International Certifications E474136

UL 60947-4-1 and CSA C22.2 60947-4-1-14 Low-voltage Switch gear and control gear-part4-1: Contactors and motor-starters, Electromechanical Contactors and motor-starters.
Electrical ratings:

Model	General Purpose		HP rating				Max.short current	Max. voltage	Maximum Fuse Size
			Single Phase 2 pole		Three Phase 3 pole				
	Voltage V AC	Current A	110-120V	220-240V	220-240V	440-480V			
VS, AS ,A PS, R, C series	600	20	1.0	2.0	3.0	5.0	5KA	480V AC	35A
A, PS series	600	40	3.0	5.0	7.5	10.0	5KA	480V AC	75A
A & PS series	600	80	5.0	10.0	15.0	30.0	5KA	480V AC	125A
A series	600	120A	5.0	10.0	20.0	30.0	5KA	480V AC	125A

CSA Certified 186663

Applicable Requirements
CAN/CSA-C22.2 No. 0-M91-General Requirements-Canadian Electrical Code, PART II
CAN/CSA-C22.2 No. 14-05-Industrial Control Equipment
UL Standard No. 508, 17th-Industrial Control Equipment
CSA Std C22.2 No. 65-93-Wire Connectors

Rating: 20A, 25A, 40A, 80A

Model No.	General Purpose		HP rating			
			Single Phase / 2 pole		Three Phase / 3 pole	
	Voltage (V)	Current (A)	110-120V	220-240V	220-240V	440-480V
PART A: AX1Y1, PSX1Y1, VSX1Y1, ASX1Y1 Series	600	20	1.0	2.0	3.0	5.0
PART B: CY4 PSX2Y2 Series	600	25	1.0	2.0	3.0	5.0
PART C: A3Y3 PSX3Y3 Series	600	40	3.0	5.0	7.5	10.0
PART D: A6Y3 Series	600	80	5.0	10.0	15.0	30.0

TUV Rheinland Group

License No. R50062176
EN 60947-1: 2004
EN 60947-3: 1999+A1
EN 60947-4-1: 2001+A1
EN 60947-5-1: 2004

Rating: 20A, 25A, 40A, 63A, 80A

Series		A2Y1 PS2Y2 R2Y3	CY4	A3Y1	A4Y1	A6Y1
Rated frequency	Hz	50/60				
Thermal current Ith	A	20	25	40	63	80
Utilization category AC-1 (EN 60947-4-1)	-	16A, 660V	20A, 660V	32A, 660V	40A, 660V	63A, 660V
Utilization category AC-21A (EN 60947-3)	-	16A, 600V	20A, 600V	25A, 600V	32A, 600V	40A, 600V
Utilization category AC-22A (EN 60947-3)	-	16A, 600V	20A, 600V	32A, 600V	40A, 600V	63A, 600V
Utilization category AC-12 (EN 60947-5-1)	-	6A, 240V 4A, 440V	6A, 240V 4A, 440V	14A, 240V 6A, 440V	16A, 240V 7A, 440V	--
Rated short-time withstand current Icw	A	250	350	1000	1000	1000
Rated short-time making capacity Icm	KA	None				
Rated conditional short circuit current	KA	1	1	10	10	10
Kind of SCPD	-	Fuse (gL/gG)	Fuse (gL/gG)	Fuse (gL/gG)	Fuse (gL/gG)	Fuse (gL/gG)
Rating of SCPD	A	20A	25A	40A	65A	80A
Insulation Voltage Ui	V	690				
Impulse withstand Voltage Uimp	V	N				

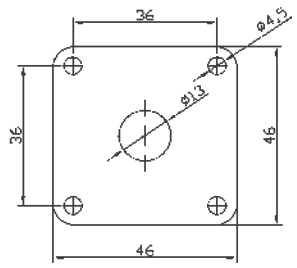
Certifications

Test specification

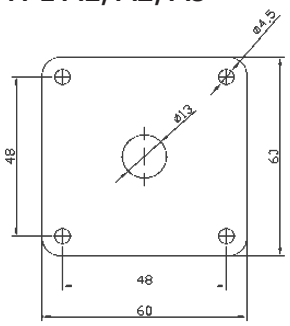
Standard: IEC 60947-3: 2008, AMD1: 2012, AMD2015 in conjunction
with IEC60947-1: 2007, AMD1: 2010, AMD2: 2014
Test procedure: CB Scheme, single phase and three phase, 50/60Hz

* CB scheme for cam switch rated 20A
  Ue: 690VAC, 50/60Hz, Ie: 20A Uimp: 6KV
  Uc: AC21A, AC22A, AC23A Short-circuit current: 1KA
* CB scheme for cam switch rated 40A
  Ue: 690VAC, 50/60Hz, Ie: 40A Uimp: 6KV
  Uc: AC21A, AC22A, AC23A Short-circuit current: 3KA
* CB scheme for cam switch rated 80A
  Ue: 690VAC, 50/60Hz, Ie: 80A Uimp: 6KV
  Uc: AC21A, AC22A, AC23A Short-circuit current: 5KA
* CB scheme for cam switch rated 100A
  Ue: 690VAC, 50/60Hz, Ie: 100A Uimp: 6KV
  Uc: AC21A, AC22A, AC23A Short-circuit current: 3KA

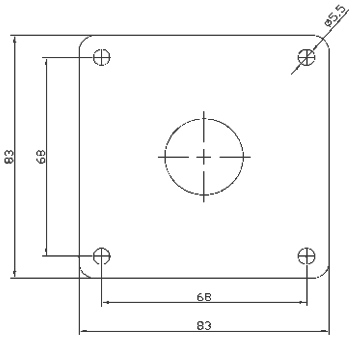
MOUNTING DIMENSIONS FOR TYPE A1, A2, A3



A1

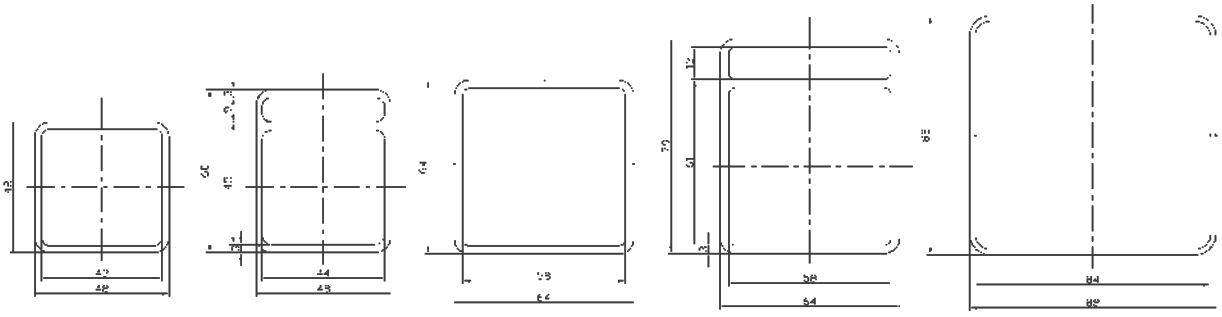


A2



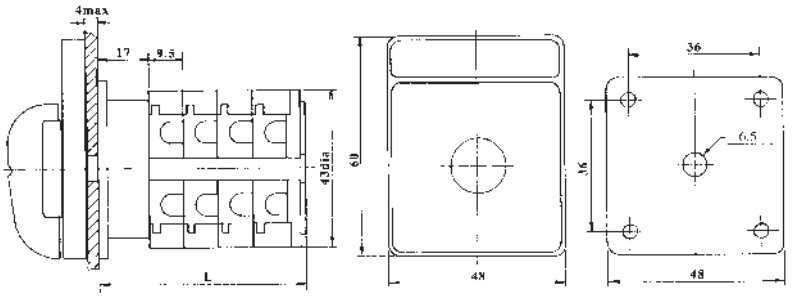
A3

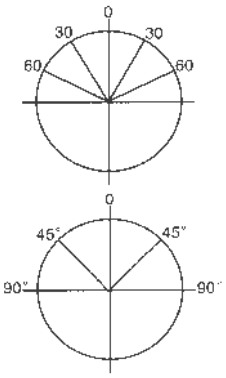
FRAME DIMENSIONS



F1 F2 F3 F4 F5

Dimensions for A2, PS2, R2, switches (20A)

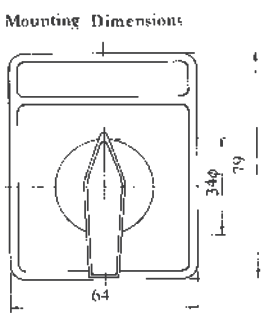


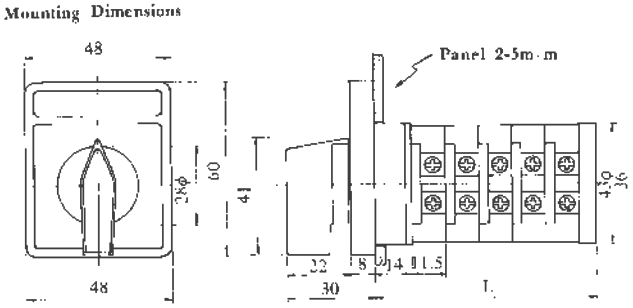




Total Number of stage	1	2	3	4	5	6	7	8
Length L	31.5	41	50.5	60	69.5	79	88.5	98

Dimensions for C series switches (20A, 25A)

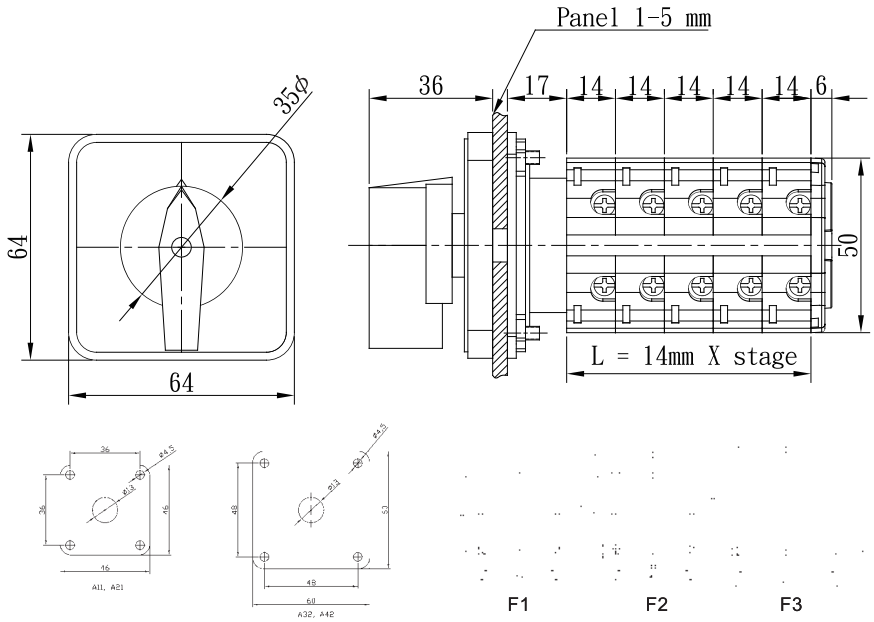






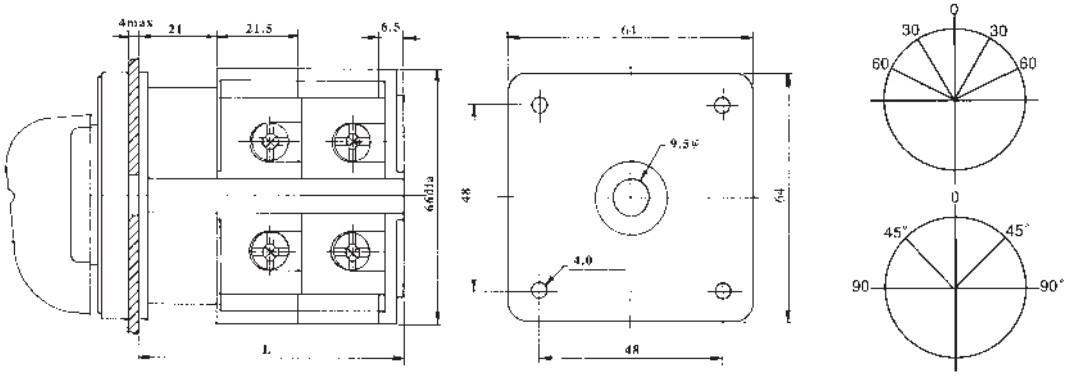
Total Number of stage	1	2	3	4	5	6	7	8	9	10
Length L	37	48 5	60	71 5	83	94 5	106	117 5	129	140 5

Dimensions for A40(40A), PS series 40A



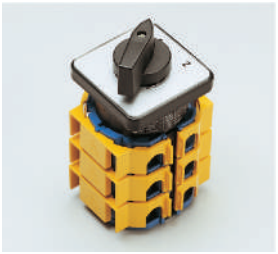


Dimensions for A80(80A) switches code No. A601~A624, PS61~PS64



Total Number of stage	1	2	3	4	5	6
Length L	49	70.5	92	113.5	135	156.5



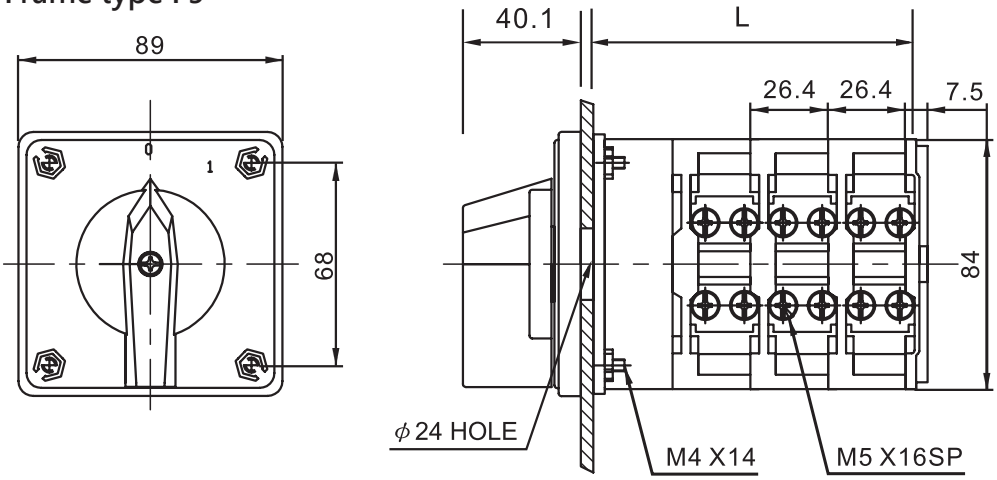


yellow safety cover

Mounting dimensions for 120A switches

Panel mounting type A3

Frame type F5

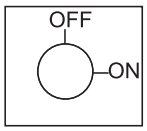


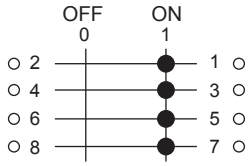


Total Number of stage	1	2	3	4	
Length L	61	87	113	140	

ON/OFF Power switch 90° 40A

Code No.	Poles	Stage
PS41	1	1
PS42	2	1
PS43	3	2
PS44	4	2
PS45	5	3
PS46	6	3

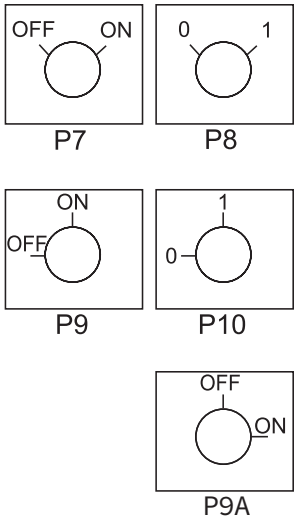


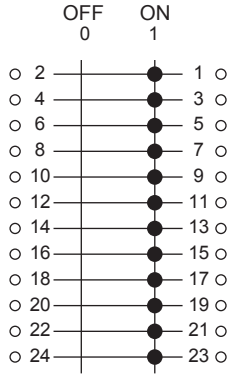




ON/OFF switch 90° 40A

Code No.	Poles	Stage
A401	1	1
A401A	2	1
A402	3	2
A402A	4	2
A403	5	3
A403A	6	3
A404	7	4
A404A	8	4
A405	9	5
A405A	10	5
A406	11	6
A406A	12	6
A407	13	7
A407A	14	7
A408	15	8
A408A	16	8





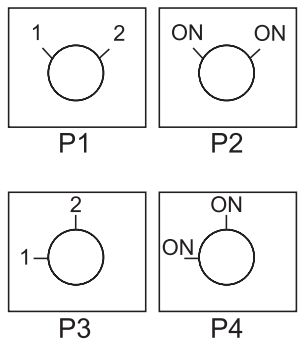
1~6 Pole

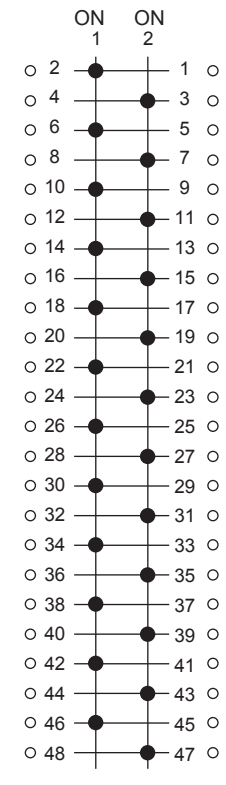




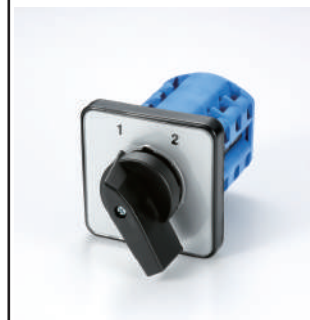
Chang-over switches without "OFF" 90° switching 40A

Code No.	Poles	Stage
A411	1	1
A412	2	2
A413	3	3
A414	4	4
A415	5	5
A416	6	6
A417	7	7
A418	8	8





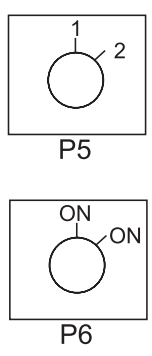
1~12 Pole





Chang-over switches without "OFF" 60° switching

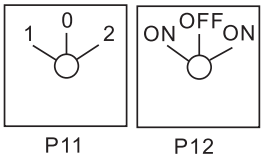
Code No.	Poles	Stage
A421	1	1
A422	2	2
A423	3	3
A424	4	4
A425	5	5
A426	6	6
A427	7	7
A428	8	8



Change over switch with “OFF” 60°° switches 40A

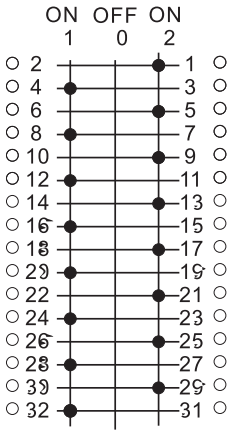
Code No.	Poles	Stage
A431	1	1
A432	2	2
A433	3	3
A434	4	4
A435	5	5
A436	6	6
A437	7	7
A438	8	8

Escutch Plate



P11 P12

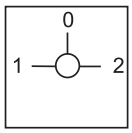
Connecting Diagram





Change over switch with “OFF” 90°° switches

Code No.	Poles	Stage
A441	1	1
A442	2	2
A443	3	3
A444	4	4
A445	5	5
A446	6	6
A447	7	7
A448	8	8

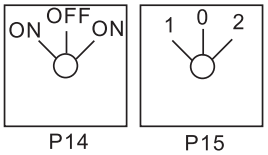


P13

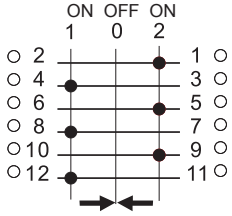


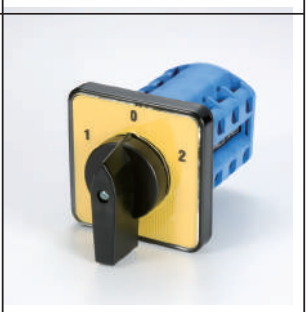
Change over switch with “OFF Spring return to center 40A

Code No.	Poles	Stage
A451	1	1
A452	2	2
A453	3	3



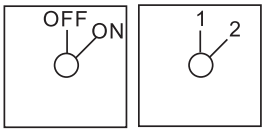
P14 P15



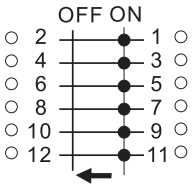


ON/OFF spring return 40A

Code No.	Poles	Stage
A454	1	1
A455	2	1
A456	3	2
A457	4	2
A458	5	3
A459	6	3



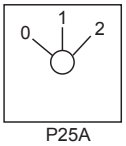
P16 P17



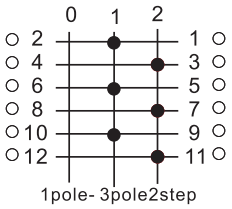


Multi-step switch with “OFF” 40A

Code No.	Poles	Stage
A461	1pole 2step	1
A462	2pole 2step	2
A463	3pole 2step	3
A464	4pole 2step	4
A465	5pole 2step	5
A466	6pole 2step	6



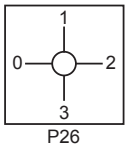
P25A



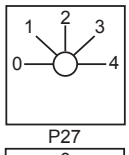
Multi-step switch with "OFF" 40A°

Code No.	Poles	Stage
A467	1pole 3step	2
A468	2pole 3step	4
A469	3pole 3step	5
A470	4pole 3step	8
A471	1pole 4step	2
A472	2pole 4step	5
A473	3pole 4step	6
A475	1pole 5step	3
A476	2pole 5step	6
A478	1pole 6step	4
A479	2pole 6step	7
A480	1pole 7step	4
A481	2pole 7step	8
A482	1pole 11step	6

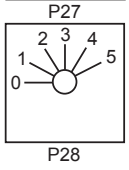
Escutch Plate



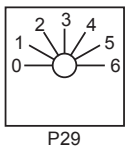
P26



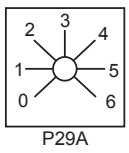
P27



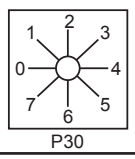
P28



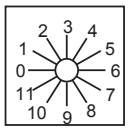
P29



P29A

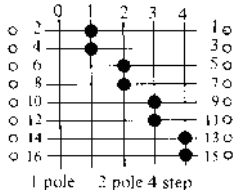


P30

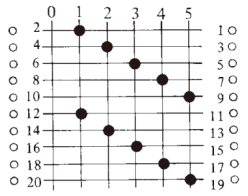


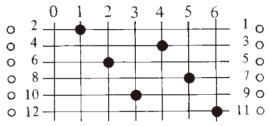
P31

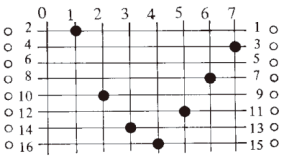
Connecting Diagram



1 pole 2 pole 4 step









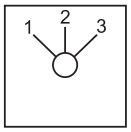




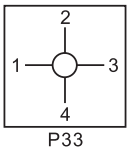
Multi-step switch without "OFF"40A

Code No.	Poles	Stage
A484	1pole 3step	2
A485	2pole 3step	3
A486	3pole 3step	5
A487	4pole 3step	6
A488	1pole 3step	2
A489	2pole 3step	4
A490	3pole 3step	6
A491	1pole 5step	3
A492	2pole 5step	5
A493	1pole 6step	3
A494	2pole 6step	6
A495	1pole 7step	4
A496	2pole 8step	5
A497	3pole 9step	6

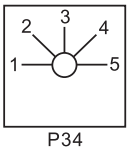
Escutch Plate



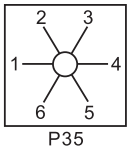
P32



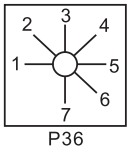
P33



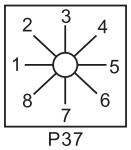
P34



P35

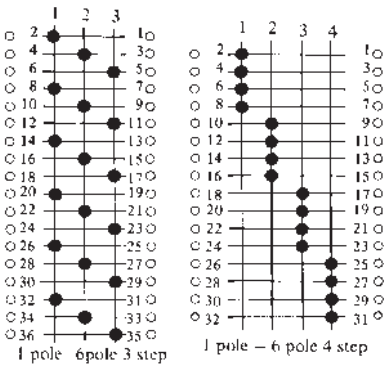


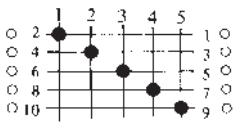
P36

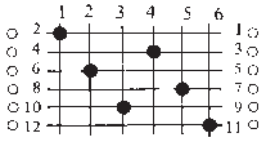


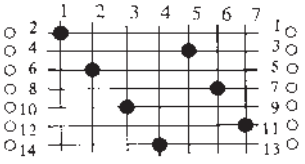
P37

Connecting Diagram















Cam Switch 40A

Multi-step switch with “OFF”40A

Code No.	Poles	Stage	Escutch Plate	Connecting Diagram	
A4101	1pole 2step	1	P40	2 step	
A4102	2pole 2step	2			
A4103	3pole 2step	3			
A4104	4pole 2step	4			
A4105	5pole 2step	5			
A4106	1pole 3step	2	P25	3 step	
A4107	2pole 3step	3			
A4108	3pole 3step	5			
A4109	4pole 3step	6			
A4110	5pole 3step	8			
A4111	1pole 4step	2	P41		
A4112	2pole 4step	4			
A4113	3pole 4step	6			
A4114	4pole 4step	8			
A4115	1pole 5step	3	P28A		
A4116	2pole 5step	5			
A4117	3pole 5step	8			
A4118	1pole 6step	4	P29A		
A4119	2pole 6step	7			
A4120	1pole 7step	4			
A4121	2pole 7step	8			

Motor control Switch 40A

Code No.	Poles	Stage	Escutch Plate	Connecting Diagram	
A4170	2 pole FOR-OFF-REV	3	P49 P50	FOR OFF REV	
A4171	3 pole FOR-OFF-REV	4		FOR OFF REV	 
A4172	2 pole LOW-OFF-HIGH	4	P51	LOW OFF HIGH	

Motor speed control&Reversing control

A4173	4 pole LOW-OFF-HIGH FOR-OFF-REV	7	P52-A		
A4180	O-Y-Δ Star-Delta	4	P64		