



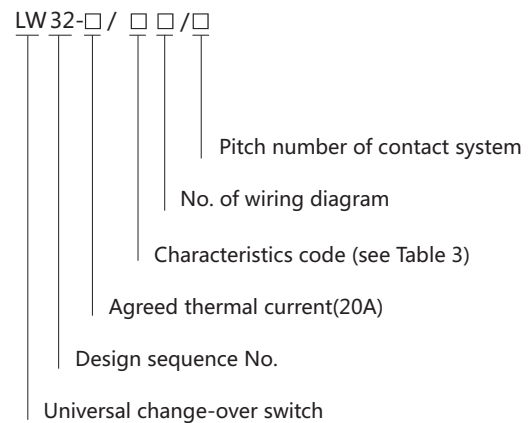
LW32 Universal Change-over Switch

1. General

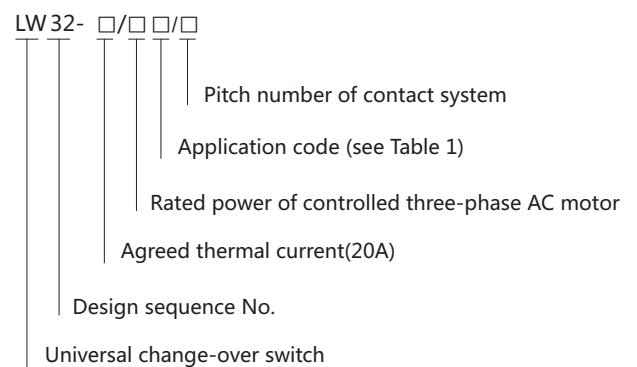
Universal change-over switch of LW32 series is mainly applicable to circuit with alternating current of 50Hz~60Hz, rated operational voltage not more than 380V and DC voltage not more than 220V for remote control or transformation of power distribution equipment, it can also used as change-over switch of various electrical measuring meter and servo moto. Standard: GB 14048.5 IEC 60947-5-1.

2. Type designation

2.1 Type of master control



2.2 Change-over switch for direct control motor



Note: Switch with application code of Q, S and N shall be transformed with 60° and with application code of SN shall be transformed with 45°.

2.3 Technical Parameters

Rated operating voltage: AC380V, DC220V
 Rated operating current: AC-15:380V, 2.6A
 DC-13:220V,0.27A
 Conventional heating current: 20A
 Rated insulation voltage: 550V

Table 1

Use code	Use
Q	Direct starting
N	Reversible conversion
S	Two-speed motor shifting
SN	Two-speed motor shifting, reversible

3. Others

3.1 Category

3.1.1 There are tow kinds, including

direct control of the motor and master control according to applications;

3.1.2 There are three types including location, self-rehabilitation and location self-rehabilitation according to operations;

3.1.3 For sessions of the contact system , locations are 1-12 section, self-rehabilitation are 1-3 section and direct control of motors are 1-6 section;

3.1.4 Three types according to panel shape and size (see Table 2).

Table 2

Large square panel		Small rectangular panel		Small square panel	
Length	Width	Length	Width	Length	Width
65	65	60	48	50	50

3.2 Combination classification based on operation modes and positions of actuator (see Table 4)

Table 3

Use category	Feature code	Self-rehabilitation type			
Actuator position	A	0° 30°		0° 45°	
	B	30° 0° 30°		45° 0° 45°	
Location type	C	0° 90°	0° 30°	0° 45°	0°
	D	90° 0° 90°	30° 0° 30°	45° 0° 45°	60° 0° 60°
	E	90° 0° 90° 180°	30° 0° 30° 60°	45° 0° 45° 90°	60° 30° 30° 60°
	F		60° 30° 0° 30° 60°	90° 45° 0° 45° 90°	150° 90° 30° 30° 90° 150°
	G		60° 30° 0° 30° 60° 90°	90° 45° 0° 45° 90° 135°	90° 30° 30° 90° 150°
	H		90° 60° 30° 0° 30° 60° 90°	135° 90° 45° 0° 45° 90° 135°	
	I		90° 60° 30° 0° 30° 60° 90° 120°	135° 90° 45° 0° 45° 90° 135° 180°	
	J		120° 90° 60° 30° 0° 30° 60° 90° 120°		
	K		120° 90° 60° 30° 0° 30° 60° 90° 120° 150°		
	L		150° 120° 90° 60° 30° 0° 30° 60° 90° 120° 150°		
	M		150° 120° 90° 60° 30° 0° 30° 60° 90° 120° 150° 180°		
Location	Z	30° 0° 60°		135° 90° 0° 45°	
				90° 0° 45°	

3.3 Handle connections are divided into the following two types.



R Type



I Type

Wiring diagram on commonly used control switch for voltage and current measurement converter box of LW32 series
Phase voltage phase-change switch

	0	UAN	UBN	UCN	UCN
LW32-20/YH1/2	0°	90°	180°	270°	270°
		x			
			x		
				x	x
		x	x	x	x

	UAN	UBN	UCN
LW32-20/YH3/2	90°	0°	90°
	x		
		x	
			x
	x	x	x

Line voltage phase-change switch

		UAB	UBC	UCA
LW32-20/YH4/2		90°	0°	90°
	1-2	x	x	
	3-4		x	x
	5-6			x
	7-8	x		

	0	UAB	UBC	UCA
LW32-20/YH2/3	0°	90°	180°	270°
	1-2	x	x	
	3-4			
	5-6			x
	7-8	x		
	9-10			
	11-12			x

	0	UAB	UBC	UCA
LW32-20/YH3/3	0°	90°	180°	270°
	1-2	x		
	3-4			x
	5-6		x	
	7-8	x		
	9-10			
	11-12			x



Phase-change switch for three-phase line voltage and three-phase voltage

		UCA	UBC	UAB	0	UAN	UBN	UCN
LW32-20/YH5/4		135°	90°	45°	0°	45°	90°	135°
	1-2		x					x
	3-4			x			x	
	5-6	x						
	7-8					x		
	9-10					x		
	11-12	x		x				x
	13-14						x	
	15-16		x					

		UCA	UBC	UAB	0	UAN	UBN	UCN
LW32-20/YH5/3		135°	90°	45°	0°	45°	90°	135°
	1-2		x					x
	3-4	x						
	5-6						x	
	7-8		x	x				
	9-10	x		x		x		
	11-12					x	x	x

Change-over switch for current measurement

		0	IA	IB	IC
LW32-20/LH1/2		0°	90°	180°	270°
	1-2	x			x
	3-4		x	x	
	5-6	x	x		
	7-8			x	x

		0	IA	IB	IC	
LW32-20/LH2/4		0°	90°	180°	270°	
	1-2	x	x	x		
	3-4	x		x	x	
	5-6	x	x		x	
	7-8		x	x	x	
	9-10					x
	11-12		x			
	13-14				x	
	15-16	x				

		0	IA	IB	IC
LW32-20/LH3/4		0°	90°	180°	270°
	1-2	x	x		x
	3-4				
	5-6	x		x	x
	7-8	x	x	x	
	9-10			x	
	11-12				
	13-14		x		
	15-16				

Direct start-up and breaking during operation

				1
LW32-20/Q1/2				60°
	1-2			x
	3-4			x
	5-6			x
	7-8			

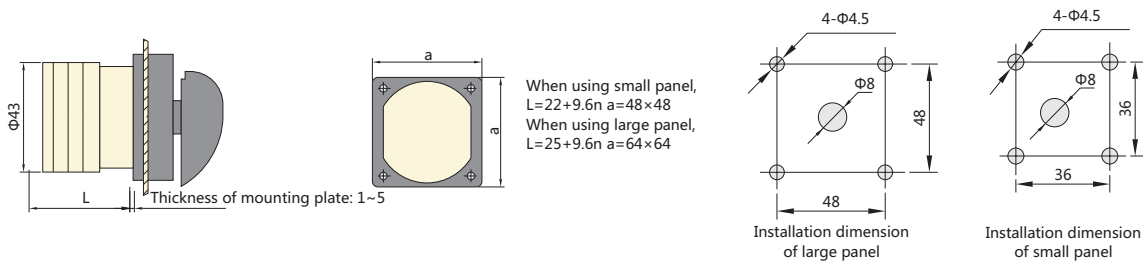
Forward and reverse direct start-up, breaking during operation

		1	0	2
LW32-20/N1/3		60°	0°	60°
	1-2			x
	3-4	x		
	5-6	x		
	7-8			x
	9-10	x		x
	11-12	x		x

Variable-speed switch of two-speed motor

		1	0	2
LW32-20/S1/4		60°	0°	60°
	1-2	x		
	3-4			x
	5-6			x
	7-8	x		
	9-10			x
	11-12			x
	13-14	x		
	15-16			x

4. Overall and mounting dimensions



5. Ordering information

When ordering, the user shall use complete model of switch.
For example: Order universal change-over switch LW32, type of wiring diagram is 100 sets. Order code: LW32-20/D303/2
100 sets.

Wiring diagram No.	D303		
Conversion angle	60°	0°	60°
1-2	x		x
3-4	x		
5-6	x		x
7-8			x