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Switch disconnectors selection guide



Schneider Electric

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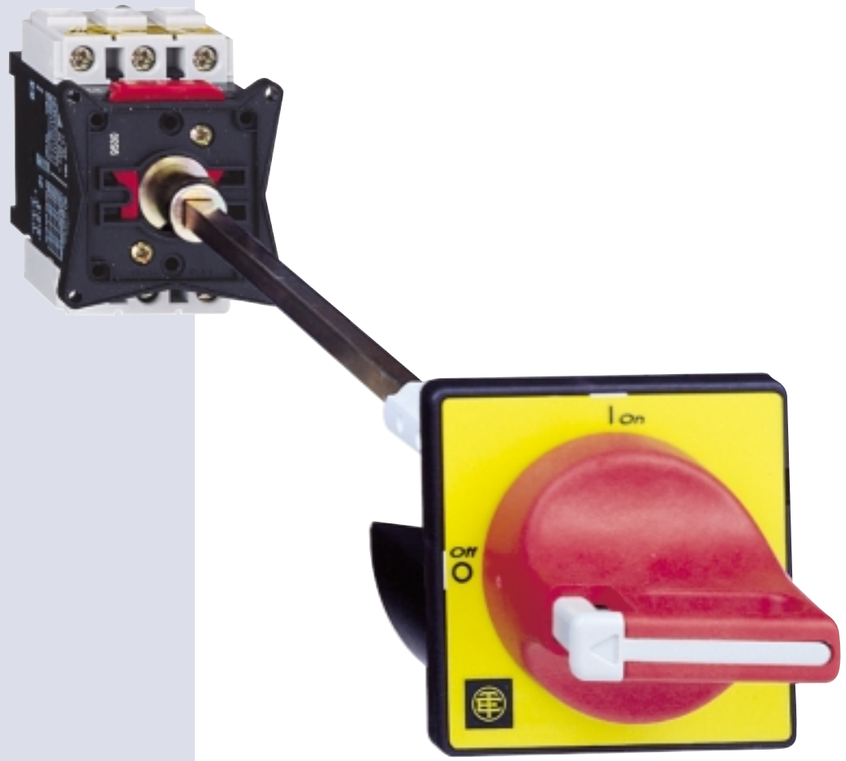
Mini-Vario and Vario open type switch disconnectors up to 175A



Flexible

- Modular system with add-on:
  Main poles
  Switched neutral
  Auxiliary contacts
- Reversible box terminals for front or rear connection

Reliable

- Full compliance with IEC 947-3

Safe

- Padlockable operator (up to three padlocks)
- A true load breaking switch disconnector
- Ingress protection IP65

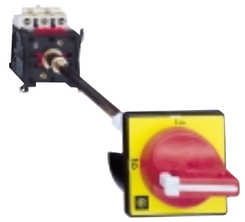
Easy to order

- All-in-one packs comprise switch body, door interlock, padlockable operator, extension shaft and incoming terminal shroud

Mini-Vario complete switch assemblies

Simple solutions for standard applications

- Optimised for simple machines
- Cost effective
- Space saving
- Easy ordering
- Ingress protection - IP65



	Main and emergency stop switch	Main switch
3 pole switch body complete with padlockable operator assembly (up to 3 padlocks)		
Front plate dimension (mm)	60 x 60	60 x 60
Operator fixing	Ø 22	Ø 22
Ith 12 A	**VCDN12**	**VBDN12**
Ith 20 A	**VCDN20**	**VBDN20**

	Main and emergency stop switch
3 pole switch body complete with padlockable operator assembly (up to 3 padlocks), extension shaft, door interlock and incoming terminal shroud	
Front plate dimension (mm)	60 x 60
Operator fixing	Ø 22
Ith 12 A	**VCCDN12**
Ith 20 A	**VCCDN20**

Mini-Vario

Components for customer assembly

- Adaptable
- Flexible
- Simple modular assembly
- Uses standard Vario operator assemblies (see page 7)

Maximum number of attachments which may be fitted to a 3 pole switch body:

VN12 and VN20
- 1 add-on module on either side of the switch body +1 earthing module.

Note:
- The maximum number of attachments which may be fitted to a switch body, as indicated, should not be exceeded.

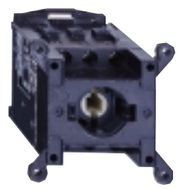
Contacts

late make
VZN05



early break
VZN06



	Three-pole switch body	Main pole	Neutral pole
			
Ith 12 A	**VN12**	**VZN12**	**VZN11**
Ith 20 A	**VN20**	**VZN20**	**VZN11**

	Earthing module	Auxiliary contact block	
			
Ith 12 A	**VZN14**	**VZN05**	**VZN06**
Ith 20 A	**VZN14**	**VZN05**	**VZN06**

Shrouds	Shroud for switch body input terminals	Shroud for main/neutral poles and auxiliary contact blocks
		
Ith 12 A	**VZN08**	**VZN26**
Ith 20 A	**VZN08**	**VZN26**

Vario complete switch assemblies

Flexible solutions for high-performance applications

Main switch, emergency/main switch, switch disconnector – the choice is yours:

Switch

A mechanical connection device with on-load making and breaking capacity, capable of:

– making, carrying and breaking currents under normal circuit conditions (a), possibly including specified operating overload conditions (b).

– carrying currents in abnormal circuit conditions – such as short-circuit conditions (c) – for a specified duration (a) switch may be able to make short-circuit currents, but it cannot break them.

(a) normal conditions: operating equipment at 40ºC room temperature for 8 hours.

(b) specified operating overload conditions: over-current developing within a faultless electrical circuit, e.g. a starting motor.

(c) abnormal conditions: circuit fault.

Main switch
For general duty AC22 (black operator)

Emergency/main switch
Capable of switching stalled rotor current-duty AC23 (red operator/yellow surround).

Disconnector
A mechanical connection device which, when open, complies with the requirements specified for the isolating function. This device can carry currents in normal circuit conditions as well as currents in abnormal conditions for a specified duration.

Switch disconnector
A mechanical connection device combining both the on-load switching and the isolation function.

Main and emergency stop switches

Switch body complete with padlockable operator (up to 3 padlocks), extension shaft, door interlock and incoming terminal shroud



Front plate dimension (mm)	60 x 60	60 x 60
Operator fixing	Ø 22	4 screws
Ith 12 A	**VCCD02**	**VCCF02**
Ith 20 A	**VCCD01**	**VCCF01**
Ith 25 A	**VCCD0**	**VCCF0**
Ith 32 A	**VCCD1**	**VCCF1**
Ith 40 A	**VCCD2**	**VCCF2**
Ith 63 A	**–**	**VCCF3**
Ith 80 A	**–**	**VCCF4**
Ith 125 A	**–**	**VCCF5**
Ith 175 A	**–**	**VCCF6**

- Easy order package
- Complete kit of parts for base mount through door assembly
- Can be fitted with additional poles/auxiliaries (see page 6)
- Ingress protection IP65
- Ideal as control panel disconnect switch

Vario complete switch assemblies

Flexible solutions for high-performance applications

- Switch body and operator assembly in one pack
- For front mounting without door interlocking
- Can be fitted with additional poles/auxiliaries (see page 6)
- Ingress protection IP65
- Ideal as local disconnect mounted within machine body

Main and emergency stop switches

Switch body complete with padlockable operator assembly (up to 3 padlocks)







Front plate dimension (mm)	60 x 60	60 x 60	90 x 90
Operator fixing	Ø 22	4 screws	4 screws
Ith 12 A	**VCD02**	**VCF02**	**–**
Ith 20 A	**VCD01**	**VCF01**	**–**
Ith 25 A	**VCD0**	**VCF0**	**–**
Ith 32 A	**VCD1**	**VCF1**	**–**
Ith 40 A	**VCD2**	**VCF2**	**–**
Ith 63 A	**–**	**VCF3**	**–**
Ith 80 A	**–**	**VCF4**	**–**
Ith 125 A	**–**	**–**	**VCF5**
Ith 175 A	**–**	**–**	**VCF6**

Main switches

Switch body complete with padlockable operator assembly (up to 3 padlocks)







Front plate dimension (mm)	60 x 60	60 x 60	90 x 90
Operator fixing	Ø 22	4 screws	4 screws
Ith 12 A	**VBD02**	**VBF02**	**–**
Ith 20 A	**VBD01**	**VBF01**	**–**
Ith 25 A	**VBD0**	**VBF0**	**–**
Ith 32 A	**VBD1**	**VBF1**	**–**
Ith 40 A	**VBD2**	**VBF2**	**–**
Ith 63 A	**–**	**VBF3**	**–**
Ith 80 A	**–**	**VBF4**	**–**
Ith 125 A	**–**	**–**	**VBF5**
Ith 175 A	**–**	**–**	**VBF6**

Vario

Components for customer assembly

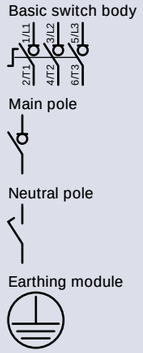
- Versatile switch for all types of machines and processes
- Simple modular assembly
- Cost effective and flexible with many options
- High performance – a true load breaking switch

Maximum number of attachments which may be fitted to a 3 pole switch body:

V02 to V4
- 1 or 2 add-on modules on either side of the switch body V5 and V6
- 1 add-on module on either side of the switch body.

Note :
- if a main or neutral and an auxiliary contact are added on one side, the auxiliary must be fitted outboard of any main pole attachments
- 3 main add-on poles maximum per switch body (V02 to V4)
- the earthing module is always mounted on the outside
- the maximum number of attachments which may be fitted to a switch body, as shown above must not be exceeded
- neutral poles cannot be ftted inboard of a main pole or auxiliary contact block

Wiring diagram



Three-pole switch body	Main pole	Neutral pole	Earthing module	Auxiliary contact blocks	
					
For switch Ith rating				1NO+1NC	2NO
Ith 12 A	**V02**	**VZ02**	**VZ11**	**VZ14**	**VZ7**	**VZ20**
Ith 20 A	**V01**	**VZ01**	**VZ11**	**VZ14**	**VZ7**	**VZ20**
Ith 25 A	**V0**	**VZ0**	**VZ11**	**VZ14**	**VZ7**	**VZ20**
Ith 32 A	**V1**	**VZ1**	**VZ11**	**VZ14**	**VZ7**	**VZ20**
Ith 40 A	**V2**	**VZ2**	**VZ11**	**VZ14**	**VZ7**	**VZ20**
Ith 63 A	**V3**	**VZ3**	**VZ12**	**VZ15**	**VZ7**	**VZ20**
Ith 80 A	**V4**	**VZ4**	**VZ12**	**VZ15**	**VZ7**	**VZ20**
Ith 125 A	**V5**	**–**	**VZ13**	**VZ16**	**VZ7**	**VZ20**
Ith 175 A	**V6**	**–**	**VZ13**	**VZ16**	**VZ7**	**VZ20**

	Shroud for input terminals main pole or neutral pole	Shroud for input terminals of auxiliary contact block VZ7 or VZ20	Shroud for switch input terminals
			
For switch Ith rating			
Ith 12 A	**VZ26**	**VZ29**	**VZ8**
Ith 20 A	**VZ26**	**VZ29**	**VZ8**
Ith 25 A	**VZ26**	**VZ29**	**VZ8**
Ith 32 A	**VZ26**	**VZ29**	**VZ8**
Ith 40 A	**VZ26**	**VZ29**	**VZ8**
Ith 63 A	**VZ27**	**VZ29**	**VZ9**
Ith 80 A	**VZ27**	**VZ29**	**VZ9**
Ith 125 A	**VZ28**	**VZ29**	**VZ10**
Ith 175 A	**VZ28**	**VZ29**	**VZ10**

Contacts

late make and early break
VZ7



normally open (N/O)
VZ20

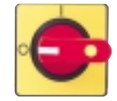


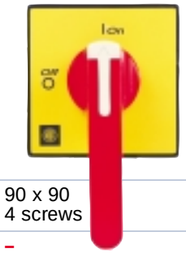
Mini-Vario and Vario

Components for customer assembly

Padlockable operator assemblies for main and emergency stop switches

Up to 3 padlocks, except 45mm x 45mm front plate – 1 padlock





For switch type	Front plate dimension (mm) Fixing	45 x 45 Ø 22	45 x 45 4 screws	60 x 60 Ø 22	60 x 60 4 screws	90 x 90 4 screws
VN12 and VN20		**KCC-1YZ**	**KCE-1YZ**	**KCD-1PZ**	**KCF-1PZ**	**–**
V02 to V2		**KCC-1YZ**	**KCE-1YZ**	**KCD-1PZ**	**KCF-1PZ**	**–**
V3 and V4					**KCF-2PZ**	**KCF-3PZ (1)**
V5 and V6					**–**	**KCF-3PZ**

Padlockable operator assemblies for main switches

Up to 3 padlocks





For switch type	Front plate dimension (mm) Fixing	60 x 60 Ø 22	60 x 60 4 screws	90 x 90 4 screws
VN12 and VN20		**KAD-1PZ**	**KAF-1PZ**	**–**
V02 to V2		**KAD-1PZ**	**KAF-1PZ**	**–**
V3 and V4			**KAF-2PZ**	**KAF-3PZ (1)**
V5 and V6				**KAF-3PZ**

Shaft extension (adjustable)

Use with operator, door interlock and switch body, for base mount, thro' door operation.




For switch type		
VN12 and VN20	**VZN17 e = 300 to 330 mm***	**VZN30 e = 400 to 430 mm***
V02 to V2	**VZ17 e = 300 to 330 mm***	**VZ30 e = 400 to 430 mm***
V3 and V4	**VZ18 e = 300 to 330 mm***	**VZ31 e = 400 to 420 mm***
V5 and V6	**VZ18 e = 300 to 330 mm***	**VZ31 e = 430 to 450 mm***

* e = distance from enclosure backplate to rear of door. Shaft may be cut shorter if required.
(1) Adaptor plate KZ106 required.

Operator backplates





For switch type (mm)	Front plate:	For door interlocking 60 x 60	90 x 90	For door mounting without interlock 45 x 45	60 x 60	90 x 90
VN12 and VN20		KZ32	–	KZ83	KZ83	–
V02 to V2		KZ32	–	KZ83	KZ83	–
V3 and V4		KZ74	–	–	KZ81	KZ81
V5 and V6		KZ74	KZ74	–	–	KZ81

Replacement seals (IP65)* for 4 screw fixing operator assemblies





Tightening tool



For switch type (mm)	45 x 45	60 x 60	90 x 90	For operators with Ø 22 mm fixing
VN12 and VN20	KZ65	KZ66	–	Z01
V02 to V2	KZ65	KZ66	–	Z01
V3 and V4	–	KZ62	KZ67	–
V5 and V6	–	–	KZ67	–

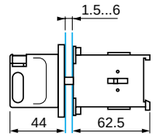
* When correctly assembled.

Mini-Vario and Vario dimensions

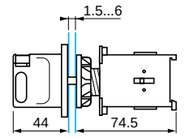
Mini-Vario
Switch disconnector
Mounting on door

Vario

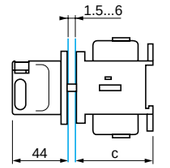
VN12, VN20
4 screw fixing

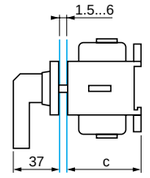


Ø22mm fixing

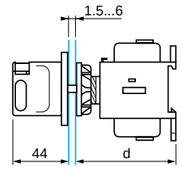


V0•, V0 to V4
4 screw fixing

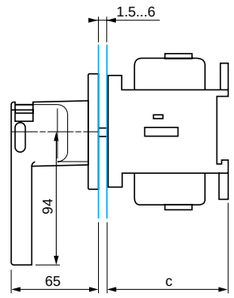




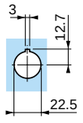
V0•, V0 to V2
Ø22mm fixing



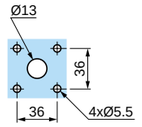
		c	d
V5 and V6	V0•, V0 to V2	60	72
4 screw fixing	V3, V4	65	–
	VZ5, VZ6	90	–



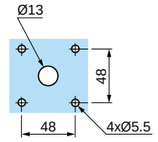
Door drilling details



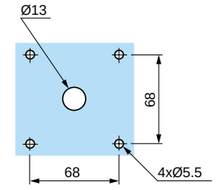
Single fixing hole Ø22
Front plate 60 x 60
VN12, VN20
V0•, V0 to V2



4 screw fixing
Front plate 45 x 45
VN12, VN20
V0•, V0 to V2



4 screw fixing
Front plate 60 x 60
VN12, VN20
V0•, V0 to V4



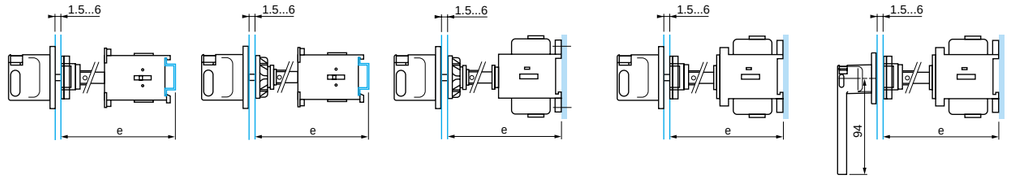
4 screw fixing
Front plate 90 x 90
V5 and V6

Mini-Vario and Vario dimensions

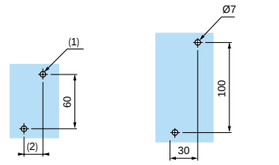
Mini-Vario
Switch disconnector
Mounting on door

Vario

VN12, VN20 | **V0•, V0 to V4** | **V3 and V4** | **V5 and V6**



	shaft extension	e = distance enclosure base plate to door
VN12, VN20	**VZN-17** **VZN-30**	**300…330 mm** **400…430 mm**
V02, V01 and V0 to V2	**VZ-17** **VZ-30**	**300…330 mm** **400…430 mm**
V3 and V4	**VZ-18** **VZ-31**	**300…320 mm** **400…420 mm**
V5 and V6	**VZN17** **VZN-30**	**330…350 mm** **430…450 mm**

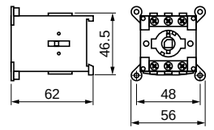


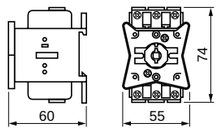
	(1)	(2)
V0•,V0 to V2	**2 x Ø 4,2**	**15**
V3, V4	**2 x Ø 5**	**20**

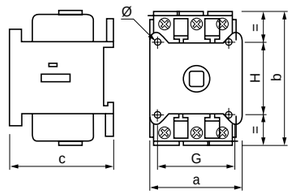
Mini-Vario
Switch bodies
VN12, VN20

Vario

V0•, V0 to V2 | V3 to V6







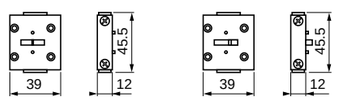
	a	b	c	G	H	Ø
V3, V4	**60**	**83**	**65**	**48**	**48**	**5,5**
V5, V6	**90**	**125**	**90**	**68**	**68**	**5,5**

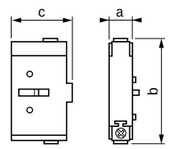
Mini-Vario
Add-on modules
VN12, VN20

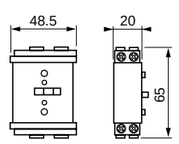
VZN11, VZN14
VZN05, VZN06

Vario
VZ02 to VZ4
VZ11 to VZ16

VZ7, VZ20







	a	b	c
VZ02 and VZ01, VZ0 to VZ2,VZ11, VZ14	**16**	**74**	**35**
VZ3, VZ4, VZ12, VZ15	**20**	**83**	**46**
VZ13, VZ16	**30**	**125**	**63**

Vario and Mini-Vario enclosed switch disconnectors up to 140A







- Enclosed Mini-Vario up to 16A
- Enclosed compact Vario up to 32A
- Enclosed Vario up to 175A
- Stainless steel enclosed Vario up to 63A

NEW FOR APRIL 2001

Vario and Mini-Vario enclosed switch disconnectors

Enclosures and stainless steel enclosed switch disconnectors

IP65 enclosure only with padlockable main/emergency switch operator

Select switch body separately



Possible additions:

- main or neutral pole
- earthing module
- auxiliary contact.

For switch body	Nominal rating AC23/400 V Ithe	Enclosure	Max no. of attachments
VN12 and VN20	**10 A to 16 A**	**VCFXGE1**	**2**
V02 to V2	**10 A to 32 A**	**VCFXGE1**	**2**
V02 to V2	**10 A to 32 A**	**VCFXGE4**	**4**
V3 and V4	**50 A and 63 A**	**VCFXGE2**	**3**
V3 and V4	**50 A and 63 A**	**VCFXGDXE**	**4**

IP65 enclosure only with padlockable main switch operator

Select switch body separately



Possible additions:

- main or neutral pole
- earthing module
- auxiliary contact.

For switch body	Nominal rating AC23/400 V Ithe	Enclosure	Max no. of attachments
VN12 and VN20	**10 A to 16 A**	**VBFXGE1**	**2**
V02 to V2	**10 A to 32 A**	**VBFXGE1**	**2**
V02 to V2	**10 A to 32 A**	**VBFXGE4**	**4**
V3 and V4	**50 A and 63 A**	**VBFXGE2**	**3**
V3 and V4	**50 A and 63 A**	**VBFXGDXE**	**4**

* when correctly installed.

Vario main and emergency stop switch – stainless steel enclosure IP65

Switch in stainless steel enclosure with padlockable operator (up to 3 padlocks)

NEW FOR APRIL 2001





	Rated power AC23/400 V	3 pole #	6 pole $
Ithe 16 A	**5.5 KW**	**VCF01SS3**	**–**
Ithe 25 A	**11 KW**	**VCF1SS3**	**–**
Ithe 32 A	**15 KW**	**VCF2SS3**	**VCF2SS6**
Ithe 63 A	**30 KW**	**VCF4SS3**	**VCF4SS6**

A 4th pole, neutral pole or aux. contact may be added.

$ Includes 1N/O + 1N/C aux. contact.

Vario and Mini-Vario enclosed switch disconnectors

Mini-Vario enclosed main and emergency stop switch – IP55 enclosure

Enclosed switch with padlockable operator (up to 3 padlocks)



Possible additions:

- main or neutral pole (same rating as switch)
- earthing module
- auxiliary contact module.

	Rated power AC23/400 V		Max no. of attachments
Ithe 10 A	**4 kW**	**VCFN12GE**	**2 max**
Ithe 16 A	**5.5 kW**	**VCFN20GE**	**2 max**

Compact Vario enclosed main and emergency stop switch – IP55 enclosure

Enclosed switch with padlockable operator (up to 3 padlocks)

NEW FOR APRIL 2001



	Rated power AC23/400 V	
Ithe 20 A	**7.5 kW**	**VCFN25GE**
Ithe 25 A	**11 kW**	**VCFN32GE**
Ithe 32 A	**15 kW**	**VCFN40GE**

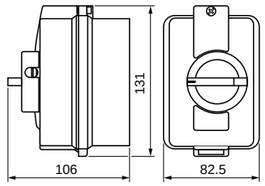
Vario enclosed main and main / emergency stop switch – IP65 enclosure

		Main and emergency stop switch	Main switch	
Enclosed main and emergency stop switch to IP65 complete with padlockable operator (up to 3 padlocks)				Possible additions: ■ main or neutral pole (same rating as switch) ■ earthing module ■ auxiliary contact module.
	Rated power AC23/400 V			Max no. of attachment
Ithe 10 A	**4kW**	**VCF02GE**	**VBF02GE**	**2 max**
Ithe 16 A	**5.5kW**	**VCF01GE**	**VBF01GE**	**2 max**
Ithe 20 A	**7.5kW**	**VCF0GE**	**VBF0GE**	**2 max**
Ithe 25 A	**11kW**	**VCF1GE**	**VBF1GE**	**2 max**
Ithe 32 A	**15kW**	**VCF2GE**	**VBF2GE**	**2 max**
Ithe 50 A	**22kW**	**VCF3GE**	**VBF3GE**	**3 max**
Ithe 63 A	**30kW**	**VCF4GE**	**VBF4GE**	**3 max**
Ithe 100 A	**37kW**	**VCF5GE**	**VBF5GE**	**1***
Ithe 140 A	**45kW**	**VCF6GE**	**VBF6GE**	**1***

* Main pole attachment not available for switch sizes 5 and 6.

Mini-Vario and Vario dimensions

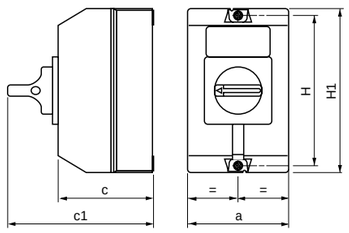
Mini-Vario and Vario
Enclosures
VCFN12GE, VCFN40GE (1)
VCFN25GE, VCFN32GE, VCFN40GE



(1) Conduit entry:
2 x Pg 16 at each end.

Vario

V•F-02GE to V•F-4GE, V•FX-GE1 to V•FX-GE4

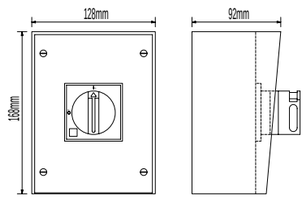


(1) Conduit entry:
2 x Pg 16 at each end.

(2) Conduit entry:
2 x Pg 16/21/29 at each end.

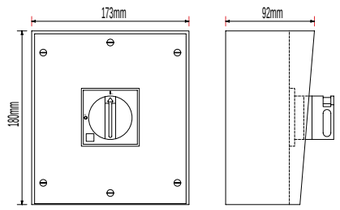
	a	c	c1	H	H1
V•F-02GE to V•F-2GE, V•FX-GE1(1)	**90**	**85**	**131**	**130**	**146**
V•F-3GE and V•F-4GE, V•FX-GE2 and V•FX-GE4(2)	**150**	**106**	**152**	**164**	**170**

Stainless steel enclosure IP65
Enclosures
VCF01SS3, VCF1SS3, VCF2SS3



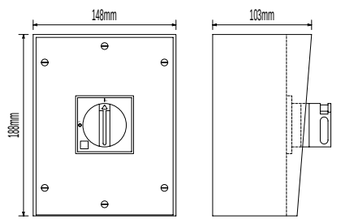
3 x ø20mm cable entries in base
Frame size 1, 3 pole

VCF2SS6



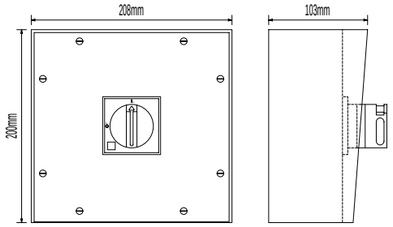
3 x ø20mm cable entries in base
Frame size 1, 6 pole

VCF4SS3



2 x ø25mm + 1 x ø20mm cable entries in base
Frame size 2, 3 pole

VCF4SS6



2 x ø25mm + 1 x ø20mm cable entries in base
Frame size 2, 6 pole

Note: These dimensions do not show bracket fixing studs on enclosure side

LK3 open type switch disconnectors 40 – 1250A



- Extensive range 20-1250A
- Available in kit form for ease of ordering
- Monobloc construction
- Now with 90º switching angle
- True AC23 rating

LK3 load break switch disconnectors

Switch disconnector kits and switch bodies



Kits

Kits comprise switch disconnector body complete with shaft extension (200mm), door interlock, power terminal screen, red padlockable handle (single sided for LK3-AP/AR/AT and LK31-AT, BC, BG, BJ, BN, BS, double sided for LK3-BV/CD) and escutcheon plate (black inscription on yellow background).
All units above 125A have defeatable handle assembly.

Kits – Handle ingress protection – up to 125A - IP54. Above 125A - IP65.

Ith (A)	Motor switching FLC rating AC-22 A (400V)	AC-23 A rating (400V)	3 pole	4 pole	3 pole + solid neutral
40	40	40	LK3-AP30	LK3-AP40	–
63	63	50	LK3-AR30	LK3-AR40	–
80	80	63	LK3-AT30	LK3-AT40	–
125	100	80	LK31-AT30	LK31-AT40	–
160	160	125	LK31-BC30	LK31-BC40	LK31-BC50
250	250	250	LK31-BG30	LK31-BG40	LK31-BG50
315	315	315	LK31-BJ30	LK31-BJ40	LK31-BJ50
400	400	400	LK31-BN30	LK31-BN40	LK31-BN50
630	630	400	LK31-BS30	LK31-BS40	LK31-BS50
800	800	800	LK3-BV30	LK3-BV40	–
1250	1250	1000	LK3-CD30	LK3-CD40	–

Components – switch bodies (select operator and accessories from table opposite)



Ith (A)	Motor switching FLC rating AC-22 A (400V)	AC-23 A rating (400V)	3 pole	4 pole	3 pole + solid neutral
40	40	40	LK3-AP3	LK3-AP4	–
63	63	50	LK3-AR3	LK3-AR4	–
80	80	63	LK3-AT3	LK3-AT4	–
125	100	80	LK31-AT3	LK31-AT4	–
160	160	125	LK31-BC3	LK31-BC4	LK31-BC5
250	250	250	LK31-BG3	LK31-BG4	LK31-BG5
315	315	315	LK31-BJ3	LK31-BJ4	LK31-BJ5
400	400	400	LK31-BN3	LK31-BN4	LK31-BN5
630	630	400	LK31-BS3	LK31-BS4	LK31-BS5
800	800	800	LK3-BV3	LK3-BV4	–
1250	1250	1000	LK3-CD3	LK3-CD4	–

LK3 load break switch disconnectors

Components and accessories

Handles



Description	Ingress protection		For use with switch type	
Door interlocked handle assemblies	IP54	Single sided	LK3-AP/AR/AT and LK31-AT	LA8-SATD6
Padlockable red handle			LK31-BC/BG/BJ/BN/BS	LA81-ZBPD7
	IP65	Double sided	LK3-BV/CD	LA8-ZBPD8
Direct mounted padlockable handle assembly	IP65	Single sided	LK31- BC/BG/BJ/BN/BS	LA81-ZBPD3

Accessories

For switch type	Door interlock	Shaft extension 200mm	Shaft extension 320mm	Terminal screen	Terminal shroud
LK3-AP3 / AP30 LK3-AP4 / AP40	LA8-SATE	LA8-SATC	–	–	–
LK3-AR3 / AR30 LK3-AR4 / AR40	LA8-SATE	LA8-SATC	–	–	–
LK3-AT3 / AT30 LK3-AT4 / AT40	LA8-SATE	LA8-SATC	–	LA8-SATB	LA81-SATB
LK31-BC3 / BC30	#	LA81-ZBPC1	LA81-ZBPC2	LA8-SBPB1	LA81-SBPB1
LK31-BC4/5 and LK31-BC40/50	#			LA8-SBPB2	LA81-SBPB2
LK31-BG3 / BG30	#	LA81-ZBPC1	LA81-ZBPC2	LA8-SBPB3	LA81-SBPB3
LK31-BG4/5 and LK31-BG40/50	#			LA8-SBPB4	LA81-SBPB4
LK31-BJ3 / BJ30	#	LA81-ZBPC1	LA81-ZBPC2	LA8-SBPB5	LA81-SBPB5
LK31-BJ4/5 and LK31-BJ40/50	#			LA8-SBPB6	LA81-SBPB6
LK31-BN3 / BN30	#	LA81-ZBPC1	LA81-ZBPC2	LA8-SBPB5	LA81-SBPB5
LK31-BN4/5 and LK31-BN40/50	#			LA8-SBPB6	LA81-SBPB6
LK31-BS3 / BS30	#	LA81-ZBPC1	LA81-ZBPC2	LA8-SBPB5	LA81-SBPB5
LK31-BS4/5 and LK31-BS40/50	#			LA8-SBPB6	LA81-SBPB6
LK3-BV3 / BV30	LA81-ZBVE	LA8-ZBPC2	–	LA8-SBPB7	–
LK3-BV4 / BV40	–	–	–	LA8-SBPB8	–
LK3-CD3 / CD30	LA81-ZBVE	LA8-ZBPC2	–	LA8-SBPB9	–
LK3-CD4 / CD40	–	–	–	LA8-SBPB10	–

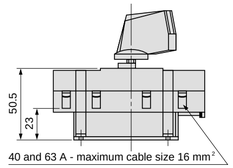
These switches have the door interlock incorporated in the handle assembly.

LK3 dimensions

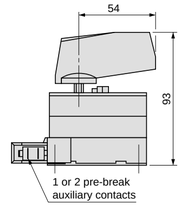
Load break switch-disconnectors, type LK3 up to 125A Ith

The 4-pole versions are illustrated: the 3-pole versions have identical dimensions but the left pole is omitted.

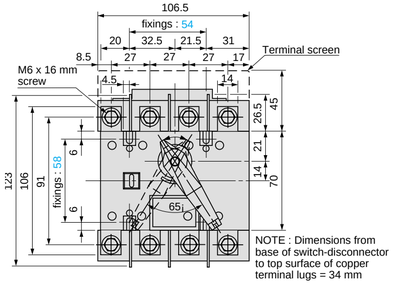
LK3-AP• and LK3-AR•



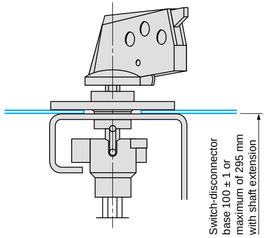
Direct operation



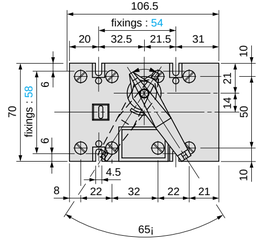
LK3-AT• and LK31-AT•



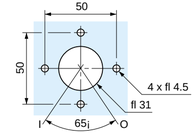
External operation



LK3-AP• and LK3-AR•

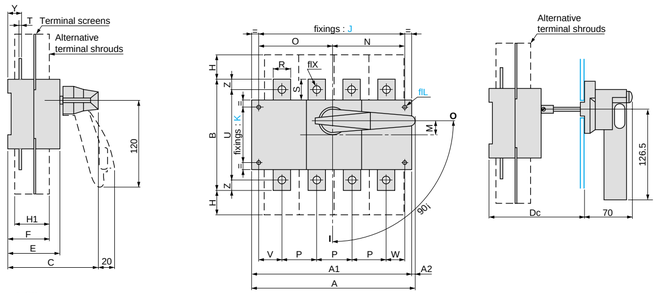


Door drilling



LK3 dimensions

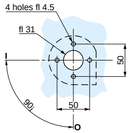
Load break switch-disconnectors, type LK3 160 - 1250 A



Direct operation

External operation

Door drilling



LK3 dimensions

Load break switch-disconnectors, type LK3 160 - 1250 A

LK31-	Rating	A	A1	A2	B	C	Dc	E	F	H	H1	J	K	ØL
BC30	3 x 160 A	175	140	35	135	120	93-156	65	48.5	47.5	40	120	65	5.5
BC•0	4 x 160 A	205	170	35	135	120	93-156	65	48.5	47.5	40	150	65	5.5
BG30	3 x 250 A	185	180	5	160	130	103-166	75	58.5	60	50	160	80	5.5
BG•0	4 x 250 A	235	230	5	160	130	103-166	75	58.5	60	50	210	80	5.5
BJ30	3 x 315 A	230	230	–	235	165	138-200	110	83.5	82.5	75	210	140	7
BJ•0	4 x 315 A	290	200	–	235	165	138-200	110	83.5	82.5	75	270	140	7
BN30	3 x 400 A	230	230	–	235	165	138-200	110	83.5	82.5	75	210	140	7
BN•0	4 x 400 A	290	290	–	235	165	138-200	110	83.5	82.5	75	270	140	7
BS30	3 x 630 A	230	230	–	260	165	138-200	110	83.5	70	75	210	140	7
BS•0	4 x 630 A	290	290	–	260	165	138-200	110	83.5	70	75	270	140	7

LK31-	Rating	M	N	O	P	R	S	T	U	V	W	ØX	Y	Z
BC30	3 x 160 A	15	75	45	36	20	25	3.5	115	28	20	9	20.5	10
BC•0	4 x 160 A	15	75	75	36	20	25	3.5	115	22	20	9	20.5	10
BG30	3 x 250 A	20	105	55	50	25	30	3.5	130	33	27	11	22.5	15
BG•0	4 x 250 A	20	105	105	50	25	30	3.5	130	33	27	11	22.5	15
BJ30	3 x 315 A	30	135	75	65	32	37.5	5	205	42.5	37.5	11	36	15
BJ•0	4 x 315 A	30	135	135	65	32	37.5	5	205	37.5	37.5	11	36	15
BN30	3 x 400 A	30	135	75	65	32	37.5	5	205	42.5	37.5	11	36	15
BN•0	4 x 400 A	30	135	135	65	32	37.5	5	205	37.5	37.5	11	36	15
BS30	3 x 630 A	30	135	75	65	40	50	6	220	42.5	37.5	13	36.5	20
BS•0	4 x 630 A	30	135	135	65	40	50	6	220	37.5	37.5	13	36.5	20

GS1 fused-switch disconnectors



- New compact 20A unit
- Extensive range 20-1250A 3 pole
- Fully intergrated neutral link available up to 400A
- Test feature available up to 315A
- Available in kit form with operator, switch body, shaft extension, fuse shroud and bolt sets in one pack
- Designed for BS88 H.R.C. fuse links

GS1 fused-switch disconnectors

GS1 easy-order kits comprise:

- Switch fuse body
- Fuse shroud
- Bolt sets
- Shaft extension
- Door interlocked black padlockable operator assembly



Easy-order kits

3 pole fused-switch disconnector kits for use with BS fuses



Thermal rating (A) Ith	AC23 Rating @ 415 V	Fuse size	
Ith 32	**32**	**A1** NEW FOR APRIL 2001	**GS1-DDB30 (1)**
Ith 32	**32**	**A1**	**GS1-DB30**
Ith 63	**63**	**A2-A3**	**GS1-GB30**
Ith 80	**80**	**A2-A3**	**GS1-HB30**
Ith 100	**100**	**A4 dia / 31mm**	**GS1-JB30**
Ith 160	**160**	**A4**	**GS1-LLB30**
Ith 160	**160**	**B1-B2**	**GS1-LB30**
Ith 200	**200**	**B1-B2**	**GS1-MMB30**
Ith 250	**250**	**B1...B3**	**GS1-NB30**
Ith 315	**315**	**B1...B3**	**GS1-PPB30**
Ith 400	**400**	**B1...B4**	**GS1-QQB30**
Ith 630	**630**	**C1-C2**	**GS1-SB30**
Ith 800	**800**	**C1...C3**	**GS1-TB30**
Ith 1250	**1050**	**D4**	**GS1-VB30**

(1) New compact 32A unit

GS1 fused-switch disconnectors

Separate components

3 pole fused-switch disconnector bodies for use with BS fuses (select operator separately from table below)



Thermal rating (A) Ith	AC23 Rating @ 415 V	Fuse size	
Ith 32	**32**	**A1**	**GS1-DDB3 (1)**
Ith 32	**32**	**A1**	**GS1-DB3**
Ith 63	**63**	**A2-A3**	**GS1-GB3**
Ith 80	**80**	**A2-A3**	**GS1-HB3**
Ith 100	**100**	**A4 dia / 31mm**	**GS1-JB30**
Ith 160	**160**	**A4**	**GS1-LLB3**
Ith 160	**160**	**B1-B2**	**GS1-LB3**
Ith 200	**200**	**B1-B2**	**GS1-MMB3**
Ith 250	**250**	**B1...B3**	**GS1-NB3**
Ith 315	**315**	**B1...B3**	**GS1-PPB3**
Ith 400	**400**	**B1...B4**	**GS1-QQB3**
Ith 630	**630**	**C1-C2**	**GS1-SB3**
Ith 800	**800**	**C1...C3**	**GS1-TB3**
Ith 1250	**1050**	**D4**	**GS1-VB3**

(1) Compact design 32A unit

Front mounted operators



Switch rating (A)	Colour handle / front plate	
Handles for external operators, mounted on front, padlockable, IP54		
32...80	**Black / Black**	**GS1-AH115**
100...400	**Black / Black**	**GS1-AH135**
630...1250	**Black / Black**	**GS1-AH155**
Handles for external operators, mounted on front, padlockable, IP65		
32...80	**Black / Black** **Red / Yellow**	**GS1-AH110** **GS1-AH120**
100...400	**Black / Black** **Red / Yellow**	**GS1-AH130** **GS1-AH140**
630...1250	**Black / Black** **Red / Yellow**	**GS1-AH150** **GS1-AH160**
Handles for external operators, mounted on front, padlockable with test facility IP65		
32...80	**Black / Black** **Red / Yellow**	**GS1-AHT110** **GS1-AHT120**
100...400	**Black / Black** **Red / Yellow**	**GS1-AHT130** **GS1-AHT140**

GS1 fused-switch disconnectors

Accessories

Auxiliary early break and 'O' and 'I' position signalling contacts		
Type of contact	Switch rating (A)	
1 C/O	32…400	GS1-AM1
2 C/O	32…400	GS1-AM2
Auxiliary 'O' and 'I' position signalling contacts (1)		
Standard contacts	Switch rating (A)	
1 N/C + 1 N/O	32…315	GS1-AN11
2 N/C + 2 N/O	32…315	GS1-AN22
1 C/O	400 - 1250	GS1-AM3
2 C/O	400 - 1250	GS1-AM4
Contacts with test facility (2)		
Standard contacts	Switch rating (A)	
1 N/C + 1 N/O	32…315	GS1-ANT11
2 N/C + 2 N/O	32…315	GS1-ANT22
3 N/C + 3 N/O	32…315	GS1-ANT33
4 N/C + 4 N/O	32…315	GS1-ANT44

U type auxiliary contacts (3) Current Ie = 10 A				
Switch type	Switch rating	Description	Contacts	
Modular U type	32	U type auxiliary contact holder (4)	–	GS1-AD20
		U type N/O auxiliary contact (5)	1	GS1-AD01
		U type N/C auxiliary contact (5)	1	GS1-AD02

(1) Reversible add-on attachments for converting a N/C contact to a N/O contact and vice-versa

(2) Provides 'Test' function only with handles GS1-AHT•••

(3) Cannot be used with integrated neutral, GS1-AM auxiliaries or GS1-DDB3 compact design switch fuse

(4) Compact auxiliary contact block holder with configurable functions. Can be used on both standard and 'Test' position switches from 32 to 400 A. Auxiliaries can operate in 'On' position only, 'Test' position only or 'On' and 'Test' positions. The contact block holder, N/O contacts and / or N/C contacts (8 maximum per holder) must be ordered as separate items.

(5) Maximum 8 contact blocks (8 circuits) per holder

GS1 fused-switch disconnectors

Accessories

Shaft extensions for external operators		
Switch rating (A)	Type of operator	
32…63	Front mounted 320mm	GS1-AE2
100…200	Front mounted 320mm	GS1-AE2
400…1250	Front mounted 200mm	GS1-AE6
3-pole terminal protection shrouds for upstream or downstream connector plates		
Switch rating (A)		
32…63		(1)
100…200		GS1-AP33
250…400		GS1-AP43
630		GS1-AP63
800		GS1-AP73
1250		GS1-AP83
Fully integrated neutral links (2) (3)		
Switch rating (A)		
32…63		GS1-AU104
160…250 compact		GS1-AU204
200…250		GS1-AU304
315…400		GS1-AU404

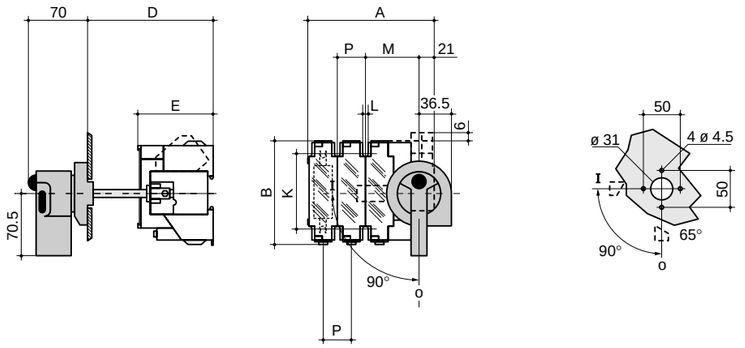
(1) Terminal shrouds fitted as standard on these switch-disconnector,

(2) Cannot be used with U type auxiliary contacts

(3) Cannot be used with 32 A compact design unit. If neutral link is required, order reference GS1-BB50 which offers 3P + fixed neutral kit.

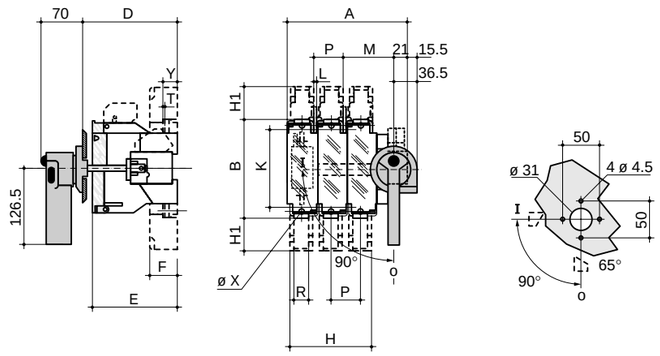
Note: For neutral links above 400A contact Telemecanique technical support on 0870 608 8 608

Fused-switch disconnectors GS1-••30, GS1-•••30, 32 - 80 A external front operation



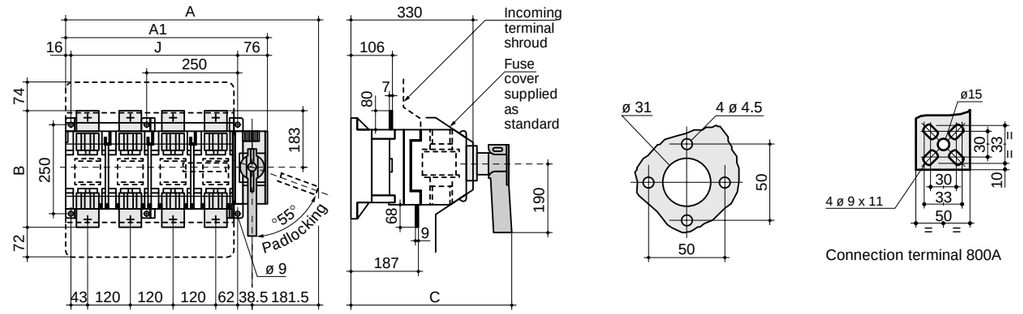
Rating	Fuse size	Overall dimensions A	B	D	Switch mountings E	K	L	M	P
3 x 32A	A1	137	118	94-225	87	108	5.4	57.5	27
3 x 63A	A2-A3	152	118	100-225	92.5	108	5.4	62.5	32
3 x 80A	A3	183	124.5	225 max	100	108	–	–	–

100 – 400A external front operation



Rating	Fuse size	Overall dimensions A	B	D	E	Switch mountings F	H	H_1	K	L	M	P	R	T	X	Y
3 x 100A	A4	164	162	114-225	108.5	44	108	53	127	5.4	66.5	38	20	2.5	8.5	19.5
3 x 160A	B1-B3	206	162	130-225	123	44	136	53	140	5.4	80.5	50	20	2.5	8.5	19.5
3 x 200-250A	B1-B2-B3	236	195	140-225	132	65	180	75	162	6.4	90.5	60	32	2.5	11	19.5
3 x 315-400A	B1-B4	278	205	157-225	149	65	192	75	172	6.4	121	66	50	3	11	20

Fused-switch disconnectors GS1-••30, 630 - 800 A external front operation



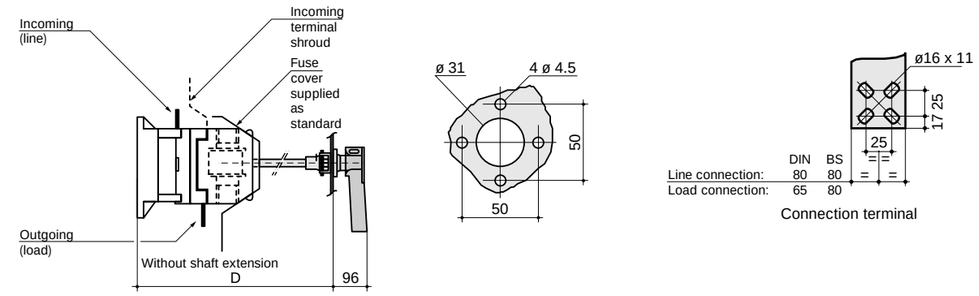
Connection terminal 800A

BS 630 - 800A

Rating	A	A1	B	B1	C	D	E	H	H1	H2	J	J1	J2	K	øL	M	N	P	R	S	S1	T	U	V	W	øX	Y
	Overall dimensions						Switch mountings											Connection terminals									
3 x 630A	470	345.5	300	150	348	341-440	268	235	85	85	250	76	19.5	250	9	38.5	162	80	50	50	50	72	60	45.5	45.5	13	72
3 x 800A	470	345.5	320	150	348	341-440	268	235	75	75	250	76	19.5	250	9	38.5	162	80	50	60	60	7	267	45.5	45.5	–	72

	BS - 3 x 630A	BS - 3 x 800A
Fuse size	C1 - C2	C3

1250 A external front operation



Connection terminal

Rating	Fuse size	Overall dimensions A	A1	B	C	D	Switch mountings J
3 x 1250A	D1	561	437	363	433	416 to 481	345