



### Introduction

The EKRS series rotary switch mainly applies to 440V and below, AC 50Hz or 240V and below DC circuits. For breaking and closing, change-over of circuits under unfrequently manual operation. And the typical application are: control switch of 3 phase motors, control switch of switch gear, control switch of instruments, and change-over switch of machinery and welding machine.

- The series comply with the IEC 60947-3, IEC 60947-5-1.
- The EKRS26 series have 8 current ratings: 10A, 20A, 25A, 32A, 63A, 125A, 160A and 315A.
- The EKRS26 series rotary switch were designed for multiple functions, wide variety of applications.
- The EKRS26-10, EKRS26-20, EKRS26-25, and EKRS26-32F have finger protection terminals.
- Both of them are applicable in circuits when a physical control is required.
- We can equip protective box for 20A, 25A, 32A and 63A.

### Working conditions

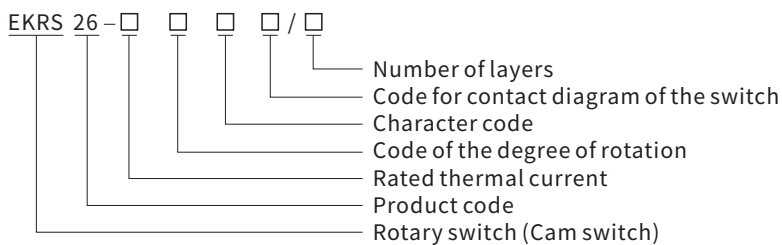
- Ambient temperature do not exceed 40°C, and the average temperature, measured over a period of 24 hours, do not exceed 35°C
- Ambient temperature should not be below -25°C
- Should Not be installed over 2000m above sea level
- The humidity should not exceed 50% when the ambient temperature is 40°C and higher humidity is allowed for lower temperature

### Installation conditions

- A clean environments is required
- Please follow our manual

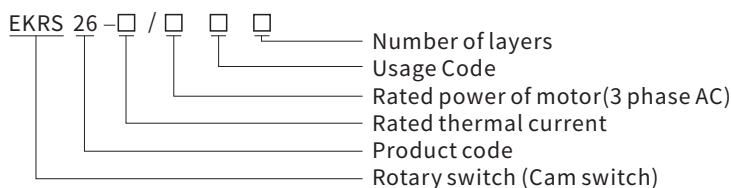
### Type Designation

#### Use as control switches



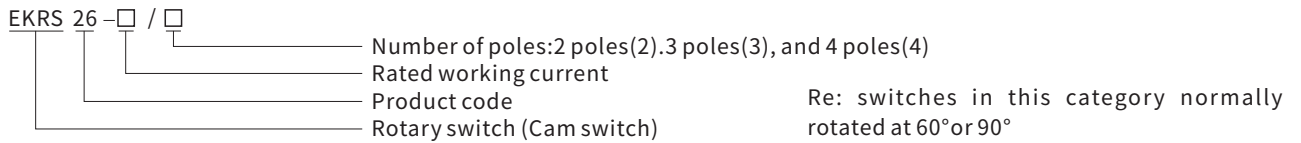
Re: Character code represent the rotating type, for instance, we have limited movement, spring return and limited movement with spring return. Code of the degree of rotation: 30°(3); 45°(4); 60°(6); 90°(9). 30°spring return, 60°limited movement(36); 30°spring return, 90°limited movement(39).

#### Use as motor switches



Re1: usage code (1) Q for start and run (2) N for start and reversing (3) S start and run at 2speed (4) SN for start and reversing of 2 speed motor (5) M16 for start and reversing of 3 speed motor  
Re2: switches in this category normally rotated at 60° or 90°. And the SN normally rotated at 45°.

## Use as control switch for a main circuit



## Classification

### 1. Classified by utilization

- Change-over switch
- Motor switch
- Control switch

### 2. Classified by operation

- Limited movement
- Spring return
- Limited movement with spring return

### 3. Classified by contact system











- Switches with limited movement could have 12 layers in maximum (for 32 A and below ).  
 And for 63 A and above could have 8 layers in maximum
- Switches with spring return could have 3 layers in maximum
- Motor switches could have 6 layers in maximum

### 4. Diagram for the operation and position of handle

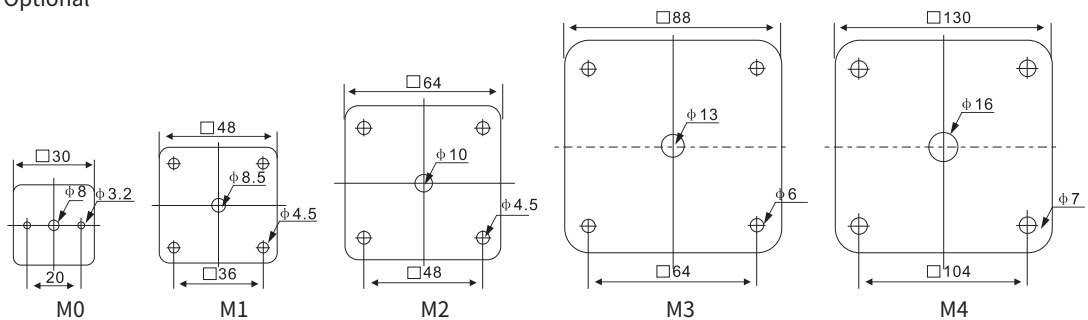
Operation angle	Character code	Position of handle			
		30° Rotation	45° Rotation	60° Rotation	90° Rotation
Spring return	A	0° ← 30°	0° ← 45°	0° ← 60°	0° ← 90°
	B	30° → 0° ← 30°	45° → 0° ← 45°	60° → 0° ← 60°	90° → 0° ← 90°
	X	60° → 30° → 0° ← 30° ← 60°	90° → 45° → 0° ← 45° ← 90°		
	Y	90° → 60° → 30° → 0° ← 30° ← 60° ← 90°			
Limited movement	C	0° 30°	0° 45°	0° 60°	
	D	30° 0° 30°	45° 0° 45°	60° 0° 60°	
	E	30° 0° 30° 60°	45° 0° 45° 90°	60° 0° 60° 120°	
	F	60° 30° 0° 30° 60°	90° 45° 0° 45° 90°	60° 0° 60° 120°	
	G	60° 30° 0° 30° 60° 90°	90° 45° 0° 45° 90° 135°	120° 60° 0° 60° 120° 180°	
	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	20° 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°			
	N		45° 45°	30° 30°	
	P				90° 0° 90°
	T				0° 90°
	V				90° 0°
	R				270° 0° 90° 180°
Limited movement with spring return	Q	30° 0° ← 30°	135° 90° 45° 0° ← 45°		
	S	30° → 0° 60°	135° 90° 45° 0° ← 45°		
	W		90° → 45° 0° 45° ← 90°		
	Z	30° → 90° 0° ← 30°	135° → 90° 0° ← 45°		

### Escutcheon plate and Handle

#### Escutcheon plate Type pf Handle

Type of handle	Color	Escutcheon plate					Type of handle	Color	Escutcheon plate				
		M0	M1	M2	M3	M4			M0	M1	M2	M3	M4
R Type 	Black		●	●	●		I Type 	Black	●	●	●	●	●
	Red			●	●			Red		●	●		
	White							White					
	Gray							Gray					
	Yellow							Yellow		●			
R2 Type 	Black		●	●			B Type 	Black		●	●		
	Red							Red		●			
	White							White			●		
	Gray							Gray					
	Yellow							Yellow					
F type 	Black	●	●	●			L Type 	Black			●		
	Red							Red					
	White							White					
	Gray							Gray					
	Yellow							Yellow					
H Type 	Black			●			O Type 	Black			●		
	Red							Red					
	White							White					
	Gray							Gray					
	Yellow							Yellow					
P Type 	Black			●	●	●	K Type 	Black			●	●	
	Red							Red					
	White							White					
	Gray							Gray					
	Yellow							Yellow					

Re: ● Standard ● Optional



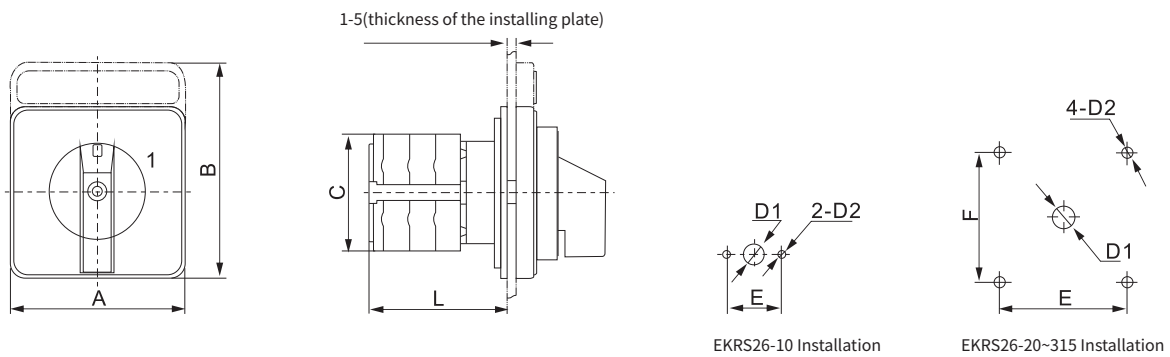
Description	Escutcheon plate						Type of handle								Rotating angle				Maximum Number of Layers					
	M0	M1	M1B	M2	M2B	M3	R	R2	F	I	R	H	I	O	P	K	30°	45°	60°	90°	12	10	8	
EKRS26-10	●								●	●							●	●	●	●		●		
EKRS26-20		●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
EKRS26-25		●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
EKRS26-32				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
EKRS26-63				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●
EKRS26-125						●	●							●	●	●	●	●	●	●	●		●	●
EKRS26-160						●	●							●	●	●	●	●	●	●	●		●	●
EKRS26-315									●					●										

Re: M1B M2B Plate should be installed by self tapping screw



### Dimensions and Installation

#### Square Escutcheon Plate and Rectangular Escutcheon Plate



EKRS26-10 Installation

EKRS26-20~315 Installation

Description	Escutcheon plate	Dimensions(mm)				Installation(mm)			
		A	B	C	L	E	F	D1	D2
EKRS26-10	M0 square	30	30	28	22+8n	20		φ 8	φ 3.2
EKRS26-20	M1 square	48	48	43	22+9.6n	36	36	φ 8.5	φ 4.5
	M1 rectangular	48	60	43	22+9.6n	36	36	φ 8.5	φ 4.5
	M2 square	64	64	43	25+9.6n	48	48	φ 10	φ 4.5
	M2 rectangular	64	80	34	25+9.6n	48	48	φ 10	φ 4.5
EKRS26-25	M1 square	48	48	45.2	23+12.8n	36	36	φ 8.5	φ 4.5
	M1 rectangular	48	60	45.2	23+12.8n	36	36	φ 8.5	φ 4.5
	M2 square	64	64	45.2	26.5+12.8n	48	48	φ 10	φ 4.5
	M2 rectangular	64	88	45.2	26.5+12.8n	48	48	φ 10	φ 4.5
EKRS26-32	M2 square	64	64	58	29.2+12.8n	48	48	φ 10	φ 4.5
	M2 rectangular	64	80	58	29.2+12.8n	48	48	φ 10	φ 4.5
	M3 square	88	88	58	29.2+12.8n	68	68	φ 13	φ 6
EKRS26-63	M2 square	64	64	66	29.2+21.5n	48	48	φ 10	φ 4.5
	M2 rectangular	64	80	66	29.2+21.5n	48	48	φ 10	φ 4.5
	M3 square	88	88	66	29.2+21.5n	68	68	φ 13	φ 6
EKRS26-125	M3 square	88	88	84	35+26.5n	68	68	φ 13	φ 6
EKRS26-160	M3 square	88	88	88	35+32.5n	68	68	φ 13	φ 6
EKRS26-315	M4 square	130	130	126	39.5+38.5n	104	104	φ 16	φ 7

Re: n for number of layers

## Technical Parameters

Description		EKRS26-10	EKRS26-20	EKRS26-25	EKRS26-32	EKRS2626-63	EKRS26-125	EKRS26-160	EKRS26-315
Rated insulation voltage $U_i$ V		660	660	660	660	660	660	660	660
Rated thermal current $I_{th}$ A		10	20	25	32	63	125	160	315
Rated working voltage $U_e$ V		240 440	240 440	240 440	240 440	240 440	240 440	240 440	240 440
Rated working current $I_e$									
AC-21A AC-22A	A	10 10	20 20	25 25	32 32	63 63	100 100	150 150	315 315
AC-23A	A	7.5 7.5	15 15	22 22	30 30	57 57	90 90	135 135	265 265
AC-2	A	7.5 7.5	15 15	22 22	30 30	57 57	90 90	135 135	265 265
AC-3	A	5.5 5.5	11 11	15 15	22 22	36 36	75 75	95 95	110 110
AC-4	A	1.75 1.75	3.5 3.5	6.5 6.5	11 11	15 15	30 30	55 55	95 95
AC-15	A	2.5 1.5	5 4	8 5	14 6				
AC-13	A		0.4	0.5					
Power	P								
AC-23A	KW	1.8 3	3.7/2.5 7.5/3.7	5.5/3 11/5.5	7.5/4 1.5/7.5	15/10 30/18.5	30/15 45/22	37/22 75/37	75/37 132/55
AC-2	KW	2.5 3.7	4 7.5	5.5 11	7.5 15	18.5 30	30 45	37 55	55 95
AC-3	KW	1.5 2.2	3/2.2 5.5/3	4/3 7.5/3.7	5.5/4 11/5.5	11/6 18.5/11	15/7.5 30/13	22/11 37/18.5	27/22 55/30
AC-4	KW	0.37 0.55	0.55/0.75 1.5/1.5	1.5/1.1 3/2.2	2.7/1.5 5.5/3	5.5/2.4 7.5/4	6/3 12/5.5	10/4 15/7.5	15/7.5 25/11

Re1: Neutral

Re2: The power under :

AC-23A、AC-3、AC-4 are in three phase three pole, and the denominator represents the power under single phase two

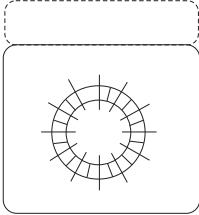
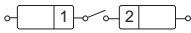
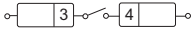
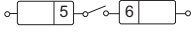
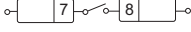
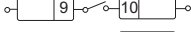
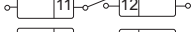
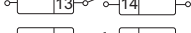
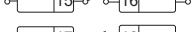



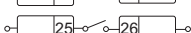
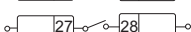
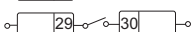
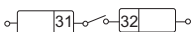
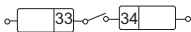
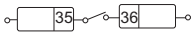
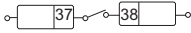
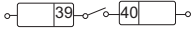

### Mechanical life

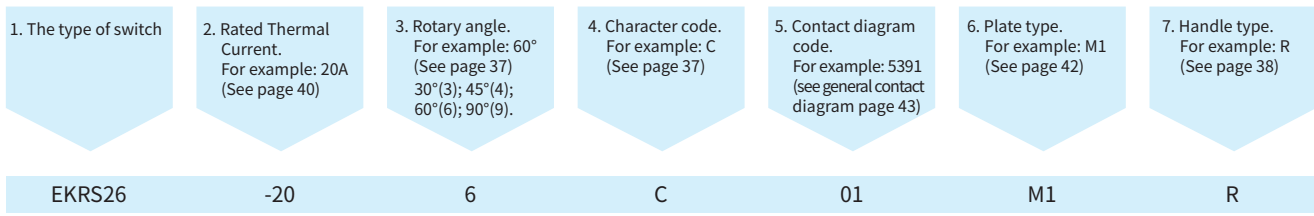
Mechanical life without load :  $0.1 \times 10^6$  times , operation frequency is 120 times/h.

Mechanical life with load :  $0.03 \times 10^6$  times, operation frequency is 120 times/h.

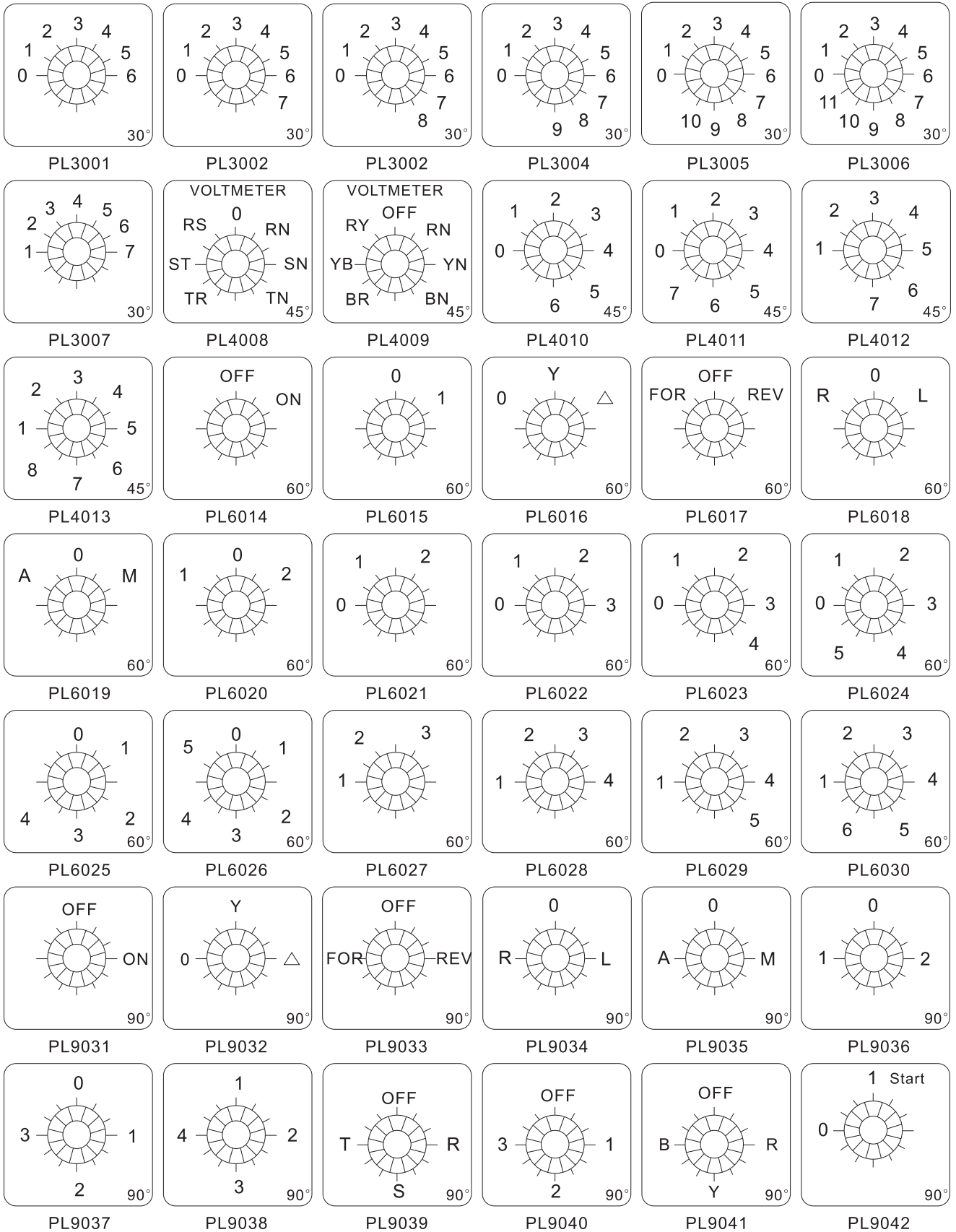
## Customized Programme form(CPF)

Due to the flexibility selection of EKRS series contact ratings and number of contacts etc, their combination number is almost limitless, to ensure that a right switch is chosen for the application, so -we prepare the following Customized programme Form for our customers order special switches.  
Only EKRS26 series.

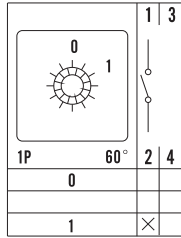
 <p>Switching Angle: Switching Position: Escutcheon Size:</p>	Customer: Programme code:	Date: Quantity:																	
	Utilization Category:																		
	Switch Type: Handle Code:	Mounting: Handle Colour:																	
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Panel type: <input type="checkbox"/> M0 <input type="checkbox"/> M1 <input type="checkbox"/> M2 <input type="checkbox"/> M3 <input type="checkbox"/> M4																
Thermal Current Rating: <input type="checkbox"/> 10A <input type="checkbox"/> 20A <input type="checkbox"/> 25A <input type="checkbox"/> 32A <input type="checkbox"/> 63A <input type="checkbox"/> 125A <input type="checkbox"/> 160A <input type="checkbox"/> 315A																			
                   																			
Note:																			



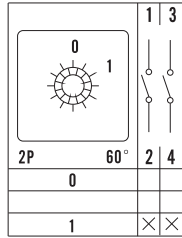
General Panel Diagram



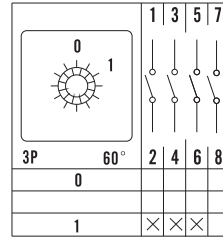
General Panel Diagram



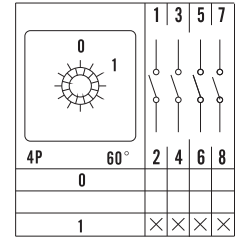
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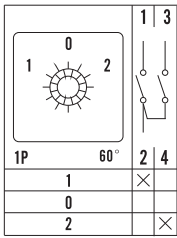
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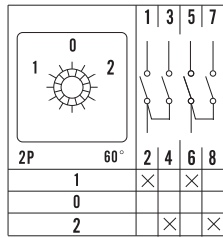
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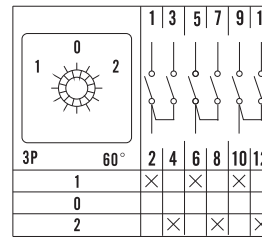
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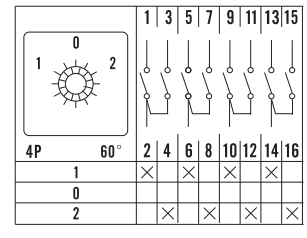
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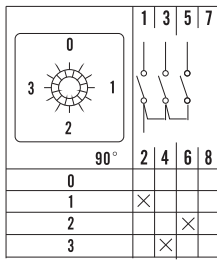
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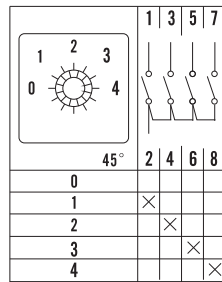
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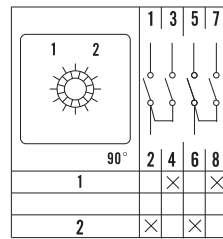
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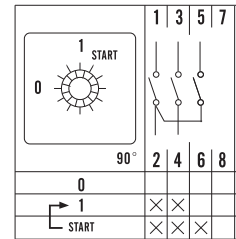
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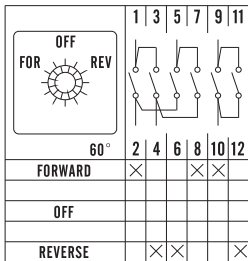
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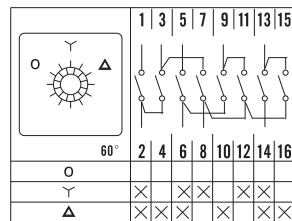
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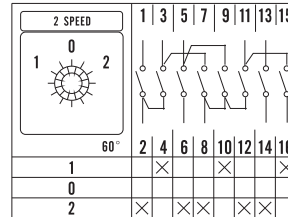
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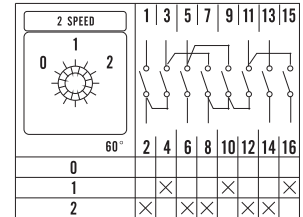
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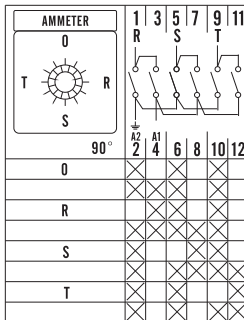
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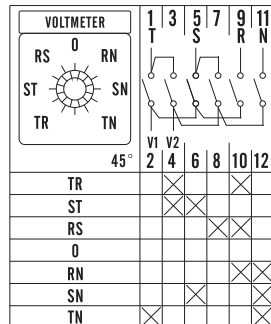
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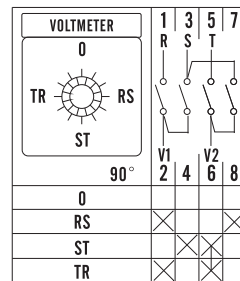
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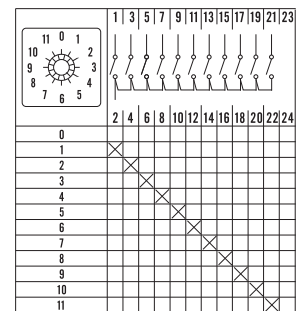
LH3



YH5



YH2



M6886