

tend CAM SWITCH(48 mm And 64mm SERIES)

FEATURES

- Diversified operating ways, handles and plates.
- Unique modular design of contact blocks keeps internal parts from falling apart when contact blocks are disassemble or replaced.
- Can assemble or disassemble contact blocks to suit for various models yet without risking excessive stock.
- Contact blocks can be added click-on easily no need to unscrew.
- Contacting screws are fastened from the back rather than normally from the side. It makes wiring easier.
- A special design to keep connecting terminals and screws in the contact blocks can prevent users from electric shocking.
- All the connecting pieces of terminals are covered to avoid electric shocking.
- Capacities are differentiated by colors of contact blocks blue for 10A; gray for 16A and black for 25A.



SPECIFICATIONS

Voltage	Capacity		AC-3(kw)		AC-23A(kw)		AC-21A I _u =I _{th}	Rated voltage	AC-3(HP)		Motor load
	3 ph.	1 ph.	3 ph.	1 ph.	3 ph.	1 ph.			3 ph.	1 ph.	
220V~240V	1.5	0.55	1.8	0.75	10A	120V	0.75	0.33	10A		
380V~440V	2.2	0.75	3	1.1							
660V~690V	2.2	0.75	3	1.1							
220V~240V	3	1.5	4	2.2	16A	120V	1.5	0.5	16A		
380V~440V	5.5	2.2	7	3							
660V~690V	5.5	2.2	7	3							
220V~240V	4	3	5.5	3	25A	120V	3	1.5	25A		
380V~440V	7.5	3.7	11	5.5							
660V~690V	7.5	3.7	11	5.5							

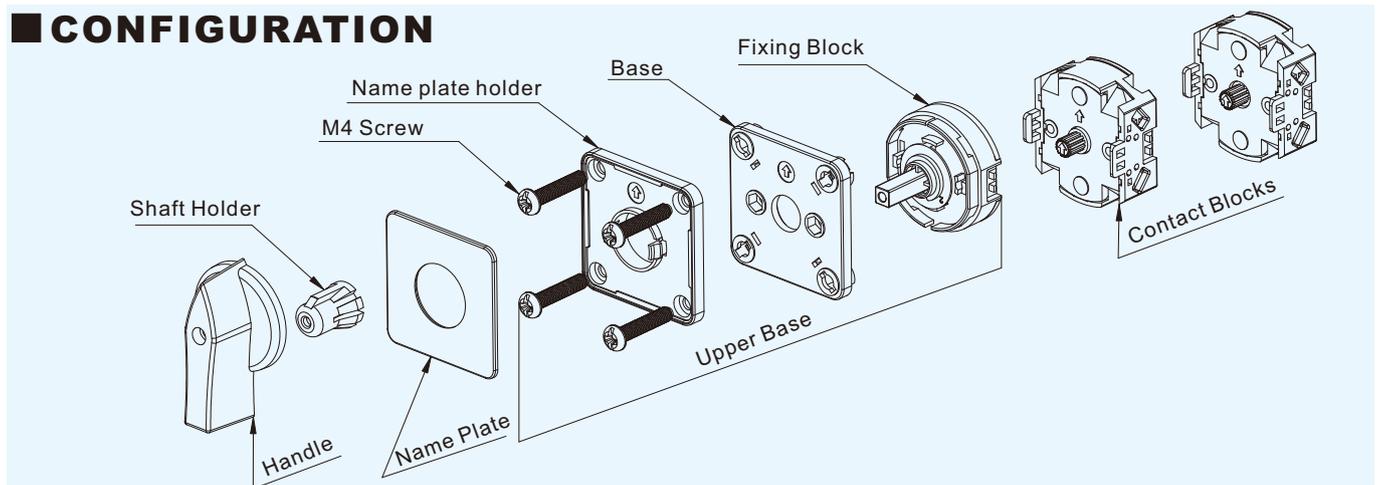
IEC 60947-3, EN 60947-3

VDE 0660 part 107

HD A300

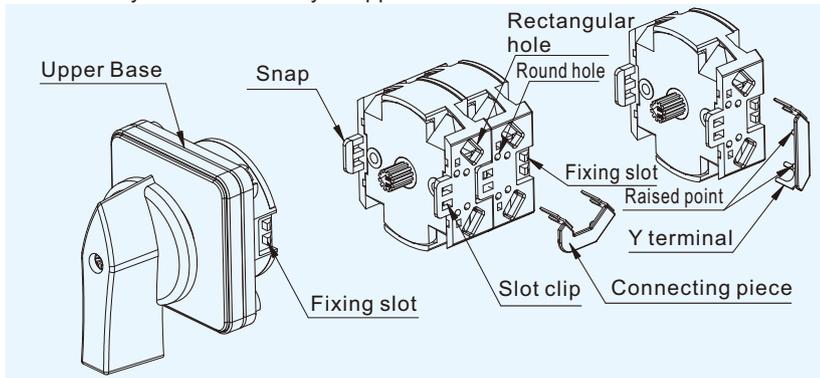
UL 77B7

CONFIGURATION



For panel series No.48 and No.64, the handles, engraving plates, upper bases and contacts can be disassembled by DIY.

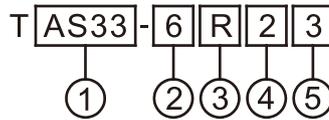
- Assembly and disassembly of upper base and contact or those of two contacts.



- Assembly between upper base and contact block: point and push the raised part of the upper base into the hole of contact block.
- Assembly between contact blocks: point and push the raised part of the contact block into the hole of another contact blocks.
- Disassembly: lift the raised part of contact with "—" shape screw driver.
- Assembly of connecting piece: insert the "Y" shape terminal of the connecting piece into the rectangular holes flanking the contact and press the raised point of connecting piece down into the round hole of contact block.

tend VOLTMETER/AMMETER CAM SWITCH(48*48 AND 64*64 SERIES) TVS/TAS

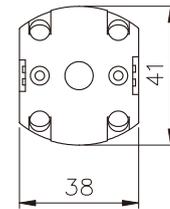
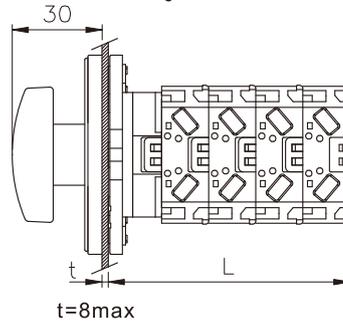
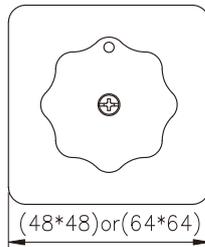
MODEL DESIGNATION



Designation	Signal	Description
1. Control Type	AS33	AS33 (3Ø3W)
	AS34	AS34 (3Ø4W)
	VS33	VS34 (3Ø3W)
	VS34	VS34 (3Ø4W)
	VS334	VS33(3Ø3W) / VS34(3Ø4W)
	AV33	VS33(3Ø3W) / AS34(3Ø4W)

2. Size	4	48*48
	6	64*64
3. Face and hands color	None	Silver panel black hands
	R	Yellow panel red hands
4. Capacity	1	10A
	2	16A
	3	25A
5. Nos. of	None	2CT
	3	3CT

DIMENSIONS



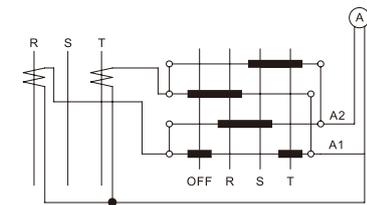
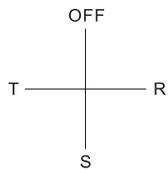
Stack	L
One Stack	32
Two Stacks	47
Three Stacks	62
Four Stacks	77
Five Stacks	92
Six Stacks	107

● All these series of switches are fitted with octagonal handles. ● 2CT or 3CT can be used for TAS33 series.

PLATE, CONTACT and WIRING DIAGRAM

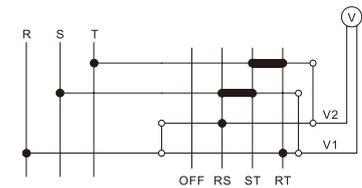
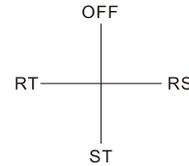
TAS33-□□

AS(3Ø3W 2CT)



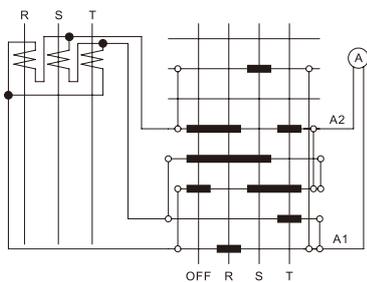
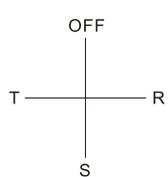
TVS33-□□

VS(3Ø3W)



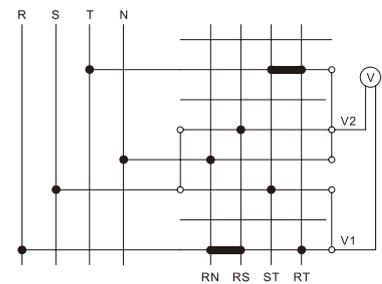
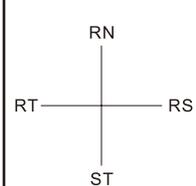
TAS33-□□3

AS(3Ø3W 3CT)



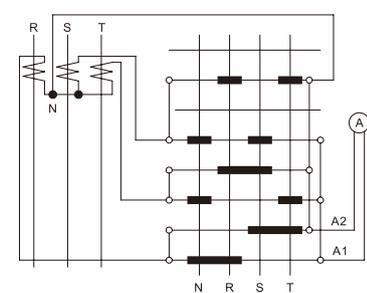
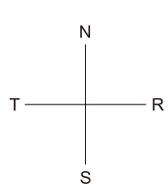
TVS34-□□

VS(3Ø4W)



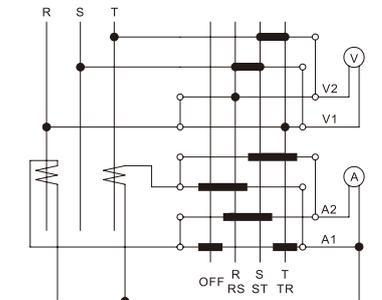
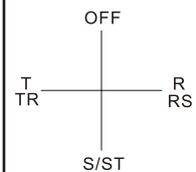
TAS34-□□

AS(3Ø4W 3CT)



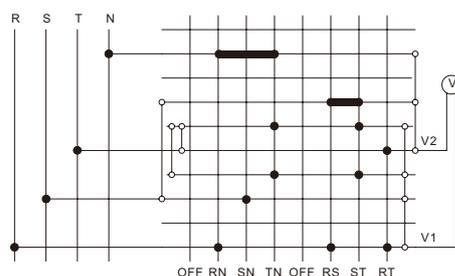
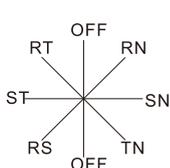
TAV33-□□

AS(3Ø3W 2CT)
VS(3Ø3W)



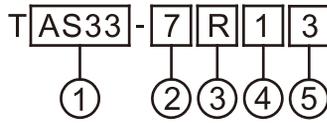
TVS334-□□

VS(3Ø3W)
VS(3Ø4W)



tend VOLTMETER/AMMETER CAM SWITCH(48*60 AND 64*80 SERIES) TVS/TAS

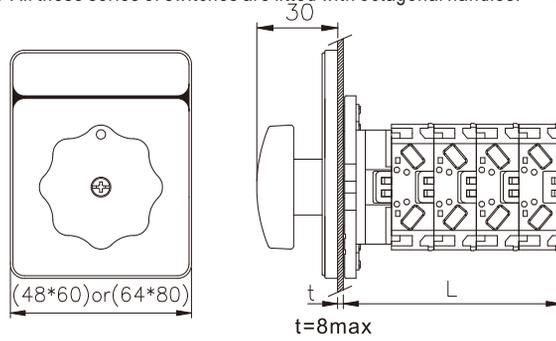
MODEL DESIGNATION



Designation	Signal	Description	2.Size	5	48*60
1.Control Type	AS33	AS33(3Ø3W)	7		64*80
	AS34	AS34(3Ø4W)	3.Face and hands color	None	Silver panel black hands
	VS33	VS34(3Ø3W)		R	Yellow panel red hands
	VS34	VS34(3Ø4W)	4.Capacity	1	10A
	VS334	VS33(3Ø3W)/VS34(3Ø4W)		2	16A
	AV33	VS33(3Ø3W)/AS34(3Ø4W)		3	25A
5.Nos.of			None	2CT	
			3	3CT	

● All these series of switches are fitted with octagonal handles. ● 2CT or 3CT can be used for TAS33 series.

DIMENSIONS

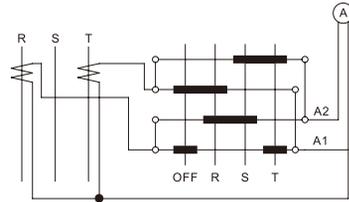
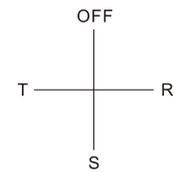


Stack	L
One Stack	32
Two Stacks	47
Three Stacks	62
Four Stacks	77
Five Stacks	92
Six Stacks	107

PLATE, CONTACT and WIRING DIAGRAM

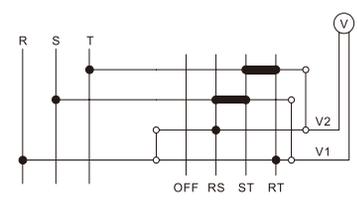
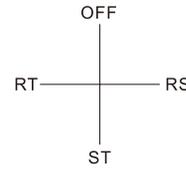
TAS33-□□

AS(3Ø3W 2CT)



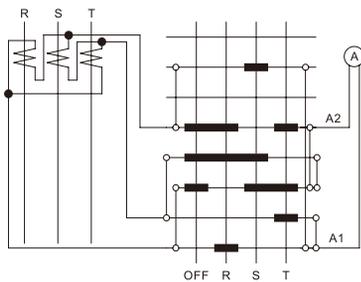
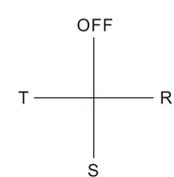
TVS33-□□

VS(3Ø3W)



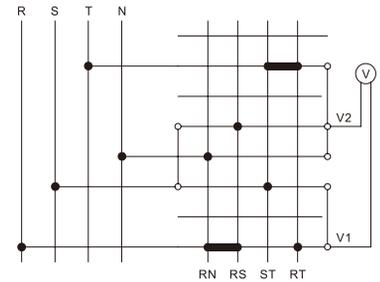
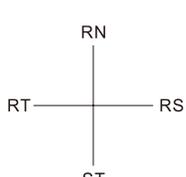
TAS33-□□3

AS(3Ø3W 3CT)



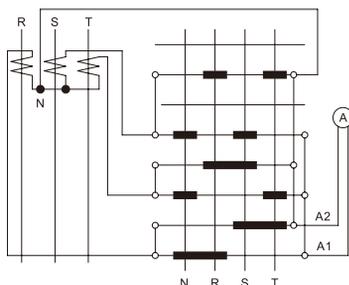
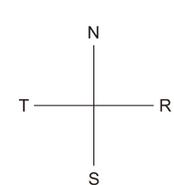
TVS34-□□

VS(3Ø4W)



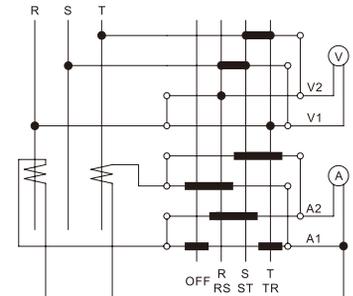
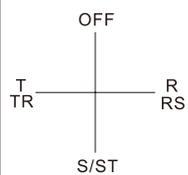
TAS34-□□

AS(3Ø4W 3CT)



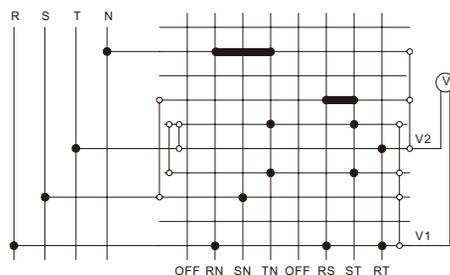
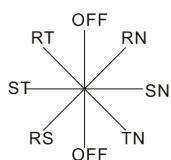
TAV33-□□

AS(3Ø3W 2CT)
VS(3Ø3W)



TVS334-□□

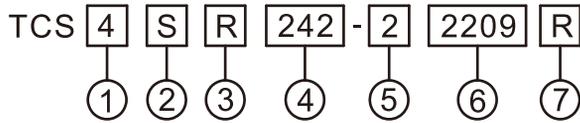
VS(3Ø3W)
VS(3Ø4W)



tend CAM SWITCH(48*48 AND 64*64 SERIES) TCS

Before placing an order for finished products, please refer to the explanation of model numbers shown in this page.

MODEL DESIGNATION

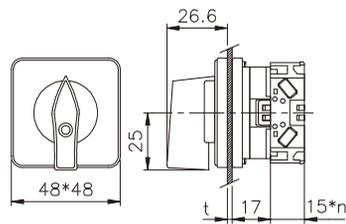


Designation	Signal	Description
1.Size	4	48*48
	6	64*64
2.Handle	S	Short handle
	L	Long handle
	O	Octagonal handle
3.Face and hands color	None	Silver panel black hands
	R	Yellow panel red hands

4.Position, turn angle plate number	240~842	See page TA23
5.Capacity	1	10A
	2	16A
	3	25A
6.Wiring diagram number		See page TA22~TA33
7.Operation	None	Hold
	R	Spring return (45°, 2 position, 3 position only)

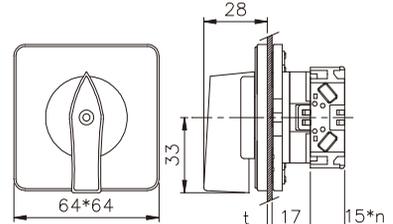
DIMENSIONS

TCS4S □ - □ □ □



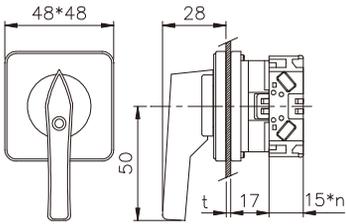
t=6max
N=number of contact blocks

TCS6S □ - □ □ □



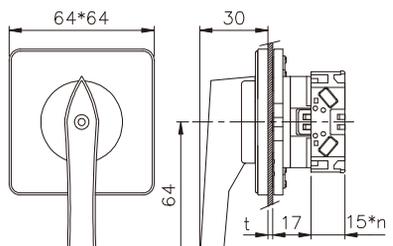
t=8max
N=number of contact blocks

TCS4L □ - □ □ □



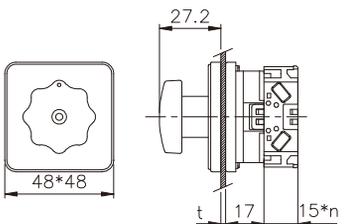
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TCS6L □ - □ □ □



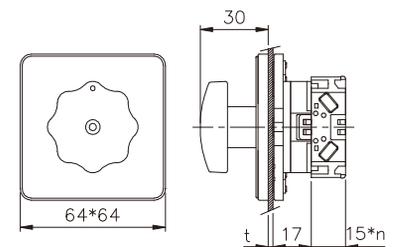
t=8max
N=number of contact blocks

TCS4O □ - □ □ □



t=8max
N=number of contact blocks

TCS6O □ - □ □ □

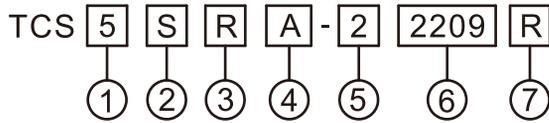


t=8max
N=number of contact blocks

tend CAM SWITCH(48*48 AND 64*64 SERIES) TCS

Before placing an order for finished products, please refer to the explanation of model numbers shown in this page.

MODEL DESIGNATION

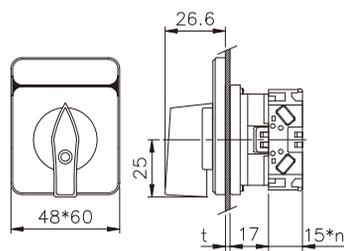


Designation	Signal	Description
1.Size	5	48*60
	7	64*80
2.Handle	S	Short handle
	L	Long handle
	O	Octagonal handle
3.Face and hands color	None	Silver panel black hands
	R	Yellow panel red hands

4.Position, turn angle plate number	A~Z	See page TA20
5.Capacity	1	10A
	2	16A
	3	25A
6.Wiring diagram number		See page TA22~TA33
7.Operation	None	Hold
	R	Spring return (45°, 2 position, 3 position only)

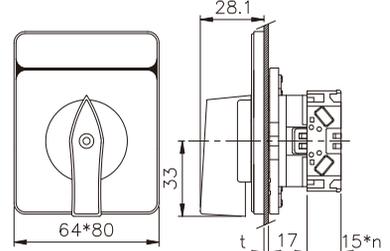
DIMENSIONS

TCS5S □ □ - □ □ □



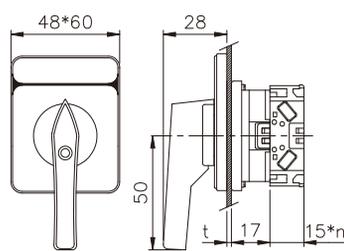
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N=number of contact blocks

TCS7S □ □ - □ □ □



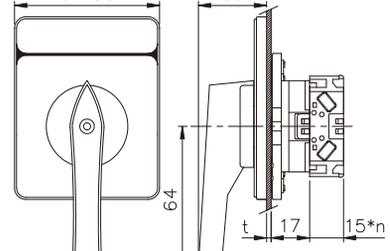
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N=number of contact blocks

TCS5L □ □ - □ □ □



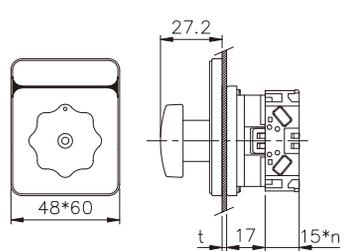
t=6max
N=number of contact blocks

TCS7L □ □ - □ □ □



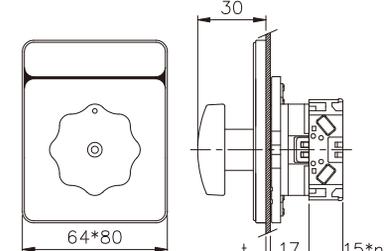
t=8max
N=number of contact blocks

TCS5O □ □ - □ □ □



t=8max
N=number of contact blocks

TCS7O □ □ - □ □ □



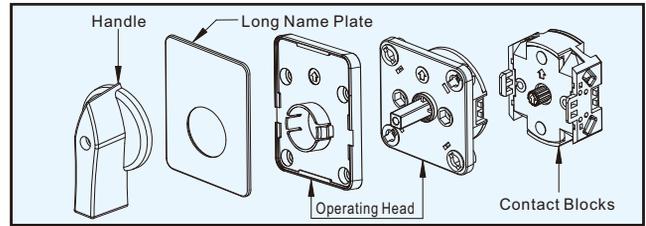
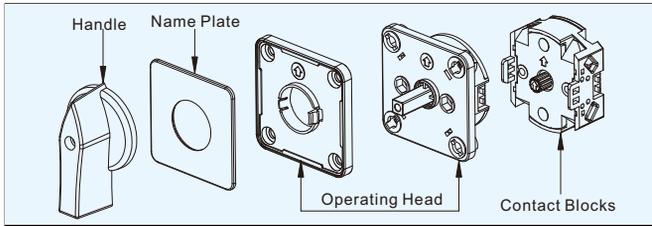
t=8max
N=number of contact blocks

tend CAM SWITCH(48mm AND 64mm SERIES) TCS

As to the order of components for DIY assembly, please refer to the following assembly illustration diagram.

● 48*48mm and 64*64mm series sub-assembly

● 48*60mm and 64*80mm series sub-assembly



HANDLE DESIGNATION

TCS

4	S	R
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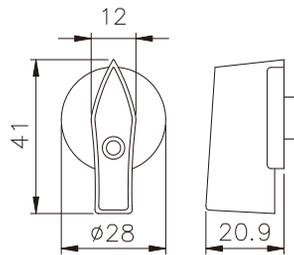
①	②	③
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Designation	Signal	Description
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	6	64*64mm

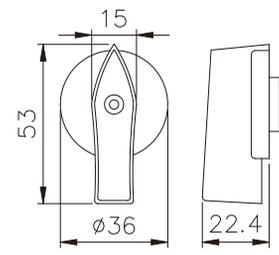
2. Handle	S	Short handle
	L	Long handle
	O	Octagonal handle
3. Face and hands color	B	Silver panel black hands
	R	Yellow panel red hands

DIMENSIONS

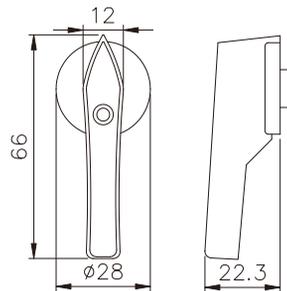
TCS4S



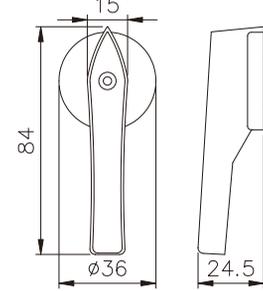
TCS6S



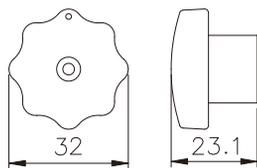
TCS4L



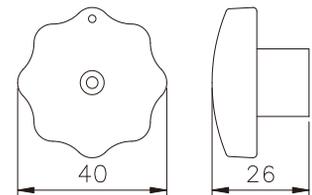
TCS6L



TCS4O



TCS6O



CONTACT BLOCKS DESIGNATION

TCS

1	C	01
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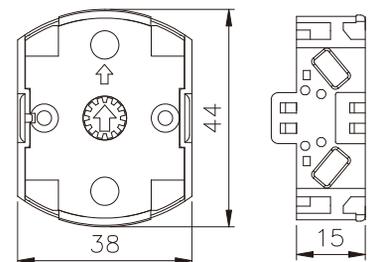
①	②	③
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Designation	Signal	Description
1. Capacity	1	10A
	2	16A
	3	25A
2. No. of Contacts Fitted	S	Single-point contact
	C	Double-point contact
3. Contact blocks number	01~A1	See page TA22~TA23

DIMENSIONS

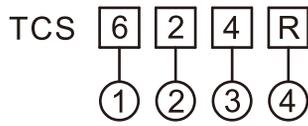
TCS□-C01~CA1

TCS□-S01~SA1



tend CAM SWITCH(48mm AND 64mm SERIES) TCS

■ UPPER BASE DESIGNATION

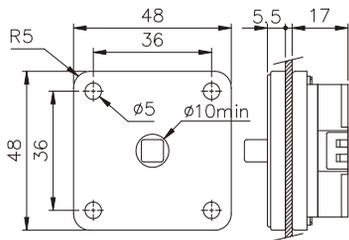


Designation	Signal	Description
1.Size	4	48*48
	5	48*60
	6	64*64
	7	64*80

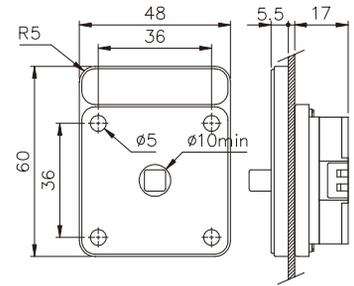
2.Position	2~8	2~8 Position
3.Turn angle	4	45°
	9	90°
4.Operation (45°, 2 position 3 position only)	None	Hold
	R	Spring return(except 90°)

■ UPPER BASE DIMENSION

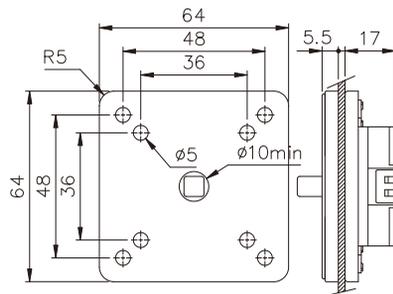
TCS4 □□



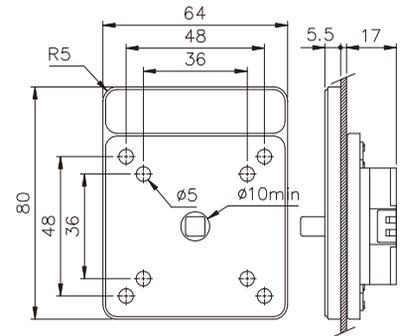
TCS5 □□



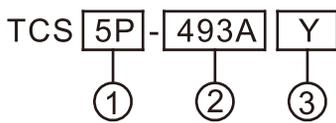
TCS6 □□



TCS7 □□

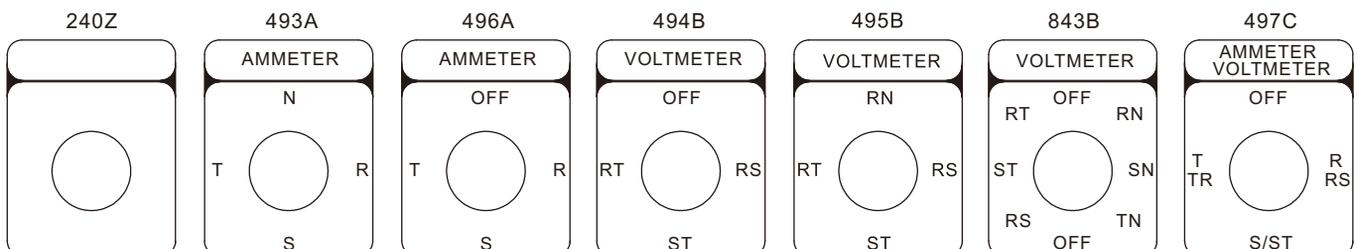


■ LONG PLATE DESIGNATION



Designation	Signal	Description
1.Long plate dimensions	5P	48*60 plate
	7P	64*80 plate
2.Long plate number	240Z 497C	See page TA22
	None	Sliver black end
3.Mingban color	Y	Black on a yellow background

● LONG PLATE NUMBER



tend CAM SWITCH(48mm AND 64mm SERIES) TCS

NAME PLATE DESIGNATION TCS **4P** - **242** **Y**

① ② ③

NUMBER DESIGNATION **2** **4** **2**

① ② ③

Designation	Signal	Description
1.Name plate dimensions	4P 6P	48*48 64*64
2.Name plate number	240 842	See number designation on right
3.Mingban color	None Y	Sliver black end Black on a yellow background

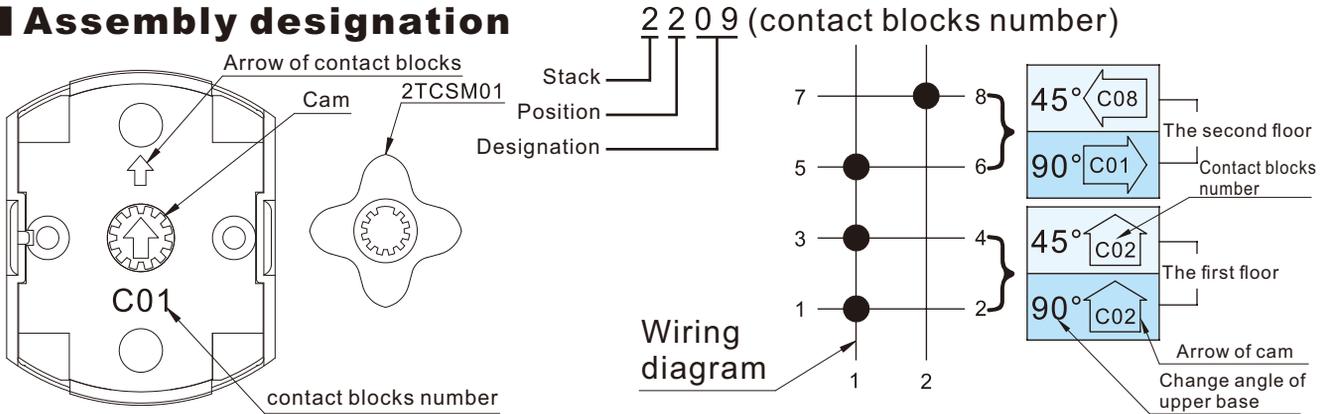
Designation	Signal	Description
1.Position	2~8	2~8Position
2.Turn angle	4	45°
	9	90°
3.Designation	0~9	See page TA23

NAME PLATE NUMBER

240	241	242	243	290	291	292	293
294	295	296	297	298	340	341	342
343	344	345	346	347	348	349	3410
390	391	392	393	394	395	396	440
441	442	443	444	490	491	492	493
494	495	496	497	540	541	542	543
640	641	642	740	741	742	840	841
842	843						

tend CAM SWITCH(48mm AND 64mm SERIES) TCS

Assembly designation



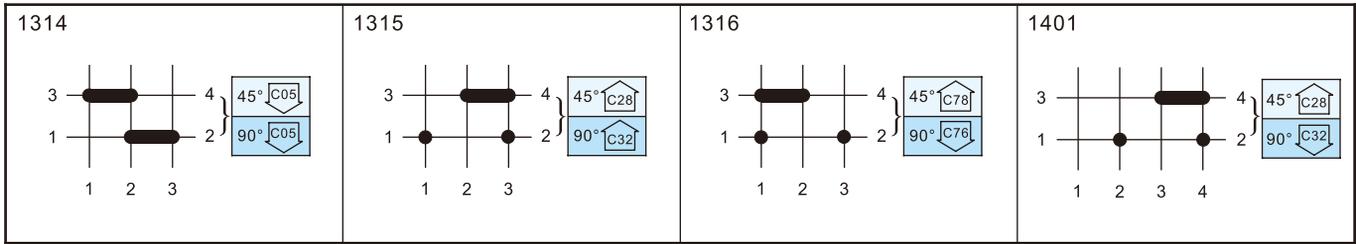
- Put cam to 2TCSM01, set the arrow of contact blocks pointing "up" rotate cam and make cam's arrow pointing to the required direction(see wiring diagram)
- Customer may order double-point contact coded as TCS□-C01~CA1, or single--point contact coded as TCS□-S01-SA1.
- Way of assembly: as illustrated above
When the turning angle of upper base is 45°, the arrow of the first layer of contact coded CO2 points "up" while that of the second layer coded CO8 points to the left.
When the turning angle of upper base is 90°, the arrow of the first layer of contact coded CO2 points "up" while that of the second layer coded CO1 points to the right.

WIRING DIAGRAM

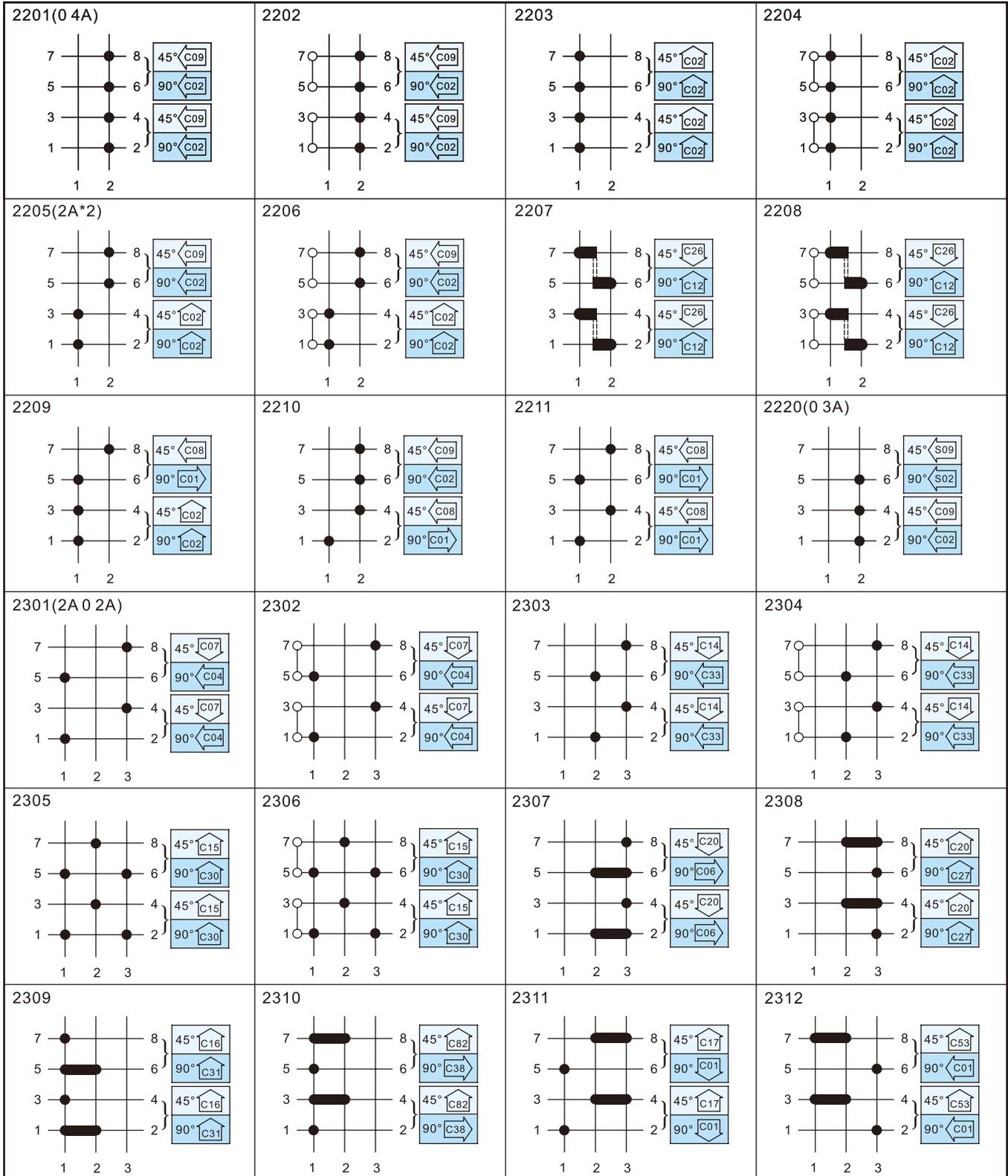
One stack

1201(0 2A) 	1202 	1203 	1204
1205(1A*2) 	1206 	1207 	1208
1209 	1219 	1220 	1301(1A 0 1A)
1302 	1303 	1304 	1305
1306 	1307 	1308 	1309
1310 	1311 	1312 	1313

tend CAM SWITCH(48mm AND 64mm SERIES) TCS



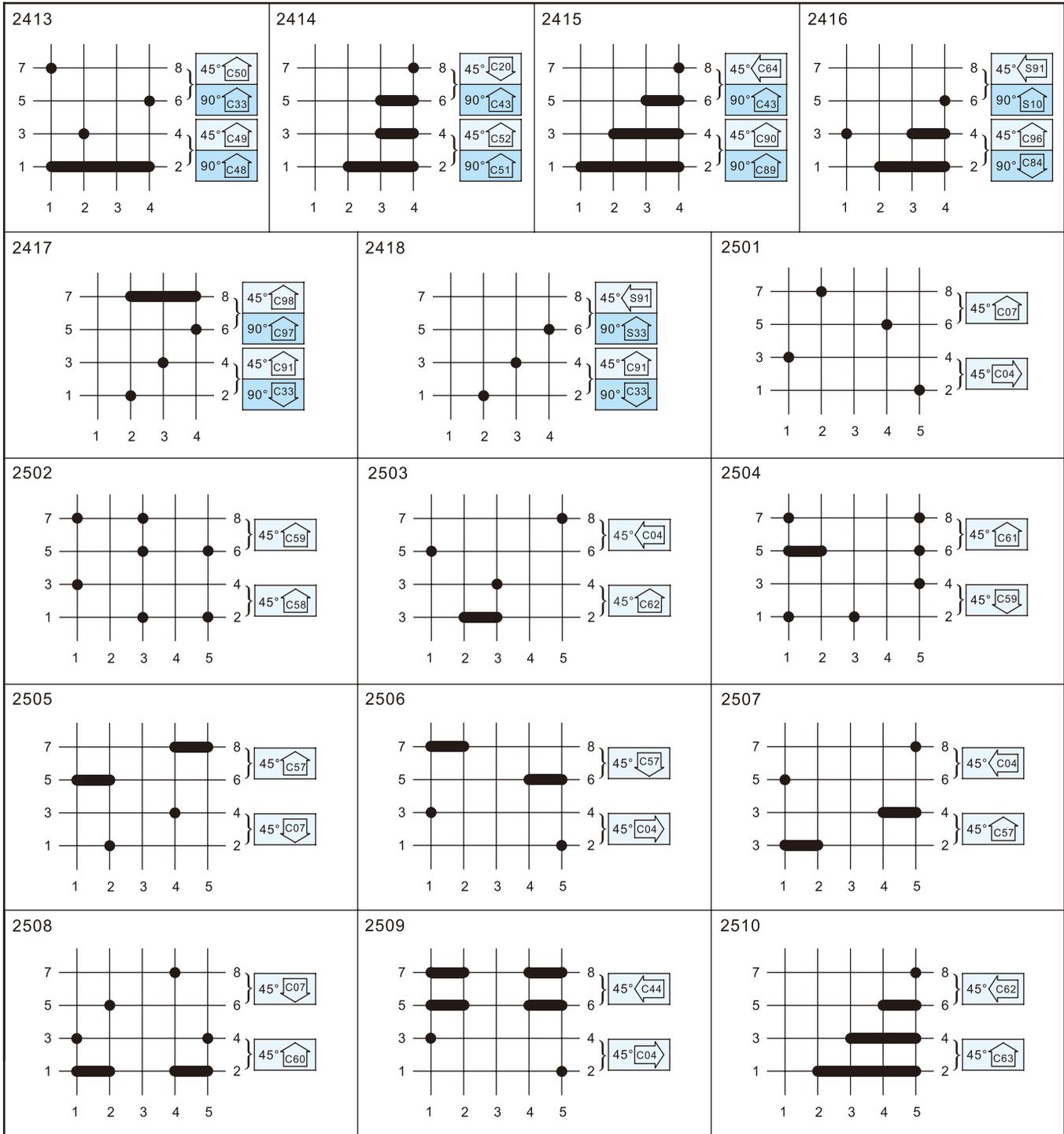
Two stacks



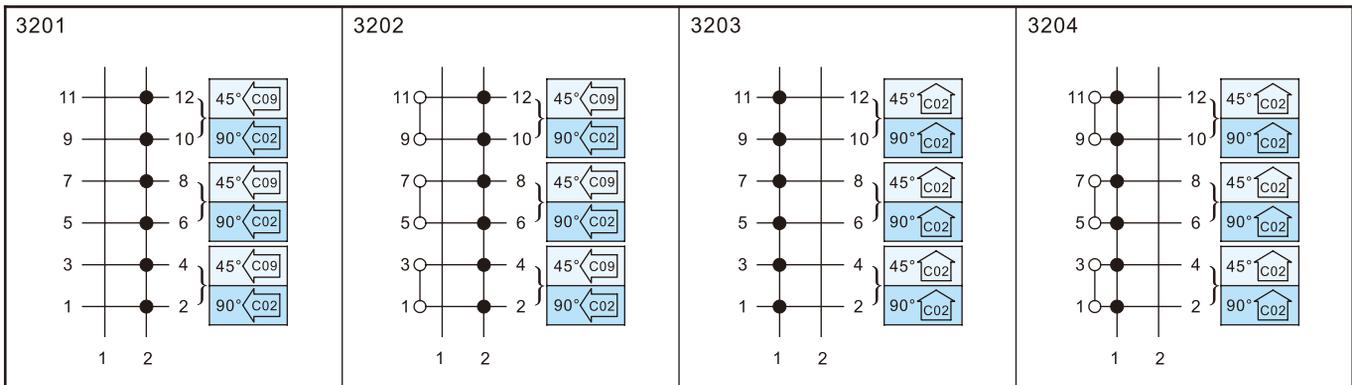
tend CAM SWITCH(48mm AND 64mm SERIES) TCS

<p>2313</p>	<p>2314</p>	<p>2315(1A*3)</p>	<p>2316</p>
<p>2317</p>	<p>2318</p>	<p>2319</p>	<p>2320</p>
<p>2321(3ØF.O.R 2P)</p>	<p>2322</p>	<p>2323</p>	<p>2324</p>
<p>2325</p>	<p>2326</p>	<p>2327</p>	<p>2328</p>
<p>2401(1A*4)</p>	<p>2402</p>	<p>2403</p>	<p>2404</p>
<p>2405</p>	<p>2406</p>	<p>2407</p>	<p>2408</p>
<p>2409</p>	<p>2410</p>	<p>2411</p>	<p>2412</p>

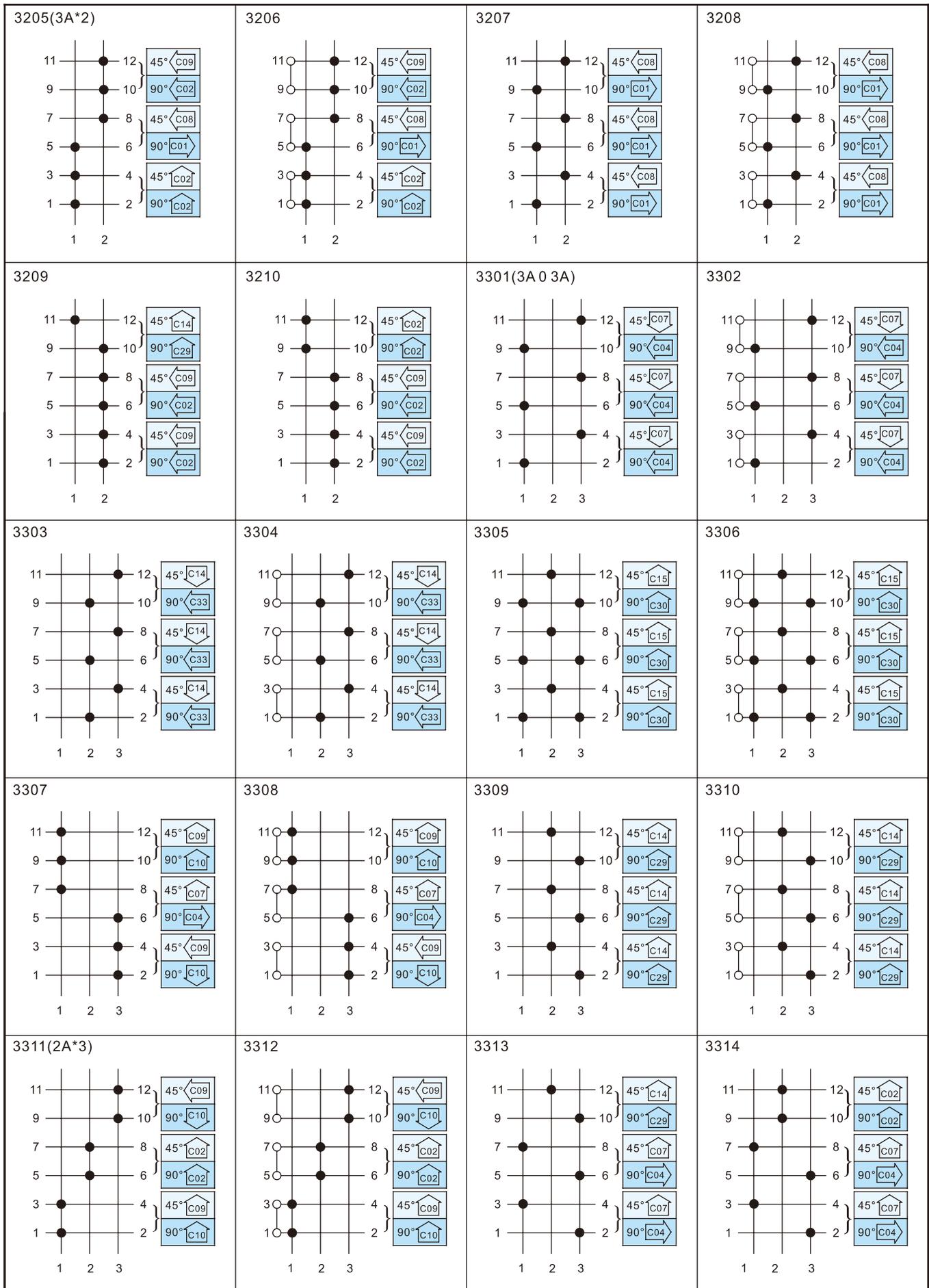
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



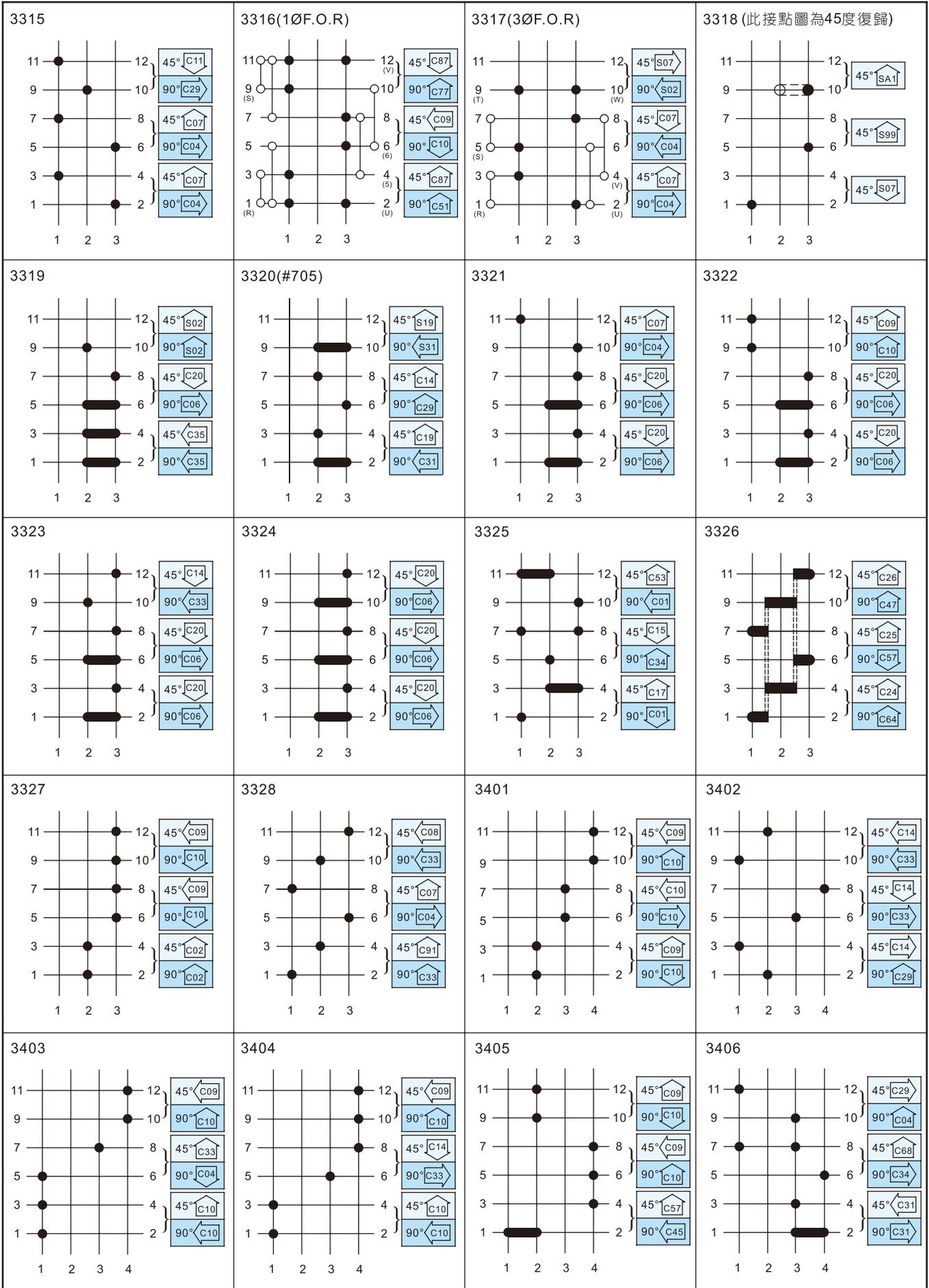
Three stacks



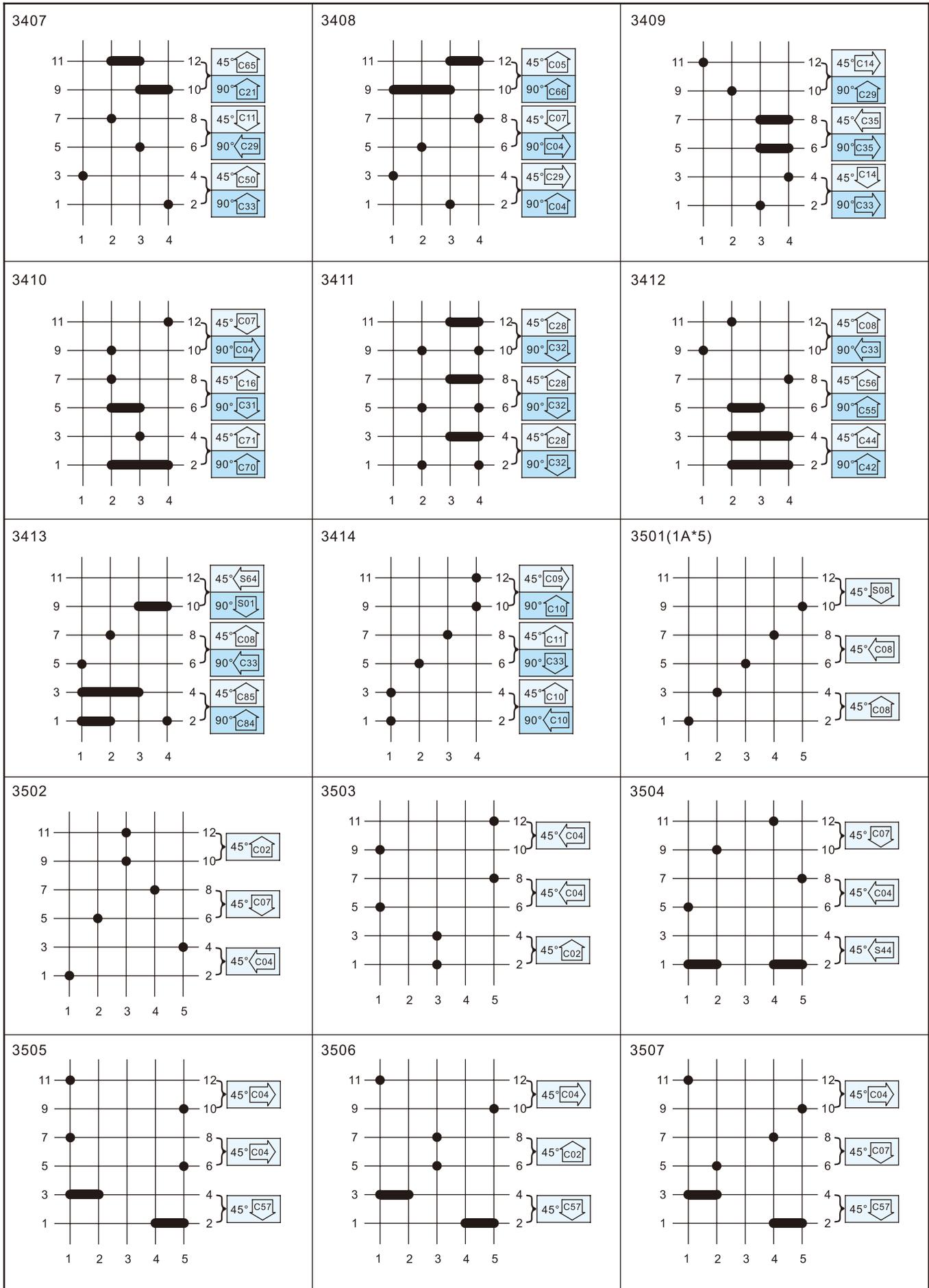
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



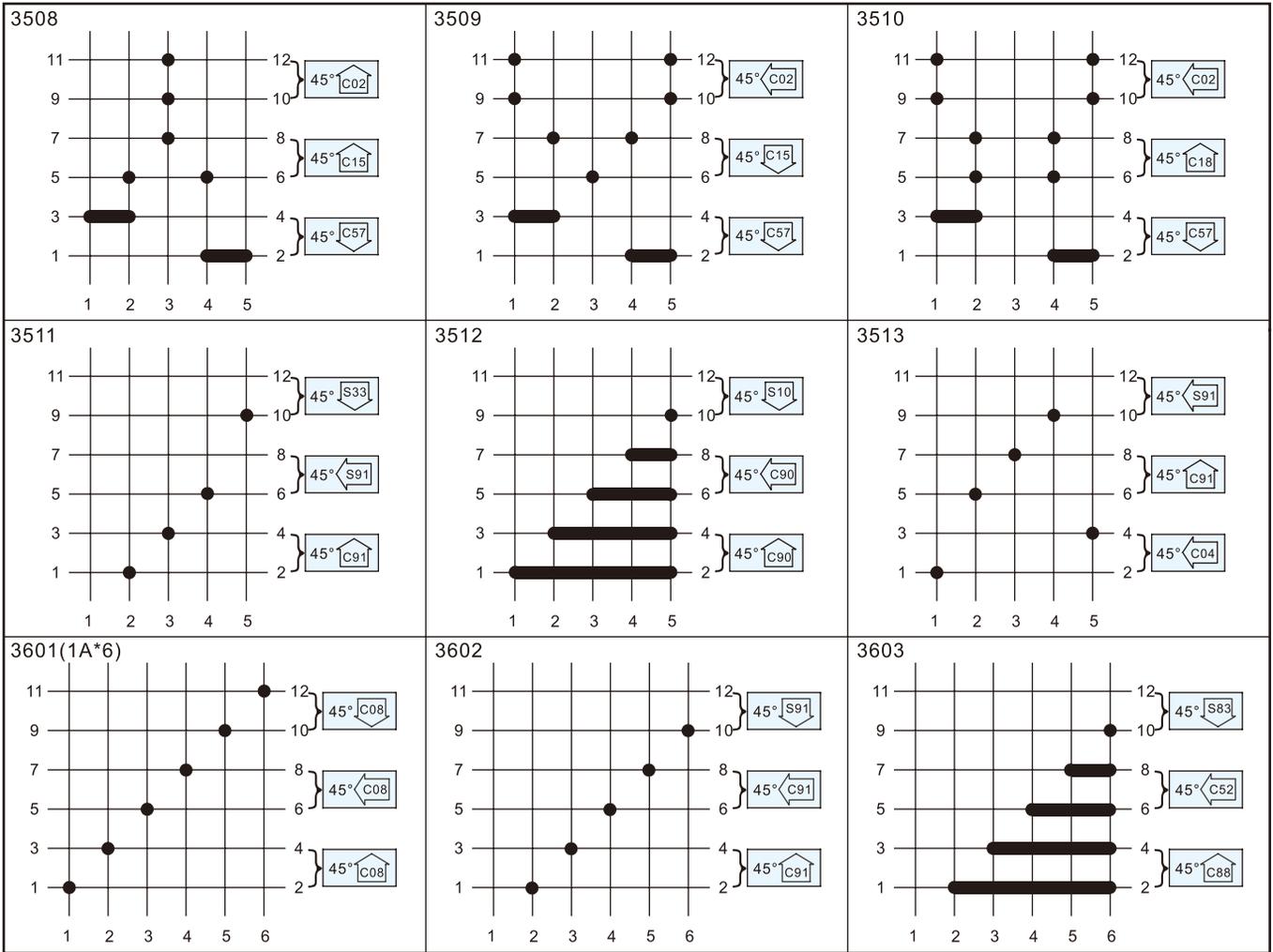
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



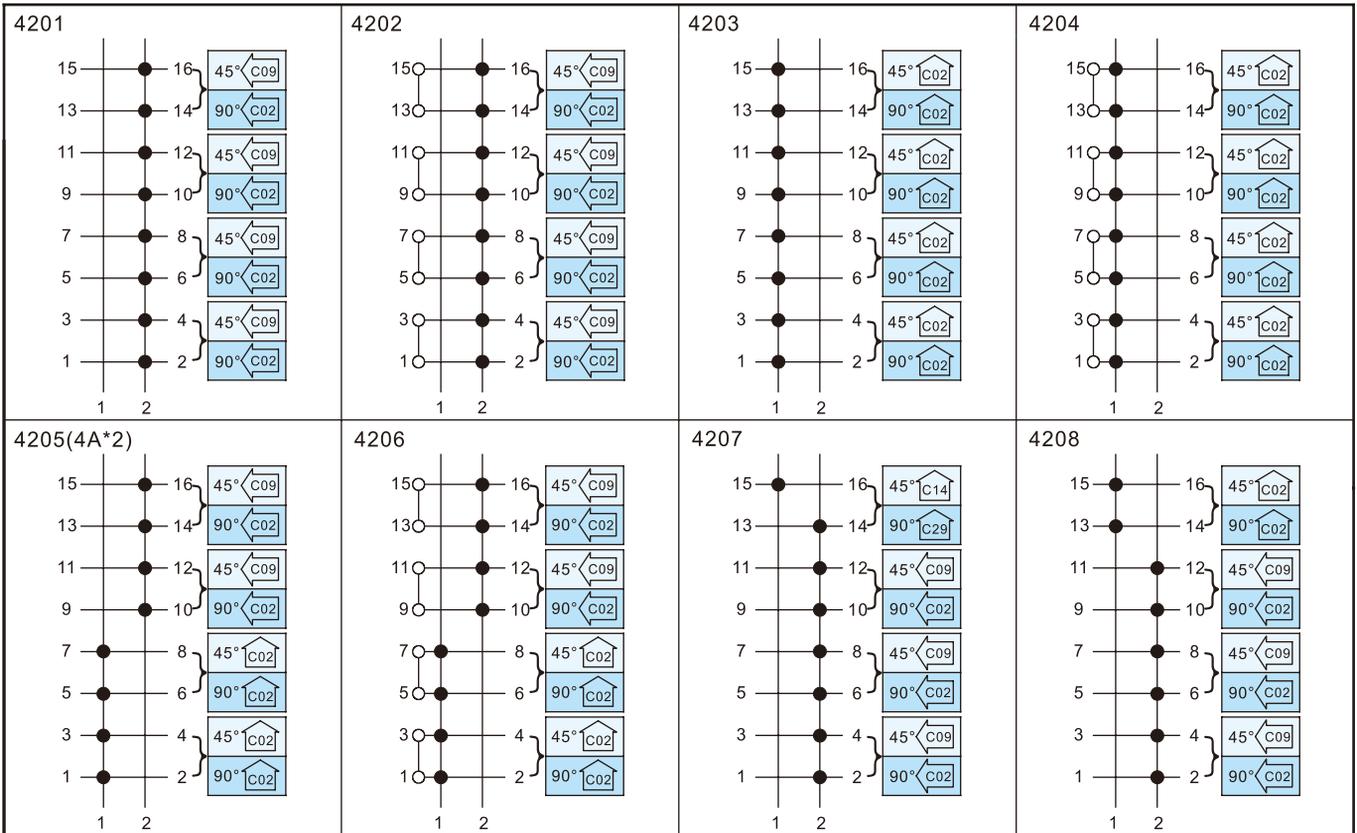
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



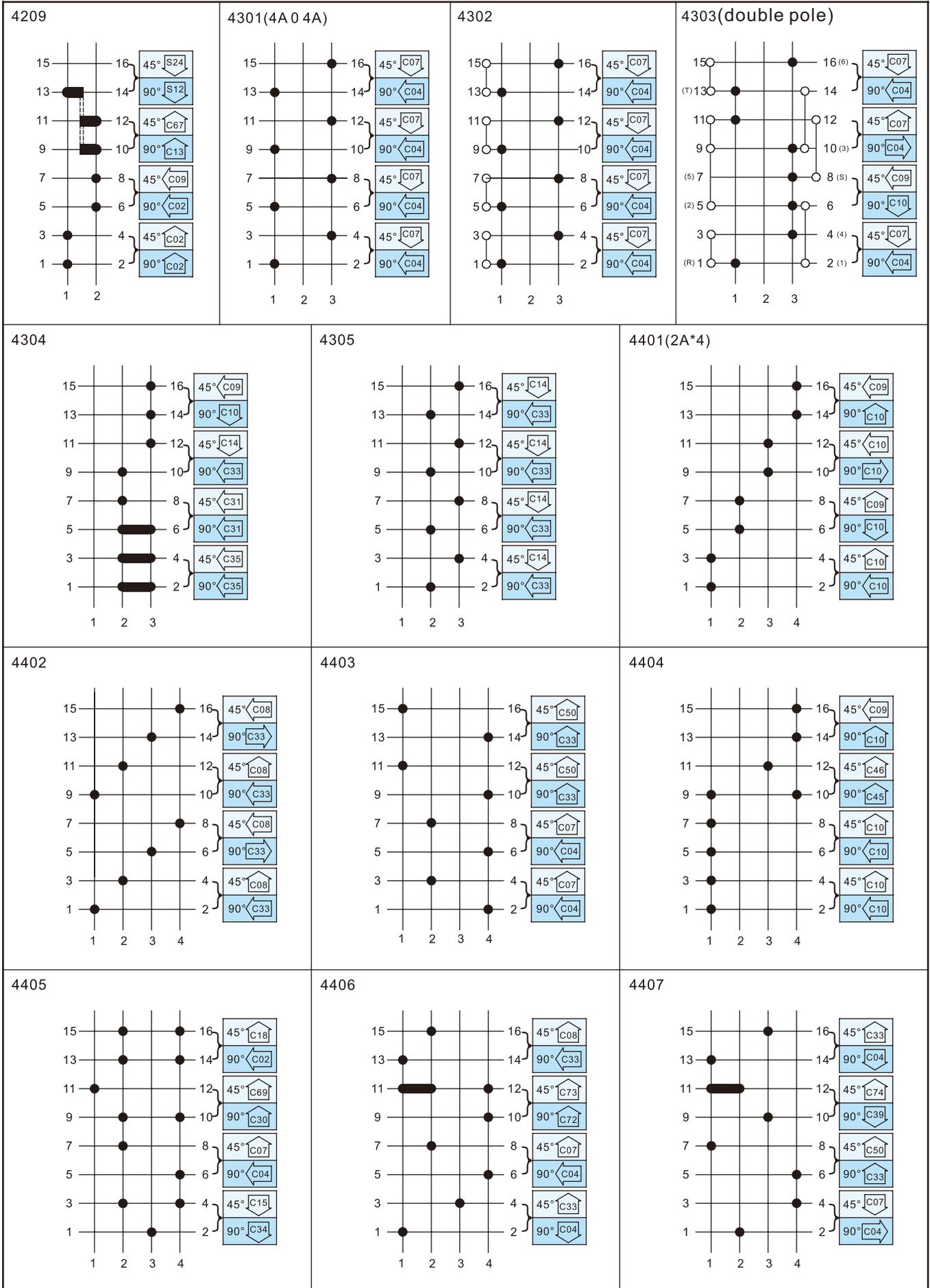
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



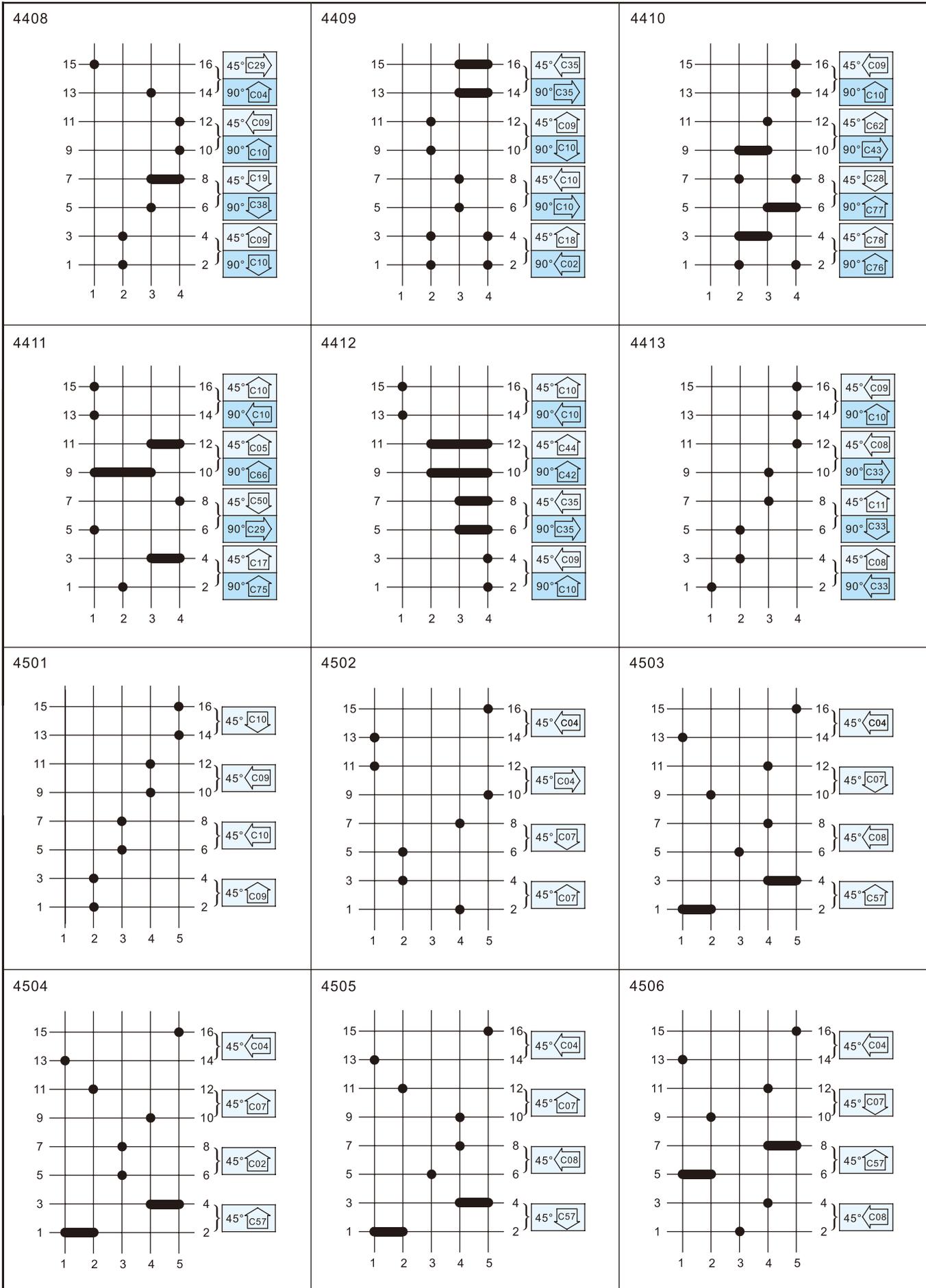
Four stacks



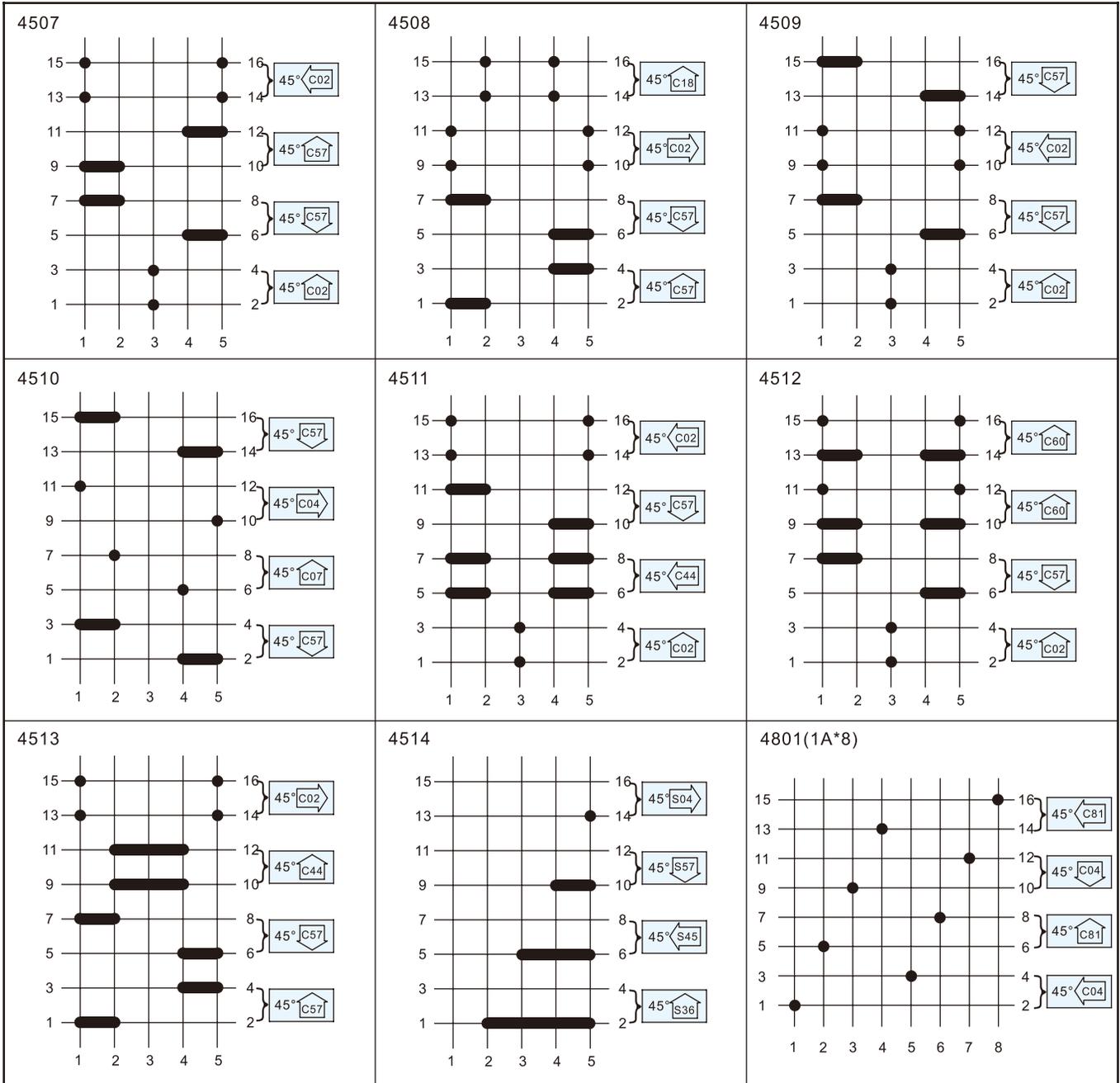
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



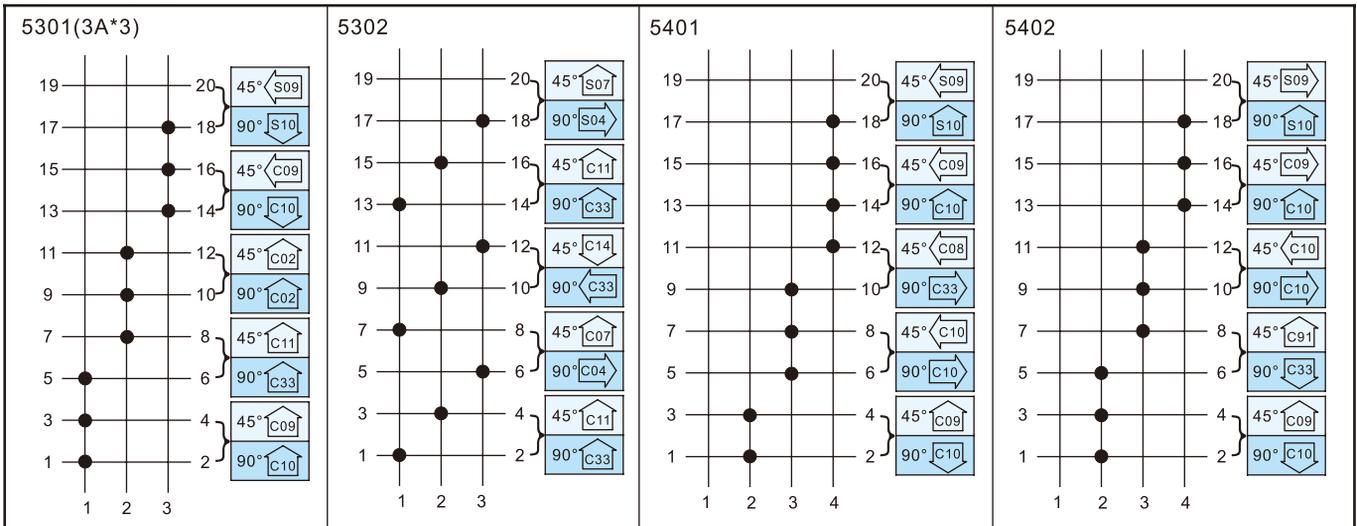
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



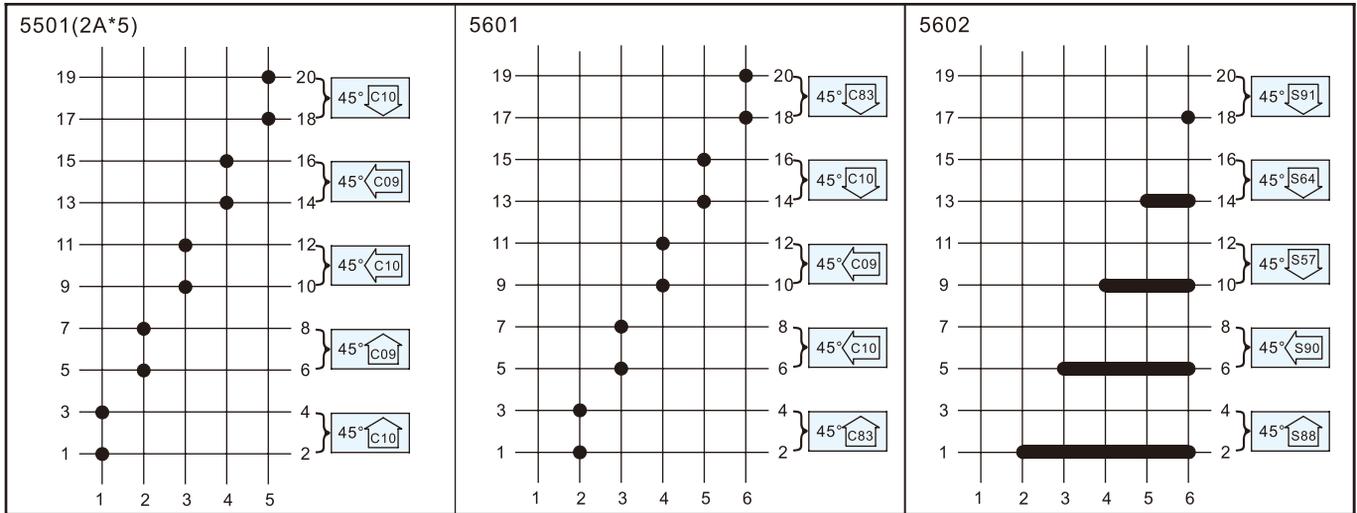
tend CAM SWITCH(48mm AND 64mm SERIES) TCS



Five stacks

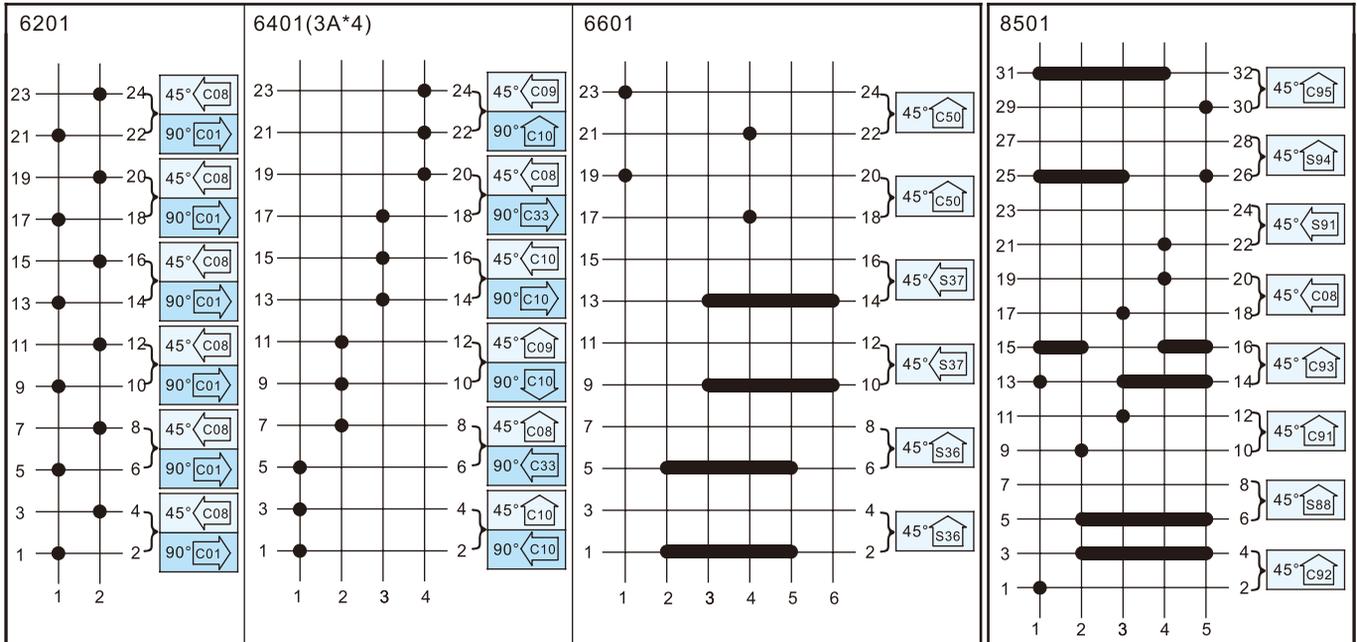


tend CAM SWITCH(48mm AND 64mm SERIES) TCS



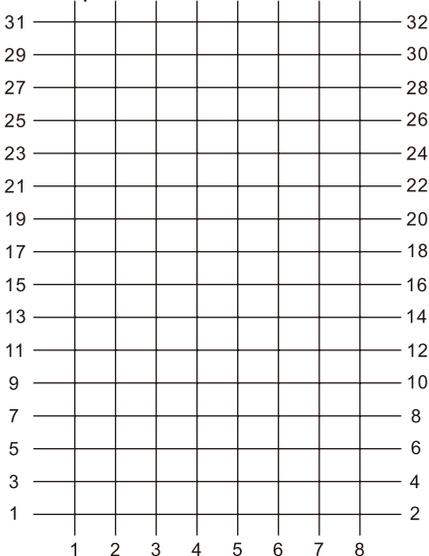
Six stacks

八層



Order form for special contacts.

● If customer has special contact requirement, please copy the following blank contact diagram and mark the required contacts.



Size	<input type="checkbox"/> 2 (Ø22/Ø25mm)
	<input type="checkbox"/> 3 (Ø30mm)
	<input type="checkbox"/> 4 (48*48mm)
	<input type="checkbox"/> 5 (48*60mm)
	<input type="checkbox"/> 6 (64*64mm)
	<input type="checkbox"/> 7 (64*80mm)
	Handle
<input type="checkbox"/> L (Long handle)	
<input type="checkbox"/> O (Aniseed handle)	
<input type="checkbox"/> K (Key)	
Position	<input type="checkbox"/> 2~8 Positions
Turn angle	<input type="checkbox"/> 4 (45°)
	<input type="checkbox"/> 9 (90°)

Plate designation	<input type="text"/> See page TA23
Long plate designation	<input type="text"/> See page TA22
Capacity	<input type="checkbox"/> 1 (10 A)
	<input type="checkbox"/> 2 (16 A)
	<input type="checkbox"/> 3 (25 A)
Return	<input type="checkbox"/> YES
	<input type="checkbox"/> NO
Action	
Piece	<input type="text"/> PCS.

tend CAM SWITCH(Ø22/Ø25/Ø30 SERIES)

TCS

FEATURES

- The upper and lower bases of 22, 25 and 30 series can be push-button assembled or disassembled as per our patent Upper base fixed base and contact are three detachable parts
- Unique modular design of contact blocks keeps internal parts from falling apart when contact blocks are disassembled or replaced.
- Can assemble or disassemble contact blocks to suit for various models yet without risking excessive stock.
- Contact blocks can be added click-on easily, no need to unscrew.
- Connecting screws are fastened from the back rather than normally from the side. It makes wiring easier.
- A special design to keep connection terminals and screws in the contact blocks can prevent users from electric shocking.
- All the connecting pieces of terminals are covered to avoid from electric shocking.
- Capacities are different by colors of contact blocks: blue for 10A; gray for 16A and black for 25A.



SPECIFICATIONS

Voltage	Capacity		AC-3(kw)		AC-23A(kw)		AC-21A I _u =I _{th}	Rated roltage	AC-3(HP)		Motor load
	3 ph.	1 ph.	3 ph.	1 ph.	3 ph.	1 ph.			3 ph.	1 ph.	
220V~240V	1.5	0.55	1.8	0.75	10A	10A	10A	120V	0.75	0.33	10A
380V~440V	2.2	0.75	3	1.1				240V	1	0.75	
660V~690V	2.2	0.75	3	1.1							
220V~240V	3	1.5	4	2.2	16A	16A	16A	120V	1.5	0.5	16A
380V~440V	5.5	2.2	7	3				240V	3	1.5	
660V~690V	5.5	2.2	7	3							
220V~240V	4	3	5.5	3	25A	25A	25A	120V	3	1.5	25A
380V~440V	7.5	3.7	11	5.5				240V	7.5	3	
660V~690V	7.5	3.7	11	5.5				480V	10	5	

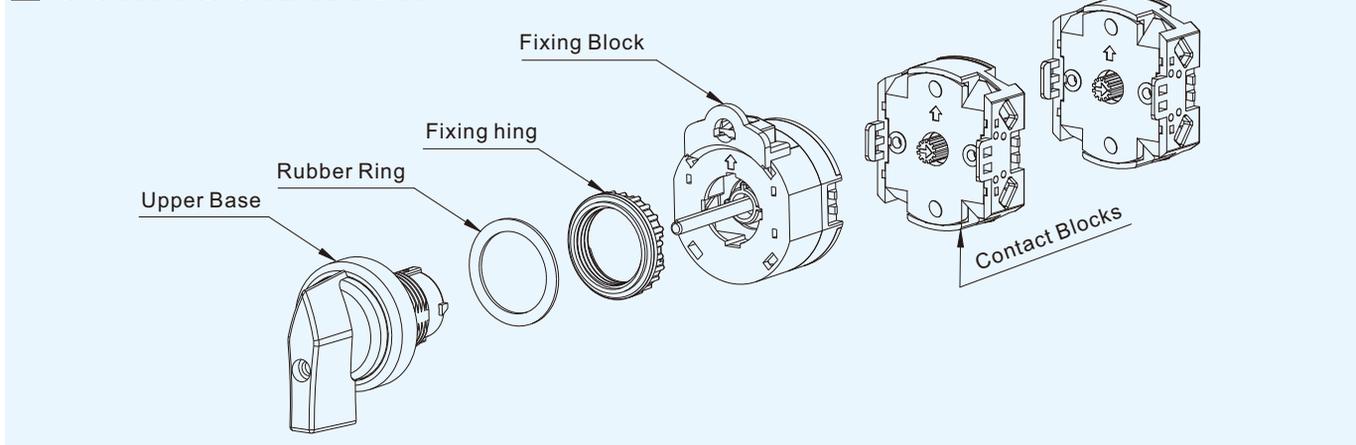
IEC 60947-3, EN 60947-3

VDE 0660 part 107

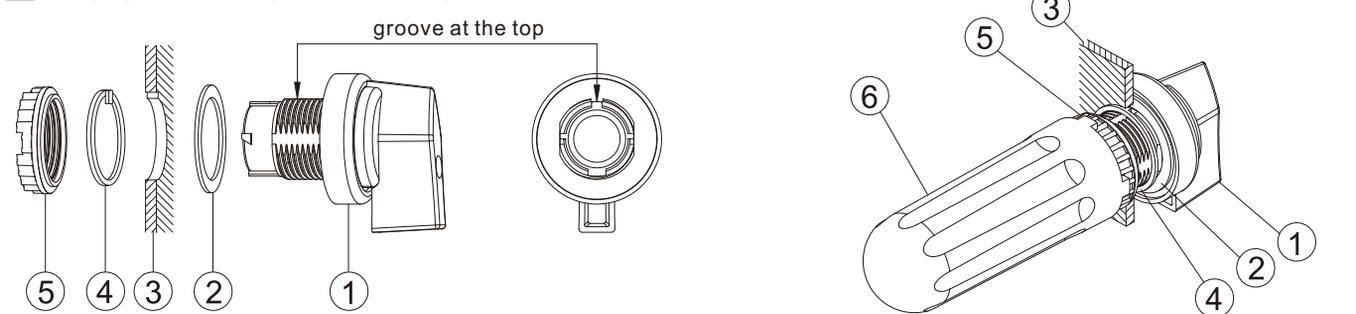
HD A300

UL 77B7

CONFIGURATION



MOUNTING METHOD



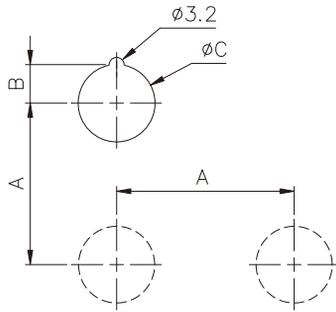
①	②	③	④	⑤	⑥
Upper Base	Rubber Ring	Panel	Stop ring	Fixing ring	Fixing tool

- Install the operating head and rubber ring through the front panel and tighten fixing ring with fixing tool.

tend CAM SWITCH(Ø22/Ø25/Ø30 SERIES)

TCS

■ PANEL CUT-OUT

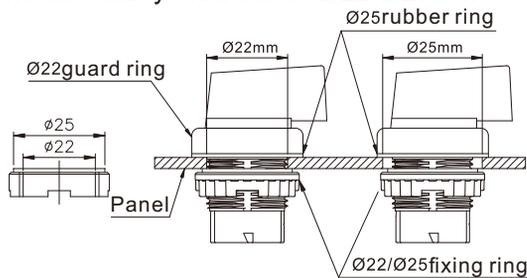


DIMENSIONS(mm)

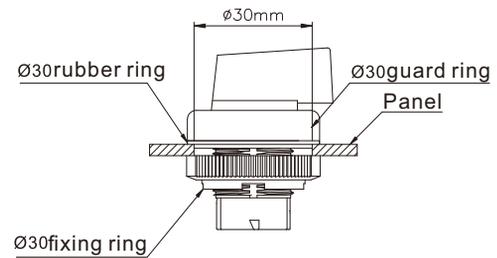
Designation	Ø22	Ø25	Ø30
A	60 min		
B	11.2	12.7	15.2
C	22.4	25.4	30.4

■ Ø22mm/Ø25mm series are the same dimensions with common fixing ring.

● The assembly method for Ø22/Ø25 series

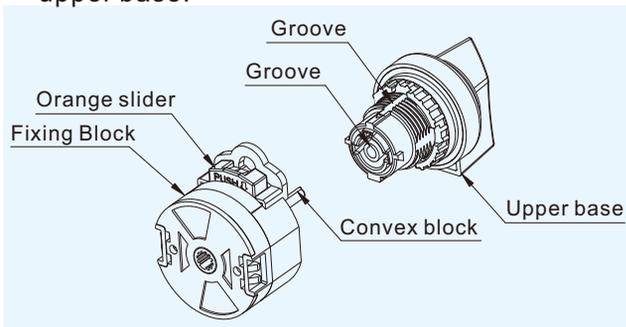


● The assembly method for Ø30 series



■ Assembly instruction

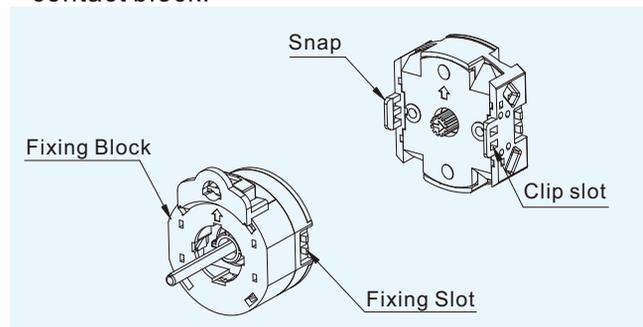
● Assembly and disassembly of fixing block with upper base.



Assembly: Align the hole on top of fixing block with groove on the upper base and push them together.

Disassembly: Place downward by hand or use flat screw-driver to push down the orange button thru the hole on top of the fixing block.

● Assembly and disassembly of fixing block with contact block.



Assembly: Align the fixing slot on the fixing block to clip slot on the contact block.

Disassembly: Use flat screw-driver toward fixing slot to lift up clip and snap for disassembly.

■ Endosure contact

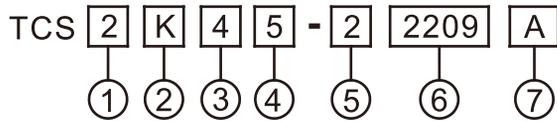
<p>TCS-2H</p>	<p>TCS-2L</p>	<p>TCS-2R</p>
<p>TCS-3L</p>	<p>TCS-3R</p>	<p>● The middle terminals of TCS-3L/TCS-3R can be snapped and turned into over passing terminals.</p> <p>Breaking</p>

tend CAM SWITCH(Ø22/Ø25/Ø30 SERIES)

TCS

Before placing an order for finished products, please refer to the explanation of model numbers shown in this page.

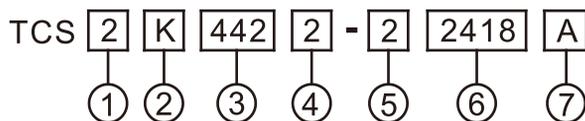
MODEL DESIGNATION(2~3 positions)



Designation	Signal	Description
1.Mounting Hole	2	Ø22mm/Ø25mm
	3	Ø30mm
2.Type	S	Knob operator
	K	Key operator
	Z	Key operator(zinc alloy)
3.Position	1	 45° 2-Position
	2	 90° 2-Position
	3	 45° 2-Position spring return from right
	4	 45° 3-Position
	5	 90° 3-Position
	6	 45° 3-Position spring return from right and left

4.Key Withdrawable (Only key operator)	1		0,1 Key with-drawable		
	2		0 Key with-drawable		
	3		1 Key with-drawable		
	5.Capacity	1	10A		
		2	16A		
		3	25A		
		6.Wiring diagram	See page TA24~TA35		
7.Key number	A	3313	E	3131	
	B	1313	F	3133	
	C	1331	G	3212	
	D	3113	H	3331	

MODEL DESIGNATION(4~8 positions)

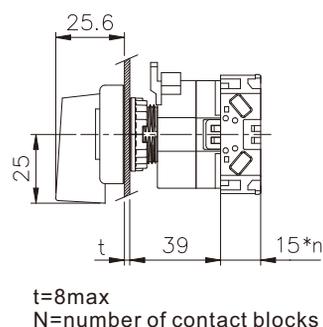


Designation	Signal	Description
1.Mounting Hole	2	Ø22mm/Ø25mm
	3	Ø30mm
2.Type	S	Knob operator
	K	Key operator

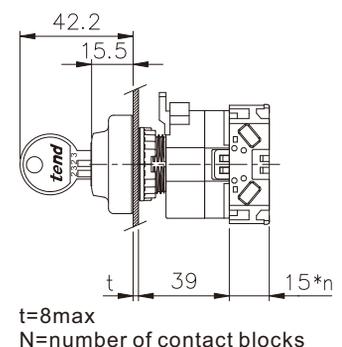
3.position, turn angle plate number	440 842	See page TA23		
4.Key Withdrawable (Only key operator)	1	Key with-drawable		
	2	0 Key with-drawable		
5.Capacity	1	10A		
	2	16A		
	3	25A		
6.Wiring diagram	See page TA24~TA35			
7.Key number	A	3313	E	3131
	B	1313	F	3133
	C	1331	G	3212
	D	3113	H	3331

DIMENSIONS

TCS2S□□-□□□



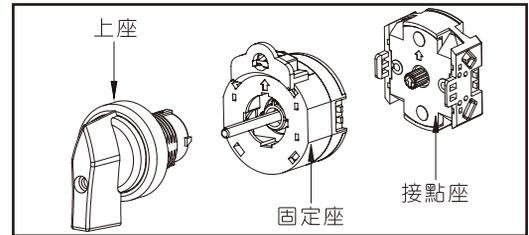
TCS2K□□-□□□



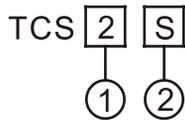
tend CAM SWITCH(Ø22/Ø25/Ø30 SERIES)

TCS

As to the order of components for DIY assembly, please refer to the following assembly illustration diagram.



Upper base designation

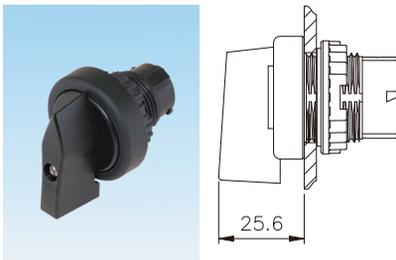


Designation	Signal	Description
1. Mounting Hole	2	Ø22/Ø25
	3	Ø30

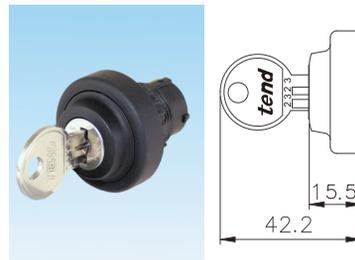
2. Handle	S	Short handle
	K	Key
	Z	Key (zinc alloy)

DIMENSIONS

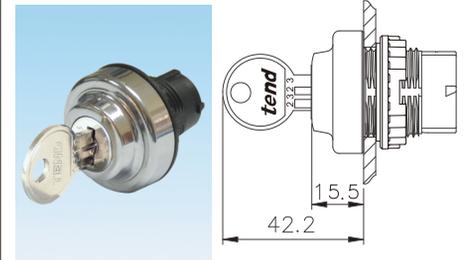
TCS2S、TCS3S



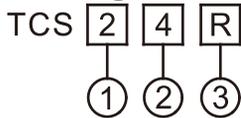
TCS2K、TCS3K



TCS2Z、TCS3Z

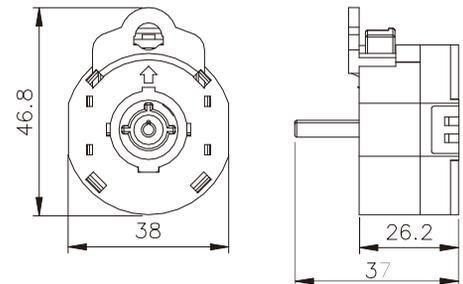


Fixing block designation DIMENSIONS



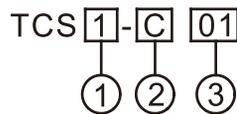
TCS □ □ □

Designation	Signal	Description
1. Position	2~8	2~8 Position
2. Turn angle	4	45°
	9	90°
3. Operation (45°2 position, 3 position only)	None	Hold
	R	Spring return



● 22mm、25mm、30mm share base.

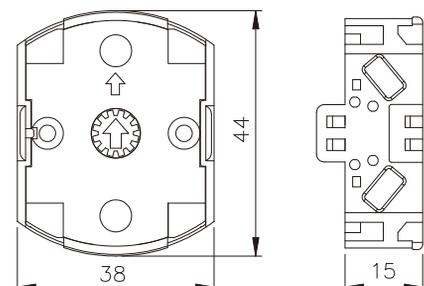
Contact block designation DIMENSIONS



TCS □ -C01~CA1

TCS □ -S01~SA1

Designation	Signal	Description
1. Capacity	1	10A
	2	16A
	3	25A
2. No. of Contacts Fitted	S	Single-point contact
	C	Double-point contact
3. Contact base number	C01 CA1	See page TA22~TA33



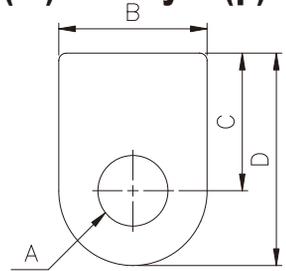
tend CAM SWITCH(Ø22/Ø25/Ø30 SERIES)

TCS

■ Ø22/Ø25/Ø30 legend plates for operating devices, aluminum(m) or acrylic(p)

TN22P- (Acrylic 22) TN22M- (22 Aluminum)
 TN25P- (Acrylic 25) TN25M- (25 Aluminum)
 TN30P- (Acrylic 30) TN30M- (30 Aluminum)

	A	B	C	D
TN22P	Ø22.3	41	32	52.5
TN22M	Ø22.2	31	26.7	42
TN25P	Ø25.5	41	32	52.5
TN25M	Ø24.8	31	26.7	42
TN30P	Ø30.5	41	32	52.5
TN30M	Ø30.2	38.3	32.7	51.9



13	14	15	16	17	18	19	20
OFF ON	ON ON	ON OFF ON	FWD REV	FWD OFF REV	AUTO MANU	AUTO OFF MANU	STOP START

21	22	00
MANU OFF AUTO	1 0 2	

71	72	73	74				
○ I	I II	I ○ II	I II III				

tend MULTI-OFF OF THE SWITCH

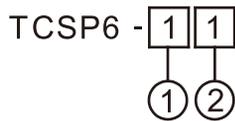
TCSP

CHARACTERISTICS

- Use out of the need to handle before switching window in the ON position for the red, in the OFF position.
- The switches were 45 degrees-date, TCS64 assembly aperture and the same panel(see page Ta20) Holes pacing 48mm*48mm.
- Block capacity to tap the color distinction 10A of blue, gray 16A, 25A black.

MODEL

DESIGNATION



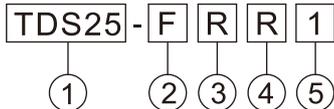
Designation	Signal	Description
1.Capacity	1	10A
	2	16A
	3	25A
2.Contact map	1	1a 0 1a
	2	1a 0 1a Residue Report

EXTERIOR DIMENSIONS, AND THE PANEL PLANS TAP

Feature

- These main switches can be divided into 3P and 4P series, each of which has 6 types ranging from 16A to 80A according to rated current.
- Installation includes fixed way(fixed on the operating panel) and detached way(contact fixed in the control box whereas upper base and handles fixed on the tope cover of control box).
- Detachable type can be in installed on TBR-N (standard aluminium rail-wide rail).
- There are two types of switching handles :standard and round. Standard is colored red/yellow or black/ silver while round ones in red/yellow or black/gray.

Model designation



Designation	Signal	Description
1.Capacity	TDS16	16A(3P)
	TDS25	25A(3P)
	TDS33	33A(3P)
	TDS40	40A(3P)
	TDS66	66A(3P)
	TDS80	80A(3P)
	TDS416	16A(4P)
	TDS425	25A(4P)
	TDS433	33A(4P)
	TDS440	40A(4P)
	TDS466	66A(4P)
	TDS480	80A(4P)
	2.Installation way	F
B		Detched way
E		Control stiaions
3.Handle	S	Standard handle
	R	Rotundity handle
4.Color	B	Black / silver gray
	R	Red/yellow
5.Transmission rod length (only detached way)	None	100mm
	1	150mm
	2	250mm
	3	300mm

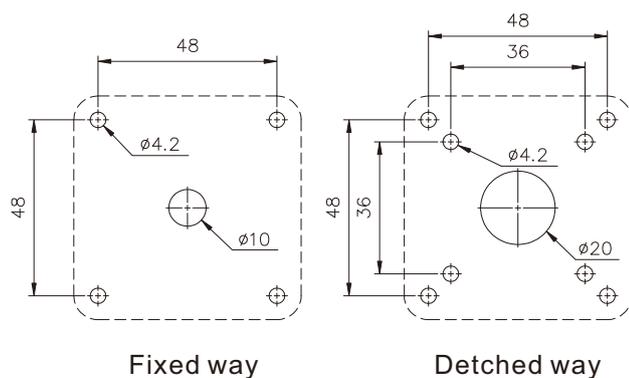
Specifications

Voltage	Type	TDS16 TDS416	TDS25 TDS425	TDS33 TDS433	TDS40 TDS440	TDS66 TDS466	TDS80 TDS480
	AC-3 (kw)	220V~240V	2.2	4.0	5.5	7.5	11.0
380V~440V		3.7	5.5	7.5	11.0	18.5	22.0
660V~690V		3.7	5.5	7.5	15.0	22.0	30.0
AC-23 (kw)	220V~240V	3.0	5.5	5.5	7.5	11.0	18.5
	380V~440V	5.5	7.5	11.5	15.0	22.0	30.0
	600V~690V	5.5	7.5	11.5	18.5	30.0	37.0
AC-21		16A	25A	33A	40A	66A	80A

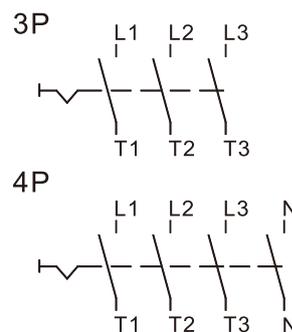
Voltage	Type	TDS16 TDS416	TDS25 TDS425	TDS33 TDS433	TDS40 TDS440	TDS66 TDS466	TDS80 TDS480
	AC-3 (hp)	110V~120V	1	1.5	2	3	5
220V~240V		2	3	5	7.5	10	20
380V~440V		3	5	10	15	20	40
500V~600V		3	5	10	15	20	50

3 phase.3 poles

Plate dimensions

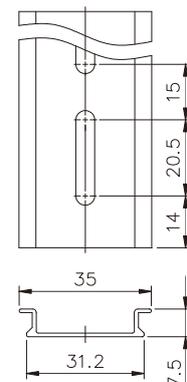


Wiring diagram



TBR-N(Dimenditions)

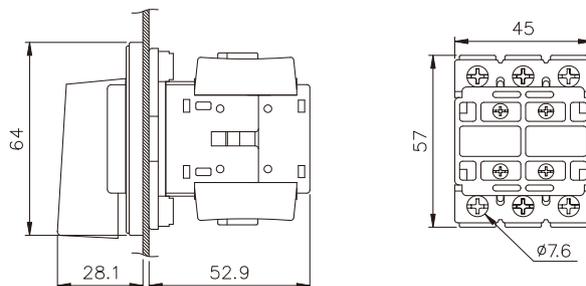
(used on detached way)



■ Dimensions

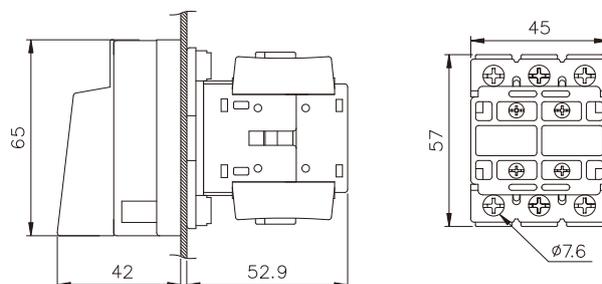
TDS16/25/33-FSB

TDS16/25/33-FSR



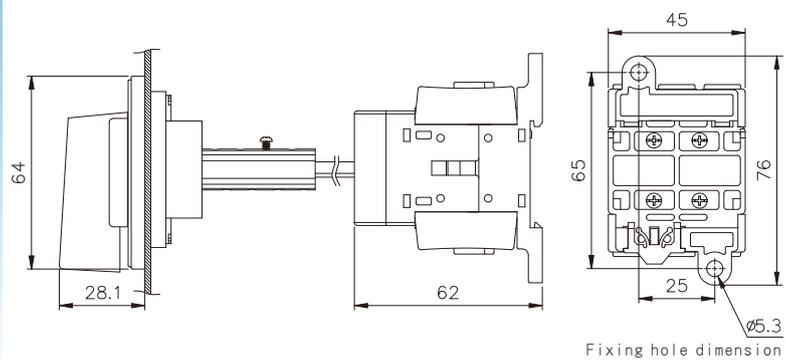
TDS16/25/33-FRB

TDS16/25/33-FRR



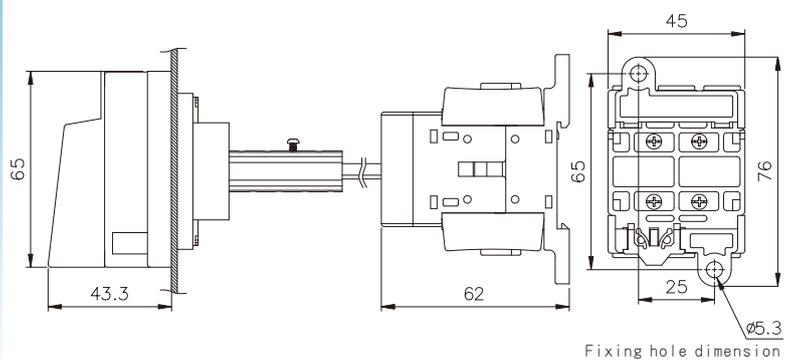
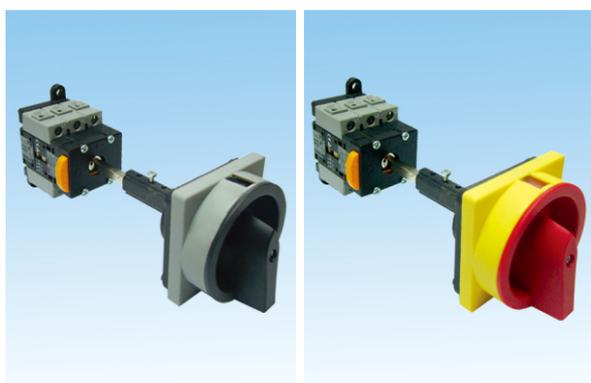
TDS16/25/33-BSB

TDS16/25/33-BSR



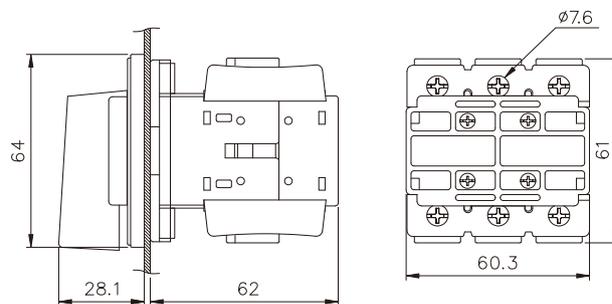
TDS16/25/33-BRB

TDS16/25/33-BRR



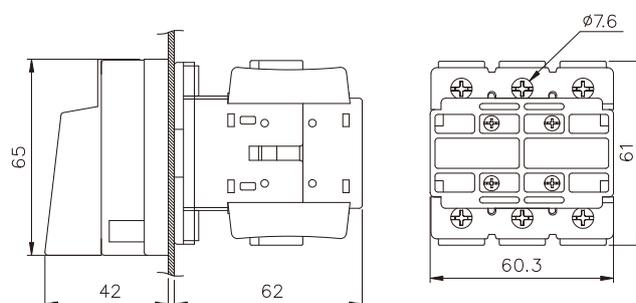
TDS40/66/80-FSB

TDS40/66/80-FSR



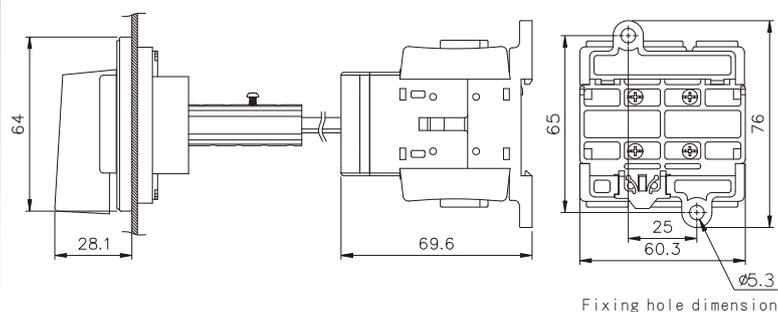
TDS40/66/80-FRB

TDS40/66/80-FRR



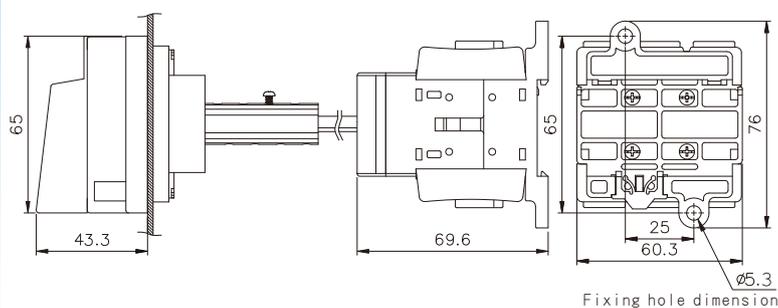
TDS40/66/80-BSB

TDS40/66/80-BSR



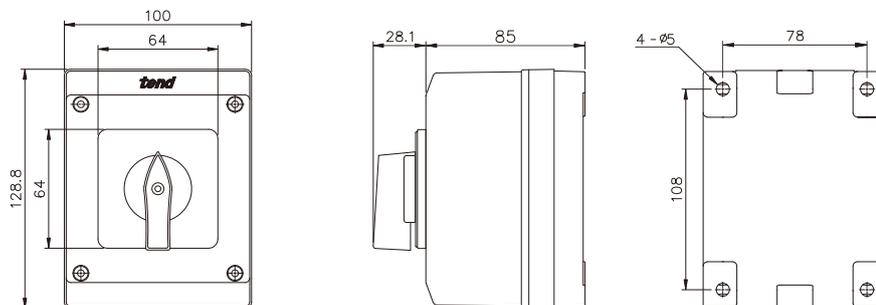
TDS40/66/80-BRB

TDS40/66/80-BRR

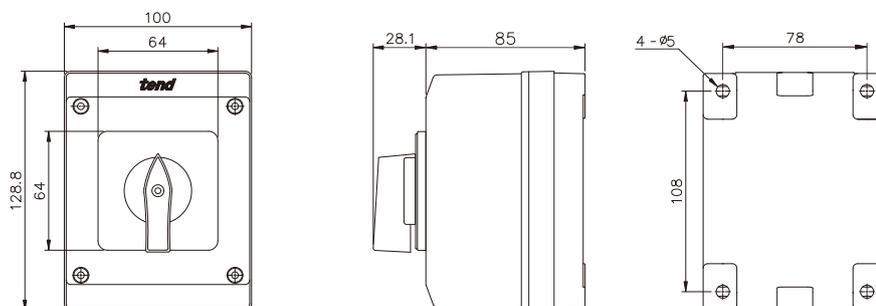


Control stations

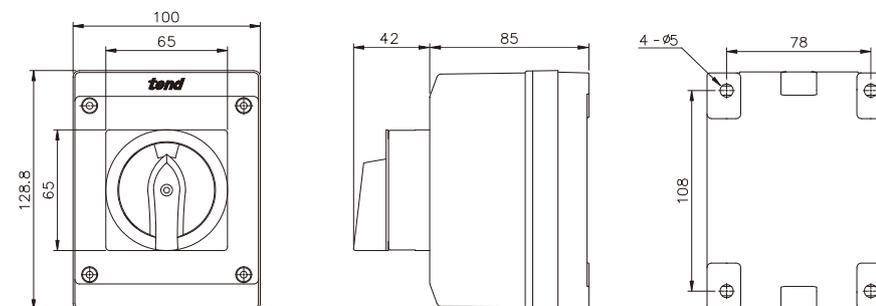
TDS□-ESB



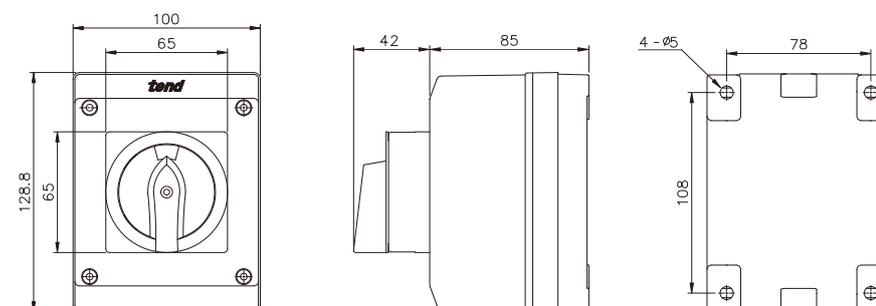
TDS□-ESR



TDS□-ERB

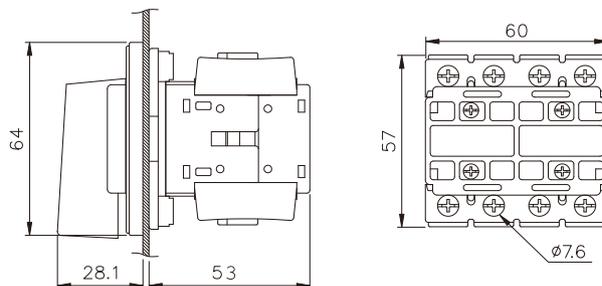


TDS□-ERR

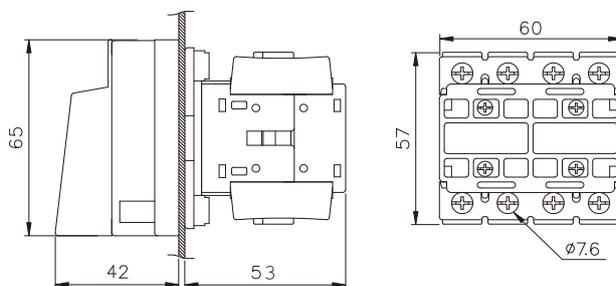


■ Dimensions

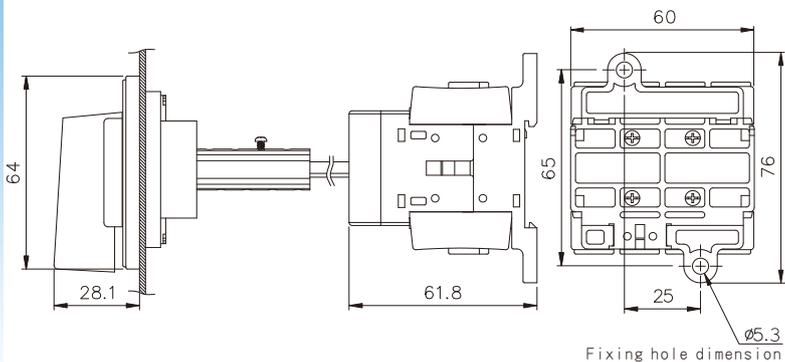
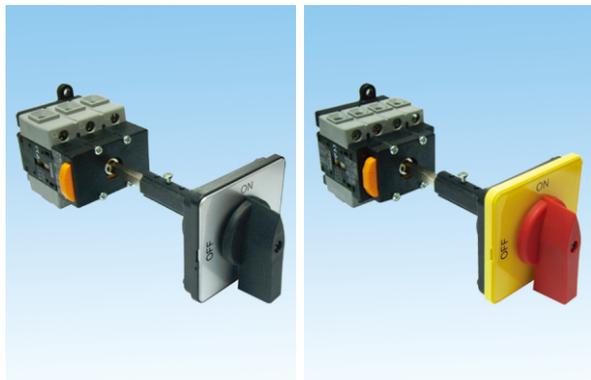
TDS416/425/433/440-FSB TDS416/425/433/440-FSR



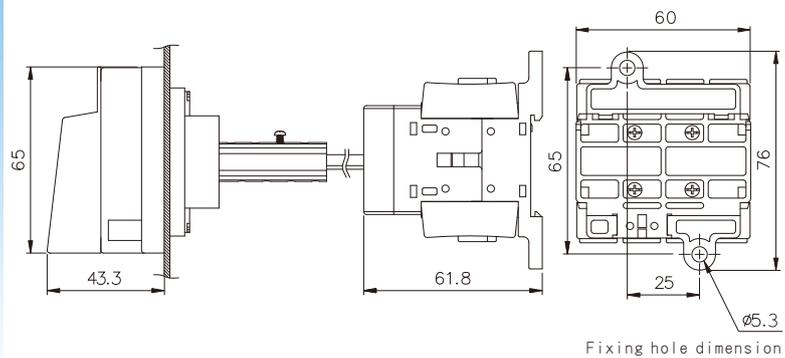
TDS416/425/433/440-FRB TDS416/425/433/440-FRR



TDS416/425/433/440-BSB TDS416/425/433/440-BSR

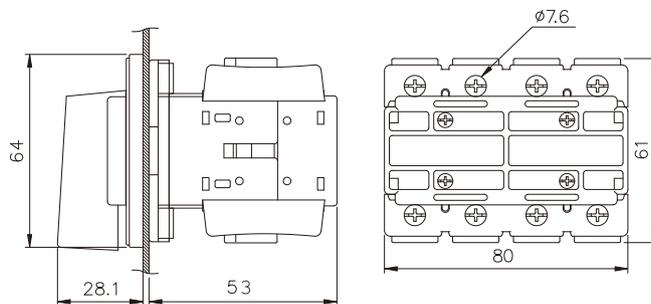


TDS416/425/433/440-BRB TDS416/425/433/440-BRR



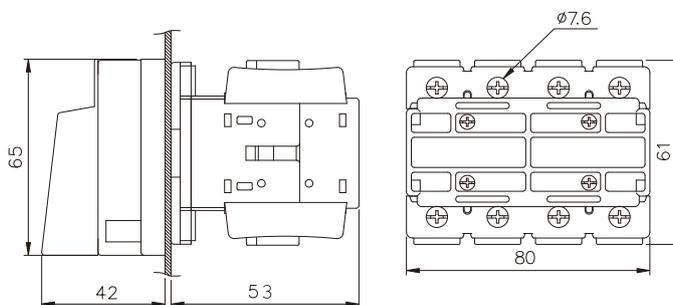
TDS466/480-FSB

TDS466/480-FSR



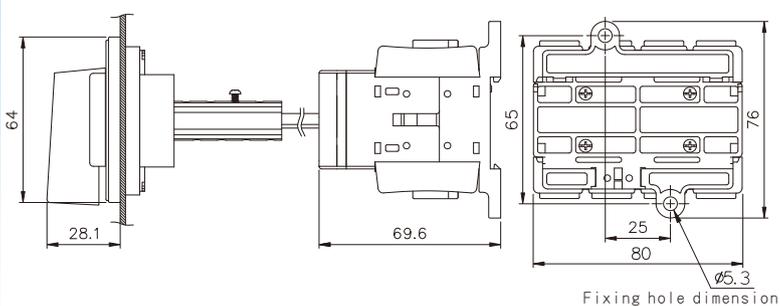
TDS466/480-FRB

TDS466/480-FRR



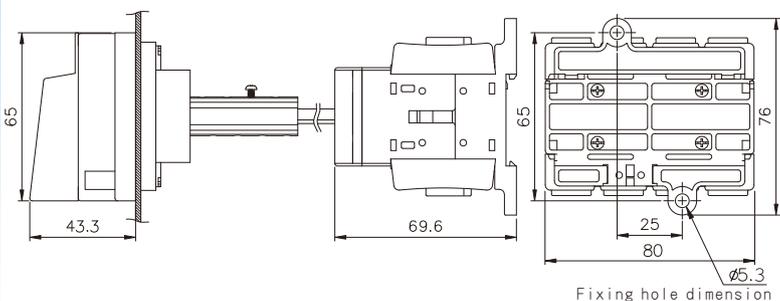
TDS466/480-BSB

TDS466/480-BSR



TDS466/480-BRB

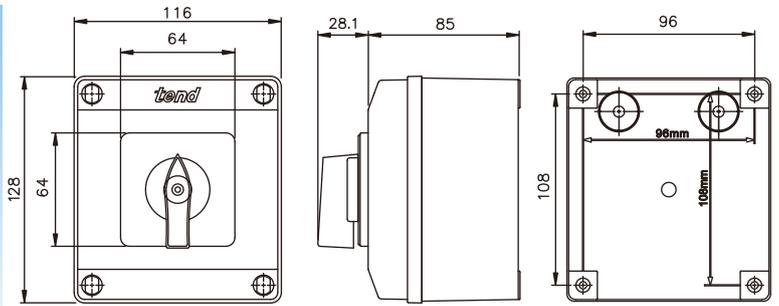
TDS466/480-BRR



Control stations

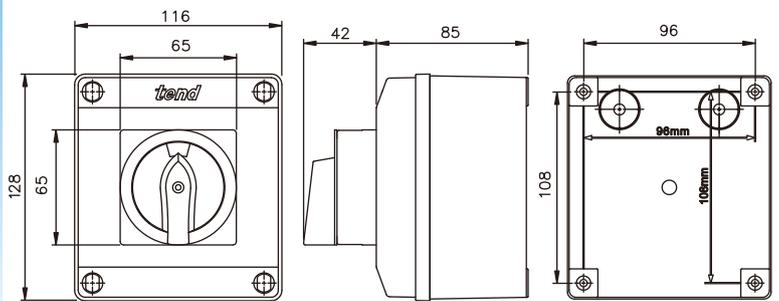
TDS4□-ESB

TDS4□-ESR



TDS4□-ERB

TDS4□-ERR

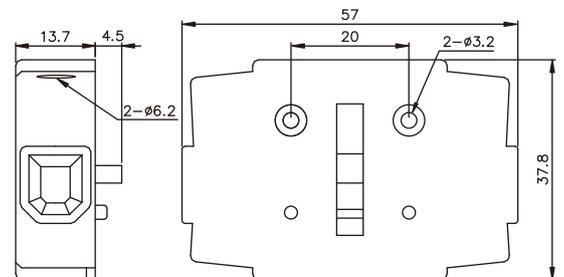


Reinforcing Contact Block & Cover

TDS16/33-AF/AB□ □ : blank=1P;2=2P(Single Side)



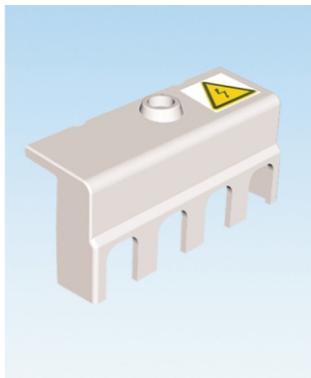
Designation	Description
TDS16-AF□	16A Fixed Reinforcing Contact Block
TDS33-AF□	33A Fixed Reinforcing Contact Block
TDS16-AB□	16A Detachable Reinforcing Contact Block
TDS33-AB□	33A Detachable Reinforcing Contact Block



1NO

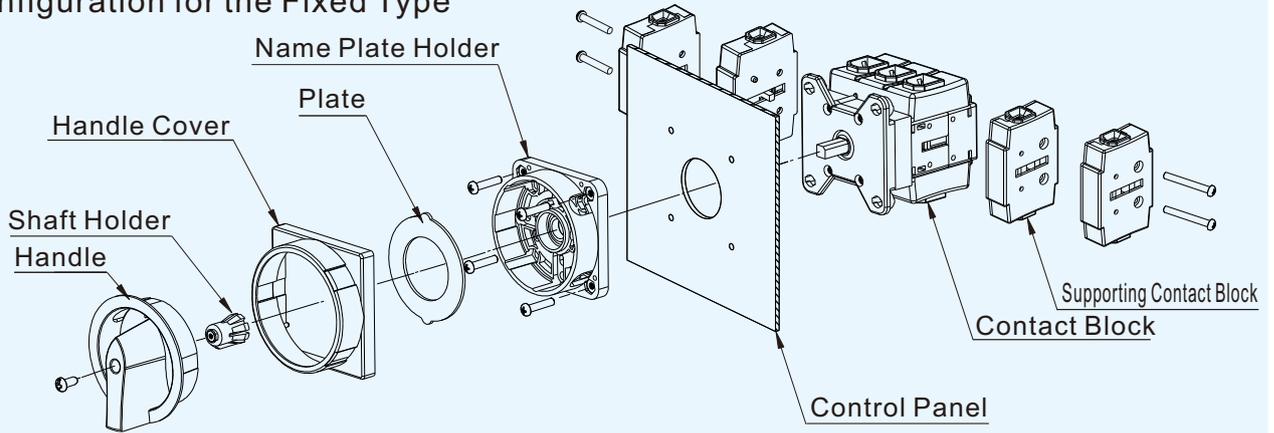
- Can be used as the main contact block with the same voltage, or as an reinforcing contact block with different voltage.
- A maximum of two sets of reinforcing contact blocks can be attached on one side.

TDS40/80-C4

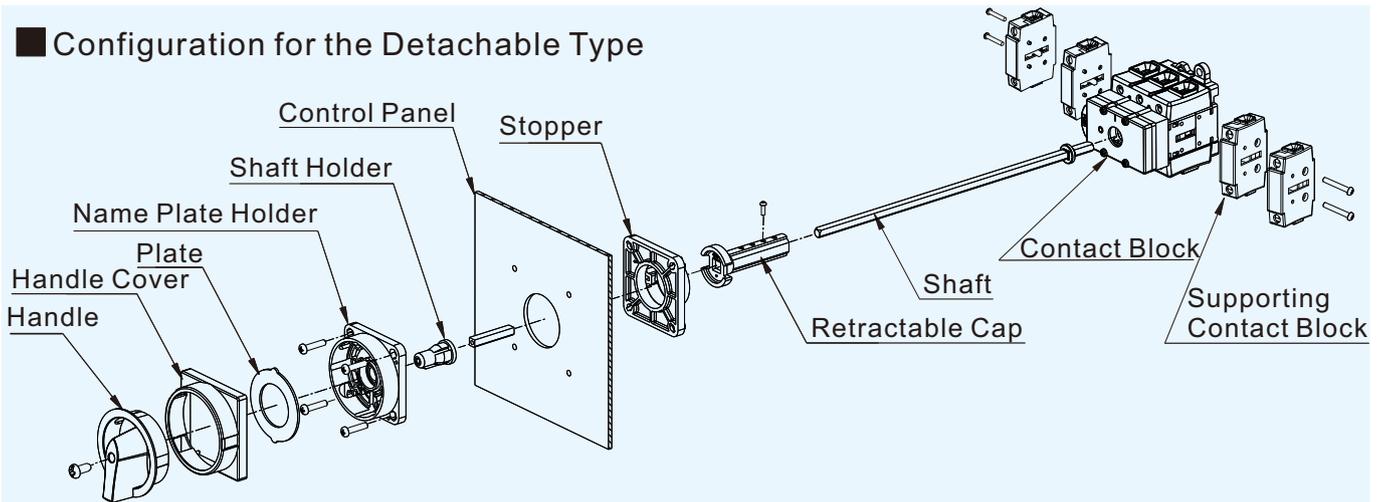


Designation	Description
TDS40-C4	40A-4P Cover (16A~40A)
TDS80-C4	80A-4P Cover (66A~80A)

■ Configuration for the Fixed Type

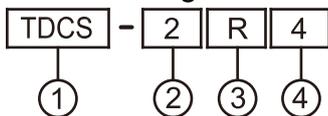


■ Configuration for the Detachable Type



tend GATED SWITCH (MULTI_STAGE)

■ Model designation

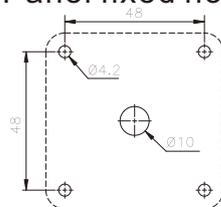


Designation	Signal	Description
1. Mounting Hole	TDCS	GATED SWITCH (MULTI_STAGE)
2. Capacity	1	10A
	2	16A
	3	25A
3. Handle color	R	Red/yellow
	B	Black / silver gray
4. Contact form	2	0 2A
	3	0 3A
	4	0 4A

■ Characteristics

- This series of circular handle only 90° Sec type, handle red / yellow and black / gray two options.
- Contact patterns can be divided into two groups tap (0 2A), the contact group 3 tap (0 3A) and four contact group tap (0 4A)
- Switching according to current capacity is divided into 10A, 16A, 25A, a total of three, specifications please refer to TA41 page.
- Block capacity to tap the color distinction 10A of blue, gray 16A, 25A black.

■ Panel fixed hole



■ Contact Figure

