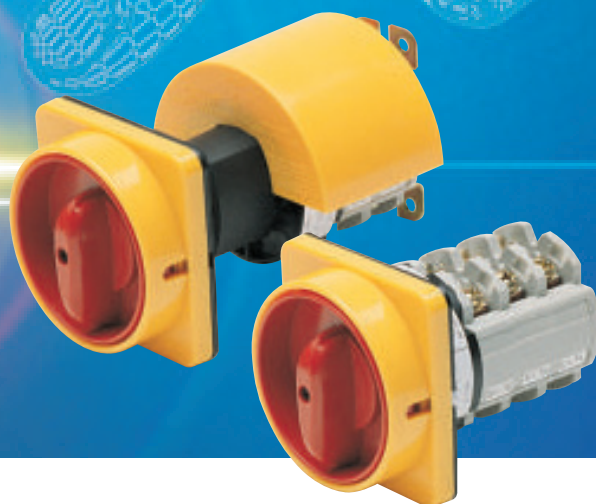




Industrial Automation



For over 40 years, **BREMAS** has been producing electro mechanical products such as switches dedicated to applications as food processing machinery, wood working machinery, welding machines, lifts, water management, production lines, power tools and electricity supply systems and many others.

Wide experience has allowed **BREMAS** to become a specialist in the industrial automation field and to be able to address specific customer requests through customized solutions.

BREMAS is known for having achieved high quality standards certified by the most important entities (CE, UL e TÜV).

The company is focused on the evolution of the industrial automation market in order to be able to provide the most complete and flexible solutions to every applications requirement.

The parts and components of Bremas products are made of the most advanced materials that can guarantee the compliance to the most important quality standards and safety requirements.

BREMAS product range includes: cam switches, switch disconnectors, power tools switches, control and signalling units Ø22, foot switches.

COMPLETE SWITCHES

Rear mounting version	Front mounting with screws				
					
	R03	PL	3L	3N	IPA

Base mounting version			
	ME	LE	LN

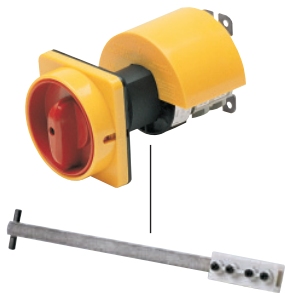
Enclosed version			
	S31	S40/S90	S10/S20

Special version (*)	Faston connection	Coaxial type	Snap action	Cable couplings
				
	Axial push interlock Unidirectional interlock	Supply failure release	Front mounting in centre hole Ø 22mm	
				

(*) For information see page 26 27

ACCESSORIES

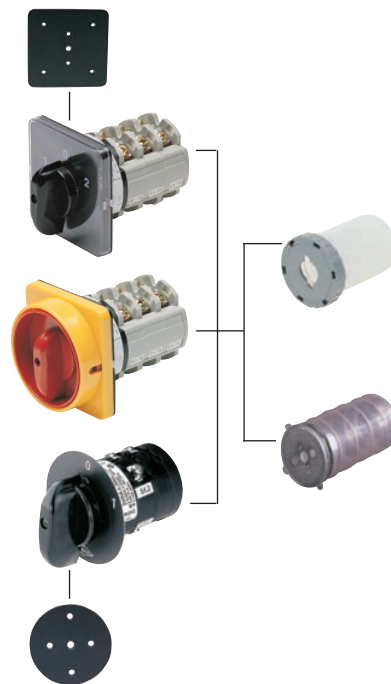
Shaft extension for door interlocking device



Panel fixing adapter from 28 mm to 32 mm



Seal gaskets and terminal covers



Empty enclosures



S31



S40

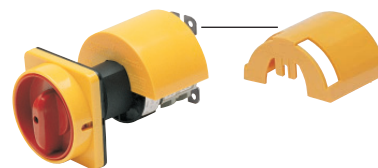


S90



G970

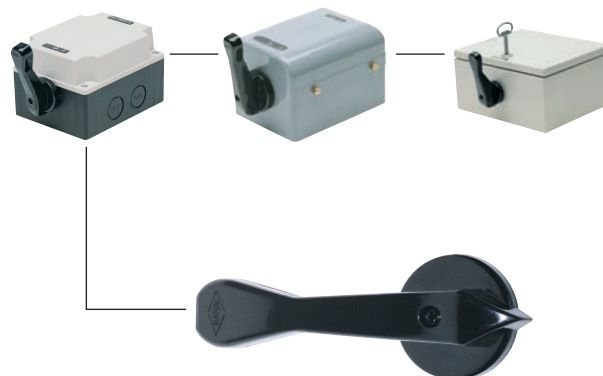
Terminal covers



Knob and handwheel



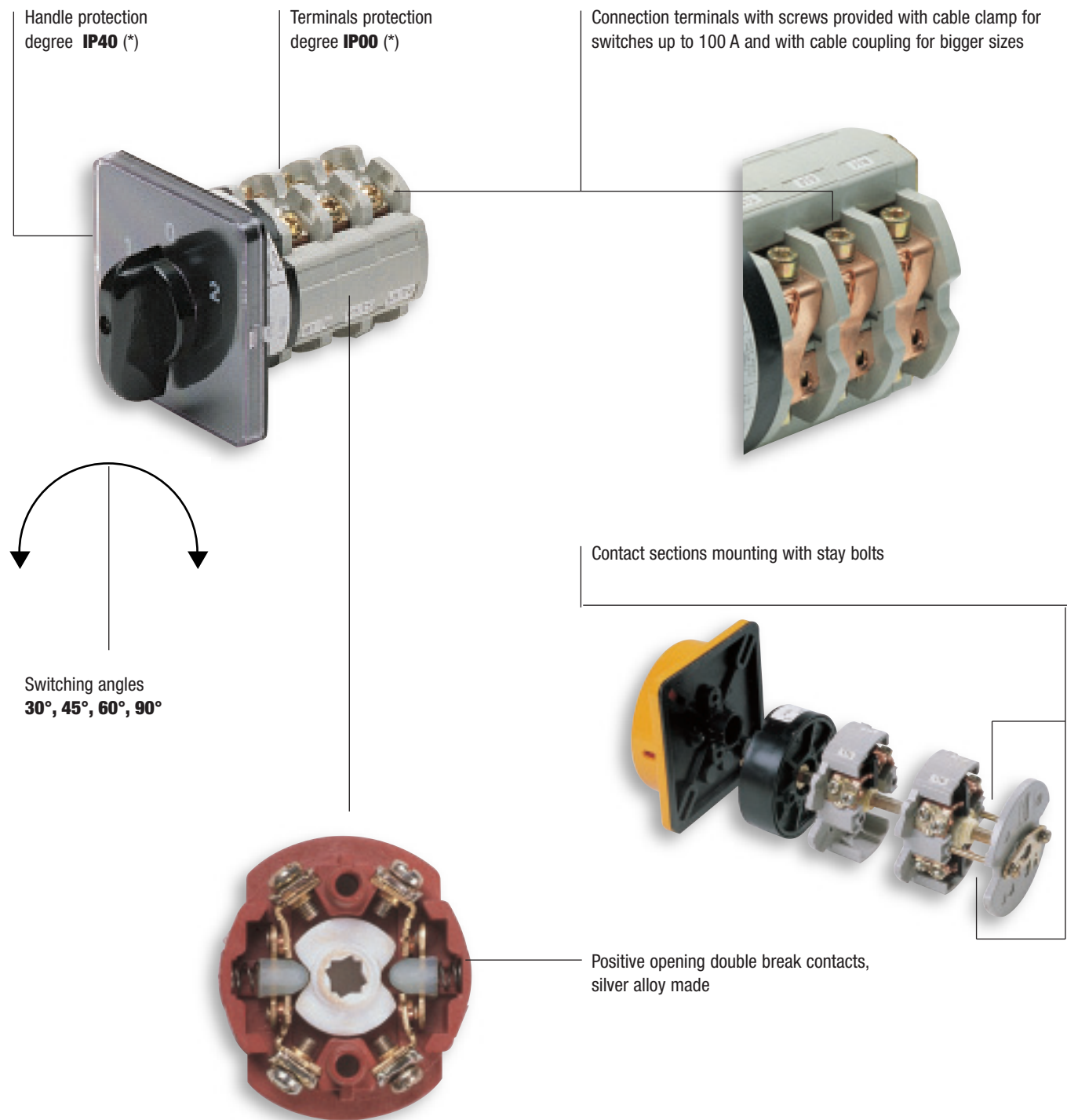
Long handles



CA cam switches is the traditional generation of manually operated switching devices.

Ratings **12** up to **630 A**

Manufactured from heat resistant and self extinguishing materials, which have high mechanical and electrical life



(*) The protection degree can be increased with suitable protections

Rear mounting with screws

Switch with
aluminium
round plate and
black knob

Switch with
transparent
plate, black text
sheet and black
knob

Main emergency
switch with
padlock in "0"
position, yellow
plate and red
knob

Main switch
with padlock in
"0" position,
grey plate and
black knob

Switch with
guarded grey
plate and black
knob



R03

PL

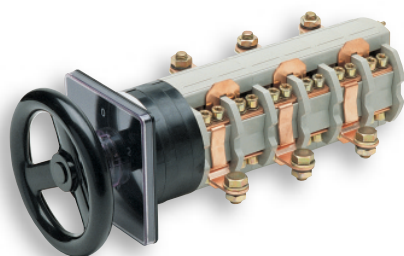
3L

3N

IPA

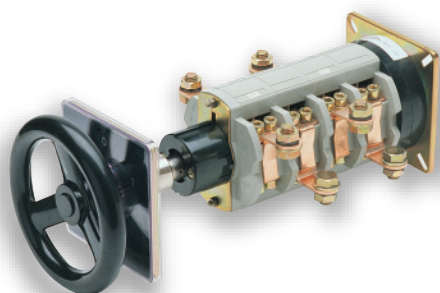
CA012	Ø 59 R03	☐ 52 PL1 ☐ 75 PL2	☐ 75 3L2	☐ 75 3N2	☐ 74 IPA
CA016	Ø 59 R03	☐ 52 PL1 ☐ 75 PL2	☐ 75 3L2	☐ 75 3N2	☐ 74 IPA
CA017	Ø 59 R03	☐ 75 PL2	☐ 75 3L2	☐ 75 3N2	
CA025	Ø 59 R03	☐ 75 PL2	☐ 75 3L2	☐ 75 3N2	
CA032		☐ 75 PL2	☐ 75 3L2	☐ 75 3N2	
CA040		☐ 105 PL3	☐ 105 3L3	☐ 105 3N3	
CA063		☐ 105 PL3	☐ 105 3L3	☐ 105 3N3	
CA100		☐ 130 PL4	☐ 130 3L4		
CA200		☐ 130 PL4	☐ 130 3L4		
CA400		☐ 130 PL5 ▲			
CA630		☐ 130 PL5 ▲			

▲ Version with operating handwheel



Base mounting			Insulated and metal enclosed		
Switch with door interlocking device, transparent plate, black text sheet and black knob	Main emergency switch with door interlocking device, padlock in "0" position, yellow plate and red knob	Main switch with door interlocking device, padlock in "0" position, grey plate and black knob	Switch in insulated plastic enclosure with side actuator	Switch in insulated plastic enclosure with side actuator	Switch in metal enclosure with side actuator
  			  		
ME	LE	LN	S31	S40/S90	S10/S20
☐ 52 ME1	☐ 75 LE2	☐ 75 LN2	S31		
☐ 75 ME2					
☐ 75 ME2	☐ 75 LE2	☐ 75 LN2	S31		
☐ 75 ME2					
☐ 75 ME2	☐ 75 LE2	☐ 75 LN2	S31		
☐ 75 ME2	☐ 75 LE2	☐ 75 LN2	S31		
☐ 75 ME2	☐ 75 LE2	☐ 75 LN2	S31		
☐ 105 ME3	☐ 105 LE3	☐ 105 LN3		S40	
☐ 105 ME3	☐ 105 LE3	☐ 105 LN3		S90	
☐ 130 ME4	☐ 130 LE4	☐ 130 LN4			S10
☐ 130 ME4	☐ 130 LE4	☐ 130 LN4			S20
☐ 130 ME5					
▲					

▲ Version with operating handwheel



Rear mounting with screws



R03 Version

- Black knob
- Aluminium round plate Ø 59
- Handle protection degree IP40

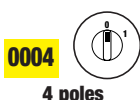
Switches



2 poles



3 poles



4 poles

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current
VB004100	CA0120002R03	VB008200	CA0120003R03	VB016500	CA0120004R03	12 A
VB005800	CA0160002R03	VB009000	CA0160003R03	VB017300	CA0160004R03	16 A
VB006600	CA0170002R03	VB010800	CA0170003R03			20 A
VB007400	CA0250002R03	VB011600	CA0250003R03			32 A

Change over switches



3 poles



4 poles

Part no.	Type no.	Part no.	Type no.	Rated operating current
VB028000	CA0120007R03	VB032200	CA0120039R03	12 A
VB029800	CA0160007R03	VB033000	CA0160039R03	16 A
VB030600	CA0170007R03	VB034800	CA0170039R03	20 A
VB031400	CA0250007R03	VB035500	CA0250039R03	32 A

Motor control switches

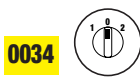
3 poles
reversing switchDahlander pole
switch

Star delta starter

Reversing dahlander
pole switchReversing
star delta starter

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current
VB036300	CA0120008R03	VB044700	CA0120009R03	VB048800	CA0120010R03	VB056100	CA0120011R03	12 A
VB037100	CA0160008R03	VB045400	CA0160009R03	VB049600	CA0160010R03	VB057900	CA0160011R03	16 A
VB038900	CA0170008R03	VB046200	CA0170009R03	VB050400	CA0170010R03	VB058700	CA0170011R03	20 A
VB039700	CA0250008R03	VB047000	CA0250009R03	VB051200	CA0250010R03	♦ VB062900	CA0170012R03	32 A

Motor control switches

Switch for
single phase motors
with auxiliary phaseChange over switch for
single phase motors
with auxiliary phaseReversing switch for
single phase motors with
centrifugal cut out3 poles reversing
switch with spring
return to '0' position

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current
VB064500	CA0120031R03	VB068600	CA0120032R03	VB052000	CA0120034R03	VB040500	CA0120036R03	12 A
VB065200	CA0160031R03	VB069400	CA0160032R03	VB053800	CA0160034R03	VB041300	CA0160036R03	16 A
VB066000	CA0170031R03					VB042100	CA0170036R03	20 A
VB067800	CA0250031R03	VB071000	CA0250032R03	♦ VB055300	CA0250034R03	VB043900	CA0250036R03	32 A

♦ Available on request

- Dimensions, see page 20
- Circuit diagrams, see page 60÷70

- Accessories, see page 17÷19
- Technical data, see page 24-25

- Homologations and approvals, see page 28



PL Version

- Black knob (*)
- Black text sheet
- Transparent plate
- Handle protection degree IP40

□ 52 - □ 75 - □ 105 - □ 130

Rear mounting with screws

Switches

0001  1 pole		0002  2 poles		0003  3 poles		0004  4 poles		Rated operating current	Plate dimens.
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.		
VB072800	CA0120001PL1	VB080100	CA0120002PL1	VB088400	CA0120003PL1	VB105600	CA0120004PL1	12 A	☐ 52
VD800000	CA0160001PL1	VG037600	CA0160002PL1	VG042600	CA0160003PL1	VG047500	CA0160004PL1	16 A	☐ 52
VB073600	CA0120001PL2	VB081900	CA0120002PL2	VB089200	CA0120003PL2	VB106400	CA0120004PL2	12 A	☐ 75
VB074400	CA0160001PL2	VB082700	CA0160002PL2	VB090000	CA0160003PL2	VB107200	CA0160004PL2	16 A	☐ 75
VB075100	CA0170001PL2	VB083500	CA0170002PL2	VB091800	CA0170003PL2	VB108000	CA0170004PL2	20 A	☐ 75
VB076900	CA0250001PL2	VB084300	CA0250002PL2	VB092600	CA0250003PL2	VB109800	CA0250004PL2	32 A	☐ 75
VB077700	CA0320001PL2	VB085000	CA0320002PL2	VB093400	CA0320003PL2	VB110600	CA0320004PL2	40 A	☐ 75
VB078500	CA0400001PL3	VB086800	CA0400002PL3	VB094200	CA0400003PL3	VB111400	CA0400004PL3	50 A	☐ 105
		VB087600	CA0630002PL3	VB095900	CA0630003PL3	VB112200	CA0630004PL3	75 A	☐ 105
		VG169700	CA1000002PL4	VB096700	CA1000003PL4	VB113000	CA1000004PL4	115 A	☐ 130
				VB097500	CA2000003PL4	VB114800	CA2000004PL4	160 A	☐ 130
				♦ VB098300	CA4000003PL4	♦ VB115500	CA4000004PL5	400 A	☐ 130

Change over switches

0005 		0006 		0007 		0039 		Rated operating current	Plate dimens.
1 pole		2 poles		3 poles		4 poles			
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.		
VB117100	CA0120005PL1	VB125400	CA0120006PL1	VB135300	CA0120007PL1	VB147800	CA0120039PL1	12 A	☐ 52
VD799400	CA0160005PL1	VD802600	CA0160006PL1	VD803400	CA0160007PL1	VD804200	CA0160039PL1	16 A	☐ 52
VB118900	CA0120005PL2	VB126200	CA0120006PL2	VB136100	CA0120007PL2	VB148600	CA0120039PL2	12 A	☐ 75
VB119700	CA0160005PL2	VB127000	CA0160006PL2	VB137900	CA0160007PL2	VB149400	CA0160039PL2	16 A	☐ 75
VB120500	CA0170005PL2	VB128800	CA0170006PL2	VB138700	CA0170007PL2	VB150200	CA0170039PL2	20 A	☐ 75
VB121300	CA0250005PL2	VB129600	CA0250006PL2	VB139500	CA0250007PL2	VB151000	CA0250039PL2	32 A	☐ 75
VB122100	CA0320005PL2	VB130400	CA0320006PL2	VB140300	CA0320007PL2	VB152800	CA0320039PL2	40 A	☐ 75
VB123900	CA0400005PL3	VB131200	CA0400006PL3	VB141100	CA0400007PL3	VB153600	CA0400039PL3	50 A	☐ 105
VB124700	CA0630005PL3	VB132000	CA0630006PL3	VB142900	CA0630007PL3	VB154400	CA0630039PL3	75 A	☐ 105
		VB133800	CA1000006PL4	VB143700	CA1000007PL4	VB155100	CA1000039PL4	115 A	☐ 130
		VB134600	CA2000006PL4	VB144500	CA2000007PL4	VB156900	CA2000039PL4	160 A	☐ 130
				VB145200	CA4000007PL5	VB157700	CA4000039PL5	400 A	☐ 130
				♦ VB146000	CA6300007PL5	VB158500	CA6300039PL5	630 A	☐ 130

Motor control switches

0008  3 poles reversing switch		0009  Dahlander pole switch		0010  Star delta starter		0011  Reversing Dahlander pole switch		0012  Reversing Star delta starter		Rated operating current	Plate dimens. ☐
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.		
VB159300	CA0120008PL1	VB174200	CA0120009PL1	VB184100	CA0120010PL1	VB199900	CA0120011PL1	♦ VB205400	CA0120012PL1	12 A	☐ 52
VG053300	CA0160008PL1	VG054100	CA0160009PL1							16 A	☐ 52
VB160100	CA0120008PL2	VB175900	CA0120009PL2	VB185800	CA0120010PL2	VB200500	CA0120011PL2	♦ VB206200	CA0120012PL2	12 A	☐ 75
VB161900	CA0160008PL2	VB176700	CA0160009PL2	VB186600	CA0160010PL2	VB201300	CA0160011PL2	VB207000	CA0160012PL2	16 A	☐ 75
VB162700	CA0170008PL2	VB177500	CA0170009PL2	VB187400	CA0170010PL2	VB202100	CA0170011PL2	VB208800	CA0170012PL2	20 A	☐ 75
VB163500	CA0250008PL2	VB178300	CA0250009PL2	VB188200	CA0250010PL2	VB203900	CA0250011PL2	VB209600	CA0250012PL2	32 A	☐ 75
VB164300	CA0320008PL2	VB179100	CA0320009PL2	VB189000	CA0320010PL2					40 A	☐ 75
VB165000	CA0400008PL3	VB180900	CA0400009PL3	VB190800	CA0400010PL3					50 A	☐ 105
VB166800	CA0630008PL3	VB181700	CA0630009PL3	VB191600	CA0630010PL3					75 A	☐ 105
VB167600	CA1000008PL4	♦ VB182500	CA1000009PL4	VB192400	CA1000010PL4					115 A	☐ 130
VB168400	CA2000008PL4	VB183300	CA2000009PL4	VB193200	CA2000010PL4					160 A	☐ 130

♦ Available on request

- Dimensions, see page 20
- Circuit diagrams, see page 60÷70

- Accessories, see page 17÷19
- Technical data, see page 24-25

- Homologations and approvals, see page 28



PL Version

- Black knob
- Black text sheet
- Transparent plate
- Handle protection degree IP40

□ 52 - □ 75 - □ 105 - □ 130

Rear mounting with screws

Motor control switches

0029	0030	0031	0032		
Change over switch for contactors with spring return from A to M	Change over switch for reversing starter with spring return from A to M	Switch for single phase motors with auxilliary phase	Change over switch for phase motors with auxilliary phase		
Part no. Type no.	Part no. Type no.	Part no. Type no.	Part no. Type no.	Rated operating current	Plate dimens.
VB226000 CA0120029PL1	VB230200 CA0120030PL1	VB211200 CA0120031PL1	VB216100 CA0120032PL1	12 A	☐ 52
	VB231000 CA0120030PL2	VB212000 CA0120031PL2	VB217900 CA0120032PL2	12 A	☐ 75
	VB232800 CA0160030PL2	VB213800 CA0160031PL2	VB218700 CA0160032PL2	16 A	☐ 75
	VB233600 CA0170030PL2	VB214600 CA0170031PL2	VB219500 CA0170032PL2	20 A	☐ 75
		VB215300 CA0250031PL2	VB220300 CA0250032PL2	32 A	☐ 75

Change over switches

0034 		0036 		Rated operating current	Plate dimens.
Reversing starter for single phase with centrifugal cut out		3 poles reversing switch with spring return to 0 position			
Part no.	Type no.	Part no.	Type no.		
VB194000	CA0120034PL1	VB169200	CA0120036PL1	12 A	☐ 52
VB195700	CA0120034PL2	VB170000	CA0120036PL2	12 A	☐ 75
VF146600	CA0160034PL1	VI990400	CA0160036PL1	16 A	☐ 75
VB196500	CA0160034PL2	VB171800	CA0160036PL2	16 A	☐ 75
VB197300	CA0170034PL2	VB172600	CA0170036PL2	20 A	☐ 75
VB198100	CA0250034PL2	VB173400	CA0250036PL2	32 A	☐ 52

Voltmeter switches

0015		0016		0017		0018		0019		Rated operating current	Plate dims.
3 phase voltages		3 concatenated voltages		3 concatenated voltages 2 lines		3 concatenated voltages and 3 phases voltages		3 concatenated voltage and 1 phase voltages			
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.		
VB234400	CA0120015PL1	VB239300	CA0120016PL1	VB244300	CA0120017PL1	VB249200	CA0120018PL1	VB254200	CA0120019PL1	12 A	□ 52
VB235100	CA0120015PL2	VB240100	CA0120016PL2	VB245000	CA0120017PL2	VB250000	CA0120018PL2	VB255900	CA0120019PL2	12 A	□ 75
VB236900	CA0160015PL2	VB241900	CA0160016PL2	VB246800	CA0160017PL2	VB251800	CA0160018PL2			16 A	□ 75
♦ VB237700	CA0170015PL2	VB242700	CA0170016PL2			VB252600	CA0170018PL2			20 A	□ 75
		VB243500	CA0250016PL2							32 A	□ 75

Ammeter switches

0014 		0020 		0021 		0022 		0023 		Rated operating current	Plate dimens.
Direct measurement		1 pole 1 current transformer		1 pole 2 current transformers		1 pole 3 current transformers		1 pole 4 current transformers			
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.		
VB259100	CA0120014PL1	VB264100	CA0120020PL1	VB269000	CA0120021PL1	VB274000	CA0120022PL1	VB279900	CA0120023PL1	12 A	☐ 52
♦ VB260900	CA0120014PL2	VB265800	CA0120020PL2	VB270800	CA0120021PL2	VB275700	CA0120022PL2	VB280700	CA0120023PL2	12 A	☐ 75
						VB276500	CA0160022PL2			16 A	☐ 75
						VB277300	CA0170022PL2			20 A	☐ 75
						VB278100	CA0250022PL2			32 A	☐ 75

♦ Available on request

- Dimensions, see page 20
- Circuit diagrams, see page 60÷70

- Accessories, see page 17÷19
- Technical data, see page 24-25

- Homologations and approvals, see page 28



Rear mounting with screws

PL Version

- Black knob (*)
- Black text sheet
- Transparent plate
- Handle protection degree IP40

□ 52 - □ 75 - □ 105 - □ 130

Double way switches



2 poles



3 poles



4 poles

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB289800	CS012D002PL1	VB294800	CS012D003PL1	VF368600	CS012D004PL1	12 A	□ 52
VB291400	CS016D002PL2	VB296300	CS016D003PL2	ZK110700	CS016D004PL2	16 A	□ 75
VB292200	CS017D002PL2	VB297100	CS017D003PL2			20 A	□ 75
VB293000	CS025D002PL2	VB298900	CS025D003PL2	♦ VF832100	CS025D004PL2	32 A	□ 75

Multi step change over switches with '0' position



1 pole - 2 ways



1 pole - 3 ways



1 pole - 4 ways



1 pole - 5 ways



2 poles - 2 ways

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB299700	CS012MZ12PL1	VB304500	CS012MZ13PL1	VB309400	CS012MZ14PL1	VG537500	CS012MZ15PL1	VB314400	CS012MZ22PL1	12 A	□ 52
VB300300	CS012MZ12PL2	VB305200	CS012MZ13PL2	VB310200	CS012MZ14PL2	VF377700	CS012MZ15PL2	VB315100	CS012MZ22PL2	12 A	□ 75
♦ VB301100	CS016MZ12PL2	VB306000	CS016MZ13PL2	VB311000	CS016MZ14PL2	VG979900	CS016MZ15PL2	♦ VB316900	CS016MZ22PL2	16 A	□ 75
		VB307800	CS017MZ13PL2	VB312800	CS017MZ14PL2	VB411100	CS017MZ15PL2			20 A	□ 75
		VB308600	CS025MZ13PL2	VB313600	CS025MZ14PL2	VG686000	CS025MZ15PL2	VB318500	CS025MZ22PL2	32 A	□ 75

Multi step change over switches with '0' position



2 poles - 3 ways



2 poles - 4 ways



3 poles - 3 ways



4 poles - 4 ways

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB319300	CS012MZ23PL1	VB324300	CS012MZ24PL1	VB329200	CS012MZ33PL1	VB334200	CS012MZ43PL1			12 A	□ 52
VB320100	CS012MZ23PL2	VB325000	CS012MZ24PL2	VB330000	CS012MZ33PL2	VB335900	CS012MZ43PL2			12 A	□ 75
VB321900	CS016MZ23PL2	VB326800	CS016MZ24PL2	VB331800	CS016MZ33PL2	VB336700	CS016MZ43PL2			16 A	□ 75
VB322700	CS017MZ23PL2			VB332600	CS017MZ33PL2					20 A	□ 75
VB323500	CS025MZ23PL2	VB328400	CS025MZ24PL2	VB333400	CS025MZ33PL2	♦ VB338300	CS025MZ43PL2			32 A	□ 75

Multi step change over switches without '0' position



1 pole - 3 ways



1 pole - 4 ways



1 pole - 5 ways



2 poles - 4 ways



2 poles - 5 ways

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB339100	CS012M013PL1	VB344100	CS012M014PL1	VB349000	CS012M015PL1	VB354000	CS012M024PL1	VB359900	CS012M025PL1	12 A	□ 52
VB340900	CS012M013PL2	VB345800	CS012M014PL2	VB350800	CS012M015PL2	VB355700	CS012M024PL2	VB360700	CS012M025PL2	12 A	□ 75
VB341700	CS016M013PL2	VB346600	CS016M014PL2	VB351600	CS016M015PL2	VB356500	CS016M024PL2	VB361500	CS016M025PL2	16 A	□ 75
VB342500	CS017M013PL2	VB347400	CS017M014PL2	VB352400	CS017M015PL2			VB362300	CS017M025PL2	20 A	□ 75
VB343300	CS025M013PL2	VB348200	CS025M014PL2	VB353200	CS025M015PL2	VB358100	CS025M024PL2	♦ VB363100	CS025M025PL2	32 A	□ 75

Multi step cumulative change over switches with '0' position



1 pole - 3 ways



1 pole - 4 ways



1 pole - 5 ways

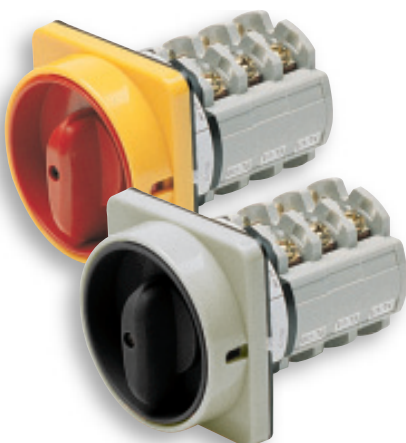
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB364900	CS012GZ12PL1	VB379700	CS012GZ13PL1	VB394600	CS012GZ14PL1	12 A	□ 52
VB365600	CS012GZ12PL2	VB380500	CS012GZ13PL2	VB395300	CS012GZ14PL2	12 A	□ 75
VB366400	CS016GZ12PL2	VB381300	CS016GZ13PL2	VB396100	CS016GZ14PL2	16 A	□ 75

♦ Available on request

- Dimensions, see page 20
- Circuit diagrams, see page 60÷70

- Accessories, see page 17÷19
- Technical data, see page 24÷25

- Homologations and approvals, see page 28



Rear mounting with screws

3L Version

Main emergency switch with padlock (max 3) in '0' position

3N Version

Main switch with padlock (max 3) in '0' position

3L

- Red knob
- Yellow plate
- Handle protection degree IP40

□ 75 - □ 105 - □ 130

3N

- Black knob
- Grey plate
- Handle protection degree IP40

□ 75 - □ 105 - □ 130

Switches

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB463900	CA01200G33L2	VB472000	CA01200G43L2	VB481100	CA01200G33N2			12 A	□ 75
VB464700	CA01600G33L2	VB473800	CA01600G43L2	VB482900	CA01600G33N2	VB491000	CA01600G43N2	16 A	□ 75
VB465400	CA01700G33L2	VB474600	CA01700G43L2	VB483700	CA01700G33N2			20 A	□ 75
VB466200	CA02500G33L2	VB475300	CA02500G43L2	VB484500	CA02500G33N2	VB493600	CA02500G43N2	32 A	□ 75
VB467000	CA03200G33L2	VB476100	CA03200G43L2	VB485200	CA03200G33N2	VB494400	CA03200G43N2	40 A	□ 75
VB468800	CA04000G33L3	VB477900	CA04000G43L3	VB486000	CA04000G33N3	VB495100	CA04000G43N3	50 A	□ 105
VB469600	CA06300G33L3	VB478700	CA06300G43L3	VB487800	CA06300G33N3	VB496900	CA06300G43N3	75 A	□ 105
VB470400	CA10000G33L4	VB479500	CA10000G43L4					115 A	□ 130
VB471200	CA20000G33L4	VB480300	CA20000G43L4					160 A	□ 130

◆ Available on request



Rear mounting with screws

IPA Version

Switch with guarded plate.

- Black knob
- Grey plate
- Handle protection degree IP40

□ 74

Switches



1 pole



2 poles



3 poles

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB559400	CA0120001IPA	VB563600	CA0120002IPA	VB567700	CA0120003IPA	12 A	□ 74
VB560200	CA0160001IPA	VB564400	CA0160002IPA	VB568500	CA0160003IPA	16 A	□ 74

Motor control switches

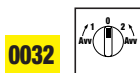
3 poles
reversing switchDahlander pole
switch

Star delta starter

Reversing Dahlander
pole switchReversing
Star delta starter

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB595800	CA0120008IPA	VB603000	CA0120009IPA	VB607100	CA0120010IPA	VB615400	CA0120011IPA	12 A	□ 74
VB596600	CA0160008IPA	VB604800	CA0160009IPA	VB608900	CA0160010IPA	VB616200	CA0160011IPA	16 A	□ 74

Change over switches

Switch for single
phase motors with
auxiliary phaseChange over switch
for single phase motors
with auxiliary phaseReversing starter
for single phase motors
with centrifugal cut out3 poles reversing switch
with spring return
to '0' position

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dims.
VB623800	CA0120031IPA	VB627900	CA0120032IPA	VB611300	CA0120034IPA	VB599000	CA0120036IPA	12 A	□ 74
VB624600	CA0160031IPA	VB628700	CA0160032IPA	VB612100	CA0160034IPA	VB600600	CA0160036IPA	16 A	□ 74

◆ Available on request

Base mounting



LE Version

Main emergency switch with door interlocking device and padlock (3 max) in '0' position. Terminal covers included

LN Version

Main switch with door interlocking device and padlock (3 max) in '0' position. Terminal covers included

LE

- Red knob
- Yellow plate
- Up to 32A: IP40 above: IP54

□ 75 - □ 105 - □ 130

LN

- Black knob
- Grey plate
- Up to 32A: IP40 above: IP54

□ 75 - □ 105 - □ 130

Switches



3 poles



4 poles

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dimens.
VB499300	CA01200G3LE2	VB508100	CA01200G4LE2	VB517200	CA01200G3LN2			12 A	□ 75
VB500800	CA01600G3LE2	VB509900	CA01600G4LE2	VB518000	CA01600G3LN2	VB527100	CA01600G4LN2	16 A	□ 75
VB501600	CA01700G3LE2	VB510700	CA01700G4LE2			VB528900	CA01700G4LN2	20 A	□ 75
VB502400	CA02500G3LE2	VB511500	CA02500G4LE2	VB520600	CA02500G3LN2	VB529700	CA02500G4LN2	32 A	□ 75
VB503200	CA03200G3LE2	VB512300	CA03200G4LE2	VB521400	CA03200G3LN3	VB530500	CA03200G4LN2	40 A	□ 75
VB504000	CA04000G3LE3	VB513100	CA04000G4LE3	VB522200	CA04000G3LN3	VB531300	CA04000G4LN3	50 A	□ 105
VB505700	CA06300G3LE3	VB514900	CA06300G4LE3	VB523000	CA06300G3LN3	VB532100	CA06300G4LN3	75 A	□ 105
VB506500	CA10000G3LE4	VB515600	CA10000G4LE4	VB524800	CA10000G3LN4	VB533900	CA10000G4LN4	115 A	□ 130
VB507300	CA20000G3LE4	VB516400	CA20000G4LE4	VB525500	CA20000G3LN4			160 A	□ 130

ME Version

Switch with door interlocking device. Terminal covers up to 200A included

- Black knob
- Black text sheet
- Transparent plate
- Handle protection degree IP40

□ 75 - □ 105 - □ 130

Switches



3 poles



4 poles

Part no.	Type no.	Part no.	Type no.	Rated operating current	Plate dimens.
♦ VB536200	CA0120003ME2	VB548700	CA0120004ME2	12 A	□ 75
VB537000	CA0160003ME2	VB549500	CA0160004ME2	16 A	□ 75
VB538800	CA0170003ME2	VB550300	CA0170004ME2	20 A	□ 75
VB539600	CA0250003ME2	VB551100	CA0250004ME2	32 A	□ 75
VB540400	CA0320003ME2	VB552900	CA0320004ME2	40 A	□ 75
VB541200	CA0400003ME3	VB553700	CA0400004ME3	50 A	□ 105
VB542000	CA0630003ME3	VB554500	CA0630004ME3	75 A	□ 105
VB543800	CA1000003ME4	VB555200	CA1000004ME4	115 A	□ 130
VB544600	CA2000003ME4	VB556000	CA2000004ME4	160 A	□ 130
♦ VB545300	CA4000003ME4	VB557800	CA4000004ME5	400 A	□ 130

♦ Available on request

• Dimensions, see page **21**
• Circuit diagrams, see page **60÷70**

• Accessories, see page **17÷19**
• Technical data, see page **24-25**

• Homologations and approvals, see page **28**

Enclosed



S31 Version

Switch in insulating enclosure with side actuator

■ Protection degree IP65

Switches

0003



3 poles

0004



4 poles

Part no.	Type no.	Part no.	Type no.	Rated operating current
VB671700	CA0120003S31	VB676600	CA0120004S31	12 A
VB672500	CA0160003S31	VB677400	CA0160004S31	16 A
VB673300	CA0170003S31	VB678200	CA0170004S31	20 A
VB674100	CA0250003S31	VB679000	CA0250004S31	32 A
VB675800	CA0320003S31	VB680800	CA0320004S31	40 A

Change over switches

0007



3 poles

0039



4 poles

Part no.	Type no.	Part no.	Type no.	Rated operating current
VB685700	CA0120007S31	VB690700	CA0120039S31	12 A
VB686500	CA0160007S31	VB691500	CA0160039S31	16 A
VB687300	CA0170007S31	VB692300	CA0170039S31	20 A
VB688100	CA0250007S31	VB693100	CA0250039S31	32 A
VB689900	CA0320007S31	VB694900	CA0320039S31	40 A

Motor control switches

0008

3 poles
reversing switch

0009

Dahlander pole
switch

0010



Star delta starter

0036

3 poles reversing switch
with spring return to '0' position

Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current
VB695600	CA0120008S31	VB700400	CA0120009S31	VB705300	CA0120010S31	♦ VB710300	CA0120036S31	12 A
VB696400	CA0160008S31	VB701200	CA0160009S31	VB706100	CA0160010S31	VB711100	CA0160036S31	16 A
VB697200	CA0170008S31	VB702000	CA0170009S31	VB707900	CA0170010S31	VB712900	CA0170036S31	20 A
VB698000	CA0250008S31	VB703800	CA0250009S31	VB708700	CA0250010S31	VB713700	CA0250036S31	32 A
VB699800	CA0320008S31	VB704600	CA0320009S31	VB709500	CA0320010S31			40 A

♦ Available on request

Enclosed

**S40-S90 Version**

Switch in insulated enclosure with side actuator

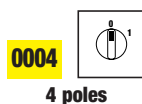
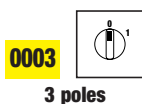
■ Protection degree IP40

**S10-S20 Version**

Switch in metal enclosure with side actuator

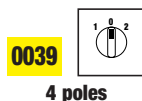
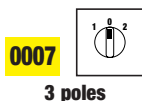
■ Protection degree IP54

Switches



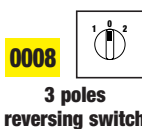
Part no.	Type no.	Part no.	Type no.	Rated operating current
VB728500	CA0400003S40	VB730100	CA0400004S40	50 A
VB729300	CA0630003S90	VB731900	CA0630004S90	75 A
♦ VB714500	CA1000003S10	VB716000	CA1000004S10	115 A
♦ VB715200	CA2000003S20	♦ VB717800	CA2000004S20	160 A

Change over switches



Part no.	Type no.	Part no.	Type no.	Rated operating current
VB732700	CA0400007S40	VB734300	CA0400039S40	50 A
VB733500	CA0630007S90	VB735000	CA0630039S90	75 A
VB718600	CA1000007S10	VB720200	CA1000039S10	115 A
♦ VB719400	CA2000007S20	VB721000	CA2000039S20	160 A

Motor control switches



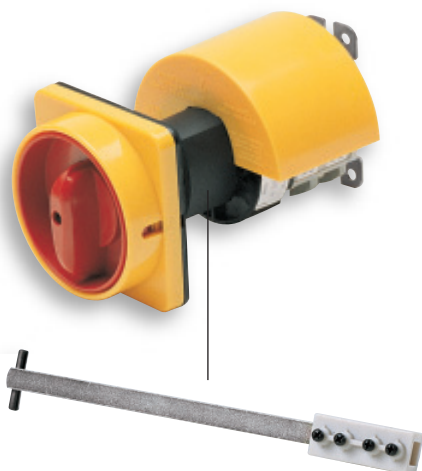
Part no.	Type no.	Part no.	Type no.	Part no.	Type no.	Rated operating current
VB736800	CA0400008S40	VB738400	CA0400009S40	VB740000	CA0400010S40	50 A
VB737600	CA0630008S90	VB739200	CA0630009S90	VB741800	CA0630010S90	75 A
♦ VB722800	CA1000008S10	♦ VB724400	CA1000009S10	VB726900	CA1000010S10	115 A
VB723600	CA2000008S20	♦ VB725100	CA2000009S20	♦ VB727700	CA2000010S20	160 A

♦ Available on request

• Dimensions, see page **22**
• Circuit diagrams, see page **60÷70**

• Technical data, see page **24-25**
• Homologations and approvals, see page **28**

Accessories



Shaft extension with coupling

Used to adapt switches with base mounting and door interlocking device to different mounting depths

Part no.	Type no.	Switch size	Length	Shaft dimension
VI355000	B-G550	12 ÷ 32 A	150 mm	□ 5
VI805400	B-G551	40 ÷ 63 A	185 mm	□ 7
VI804700	B-G552	100 ÷ 200 A	175 mm	□ 10



Panel fixing adapter

Used to reduce the fixing distance from 28 to 32mm

Part no.	Type no.	Switch size
VB825900	B-G555	12 ÷ 20 A

Plastic empty insulated enclosures



Front actuators version IP65

6 different PG entries

Part no.	Type no.	Switch size	Number of elements
VD822400	B-G970	12 ÷ 20 A	3
VD822400	B-G970	25 ÷ 32 A	2



S31 Version with lateral actuators IP65

6 different PG entries

Part no.	Type no.	Switch size	Number of elements
VB849900	B-G554	12 ÷ 20 A	6
VB849900	B-G554	25 ÷ 32 A	4



S40 Version with lateral actuators IP40

3 different PG entries

Part no.	Type no.	Switch size	Number of elements
VB800200	B-G775	40 A	4



S90 Version with lateral actuators IP40

6 different PG entries

Part no.	Type no.	Switch size	Number of elements
VB801000	B-G776	63 A	4

Accessories

Seal gaskets

IP54

Allow increasing the front protection degree.
Suitable for PL 3L IPA LE LN ME only with turned shaft.

Part no.	Type no.	Switch size	Shaft dimens.
VB816800	B-G3837 001	12÷32 A	□ 75
VB818400	B-G3836 002	40÷63 A	□ 105
♦ VB819200	G3838	100÷630 A	□ 130

♦ Available on request

Terminal covers

IP55

Allow increasing the protection degree of the terminals.
Semi rigid protections provided with seal ring nut and knock outs

Part no.	Type no.	Switch size	Number of elements	Diametro
VB826700	B-G092	12÷20 A	2	Ø 63
VB827500	B-G093	12÷20 A	4	Ø 63
VB828300	B-G094	12÷20 A	6	Ø 63
VB829100	B-G095	25÷32 A	2	Ø 77
VB830900	B-G096	25÷32 A	4	Ø 77
VB831700	B-G097	25÷32 A	6	Ø 77
VB832500	B-G098	40 A	3	Ø 100
VB832500	B-G098	63 A	2	Ø 100
VB833300	B-G099	40 A	6	Ø 100
VB833300	B-G099	63 A	4	Ø 100

Terminal covers

IP40

Flexible PVC protections provided with bearing cup.

Part no.	Type no.	Switch size	Number of elements	Diametro
VB835800	B-G2130 001	12÷20 A	2	Ø 50
VB836600	B-G2130 002	12÷20 A	4	Ø 50
VB837400	B-G2130 011	12÷20 A	6	Ø 50
VB838200	B-G2130 004	12÷20 A	2	Ø 60
VB838200	B-G2130 004	25÷32 A	1	Ø 60
VB839000	B-G2130 005	12÷20 A	4	Ø 60
VB839000	B-G2130 005	25÷32 A	3	Ø 60
VB840800	B-G2130 007	12÷20 A	7	Ø 60
VB840800	B-G2130 007	25÷32 A	5	Ø 60

Seal gaskets

IP54

Allow increasing the front protection degree.
Suitable for R version

Part no.	Type no.	Switch size	Diametro
VB820000	B-G3957 002	12÷20 A	Ø 40
VB821800	B-G3697 001	25÷32 A	Ø 60
♦ VB822600	B-G3836 003	40÷63 A	Ø 78
♦ VB823400	B-G3836 004	100÷630 A	Ø 110

♦ Available on request

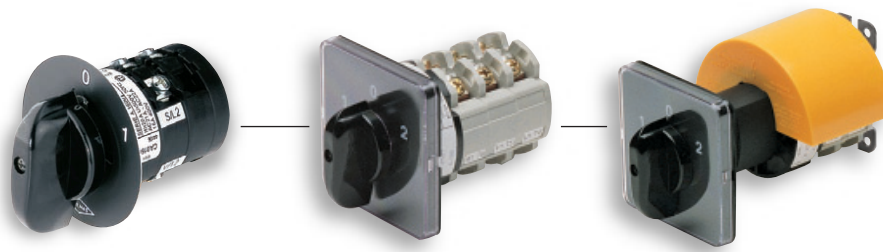
Terminal covers

IP20

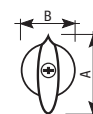
Suitable for protection of the supply terminals in the versions provided with door interlocking device.

Part no.	Type no.	Switch size	Number of elements
VB841600	B-G3228 001	12÷20 A	1
VB842400	B-G3228	12÷20 A	2
VB842400	B-G3228	12÷20 A	3
VB843200	B-G3880 001	25÷32 A	1
VB844000	B-G3880 002	25÷32 A	2
VI294100	B-G3880 003	25÷32 A	3
VB845700	B-G3229 001	40 A	2
VB846500	B-G3229 002	63 A	2
VI264400	B-G3211 002	63 A	3
VB847300	B-G3942	100÷200 A	2

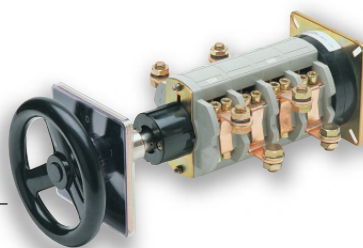
Accessories

**Black shaped knob**

Suitable for R03, PL and ME versions



Part no.	Type no.	Description	Switch size	Lever dimensions (AxB)	Shaft dimensions
VB806900	B-G083N	Knob M4	12÷32 A	41x28	□ 5
VB807700	B-G025N	Knob M5	12÷32 A	50x34	□ 5
VB769900	B-G085N	Knob M06	12÷32 A	70x48	□ 5
VB808500	B-G086N	Knob M6	40 - 63 A	70x48	□ 7
VB809300	B-G034N	Knob M9	100 - 200 A	105x75	□ 10

**Black handwheel**

Suitable for PL and ME version

Part no.	Type no.	Description	Switch size	Dimension	Shaft dimensions
VB815000	B-G087N	Wheel	100÷630 A	Ø160	10

**Long handle**

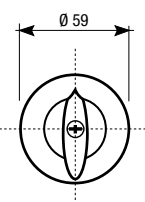
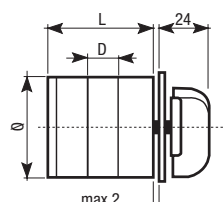
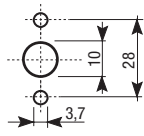
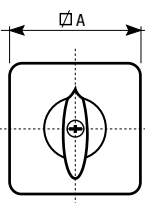
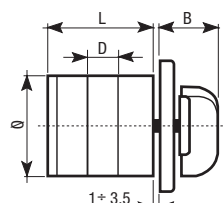
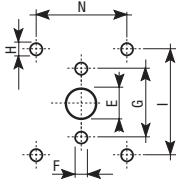
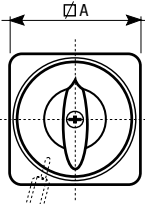
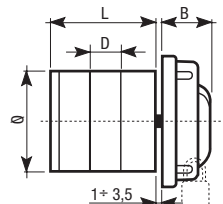
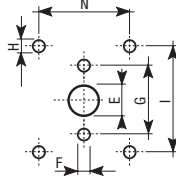
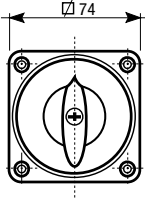
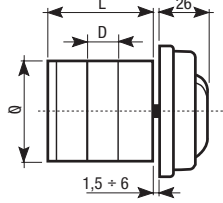
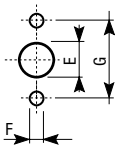
Suitable for enclosed versions



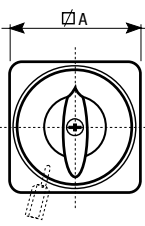
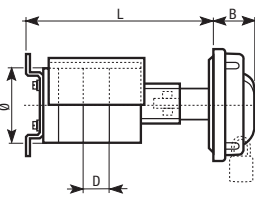
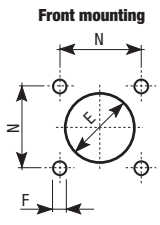
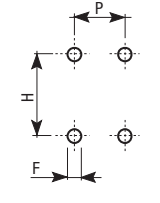
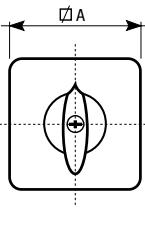
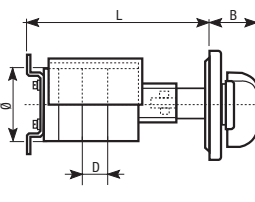
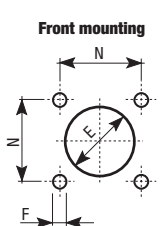
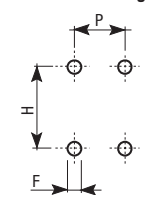
Part no.	Type no.	Description	Switch size	Lever dimensions (AxB)	Shaft dimensions
VB812700	B-G088N	Lever M7	12÷32 A	80,5x33	5
VB813500	B-G089N	Lever M8	40÷63 A	109x48	7
VB814300	B-G090N	Lever M10	100÷200 A	149x58	10



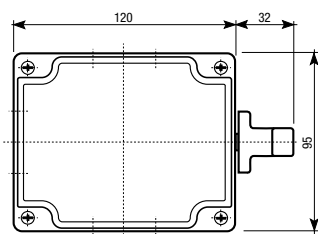
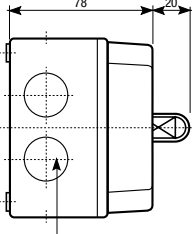
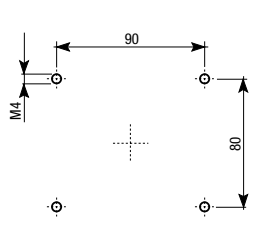
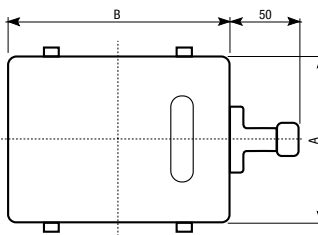
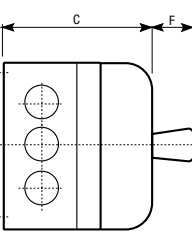
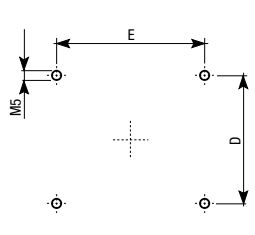
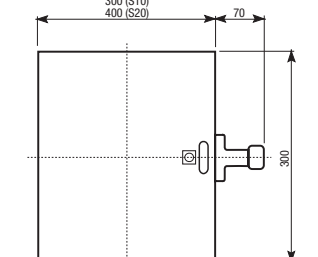
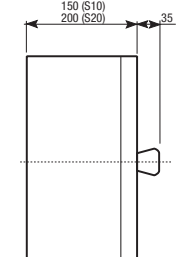
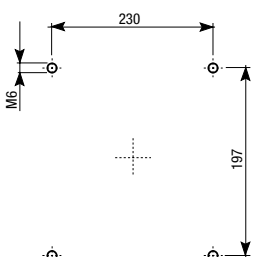
Rear mounting with screws

Type	Front view	Side view	Drilling template	Dimensions ▲ L value is relative to switch with one element, for other configurations add quote D in according number.																																																																																																																																																																								
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Base mounting

Type	Front view	Side view	Drilling template	Dimensions ▲ L value is relative to switch with one element, for other configurations add quote D in according number.																																																																																																																																																												
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CA400	110	130	62	78	94÷110	50	5,3 (M5)	94÷110	94÷110																																																																																																																																																							
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ME			Front mounting  Base mounting 	<table><tr><th></th><th>Ø</th><th>A</th><th>B</th><th>D</th><th>N</th><th>E</th><th>F</th><th>P</th><th>H</th><th colspan="2">▲ L</th></tr><tr><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>MIN.</th><th>MAX</th></tr><tr><td>CA012</td><td>40</td><td>75</td><td>30</td><td>12</td><td>46÷48</td><td>27</td><td>4,3 (M4)</td><td>18</td><td>58</td><td>90</td><td>95</td></tr><tr><td>CA016</td><td>40</td><td>75</td><td>32</td><td>12</td><td>46÷48</td><td>27</td><td>4,3 (M4)</td><td>18</td><td>58</td><td>90</td><td>95</td></tr><tr><td>CA017</td><td>46</td><td>75</td><td>32</td><td>12</td><td>58÷60</td><td>27</td><td>4,3 (M4)</td><td>18</td><td>58</td><td>90,5</td><td>95,5</td></tr><tr><td>CA025</td><td>58</td><td>75</td><td>32</td><td>16,5</td><td>58÷60</td><td>27</td><td>4,3 (M4)</td><td>18</td><td>58</td><td>100</td><td>105</td></tr><tr><td>CA032</td><td>58</td><td>75</td><td>32</td><td>16,5</td><td>58÷60</td><td>27</td><td>4,3 (M4)</td><td>18</td><td>58</td><td>100</td><td>105</td></tr><tr><td>CA040</td><td>74</td><td>105</td><td>44</td><td>18</td><td>65÷85</td><td>40</td><td>5,3 (M5)</td><td>26</td><td>84</td><td>117</td><td>121</td></tr><tr><td>CA063</td><td>84</td><td>105</td><td>44</td><td>25</td><td>65÷85</td><td>40</td><td>5,3 (M5)</td><td>26</td><td>84</td><td>126</td><td>130</td></tr><tr><td>CA100</td><td>110</td><td>130</td><td>62</td><td>30</td><td>94÷110</td><td>50</td><td>5,3 (M5)</td><td>94÷110</td><td>94÷110</td><td>152</td><td>158</td></tr><tr><td>CA200</td><td>110</td><td>130</td><td>62</td><td>39</td><td>94÷110</td><td>50</td><td>5,3 (M5)</td><td>94÷110</td><td>94÷110</td><td>161</td><td>167</td></tr><tr><td>CA400</td><td>110</td><td>130</td><td>62</td><td>78</td><td>94÷110</td><td>50</td><td>5,3 (M5)</td><td>94÷110</td><td>94÷110</td><td></td><td></td></tr><tr><td>CA630</td><td>110</td><td>130</td><td>62</td><td>117</td><td>94÷110</td><td>50</td><td>5,3 (M5)</td><td>94÷110</td><td>94÷110</td><td></td><td></td></tr></table>		Ø	A	B	D	N	E	F	P	H	▲ L												MIN.	MAX	CA012	40	75	30	12	46÷48	27	4,3 (M4)	18	58	90	95	CA016	40	75	32	12	46÷48	27	4,3 (M4)	18	58	90	95	CA017	46	75	32	12	58÷60	27	4,3 (M4)	18	58	90,5	95,5	CA025	58	75	32	16,5	58÷60	27	4,3 (M4)	18	58	100	105	CA032	58	75	32	16,5	58÷60	27	4,3 (M4)	18	58	100	105	CA040	74	105	44	18	65÷85	40	5,3 (M5)	26	84	117	121	CA063	84	105	44	25	65÷85	40	5,3 (M5)	26	84	126	130	CA100	110	130	62	30	94÷110	50	5,3 (M5)	94÷110	94÷110	152	158	CA200	110	130	62	39	94÷110	50	5,3 (M5)	94÷110	94÷110	161	167	CA400	110	130	62	78	94÷110	50	5,3 (M5)	94÷110	94÷110			CA630	110	130	62	117	94÷110	50	5,3 (M5)	94÷110	94÷110		
	Ø	A	B	D	N	E	F	P	H	▲ L																																																																																																																																																						
										MIN.	MAX																																																																																																																																																					
CA012	40	75	30	12	46÷48	27	4,3 (M4)	18	58	90	95																																																																																																																																																					
CA016	40	75	32	12	46÷48	27	4,3 (M4)	18	58	90	95																																																																																																																																																					
CA017	46	75	32	12	58÷60	27	4,3 (M4)	18	58	90,5	95,5																																																																																																																																																					
CA025	58	75	32	16,5	58÷60	27	4,3 (M4)	18	58	100	105																																																																																																																																																					
CA032	58	75	32	16,5	58÷60	27	4,3 (M4)	18	58	100	105																																																																																																																																																					
CA040	74	105	44	18	65÷85	40	5,3 (M5)	26	84	117	121																																																																																																																																																					
CA063	84	105	44	25	65÷85	40	5,3 (M5)	26	84	126	130																																																																																																																																																					
CA100	110	130	62	30	94÷110	50	5,3 (M5)	94÷110	94÷110	152	158																																																																																																																																																					
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CA630	110	130	62	117	94÷110	50	5,3 (M5)	94÷110	94÷110																																																																																																																																																							

Enclosed

Type	Front view	Side view	Drilling template	Dimensions																								
S31																												
S40/S90				<table><tr><th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>N. MAX ELEM.</th></tr><tr><td>CA040</td><td>113</td><td>152</td><td>104</td><td>95</td><td>129</td><td>28</td><td>4</td></tr><tr><td>CA063</td><td>135</td><td>190</td><td>115</td><td>111</td><td>166</td><td>24</td><td>4</td></tr></table>		A	B	C	D	E	F	N. MAX ELEM.	CA040	113	152	104	95	129	28	4	CA063	135	190	115	111	166	24	4
	A	B	C	D	E	F	N. MAX ELEM.																					
CA040	113	152	104	95	129	28	4																					
CA063	135	190	115	111	166	24	4																					
S10/S20																												

Conformity to standards IEC 947 3 EN 60 947 3				CA012		CA016		
Rated insulation voltage		Ui	V	500	★	500	★	
Rated operating voltage		Ue	V	400		400		
Rated impulse withstand voltage		Uimp	kW	4	★	4	★	
Rated thermal current	open	Ith	A	16	★	20	★	
	enclosed	Ithe	A	16	★	20	★	
Rated operating frequency			Hz	50		50		
Power dissipation for each pole			W	0,27		0,5		
Rated operating current Ie in category								
AC 21A Switching resistive loads with light overloads		3 phases – 3 poles + neutral	Ie	A	12	★●	16	★●
AC 22A Switching mixed resistive and inductive loads with light overloads		3 phases – 3 poles + neutral	Ie	A	12	★●	16	★●
AC 20A OFF ON without loads			A					
Rated operating power								
AC 23A Periodic switching of motors and others inductive loads with high overloads	3 phases 3 poles	230V	Kw (A)	3 (9)		4 (14)		
		400V	Kw (A)	4 (9)	★	7,5 (14)	★	
		500V	Kw (A)	-		-		
		690V	Kw (A)	-		-		
AC 3 Starting of cage motors and interruption while running	3 phases 3 poles	230V	Kw (A)	2,2 (7)		3,7 (12)	★	
		400V	Kw (A)	3,5 (7)	★	5,5 (10)	★	
		500V	Kw (A)	-		-		
		690V	Kw (A)	-		-		
AC 4 Starting of cage motors, reverse current braking, impulse action	3 phases 3 poles	230V	Kw (A)	-		-		
		400V	Kw (A)	-		-		
AC 15 Electromagnetic loads ≥72 VA		230V	A	4		6		
		400V	A	3		4		
Rated breaking capacity in category AC 23A (Cosφ 0,45)		230V	A	72		112		
		400V	A	72	★	112	★	
Short circuit safety								
Rated short time withstand current (1s)		Icw	A	150		240		
Rated short circuit make capacity		Icm	A	-		-		
Rated conditional short circuit current			kA	4	★	4	★	
With fuses class gG		500V	A	16		20		
Technical data UL/CSA								
Rated insulation voltage		Ui	UL/CSA V					
Rated operating voltage		Ue	UL/CSA V					
General Use Current		Ie	UL/CSA A	-		-		
Rated operating power								
1 phase - 2 poles		120V	HP	-		-		
		240V	HP	-		-		
3 phases - 2 poles		200V	HP	-		-		
		240V	HP	-		-		
		480V	HP	-		-		
		600V	HP	-		-		
Mechanical data								
Mechanical life (120 cycles/hour)			Cycles 10 ⁶	2		2		
			Cycles for hour	120		120		
Connections, according to IEC 947 1 EN 60947 1								
Connecting capacity	Stranded wire plus connector	Min-Max	mm²	2x1,5-2,5		2x1,5-2,5		
		Min-Max	AWG	16-12		16-12		
	Solid wire	Min-Max	mm²	2x1,5-4		2x1,5-4		
Connection terminal screw dimension			Type	M3,5		M3,5		
Screw tightening torque			Nm	1,0		1,0		
Protection degree IEC 529 EN 60529								
Body								
Normal service conditions								
Operating			°C					
Storage			°C					
Resistance to constant hot damp climate, according to IEC 68 part:								
Resistance to cyclic hot damp climate, according to IEC 68 part:								

● at 400V

▲ CSA at 300 V

■ for using similar to AC20 category

⊗ at 500 V

○ Terminals designed for M10 bolts

★ Values certified by IMQ

▼ UR recognized

CA017	CA025	CA032	CA040	CA063	CA100	CA200	CA400	CA630
690	690 ★	690 ★	690 ★	690 ★	690 ★	690	690	690
690	690 ★	690 ★	690 ★	690 ★	690 ★	690	690	690
6 ★	6	6	6	6	6	6		
20 ★	32 ★	40	50 ★	75	115 ★	200	400	630
20 ★	32 ★	40	50 ★	75	115 ★	200	-	-
50	50	50	50	50	50	50	50	50
0,4	1,0	1,3	1,6	2,5	4,7	7	15	30
20 ★	32 ★	40	50	75	115	160	-	-
16 ★	25 ★	32	40	63 ☼	115 ☼	160 ☼	-	-
							400	630
5,5 (17) ★	8,5 (27) ★	10 (32)	15 (48)	18,5 (58)	30 (95)	40 (125)	-	-
9 (16) ★	15 (27)	18,5 (30)★	25 (45)	30 (54)	45 (85)	59 (106)	-	-
9 (13)	15 (22)	18,5 (27)★	33 (48)	22 (32)	30 (40)	75 (108)	-	-
9 (9) ★	15 (16) ★	18,5 (19)	22 (23) ★	-	-	-	-	-
4 (13) ★	5,5 (17) ★	7,5 (24)	11 (35)	15 (47)	22 (70)	30 (95)	-	-
7,5 (14) ★	10 (17) ★	15 (27)	18 (33)	22 (40)	37 (67)	45 (82)	-	-
7,5 (11)	14 (17)	15 (22)	22 (32)	22 (32) ★	30 (40) ★	59 (85)	-	-
7,5 (8) ★	10 (10) ★	18,5 (19)★	20 (20) ★	-	-	-	-	-
1,5	2 (7)	3 (10)	3,7 (12)	5,5 (17)	7,5 (85)	-	-	-
2,2	3 (5,5)	5,5 (10)	6 (11)	7,5 (14)	11 (20)	-	-	-
7	8	10	-	-	-	-	-	-
5	6	8	-	-	-	-	-	-
136 ★	216	256	384	464	760	1000	-	-
128 ★	216	240	360	432	680	848	-	-
240 ★	400	500	600	800	1500	2000		
1500 ★	2000	2000	2000	2500	3000	3000		
5 ★	10	10	15	15	15	15		
20	35	50	50	63	125	200		
600/300	600	600	600	600	600/600	600/-	600/- ▼	600/- ▼
600/300	600	600	600	600	600/600	600/-	600/- ▼	600/- ▼
20/16	32/25	40/32	60/40	85/63	125/100	240/-	400/- ■▼	630/- ■▼
1,5/-	2/-	3/2,5	5/-	7,5/-	10/5	-	-	-
3/2,5 ▲	5/-	7,5/4,5	10/-	10/-	15/12	-	-	-
5/-	7,5/-	10/-	15/-	20/-	20/-	-	-	-
7,5/5 ▲	10/-	15/9,5	20/-	20/-	25/24	-	-	-
10	15/-	20/20	30/-	40/-	50/50	-	-	-
14	15/17	20/25	30/32,5	40/50	50/65	-	-	-
2	2	1,5	1,6	1	0,3	0,1	-	-
120	120	120	120	120	30	30	-	-
2x1,5-2,5	2x2,5-6	2x2,5-6	2x2,54-6	6-16	10-25	50-70 ○	Terminals designed for cable lugs or copper bars suitable for bolts	
16-12	14-10	14-10	14-8	10-6	10-3	1/0-2/0		
2x1,5-4	2x2,5-10	2x2,5-10	2x4-10	10-25	16-35	-		
M3,5	M5	M5	M5	2XM5	2XM8	M10	M12X20	M16X25
1,0	2,8	2,8	2,8	2,8	2,8	23	40	98
IP00								
		-25 ÷ +55						
		-30 ÷ +70						
		2-8						
		2-30						

Upon request, special versions can be assembled, in addition to the variants of circuit diagrams.
The more significant variants are as follows:

Quick connection terminals (Faston connections)

Flat terminals 6,3 x 0,8 mm fitted according to the customer requirements.
Suitable for CA012, CA016, CA017, CA025 and CA032 series



Coaxial type nos

They are assembled by coupling between different series:
CA100 + CA040 + CA017/CA016/CA012
CA100 + CA032/CA025/CA017/CA016/CA012
CA063 + CA032/CA025/CA017/CA016/CA012
CA040 + CA017/CA016/CA012



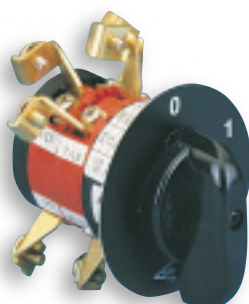
Snap action

It allow the quick opening and closing of the contacts, independent from the manual operation. Positions: 0 1 60°, 1 0 2,6 positions to 360°. 6 contacts max for CA012, CA016, CA017 series and 4 contacts max for CA025, CA032 series.



Cable couplings

These connections protrude from the switch and are suitable for CA012, CA016, CA017, CA032, CA040, CA063 and CA100 series supplied as rear and surface mounting devices





Axial push interlock

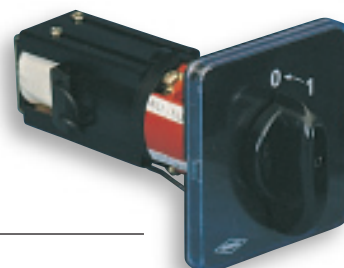
This device allows the lock of the switch in the position required and its release by means of an axial pressure carried out on the operating handle. Suitable for CA012, CA016, CA017, CA025, CA032.

Unidirectional interlock

This device allows the rotation of the switch clockwise only and its interlock in all positions or in pre determinate positions only. Suitable for CA012, CA016, CA017, CA025, CA032, CA040, CA063.

Supply failure release

This device includes a safety electromagnet. It allows the spring return of the switch in "0" position in case of supply failure, disconnecting the supply. 6 contacts max for CA012, CA016, CA017 series and 4 contacts for CA025, CA032 series. Positions 0 1 and 1 0 2.



Selector and key selector switch

Device for mounting in centre hole diameter 22 mm with selector or key. Suitable for CA012, CA016, CA017, CA025 and CA032 series.

SERIES							
CA012	✓					✓	✓
CA016	✓					✓	✓
CA017	✓	✓	✓		✓	✓	✓
CA025	✓		✓		✓	✓	✓
CA032	✓		✓		✓	✓	✓
CA040	✓		✓		✓	✓	✓
CA063	✓		✓		✓	✓	✓
CA100	✓		✓		✓	✓	✓
CA200	✓			✓		✓	✓
CA400				✓		✓	✓
CA630				✓		✓	✓