

Power Transmitter



CZDL Series

Model	Name	Input	Output	Power supply mode	Page
CZDL-IAC-10A	AC current transmitter	0-1A/5A/10A AC	4-20mA/0-20mA/1-5V/0-5V/0-10V	90-260V AC 120V-300V DC	23
CZDL-IAC-10T	AC current transmitter(true RMS)	0-1A/5A/10A AC	4-20mA/0-20mA/1-5V/0-5V/0-10V	20-30V DC	23
CZDL-IDC-10	DC current transmitter	0-1A/2A/5A/10A DC	4-20mA/0-20mA/1-5V/0-5V/0-10V 1-5V/0-5V/0-10V/-10-10V	20-30V DC	24
CZDL-VAC-370T	AC voltage transmitter(true RMS)	0-(30-500V) AC	4-20mA/0-20mA/1-5V/0-5V/0-10V	20-30V DC	25
CZDL-VDC-400	DC voltage transmitter	0-(10-100V DC), 0-(100-1000V DC)	4-20mA/0-20mA/1-5V/0-5V/0-10V	20-30V DC	26
CZDL-1PH	single-phase power transmitter	0-1A/5A/10A AC	4-20mA/0-20mA/1-5V/0-5V/0-10V	20-30V DC	27

ESC Series

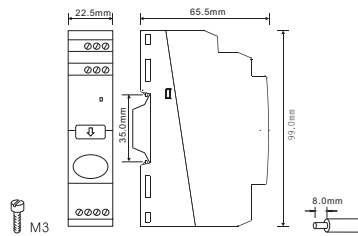
Model	Name	Input	Output	Power supply mode	Page
ESC-I-30	AC/DC current transmitter	0-20A/25A/30A AC/DC	4-20mA/0-20mA/0-5V/0-10V/±5V/±10V	20-30V DC	28
ESC-I-60	AC/DC current transmitter	0-40A/50A/60A AC/DC	4-20mA/0-20mA/0-5V/0-10V/±5V/±10V	20-30V DC	28

AC current Transmitter

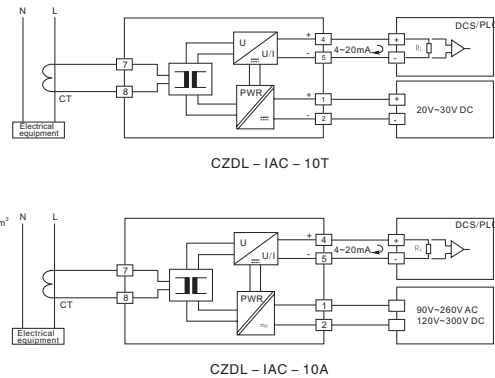
Specification
Compact shell structure
DIN35mm rail mounting
Variety current, voltage output selectable

	CZDL – IAC – 10T DC supply(True RMS)	CZDL–IAC–10A AC supply
Input		
Input current range(In)	0–1A/5A/10A AC	0–1A/5A/10A AC
Max. input current(I _{max})	1.2 × I _n (continues), 2 × I _n (1minute)	1.2 × I _n (continues), 2 × I _n (1minute)
Frequency range	40Hz–1kHz	40Hz–60Hz
Output		
Current output	4–20mA/0–20mA	4–20mA/0–20mA
Max. output current	30mA	30mA
Load resistance	≤550Ω	≤550Ω
Voltage output	0–5V/1–5V/0–10V	0–5V/1–5V/0–10V
Max. output voltage	15V	15V
Load resistance	≥300kΩ	≥100kΩ
General parameters		
Supply voltage	20V–30V DC	120V–300V DC/90V–260V AC
Rated power consumption	1W(40mA, 24V)	3VA(1.2W)
Response time	Reach 90% of final value in 330ms	Reach 90% of final value in 330ms
Transfer accuracy	0.5%F.S.	0.5%F.S.
Temperature drift	0.02%F.S./°C	0.02%F.S./°C
Operating temperature	–20°C – +60°C	–20°C – +60°C
Storage temperature	–40°C – +80°C	–40°C – +80°C
Relative humidity	15%–90%	15%–90%
Pollution degree	3	3
EMC	GB/T 18268(IEC 61326-1)	GB/T 18268(IEC 61326-1)
Dimensions	99.0mm × 65.5mm × 22.5mm	99.0mm × 65.5mm × 22.5mm
Safety parameters		
Insulation performance test standards	GB4793.1 (IEC 61010-1)	GB4793.1 (IEC 61010-1)
Dielectric strength (input–power, output)	4000V AC, 1min	4000V AC, 1min
Impulse voltage	4000V	4000V
Insulation resistance	100MQ	100MQ
IP degree (Comply with IEC60529)	IP20	IP20

Dimensions



Application

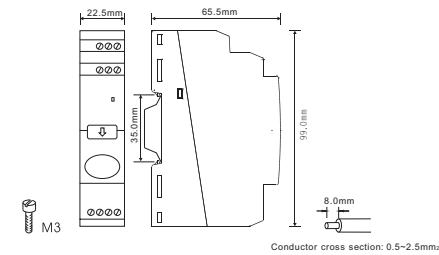


DC current Transmitter

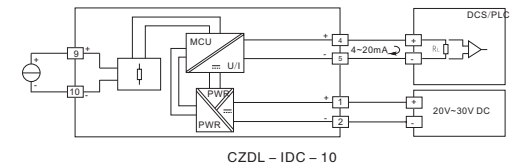
Specification
Compact shell structure
DIN35mm rail mounting
Variety current, voltage output selectable

	CZDL – IDC – 10 DC supply
Input	
Input current range(In)	0–1A/2A/5A/10A DC
Max. input current(I _{max})	1.2 × I _n (continues), 2 × I _n (1minute)
Current input impedance	5mΩ
Output	
Current output	0–20mA/4–20mA/–20–20mA
Max. output current	24mA
Load resistance	≤550Ω
Voltage output	0–10V/0–5V/1–5V/–10–10V
Max. output voltage	12V
Load resistance	≥300kΩ
General parameters	
Supply voltage	20V–30V DC
Rated power consumption	≤1W
Response time	Reach 90% of final value in 200ms
Transfer accuracy	0.5%F.S.
Temperature drift	0.02%F.S./°C
Operating temperature	–20°C – +60°C
Storage temperature	–40°C – +80°C
Relative humidity	15%–90%
Pollution degree	3
EMC	GB/T 18268(IEC 61326-1)
Dimensions	99.0mm × 65.5mm × 22.5mm
Safety parameters	
Insulation performance test standards	GB4793.1 (IEC 61010-1)
Dielectric strength (input–power, output)	2500V AC, 1min
Impulse voltage	4000V
Insulation resistance	100MQ
IP degree (Comply with IEC60529)	IP20

Dimensions



Application



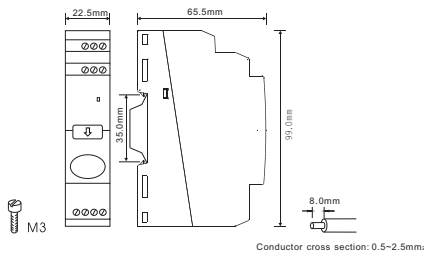
AC voltage Transmitter

Specification
 Compact shell structure
 DIN35mm rail mounting
 Variety current, voltage output selectable

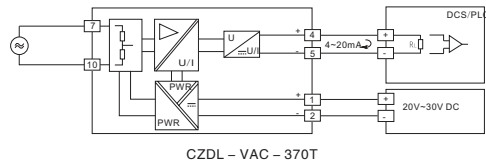
CZDL - VAC - 370T
 DC supply(True RMS)

Input	
Input voltage range(Un)	0~(30~500V)AC
Max. input voltage(Umax)	1.2 × Un(continues), 2 × Un(1minute)
Voltage input impedance	800kΩ
Frequency range	40Hz~1kHz
Output	
Current output	4~20mA/0~20mA
Max. output current	25mA
Load resistance	≤ 550Ω
Voltage output	1~5V/0~5V/0~10V
Max. output voltage	12.5V
Load resistance	≥ 100kΩ
General parameters	
Supply voltage	20V~30V DC
Rated power consumption	≤ 1W
Response time	Reach 90% of final value in 330ms
Transfer accuracy	0.5%F.S.
Temperature drift	0.02%F.S./°C
Operating temperature	-20°C~+60°C
Storage temperature	-40°C~+80°C
Relative humidity	15%~90%
Pollution degree	3
EMC	GB/T 18268(IEC 61326-1)
Dimensions	99.0mm × 65.5mm × 22.5mm
Safety parameters	
Insulation performance test standards	GB4793.1 (IEC 61010-1)
Dielectric strength (input~power, output)	2500V AC, 1min
impulse voltage	4000V
insulation resistance	100MΩ
IP degree (Comply with IEC60529)	IP20

Dimensions



Application



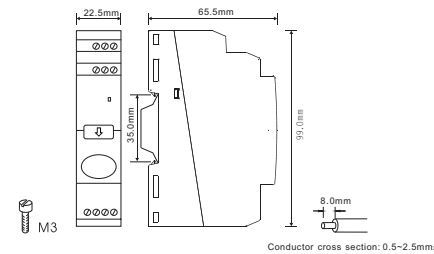
DC voltage Transmitter

Specification
 Compact shell structure
 DIN35mm rail mounting
 Variety current, voltage output selectable

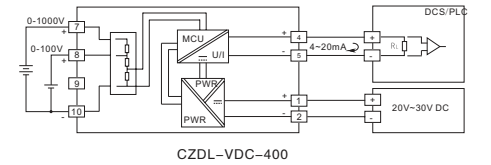
CZDL - VDC - 400
 DC supply

Input	
Input voltage range(Un)	0~(10~100V DC), 0~(100~1000V DC)
Max. input voltage(Umax)	1.2 × Un(continues), 2 × Un(1minute)
Voltage input impedance	≥ 200kΩ(10V ≤ input ≤ 100V) ≥ 2MΩ(100V < input ≤ 1000V)
Output	
Current output	0~20mA/4~20mA
Max. output current	24mA
Load resistance	≤ 550Ω
Voltage output	0~10V/0~5V/1~5V
Max. output voltage	12V
Load resistance	≥ 300kΩ
General parameters	
Supply voltage	20V~30V DC
Rated power consumption	≤ 1W
Response time	Reach 90% of final value in 200ms
Transfer accuracy	0.1%F.S.(0~100V); 0.2%F.S.(0~1000V)
Temperature drift	0.01%F.S./°C
Operating temperature	-20°C~+60°C
Storage temperature	-40°C~+80°C
Relative humidity	15%~90%
Pollution degree	3
EMC	GB/T 18268(IEC 61326-1)
Dimensions	99.0mm × 65.5mm × 22.5mm
Safety parameters	
Insulation performance test standards	GB4793.1 (IEC 61010-1)
Dielectric strength (input~power, output)	2500V AC, 1min
impulse voltage	4000V
insulation resistance	100MΩ
IP degree (Comply with IEC60529)	IP20

Dimensions



Application



Single-phase power transmitter

Specification

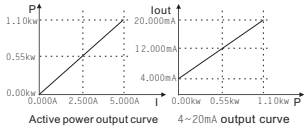
Independent power supply, realize measurement of active power, reactive power, power factor and current
 DIN35mm rail mounting
 Variety current, voltage output selectable

CZDL - 1PH
 Single-phase power

Input	
Input current range(In)	0-1A/5A/10A AC
Max. input current(I _{max})	1.2×I _n (continues), 2×I _n (1minute)
Rated voltage(Un)	100V/220V/380V AC
Max. input voltage(U _{max})	1.2×U _n (continues), 2×U _n (1minute)
Voltage input impedance	>800kΩ
Frequency range	45Hz-65Hz
Current input impedance	<50mΩ
Output	
Current output	0-20mA/4-20mA
Max. output current	25mA
Load resistance	≤550 Ω
Voltage output	0-10V/0-5V/1-5V
Max. output voltage	12.5V
Load resistance	≥300k Ω
General parameters	
Supply voltage(U _e)	20-30V DC
Rated power consumption	<50mA
Power factor PF-cos φ	0.000 ≤ PF ≤ 1.000
Response time	Reach 90% of final value in 330ms
Transfer accuracy	0.5%F.S.(sinusoidal 50Hz, 23℃)
Temperature drift	0.02%F.S./℃
Operating temperature	-20℃ ~ +60℃
Storage temperature	-40℃ ~ +80℃
Relative humidity	10%-90%
Pollution degree	3
EMC	GB/T 18268(IEC 61326-1)
Dimensions(L×H×W)	99.0mm×65.5mm×22.5mm
Safety parameters	
Insulation performance test standards	GB4793.1 (IEC 61010-1)
Dielectric strength (input-power, output)	Input-Output, power 2500V AC, 50Hz, 1min Power-Output 1500V AC, 50Hz, 1min
Impulse voltage	4000V
Insulation resistance	100MΩ
IP degree (Comply with IEC60529)	IP20

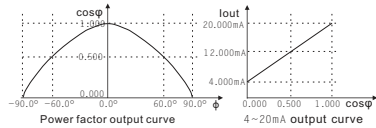
Output curve(active power)

1/Active power transfer into 4~20mA, rated voltage 220V, when φ=0° (resistive load), as following curve:



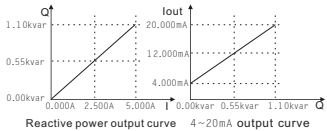
Output curve(power factor)

3/Power factor transfer into 4~20mA, according to PF=cosp(φ is current leads voltage phase angle), when -90° ≤ φ ≤ 90°, as following curve:

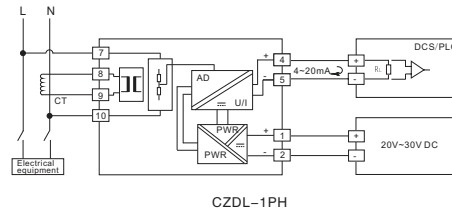


Output curve(reactive power)

2/Reactive power transfer into 4~20mA, rated voltage 220V, when φ=90° / -90° (capacitive/inductive load), as following curve:



Appication



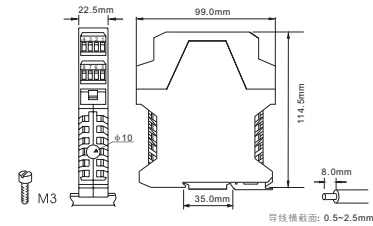
AC/DC current transmitter

Specification

Variety voltage, current output selectable
 Output signal can be characterized by direction of DC current
 Measurement range is selectable

Input		
Input current range(In)	0A-20A/25A/30A AC/DC	0A-40A/50A/60A AC/DC
Max. input current(I _{max})	Depend on current carrying capacity of wire	Depend on current carrying capacity of wire
Frequency range	15Hz-400Hz	15Hz-400Hz
Output		
Current output	4-20mA/0-20mA	4-20mA/0-20mA
Max. output current	22mA	22mA
Load resistance	≤550Ω	≤550Ω
Voltage output	0-5V/0-10V/±5V/±10V	0-5V/0-10V/±5V/±10V
Max. output voltage	±12V	±12V
Load resistance	≥10kΩ	≥10kΩ
General parameters		
Supply voltage	20V-30V DC	20V-30V DC
Rated power consumption	1.2W(50mA, 24V)	1.2W(50mA, 24V)
Response time	Reach 90% of final value in 330ms	Reach 90% of final value in 330ms
Transfer accuracy	0.5%F.S.(sinusoidal 50Hz/True RMS/23℃)	0.5%F.S.(sinusoidal 50Hz/True RMS/23℃)
Temperature drift	0.03%F.S./℃	0.03%F.S./℃
Operating temperature	-20℃ ~ +60℃	-20℃ ~ +60℃
Storage temperature	-40℃ ~ +80℃	-40℃ ~ +80℃
Relative humidity	15%-90%	15%-90%
Pollution degree	3	3
EMC	GB/T 18268 (IEC 61326-1)	GB/T 18268 (IEC 61326-1)
Dimensions	114.5mm × 99.0mm × 22.5mm	114.5mm × 99.0mm × 22.5mm
Safety parameters		
Insulation performance test standards	GB4793.1 (IEC 61010-1)	GB4793.1 (IEC 61010-1)
Dielectric strength (input-power, output)	4000V AC, 1min	4000V AC, 1min
Impulse voltage	4000V	4000V
Insulation resistance	≥100MΩ; 500V DC	≥100MΩ; 500V DC
IP degree (Comply with IEC60529)	IP20	IP20

Dimensions



Appication

