

## AUTOMATIC TRANSFER SWITCHES

### LECTOTYPE MANUAL



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## SPECIFICATION

### TDS SERIES

Type	TDS 01		TDS 02		TDS 04		TDS 06	
Rated voltage	AC800V							
Rated current(Ie)	100A		200A		400A		600A	
Connection	Front						Back	
Number of poles	3P	4P	3P	4P	3P	4P	3P	4P
Weight	6.3kg	7kg	6.3kg	7kg	12kg	14.5kg	33kg	42kg
	AC 100V/110V		20A					
	AC 200V/220V		10A					
	Trip coil current		AC 220V 2A					
Performance	Fuse protected short-circuit withstand							
	Rated Short-time current		100KA	120KA	120KA	120KA	120KA	120KA
	Short-time withstand current without protection 240V							
	Rated Short-time current		10KA	10KA	12KA	15KA	15KA	15KA
	Switching capacity		AC33B(10Ie Ie≤100A時cosφ=0.45、Ie≤100A時cosφ=0.35)					
	Operati on time	Source A	Closing	55ms	55ms	60ms	100ms	100ms
			Tripping	20ms	20ms	25ms	30ms	30ms
		Source B	Closing	80ms	80ms	90ms	135ms	135ms
			Tripping	20ms	20ms	25ms	30ms	30ms
	Life		Electrical:10000 operations , Mechanical:15000 operation					
Switching frequency		120 operations/hour						
Auxiliary switch		2C for power source A,2C for power source B (240V AC15A.110V DC/5A Switching capacity)						
Accessories		Protective cover (front) · Surge absorber · Manual handle						

#### CHARACTERISTIC :

One-Coil Application : Only one coil is used for both service circuit and stand-by circuit switching. Surge absorber protection.

Reference Standards  
IEC 60947-6-1 UL 1008

#### Neutral Point Method :

ATS can be positioned at neutral point by its tripping mechanism.

ATS control mode can be :

A→OFF→B · B→OFF→A and A→OFF→A · B→OFF→B Also, ATS can switch instantly to stand-by source when normal power service fails.

## SPECIFICATION TDS SERIES

Type	TDS 08		TDS 10		TDS 12		TDS 16	
Rated voltage	AC800V							
Rated current(Ie)	800A		1000A		1250A		1600A	
Connection	Back							
Number of poles	3P	4P	3P	4P	3P	4P	3P	4P
Weight	33kg	42kg	39kg	49kg	40kg	51kg	51kg	59kg
	AC 100V/110V		20A				40A	40A
	AC 200V/220V		10A				20A	20A
	Trip coil current		AC 220V 2A				4A	
Performance	Fuse protected short-circuit withstand							
	Rated Short-time current		120KA	120KA	120KA	120KA	120KA	120KA
	Short-time withstand current without protection 240V							
	Rated Short-time current		22KA	22KA	25KA	25KA	25KA	25KA
	Switching capacity		AC33B(10Ie Ie≤100A時cosφ=0.45、Ie≤100A時cosφ=0.35)					
	Operati on time	Source A	Closing	100ms	115ms	115ms	115ms	115ms
			Tripping	30ms	25ms	25ms	25ms	25ms
		Source B	Closing	135ms	145ms	145ms	145ms	150ms
			Tripping	30ms	25ms	25ms	25ms	25ms
	Life		Electrical:10000 operations , Mechanical:15000 operation					
Switching frequency		120 operations/hour						
Auxiliary switch		2C for power source A,2C for power source B (240V AC15A.110V DC/5A Switching capacity)						
Accessories		Protective cover (front) 、 Surge absorber 、 Manual handle						

### ORDERING FORM

\*Optional, please contact us for more information

- Pole  
2=2P 3=3P 4=4P
- Rated Current  
01=100A 02=200A 04=400A .....
- Operating Voltage  
0=Optional 1=AC110V 2=AC220V

## SPECIFICATION TDS SERIES

Type			TDS 20		TDS 25		
Rated voltage			AC 800V				
Rated current(Ie)			2000A		2500		
Connection			Back				
Number of poles			3P	4P	3P	4P	
Weight			115kg	135kg	115kg	135kg	
	AC100V/110V		40A	40A	40A	40A	
	AC200V/220V		20A	20A	20A	20A	
	Trip coil current		AC 220V 6A				
Performance	Fuse protected short-circuit withstand						
	Rated Short-time current		120KA		120KA		
	Short-time withstand current without protection 240V						
	Rated Short-time current		35KA		50KA		
	Switching capacity		AC33B(10Ie Ie≤100A時cosφ=0.45 · Ie≤100A時cosφ=0.35)				
	Operati on time	Source A	Closing	180ms		180ms	
			Tripping	25ms		25ms	
		Source B	Closing	220ms		220ms	
			Tripping	25ms		25ms	
	Life		Electrical:10000 operations , Machanical:15000 operation				
Switching frequency		30 operations/hour					
Auxiliary switch			2C for power source A,2C for power source B (240V AC 2.5A,110V AC/5A,110V DC/5A Switching capacity)				
Accessories			Protective cover (front) · Manual handle				

### 1.Reference Standards

1.1 85~110% of operating voltage.

1.2 Withstand voltage

\* Main circuit 2500VAC for 1 min. \* operating circuit 2000VAC for 1 min.

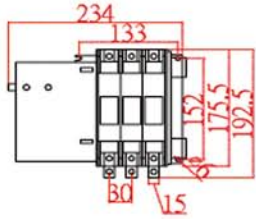
### 2.VA of operating transformer

The VA of transformer used in the operating circuit of should not be smaller than the value calculated as. operating voltage \* operating current \* 1.5=\_\_\_\_\_VA

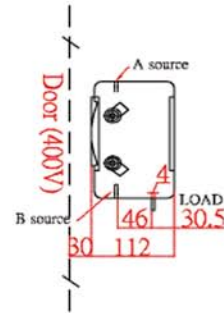
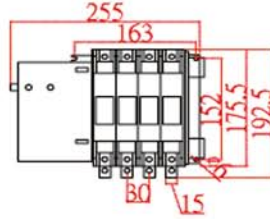
# OVERALL DIMENSIONS (mm)

## TDS SERIES

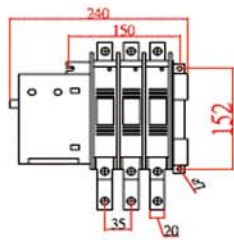
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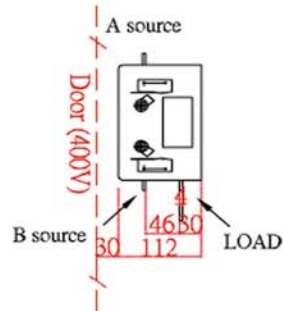
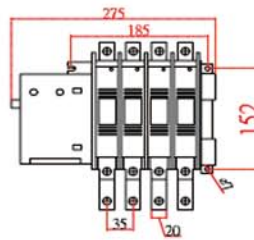
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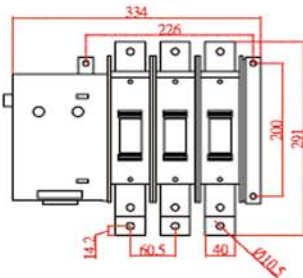
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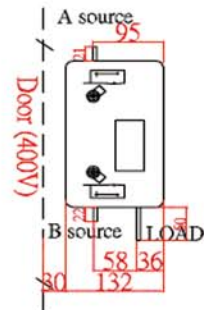
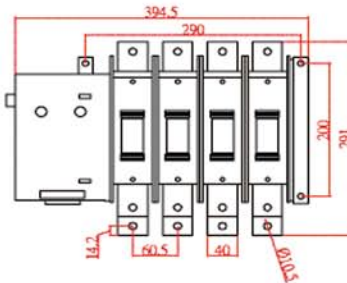
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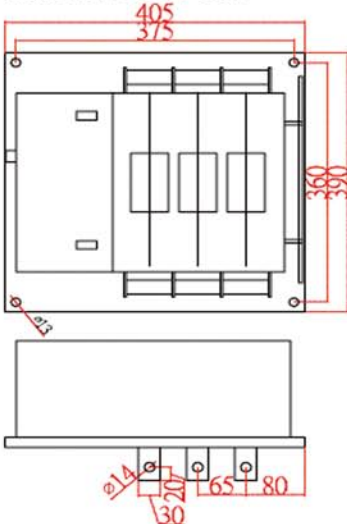
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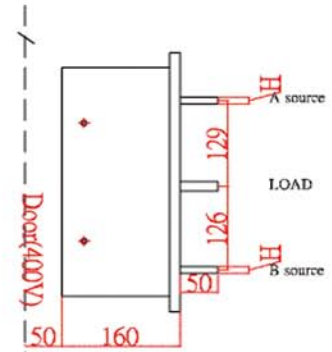
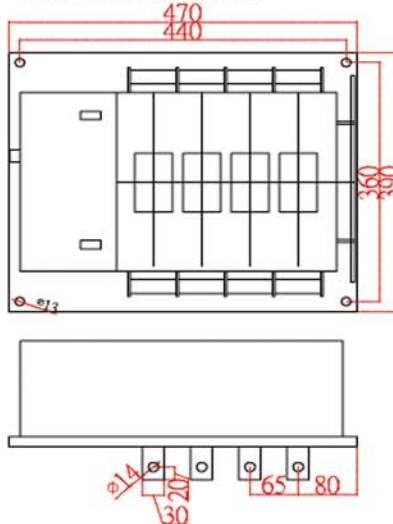
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TYPE:TDS-3P600  
TYPE:TDS-3P800



TYPE:TDS-4P600  
TYPE:TDS-4P800



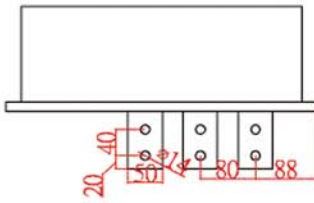
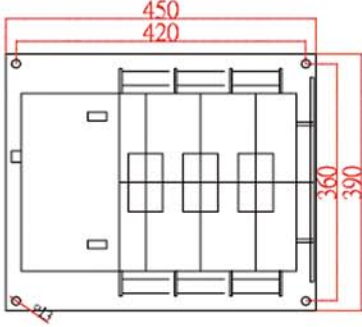
BUS (mm)

	600A	800A
H	15	15

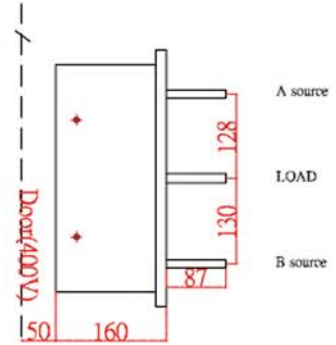
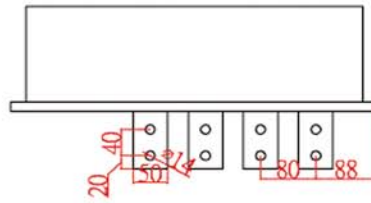
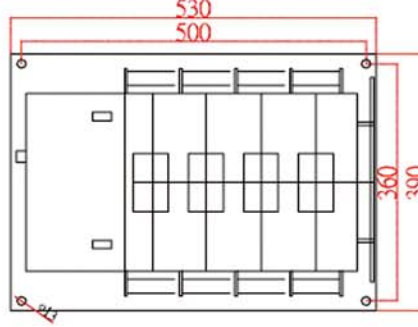
# OVERALL DIMENSIONS (mm)

## TDS SERIES

TYPE : TDS-3P1000  
TYPE : TDS-3P1250



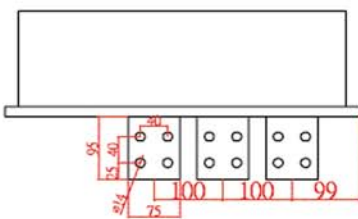
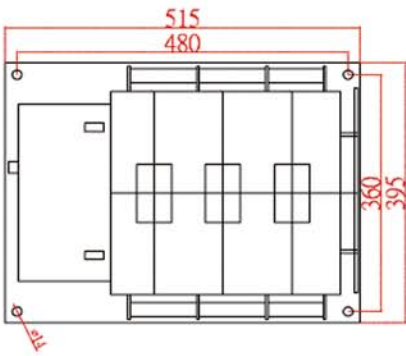
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TYPE : TDS-4P1250



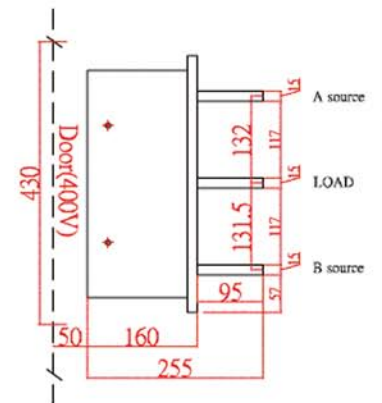
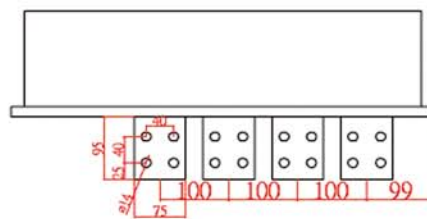
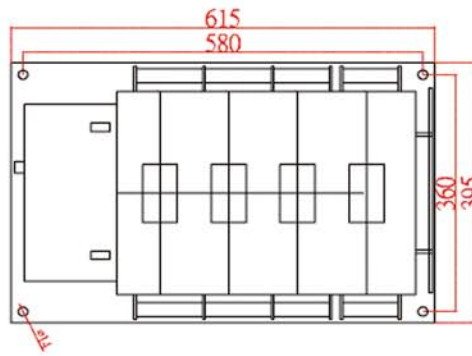
BUS (mm)

	1000A	1250A
H	15	15

TYPE : TDS-3P1600



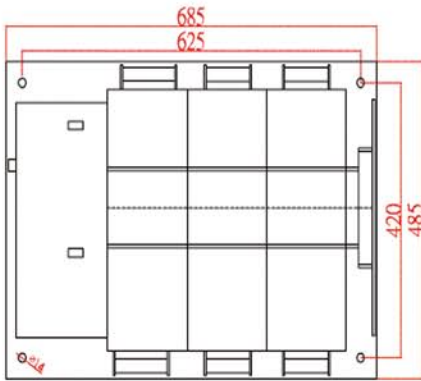
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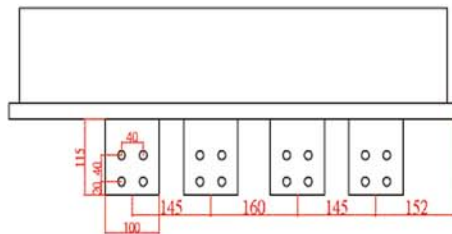
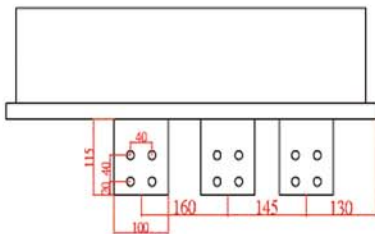
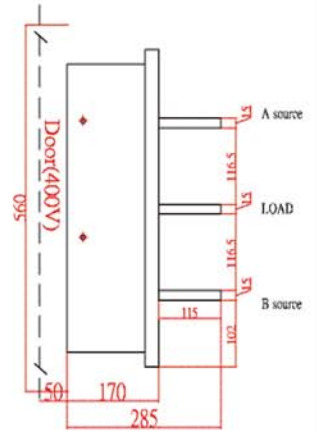
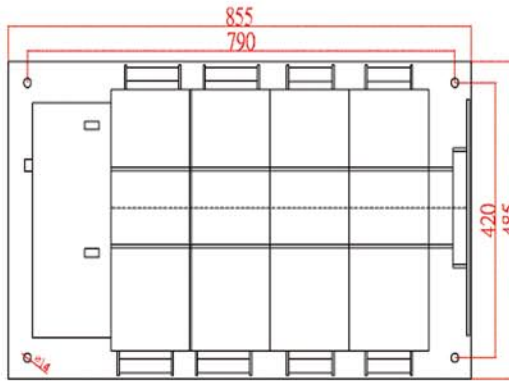
# OVERALL DIMENSIONS (mm)

## TDSN SERIES

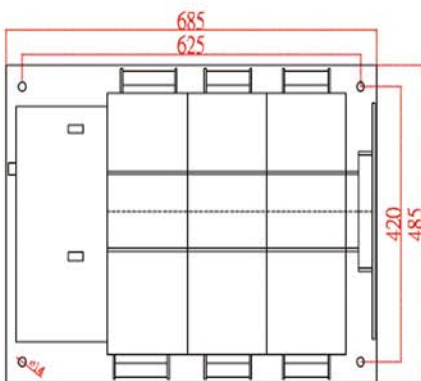
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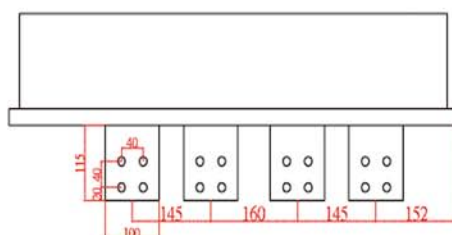
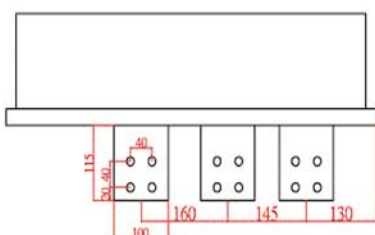
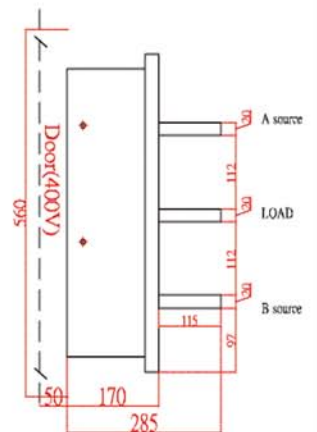
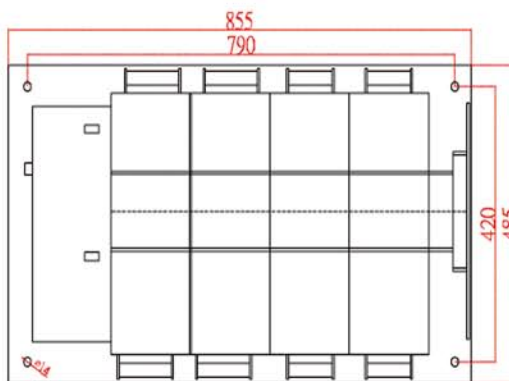
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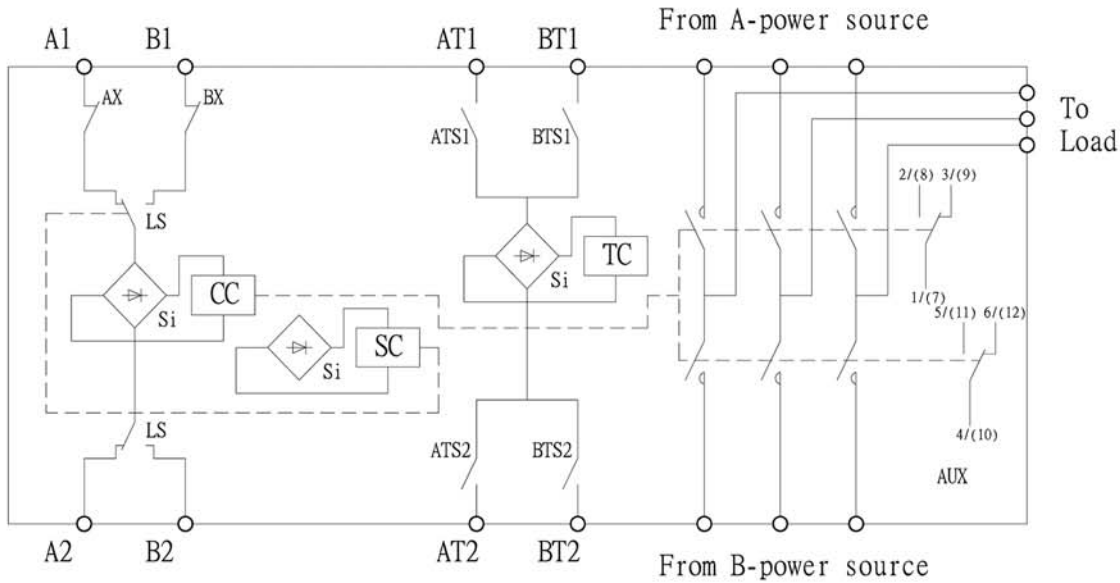
TYPE : TDS-3P2500



TYPE : TDS-4P2500



# Internal circuit diagram



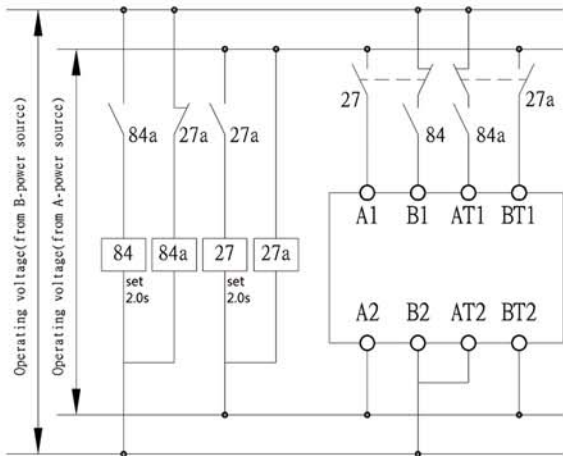
CC : Closing coil  
 Si : Silicon rectifier  
 LS : Selective switch  
 ATS1.ATS2 : Trip control switch  
 BTS1.BTS2 : Trip control switch  
 AUX : Auxiliary switch  
 AUX( ) : Additional purchase

AX、BX : Control switch  
 SC : Selective coil  
 TC : Trip coil

Operating Circuit Terminal  
 A1-A2 : A-power source side  
 B1-B2 : B-power source side  
 AT1-AT2 : A-power Trip side  
 BT1-BT2 : B-power Trip side

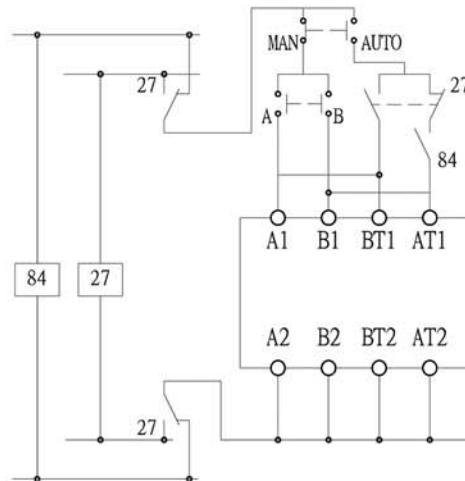
## Representative control circuit

Standard changeover A priority



27a.84a: Volatge relay  
 27 .84 : Time delay Volatge relay

In the case of using a changeover switch (Manual<->Auto)



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2023.10 1000 pcs