y0.25A90 PRSLL044252-X0.5Y0.25A135

| | | _ |
|----------------|-----------------------|---|
| Poducts series | | |
| PRS | Pro S Busway | |
| | | |
| Elbow | | |
| LL | Horizontal left elbow | |
| | | |
| Current class | | |
| 02 | 250A | - |
| 04 | 400A | |
| 05 | 500A | |
| 06 | 630A | |
| 08 | 800A | |
| 10 | 1000A | |
| | | |
| | | _ |

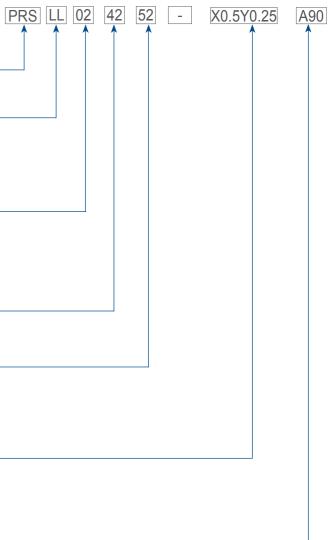
| l | Р | |
|----|------|--|
| 42 | IP42 | |

| Phase number/wire system | | |
|--------------------------|----|-----|
| 52 | 3F | 25W |

| Elbow length X, Y (m) | |
|-----------------------|--------------------|
| X0.25 | X0.25m (min value) |
| Y0.25 | Y0.25m (min value) |
| (In 0.01 increments) | |

| Elbow angle | | |
|-------------------|------------------------|--|
| A90 | 90 ° right angle elbow | |
| A135 | 135 ° elbow | |
| (In 1 increments) | | |

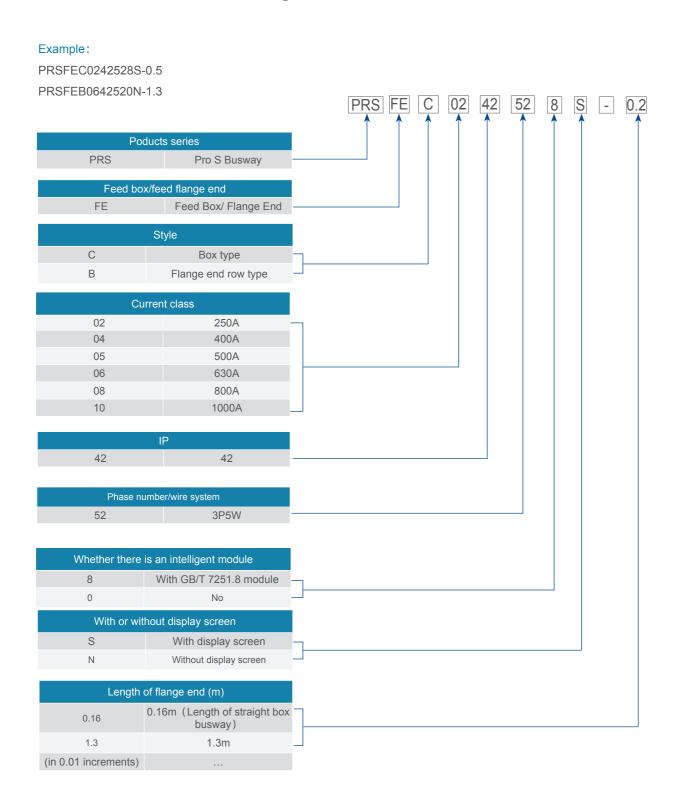






Product Code

Pro S feed box/feed flange end



Pro S tap-off unit

Example:

PRSPRV0642318 PRSPRH1242330

| Poo | ducts series | | |
|------------------------|---|----|--|
| PRS | Pro S Busway | | |
| Tap-off unit | | | |
| PR | Tap-off unit | | |
| Box type | | | |
| Н | Vertical | _ | |
| V | Horizontal | 1- | |
| | | | |
| | irrent class | | |
| 01 | 16A | | |
| 03 | 32A | | |
| 04 | 40A | | |
| 05 | 50A | | |
| 06 08 | 63A 80A | | |
| 10 | 100A | | |
| 12 | 125A | | |
| 12 | IP | | |
| 42 | 42 | | |
| 42 | 42 | | |
| No. of output circuits | &No. of circuit breaker poles | | |
| 11 | 1-way output single pole circuit breaker | | |
| 31 | 3-way output, single pole circuit breaker | | |
| 33 | 3-way output, 3-pole circuit breaker | | |
| 61 | 6-way output, single pole circuit breaker | | |
| 63 | 6-way output 3-pole circuit breaker | | |
| Whether there | is an intelligent module | | |
| 8 | With GB/T 7251.8 module | | |

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