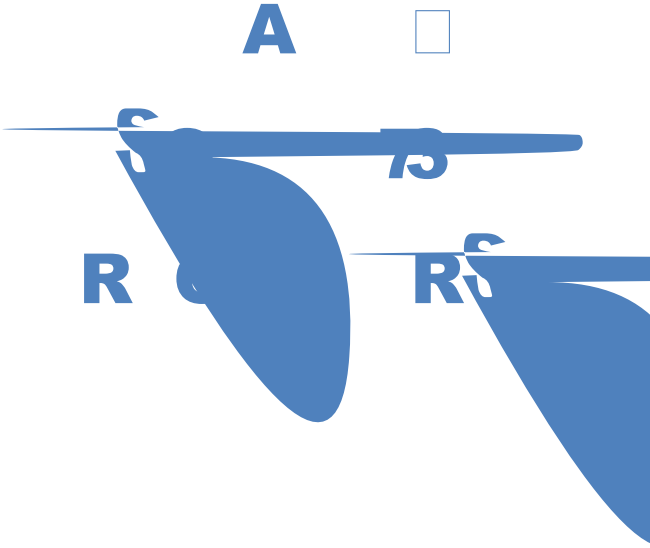
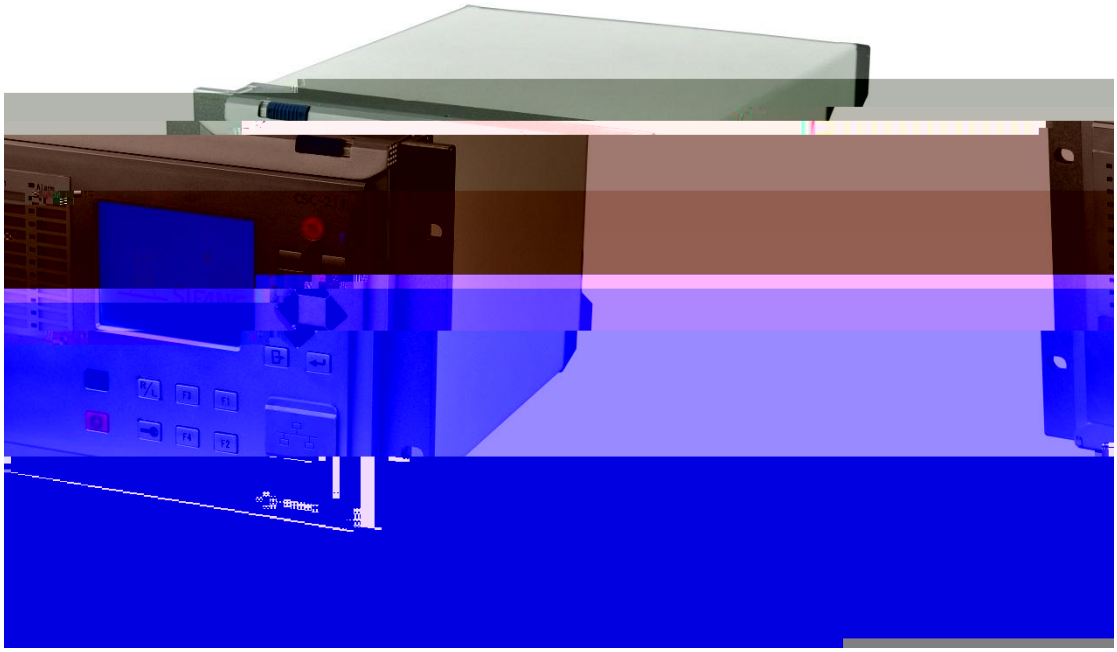


BEIJING SIFANG AUTOMATION CO., LTD





Powerful capability to meet various applications:

Comprehensive functionality including current differential or magnetic balance protection, overcurrent and earth overcurrent protection, voltage protection, frequency protection, breaker failure protection, thermal overload protection, phase reversal, locked-rotor, etc.

Embedded TCS and lockout relays, or optional operating module.

Wide range of supported protocols IEC 61850, IEC 60870-5-103, DNP3.0 and Modbus. And redundant communications with zero downtime using PRP protocol

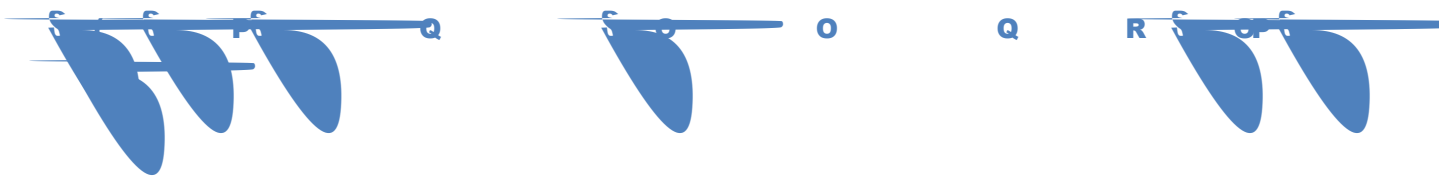
Robust hardware with excellent EMC performance and IP54 protection under -40 to 70 operating temperature



4 Q

4 Q

Trip circuit supervision			
Lockout			
4~20mA analog intput			
4~20mA analog output			
Programmable logic			



Support MMS, GOOSE service of station layer and bay layer application in accordance with IEC61850-8-1

3 100Base-TX copper Ethernet ports, or 2 100Base-FX optical Ethernet ports and 1 100Base-TX copper Ethernet port

2 RS-485 serial ports, 1 RS-232 print port

Support all main protocols, include:

IEC 61850-8-1

AESP tools

AESP is the user-friendly engineering and commissioning software. The software is applicable to all protection and BCU IEDs of Sifang. It provides integrated configuration and monitoring functions.

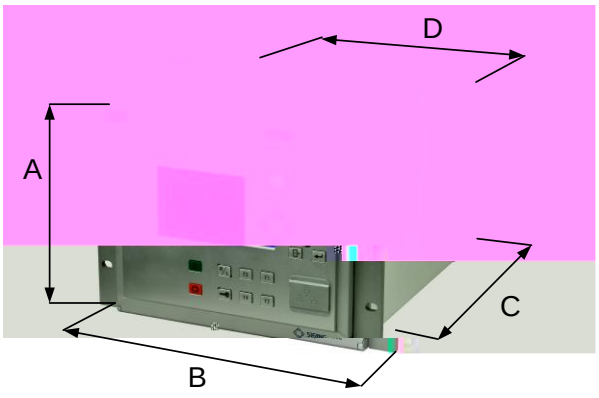
Setting and parameter

B

Up to 18 binary inputs;
Up to 16 binary output relays, with 1 switchable NO/NC contact
Up to 3 4~20mA analog output and 1 4~20mA analog input
Up to 3 RJ45 Ethernet ports or 2 LC optical Ethernet ports for SAS
Up to 2 RS-485 ports and 1 RS-232 print port
1 IRIG-B / Pulse time synchronization port;
1 front RJ45 for debugging

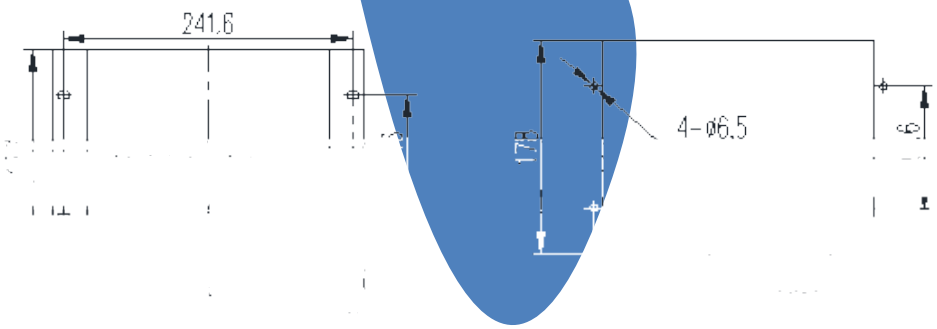
22 programmable LED
Up to 4 customer defined function key, and remote/local key, circuit breaker open/close keys
, easy to install in the switchgear
Weight in full hardware scheme, 8.5kg

Front view

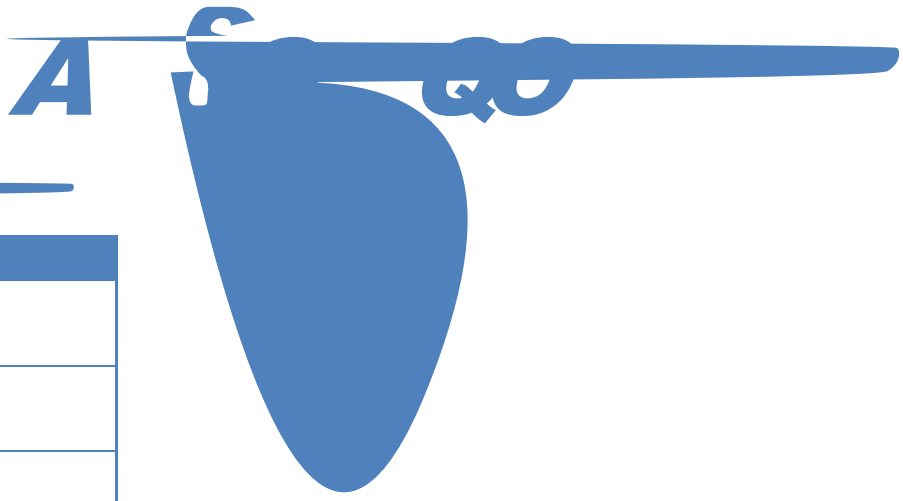


Rear view

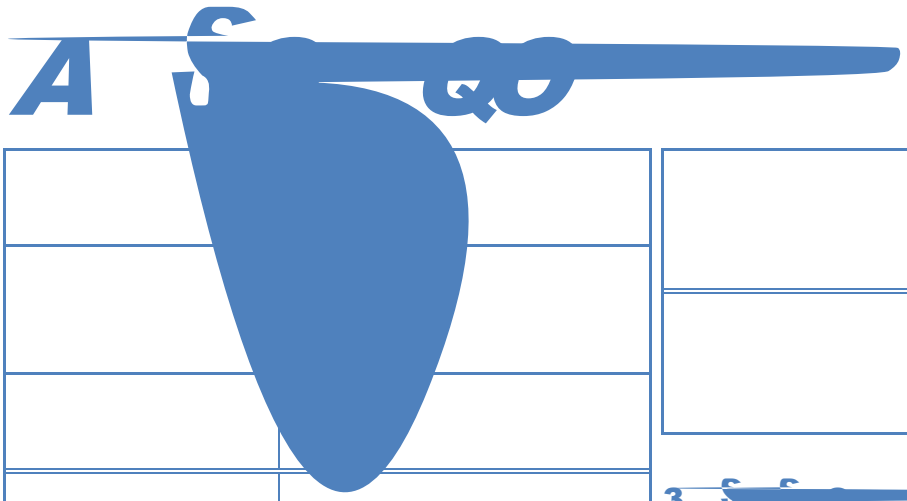




CSC-237 installation size









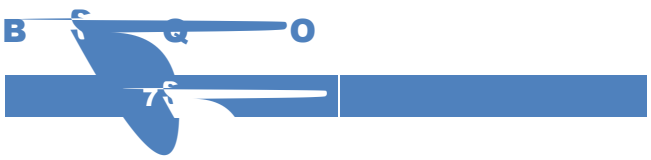
Fiber optic cable type	
Optic wavelength	
Maximum transmission distance of optical cable	

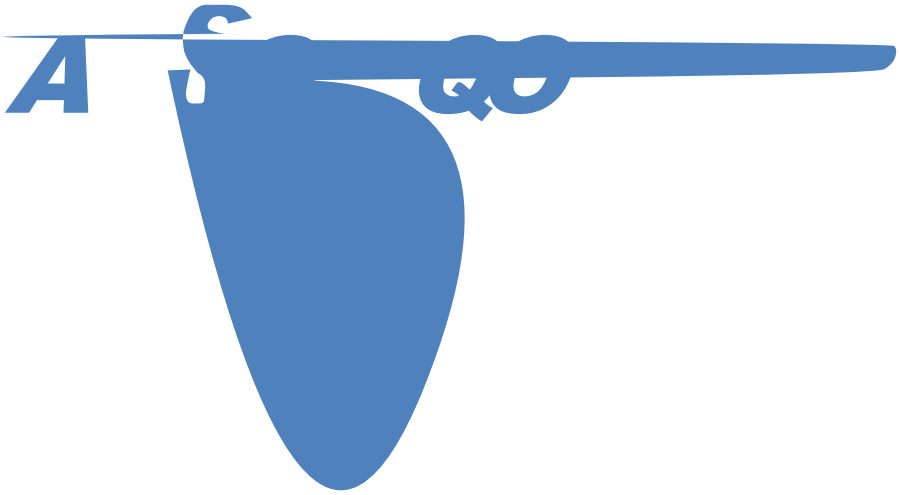


		B	B
Ia	0	6A	1.2A
Ib	0	6A	1.2A
Ic	0	6A	1.2A
Ua	0	120V	120V
Ub	0	120V	120V
Uc	0	120V	120V
Uab	0	200V	200V
Ubc	0	200V	200V
Uca	0	200V	200V
P	0	2500W	2500W
Q	0	2500W	2500W
Pa	0	750W	750W
Pb	0	750W	750W
Pc	0	750W	750W
Qa	0	750W	750W
Qb	0	750W	750W
Qc	0	750W	750W

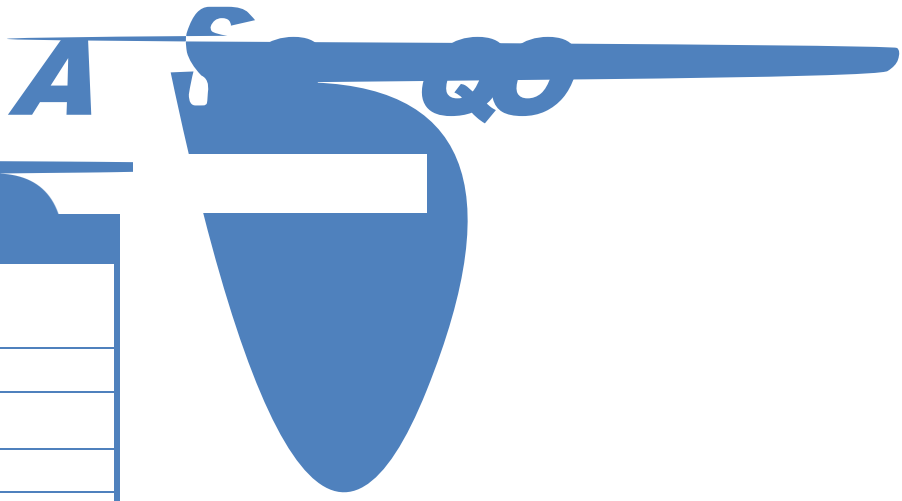




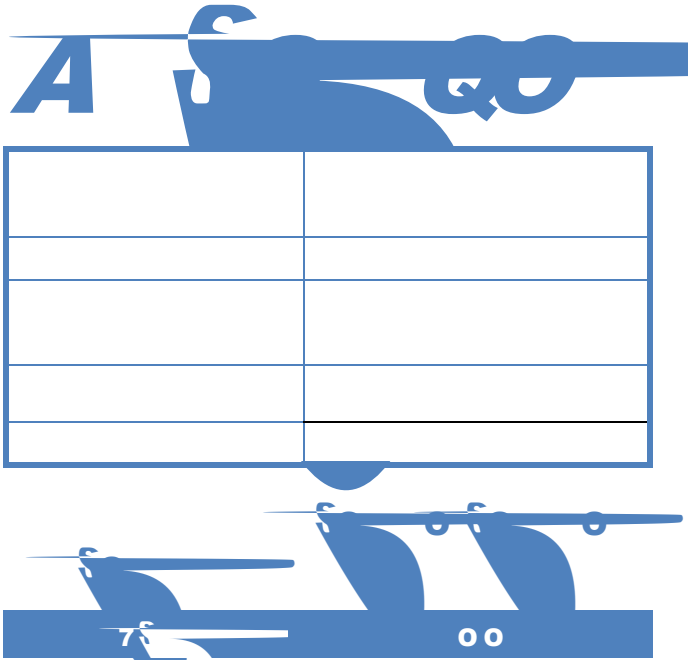




	CM DM
	Spot frequencies: 27MHz and 68MHz;
	150V, DM;









	V ± 2.5% setting or ± 1V
Drop-off ratio	0.95 to 1, step 0.01 ±3 % setting
	0.00s to 120.00s, step 0.01s 1 % setting +60ms, at 120% setting
Reset time	ms





Voltage input	Calculated from 3 phase to earth voltages
Definite time characteristic	
Voltage	2 to 100 V, step 0.01 V ±5% setting or ± 1V
	0.00s to 120.00s, step 0.01s ±1 % setting or at 120% setting
Drop-off ratio	
Inverse time characteristic	
Voltage	2 to 100 V, step 0.01 V ±5% setting or ± 1V
	±5% setting +60ms, at 2 $3U_0 / 3U_0$set<20

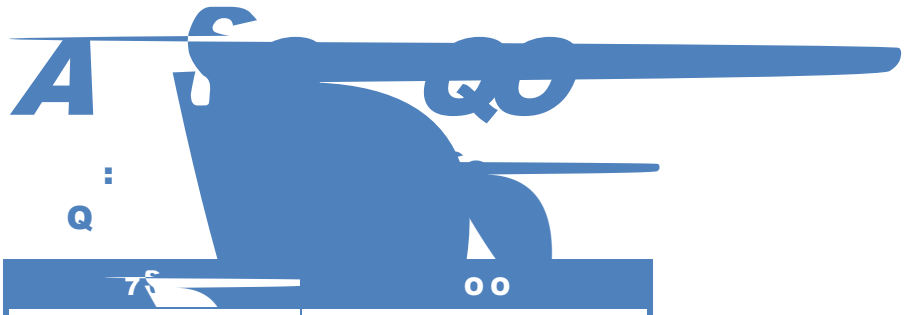


Heating time constant	6s to 9999 s
Cooling coefficient	0.1 to10
IEC low temperature curve IEC 60255-8	= A ±5% setting or +40ms
IEC high temperature curve IEC 60255-8	$t = \ln \frac{I_{eq}^2 - I_P^2}{I_{eq}^2 - I^2}$ ±5% setting +40ms

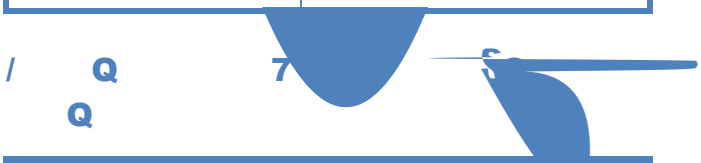


Voltage input	Phase to phase voltage or phase to earth voltage
phase-to-earth voltages	40.0V to 100.0 V, step 0.01 V ±2.5% setting or ± 1V
Phase to phase voltage	80.0V to 200.0 V, step 0.01

	±5% setting +60ms, at 2 $3U_0 / 3U_0$set<20
IEC60255-151	$t = \frac{A}{\frac{3U_0}{3U_0\text{set}}^{P} - 1} + B \quad T$ at 2 $3U_0 / 3U_0$set<20
	4 ms



Asynchronous impedance	



Power	0.1W to 1000W, step 0.01W ±3% setting or ±0.5P
Time delay	







Frequency changing rate	
Voltage change rate,	2V/s~200V/s, step 0.01V/s ±3% setting or ±1V/s
Blocking voltage	10V to 120V, step 0.01V 3% setting or ± 1V

Voltage input	Phase to phase voltages or phase to earth voltages
Voltage	50V to 120 V, step 0.01 V ±3% setting or ± 1V
Time delay	0.1s to 100.00s, step 0.01s ±1.5 % setting or +60ms
Voltage change rate,	2V/s~200V/s, step 0.01V/s ±3% setting or ±1V/s
Blocking voltage	10V to 120V, step 0.01V 3% setting or ± 1V



