

## Changeover Switch

## Universal Changeover Switches LW28 Series



10A



20A-V



20A-A



63A



160A

### Scope

Lw28 Series Universal changeover switch mainly used for AC 50HZ, rated voltage up to 380V and below, DC voltage up to 220V, rated current to 160A electrical circuit for manually infrequent making or breaking the circuit for the purposes of control and conversion, can also controlling three-phase asynchronous motors and circuit directly as the purposes of master control and measurement. The products widely used, instead of the various national switch, can be used as the circuit control switch, measuring equipment switches, motor control switches and the master control switch, and welding machine switch and so on.

Compliance with standards: The changeover switch use to the main circuit switching and direct control comply with GB14048.3-2001, IEC60947-3.

The changeover switch use to master control comply with GB14048.5-2001

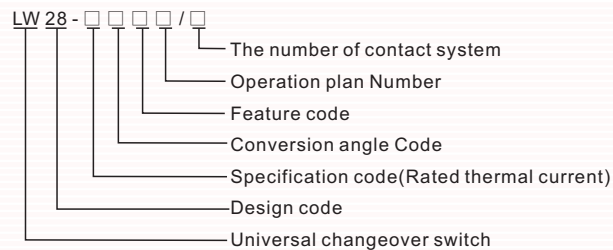
### Normal Working Conditions

1. The ambient air temperature does not exceed +40°C, the average temperature within 24 hours and not more than +35°C.
2. The ambient air temperature is not lower than -5°C.
3. Installation site altitude does not exceed 2000m.
4. The relative humidity of the air no more than 50% when the maximum temperature is +40°C and at a lower temperature allows a higher relative humidity, such as when temperature is 20°C the relative humidity reach 90%.

To condensation occasionally due to temperature changes should take special measures.

### Type Designation

For use to master control



Note: Conversion angle Codes are 30° (3); 45° (4); 60° (6) ; 90° (9);  
30° automatic reset 60° position(36); 45° automatic reset 90° position(49).

## Changeover Switch LW28 Series

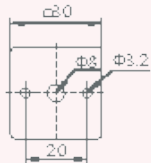
The following table shows the main technical parameters of the transfer switch

Model	Ith A	Ui V	Ue V	AC-21A	AC-22A	AC-23A		AC-2		AC-3		AC-4		AC-15	DC-13
				le A	le A	le A	P KW	le A	P KW	le A	P KW	le A	P KW	le A	le A
LW28-10	10	660	240		10	7.5	1.8	7.5	2.5	5.5	1.5	1.75	0.37	2.5	
	10	660	440		10	7.5	3.0	7.5	3.7	5.5	2.2	1.75	0.55	1.5	
LW28-20	20	660	440		20	15	7.5	15	7.5	11	5.5	3.5	1.5	4	
	20	660	240											5	1
LW28-25	20	660	120												5
	25	660	440		25	22	11	22	11	15	7.5	6.5	3	5	
	25	660	240											8	1.5
LW28-32	25	660	120												9
	32	660	440		32	30	15	30	15	22	11	11	5.5	6	
	32	660	240											14	11
LW28-63	32	660	120												25
	63	660	440		63	57	30	57	30	36	18.5	15	7.5		
	63	660	120												55
LW28-125	125	660	440		125	90	45	90	45	75	30	30	12		90
LW28-160	160	660	440		160	135	75	135	55	95	37	55	15		110

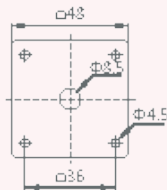
The following table shows the relevant dimension of the transfer switch

Model	Panel Specification	Dimension(mm)				Model	Panel Specification	Dimension(mm)			
		A	B	C	L			A	B	C	L
LW28-10	M0 Square	30	30	28	22+8n	LW28-32	M2 Square	64	64	58	29.2+12.8n
LW28-20	M1 Square	48	48	43	22+9.6n		M2 Rectangle	64	80	58	29.2+12.8n
	M2 Square	64	64	43	25+9.6n		M3 Square	88	88	58	29.2+12.8n
	M2 Rectangle	64	80	43	25+9.6n		M2 Square	64	64	66	29.2+21.5n
LW28-20c	M2 Square	64	64	60	42.5+12.6n	LW28-63	M2 Square	64	80	66	29.2+21.5n
	M2 Rectangle	64	80	60	42.5+12.6n		M3 Square	88	88	66	29.2+21.5n
	M3 Square	88	88	60	42.5+12.6n	LW28-125	M3 Square	88	88	84	35+26.5n
LW28-25	M1 Square	48	48	45.2	23+12.8n	LW28-160	M3 Square	88	88	88	35+32.5n
	M1 Rectangle	48	60	45.2	23+12.8n	LW28-315	M4 Square	130	130	126	39.5+38.5n
	M2 Square	64	64	45.2	26.5+12.8n						
	M2 Rectangle	64	80	45.2	26.5+12.8n						

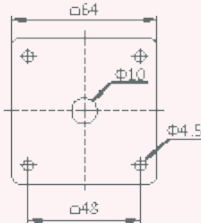
M0



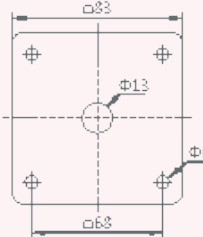
M1



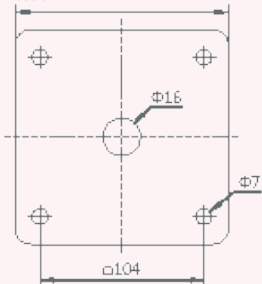
M2



M3



M4



## Changeover Switch

## Changeover Switches LW28 Series



20A/04-1



20A/04-2



25A/04-2



32A/04-2

### Scope

LW28GS series Padlock type Power cut off switch is derived product of Lw28 universal changeover switch. The main use to the power cut-off switch of machine tool that can be locked by a padlock, in the open position( "O" or "OFF" )and on position( "1" or "ON" )can be locked by a padlock to prevent the misuse and operation control by unauthorized personnel. The product comply with GB14048.3-2001, IEC60947-3.

### Classification

1. Padlock type switch specification has 20A, 25A, 32A, 63A, 125A, 165A four rated current.

In (1) type switch, 20A has big and small two size panels, the remaining specification is big size that can use 3 locks at the same time, and small size can use 2 locks at the same time

The (2) type is big panel and can use 3 lock at the same time.

2. Padlock type switch can be divided by use with general and emergency stop style.

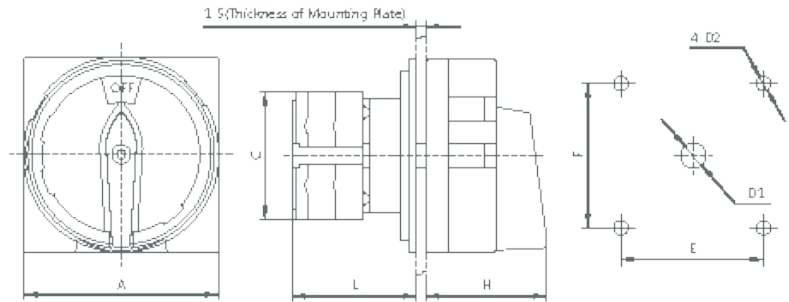
General style(LW28GS-□03) is black panel, black handle.

Emergency style(LW28GS-□04) is emergency stop sign, yellow panel red handle.

Model Specification		LW28GS-20	LW28GS-25	LW28GS-32	LW28GS-63	LW28GS-125	LW28GS-160
Rated Operating Voltage Ue V		440	440	440	440	440	440
Rated Thermal Current A		20	25	32	63	125	160
Rated Operating Current	AC-21A	20	25	32	63	100	150
	AC-22A	20	25	32	63	100	150
	AC-23A	15	22	30	57	90	135
Rated Control Frequency	AC-23A	7.5	11	15	30	45	75
Operating Cycle P kW	No-load	8500	8500	8500	8500	8500	8500
	Load	1500	1500	1500	1500	1500	1500
	The total load	10000	10000	10000	10000	10000	10000



63A/04-2



125A/04-3



160A/04-3

Model Specification	Panel Specification	Dimensions(mm)				Mounting Dimensions(mm)			
		A	C	L	H	E	F	D1	D2
LW28GS-20/04-1	M1	48	43	42	33	36	36	φ 8.5	φ 4.5
LW28GS-20/04-2	M2	64	43	43	42	48	48	φ 10	φ 4.5
LW28GS-25/04-1	M1	48	45.2	50	33	36	36	φ 8.5	φ 4.5
LW28GS-25/04-2	M2	64	45.2	51	42	48	48	φ 10	φ 4.5
LW28GS-32/04-2	M2	64	58	55	42	48	48	φ 10	φ 4.5
LW28GS-32/04-3	M3	88	58	55	52	68	68	φ 13	φ 6
LW28GS-63/04-2	M2	64	66	72.5	42	48	48	φ 10	φ 4.5
LW28GS-63/04-3	M3	88	66	72.5	52	68	68	φ 13	φ 6
LW28GS-125/04-3	M3	88	84	88	52	68	68	φ 13	φ 6
LW28GS-160/04-3	M3	88	88	100	52	68	68	φ 13	φ 6

## Changeover Switch

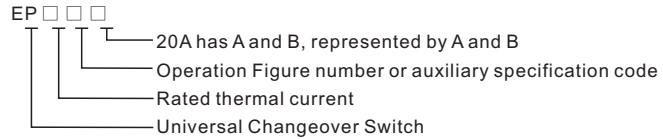
## Changeover Switches LW28 Series



### Scope

EP mainly used for electrical equipment cabinets or three-phase asynchronous motor load start shifting and steering, used as the main and auxiliary circuits conversion, can fully replace other switch.

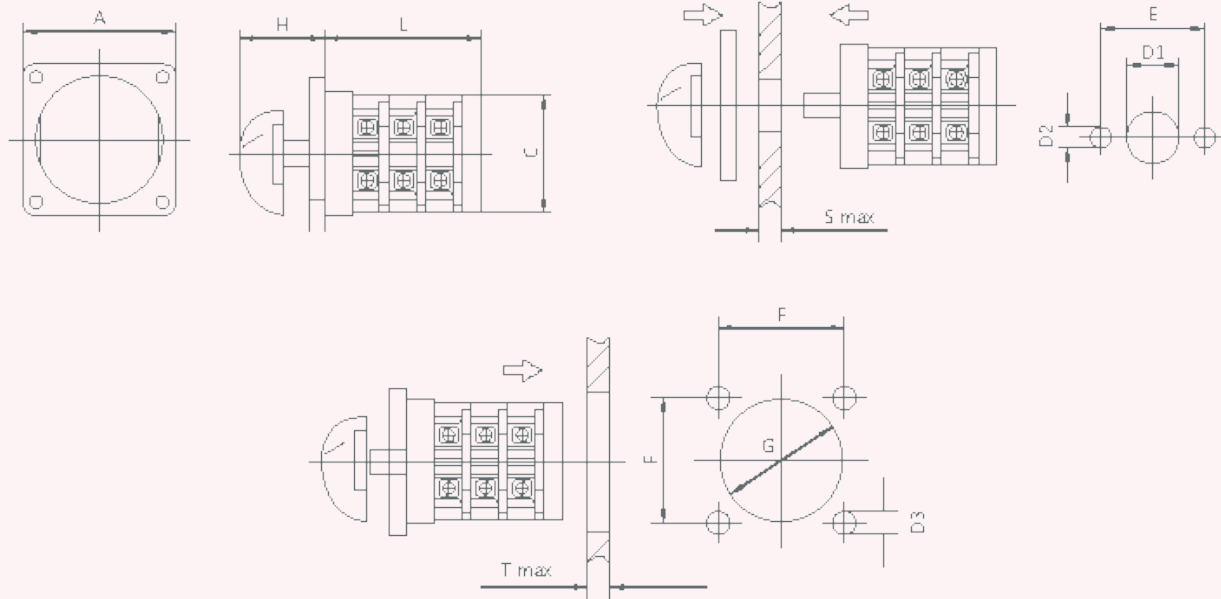
### Type Designation



Model Specification		EP 20					EP 25					EP 32				
Rated Thermal Current	A	20					25					32				
Rated Operating Voltage	V	110	220	440	110	220	440	500	690	110	220	440	500	690		
Rated Operating Current	AC-21A	A		20					25					32		
	AC-22A	A		6					20					32		
	DC-20	A	20			25				32						
Rated Control Frequency	AC-23A	kW	5		7.5	11		15		11	18.5		22			
	AC 3	kW	4	7.5		5.5	7.5		11		7.5	15		18.5		
	AC 4	kW	22	5.5		2.2	4	4			3	5.5	5.5			
	DC 23	kW	0.77	12	3	2	2.2				2	2.2				

Model Specification		EP 50						EP 75				
Rated Thermal Current	A	25						32				
Rated Operating Voltage	V	110	220	440	500	690	110	220	440	500	690	
Rated Operating Current	AC-21A	A				50					75	
	AC-22A	A				40					63	
	DC-20	A	50						75			
Rated Control Frequency	AC-23A	kW	15	22		30		18.5	30		37	
	AC 3	kW	11	18.5		22		15	22		30	
	AC 4	kW	5.5	7.5	9			7.5	11	15		
	DC 23	kW	3	6				4	8			

## Changeover Switch LW28 Series



Model	Panel Specification (A)	Dimension(mm)			Mounting Dimension(mm)							
		C	H	L	E	D1	D2	S	F	G	D3	T
EP-20	54	φ 44	38	25+12n	32	φ 9.5	φ 3.2	1.5	35	φ 45	φ 4.5	6
EP-20	72	φ 44	38	25+12n	32	φ 9.5	φ 3.2	1.5	58	φ 45	φ 4.5	6
EP-25	72	φ 59	36	23+13n	33	φ 9.5	φ 3.2	1.5	58	φ 64	φ 4.5	6
EP-25	105	φ 59	53	23+13n	33	φ 9.5	φ 3.2	1.5	85	φ 64	φ 4.5	6
EP-32	72	φ 59	36	23+18n	33	φ 9.5	φ 3.2	1.5	58	φ 64	φ 4.5	6
EP-32	105	φ 59	53	23+18n	33	φ 9.5	φ 3.2	1.5	85	φ 64	φ 4.5	6
EP-50	105	φ 80	53	34+18n	46	φ 13	φ 5.3	3	85	φ 90	φ 5.5	8
EP-75	105	φ 80	53	34+27n	46	φ 13	φ 5.3	3	85	φ 90	φ 5.5	8

## Changeover Switches LW28 Series



25A-32A



40A-63A



40A-63A



80A-100A



Attached socket

### Scope

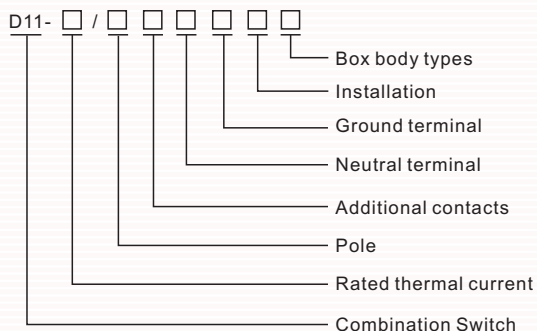
D11 is the product of introducing foreign advanced technology development, small volume, most secure and reliable performance, it's a load breaker switch that suitable for ventilation, air conditioning and water pump system, and industrial equipment switch use for insulation and security isolation, equivalent foreign KG20-KG100 load breaker switch.

### Normal Working Conditions

1. The ambient air temperature does not exceed +40°C, the average temperature within 24 hours and not more than +35°C.
2. The ambient air temperature is not lower than -5°C.
3. Installation site altitude does not exceed 2000m.
4. The relative humidity of the air no more than 50% when the maximum temperature is +40°C and at a lower temperature allows a higher relative humidity, such as when temperature is 20°C the relative humidity reach 90%.

To condensation occasionally due to temperature changes should take special measures.

### Type Designation



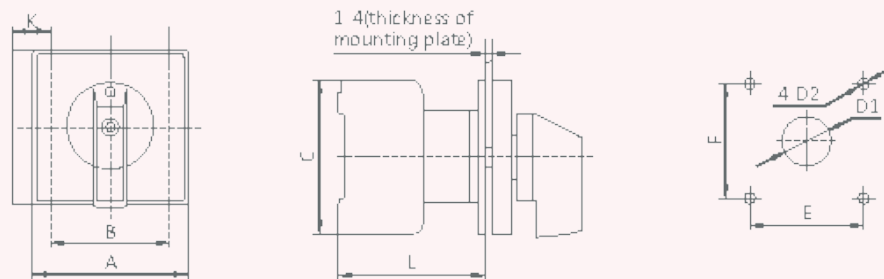
### Product Features

1. Security  
Insulation distance of the switch contact point is large, to achieve 13-14mm, Exceeds the safety requirements VDE0113, in many cases, the security level of the switch exceeds the existing word of various circuit interrupter.
2. Flexible installation type  
Switches can be applied panel type, you can also apply bottom mount, the switch exceeds the existing world of various circuit interrupter.
2. Flexible installation type  
Switches can be applied panel type, you can also apply bottom mount, the base mounting type can be easily and securely with screws or 35mm rail mounting, switching system has strong flexibility and adaptability to add additional contacts and neutral terminals, you can not remove the switch could increase the adaptability additional contacts easily.
3. Easy installation  
The built-in screw to prevent slipping manual, benefiting to pneumatic electric tools to facilitate the best performance and ensure safety and speed at installation.

## Changeover Switch LW28 Series

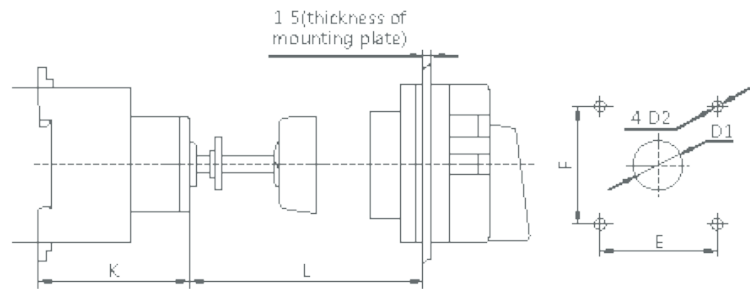
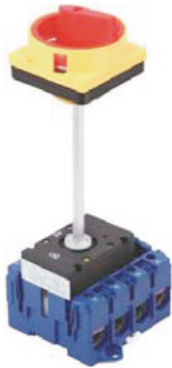
Switch	Type	Pole	A	B	Cam	D1	D2	F	G	H	L
D11-25	ON-OFF	3P	64	48	4	4	22	42	-	54	62
	ON-OFF	4P	64	48	4	4	22	56	-	54	62
D11-32	ON-OFF	3P+N	64	48	4	4	22	56	-	54	62
	ON-OFF	3P+N+E	64	48	4	4	22	69	-	54	62
D11-40 D11-63	ON-OFF	6P	64	48	4	4	22	-	84	54	62
	ON-OFF	3P	64	48	4	4	22	50	-	64	67
	ON-OFF	4P	64	48	4	4	22	66	-	64	67
	ON-OFF	3P+N	64	48	4	4	22	66	-	64	67
	ON-OFF	3P+N+E	64	48	4	4	22	82	-	64	67
D11-80 D11-100	ON-OFF	6P	64	48	4	4	22	-	100	64	67
	ON-OFF	3P	64	48	4	5.5	22	70	-	80	82
	ON-OFF	4P	64	48	4	5.5	22	92	-	80	82
	ON-OFF	3P+N+E	64	48	4	5.5	22	104	-	80	82
	ON-OFF	6P	88	68	4	5.5	22	-	140	80	82

Control Current And Power Switch Model	Use Categories	IEC/BS/VDE Rated Standard Values					
		Rated Thermal Current I <sub>th</sub>	Resistive Load AC21	Ac23 Accidental Switching Motors Or High Inductive Loads		Direct Link To Start The Motor	
				3X220~240V	3X380~440V	3X220~240V	3X380~440V
D11-25		25A	25A	4kW	7.5kW	3kW	5.5kW
D11-32		32A	32A	5.5kW	11kW	4kW	7.5kW
D11-40		40A	40A	7.5kW	15kW	7.5kW	11kW
D11-63		63A	63A	11kW	22kW	11kW	12.5kW
D11-80		80A	80A	18.5kW	30kW	15kW	22kW
D11-100		100A	100A	22kW	37kW	18.5kW	30kW



Model Specification	Dimension(mm)					Mounting Dimension(mm)			
	A	B	C	K	L	E	F	D1	D2
D11-25	64	42	54	13.5	61	48	48	φ 20	φ 4.2
D11-32	64	42	54	13.5	61	48	48	φ 20	φ 4.2
D11-40	64	50	64	16	67	48	48	φ 20	φ 4.2
D11-63	64	50	64	16	67	48	48	φ 20	φ 4.2
D11-80	64	70	80	22.5	82	48	48	φ 20	φ 4.2
D11-100	64	70	80	22.5	82	48	48	φ 20	φ 4.2





### Basement Mounting With Lock

Model Specification	Dimension(mm)						
	K	Lmin	Lmax	E	F	D1	D2
D11-25	50	32	150	48	48	φ 22	φ 4.2
D11-32	50	32	150	48	48	φ 22	φ 4.2
D11-40	61	32	150	48	48	φ 22	φ 4.2
D11-63	61	32	150	48	48	φ 22	φ 4.2
D11-80	68	32	150	48	48	φ 22	φ 4.2
D11-100	68	32	150	48	48	φ 22	φ 4.2

### Scope

Multi-stage selection switch is a versatile product, widely used in the control panel of CNC power switch. Power switch the use, because of their high voltage, high current, the combined use of gold and silver contacts on the control panel of CNC. On the use of power switch, because of their high voltage, high current, the combined use of gold and silver contacts on the control panel of CNC, because of their low voltage, low current, so you should use gold contacts, Since the difference between with the use, so we should distinguish clearly, but generally the product is not clearly marked will both increase the failure rate or poor contact, therefore, the company launched multi-stage switch, with a blue and white two colors indicate high voltage, high current and low voltage, low current, so as to achieve the effect of the work to improve the product life.



**Rated Value Table**

	Low Voltage Low Current (Contact seat in white)	High Voltage High Current (Contact seat in blue)
Contact capacity	24V 0.1A	600V 15A
Contact resistance	Below 10m during the early	Below 500m during the early
Withstanding Voltage	220VAC 1min	
Insulation resistance	Above 100m 500VAC	
Lifetime	Electrical life:above 100000 Mechanical life:above 100000	

Operat on	Manual Reset	Automatic reset
Switching angle	30° 45° 60° 90°	45°
Switching the number of segments	2-12	2-3

### Dimensions and Mounting Dimensions

Dimension drawing

