TeSys Vario
Switch-disconnectors

Door mounting isolation switch - Mini-Vario - Vario

Type of product	Range		Pages
Switch-disconnectors Mini-Vario	Up to 12 or 20 A		B3/2
Switch-disconnectors, high performance applications Vario	From 12 to 175 A		B3/6
Accessories Mini-Vario and Vario			B3/8

Technical Data for Designers B3/17

PB121292.eps

VCDN20

PB121293.eps

VCCDN20

PB119284.eps

VBDN20

TeSys Mini-Vario Switch-disconnectors for standard applications

- 3-pole rotary switch-disconnectors, 12 to 20 A
- Marking on operator ○|.
- Padlockable operating handle (padlocks not supplied).
- Degree of protection IP 65.

Main and Emergency stop switch-disconnectors for door mounting

Operator			Ith	Reference
Handle	Front plate	Fixing		
	mm	mm	A	
Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	Ø22.5	12	**VCDN12**
			20	**VCDN20**

Main and Emergency stop switch-disconnectors for mounting at back of an enclosure (1)

Operator			Ith	Reference
Handle	Front plate	Fixing		
	mm	mm	A	
Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	Ø22.5	12	**VCCDN12**
			20	**VCCDN20**

Main switch-disconnectors for door mounting

Operator			Ith	Reference
Handle	Front plate	Fixing		
	mm	mm	A	
Black, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 60 x 60	Ø22.5	12	**VBDN12**
			20	**VBDN20**

(1) Switches supplied with a shaft extension **VZN17** *and a door interlock plate* **KZ32** *(see page B3/5).*

Characteristics:
pages B3/18 to B3/21

Dimensions:
pages B3/22 and B3/23

Schemes:
page B3/23

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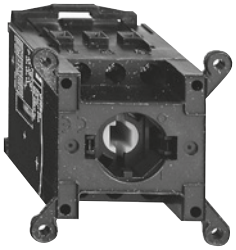

VN20

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VZN11

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VZN14

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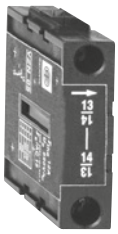

VZN05

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VZN26

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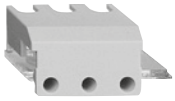


VZN08

TeSys Mini-Vario Switch-disconnectors for standard applications

Switch bodies

Description	Rating A	Reference
3-pole switch-disconnectors	12	**VN12**
	20	**VN20**

Add-on modules

Description	Rating A	Reference
Main pole modules	12	**VZN12**
	20	**VZN20**
Neutral pole module with early make and late break contacts	12 and 20	**VZN11**
Earthing module	12 and 20	**VZN14**
Auxiliary contact block modules	1 N/O late make contact	**VZN05**
	1 N/C early break contact	**VZN06**
Input terminal protection shrouds	For add-on pole modules or auxiliary contact block modules (single-pole shroud)	**VZN26**
	For switch bodies (3-pole shroud)	**VZN08**

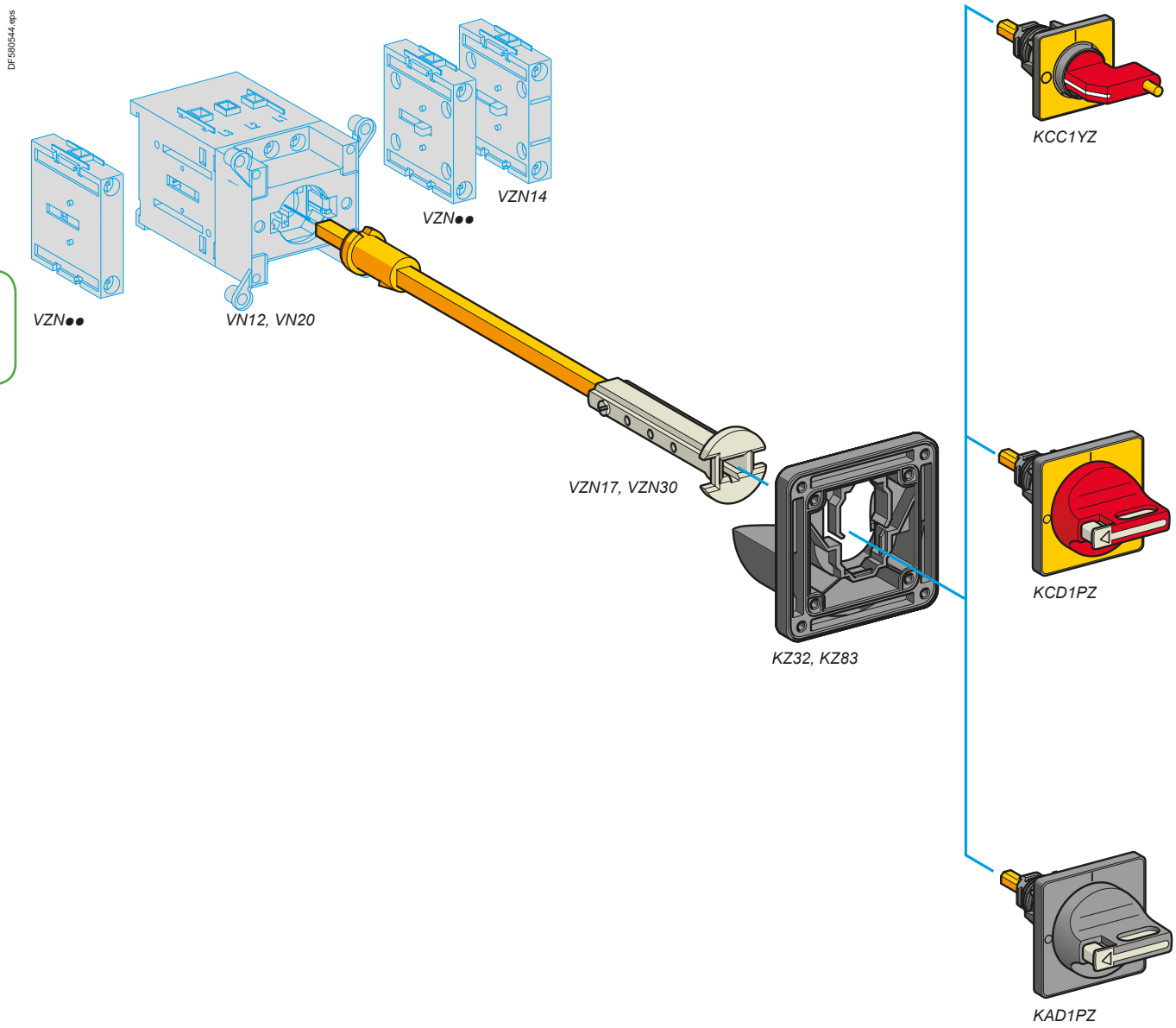
Maximum number of add-on modules that can be fitted on a switch body

VZN12 or VZN20	+	**VN12 or VN20**	+	VZN12 or VZN20
				or
or				VZN11 + VZN14
				or
VZN05 or VZN06				VZN05 or VZN06

Characteristics:
pages B3/18 to B3/21

Dimensions:
pages B3/22 and B3/23

Schemes:
page B3/23



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TeSys Mini-Vario Switch-disconnectors for standard applications

- Degree of protection IP 65.
- Marking on operator ○┘.
- Padlockable operating handle (padlocks not supplied).
- Operator fixing by 1 Ø22.5 hole; for other operators see pages B3/11 and B3/13.
- For other accessories and empty enclosures, see pages B3/14, B3/15 and chapter A1.

Operators for main and Emergency stop switch-disconnectors

Handle	Front plate mm	Reference
Red, padlockable with 1 padlock (Ø4 to Ø6)	Yellow 45 x 45	**KCC1YZ**
Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	**KCD1PZ**

Operators for main switch-disconnectors

Handle	Front plate mm	Reference
Black, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 60 x 60	**KAD1PZ**

Accessories for door interlocking

For rear fixing switch-disconnectors mounted at the back of an enclosure, in addition to a direct operator

Description	Front plate	Distance enclosure back/door	Sold in lots of	Unit reference
	mm	mm		
Shaft extensions	–	300…330	1	**VZN17**
		400…430	1	**VZN30**
Door interlock plate	45 x 45 or 60 x 60	–	5	**KZ32**
Plate for door mounting	45 x 45 or 60 x 60	–	5	**KZ83**

Characteristics: pages B3/18 to B3/21
Dimensions: pages B3/22 and B3/23
Schemes: page B3/23

PB121294.eps

VCF0

PB121295.eps

VCF5

PB121296.eps

VCCF0

TeSys Vario Switch-disconnectors for high performance applications

- 3-pole rotary switch-disconnectors, 12 to 175 A
- Marking on operator ○┘.
- Padlockable operating handle (padlocks not supplied).
- Degree of protection IP 65.

Main and Emergency stop switch-disconnectors for door mounting

Handle	Front plate mm	Fixing	Rating A	Reference	Weight kg
Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	Ø22.5	12	**VCD02**	0.215
			20	**VCD01**	0.215
			25	**VCD0**	0.215
			32	**VCD1**	0.215
			40	**VCD2**	0.215
		4 screws	12	**VCF02**	0.250
			20	**VCF01**	0.250
			25	**VCF0**	0.250
			32	**VCF1**	0.250
			40	**VCF2**	0.250
			63	**VCF3**	0.560
			80	**VCF4**	0.560
Red, long, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 90 x 90	4 screws	125	**VCF5**	1.200
			175	**VCF6**	1.200

Main and Emergency stop switch-disconnectors for mounting at back of an enclosure (1)

Handle	Front plate mm	Fixing	Rating A	Reference	Weight kg
Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	Ø22.5	12	**VCCD02**	0.392
			20	**VCCD01**	0.392
			25	**VCCD0**	0.392
			32	**VCCD1**	0.392
			40	**VCCD2**	0.392
		4 screws	12	**VCCF02**	0.527
			20	**VCCF01**	0.527
			25	**VCCF0**	0.527
			32	**VCCF1**	0.527
			40	**VCCF2**	0.527
			63	**VCCF3**	0.440
			80	**VCCF4**	0.680
Red, long, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 90 x 90	4 screws	125	**VCCF5**	1.320
			175	**VCCF6**	1.320

*(1) Unit supplied with a shaft extension **VZN17** or **VZ18** and a door interlock plate **KZ32** or **KZ74** (see page B3/14).*

Characteristics: pages B3/18 to B3/21
Dimensions: pages B3/24 and B3/25
Schemes: page B3/25

TeSys Vario Switch-disconnectors for high performance applications

- 3-pole rotary switch-disconnectors, 12 to 175 A
- Marking on operator ○┘.
- Padlockable operating handle (padlocks not supplied).
- Degree of protection IP 65.

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VBD01

PB119275.eps

VBF4

PB121298.eps

VVE1

Main switch-disconnectors for door mounting

Handle	Front plate mm	Fixing	Rating A	Reference	Weight kg
Black, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 60 x 60	Ø22.5	12	**VBD02**	0.215
			20	**VBD01**	0.215
			25	**VBD0**	0.215
			32	**VBD1**	0.215
			40	**VBD2**	0.215
		4 screws	12	**VBF02**	0.250
			20	**VBF01**	0.250
			25	**VBF0**	0.250
			32	**VBF1**	0.250
			40	**VBF2**	0.250
			63	**VBF3**	0.560
			80	**VBF4**	0.560
Black, long, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 90 x 90	4 screws	125	**VBF5**	1.200
			175	**VBF6**	1.200

Main and Emergency stop switch-disconnectors

For mounting in an enclosure or for modular distribution boards

Handle	Front plate mm	Fixing	Rating A	Reference	Weight kg
Red, padlockable with 1 padlock (Ø4 to Ø6)	Yellow 45 x 45	4 screws	25	**VVE0**	0.250
			32	**VVE1**	0.250
			40	**VVE2**	0.250
			63	**VVE3**	0.530
			80	**VVE4**	0.530

Main switch-disconnectors

For mounting in an enclosure or for modular distribution boards

Handle	Front plate mm	Fixing	Rating A	Reference	Weight kg
Black, not padlockable	Black 45 x 45	4 screws	25	**VVD0**	0.250
			32	**VVD1**	0.250
			40	**VVD2**	0.250
			63	**VVD3**	0.560
			80	**VVD4**	0.560

Characteristics: pages B3/18 to B3/21
Dimensions: pages B3/24 and B3/25
Schemes: page B3/25

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V5

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VZ0

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VZ11

580539.tif

VZ15

580540.tif

VZ20

TeSys Vario Switch-disconnectors for high performance applications

Switch bodies

Description	Rating A	Reference
3-pole switch-disconnectors (1)	12	**V02**
	20	**V01**
	25	**V0**
	32	**V1**
	40	**V2**
	63	**V3**
	80	**V4**
	125	**V5**
	175	**V6**

Add-on modules

Description	Rating A	Reference
Main pole modules	12	**VZ02**
	20	**VZ01**
	25	**VZ0**
	32	**VZ1**
	40	**VZ2**
	63	**VZ3**
	80	**VZ4**
Neutral pole modules with early make and late break contacts (1)	12 to 40	**VZ11**
	63 to 80	**VZ12**
	125 and 175	**VZ13**
Earthing modules	12 to 40	**VZ14**
	63 and 80	**VZ15**
	125 and 175	**VZ16**

Auxiliary contact block modules

Description	Type	Reference
Auxiliary contact block modules with 2 auxiliary contacts	N/O + N/C (2)	**VZ7**
	N/O + N/O	**VZ20**

(1) Protection shrouds are available if required: see page B3/14.
(2) Late make N/O, early break N/C contacts

Characteristics:
pages B3/18 to B3/21

Dimensions:
pages B3/24 and B3/25

Schemes:
page B3/25

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TeSys Vario Switch-disconnectors for high performance applications

Maximum number of add-on modules that can be fitted on a switch body

1 add-on module on each side of the switch body

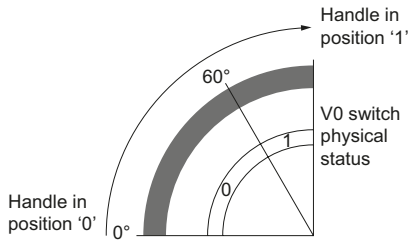
VZ7 or VZ20	+	V0●	+	VZ7 or VZ20		VZ7	+	V5 or V6	+	VZ7
or				or		or				or
VZ11 or VZ12	+	V0 to V4	+	VZ11 or VZ12		VZ20	+		+	VZ20
or				or		or				or
VZ14 or VZ15	+		+	VZ14 or VZ15		VZ13	+		+	VZ13
or				or		or				or
VZ0●/VZ0 to VZ4	+		+	VZ0●/VZ0 to VZ4		VZ16	+		+	VZ16

2 add-on modules on each side of the switch body

VZ0●	+	VZ0●	+	V0●	+	VZ0●	+	VZ7	or	VZ20	or	VZ11	or	VZ14
VZ0	+	VZ0	+	V0	+	VZ0	+	VZ7	or	VZ20	or	VZ11	or	VZ14
VZ1	+	VZ1	+	V1	+	VZ1	+	VZ7	or	VZ20	or	VZ11	or	VZ14
VZ2	+	VZ2	+	V2	+	VZ2	+	VZ7	or	VZ20	or	VZ11	or	VZ14
VZ3	+	VZ3	+	V3	+	VZ3	+	VZ7	or	VZ20	or	VZ12	or	VZ15
VZ4	+	VZ4	+	V4	+	VZ4	+	VZ7	or	VZ20	or	VZ12	or	VZ15

Note: *The add-on modules mounted next to the switch body are main pole modules. Maximum of 3 main pole modules per switch body.*

Auxiliary switch switching angles

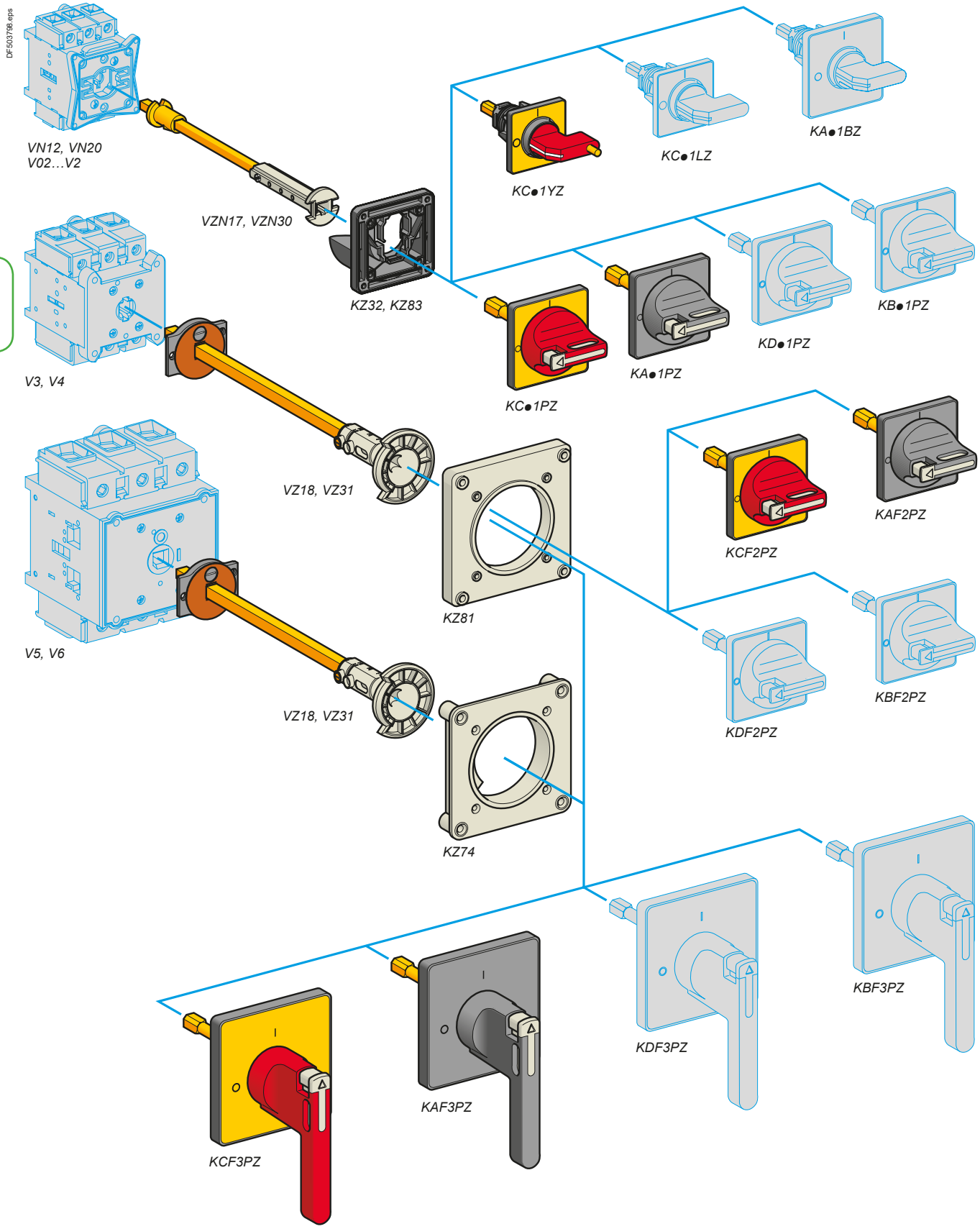


Switching angle representation - example with V0 switch

0: contact open 1: contact close

Handle travel 0 > 1		0°	30°	60°	90°
3-pole switch-disconnectors V02 / V01 / V0 / V1 / V2 / V3 / V4 / V5 / V6			60°		
		0		1	
Main pole modules VZ02 / VZ01 / VZ0 / VZ1 / VZ2 / VZ3 / VZ4			60°		
		0		1	
Neutral pole modules with early make and late break contacts VZ11 / VZ12 / VZ13			45°		
		0		1	
Auxiliary contact block modules with 2 auxiliary contacts (N/0+N/C) VZ7 Late make N0 and earlier break NC (Early break N0 and late make NC for travel 1-0)				75°	
	N/0	0		1	
	N/C	1	0		
		20°			
Auxiliary contact block modules with 2 auxiliary contacts (N/0+N/C) VZ20			60°		
		0		1	
		0		1	
			60°		

Switch-disconnectors



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- Marking on operator O I.
- Padlockable operating handle (padlocks not supplied).
- Degree of protection IP 65.

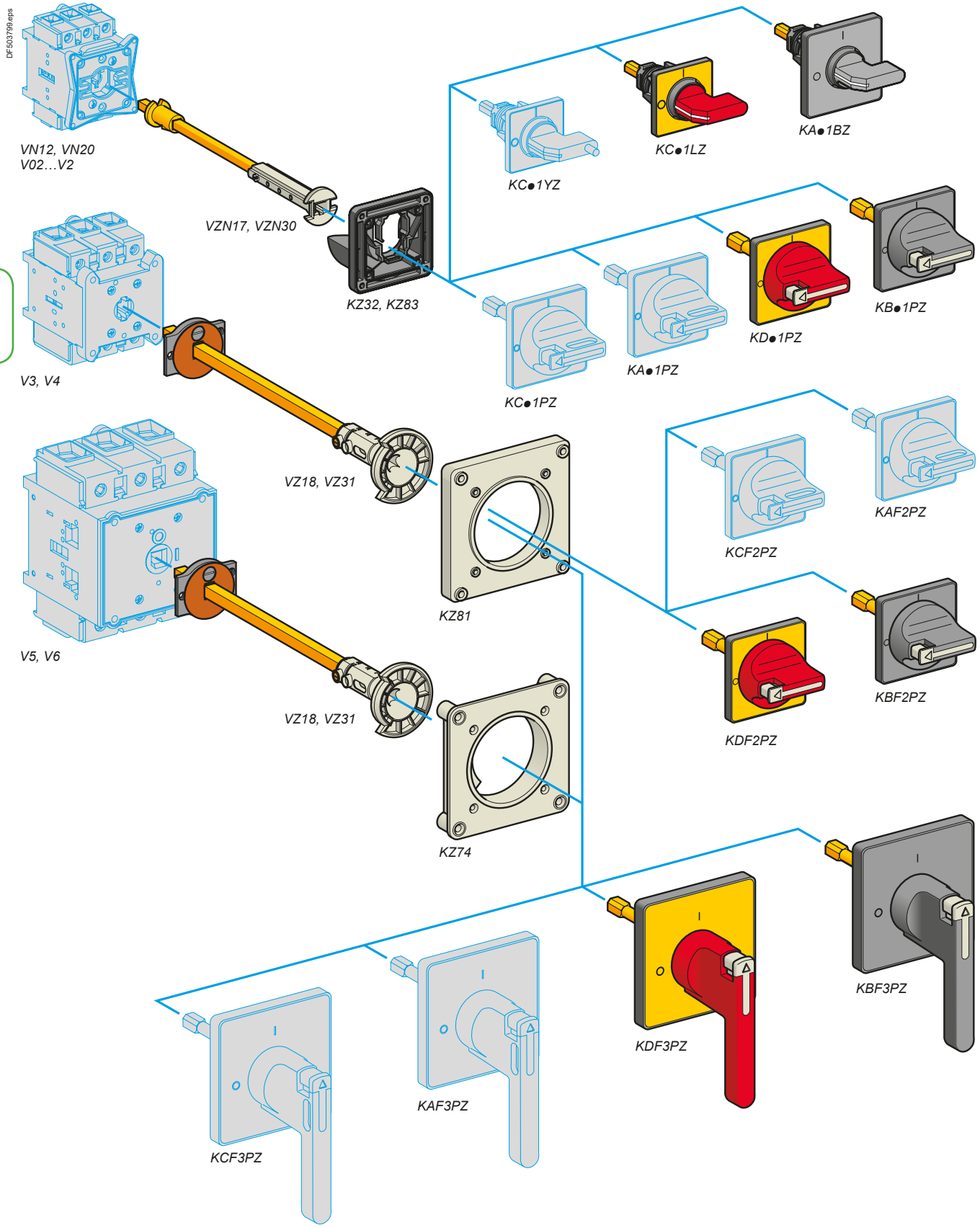
Handles and front plates for main and Emergency stop switch-disconnectors

For switch body	Operator			Reference
	Handle	Front plate		
		Dimensions	Fixing	
		mm		
VN12, VN20 V02…V2	Red, padlockable with 1 padlock (Ø4 to Ø6)	Yellow 45 x 45	Ø22.5	**KCC1YZ**
			4 screws	**KCE1YZ**
	Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	Ø22.5	**KCD1PZ**
			4 screws	**KCF1PZ**
V3 and V4	Red, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 60 x 60	4 screws	**KCF2PZ**
V5 and V6	Red, long, padlockable with up to 3 padlocks (Ø4 to Ø8)	Yellow 90 x 90	4 screws	**KCF3PZ** (1)

Handles and front plates for main switch-disconnectors

For switch body	Operator			Reference
	Handle	Front plate		
		Dimensions	Fixing	
		mm		
VN12, VN20 V02…V2	Black, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 60 x 60	Ø22.5	**KAD1PZ**
			4 screws	**KAF1PZ**
V3 and V4	Black, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 60 x 60	4 screws	**KAF2PZ**
V5 and V6	Black, long, padlockable with up to 3 padlocks (Ø4 to Ø8)	Black 90 x 90	4 screws	**KAF3PZ** (1)

*(1) For door mounting of 63 and 80 A switch-disconnectors, adapter plate **KZ106** must be ordered separately (see page B3/14).*



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- Marking on operator ○|.
- Degree of protection IP 65.

Handles and front plates for Emergency stop switch-disconnectors

For switch body	Operator			Reference
	Handle	Front plate		
		Dimensions	Fixing	
		mm		
VN12, VN20 V02…V2	Red, not padlockable	Yellow 45 x 45	Ø22.5	**KCC1LZ**
			4 screws	**KCE1LZ**
		Yellow 60 x 60	Ø22.5	**KDD1PZ**
			4 screws	**KDF1PZ**
V3 and V4	Red, long, not padlockable	Yellow 60 x 60	4 screws	**KDF2PZ**
V5 and V6	Red, long, not padlockable	Yellow 90 x 90	4 screws	**KDF3PZ** (1)

Handles and front plates for switch-disconnectors

For switch body	Operator			Reference
	Handle	Front plate		
		Dimensions	Fixing	
		mm		
VN12, VN20 V02…V2	Black, not padlockable	Black 45 x 45	Ø22.5	**KAC1BZ**
			4 screws	**KAE1BZ**
		Black 60 x 60	Ø22.5	**KBD1PZ**
			4 screws	**KBF1PZ**
V3 and V4	Black, not padlockable	Black 60 x 60	4 screws	**KBF2PZ**
V5 and V6	Black, not padlockable	Black 90 x 90	4 screws	**KBF3PZ** (1)

*(1) For door mounting of 63 and 80 A switch-disconnectors, adapter plate **KZ106** must be ordered separately (see next page).*

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VZ8

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VZ26

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VZ29

Input terminal protection shrouds

Description	For use on	Reference
For switch bodies (3-pole shroud)	V02…V2	**VZ8**
	V3 and V4	**VZ9**
	V5 and V6	**VZ10**
For add-on pole modules (single-pole shroud)	VZ02…VZ2, VZ11, VZ14	**VZ26**
	VZ3, VZ4, VZ12, VZ15	**VZ27**
	VZ13, VZ16	**VZ28**
For contact blocks with 2 auxiliary contacts	–	**VZ29**

Components for door interlocking

For rear fixing switch-disconnectors mounted at the back of an enclosure, in addition to a direct operator

Description	For use on	Distance enc. back/door	Sold in lots of	Unit reference
		mm		
Shaft extensions	VN12, VN20 V02…V2	300…330	1	**VZN17** (1)
		400…430	1	**VZN30** (1)
	V02…V2	300…330	1	**VZ17**
		400…430	1	**VZ30**
	V3 and V4	300…320	1	**VZ18**
		400…420	1	**VZ31**
	V5 and V6	330…350	1	**VZ18**
		430…450	1	**VZ31**
Door interlock plates	VN12, VN20 V02…V2	–	5	**KZ32**
	V3…V6	–	5	**KZ74**

Description	For use on	Front plate dimensions	Sold in lots of	Unit reference
		mm		
Plates for door mounting of handles with 4 screw fixing	VN12, VN20 V02…V2	45 x 45 or 60 x 60	5	**KZ83**
	V3…V6	60 x 60 or 90 x 90	5	**KZ81**
Adapter plate for switch-disconnectors	V3 and V4	90 x 90	5	**KZ106**

(1) Can be used with V02 to V2 switches.

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VZ31

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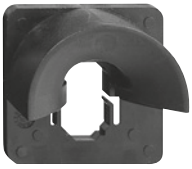

KZ32

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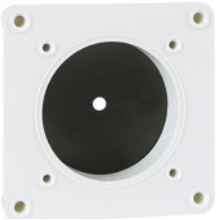

KZ81

Characteristics:
pages B3/18 to B3/21

Dimensions:
pages B3/24 and B3/25

Schemes:
page B3/25

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Product references

PB121519.eps

KZ15

PB121520.eps

KZ67

PB121521.eps

Z01

Accessories for operators

Description	For use on	Front plate dimensions	Sold in lots of	Unit reference
		mm		
Legend holder with silver coloured blank legend plate	Front plate	45 x 45	5	**KZ13**
		60 x 60	5	**KZ15**
		90 x 90	5	**KZ103**
Legend holders without legend plate	Front plate	45 x 45	20	**KZ14**
		60 x 60	10	**KZ16**
		90 x 90	5	**KZ101**
Silver coloured blank legend plates for engraving by customer	KZ14	–	20	**KZ76**
	KZ16	–	10	**KZ77**
	KZ101	–	5	**KZ100**
Seals	VN12, VN20	45 x 45	5	**KZ65**
	V02…V2	60 x 60	5	**KZ66**
	V3 and V4	60 x 60	5	**KZ62**
	V3…V6	90 x 90	5	**KZ67**
Tightening tool	For operators with Ø22.5 fixing	–	5	**Z01**

Characteristics:
pages B3/18 to B3/21

Dimensions:
pages B3/24 and B3/25

Schemes:
page B3/25