

# Power distribution

## System data

### Operating and ambient conditions for Ri4Power switchgear assemblies

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The siting conditions for Ri4Power systems are identical for all field types. Any requirements which deviate from this should be agreed with the product management team.

Operating and ambient conditions	Ambient temperature	Short-term peak	+40°C	IEC 61 439-1 IEC 61 439-2
		Maximum on a 24 h average	+35°C	
		Low	-5°C	
	Atmospheric conditions	Normal climatic stress		IEC 61 439-1 IEC 61 439-2
		Relative humidity	50% at 40°C 90% at 20°C (without dewing/condensation due to temperature fluctuations)	
			Operation up to 2000 m above sea level	

Additional field-specific technical data for the tested field types is listed in detail on the following pages. This data represents the maximum, tested figures. For optimum adaptation of customer requirements to the possible

system assemblies, we recommend use of the latest version of the Rittal Power Engineering software.

## Enclosures

### for distribution enclosures up to 1250 A

#### Enclosures

Mechanical characteristics	Dimensions	Enclosure width	600/850/1100 mm	
		Enclosure height	2000 mm	
		Enclosure depth	400/600 mm	
	Pitch pattern	25 mm		
	Protection category		IP 20 without door/IP 55 with door	IEC 60 529
	Type			IEC 61 439-1/-2
	Surface protection/ Material	Enclosure frame	Dipcoat-primed	
Protective measures		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside	
		System rails and punched sections with mounting flanges	Sheet steel, zinc-plated	
Protective measures		Protection category	1 (with PE conductor)	

#### General ratings data

Electrical characteristics	Rated voltage	Rated insulation voltage $U_i$	1000 V	IEC 61 439-1/-2
		Rated operating voltage $U_e$	690 V	
		Rated impulse withstand voltage $U_{imp}$	8 kV	
		Oversupply category	3	
		Contamination level	3	
		Rated frequency	50 Hz	

#### Busbar system

Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e$	E-Cu 30 x 10 mm	E-Cu 40 x 10 mm	E-Cu 80 x 10 mm	IEC 61 439-1/-2
		Rated peak withstand current $I_{pk}$	85 kA	95 kA	87 kA	
		Rated short-time withstand current $I_{cw}$	45 kA			
	Testing under accidental arc conditions	Permissible prospective short-circuit current				
		Test voltage				EN 61 641
		Permissible arc duration				
Mechanical characteristics	Busbar	Material	E-Cu, bare			
		External dimensions (cross-section)	30 x 10 mm (300 mm <sup>2</sup> )	40 x 10 mm (400 mm <sup>2</sup> )	80 x 10 mm (800 mm <sup>2</sup> )	
		Bar centre distance	60 mm	100 mm	185 mm	

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## System data

### Enclosures

for air circuit-breakers and moulded case circuit-breakers (ACB + MCCB)

Enclosures			
Mechanical characteristics	Dimensions	Enclosure width	400/600/800 mm
		Enclosure height	1800/2000/2200 mm
	Protection category	Enclosure depth	600/800 mm
		Pitch pattern	25 mm
	Type		Max. IP 54 IEC 60 529
	Surface protection/ Material	1 – 4	IEC 61 439-1/-2
		Enclosure frame	Dipcoat-primed
		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside
		System attachment	Stainless steel
		System rails and punched sections with mounting flanges	Sheet steel, zinc-plated

### General ratings data

General ratings data			
Electrical characteristics	Rated voltage	Rated insulation voltage $U_i$	1000 V
		Rated operating voltage $U_e$	690 V
		Rated impulse withstand voltage $U_{imp}$	8 kV IEC 61 439-1/-2
		Oversupply category	IV
		Contamination level	3
		Rated frequency	50 Hz

Maxi-PLS busbar system			Maxi-PLS 1600	Maxi-PLS 2000	Maxi-PLS 3200	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^3)$	1400 A	1800 A	2800 A	IP 54
			1600 A	2000 A	3000 A	IP 2X <sup>1)</sup>
			1800 A	2500 A	4000 A	IP 2X <sup>2)</sup>
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	110 kA	220 kA		IEC 61 439-1/-2
		Rated short-time withstand current $I_{cw}$	50 kA	100 kA		
		Permissible prospective short-circuit current	50 kA	70 kA		
Mechanical characteristics	Busbar	Test voltage	420 V			EN 61 641
		Permissible arc duration	0.3 sec.			
		Material	E-Cu, bare			
		External dimensions (cross-section)	45 x 45 mm (1000 mm <sup>2</sup> )	45 x 45 mm (1380 mm <sup>2</sup> )	60 x 60 mm (2700 mm <sup>2</sup> )	

RiLine busbar system			E-Cu 30 x 10 mm	PLS 1600	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^3)$	800 A	1150 A	IP 54
			860 A	1300 A	IP 43
			1000 A <sup>4)</sup>	1600 A <sup>2)</sup>	IP 2X
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	68 kA	110 kA	IEC 61 439-1/-2
		Rated short-time withstand current $I_{cw}$	32 kA, 1 sec.	50 kA, 1 sec./50 kA, 3 sec.	
		Permissible prospective short-circuit current	30 kA	50 kA	
Mechanical characteristics	Busbar	Test voltage	690 V		EN 61 641
		Permissible arc duration	0.3 sec.		
		Material	E-Cu, bare		
		Version (cross-section)	30 x 10 mm (300 mm <sup>2</sup> )	PLS 1600 (900 mm <sup>2</sup> )	

Flat-PLS busbar system			Flat-PLS 60	Flat-PLS 100	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^3)$	2360 A	3120 A	IP 54
			2540 A	3400 A	IP 43
			4100 A <sup>2)</sup>	5500 A <sup>2)</sup>	IP 2X
		Rated peak withstand current $I_{pk}$	154 kA	220 kA	IEC 61 439-1/-2
		Rated short-time withstand current $I_{cw}$	70 kA, 1 sec.	100 kA, 1 sec.	
Mechanical characteristics	Busbar	Material	E-Cu, bare		
		Version (cross-section)	Up to 4 x 60 x 10 mm (max. 2400 mm <sup>2</sup> )	Up to 4 x 100 x 10 mm (max. 4000 mm <sup>2</sup> )	

<sup>1)</sup> Using outlet filter SK 3243.600 and roof plate IP 2X

<sup>2)</sup> Using fan-and-filter unit SK 3244.100 (700 m<sup>3</sup>/h) and roof plate IP 2X

<sup>3)</sup> Other rated currents for different protection categories on request

<sup>4)</sup> Using fan-and-filter unit SK 3241.100 (230 m<sup>3</sup>/h) and roof plate IP 2X

# Power distribution

## System data

### Enclosures

for coupling sections

Enclosures					
Mechanical characteristics	Dimensions	Enclosure width	600/800/1000 mm		
		Enclosure height	2000/2200 mm		
	Protection category	Enclosure depth	600/800 mm		
		Pitch pattern	25 mm		
	Type		Max. IP 54	IEC 60 529	
	Surface protection/ Material	Enclosure frame	Dipcoat-primed		
		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside		
		System attachment	Stainless steel		
		System rails and punched sections with mounting flanges	Sheet steel, zinc-plated		

### General ratings data

General ratings data					
Electrical characteristics	Rated voltage	Rated insulation voltage $U_i$	1000 V		
		Rated operating voltage $U_e$	690 V		
		Rated impulse withstand voltage $U_{imp}$	8 kV	IEC 61 439-1/-2	
		Oversupply category	IV		
		Contamination level	3		
		Rated frequency	50 Hz		

Maxi-PLS busbar system			Maxi-PLS 1600	Maxi-PLS 2000	Maxi-PLS 3200	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	1400 A	1800 A	2800 A	For IP 54
			1600 A	2000 A	3000 A	For IP 2X <sup>1)</sup>
			1800 A	2500 A	4000 A	For IP 2X <sup>2)</sup>
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	110 kA	165 kA		
		Rated short-time withstand current $I_{cw}$	50 kA	75 kA		IEC 61 439-1/-2
		Permissible prospective short-circuit current	50 kA	70 kA		
Mechanical characteristics	Busbar	Test voltage	420 V			EN 61 641
		Permissible arc duration	0.3 sec.			
		Material	E-Cu, bare			
		External dimensions (cross-section)	45 x 45 mm (1000 mm <sup>2</sup> )	45 x 45 mm (1380 mm <sup>2</sup> )	60 x 60 mm (2700 mm <sup>2</sup> )	

RiLine busbar system			E-Cu 30 x 10 mm	PLS 1600	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	800 A	1150 A	IP 54
			860 A	1300 A	IP 43
			1000 A <sup>4)</sup>	1600 A <sup>2)</sup>	IP 2X
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	68 kA	110 kA	
		Rated short-time withstand current $I_{cw}$	32 kA, 1 sec.	50 kA, 1 sec./50 kA, 3 sec.	IEC 61 439-1/-2
		Permissible prospective short-circuit current	30 kA	50 kA	
Mechanical characteristics	Busbar	Test voltage	690 V		EN 61 641
		Permissible arc duration	0.3 sec.		
		Material	E-Cu, bare		
		Version (cross-section)	30 x 10 mm (300 mm <sup>2</sup> )	PLS 1600 (900 mm <sup>2</sup> )	

Flat-PLS busbar system			Flat-PLS 60	Flat-PLS 100	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	2360 A	3120 A	IP 54
			2540 A	3400 A	IP 43
			4100 A <sup>2)</sup>	5500 A <sup>2)</sup>	IP 2X
		Rated peak withstand current $I_{pk}$	154 kA	220 kA	
		Rated short-time withstand current $I_{cw}$	70 kA, 1 sec.	100 kA, 1 sec.	IEC 61 439-1/-2
Mechanical characteristics	Busbar	Material	E-Cu, bare		
		Version (cross-section)	Up to 4 x 60 x 10 mm (max. 2400 mm <sup>2</sup> )	Up to 4 x 100 x 10 mm (max. 4000 mm <sup>2</sup> )	

<sup>1)</sup> Using outlet filter SK 3243.600 and roof plate IP 2X

<sup>2)</sup> Using fan-and-filter unit SK 3244.100 (700 m<sup>3</sup>/h) and roof plate IP 2X

<sup>3)</sup> Other rated currents for different protection categories on request

<sup>4)</sup> Using fan-and-filter unit SK 3241.100 (230 m<sup>3</sup>/h) and roof plate IP 2X

# Power distribution

## System data

### Enclosures

for modular outgoing sections

#### Enclosures

Mechanical characteristics	Dimensions	Enclosure width	400/600/800 mm	
		Enclosure height	1800/2000/2200 mm	
		Enclosure depth	600/800 mm	
	Pitch pattern	25 mm		
	Protection category	Max. IP 54		IEC 60 529
	Type	1 – 4		IEC 61 439-1/-2
	Surface protection/ Material	Enclosure frame	Dipcoat-primed	
		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside	
		System attachment	Stainless steel	
	System rails and punched sections with mounting flanges	Sheet steel, zinc-plated		

#### General ratings data

Electrical characteristics	Rated voltage	Rated insulation voltage $U_i$	1000 V		
		Rated operating voltage $U_e$	690 V		
		Rated impulse withstand voltage $U_{imp}$	8 kV		IEC 61 439-1/-2
		Oversupply category	IV		
		Contamination level	3		
		Rated frequency	50 Hz		

#### Maxi-PLS busbar system

			Maxi-PLS 1600	Maxi-PLS 2000	Maxi-PLS 3200	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	1400 A	1800 A	2800 A	For IP 54
			1600 A	2000 A	3000 A	For IP 2X <sup>1)</sup>
			1800 A	2500 A	4000 A	For IP 2X <sup>2)</sup>
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	110 kA		220 kA	
		Rated short-time withstand current $I_{cw}$	50 kA		100 kA	IEC 61 439-1/-2
		Permissible prospective short-circuit current	50 kA		70 kA	
Mechanical characteristics	Busbar	Test voltage	690 V			EN 61 641
		Permissible arc duration	0.3 sec.			
		Material	E-Cu, bare			
		External dimensions (cross-section)	45 x 45 mm (1000 mm <sup>2</sup> )	45 x 45 mm (1380 mm <sup>2</sup> )	60 x 60 mm (2700 mm <sup>2</sup> )	

#### RiLine busbar system

			E-Cu 30 x 10 mm	PLS 1600	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	800 A	1150 A	IP 54
			860 A	1300 A	IP 43
			1000 A <sup>4)</sup>	1600 A <sup>2)</sup>	IP 2X
	Rated current (distribution busbar)	Rated peak withstand current $I_{pk}$	68 kA	110 kA	
		Rated short-time withstand current $I_{cw}$	32 kA, 1 sec.	50 kA, 1 sec./50 kA, 3 sec.	IEC 61 439-1/-2
		Rated operating current $I_e^{(3)}$	800 A	1600 A <sup>5)</sup>	IP 54
Mechanical characteristics	Testing under accidental arc conditions		860 A	1600 A <sup>5)</sup>	IP 43
			1000 A <sup>4)</sup>	1600 A <sup>2)</sup>	IP 2X
		Rated peak withstand current $I_{pk}$	68 kA	110 kA	
	Busbar	Rated short-time withstand current $I_{cw}$	32 kA, 1 sec.	50 kA, 1 sec./50 kA, 3 sec.	IEC 61 439-1/-2
		Permissible prospective short-circuit current	30 kA	50 kA	
		Test voltage	690 V		EN 61 641
		Permissible arc duration	0.3 sec.		
		Material	E-Cu, bare		
		Version (cross-section)	30 x 10 mm (300 mm <sup>2</sup> )	PLS 1600 (900 mm <sup>2</sup> )	

#### Flat-PLS busbar system

			Flat-PLS 60	Flat-PLS 100	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	2360 A	3120 A	IP 54
			2540 A	3400 A	IP 43
			4100 A <sup>2)</sup>	5500 A <sup>2)</sup>	IP 2X
		Rated peak withstand current $I_{pk}$	154 kA	220 kA	
Mechanical characteristics	Busbar	Rated short-time withstand current $I_{cw}$	70 kA, 1 sec.	100 kA, 1 sec.	
		Material	E-Cu, bare		
		Version (cross-section)	Up to 4 x 60 x 10 mm (max. 2400 mm <sup>2</sup> )	Up to 4 x 100 x 10 mm (max. 4000 mm <sup>2</sup> )	

<sup>1)</sup> Using outlet filter SK 3243.600 and roof plate IP 2X

<sup>2)</sup> Using fan-and-filter unit SK 3244.100 (700 m<sup>3</sup>/h) and roof plate IP 2X

<sup>3)</sup> Other rated currents for different protection categories on request

<sup>4)</sup> Using fan-and-filter unit SK 3241.100 (230 m<sup>3</sup>/h) and roof plate IP 2X

<sup>5)</sup> In conjunction with RiLine as the primary busbar system: Rated currents on request

# Power distribution

## System data

### Enclosures

for fuse-switch disconnector sections

Enclosures					
Mechanical characteristics	Dimensions	Enclosure width	1000/1200 mm		
		Enclosure height	2000/2200 mm		
	Protection category	Enclosure depth	600/800 mm		
		Pitch pattern	25 mm		
	Type		Max. IP 31		IEC 60 529
	Surface protection/ Material	Enclosure frame	Dipcoat-primed		
		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside		
		System attachment	Stainless steel		
		System rails and punched sections with mounting flanges	Sheet steel, zinc-plated		

### General ratings data

General ratings data					
Electrical characteristics	Rated voltage	Rated insulation voltage $U_i$	1000 V		
		Rated operating voltage $U_e$	690 V		
		impulse withstand voltage $U_{imp}$	8 kV		IEC 61 439-1/-2
		Oversupply category	IV		
		Contamination level	3		
		Rated frequency	50 Hz		

Maxi-PLS busbar system			Maxi-PLS 1600	Maxi-PLS 2000	Maxi-PLS 3200	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	1400 A	1800 A	2800 A	For IP 54
			1800 A	2500 A	4000 A	For IP 2X <sup>1)</sup>
	Rated peak withstand current $I_{pk}$	110 kA		220 kA		IEC 61 439-1/-2
	Rated short-time withstand current $I_{cw}$	50 kA		100 kA		
Mechanical characteristics	Testing under accidental arc conditions	Permissible prospective short-circuit current	50 kA		70 kA	
		Test voltage	690 V			EN 61 641
		Permissible arc duration	0.3 sec.			
Mechanical characteristics	Busbar	Material	E-Cu, bare			
		External dimensions (cross-section)	45 x 45 mm (1000 mm <sup>2</sup> )	45 x 45 mm (1380 mm <sup>2</sup> )	60 x 60 mm (2700 mm <sup>2</sup> )	

Flat-PLS busbar system			Flat-PLS 60	Flat-PLS 100	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	2360 A	3120 A	IP 54
			2540 A	3400 A	IP 43
		Rated peak withstand current $I_{pk}$	4100 A <sub>2)</sub>	5500 A	IP 2X
		Rated short-time withstand current $I_{cw}$	154 kA	220 kA	IEC 61 439-1/-2
Mechanical characteristics	Busbar	Material	E-Cu, bare		
		Version (cross-section)	Up to 4 x 60 x 10 mm (max. 2400 mm <sup>2</sup> )	Up to 4 x 100 x 10 mm (max. 4000 mm <sup>2</sup> )	

Flat-PLS distribution busbar system			Flat-PLS		
Electrical characteristics	Rated current (distribution busbar)	Rated operating current $I_e^{(3)}$	1000 A	1250 A	1600 A
		Rated peak withstand current $I_{pk}$	154 kA	165 kA	187 kA
		Rated short-time withstand current $I_{cw}$	70 kA, 1 sec.	75 kA, 1 sec.	85 kA, 1 sec.
Mechanical characteristics	Busbar	Material	E-Cu, bare		
		Version (cross-section)	50 x 10 mm (500 mm <sup>2</sup> )	60 x 10 mm (600 mm <sup>2</sup> )	80 x 10 mm (800 mm <sup>2</sup> )

<sup>1)</sup> Using roof plate IP 2X

<sup>2)</sup> Using fan-and-filter unit SK 3244.100 (700 m<sup>3</sup>/h) and roof plate IP 2X

<sup>3)</sup> Other rated currents for different protection categories on request

# Power distribution

## System data

### Enclosures

for cable chambers

#### Enclosures

Mechanical characteristics	Dimensions	Enclosure width	300/400/600 mm	
		Enclosure height	1800/2000/2200 mm	
		Enclosure depth	600/800 mm	
	Pitch pattern	25 mm		
	Protection category	Max. IP 54		IEC 60 529
	Type	1 – 4		IEC 61 439-1/-2
	Surface protection/ Material	Enclosure frame	Dipcoat-primed	
		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside	
		System attachment	Stainless steel	
	System rails and punched sections with mounting flanges	Sheet steel, zinc-plated		

Maxi-PLS busbar system			Maxi-PLS 1600	Maxi-PLS 2000	Maxi-PLS 3200	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^3)$	1400 A	1800 A	2800 A	For IP 54
			1600 A	2000 A	3000 A	For IP 2X <sup>1)</sup>
			1800 A	2500 A	4000 A	For IP 2X <sup>2)</sup>
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	110 kA		220 kA	
		Rated short-time withstand current $I_{cw}$	50 kA		100 kA	IEC 61 439-1/-2
		Permissible prospective short-circuit current	50 kA		70 kA	
	Mechanical characteristics	Test voltage	420 V			EN 61 641
		Permissible arc duration	0.3 sec.			
		Material	E-Cu, bare			
	Busbar	External dimensions (cross-section)	45 x 45 mm (1000 mm <sup>2</sup> )	45 x 45 mm (1380 mm <sup>2</sup> )	60 x 60 mm (2700 mm <sup>2</sup> )	

RiLine busbar system			E-Cu 30 x 10 mm	PLS 1600	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^3)$	800 A	1150 A	IP 54
			860 A	1300 A	IP 43
			1000 A <sup>4)</sup>	1600 A <sup>2)</sup>	IP 2X
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	68 kA	110 kA	
		Rated short-time withstand current $I_{cw}$	32 kA, 1 sec.	50 kA, 1 sec./50 kA, 3 sec.	IEC 61 439-1/-2
		Permissible prospective short-circuit current	30 kA	50 kA	
	Mechanical characteristics	Test voltage	690 V		EN 61 641
		Permissible arc duration	0.3 sec.		
		Material	E-Cu, bare		
	Busbar	Version (cross-section)	30 x 10 mm (300 mm <sup>2</sup> )	PLS 1600 (900 mm <sup>2</sup> )	

Flat-PLS busbar system			Flat-PLS 60	Flat-PLS 100	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^3)$	2360 A	3120 A	IP 54
			2540 A	3400 A	IP 43
			4100 A <sup>2)</sup>	5500 A <sup>2)</sup>	IP 2X
		Rated peak withstand current $I_{pk}$	154 kA	220 kA	
		Rated short-time withstand current $I_{cw}$	70 kA, 1 sec.	100 kA, 1 sec.	IEC 61 439-1/-2
	Mechanical characteristics	Material	E-Cu, bare		
		Version (cross-section)	Up to 4 x 60 x 10 mm (max. 2400 mm <sup>2</sup> )	Up to 4 x 100 x 10 mm (max. 4000 mm <sup>2</sup> )	

<sup>1)</sup> Using outlet filter SK 3243.600 and roof plate IP 2X

<sup>2)</sup> Using fan-and-filter unit SK 3244.100 (700 m<sup>3</sup>/h) and roof plate IP 2X

<sup>3)</sup> Other rated currents for different protection categories on request

<sup>4)</sup> Using fan-and-filter unit SK 3241.100 (230 m<sup>3</sup>/h) and roof plate IP 2X

# Power distribution

## System data

### Enclosures

for busbar sections

Enclosures					
Mechanical characteristics	Dimensions	Enclosure width	200/300/400 mm		
		Enclosure height	1800/2000/2200 mm		
	Protection category	Enclosure depth	600/800 mm		
		Pitch pattern	25 mm		
	Type		Max. IP 54	IEC 60 529	
	Surface protection/ Material	Enclosure frame	Dipcoat-primed		
		Panels (roof plate, rear panel)	Dipcoat-primed, powder-coated in RAL 7035 on the outside		
		System attachment	Stainless steel		
		System rails and punched sections with mounting flanges	Sheet steel, zinc-plated		

### General ratings data

General ratings data					
Electrical characteristics	Rated voltage	Rated insulation voltage $U_i$	1000 V		
		Rated operating voltage $U_e$	690 V		
		Rated impulse withstand voltage $U_{imp}$	8 kV		IEC 61 439-1/-2
		Oversupply category	IV		
		Contamination level	3		
		Rated frequency	50 Hz		

Maxi-PLS busbar system <sup>5)</sup>			Maxi-PLS 1600	Maxi-PLS 2000	Maxi-PLS 3200	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	1400 A	1800 A	2800 A	For IP 54
			1600 A	2000 A	3000 A	For IP 2X <sup>1)</sup>
			1800 A	2500 A	4000 A	For IP 2X <sup>2)</sup>
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	110 kA		165 kA	
		Rated short-time withstand current $I_{cw}$	50 kA		75 kA	IEC 61 439-1/-2
		Permissible prospective short-circuit current	50 kA		70 kA	
Mechanical characteristics	Busbar	Test voltage	420 V			EN 61 641
		Permissible arc duration	0.3 sec.			
Mechanical characteristics	Busbar	Material	E-Cu, bare			
		External dimensions (cross-section)	45 x 45 mm (1000 mm <sup>2</sup> )	45 x 45 mm (1380 mm <sup>2</sup> )	60 x 60 mm (2700 mm <sup>2</sup> )	

RiLine busbar system <sup>5)</sup>			E-Cu 30 x 10 mm	PLS 1600	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	800 A	1150 A	IP 54
			860 A	1300 A	IP 43
			1000 A <sup>4)</sup>	1600 A <sup>2)</sup>	IP 2X
	Testing under accidental arc conditions	Rated peak withstand current $I_{pk}$	68 kA	110 kA	
		Rated short-time withstand current $I_{cw}$	32 kA, 1 sec.	50 kA, 1 sec./50 kA, 3 sec.	IEC 61 439-1/-2
		Permissible prospective short-circuit current	30 kA	50 kA	
Mechanical characteristics	Busbar	Test voltage	690 V		EN 61 641
		Permissible arc duration	0.3 sec.		
Mechanical characteristics	Busbar	Material	E-Cu, bare		
		Version (cross-section)	30 x 10 mm (300 mm <sup>2</sup> )	PLS 1600 (900 mm <sup>2</sup> )	

Flat-PLS busbar system <sup>5)</sup>			Flat-PLS 60	Flat-PLS 100	
Electrical characteristics	Rated current (primary busbar)	Rated operating current $I_e^{(3)}$	2360 A	3120 A	IP 54
			2540 A	3400 A	IP 43
			4100 A <sup>2)</sup>	5500 A <sup>2)</sup>	IP 2X
		Rated peak withstand current $I_{pk}$	154 kA	220 kA	
		Rated short-time withstand current $I_{cw}$	70 kA, 1 sec.	100 kA, 1 sec.	
Mechanical characteristics	Busbar	Material	E-Cu, bare		
		Version (cross-section)	Up to 4 x 60 x 10 mm (max. 2400 mm <sup>2</sup> )	Up to 4 x 100 x 10 mm (max. 4000 mm <sup>2</sup> )	

<sup>1)</sup> Using outlet filter SK 3243.600 and roof plate IP 2X

<sup>2)</sup> Using fan-and-filter unit SK 3244.100 (700 m<sup>3</sup>/h) and roof plate IP 2X

<sup>3)</sup> Other rated currents for different protection categories on request

<sup>4)</sup> Using fan-and-filter unit SK 3241.100 (230 m<sup>3</sup>/h) and roof plate IP 2X

<sup>5)</sup> Usability of the various busbar systems depends on the enclosure width