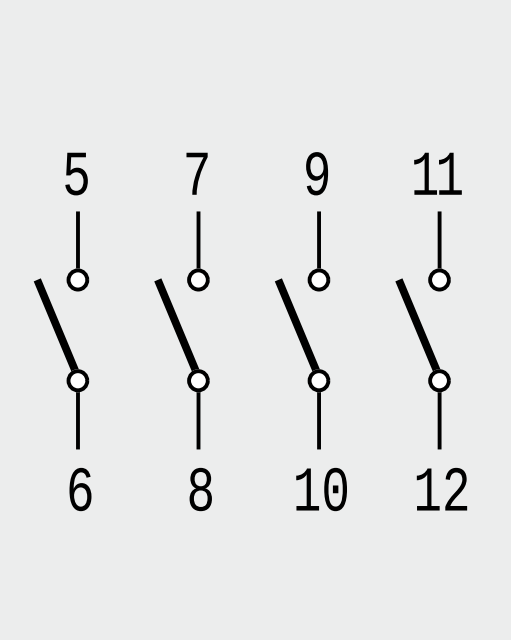
Kraus & Naimer



Switch Wiring Diagrams

POCKETBOOK

Kraus & Naimer

Switch Wiring Diagrams

POCKETBOOK

This pocketbook has been compiled to assist our customers in the selection of our most commonly used cam switches. It contains Kraus & Naimer standard contact arrangements for C-, CA-, CG- and CH-series cam switches.

For details on special or non-standard switches, please contact our local sales office.

Contents

ON/OFF Switches 0-1		Code-no.	Stages C/CG/CH	Page
60° Switching	1 pole	A200	1	32
	2 pole	A201	1	32
	3 pole	A202	2	32
	4 pole	A203	2	32
	5 pole	WAA341	3	56
	6 pole	A342	3	56
	7 pole	A343	4	56
	8 pole	A344	4	56
	9 pole	WAA345	5	56
	10 pole	A346	5	56
	11 pole	WAA347	6	56
	12 pole	A348	6	56
90° Switching	1 pole	A290	1	45
	2 pole	A291	1	45
	3 pole	A292	2	45
	4 pole	A324	2	54
4. Pole preclose 30°	4 pole	A293	2	45
	5 pole	A325	3	54
	6 pole	A326	3	54
30° Switching with spring return	1 pole	A204	1	32
	2 pole	A205	1	32
	3 pole	WAA206	2	32
	4 pole	WAA207	2	32
Double-throw Switches without „OFF" Positions (1-2) 60° Switching	1 pole	A220	1	36
	2 pole	A221	2	36
	3 pole	A222	3	36
	4 pole	A223	4	36
	5 pole	A369	5	58
	6 pole	A370	6	58
	7 pole	A371	7	58
	8 pole	A372	8	58
	9 pole	WAA373	9	58
	10 pole	WAA374	10	58
	11 pole	WAA375	11	58
	12 pole	WAA376	12	58

Contents

Double-throw Switches		Code-no.	Stages C/CG/CH	Page
without „OFF“ (1-2)	1 pole	A720	1	83
with electrically	2 pole	A721	2	83
isolated contacts	3 pole	A722	3	83
	4 pole	A723	4	83
without „OFF“	1 pole	A295	1	47
with spring return	2 pole	A296	2	47
30° Switching	3 pole	WAA297	3	47
with electrically isolated contacts	1 pole	A795	1	86
with „OFF“	1 pole	A210	1	33
Positions (1-0-2)	2 pole	A211	2	33
60° Switching	3 pole	A212	3	33
	4 pole	A213	4	33
	5 pole	A361	5	57
	6 pole	A362	6	57
	7 pole	WAA363	7	57
	8 pole	WAA364	8	57
with electrically	1 pole	A710	1	81
isolated contacts	2 pole	A711	2	81
	3 pole	A712	3	81
	4 pole	A713	4	81
Positions (1-0-2)	1 pole	A218	1	35
90° Switching	2 pole	A219	2	35
	3 pole	WAA299	3	48
KG-, KH-, KF-Serie	3 pole	K900		88
1 Pol preclose 30°	4 pole	WAA294	4	44
KG-, KH-, KF-Serie, 4. pole preclose 30°	4 pole	K950		88
Positions (1-0-2)	1 pole	A214	1	34
30° with spring return	2 pole	A215	2	34
to center	3 pole	A216	3	34

Contents

		Code-no.	Stages C/CG/CH	Page
Double-throw Switches				
with electrically isolated contacts	1 pole	A714	1	82
	2 pole	A715	2	82
Positions (1-0-2) with spring return from left to center from 1 to 0	1 pole	A320	1	53
	2 pole	A321	3	52
	3 pole	A322	2	53
Multi-step Switches without „OFF“ position				
1 pole	3 Step	60°	A230	2	38
	4 Step	60°	A231	2	38
	5 Step	60°	A232	3	38
	6 Step	60°	A233	3	38
	7 Step	45°	WAA234	4	38
	8 Step	45°	WAA236	4	38
	9 Step	30°	WAA236	5	38
	10 Step	30°	WAA237	5	38
	11 Step	30°	WAA239	6	38
	12 Step	30°	WAA239	6	38
2 pole	3 Step	60°	A250	3	41
	4 Step	50°	A251	4	41
	5 Step	60°	A252	5	41
	6 Step	60°	WAA253	6	41
	7 Step	45°	WAA254	7	41
	8 Step	45°	WAA255	8	41
3 pole	3 Step	60°	A270	5	43
	4 Step	60°	A271	6	43
	5 Step	60°	WAA272	8	43
	6 Step	60°	WAA273	9	43
	7 Step	45°	WAA274	11	43
	8 Step	45°	WAA275	12	43
4 pole	3 Step	60°	A476	6	71
	4 Step	60°	A477	8	71
	5 Step	60°	WAA478	10	71

Contents

			Code-no.	Stages C/CG/CH	Page
Multi-step Switches without „OFF“ position					
5 pole	3 Step	60°	WAA484	8	73
	4 Step	60°	WAA485	10	73
6 pole	3 Step	60°	WAA489	9	75
	4 Step	60°	WAA490	12	75
and electrically isolated contacts					
1 pole	3 Step	60°	A730	2	82
	4 Step	60°	A731	2	85
2 pole	3 Step	60°	A750	3	84
	4 Step	60°	A751	4	85
Multi-step Switches with „OFF“ position					
1 pole	2 Step	60°	A240	1	38
	3 Step	45°	A242	2	39
	4 Step	30°	A242	2	39
	5 Step	30°	A243	3	39
	6 Step	30°	A244	3	39
	7 Step	30°	WAA245	4	39
	8 Step	30°	WAA246	4	39
	9 Step	30°	WAA247	5	39
	10 Step	30°	WAA248	5	39
	11 Step	30°	WAA249	6	39
2 pole	2 Step	50°	A260	2	42
	3 Step	45°	A261	3	42
	4 Step	30°	WAA262	4	42
	5 Step	30°	WAA263	5	42
	6 Step	30°	WAA264	6	42
	7 Step	30°	WAA265	7	42
3 pole	2 Step	60°	A280	3	44
	3 Step	45°	A281	5	44
	4 Step	30°	WAA282	6	44
	5 Step	30°	WAA283	8	44
	6 Step	30°	WAA284	9	44

Contents

			Code-no.	Stages C/CG/CH	Page
Multi-step Switches with „OFF“ position					
4 pole	2 Step	60°	WAA480	4	72
	3 Step	45°	WAA481	6	72
	4 Step	30°	WAA482	8	72
5 pole	2 Step	60°	WAA486	5	74
	3 Step	45°	WAA487	8	74
6 pole	2 Step	60°	WAA491	6	75
General Application Switches					
2 Gang	1 pole	60°	A310	1	49
Switching sequence:	2 pole	60°	A312	2	50
0, A, A+B	3 pole	60°	WAA314	3	51
3 Gang	1 pole	30°	A311	2	49
Switching sequence:	2 pole	30°	WAA313	3	50
0, A, A+B, A+B+C	3 pole	30°	WAA315	5	52
General Application Series - Switching					
2 Gang	1 pole	30°	WAA330	1	55
Switching sequence:	2 pole	30°	WAA331	2	55
0, A, B, A+B	3 pole	30°	WAA332	3	55
Coding Switches/Binary Code					
0 up to 7		30°	A540	2	76
0 up to 7 complement		45°	WAA541	2	76
0 up to 7+complement		45°	WAA542	3	77
0 up to 11		30°	A543	2	77
0 up to 11+complement		30°	WAA545	4	78
Coding Switchtes/BCD-Code					
0 up to 9		30°	A550	2	78
0 up to 9 complement		30°	WAA551	2	79
0 up to 9+complement		30°	WAA552	4	79

Contents

		Code-no.	Stages C/CG/CH	Page
Voltmeter-Double-throw Switches				
without „OFF“				
3 phase 3 wire	45°	A023	2	19
3 phase 3 wire and phase to neutral	45°	A025	3	19
with „OFF“				
3 phase 3 wire	45°	A004	2	14
3 phase to neutral	45°	WAA005	2	15
3 phase 3 wire and phase to neutral	45°	A007	3	16
2 separate 3 phase with „OFF“	45°	WAA008	4	17
Ammeter-Double-throw Switches				
with „OFF“				
1 pole 3 Current transformers	90°	A048	3	24
2 pole 2 Current transformers	90°	WAA037	3	21
2 pole 3 Current transformers	90°	A038	5	22
without „OFF“				
1 pole 3 Current transformers	90°	WAA017	3	18
1 pole 4 Current transformers	90°	WAA036	4	20
2 pole 4 Current transformers	90°	WAA039	6	23

Contents

			Code-no.	Stages C/CG/CH	Page
Control Switches					
Stop switch	1 pole	30°	WAA174	1	25
Start switch	1 pole	30°	A175	1	25
Stop start switch	1 pole	30°	A176	1	26
	2 pole	30°	WAA183	2	30
Stop start switch with spring return from start to run		90°+30°	A178	1	28
Double-Stop start switch with spring return from start to run		60°+30°	WAA177	2	27
for contactor interlock with spring return from start to run		60°+30°	WAA182	2	30
and electrically isolated contacts					
Stop start switch	1 pole	30°	A789	1	86
Stop start switch with spring return form start to run		90°+30°	A791	1	86
for 2 contactors, Contactor control with spring return to „OFF“		30°	WAA179	3	29
Main Switches 3, 4, 6, 8 pole, with and without auxiliary contacts					87

Contents

		Code-no.	Stages C/CG/CH	Page
Motor Switches				
Motor Reversing Switches				
Position (1-0-2)	2 pole 60°	A400	2	59
	3 pole 60°	A401	3	59
with spring return to „OFF“	3 pole 30°	A228	3	37
Star-delta Switches				
Normal version	60°	A410	4	60
Reversing	45°	WAA413	5	61
with auxiliary contact, closed in „OFF“-Position	60°	WAA416	5	62
For use with contactors	90°	A419	4	62
Motor Control Switches				
Position (0-1-2)	60°	A440	4	64
without „OFF“	60°	A466	4	69
Position (1-0-2)	60°	A441	4	64
Reversing	45°	A442	6	65
for reversing for for use with contactors and	60°	WAA444	5	66
with slip clutch for „OFF“ load use	45°	WAA468	10*	70
Motor Control Switches				
2 speed, 2 winding 0 - A - B, Y or Δ	60°	WAA451	3	67
3 speed, 2 winding 0 - AΔ - BY - AYY	45°	WAA457	6	68
Start and Run Switches				
Split-phase start	90°+30°	A425	2	63
Reversing Split-phase start	60°+30°	WAA426	3	63
Split-phase reversing auto cutout of start field winding	60°	A622	3	80

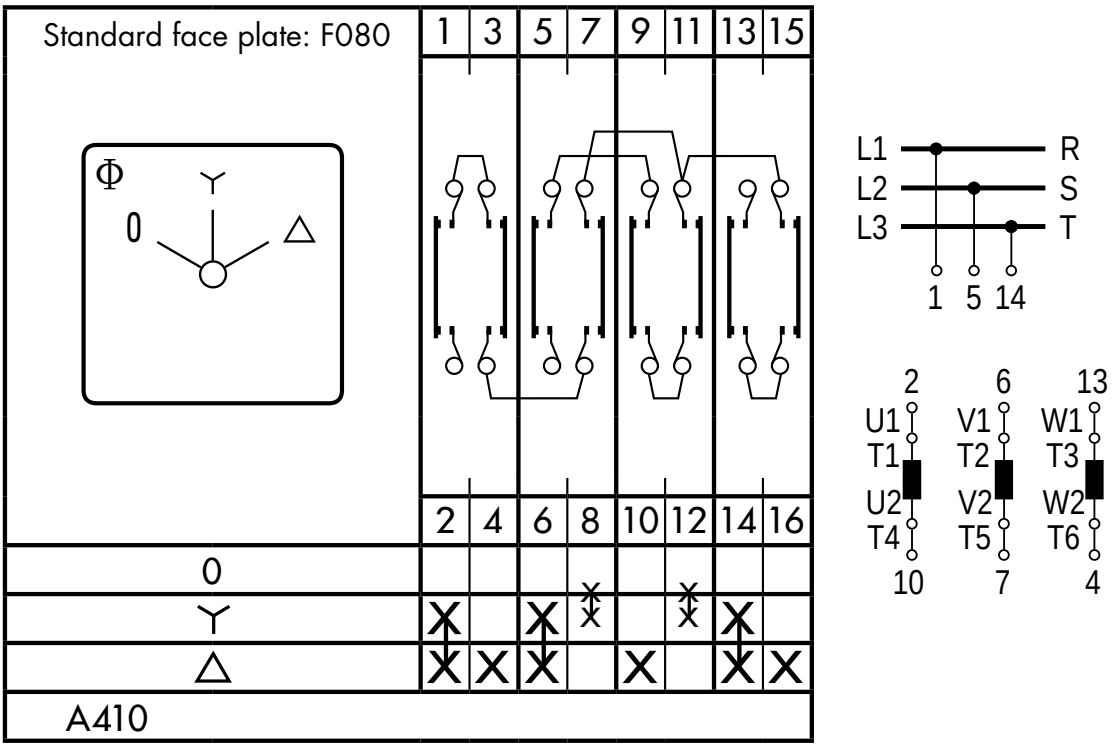
* with slip clutch

Caption

Contactor or Relay	
Thermal Relay	
Motor	M
Coil / Inductance	
Ammeter	A
Voltmeter	V
Earth / Ground	
NO-contact	
NC-contact	
Motor - star circuit	
Motor - delta circuit	
Motor - double star circuit	

Connection Details

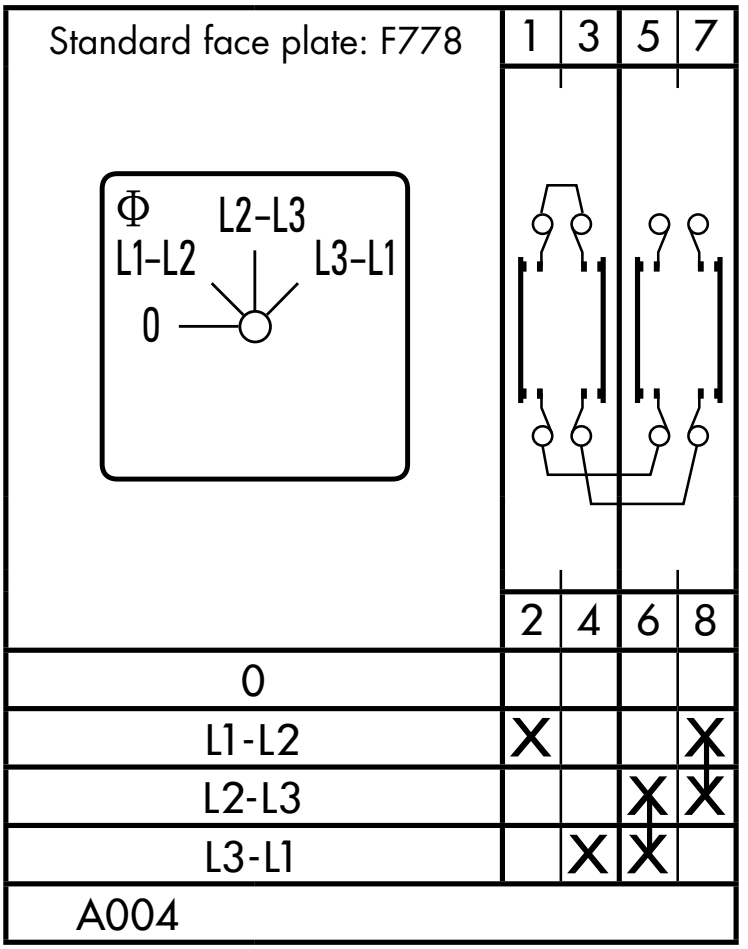
The information is presented with either a switch chart only or a switch chart and connection diagrams when appropriate.

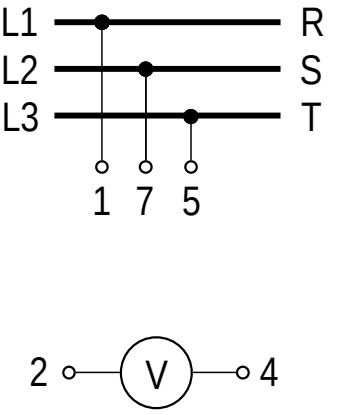


A410 Star-Delta Switch

The large image shows the switch chart. A cross in a column indicates that the contact above it is closed, when the switch is in the position as indicated to the left of the cross. For example, contact 3/4 closes in the delta position. A vertical line between 2 or more crosses indicate that the contact remains closed while the switch moves from one position to the next. The images on the right show the wiring connections for both the supply and load. For example, L1 connects to switch terminal 1 while U1 or T1 connects to terminal 2.

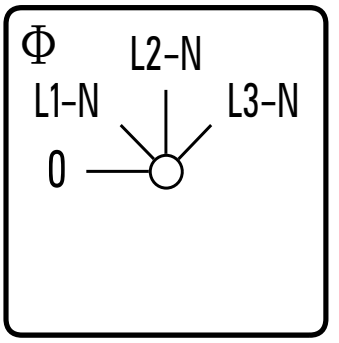
Voltmeter switches

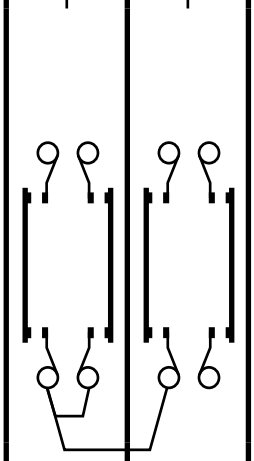


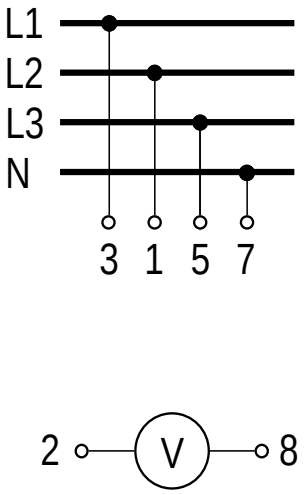


A004 Voltmeter Switch
3 phase 3 wire

Voltmeter switches



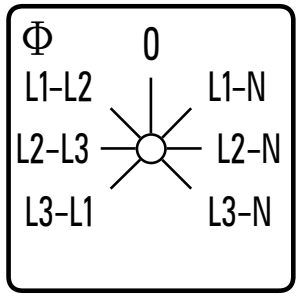


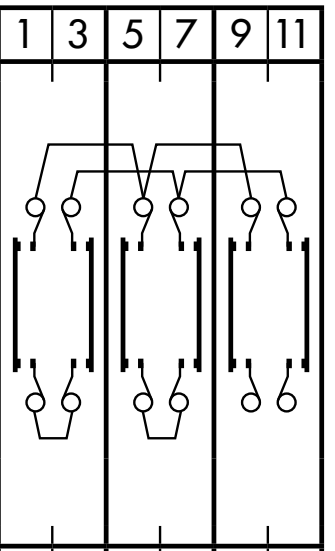


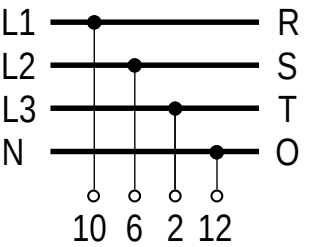
Standard face plate: F781	1	3	5	7
	2	4	6	8
0				
L1-N		X		X
L2-N	X			
L3-N			X	X
WAA005				

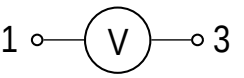
WAA005 Voltmeter Switch
(formerly A005) 3 phase to neutral

Voltmeter switches





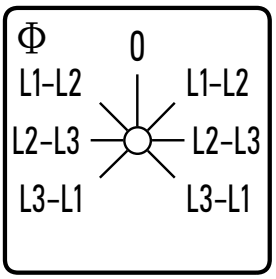


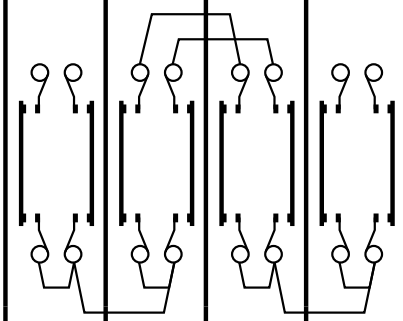


Standard face plate: F785	1	3	5	7	9	11
	2	4	6	8	10	12
L3-L1		X			X	
L2-L3		X	X			
L1-L2				X	X	
0						
L1-N					X	X
L2-N			X			
L3-N	X					X
A007						

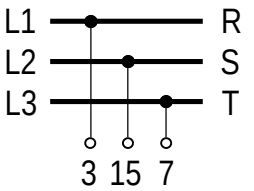
A007 Voltmeter Switch
3 phase to neutral

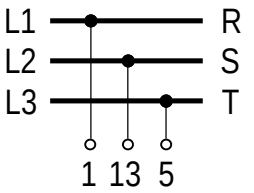
Voltmeter switches

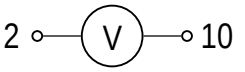




Standard face plate: F788	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
L3-L1		X				X		
L2-L3				X				X
L1-L2		X						X
0								
L1-L2	X						X	
L2-L3			X				X	
L3-L1	X				X			
WAA008								

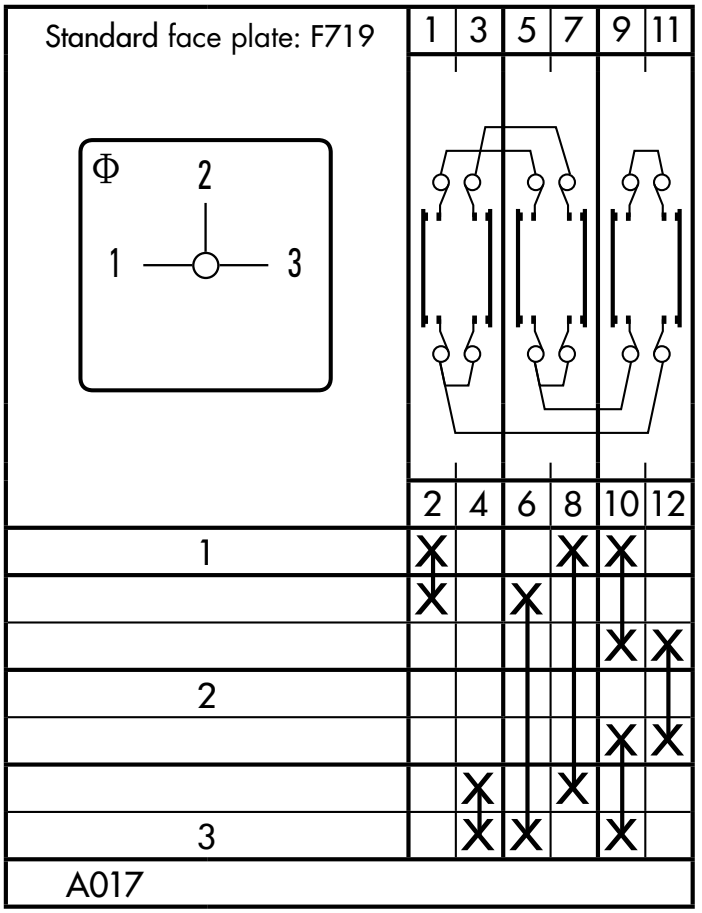


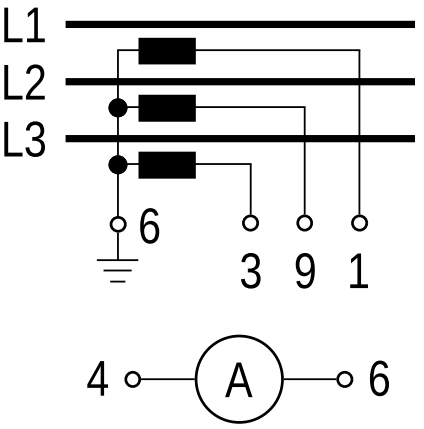




WAA008 Voltmeter Switch
(formerly A008) 2 separate 3 phase

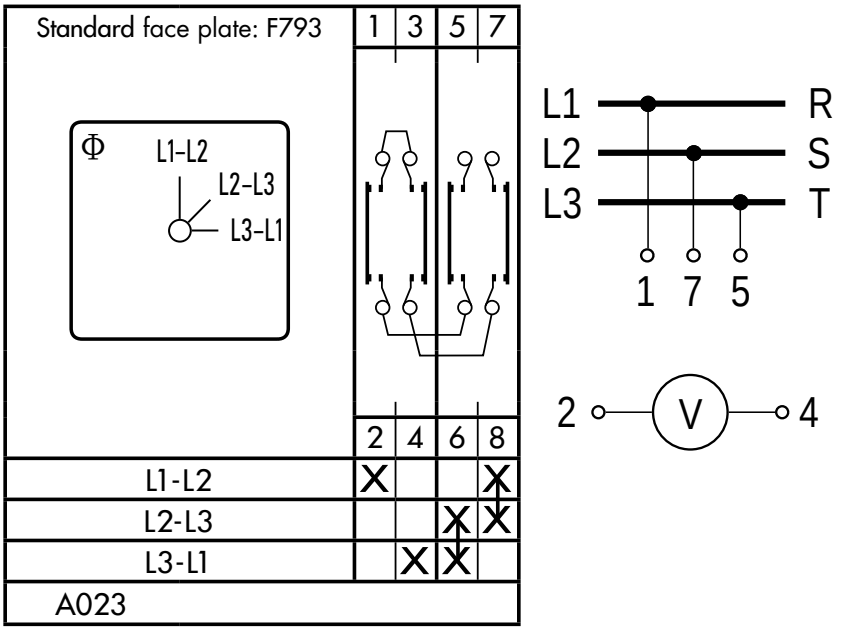
Ammeter switches



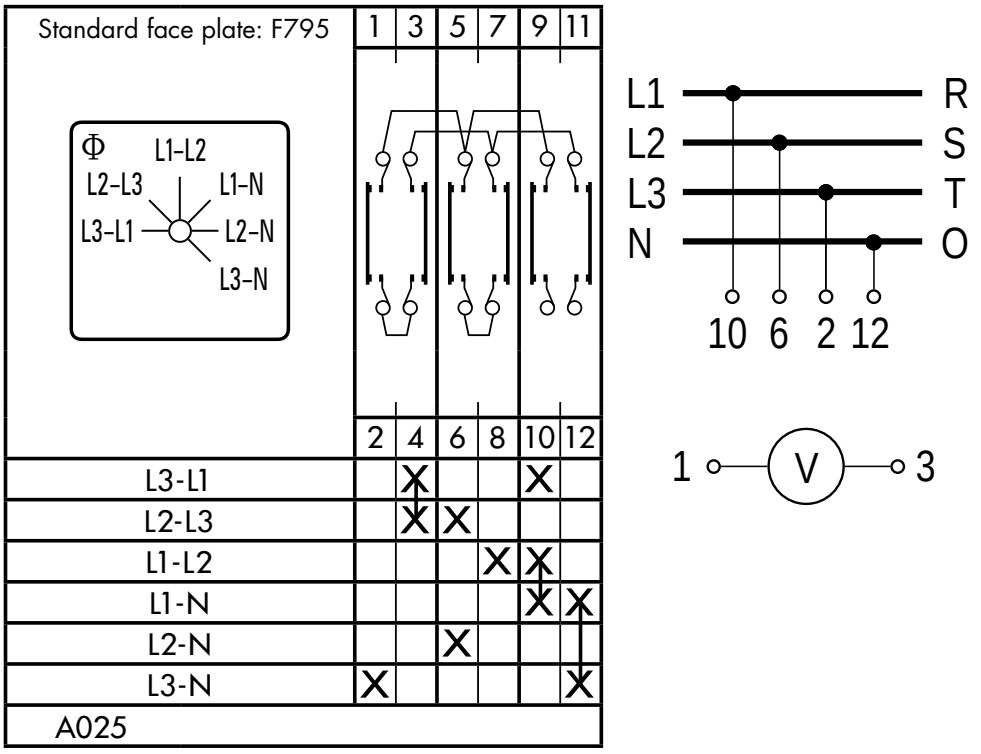


WAA017 Ammeter Switch
1 pole, 3 Current transformers

Voltmeter switches

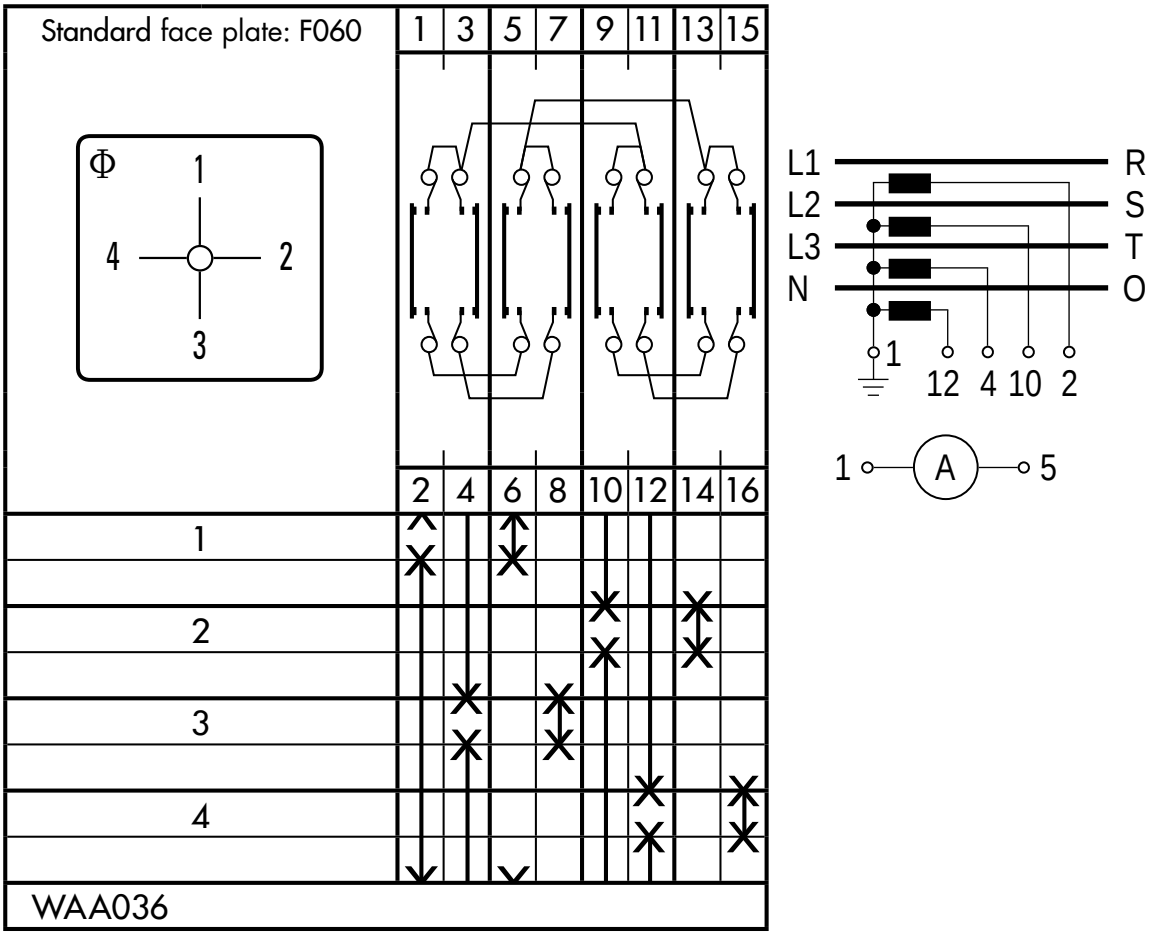


A023 Voltmeter Switch, 3 phase 3 wire



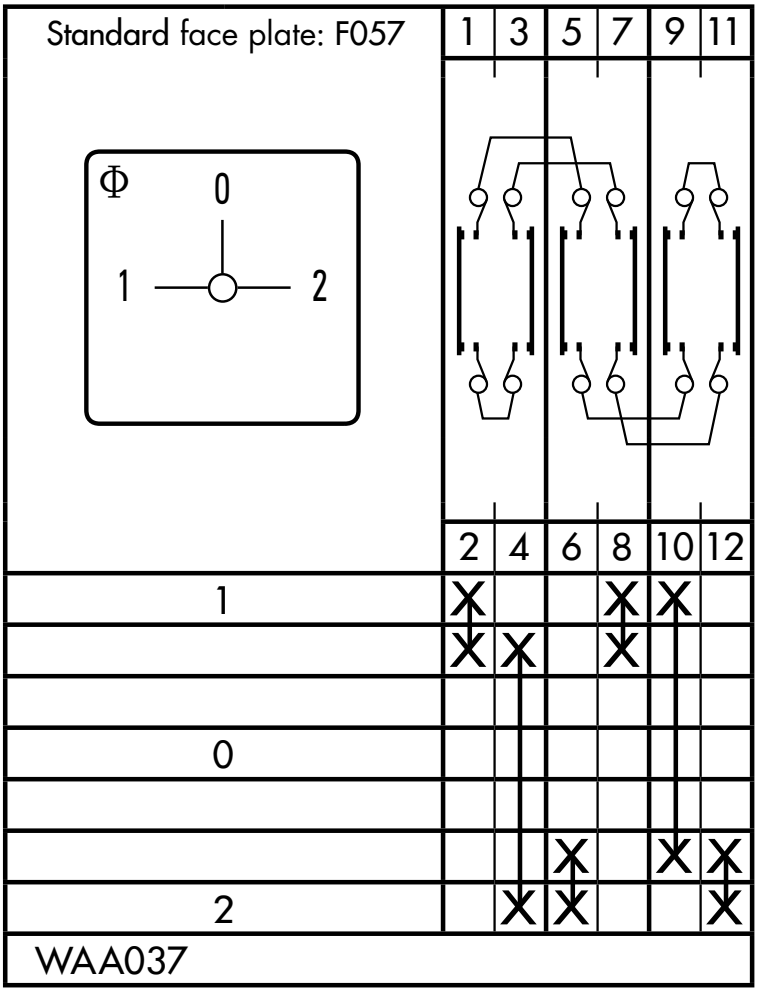
A025 Voltmeter Switch, 3 phase 3 wire,
3 phase to neutral

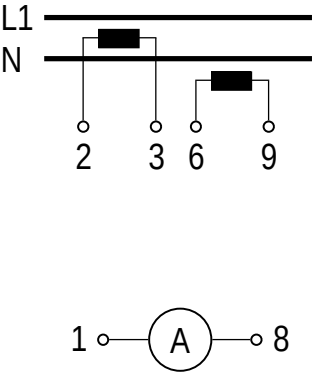
Ammeter switches



WAA036 Ammeter Switch
(formerly A036) 1 pole, 4 Current transformers

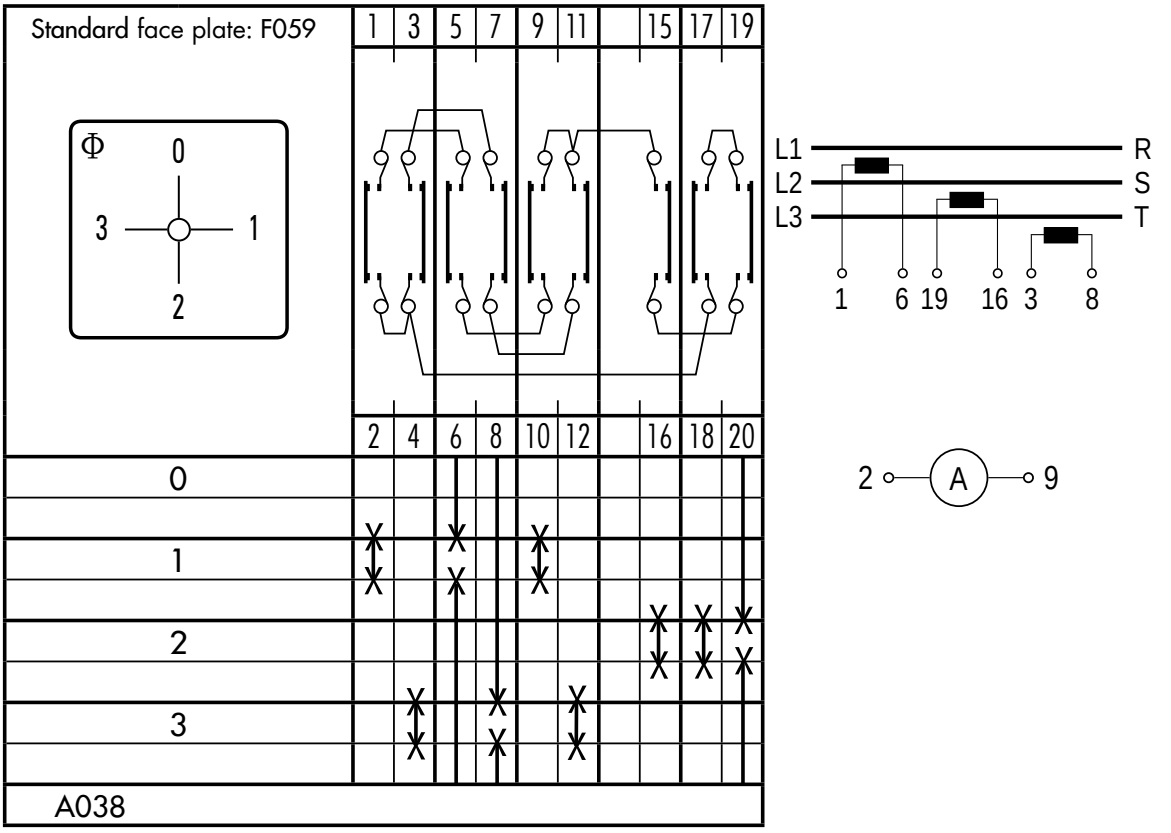
Ammeter switches





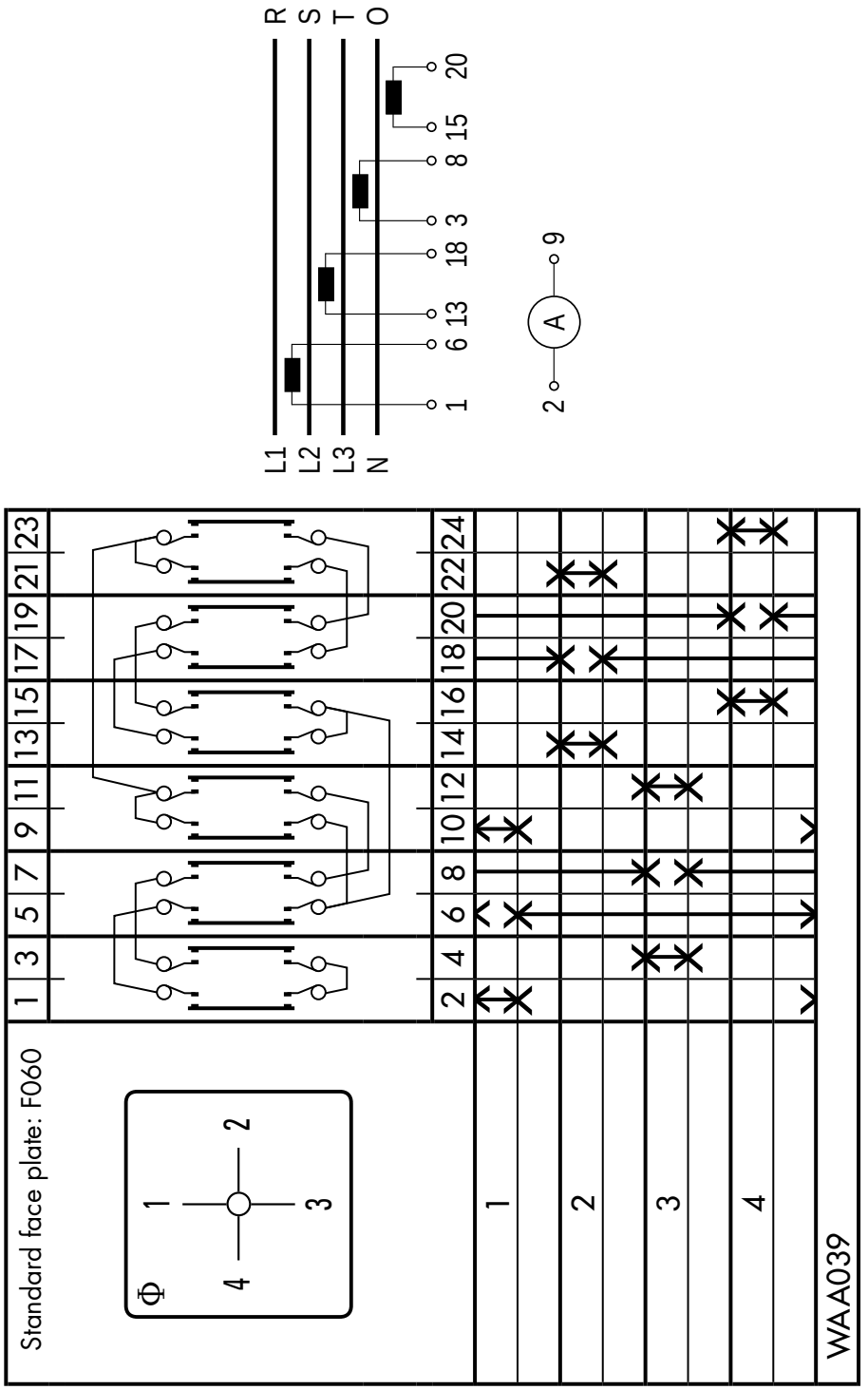
WAA037 Ammeter Switch
(formerly A037) 2 pole, 2 Current transformers

Ammeter switches



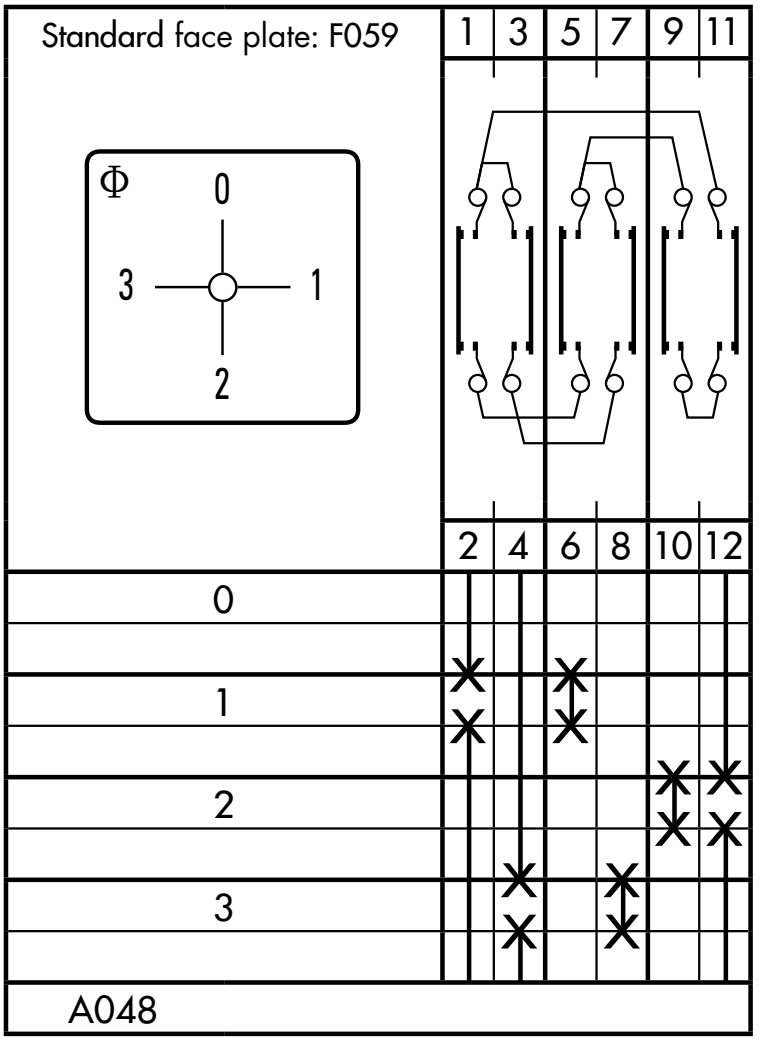
A038 Ammeter Switch
2 pole, 3 Current transformers

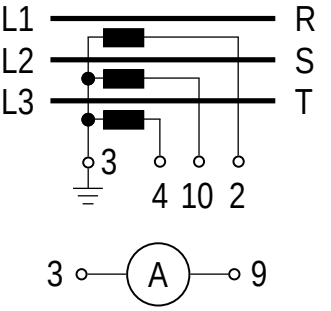
Ammeter switches



WAA039 Ammeter Switch
(formerly A039) 2 pole, 4 Current transformers

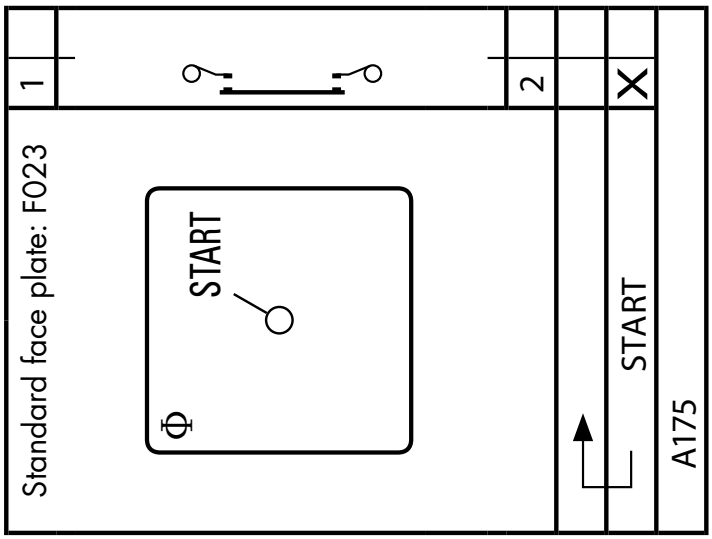
Ammeter switches

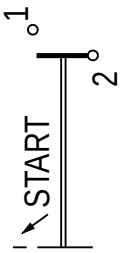




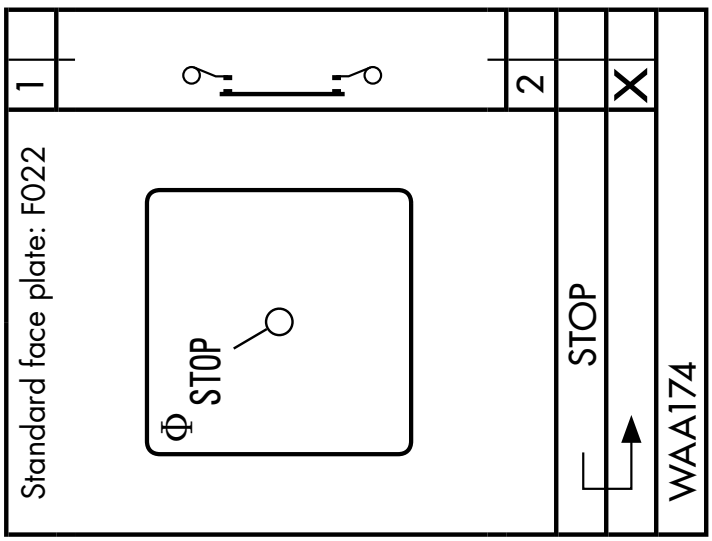
A048 Ammeter Switch
1 pole, 3 Current transformers

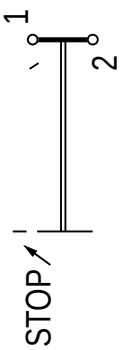
Control Switches





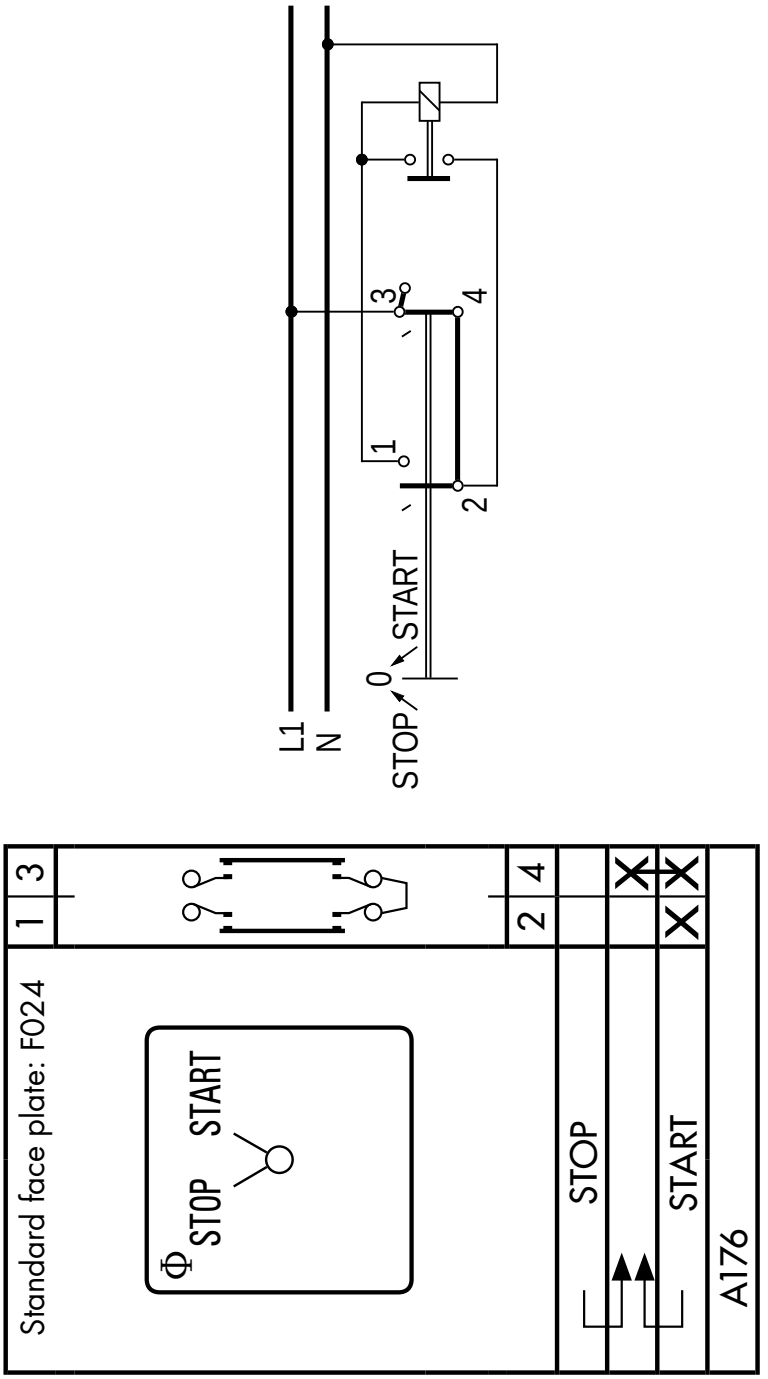
A175 Start switch
1 pole



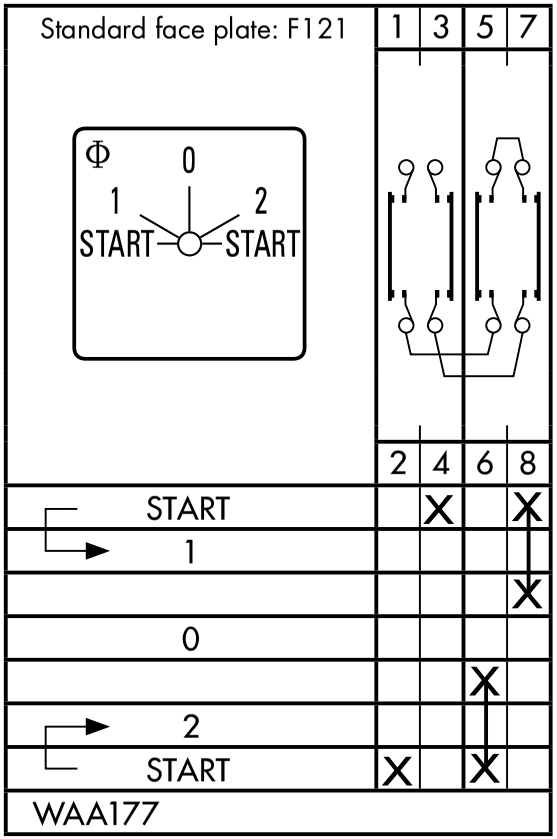


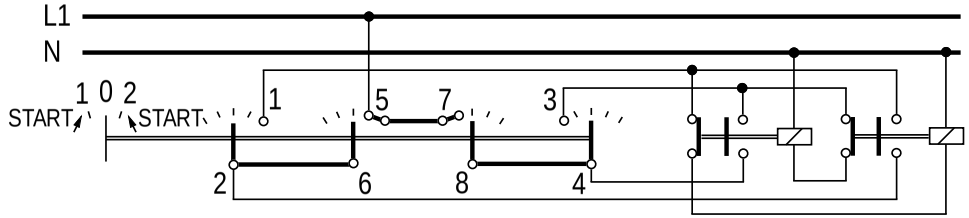
WAA174 Stop switch
(formerly A174) 1 pole

Control Switches



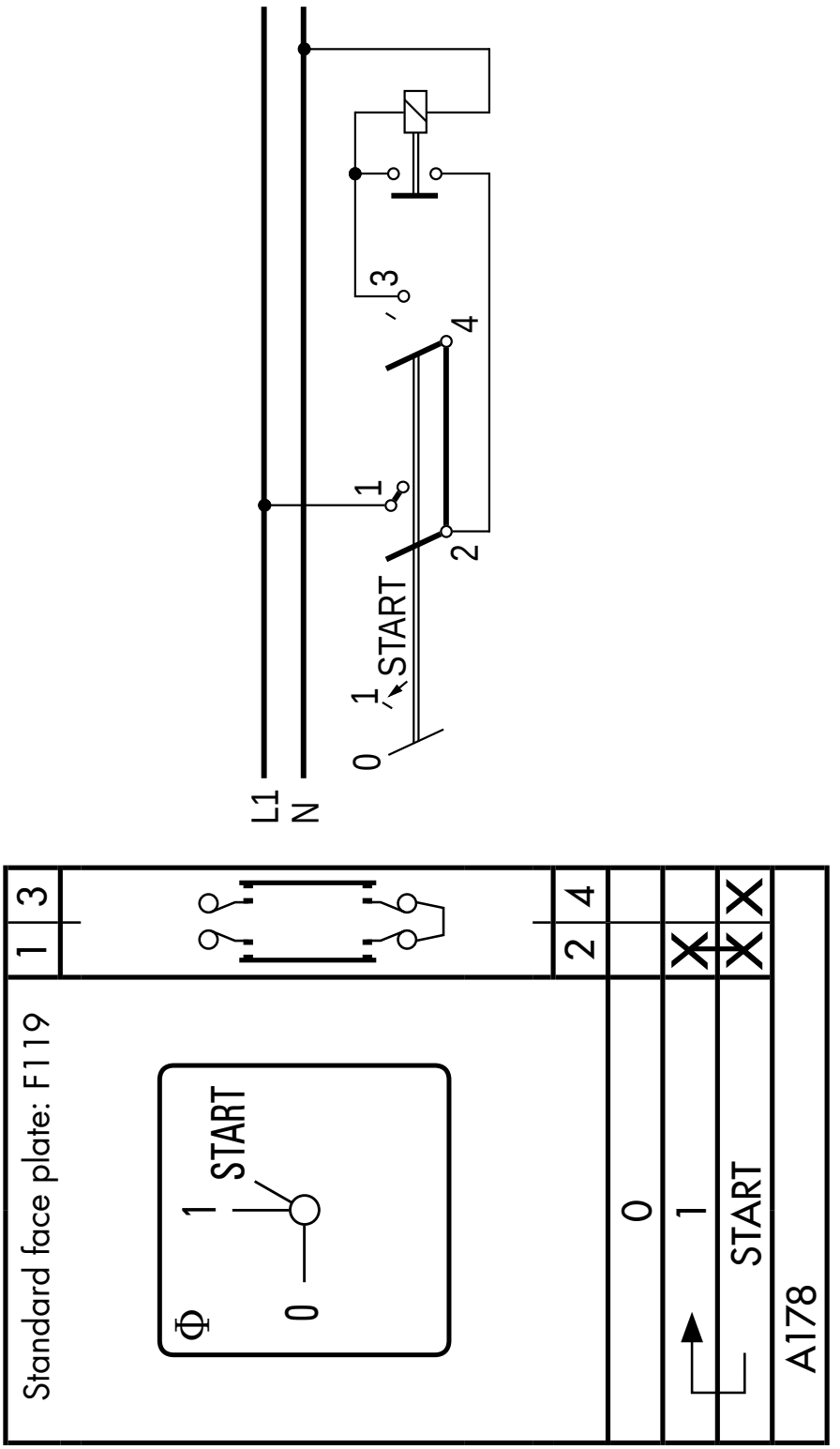
A176 Stop start switch
2 pole see page 31
Electrically isolated contacts see page 86





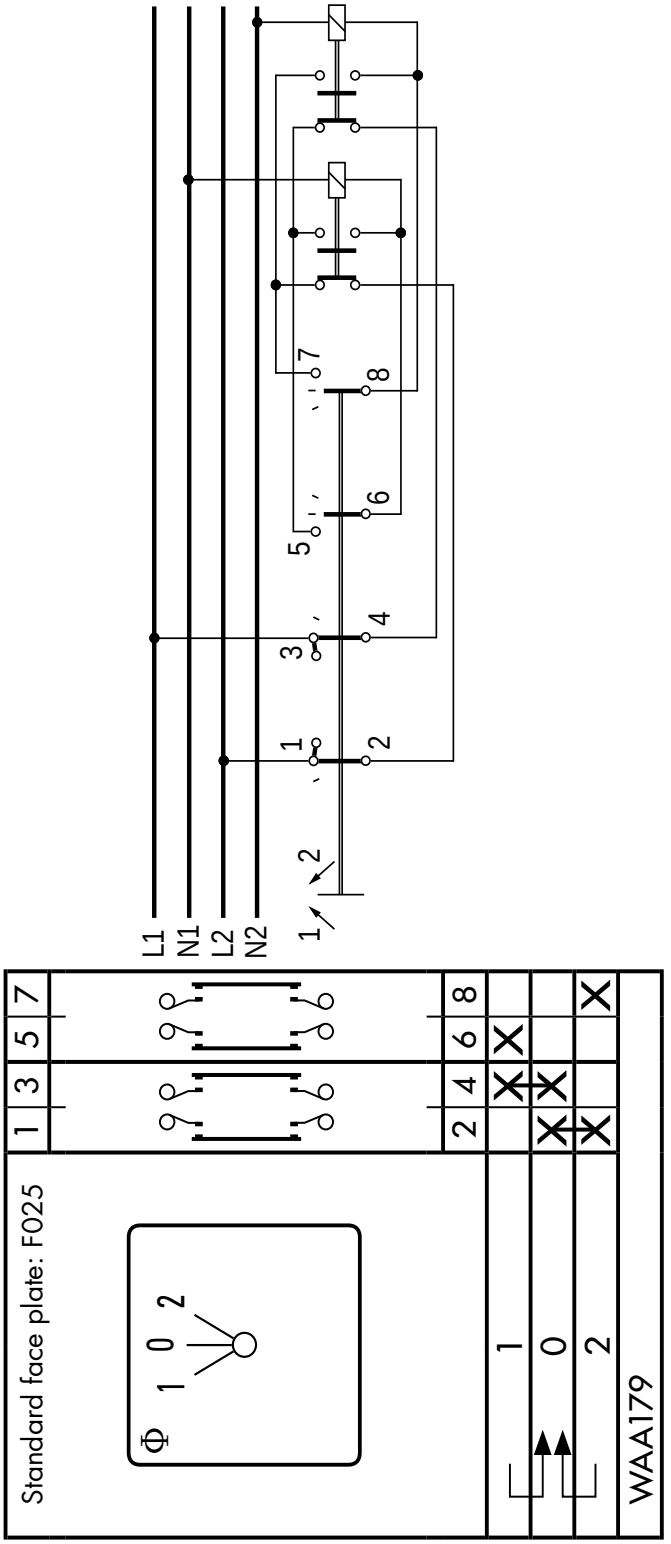
WAA177 Stop Start Switch for two units
(formerly A177) 2 pole, with spring return from start to run

Control Switches

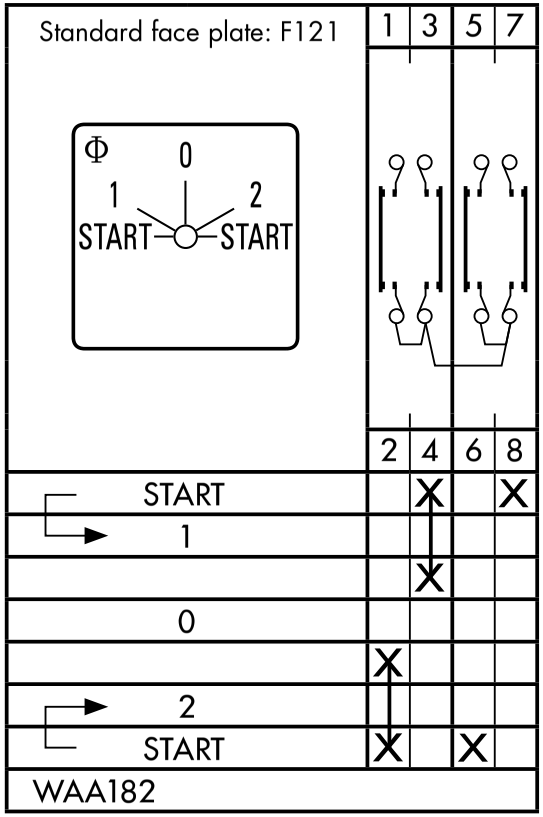


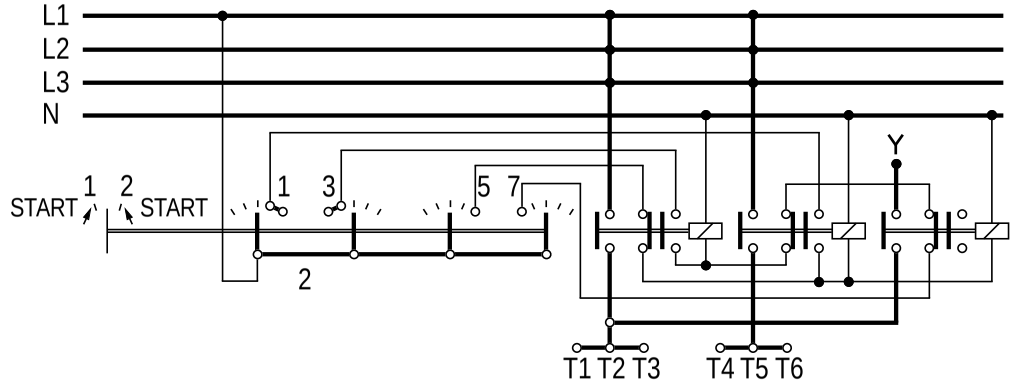
A178 Stop start switch
1 pole, with spring return from start to run
Electrically isolated contacts see page 86

Control Switches



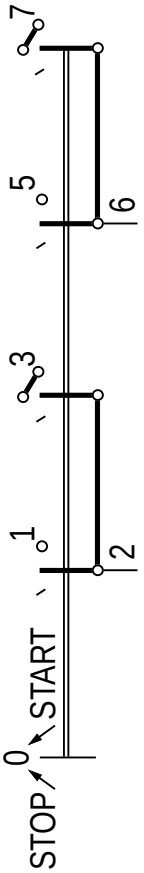
WAA179 Contactor control with spring return to „OFF"
(formerly A179)

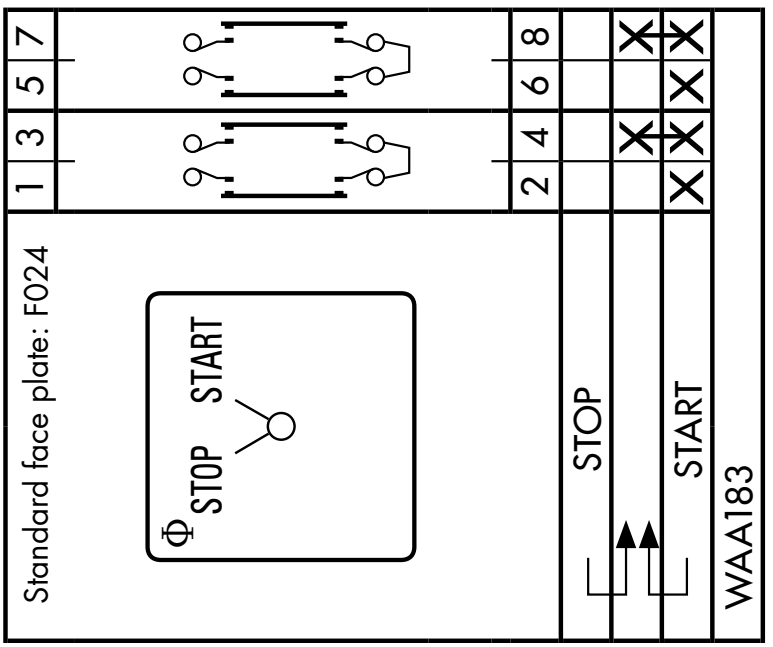




WAA182 Stop Start Switch
(formerly A182) with spring return to run with contactor interlock

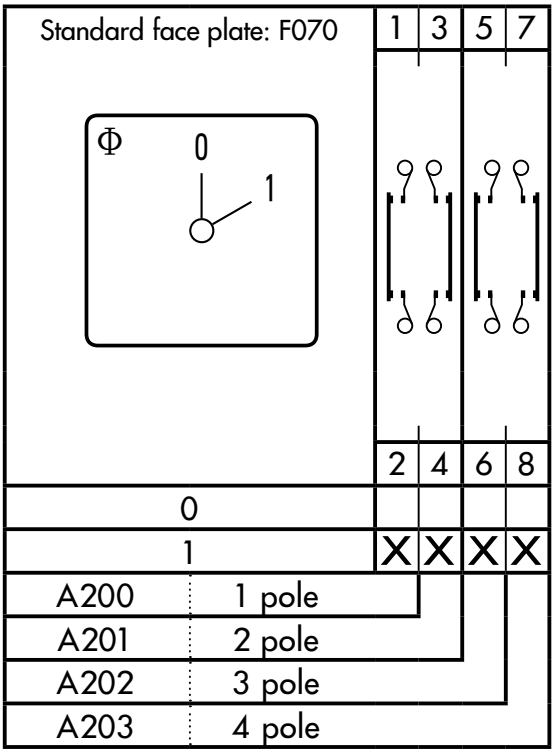
Control Switches





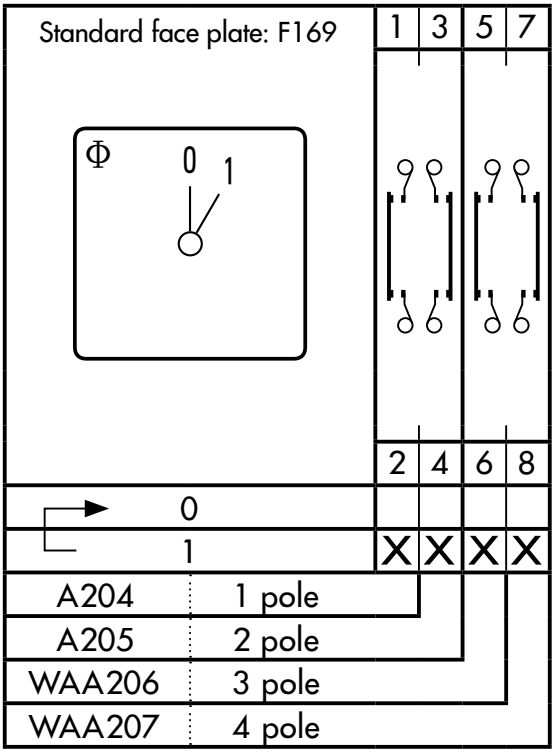
WAA183 Stop start switch
(formerly A183) 2 pole

ON/OFF Switches



A200 up to A203 ON/OFF Switches, 60° Switching

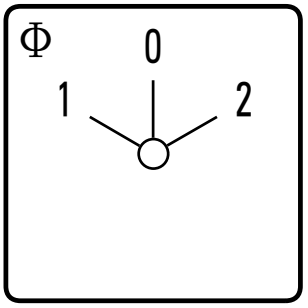
ON/OFF Switches 5- up to 12 pole
see page 56



A204 up to WAA207
(formerly A207)

ON/OFF Switches with spring return, 30° Switching

Double-throw Switches



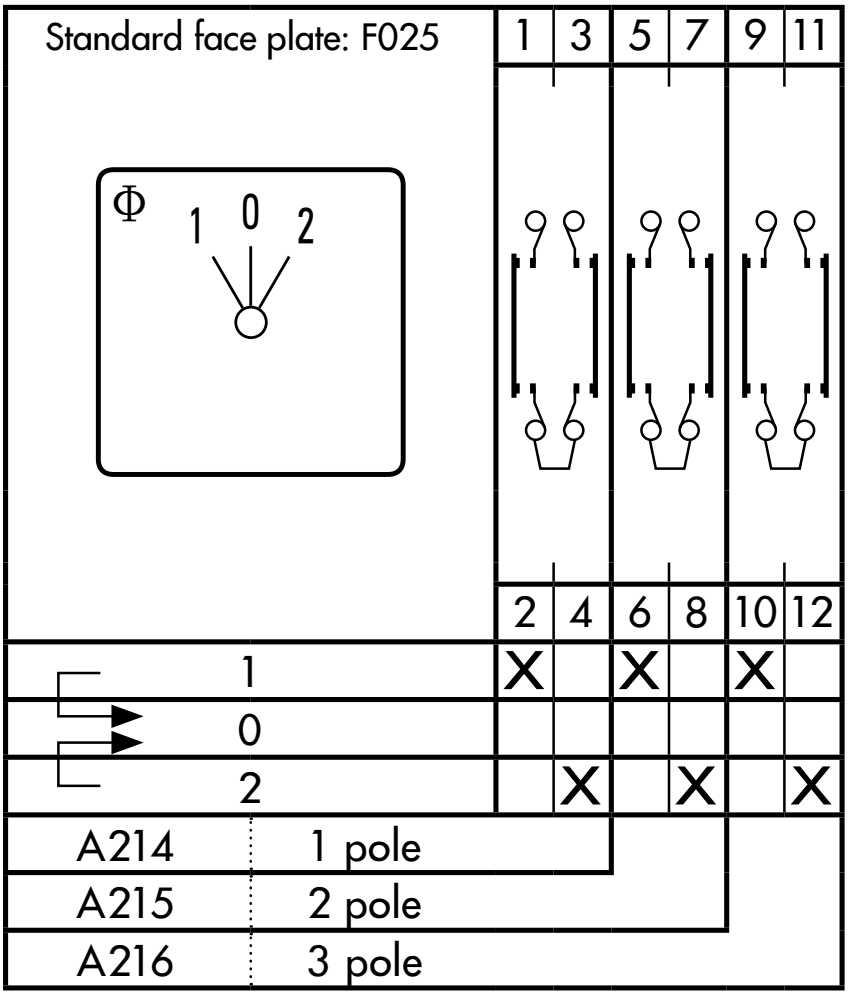
Standard face plate: F071	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
1		X		X		X		X
0								
2	X		X		X		X	

A210	1 pole
A211	2 pole
A212	3 pole
A213	4 pole

A210 up to A213 Double-throw Switches, with „OFF“, 60° Switching

Electrically isolated contacts see page 81
Double-throw Switches with „OFF“, 5-8 pole see page 57

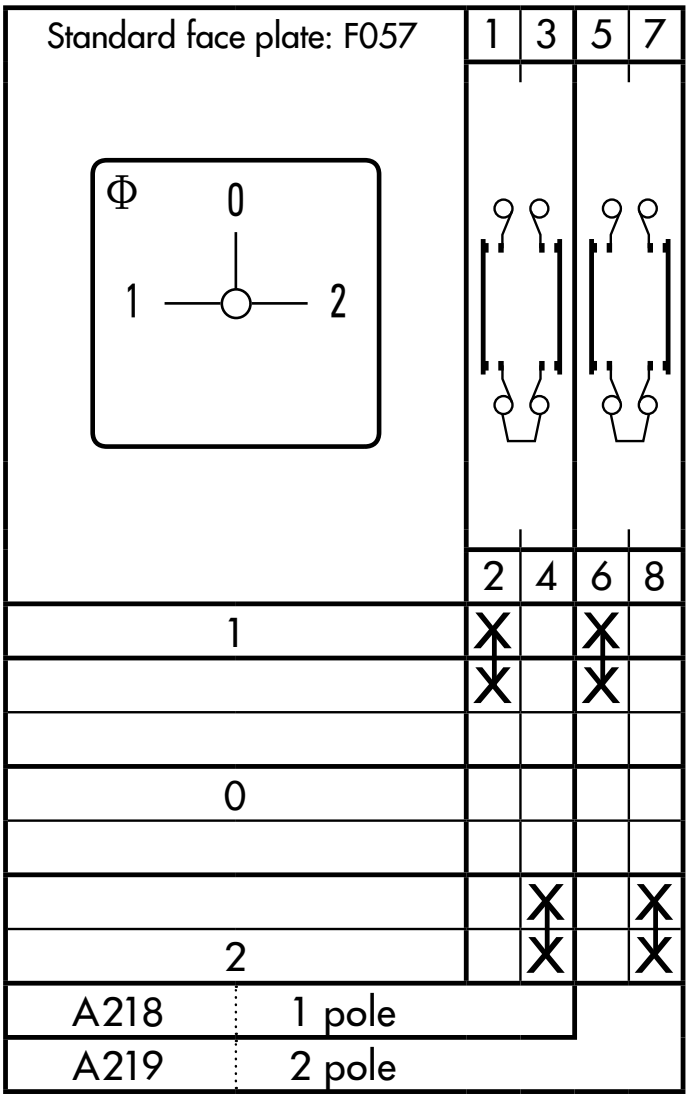
Double-throw Switches



A214 up to A216 Double-throw Switches with „OFF“ and with spring return to „OFF“, 30° Switching

Electrically isolated contacts see page 82

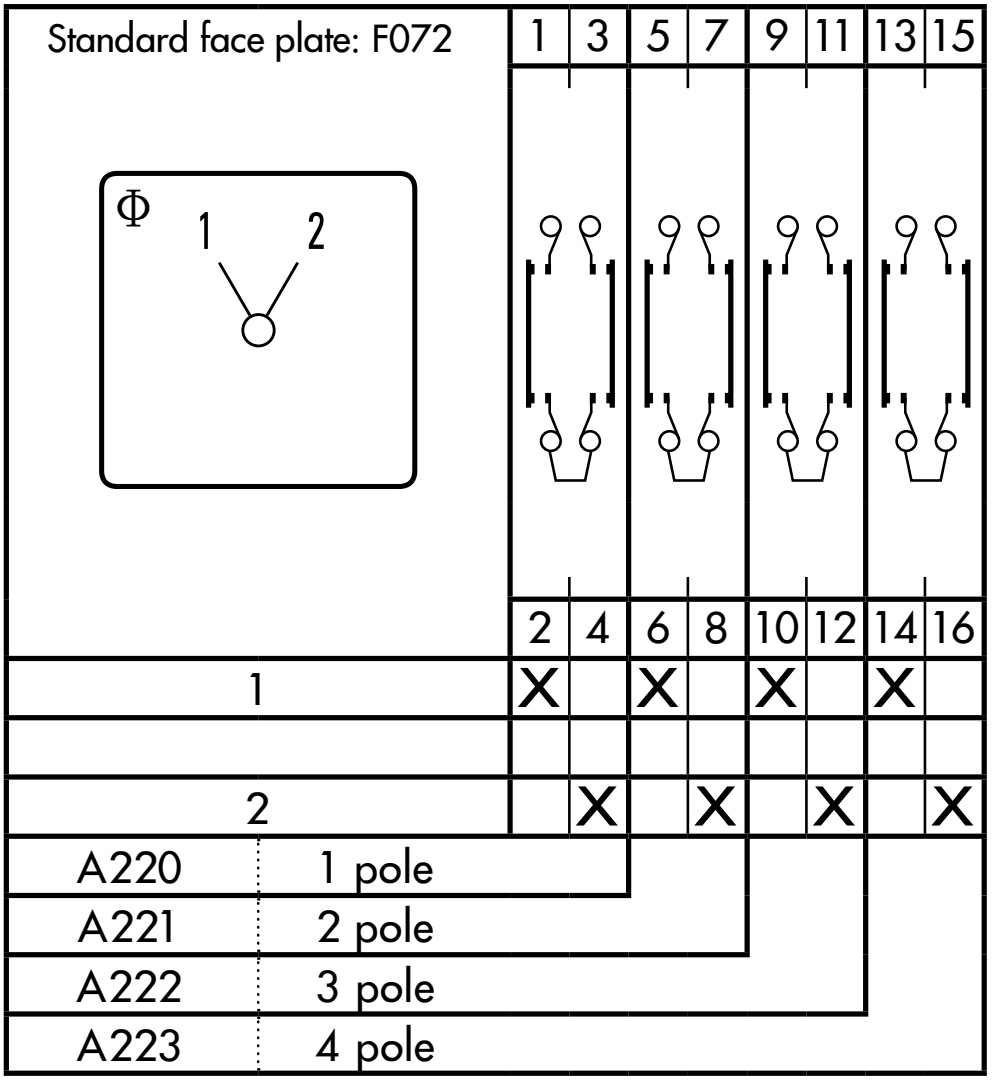
Double-throw Switches



A218, A219
Double-throw Switches with „OFF“, 90° Switching

For 3 & 4 pole options see pages 48 & 46 respectively

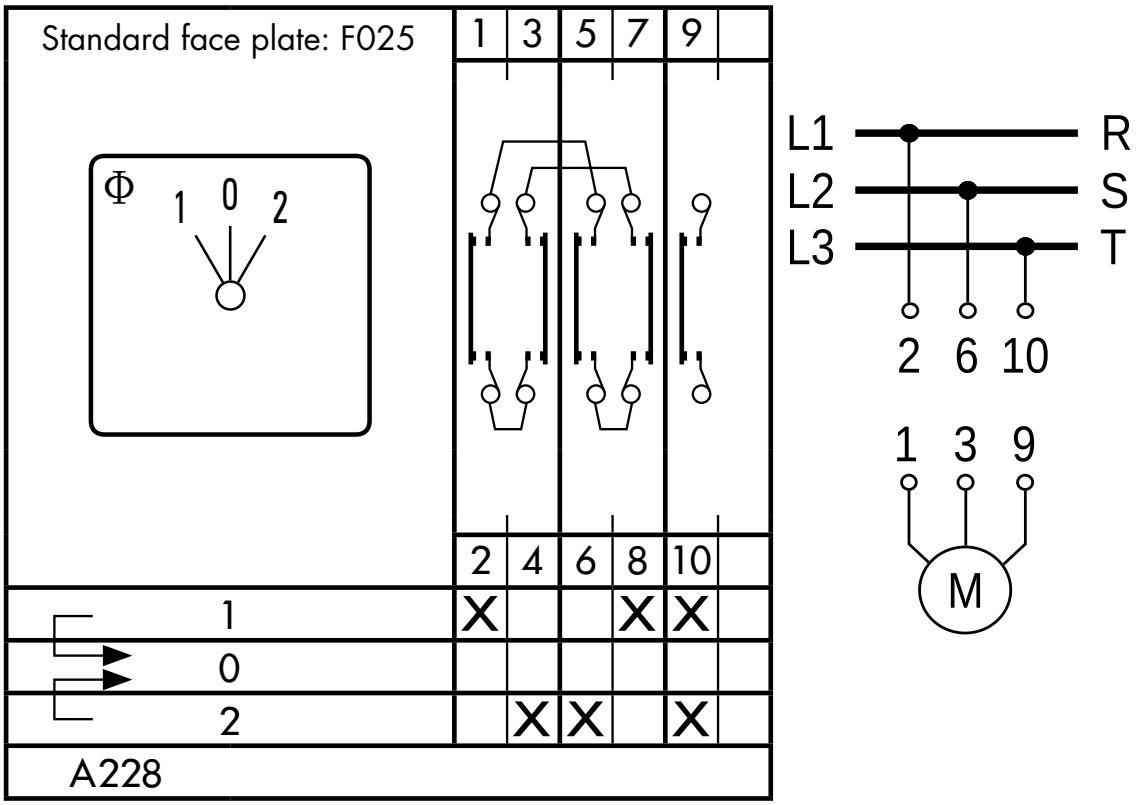
Double-throw Switches



A220 up to A223
Double-throw Switches without „OFF“, 60° Switching

Electrically isolated contacts see page 83
Double-throw Switches without „OFF“ 5-12 pole see page 58

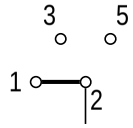
Motor Switches



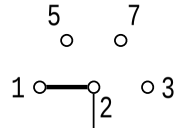
A228 Motor Reversing Switches
3 pole, with spring return to 0

Multi-step Switches 1 pole without „OFF"

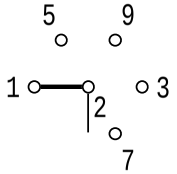
3 Step
A230 *



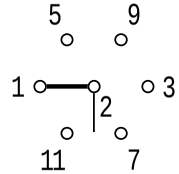
4 Step
A231 **



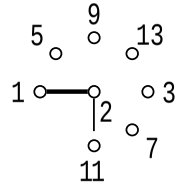
5 Step
A232



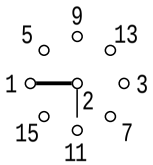
6 Step
A233



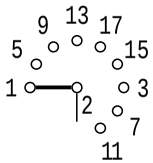
7 Step
WAA234 (formerly A234)



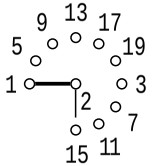
8 Step
WAA235 (formerly A235)



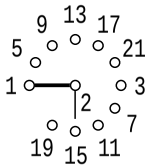
9 Step
WAA236 (formerly A236)



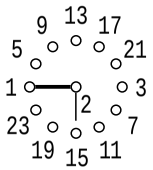
10 Step
WAA237 (formerly A237)



11 Step
WAA238 (formerly A238)



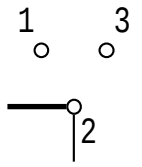
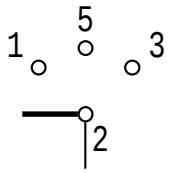
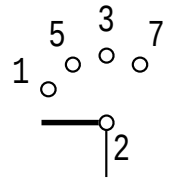
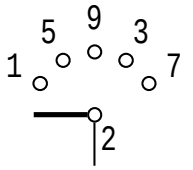
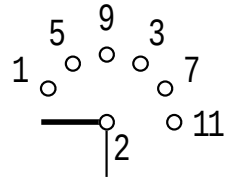
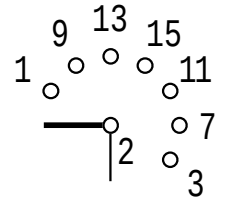
12 Step
WAA239 (formerly A239)



Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

and electrically isolated contacts see *Page 84 resp. **Page 85

Multi-step Switches 1 pole with „OFF“

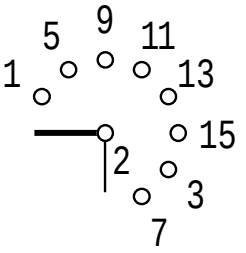
2 Step	A240	
3 Step	A241	
4 Step	A242	
5 Step	A243	
6 Step	A244	
7 Step	WAA245 (formerly A245)	

Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 1 pole with „OFF“

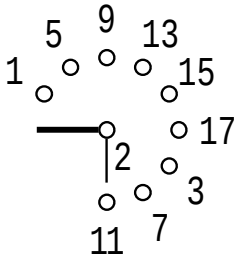
8 Step

WAA246
(formerly A246)



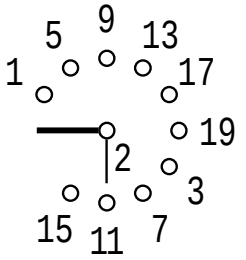
9 Step

WAA247
(formerly A247)



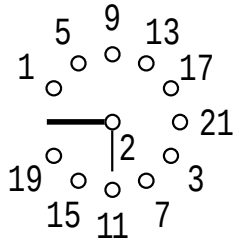
10 Step

WAA248
(formerly A248)



11 Step

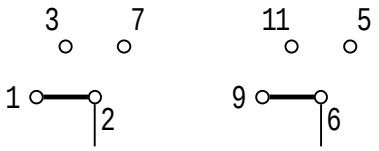
WAA249
(formerly A249)



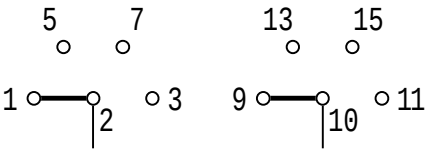
Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 2 pole without „OFF“

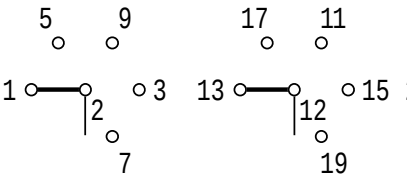
3 Step — A250*



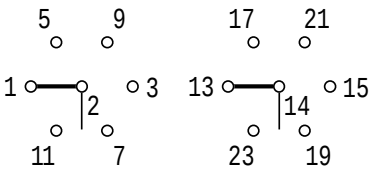
4 Step — A251**



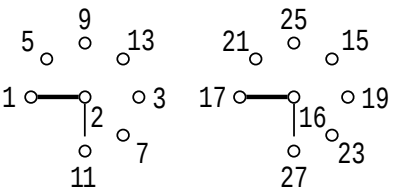
5 Step — A252



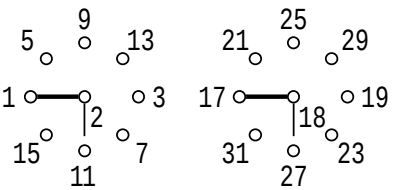
6 Step — WAA253 (formerly A253)



7 Step — WAA254 (formerly A254)



8 Step — WAA255 (formerly A255)

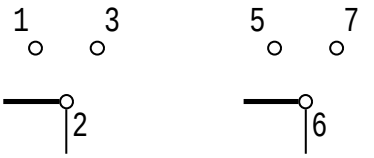


Electrically isolated contacts see *Page 84 resp. **Page 85

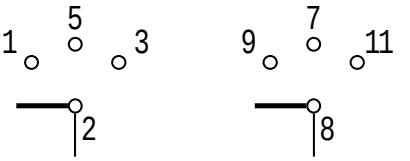
Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 2 pole with „OFF“

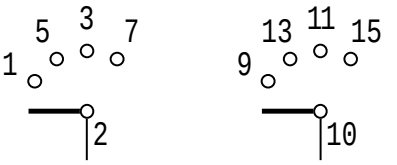
2 Step — A260



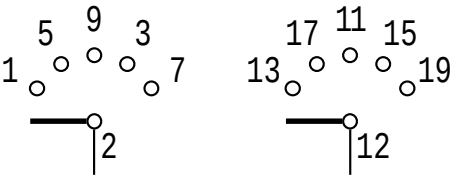
3 Step — A261



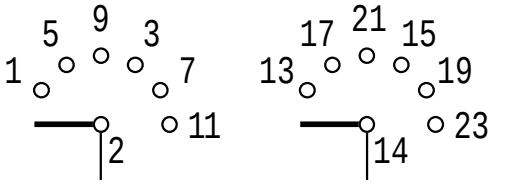
4 Step — WAA262 (formerly A262)



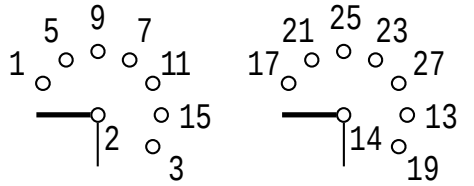
5 Step — WAA263 (formerly A263)



6 Step — WAA264 (formerly A264)



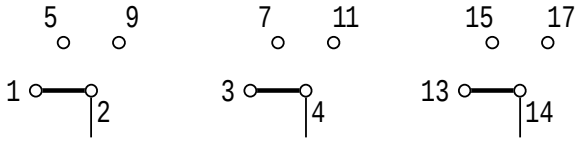
7 Step — WAA265 (formerly A265)



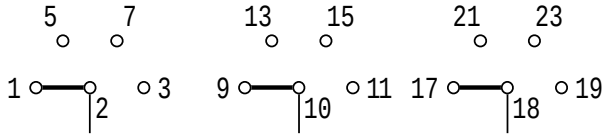
Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 3 pole without „OFF“

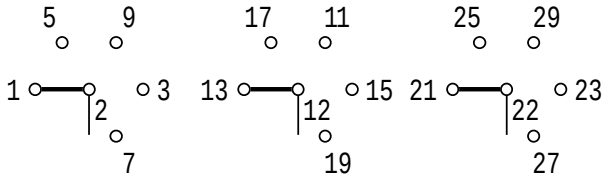
3 Step
A270



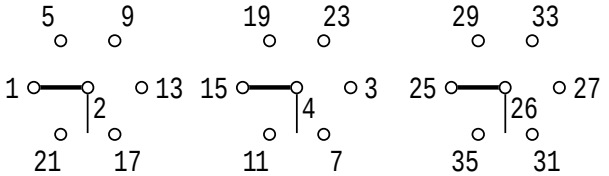
4 Step
A271



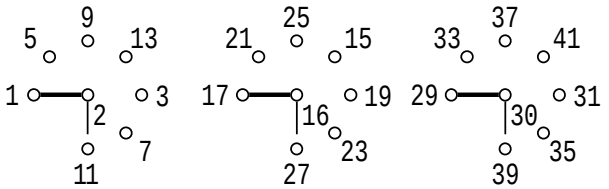
5 Step
WAA272
(formerly A272)



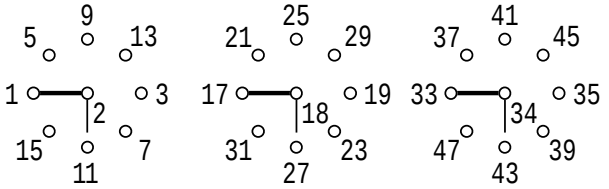
6 Step
WAA273
(formerly A273)



7 Step
WAA274
(formerly A274)



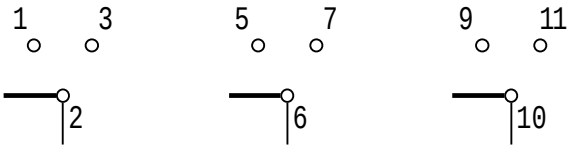
8 Step
WAA275
(formerly A275)



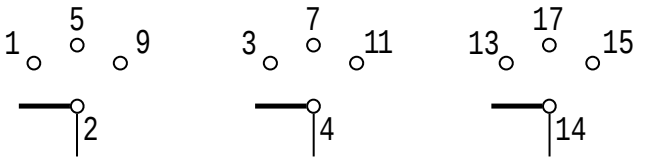
Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 3 pole with „OFF“

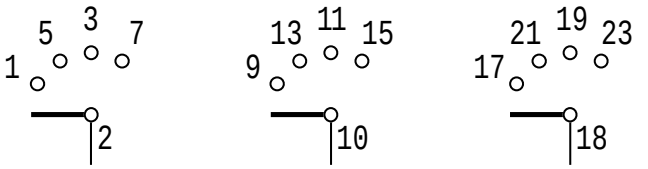
2 Step
A280



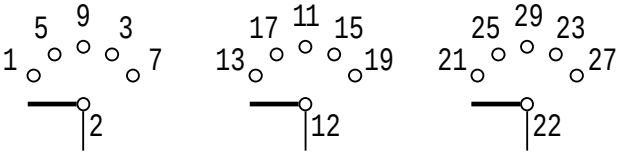
3 Step
A281



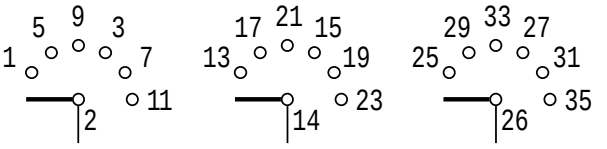
4 Step
WAA282
(formerly A282)



5 Step
WAA283
(formerly A283)

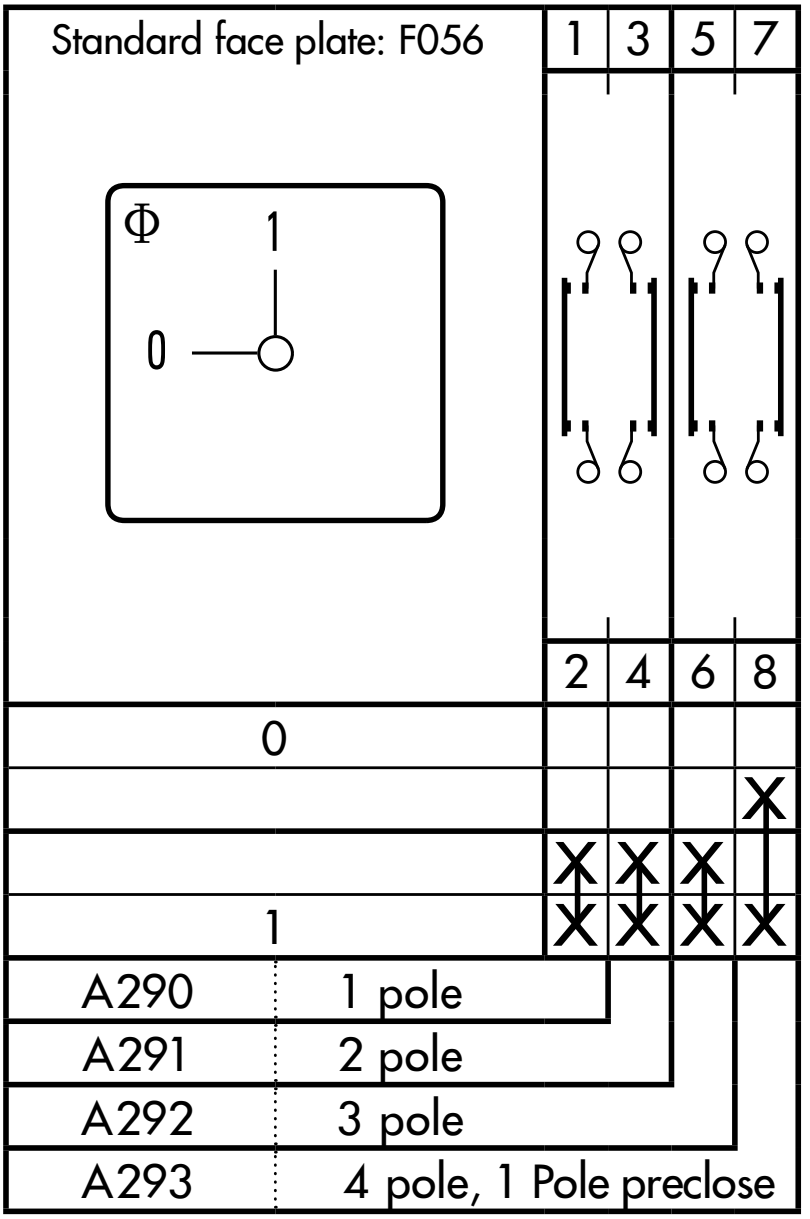


6 Step
WAA284
(formerly A284)



Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

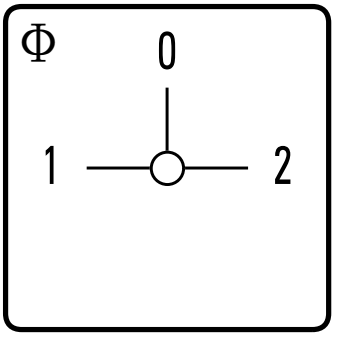
ON/OFF Switches

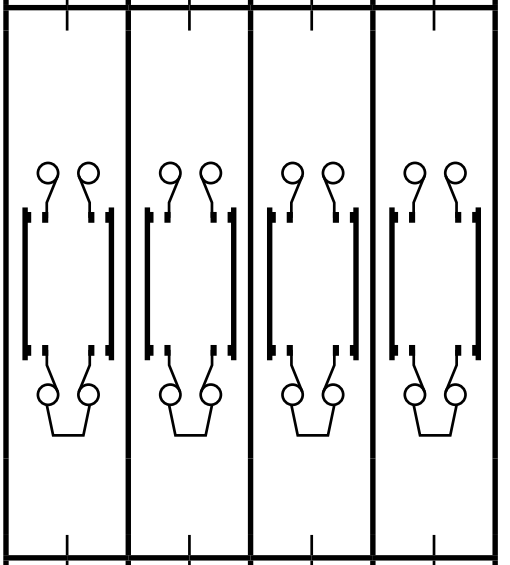


A290 up to A293
ON/OFF Switches 90° Switching

Double-throw Switches

Standard face plate: F057



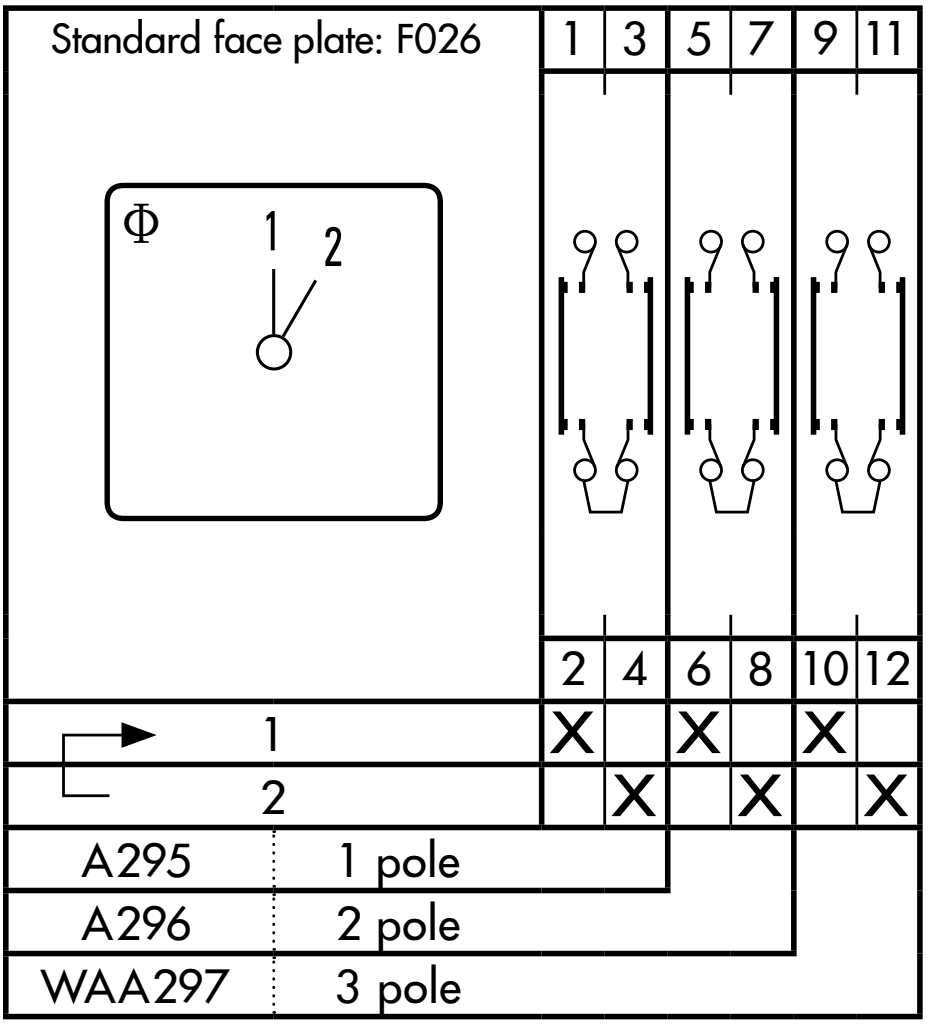


	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
1	X		X		X		X	
	X		X		X			
							X	
0								
								X
		X		X		X		
2		X		X		X		X

WAA294 4 pole, 1 Pole preclose

WAA294 Double-throw Switch with „OFF“,
(formerly A294) 90° Switching

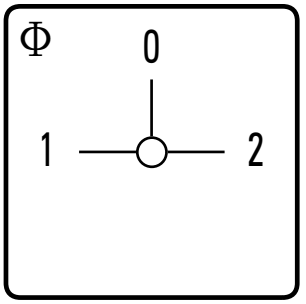
Double-throw Switches



A295* up to WAA297 (formerly A297)
Double-throw Switches without „OFF“,
with spring return, 30° Switching

*Electrically isolated contacts see page 86

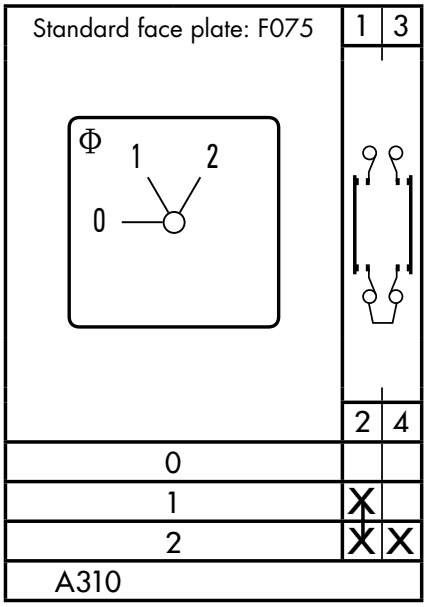
Double-throw Switches

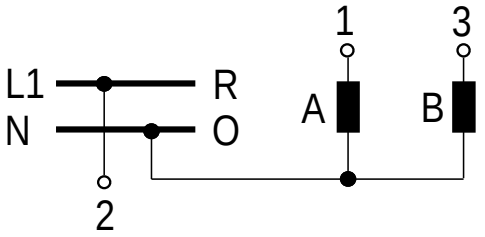


Standard face plate: F057	1	3	5	7	9	11
	2	4	6	8	10	12
1	X		X		X	
	X		X		X	
0						
		X		X		X
2		X		X		X
WAA299						

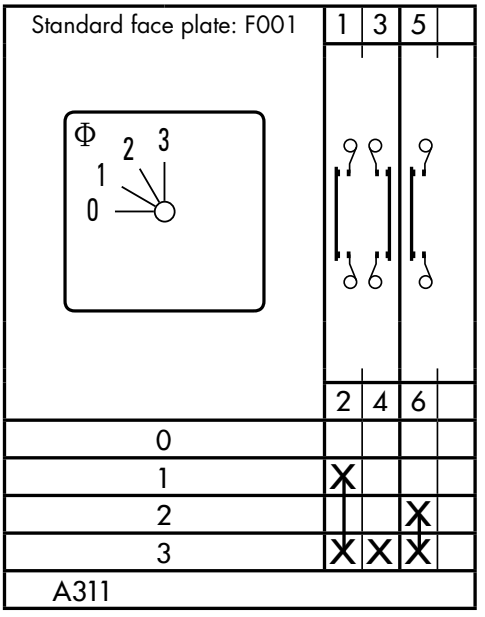
WAA299 Double-throw Switch with „OFF“
(formerly A299) 90° Switching, 3 pole

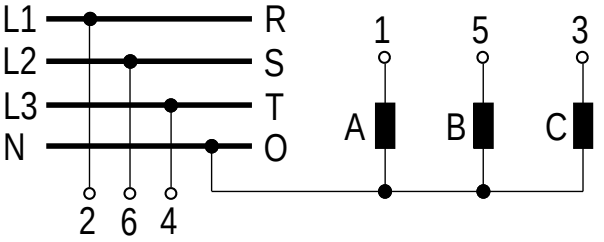
General Application Switches





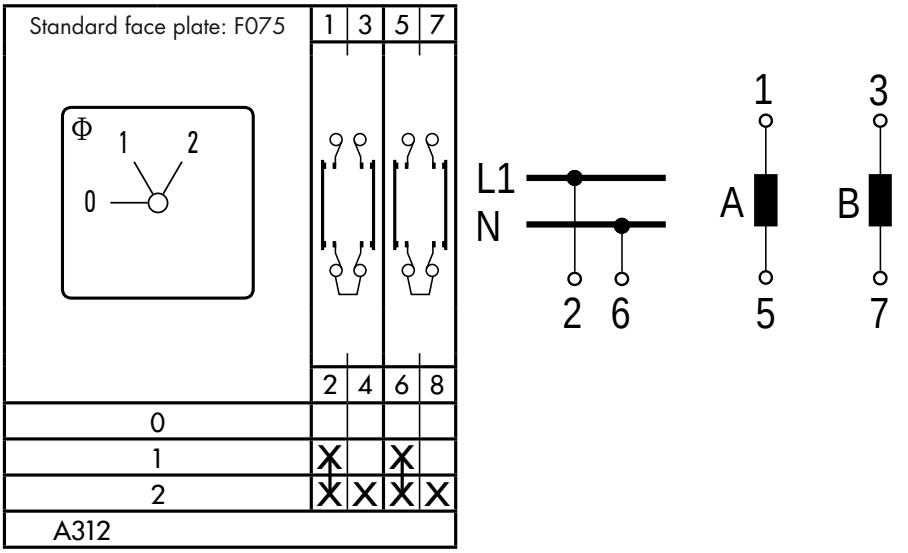
A310 General Application Switch
2 Gang, 1 pole
0, A, A+B



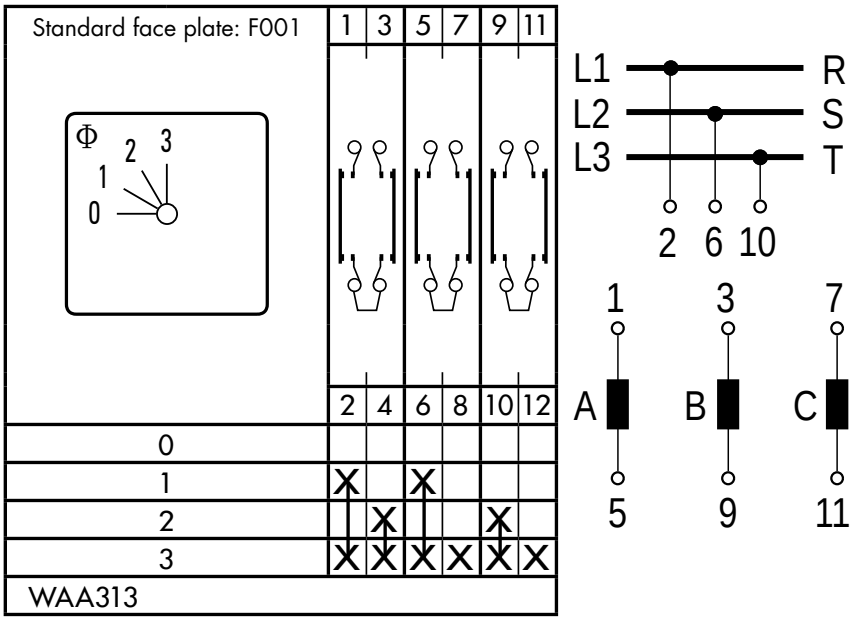


A311 General Application Switch
3 Gang, 1 pole
0, A, A+B, A+B+C

General Application Switches

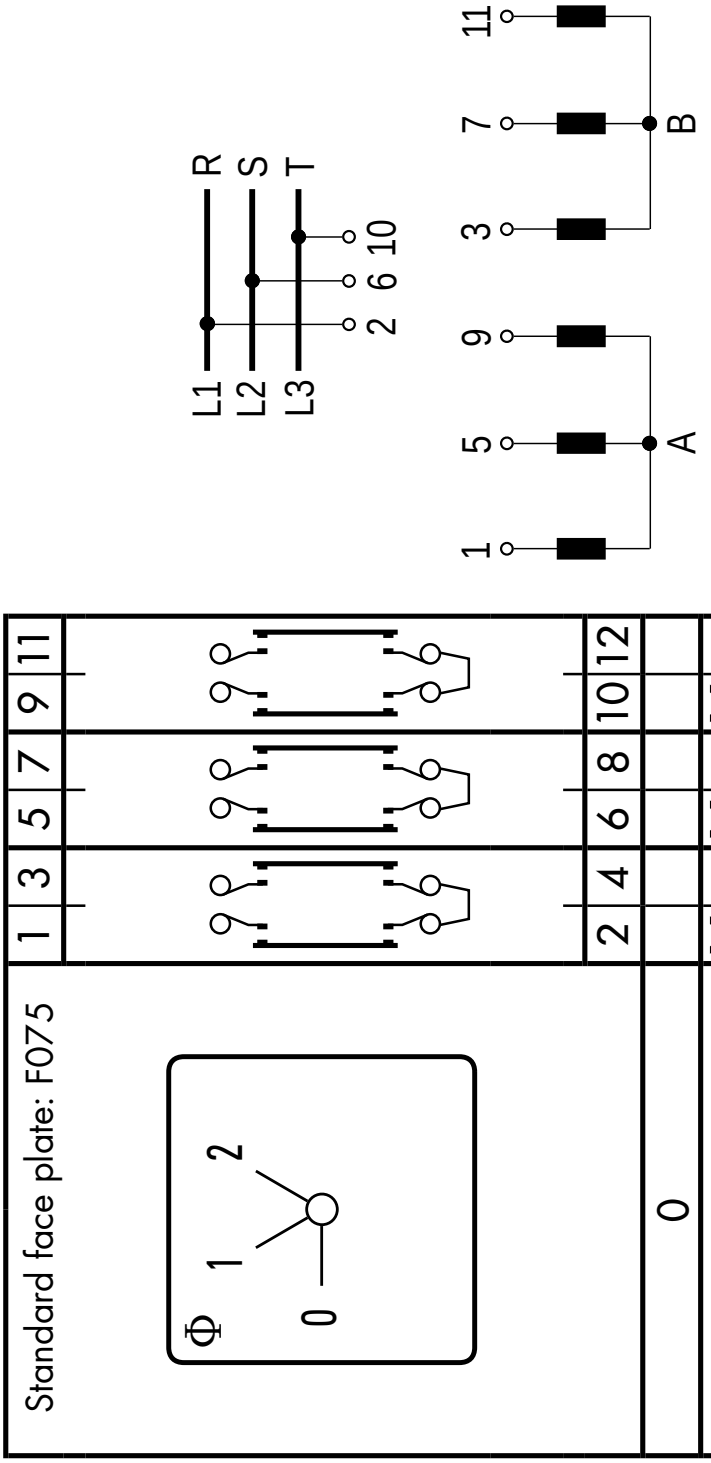


A312 General Application Switch
2 Gang, 2 pole
0, A, A+B



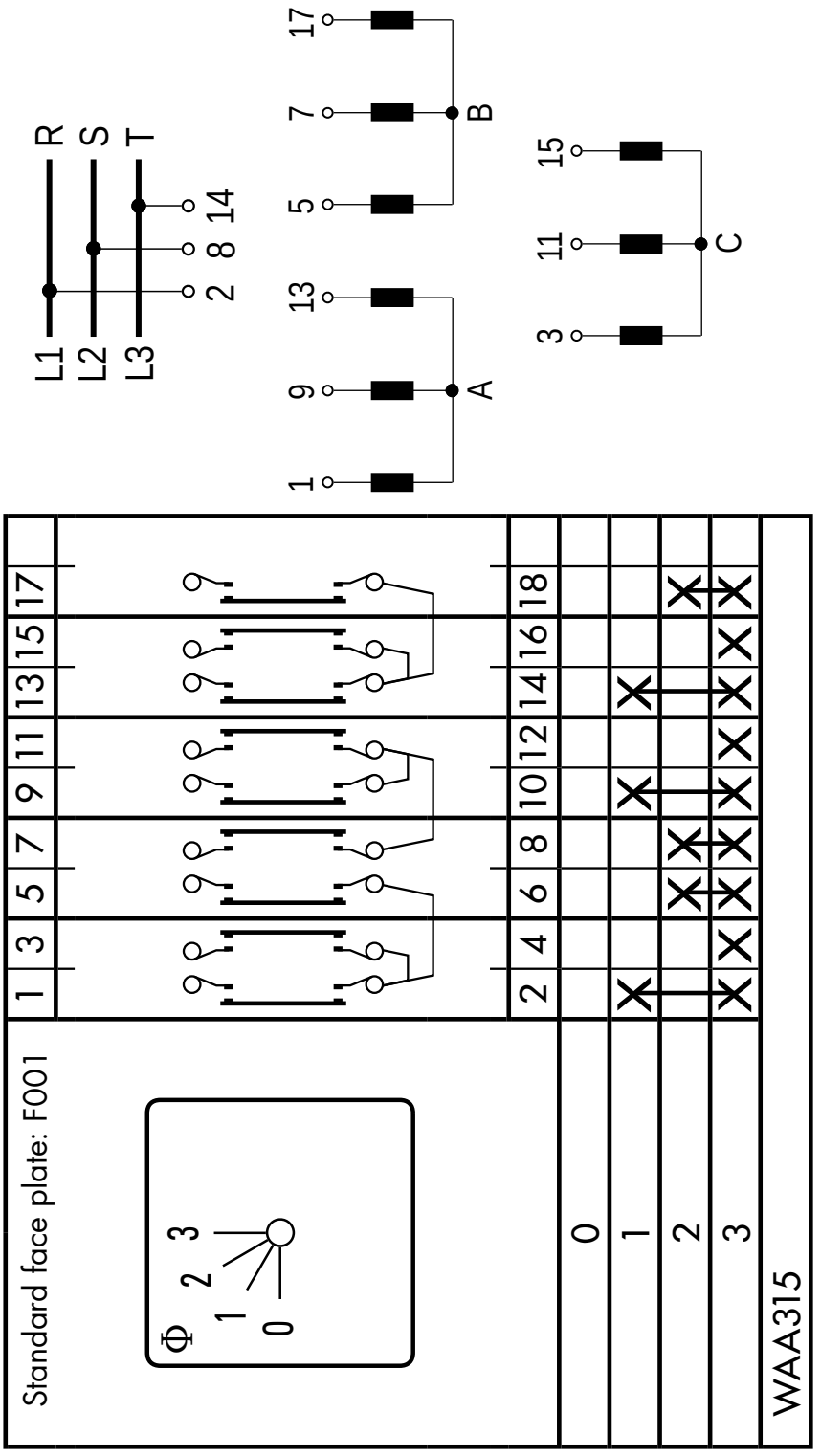
WAA313 General Application Switch
(formerly A313) 3 Gang, 2 pole
0, A, A+B, A+B+C

General Application Switches



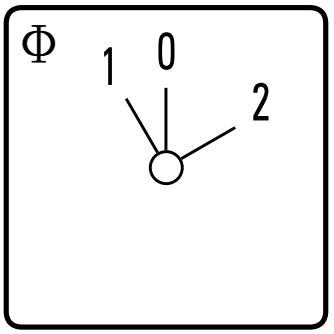
WAA314 General Application Switch
(formerly A314) 2 Gang, 3 pole
0, A, A+B

General Application Switches



WAA315 General Application Switch
(formerly A315) 3 Gang, 3 pole
0, A, A+B, A+B+C

Double-throw Switches

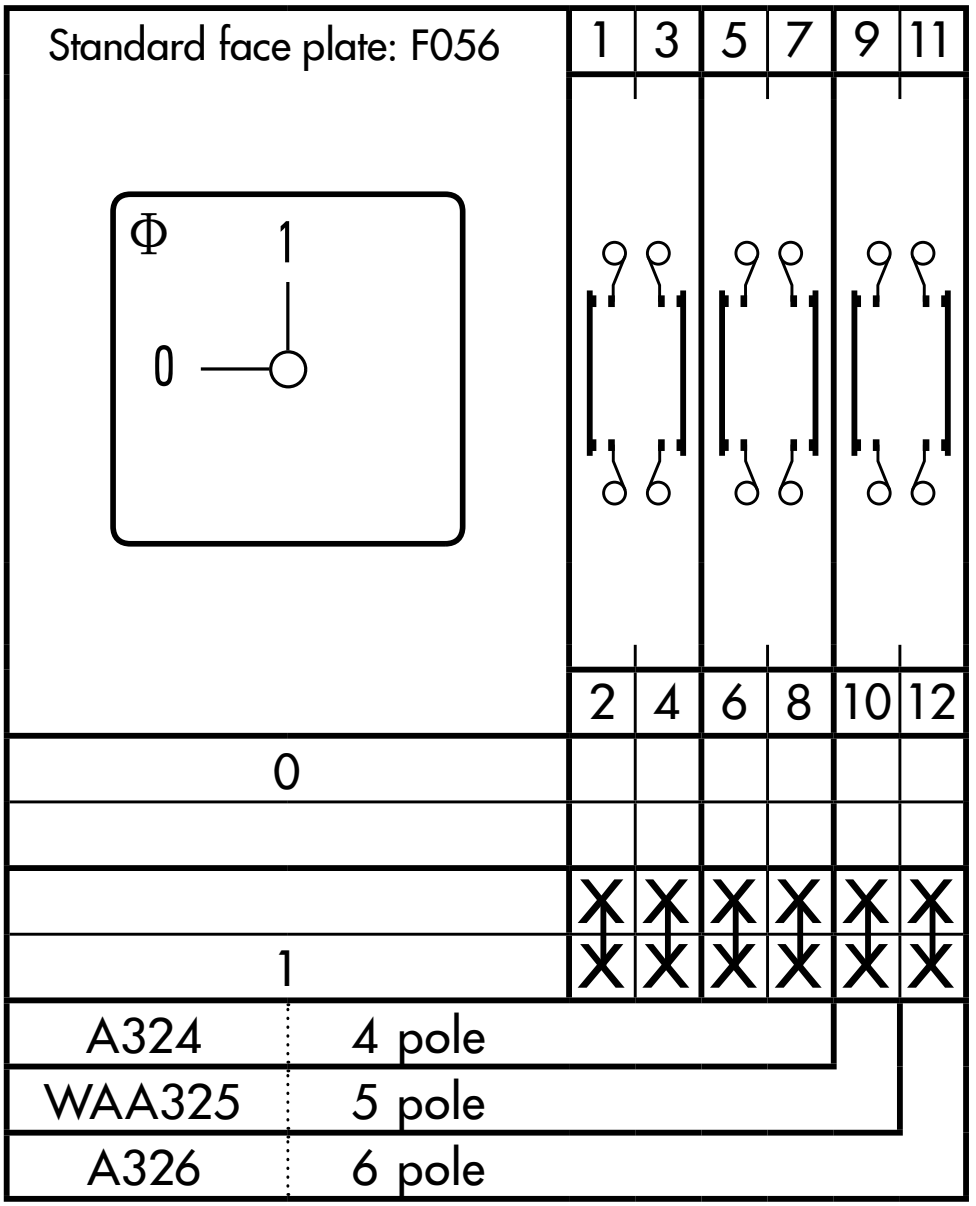


Standard face plate: F341	1	3	5	7	9	11
	2	4	6	8	10	12
1		X		X		X
0						
2	X		X		X	

A320	1 pole
A321	2 pole
A322	3 pole

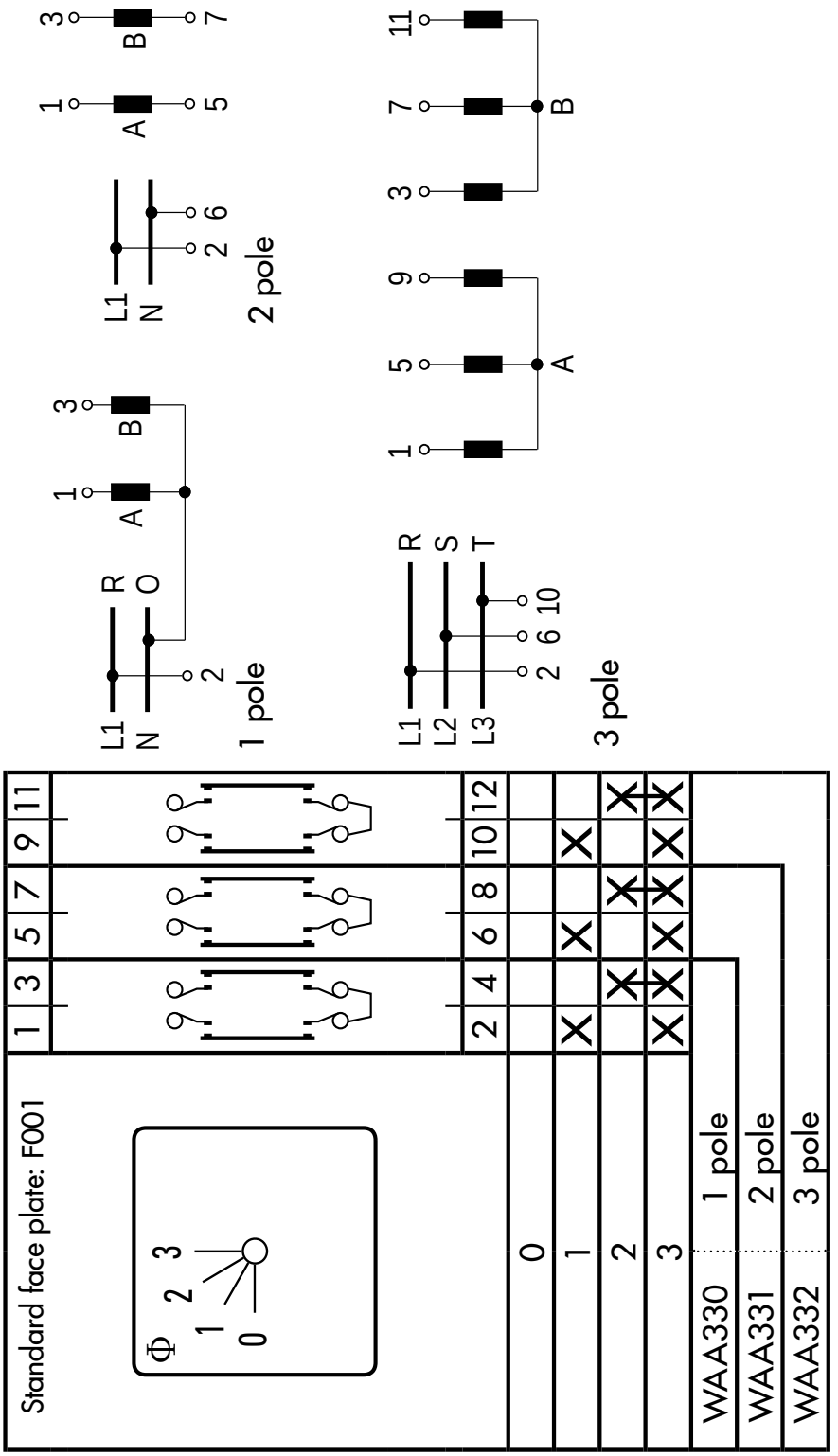
A320 up to A322
Double-throw Switches with „OFF“ with spring return from left to center

ON/OFF Switches



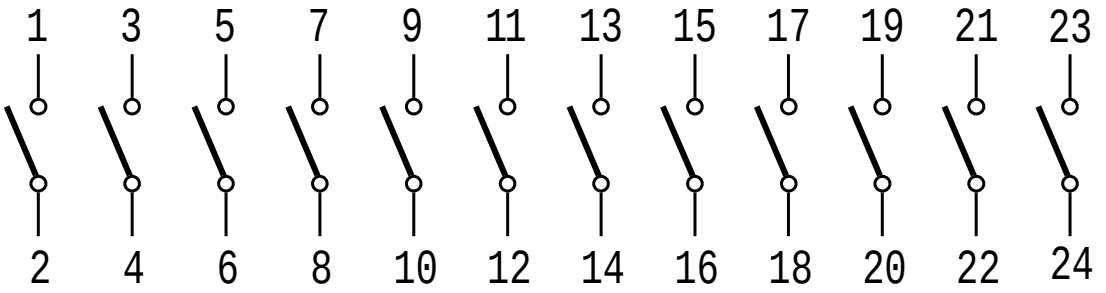
A324 up to A326
ON/OFF Switches, 90° Switching

2 Gang Series Switching



WAA330 up to WAA332 2 Gang Series Switching
(formerly A330 up to A332) 0,A,B,A+B

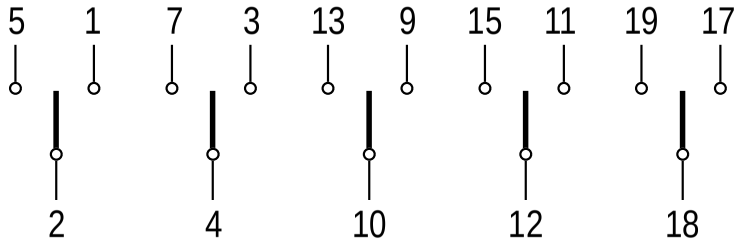
ON/OFF Switches



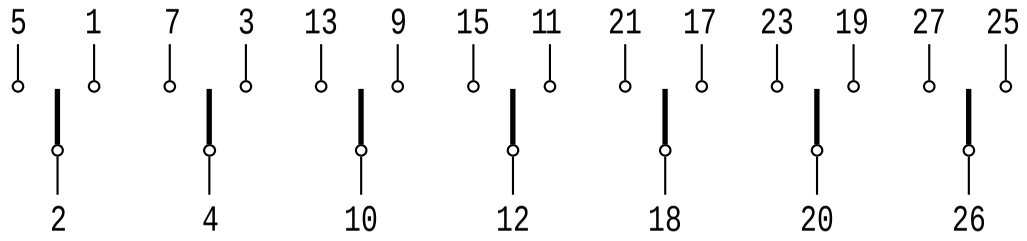
WAA341 (formerly A341)	5 pole
A342	6 pole
A343	7 pole
A344	8 pole
WAA345 (formerly A345)	9 pole
A346	10 pole
WAA347 (formerly A347)	11 pole
A348	12 pole

ON/OFF Switches, 60° Switching

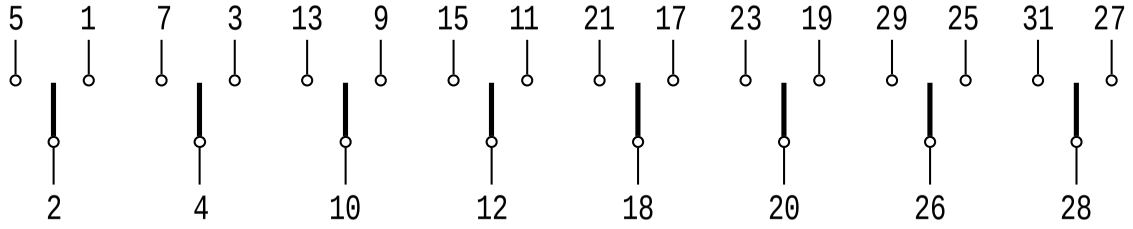
Double-throw Switches



5 pole



6 and 7 pole

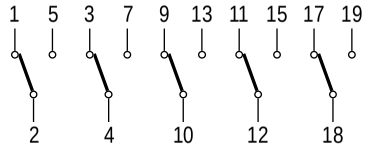


8 pole

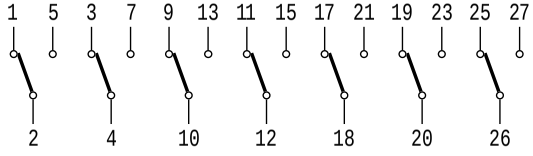
Double-throw Switches with „OFF“ 60° Switching

A361	5 pole	WAA363 (formerly A363)	7 pole
A362	6 pole	WAA364 (formerly A364)	8 pole

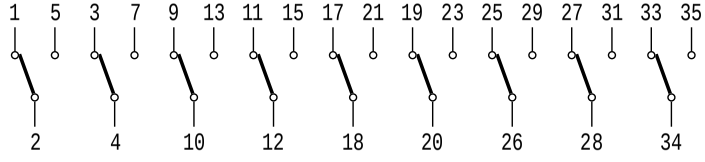
Double-throw Switches



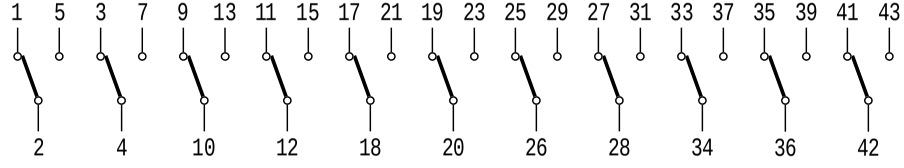
5 pole



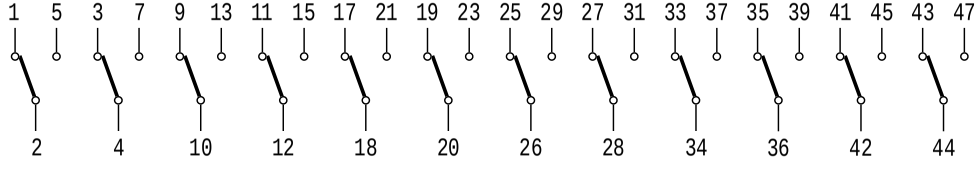
6- and 7 pole



8- and 9 pole



10- and 11 pole



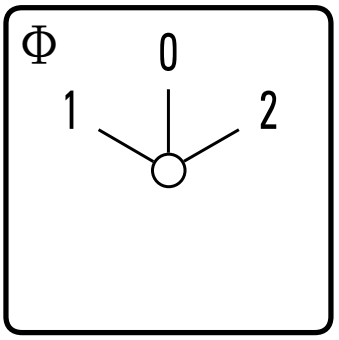
12 pole

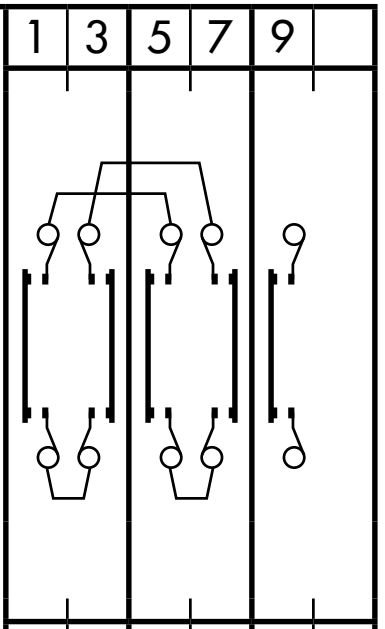
Double-throw Switches without „OFF“, 60° Switching

A369 5 pole	A371 7 pole	WAA373 9 pole (formerlyA373)	WAA375 11 pole (formerlyA375)
A370 6 pole	A372 8 pole	WAA374 10 pole (formerlyA374)	WAA376 12 pole (formerlyA376)

Motor Switches

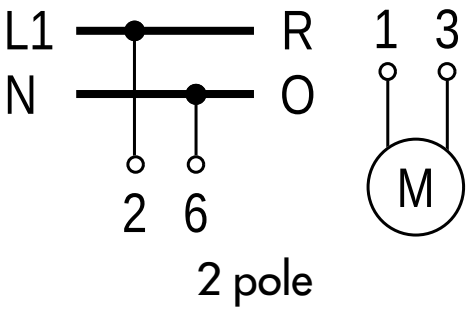
Standard face plate: F071

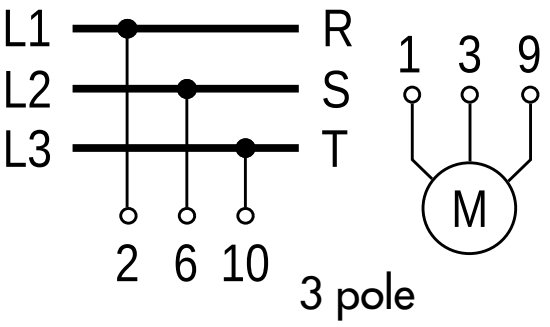




	2	4	6	8	10
1		X	X		X
0					
2	X			X	X

A400	2 pole
A401	3 pole

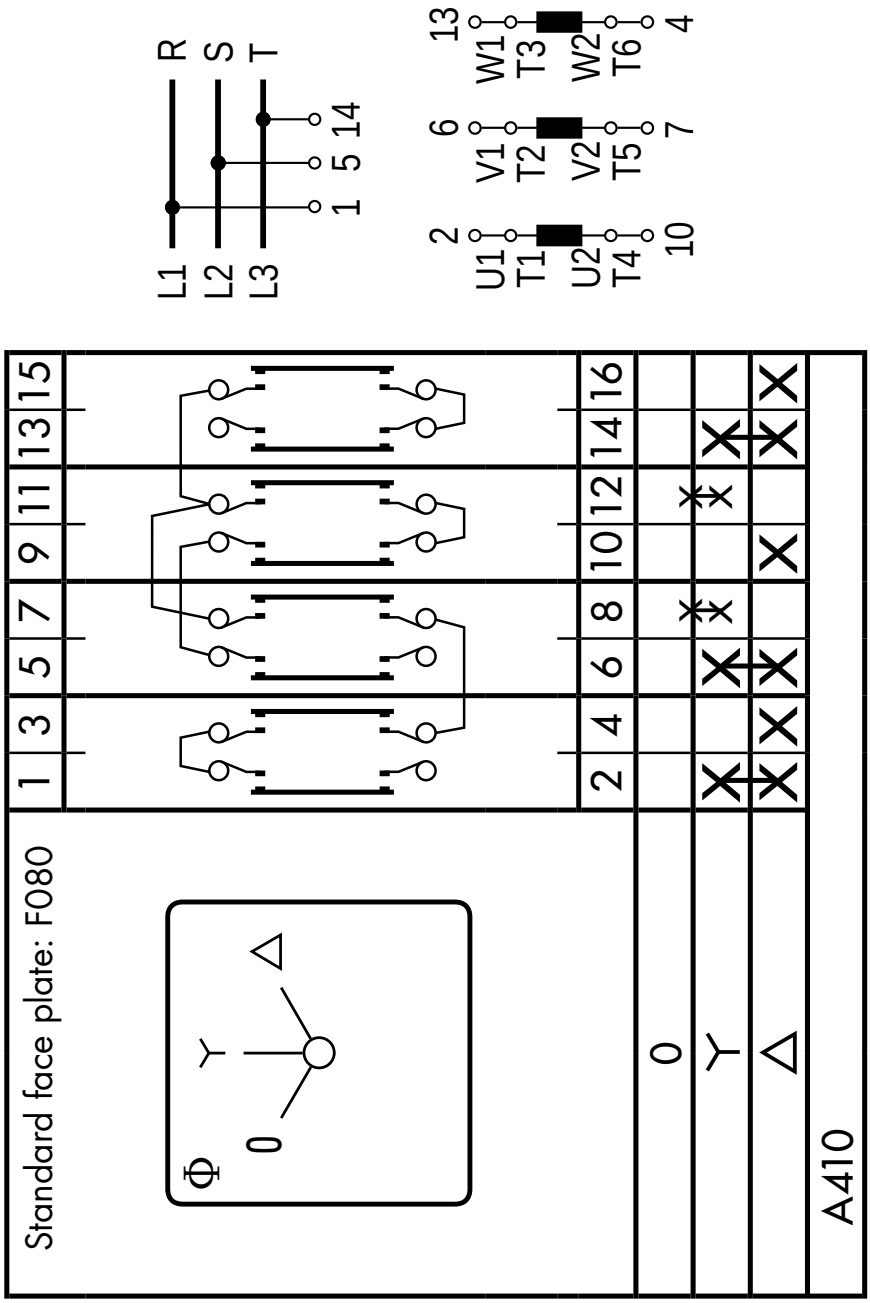




A400, A401 Motor Reversing Switches

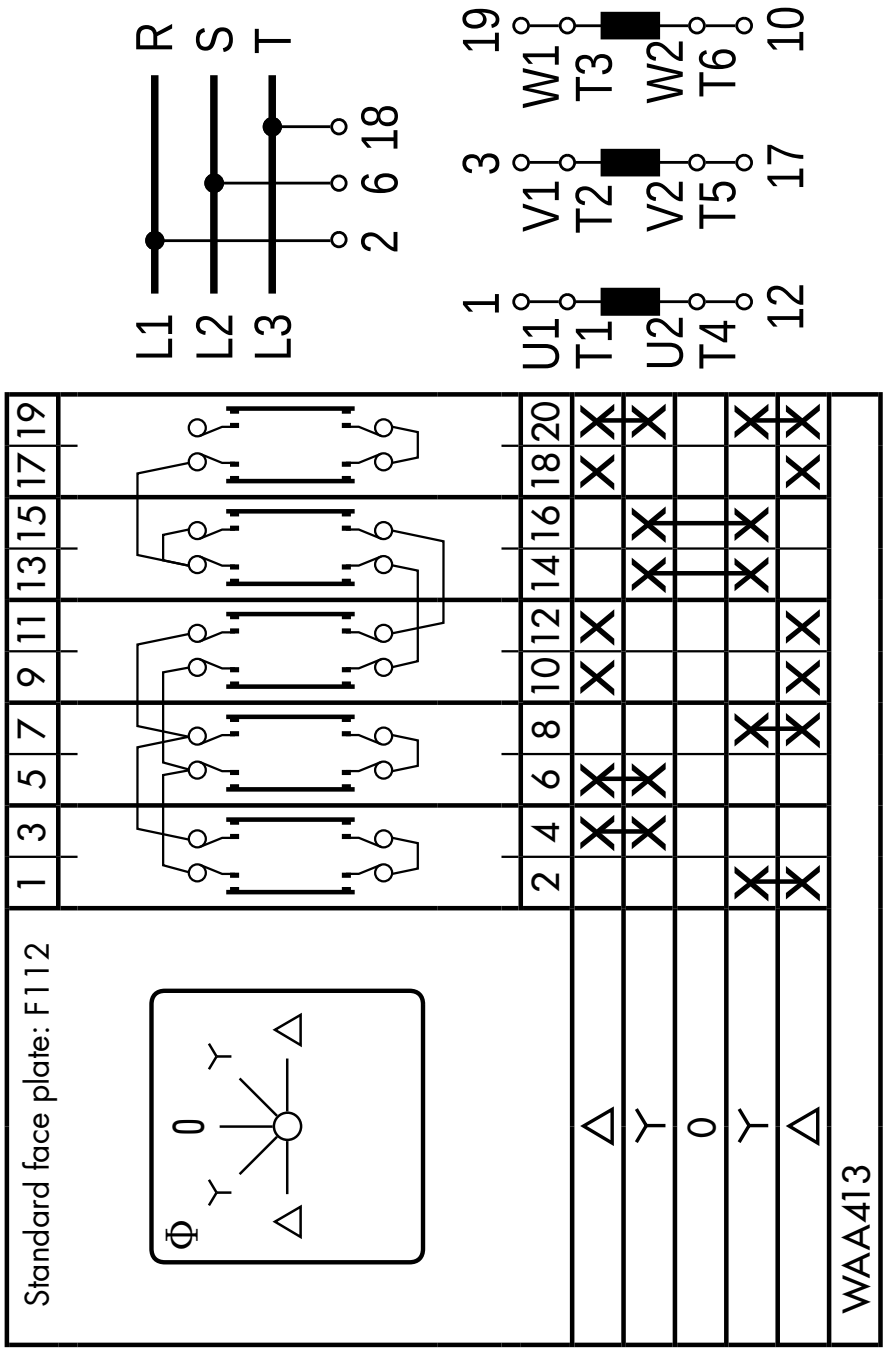
With spring return to „OFF“ see page 37

Motor Switches



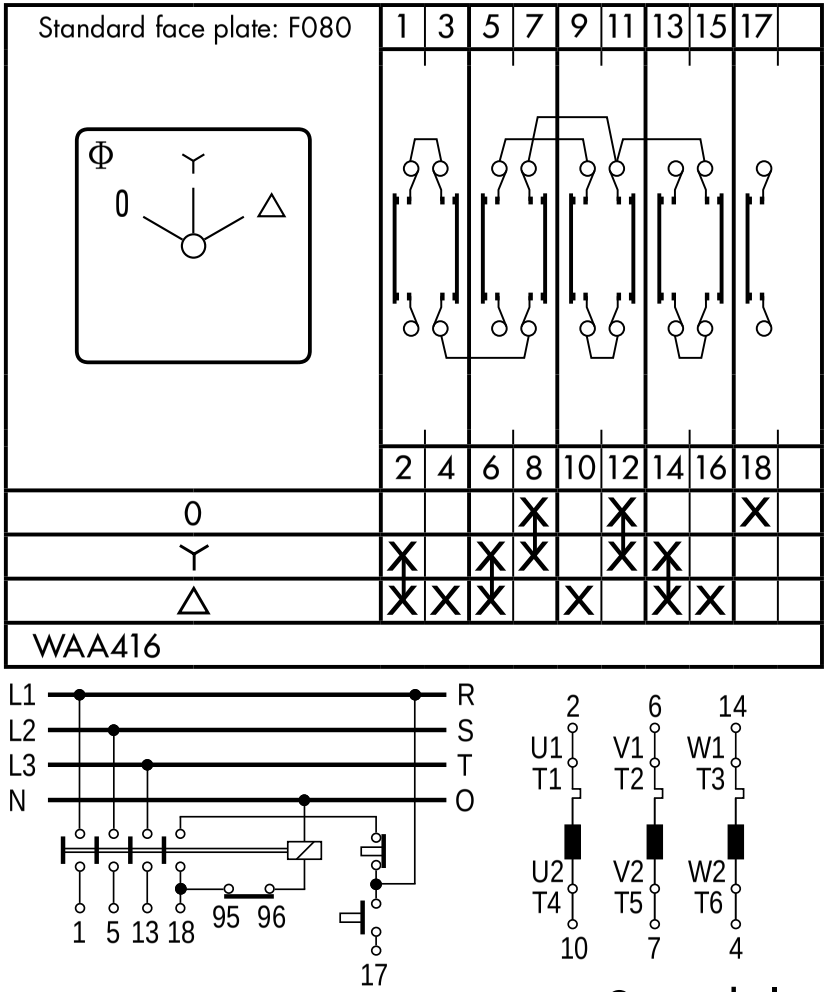
A410 Star-delta Switch

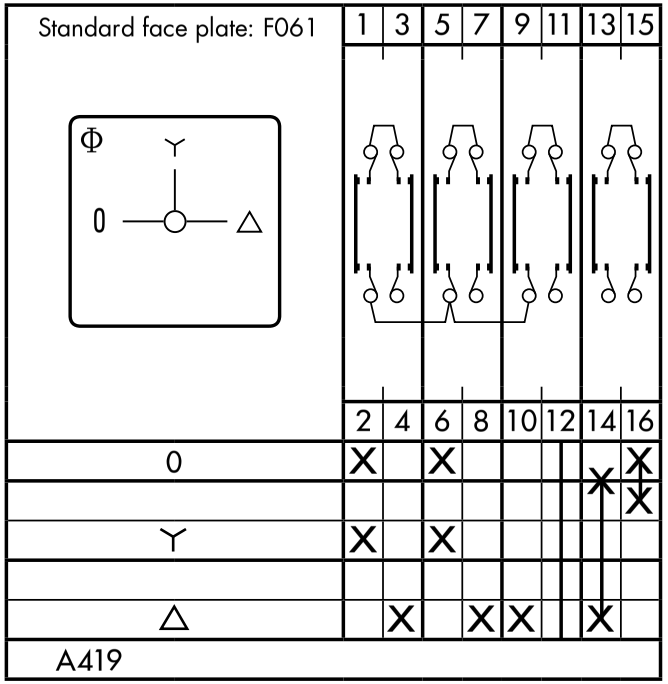
Motor Switches



WAA413 Star-delta Switch
(formerly A413) Reversing

Motor Switches



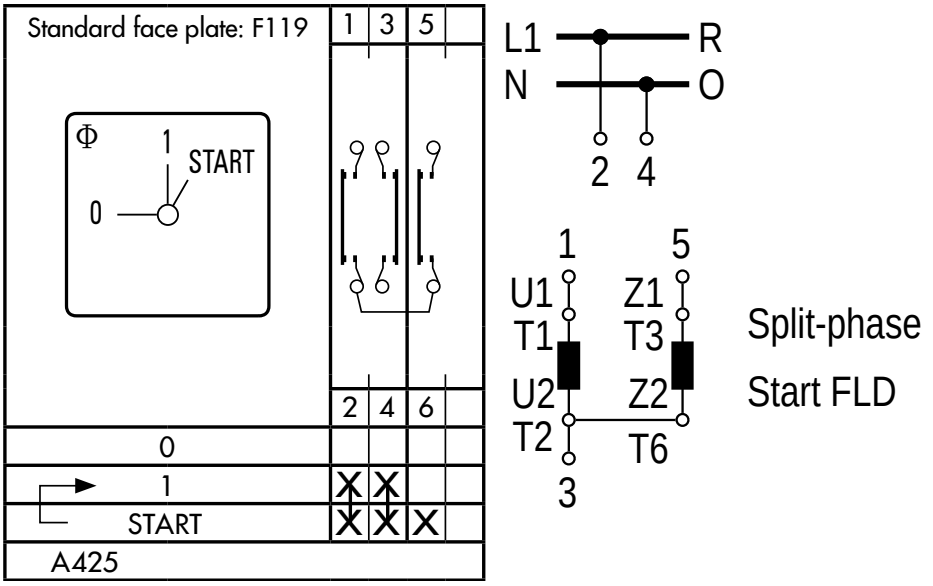


Star-delta Switches

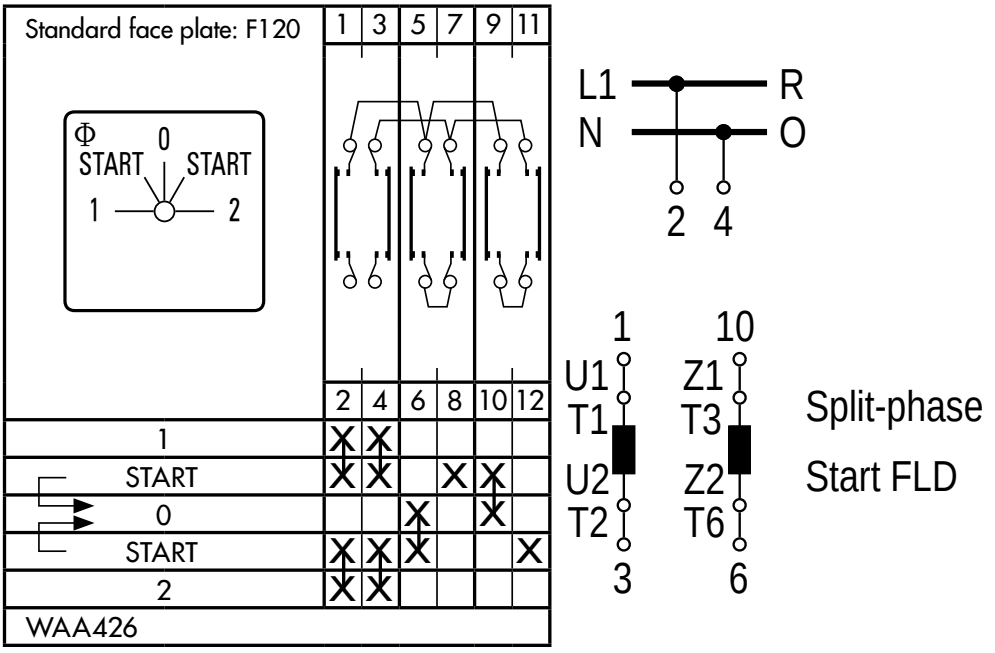
WAA416 (formerly A416) With auxiliary contact, closed in „OFF" position

A419 For use with reversing contactors

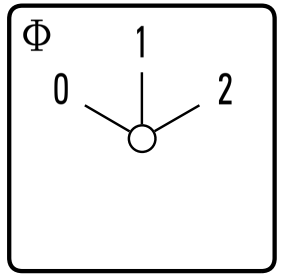
Motor Switches

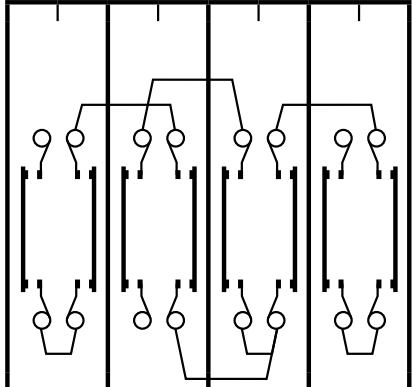


A425 Start and Run Switch
Split-phase start

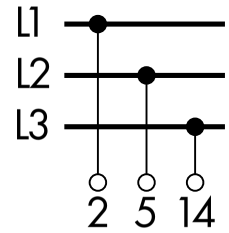


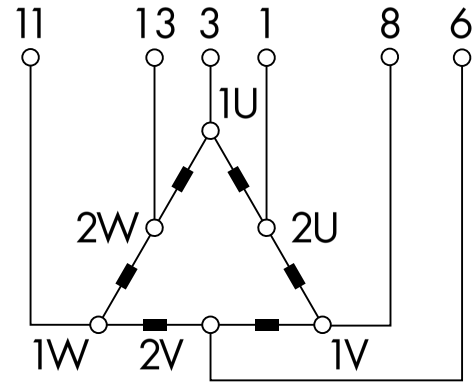
WAA426 Start and Run Switch
(formerly A426) Split-phase start reversing





Standard face plate: F073	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
0								
1		X			X			X
2	X		X	X		X	X	
A440								



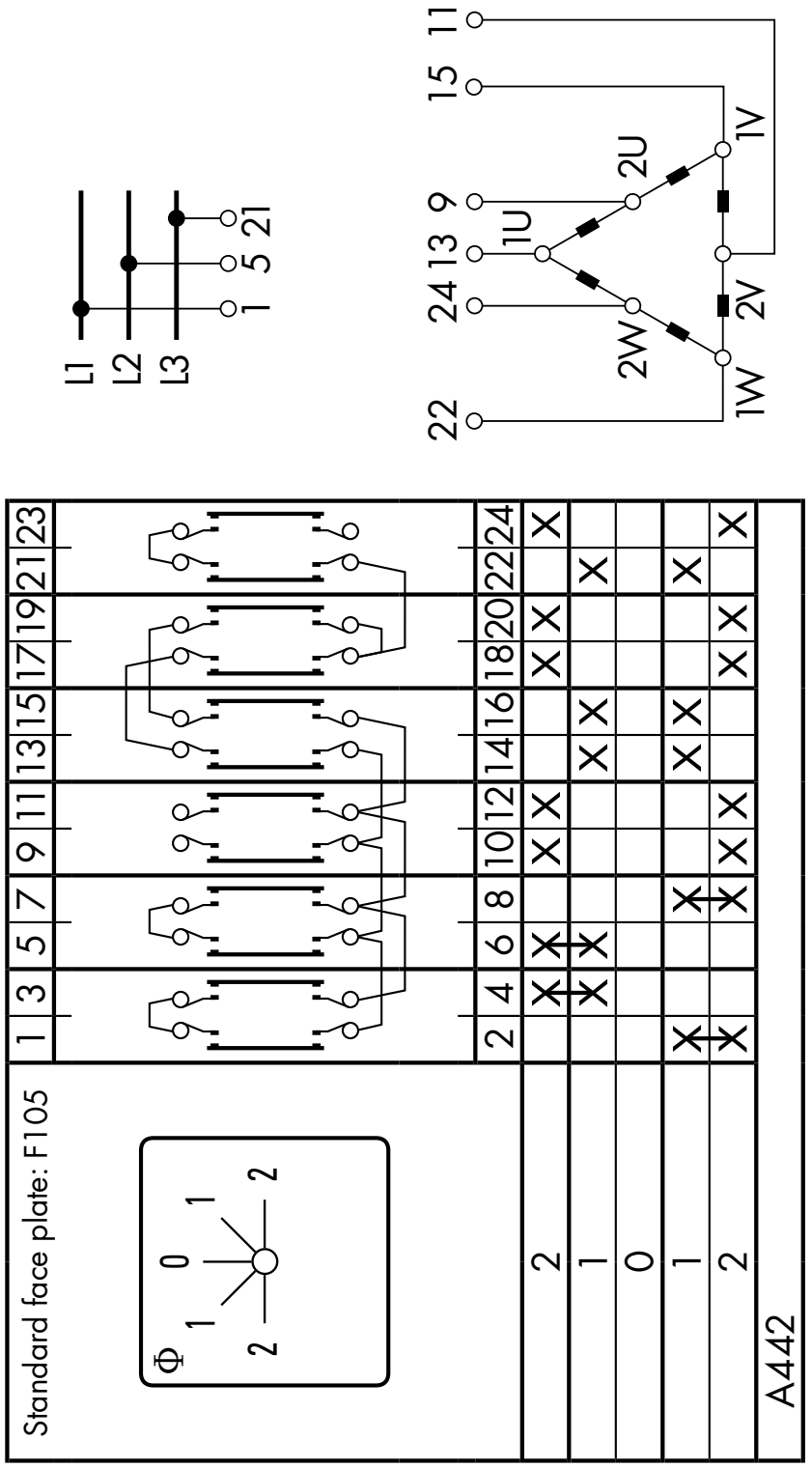


A440 2 speed, single winding
0 - A△ -A⋎⋎

A441 A△ - 0 - A⋎⋎

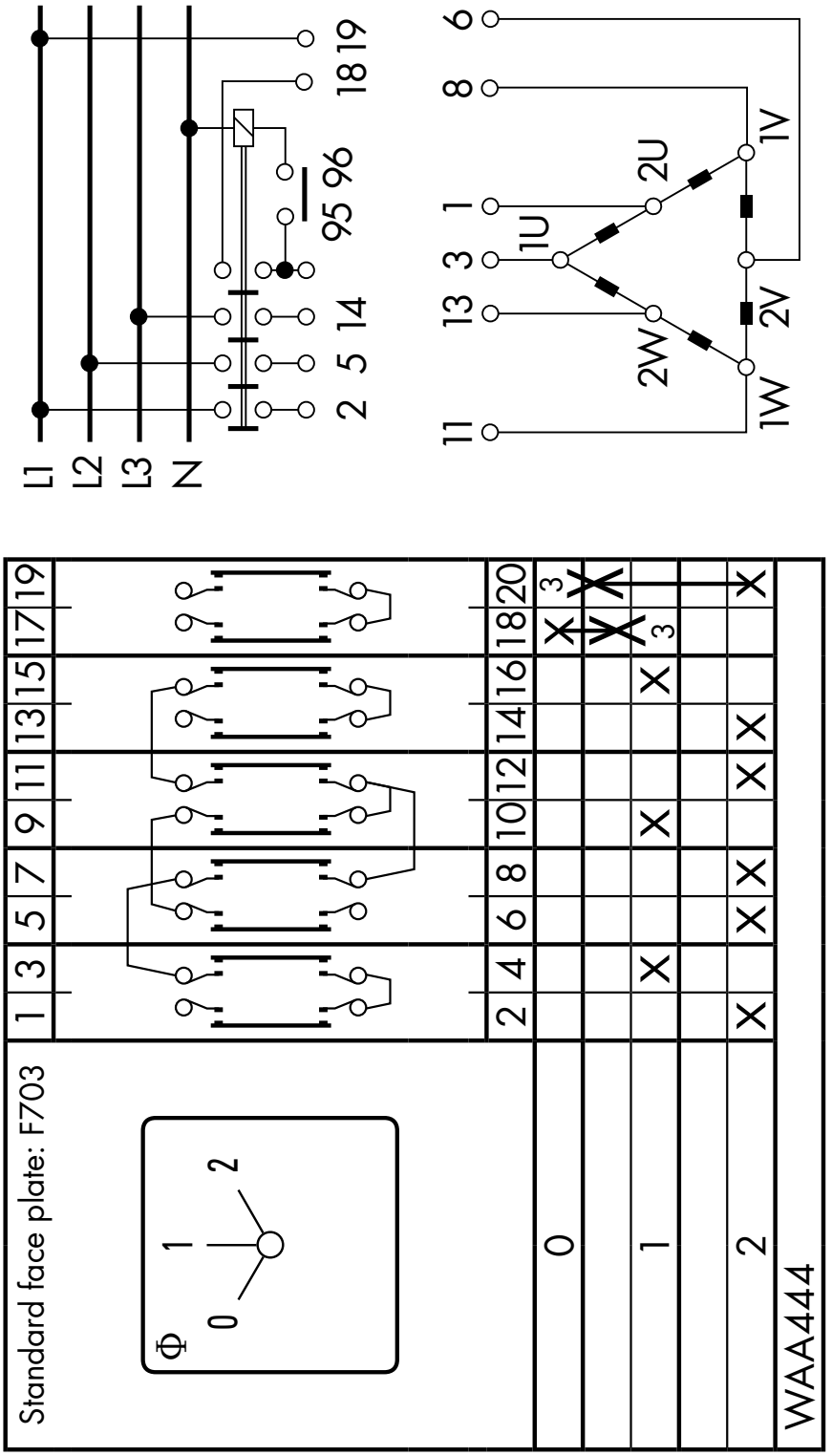
without „OFF“ see page 69

Motor Switches



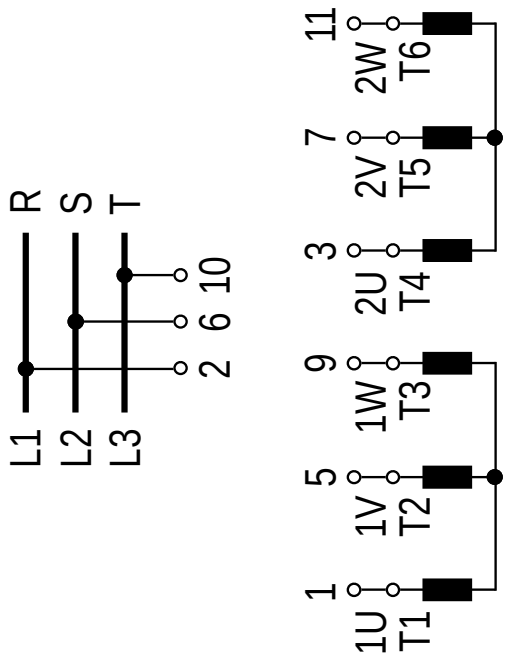
A442 2 speed, single winding with reverse
A⋎⋎ - A∆ - 0 - A∆ - A⋎⋎

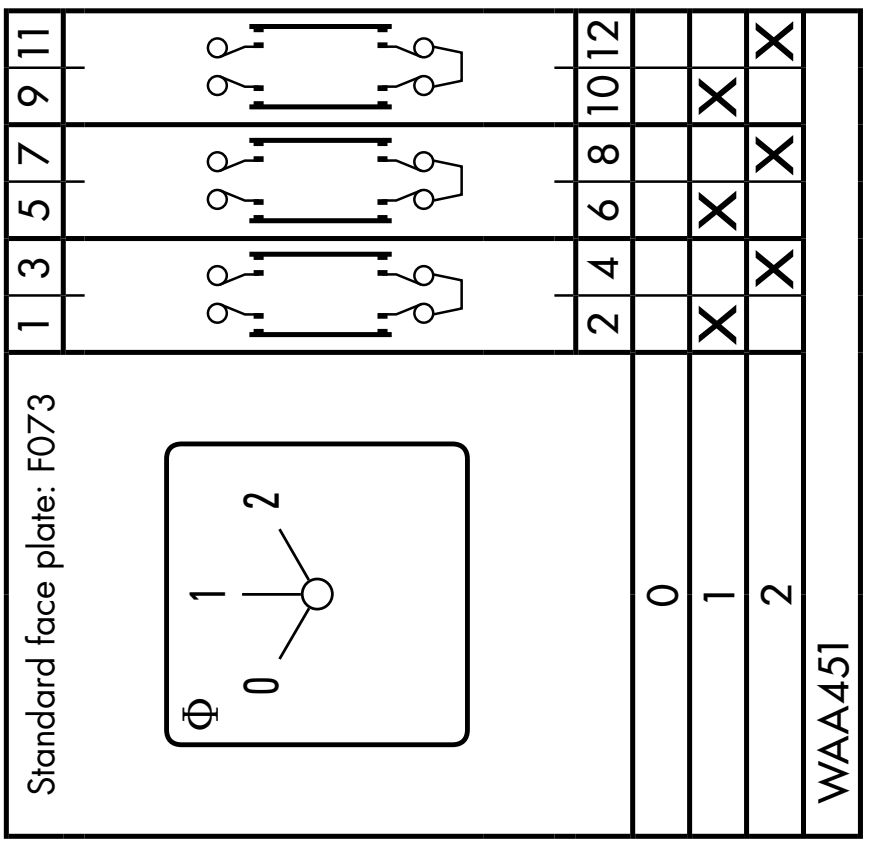
Motor Switches



WAA444 Motor Control Switch
(formerly A444) For use with reversing contactors

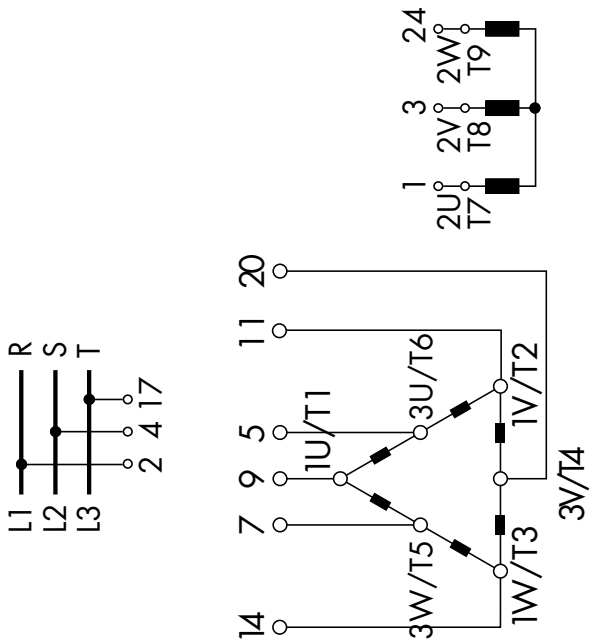
Motor Switches

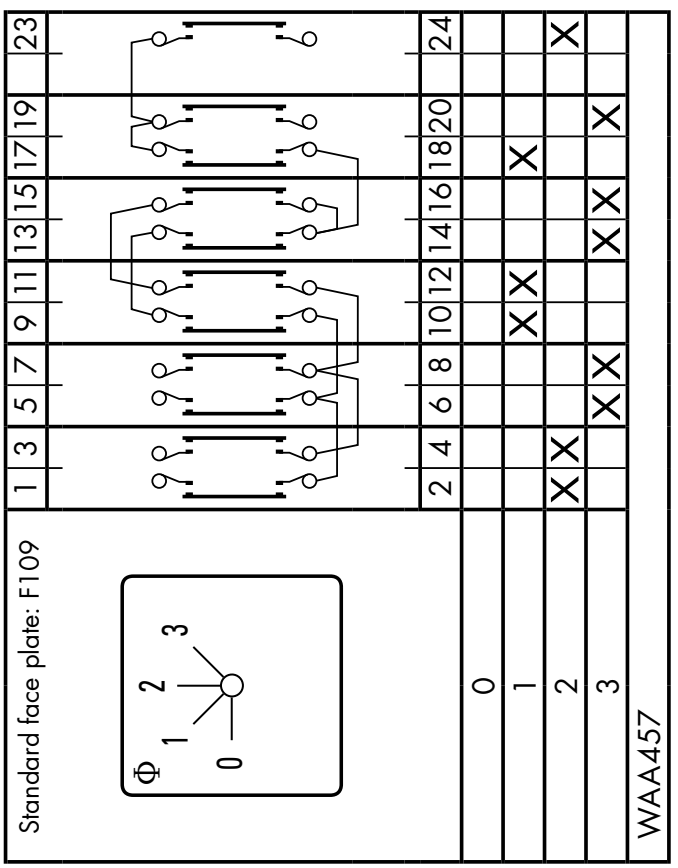




WAA451 Motor Control Switch
(formerly A451) 2 speed, 2 winding
0 - A - B, Y or Δ

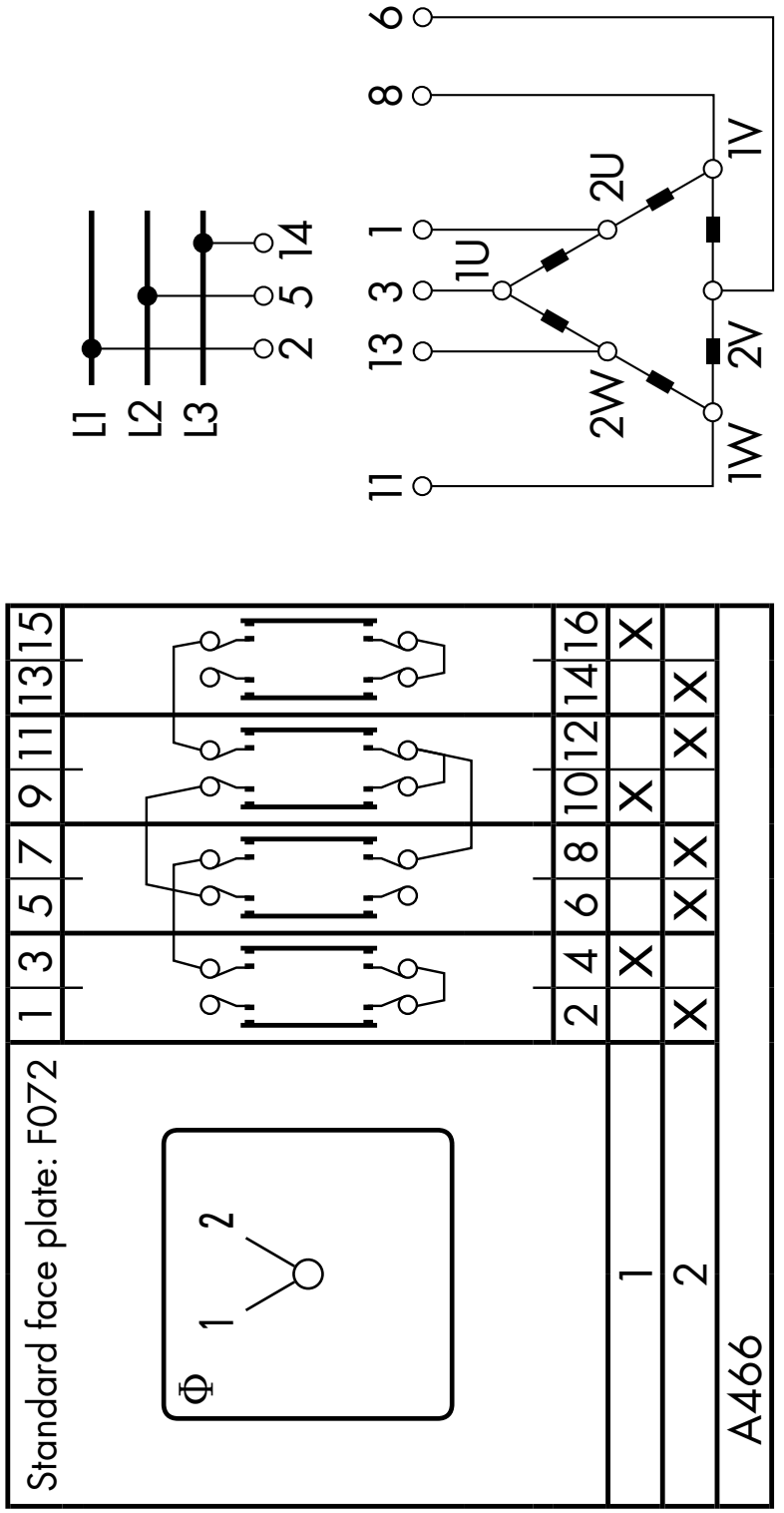
Motor Switches





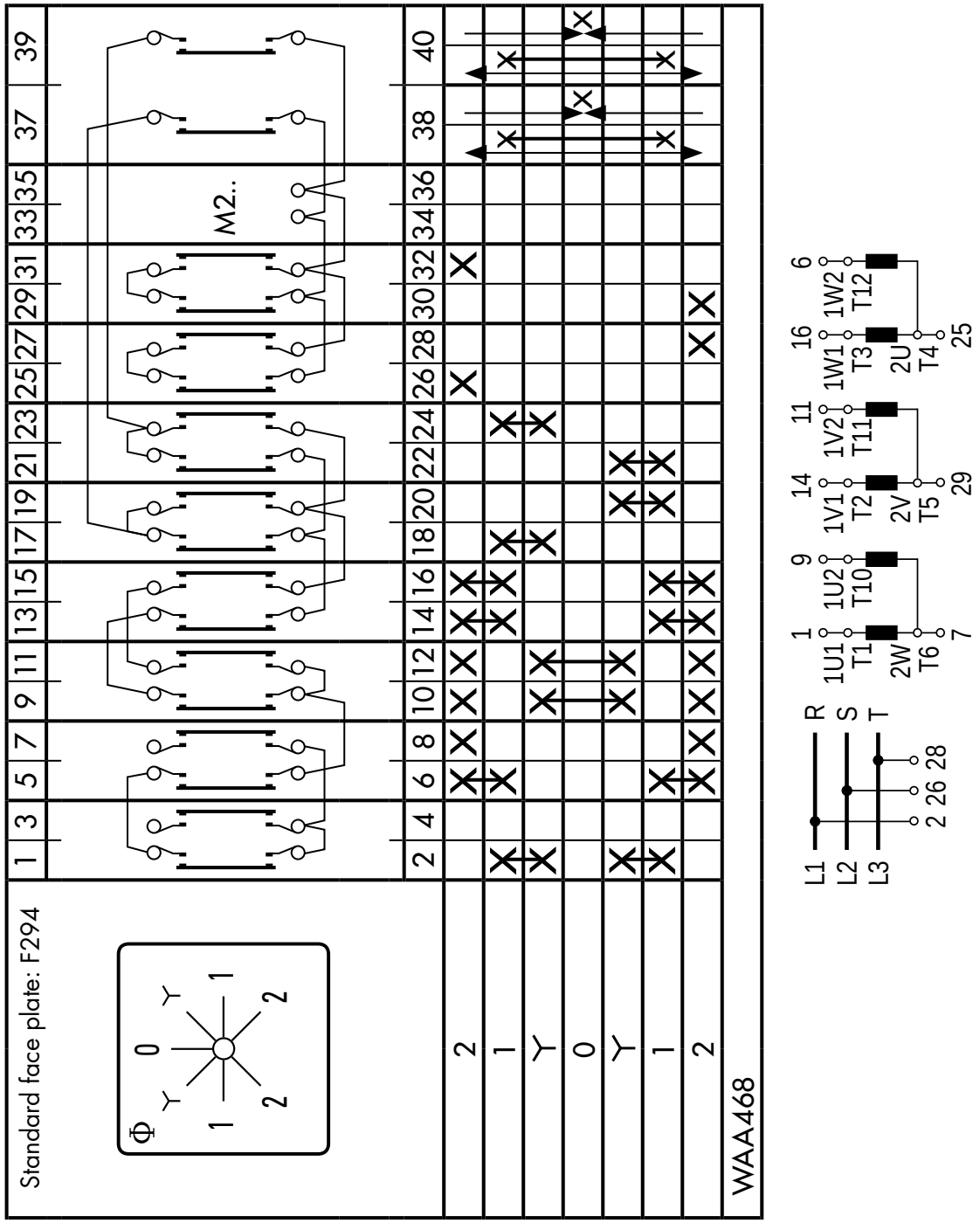
WAA457 Motor Control Switch
(formerly A457) 3 speed, 2 winding
0 - A∆ - B⋎ - A⋎⋎

Motor Switches



A466 2 speed, single winding without „OFF"
AΔ - AY

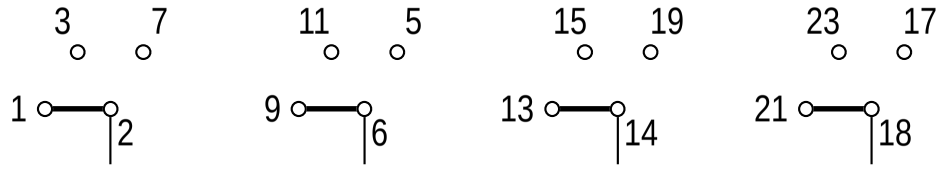
Motor Switches



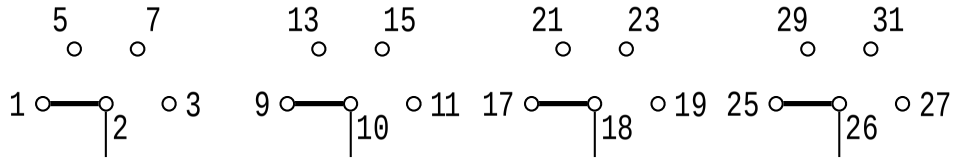
WAA468 Motor Control Switch
(formerly A468) 2 speed reversing for 2 way operation
with slip clutch for „OFF“ load use

Multi-step Switches 4 pole without „OFF"

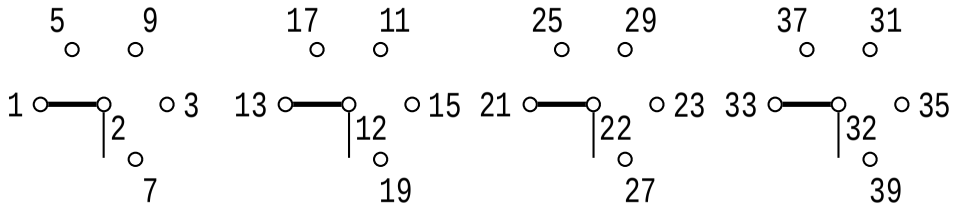
3 Step A476



4 Step A477



5 Step WAA478
(formerly A478)

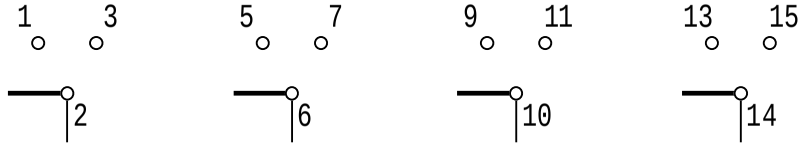


Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 4 pole with „OFF"

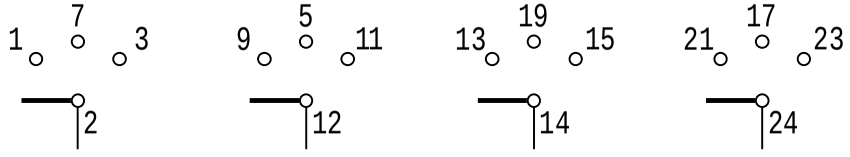
2 Step

WAA480
(formerly A480)



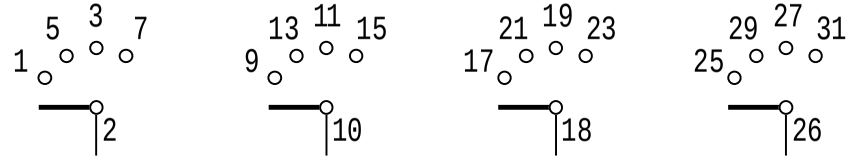
3 Step

WAA481
(formerly A481)



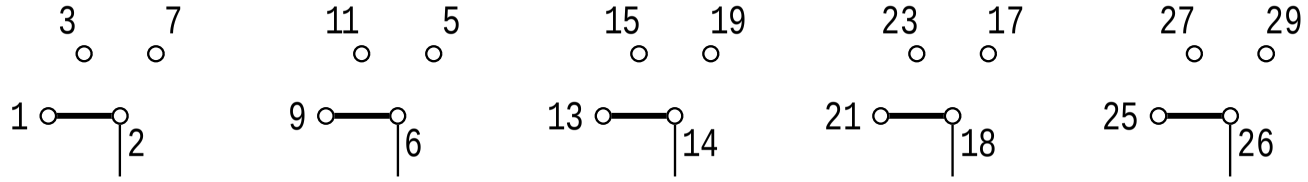
4 Step

WAA482
(formerly A482)

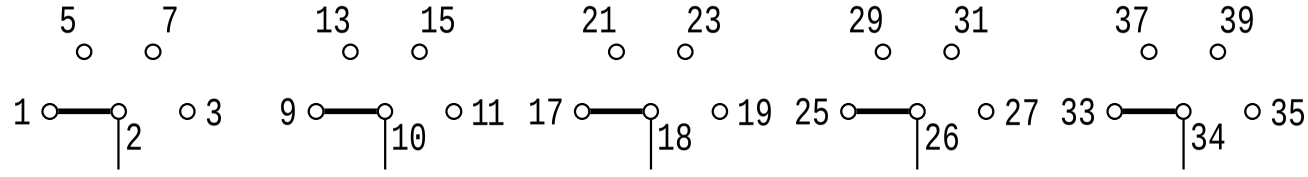


Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 5 pole without „OFF"



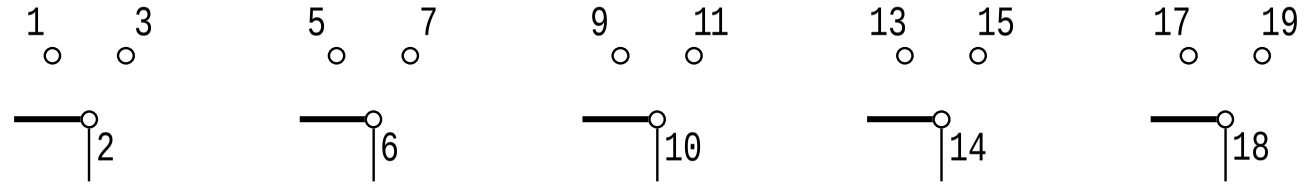
3 Step WAA484
(formerly A484)



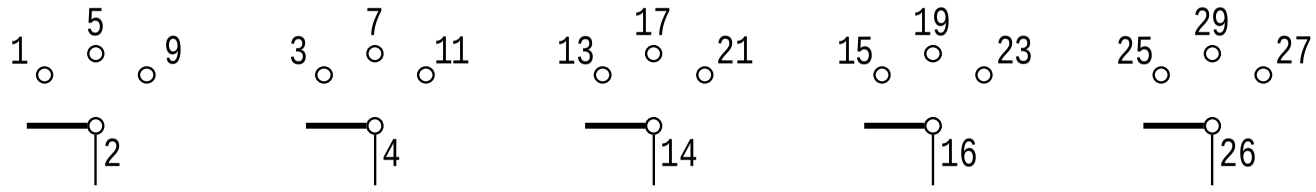
4 Step WAA485
(formerly A485)

Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate.

Multi-step Switches 5 pole with „OFF"



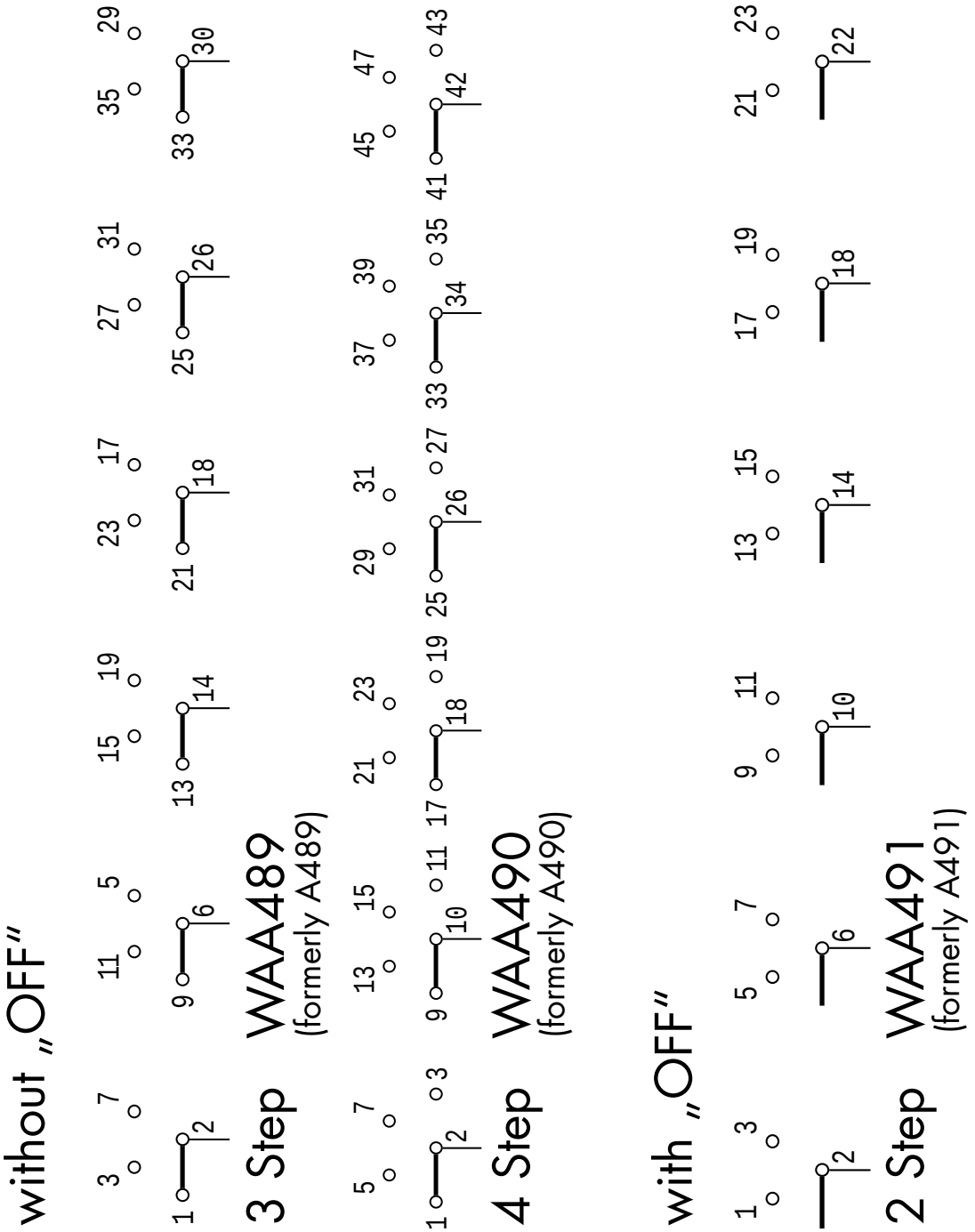
2 Step WAA486
(formerly A486)



3 Step WAA487
(formerly A487)

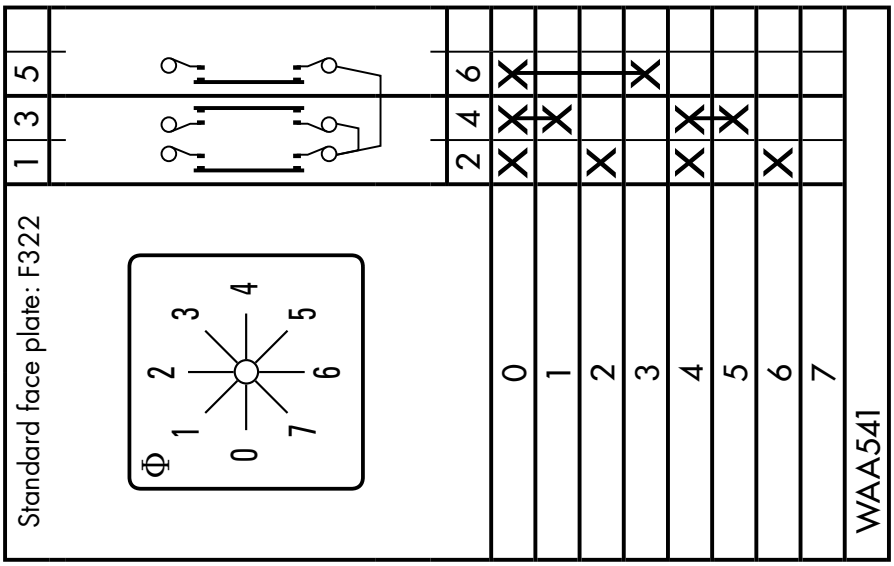
Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate

Multi-step Switches 6 pole

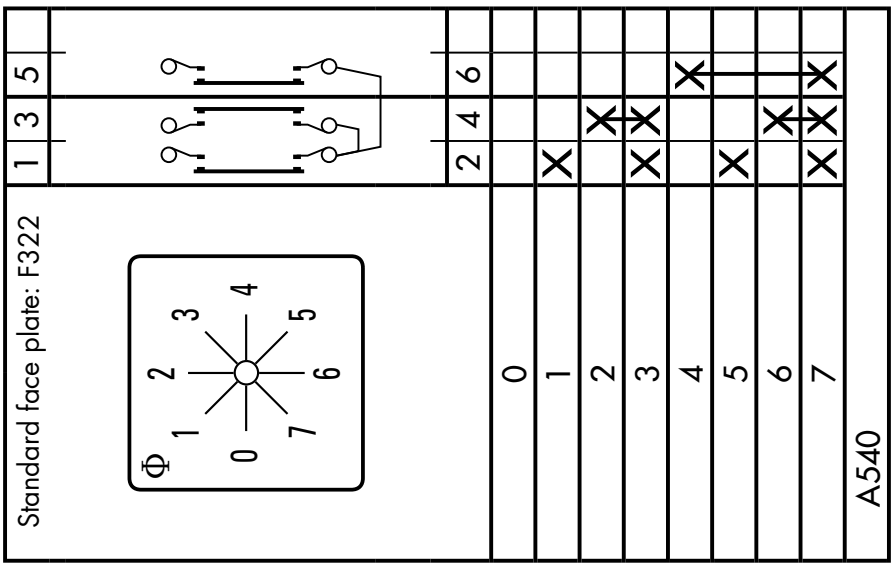


Numbers shown at the connection points on the above diagrams, correspond to the terminal numbers on the switch. The position of connection points correspond to the positions indicated on the face plate

Coding Switches/Binary Code

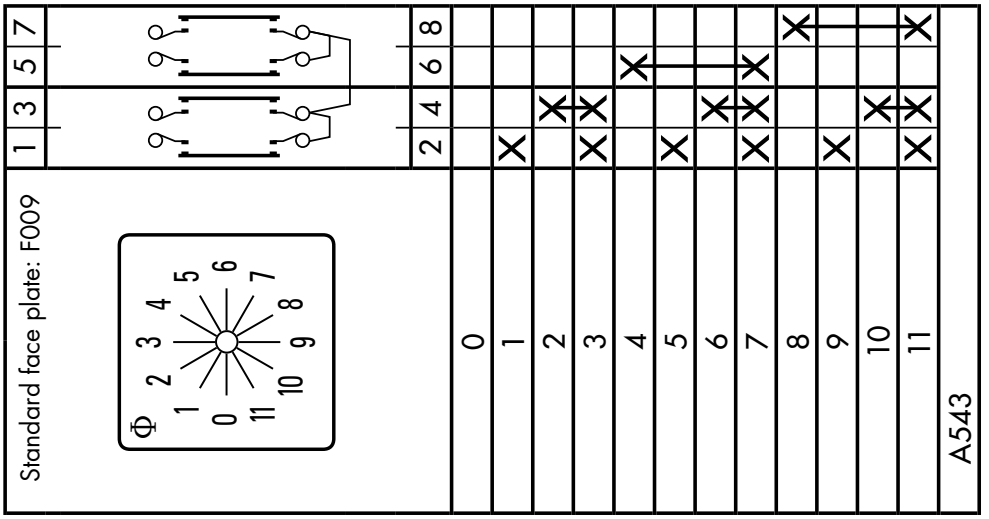


WAA541 0-7+complement
(formerly A541)

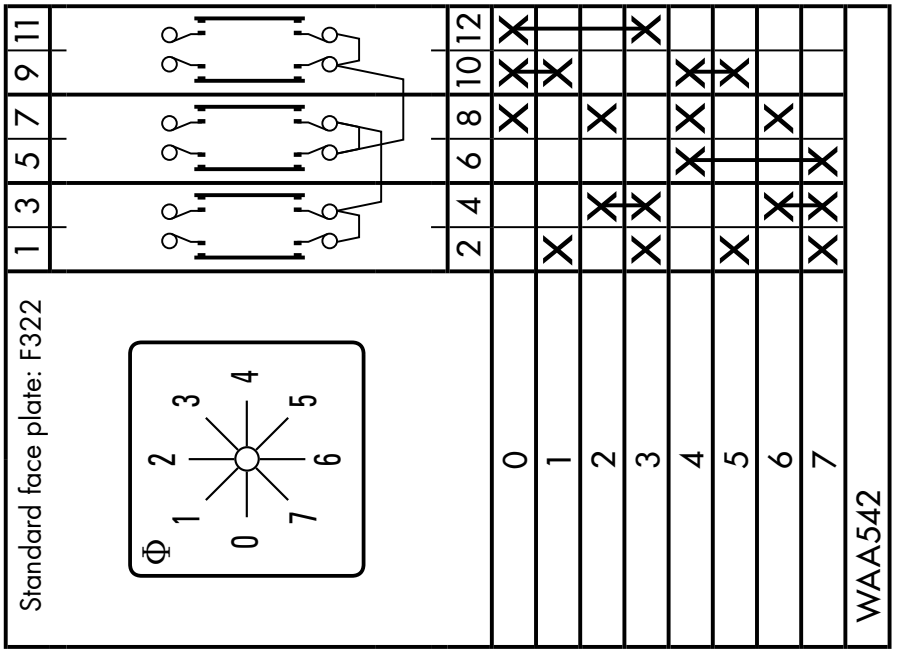


A540 0-7

Coding Switches/Binary Code

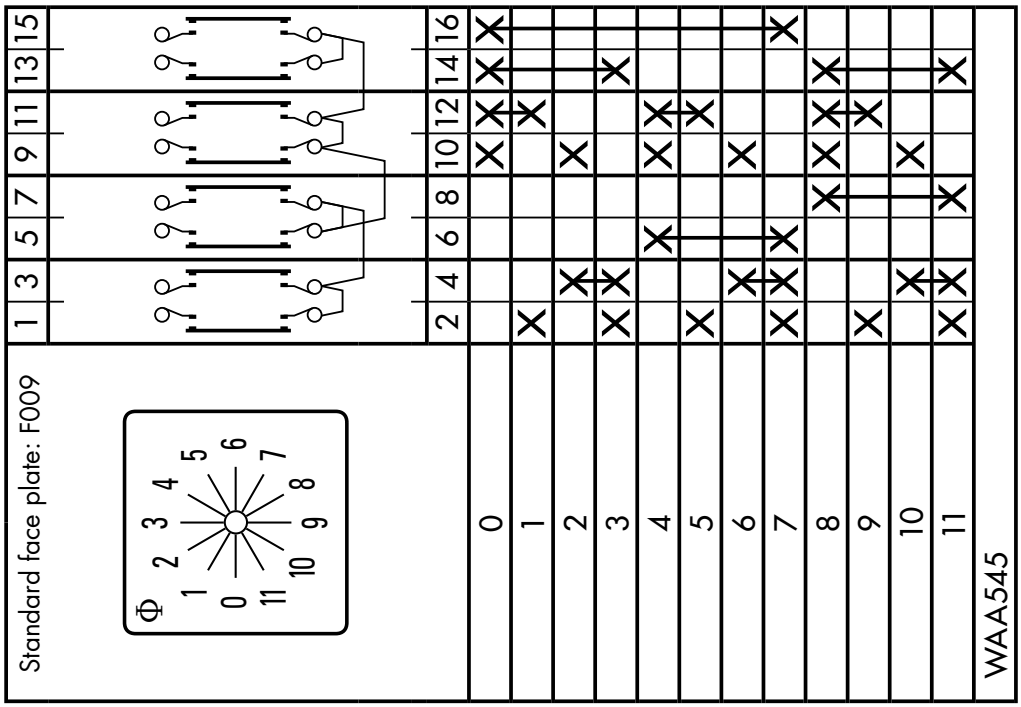


A543 0-11

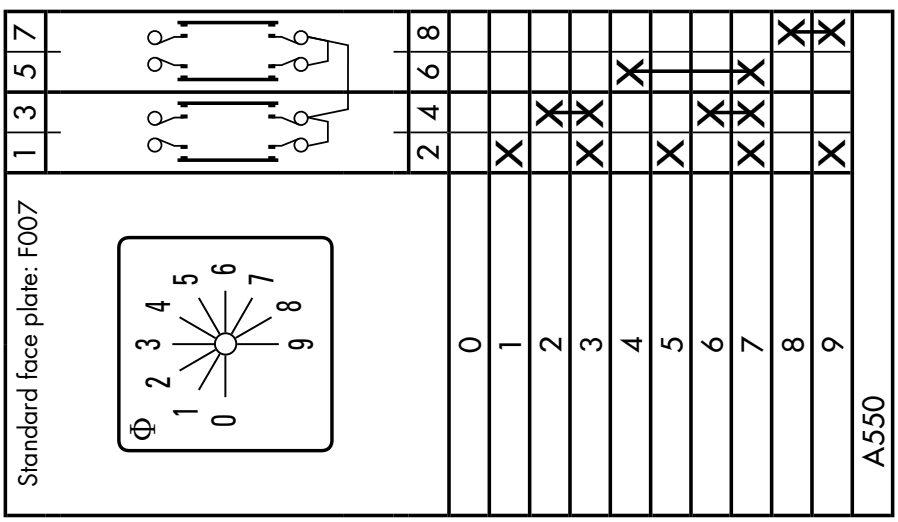


WAA542 0-7+complement
(formerly A542)

Coding Switches/Binary Code

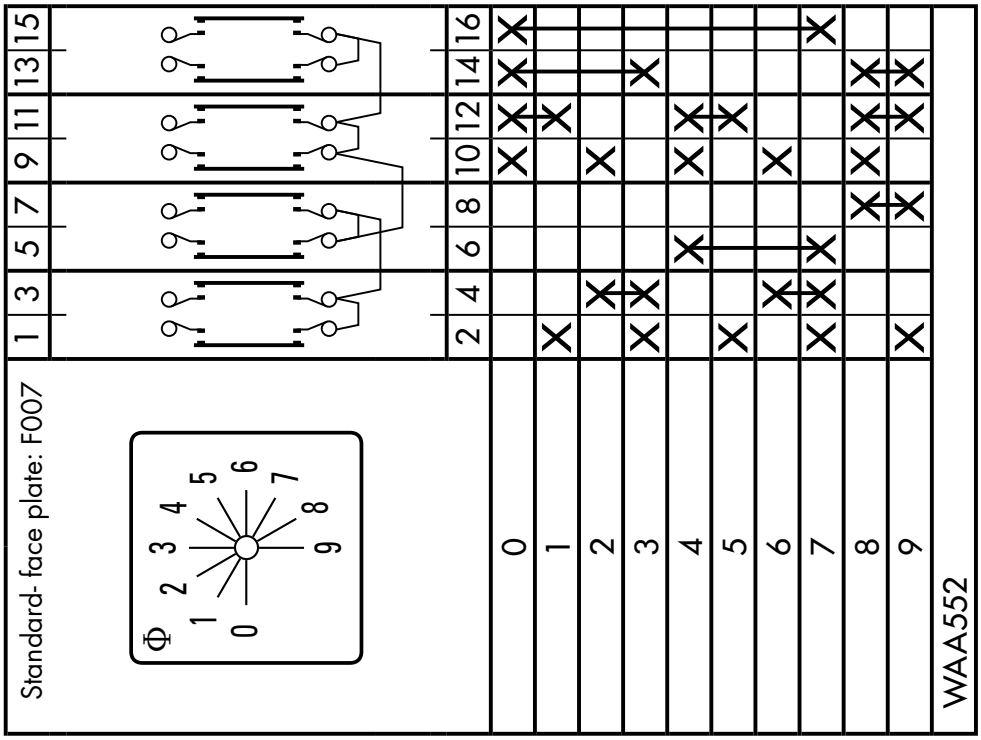


WAA545 0-11+complement
(formerly A545)

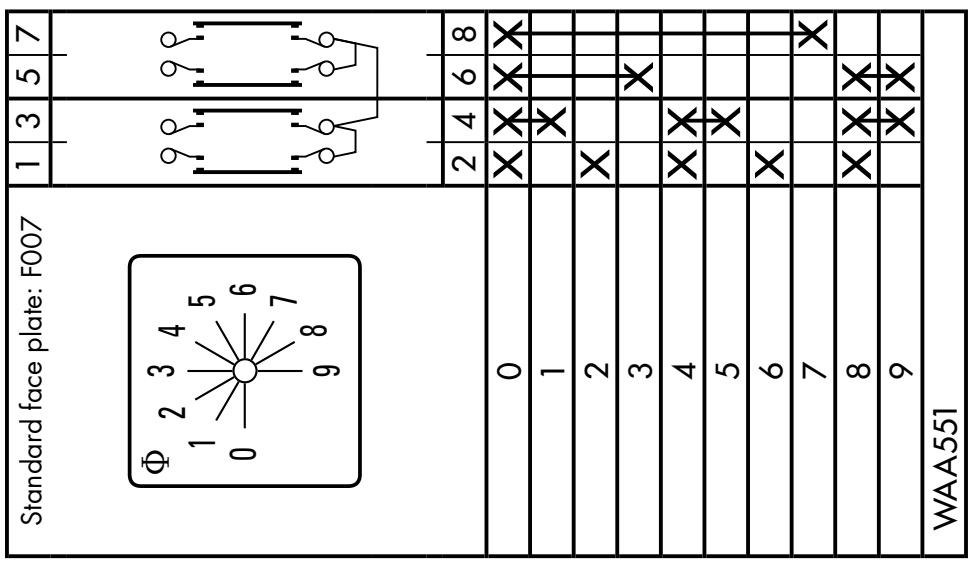


A550 0-9

Coding Switches/BCD-Code

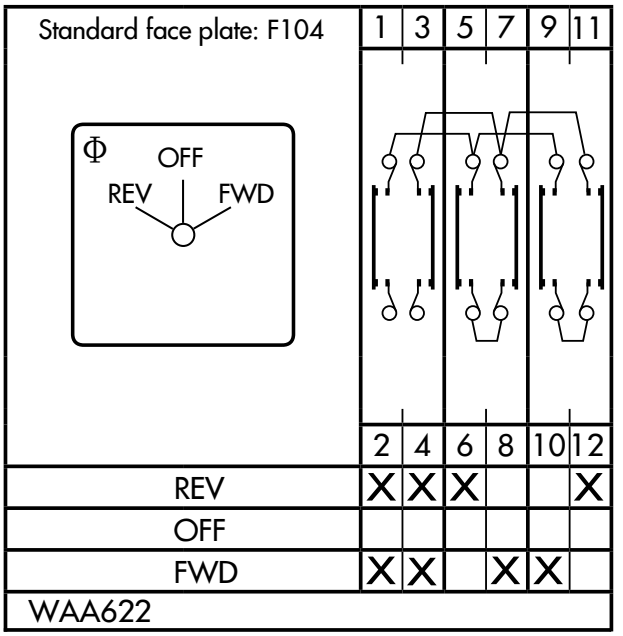


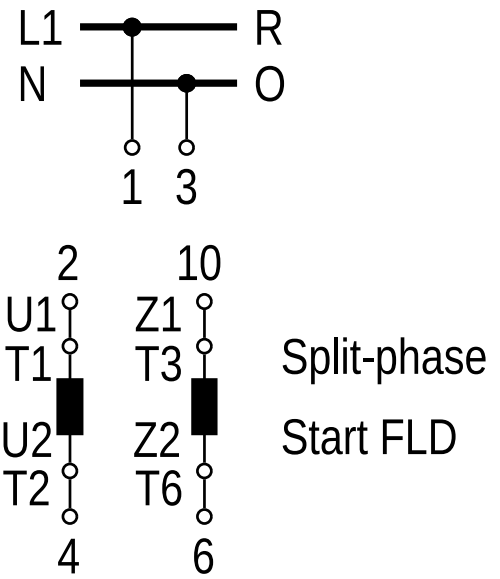
WAA552 0-9+complement
(formerly A552)



WAA551 0-9
(formerly A551)

Motor Switches



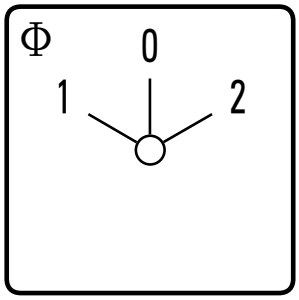


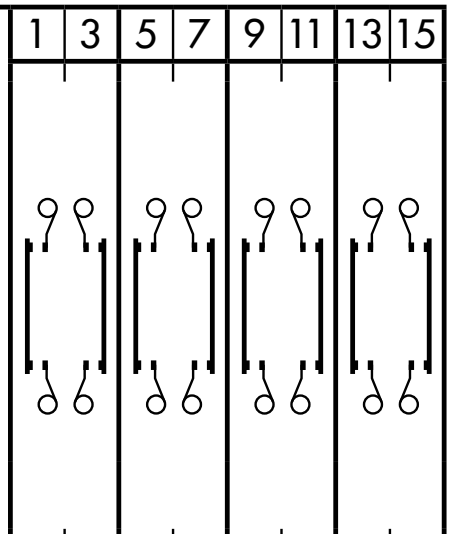
WAA622
(formerly A622)

Start and Run Switch
Split-phase reversing
auto cutout of start
field winding

Double-throw Switches with electrically isolated contacts

Standard face plate: F071



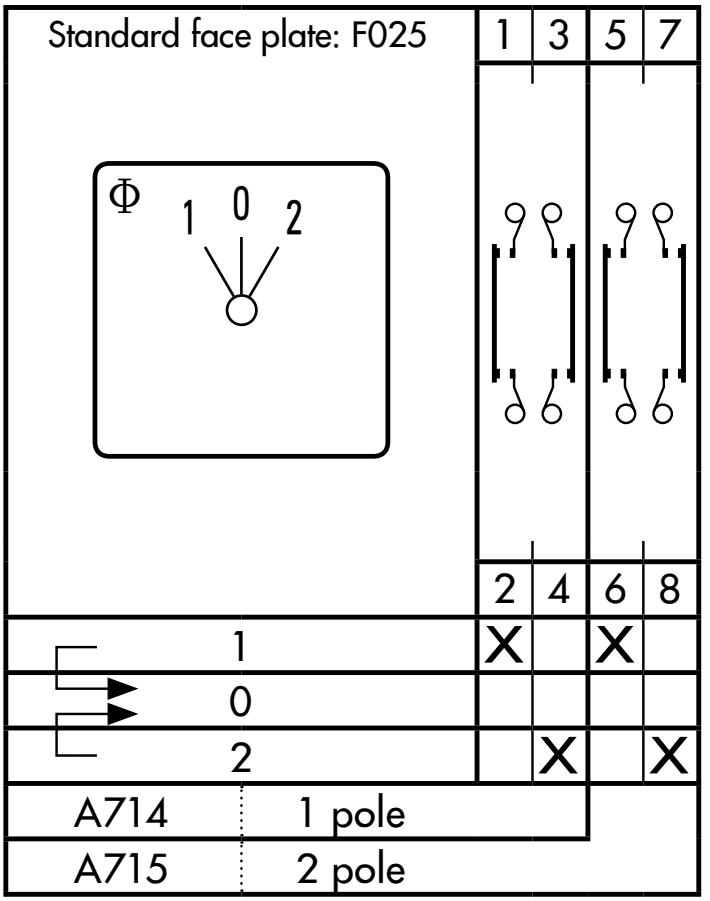


	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
1		X		X		X		X
0								
2	X		X		X		X	

A710	1 pole
A711	2 pole
A712	3 pole
A713	4 pole

A710 up to A713 Double-throw Switch with „OFF“, 60° Switching

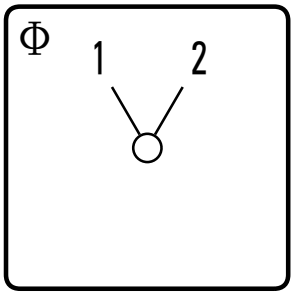
Double-throw Switches with electrically isolated contacts

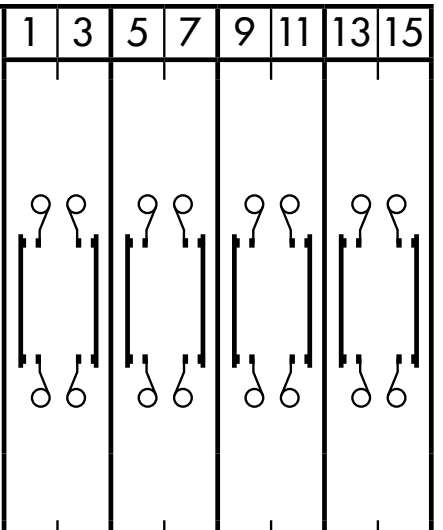


A714 up to A715 Double-throw Switch with „OFF“with spring return to center, 30° Switching

Double-throw Switches with electrically isolated contacts

Standard face plate: F072





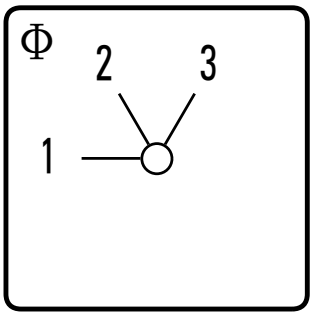
	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
1	X		X		X		X	
2		X		X		X		X

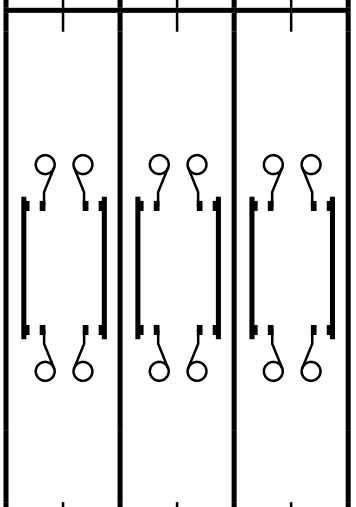
A720	1 pole
A721	2 pole
A722	3 pole
A723	4 pole

A720 up to A723
Double-throw Switch without „OFF“,
60° Switching

Multi-step Switch with electrically isolated contacts

Standard face plate: F076





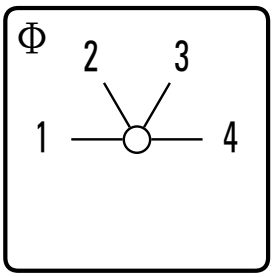
	1	3	5	7	9	11
	2	4	6	8	10	12
1	X				X	
2		X				X
3			X	X		

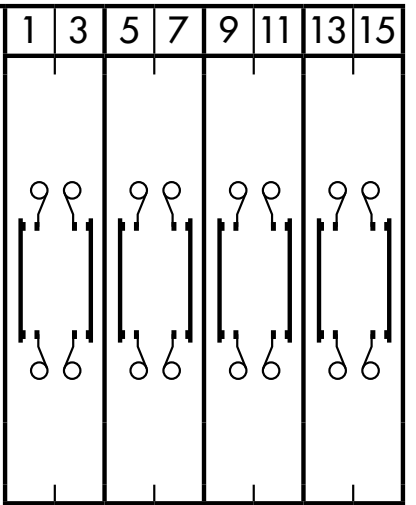
A730	1 pole
A750	2 pole

A730, A750
Multi-step Switch without „OFF“, 3 Positions

Multi-step Switch with electrically isolated contacts

Standard face plate: F077



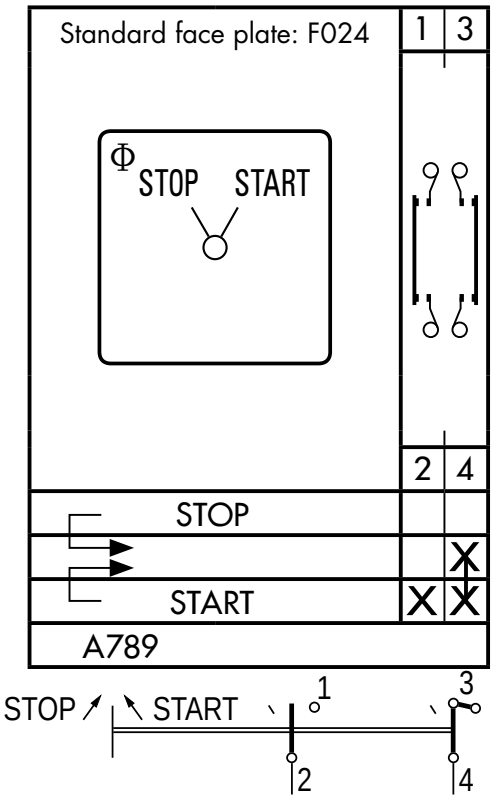


	1	3	5	7	9	11	13	15
	2	4	6	8	10	12	14	16
1	X				X			
2			X				X	
3				X				X
4		X				X		

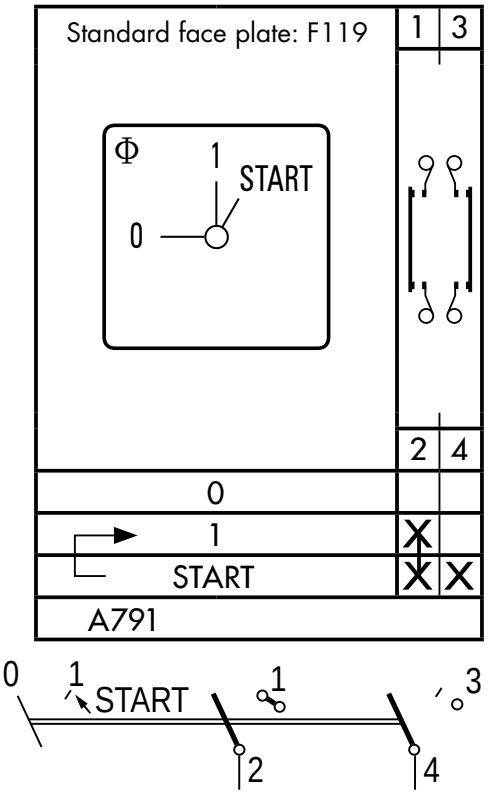
A731	1 pole
A751	2 pole

A731, A751
Multi-step Switch without „OFF“, 4 Positions

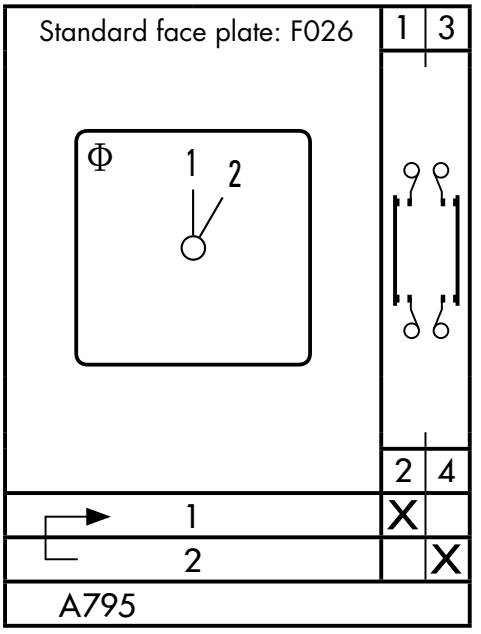
Control Switch with electrically isolated contacts



A789 Stop start switch

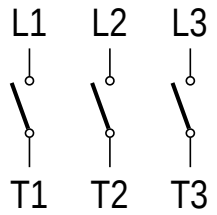


A791 Stop start switch with spring return from start to run

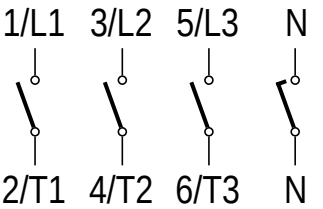


A795 Double-throw Switch without „OFF“, 1 pole with spring return

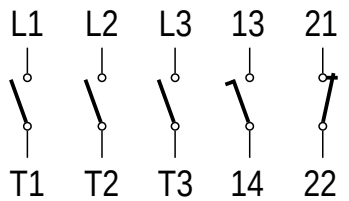
Main Switches of KG-, KH- and KF-series



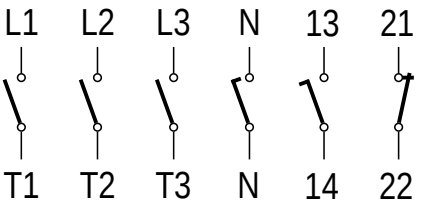
3 pole



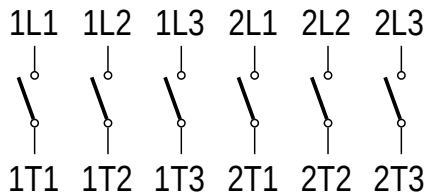
4 pole (3+N)



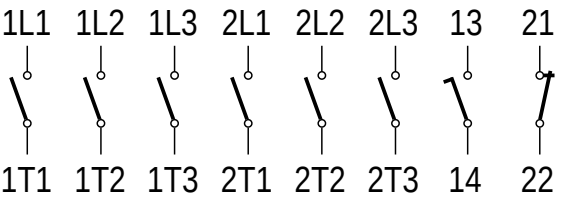
3 pole,1NO+1NC



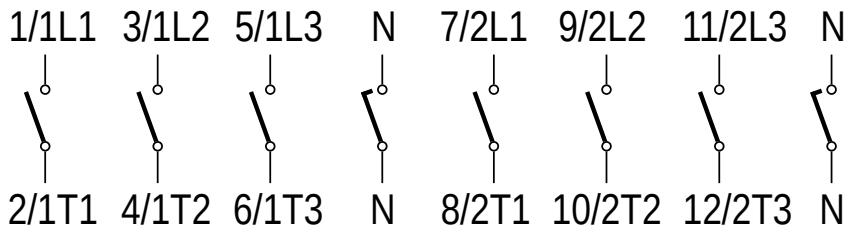
4 pole,1NO+1NC



6 pole

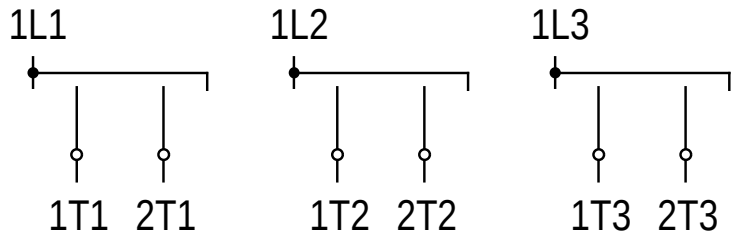


6 pole,1NO+1NC

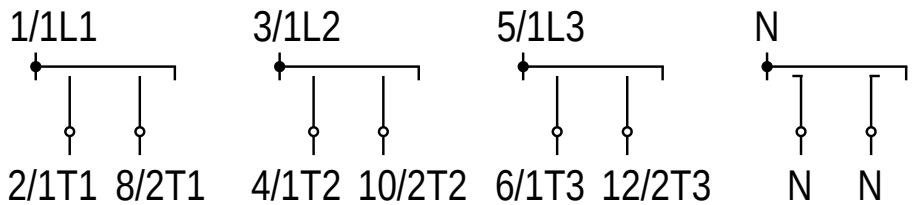


8 pole

Double-throw Switches with „OFF“ of KG-, KH- and KF-series



K900 3 pole



K950 4 pole

Notes

Notes

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