

For the content contained in this manual, Gandian Lightning Protection has the final right to interpret. For more detailed information, please inquire; our company's technical engineers will serve you wholeheartedly. Because of the continuous innovation of product technology, please refer to the actual product or the manual; Subject to change without notice.

Use environmentally friendly materials



**GA&DA**

# Dual power supply automatic switch

## Solutions Catalogue

### GANDIAN LIGHTNING PROTECTION ELECTRI CO.LTD.

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LIFE

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# GA&DA

## Gandianfanglei

Better life, better electricity

不辜负每一份电力，让电尽其所能

# GANDIAN LANGYONG

有品质才有市场，有改进才有进步，有创新才有发展

坚守专业与责任，做行业的领跑者

Stick to professionalism and responsibility  
and be the leader of the industry



## 公司简介 COMPANY PROFILE

Gandian Lightning Protection Electric Co., Ltd. is a modern high-tech enterprise dedicated to the design, research and development, production, sales and service of lightning safety protection equipment. The company is located in the economic and technological development zone of Jiujiang City, the only international trade port city in Jiangxi Province. The total plant construction area is 39,960 square meters, the factory covers an area of 29,970.16 square meters, and there are more than 200 employees.

Through continuous reform and innovation, the company develops its own brand, showing a new look of internationalization, modernization and informationization. Break through high-end industries with focus, upgrade traditional industries with automation, actively build automated electrical equipment bases, gather a team of highly skilled experts, strengthen the simultaneous development of advanced equipment industry and modern service industry, have a variety of fully functional product performance testing laboratories, 8/20us 150kA compatible with 10/350us 25kA simulated lightning laboratory, 10/350us 120kA simulated lightning laboratory, 1.2/50us combined wave generator, 1.2/50us voltage generator, gap, discharge tube detector, thermal stability test System, lightning online monitoring system, intelligent lightning protection detection system, SPD backup protector power frequency current test, lightning non-trip current test system and a series of advanced detection equipment, to ensure the stability and innovation of our products!

Independently develop a number of advanced production and processing automatic assembly lines, which integrate automatic glue filling, automatic soldering, automatic laminating, pad printing, laser marking, automatic detection and uploading of data, automatic sealing and packaging and other automatic equipment to ensure each product consistency, fully guarantee efficient production and high-quality management, with unified planning of logistics, production, life and other service facilities, and strive to build a first-class intelligent production industrial base with international competitiveness.

The company took the lead in passing ISO9001 quality system certification, ISO14001 environmental management system certification, OHSAS18001 occupational health and safety management system, CQC certification, European Community CE certification, TUV Rheinland certification, CB certification, Rohs certification, and established a system from software and hardware. A strict quality management system can meet the various needs of new and old customers with the fastest speed, the best products, and the best services; sales points are set up throughout the country, and the sales scope radiates to all provinces in China, Southeast Asia, South America, and Europe, Africa and many other places, the service scope is all over the country, and the high-quality products and good service have won the favor of the majority of customers.

The main products are power surge protector series, smart lightning protection series, smart surge protector series, smart lightning protection box series, signal lightning protection series, fuses, circuit breakers, photovoltaic connectors, transfer switches, photovoltaic cables Wait. The products are mainly used in the construction of urban and rural power grids, urban infrastructure construction, factory construction stages, major domestic and foreign oil fields, petrochemical companies, shipbuilding industry, offshore oil drilling platforms, military power construction, photovoltaic power generation, wind power generation, coal, petroleum, Chemical, industrial and mining, hospitals, airports and other fields.

The company adheres to the corporate culture of "integrity first, happiness in the world, sharing and win-win", adheres to the spirit of "pragmatism, hard work, and dedication", and has the dream of "revitalizing national industry and assuming social morality". With the principle of trust, persist in realizing the new situation of "sustainable development, cooperative innovation", with the attitude of "professional, dedicated, rigorous, and eager to learn", always practice the glorious mission of "based on Rael Dunwei and build a world brand together".

Staff living area

The staff living area has 4360 square meters, 42 single rooms, 28 suites, supporting internal canteen, fitness area, outdoor activity area

Stamping and injection molding area

The stamping and injection molding area has 6800 square meters, 30 injection molding machines, 7 45T stamping machines, 5 35T stamping machines, 8 25 stamping machines, and the remaining 18 stamping machines of each tonnage

Comprehensive production area

The comprehensive production area has 8,100 square meters, dozens of production lines for various products, a simulation laboratory for lightning strikes, and various lightning protection products test instruments, etc.



# 实验设备 Laboratory And Testing



# 证书 Certificate And International Patents



ISO14001



ISO9001



OHSAS18001



CB



CQC



型式试验



TUV-CE



TUV



试验报告

**GDS-63 Dual Power Transfer Switch (CB Class)**

GDS-63 Micro-Breaking Dual Power Transfer Switch is suitable for AC 50/60Hz dual power supply system with rated operating voltage of 400V and rated operating current from 16~63A. Optional transfer of dual power can be made according to requirement,.



**Product Performance**

Making and Breaking Capacity						
Utilization Category	Making and Breaking Test Condition					
	I/le	U/Ue	CosΦ	Electrical time(s)	Duration of cycle(min)	Number of operating cycles
Ac-B33	6.0	1.05	0.5	0.05	≤5	12

Note: AC-B33 motor load or combined load including motor and resistance load under infrequent operation condition

**Application**

- Complete protective functions, including short circuit, overload, open phase and loss-of-voltage protection.
- Reliable remote double-break with EPS fire protection power supply interface DC12-24V
- Noiseless, energy saving, simple installation, easy operation, reliable and stable performance

**Product Performance**

- Rated short circuit breaking capacity: 3kA
- Rated short circuit making capacity: 3kA
- transfer time: ≤3S
- Control voltage of transfer switch: AC230V
- Mechanical life of transfer switch(transfer of normal and reserve power): 3000 times, electric life: 1500 times
- Rated insulation voltage: U=500V
- Rated working current: 10A,16A,20A,32A,40A,50A,63A,80A,100A

**Order Code**

Type	GDS-63/10A-2P	GDS-63/10A-4P	GDS-63/16A-2P	GDS-63/16A-4P	GDS-63/20A-2P	GDS-63/20A-4P	GDS-63/32A-2P
Order Code	270164	270165	270166	270167	270168	270169	270170
Type	GDS-63/32A-4P	GDS-63/40A-2P	GDS-63/40A-4P	GDS-63/50A-2P	GDS-63/50A-4P	GDS-63/63A-2P	GDS-63/63A-4P
Order Code	270171	270172	270173	270174	270175	270176	270177
Type	GDS-63/80A-2P	GDS-63/80A-4P	GDS-63/100A-2P	GDS-63/100A-4P			
Order Code	270178	270179	270180	270181			

**GDS-63 Dual Power Transfer Switch (CB Class)**

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**Application**

Normal ON      Reserve ON

4-Poles overall dimensions

**Dimensions (mm)**

Type	W	W1	L	L1	H
GDS-63/4P	230	200	132	120	122

Normal ON      Reserve ON

2-Poles overall dimensions

**Dimensions (mm)**

Type	W	W1	L	L1	H
GDS-63/2P	150	135	132	120	122

**Installation**

4-poles wiring diagram

2-poles wiring diagram

Normal ON (AC220V) Reserve ON

DC12-24V

External power ON indication and fire protection power wiring diagram

### GDSM Moulded Case Dual Power Transfer Switch(CB Class)

GDSM series automatic transfer switch are mainly composed of power conversion actuator, circuit breaker and controller. This dual power switch with automatic, manual, power indicator, normal switch indicator, ready switch indicator working state.



- When installing wiring, normal power N should be access to normal power supply circuit breaker QN,
- 4 poles :QN and QR's 1, 3, 5 are three-phase (A, B, C) into line terminals, 2, 4, 6 are three-phase outgoing line terminals, 7 is zero line (N) into line terminal, 8 is zero line outgoing line terminal.
- If the use of 3 poles circuit breaker, the normal power N's zero line (NN) and ready power R's zero line (NR) must be respectively received on 3 poles special connection zero line terminal.
- Do not let the local controller to forget to connect the signal line, too off or short circuit and so on, otherwise can not work.

#### Product Performance

Type	GDSM-63	GDSM-125	GDSM-250	GDSM-400	GDSM-630
Standard					
<b>Electrical Characteristic Parameter</b>					
Shell Frame Current	63A	125A	250A	400A	630A
Rated Current In(A)	10,16,20,25,32,40,50,63,	25,32,40,50,63,80,100,125,	100,125,140,160,180,200,225,250,	225,250,315,350,400,	400,500,630,
Rated Operating Voltage Ue	AC 400V 50HZ				
Rated Insulation Voltage Ui	AC500V	AC800V	AC800V	AC800V	AC800V
Rated Impulse Withstand Voltage Uimp	8kV				
Switching Poles	3P,4P,				
Life Times	6000	6000	6000	4000	3000
Use Category	AC-33iB				
Electrical Level	CB Class				
Protection Level	IP30				
<b>Control Characteristic Parameter</b>					
Rated Control Supply Voltage Us	AC 230V 50HZ				
Switching Time	≤3s	≤3s	≤3s	≤4s	≤4s

#### Order Code

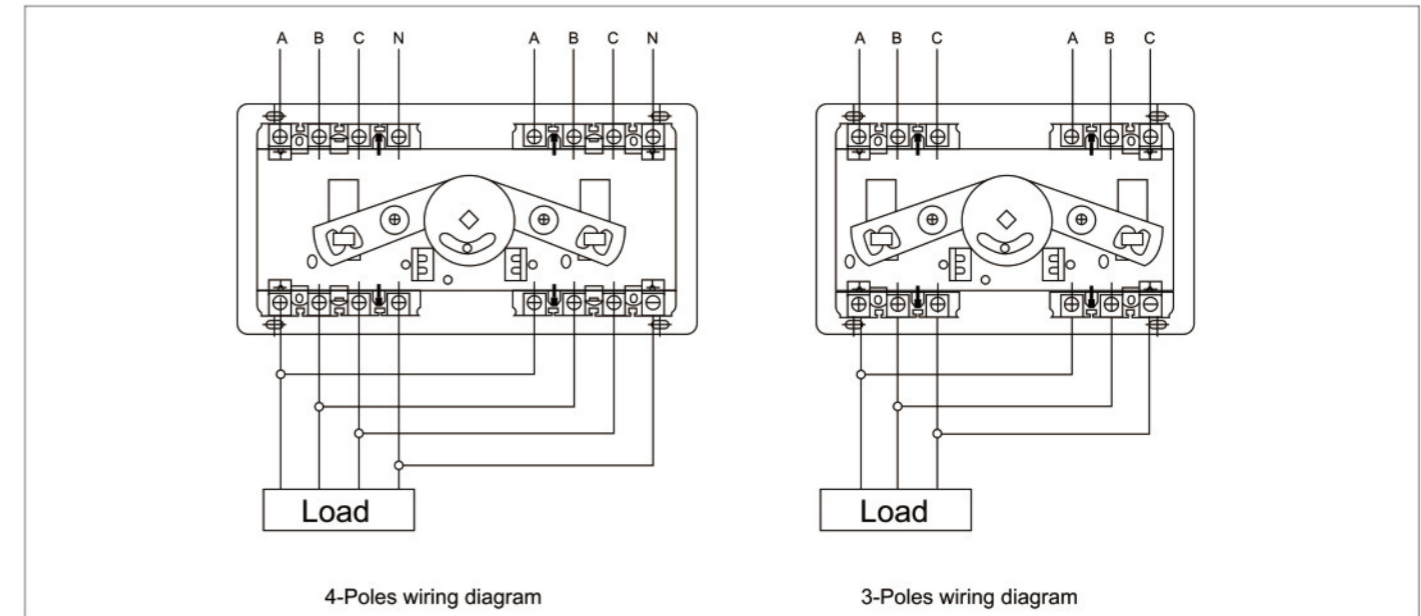
Type	GDSM-63/10-63-3P	GDSM-63/10-63-4P	GDSM-125/25-125-3P	GDSM-125/25-125-4P
Order Code	10A-63A:270182-2700189	10A-63A:270190-2700197	25A-125A:270198-2700205	25A-125A:270206-270213
Type	GDSM-250/100-250-3P	GDSM-250/100-250-4P	GDSM-400/225-400-3P	GDSM-400/225-400-4P
Order Code	100A-250A:270214-2700221	100A-250A:270222-2700229	100A-250A:270230-2700234	100A-250A:270235-2700239
Type	GDSM-630/400-630-3P	GDSM-630/400-630-4P	/	/
Order Code	100A-250A:270240-2700242	100A-250A:270243-2700245	/	/

### GDSM Moulded Case Dual Power Transfer Switch(CB Class)

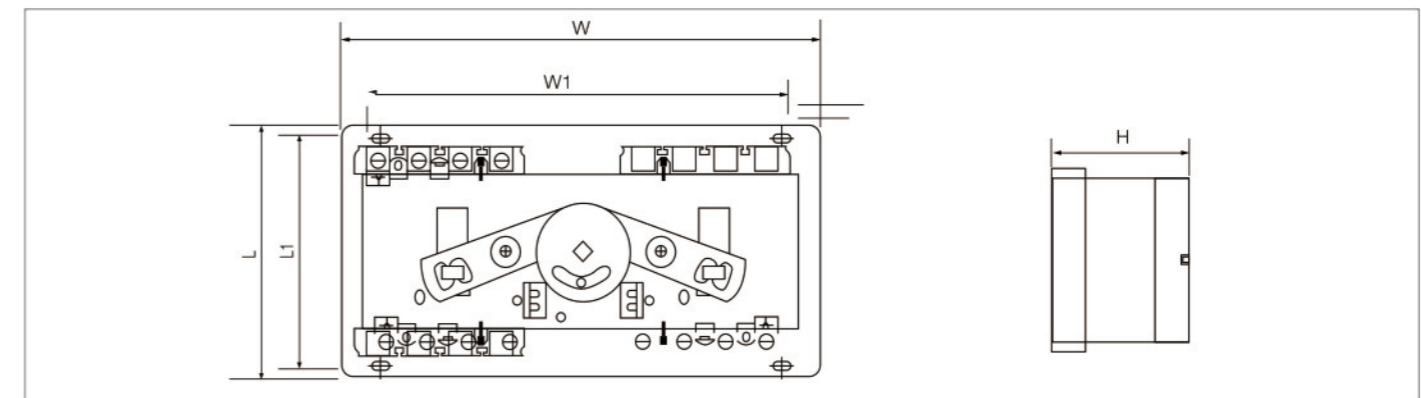
GDSM series automatic transfer switch are mainly composed of power conversion actuator, circuit breaker and controller. This dual power switch with automatic, manual, power indicator, normal switch indicator, ready switch indicator working state.



#### Application



#### Size

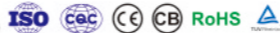


#### Dimensions (mm)

Type	W	W1	L	L1	H
GDSM-63/3P	290	255	240	220	135
GDSM-63/4P	290	255	240	220	135
GDSM-125/3P	290	255	200	180	165
GDSM-125/4P	320	295	200	180	180
GDSM-250/3P	330	300	215	193	190
GDSM-250/4P	365	340	215	193	210
GDSM-400/3P	455	408	328	305	240
GDSM-400/4P	510	470	328	305	240
GDSM-630/3P	535	490	345	323	240
GDSM-630/4P	590	550	345	323	240

### GDG Automatic Transfer Switch Equipment(PC Class)

● GDG series is a device integrated with the switching function and logic control, truly perform electromechanical integration function, suitable for operating in the distribution system of Ac50 Hz, rated voltage AC400V, widely used to shift between normal power and standby power or two loading equipment, or perform safe isolation and etc.



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- Standard: IEC947-6-1 GB14048.11-2008;
- Rated working voltage (Ue): AC440V;
- Rated connecting capacity (A Rms): 10Ie;
- Rated breaking capacity (A Rms): 8Ie;
- Control supply voltage: DC24V, 48V, 110V, AC220V.

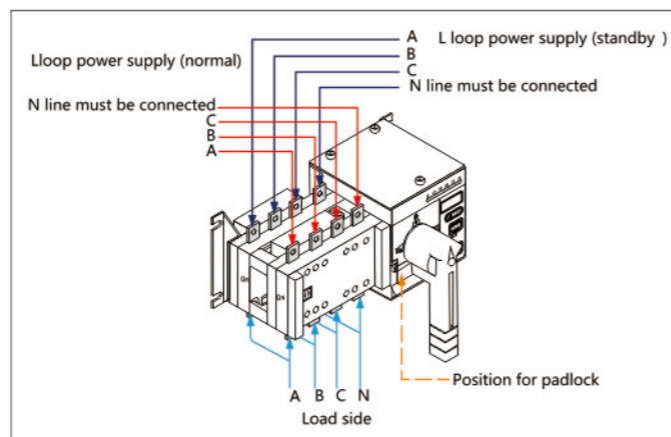
#### Product Performance

Rated heating current(A)	100	160	250	400	630	1000	1250	1600	2000	2500	3200	
Rated insulation voltage Ui (V)	750			1000								
Rated impact withstand voltage Uimp (kV)	8			12								
Rated operating current Ie (A)	AC-31A	100	160	250	400	630	1000	1250	1600	2000	2500	3200
	AC-35A	100	160	250	400	630	1000	1250	1600	2000	2500	3200
	AC-33A	100	160	250	400	630	1000	1250	1600	2000	2500	3200
Rated short-time withstand current Icw(kA)	7	9		13			50			55		
Rated limit short-circuit current(kA)	100			70			100	120		80		
Control supply voltage(V)	DC24V, 48V, 110V, AC220V											
Conversion time(S)	0.5	1	1.1	1.2			1.25			2.45		

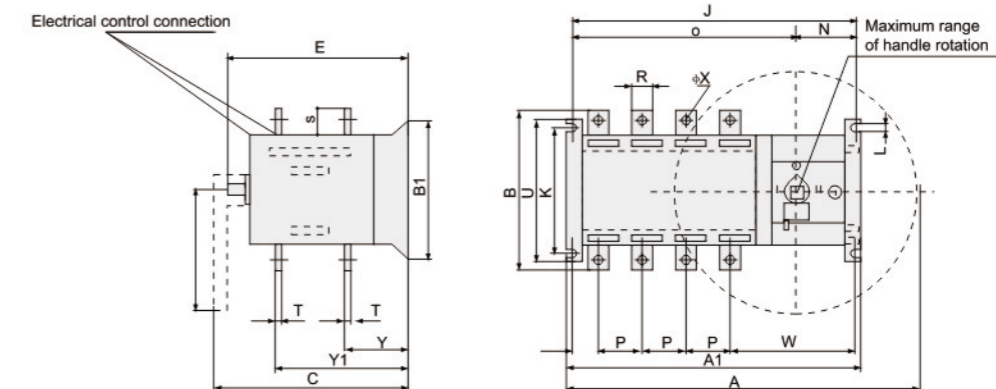
#### Order Code

Type	GDQ-100/3P.4P	GDQ-160/3P.4P	GDQ-250/3P.4P
Order Code	3P:270246, 4P:270247,	3P:270248, 4P:270249,	3P:270250, 4P:270251,
Type	GDQ-400/3P.4P	GDQ-630/3P.4P	GDQ-1000/3P.4P
Order Code	3P:270252, 4P:270253,	3P:270254, 4P:270255,	3P:270256, 4P:270257,
Type	GDQ-1250/3P.4P	GDQ-1600/3P.4P	GDQ-2000/3P.4P
Order Code	3P:270258, 4P:270259,	3P:270260, 4P:270261,	3P:270262, 4P:270263,
Type	GDQ-2500/3P.4P	GDQ-3200/3P.4P	/
Order Code	3P:270264, 4P:270265,	3P:270266, 4P:270267,	/

#### Wiring Diagram

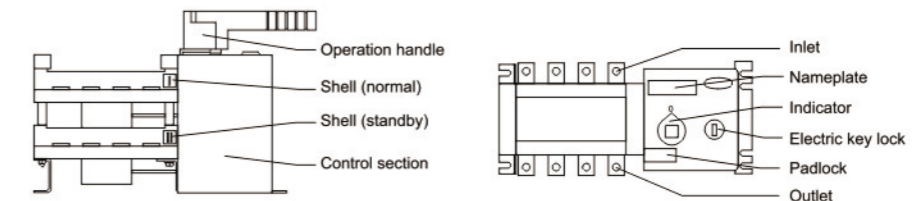


#### Dimension



#### Dimensions (mm)

In	Product size and installation size																			
	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	W	X	Y	Y1
100A/3	235	232	106	105	134	133	115	221.5	84	7	74.5	30	14	18	2.5	105	126	6	36	86
100A/4	247	244	106	105	134	133	115	233.5	84	7	74.5	30	14	18	2.5	105	126	6	36	86
125A/3	292	270	135	128	230	189	145	254	102	7	91	36	20	25	3.5	127	158	9	55	125
125A/4	322	300	135	128	230	189	145	284	102	7	91	36	20	25	3.5	127	158	9	55	125
160A/3	292	270	135	128	230	189	145	254	102	7	91	36	20	25	3.5	127	158	9	55	125
160A/4	322	300	135	128	230	189	145	284	102	7	91	36	20	25	3.5	127	158	9	55	125
250A/3	356	312	170	142	261	208	145	293	102	7	91	50	25	30	3.5	142	168	11	60	145
250A/4	406	362	170	142	261	208	145	343	102	7	91	50	25	30	3.5	142	168	11	60	145
400A/3	487	368	260	222	284	273	189	351	180	9	93	65	32	40	5	222	203	11	83	193
400A/4	552	433	260	222	284	273	189	416	180	9	93	65	32	40	5	222	203	11	83	193
630A/3	487	368	260	222	284	273	189	351	180	9	93	65	40	50	6	222	203	12	83	193
630A/4	552	433	260	222	284	273	189	416	180	9	93	65	40	50	6	222	203	12	83	193
800A/3	646	519	357	250	363	350	443	499	220	11	87	120	60	69	8	250	207	12.5	109	254
800A/4	760	633	357	250	363	350	443	613	220	11	87	120	60	69	8	250	207	12.5	109	254
1000A/3	646	519	357	250	363	350	443	499	220	11	87	120	60	69	8	250	207	12.5	109	254
1000A/4	760	633	357	250	363	350	443	613	220	11	87	120	60	69	8	250	207	12.5	109	254
1250A/3	646	519	357	250	363	350	443	499	220	11	87	120	80	69	8	250	207	13	110	255
1250A/4	760	633	357	250	363	350	443	613	220	11	87	120	80	69	8	250	207	13	110	255
1600A/3	646	519	357	250	363	350	443	499	220	11	87	120	80	69	10	250	207	13	110	255
1600A/4	760	633	357	250	363	350	443	613	220	11	87	120	80	69	10	250	207	13	110	255
2000A	800	633	460		542		447	610			84.5		80	120	10					169
2500A	800	633	460		542		447	610			84.5		80	125	15					174
3200A	800	633	460		542		447	610			84.5		80	130	20					179



- Electric key lock: Control switch internal control line power, when the electric lock is turned on, the switch can be fully automatic, operation control, strong set "0" operation; when the electric lock is closed, the switch can only be operated manually.
- Operating handle: When using the operating handle to operate manually, the electric lock must be closed.
- Padlock: Maintenance-only, that is, first use the operating handle to make the switch in the "0" position, and then pick up the padlock mechanism and padlock, can be overhauled. 4. Indicator: Indicates the working status of the switch.
- Indicator: Indicates the working status of the switch.