Main characteristics

Electrical characteristics according to IEC 62271-100

Ur 7.2 kV	**Isc**	**Ir**			
Phase to phase distance (mm)			**145**	**185**	**240**
Ud 20 kV 50 Hz, 1 min	25 kA	630 A	■	■	
Up 60 kV peak		1250 A	■	■	
		2500 A			■
	31.5 kA	630 A		■	
		1250 A		■	
		2500 A			■
	40 kA	630 A			■
		1250 A			■
		2500 A			■
Ur 12 kV	**Isc**	**Ir**			
Phase to phase distance (mm)			**145**	**185**	**240**
Ud 28 kV 50 Hz, 1 min	25 kA	630 A	■	■	
Up 75 kV peak		1250 A	■	■	
		2500 A			■
	31.5 kA	630 A		■	
		1250 A		■	
		2500 A			■
	40 kA	630 A			■
		1250 A			■
		2500 A			■
Ur 17.5 kV	**Isc**	**Ir**			
Phase to phase distance (mm)			**145**	**185**	**240**
Ud 38 kV 50 Hz, 1 min (*)	25 kA	630 A		■	
Up 95 kV peak		1250 A		■	
		2500 A			■
	31.5 kA	630 A		■	
		1250 A		■	
		2500 A			■
	40 kA	630 A			■
		1250 A			■
		2500 A			■

(*) Ud 42 kV 50 Hz, 1 min possible

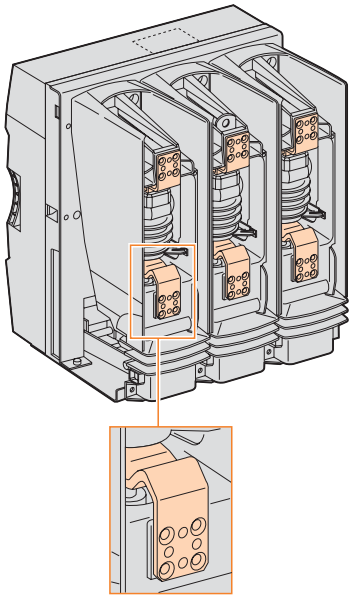
Additional characteristics according to IEC 62271-100

Rated values			
Voltage	**Ur**	kV rms	7.2-12-17.5
Insulation voltage:			
- power frequency withstand	**Ud**	kV rms	20-28-38
- lightning impulse withstand	**Up**	kV peak	60-75-95
Frequency	**fr**	Hz	50-60
Short time withstand current	**Ik/tk**	kA	Isc/3 s
Peak withstand current	**Ip**	kA peak	2.5 Isc (50 Hz)
			2.6 Isc (60 Hz)
Short circuit making capacity		kA peak	2.5 Isc (50 Hz)
			2.6 Isc (60 Hz)

Other characteristics		
Operating sequence		O-0.3 s-CO-15 s-CO
		O-0.3 s-CO-3 min-CO
		O-3 min-CO-3 min-CO
Operating times	Opening	< 50 ms
	Breaking	< 60 ms
	Closing	< 65 ms
Mechanical endurance	Class	M2
	Number of switching operations	10000
Electrical endurance	Class	E2
Number of switching operations at full Isc value	25 kA	100
	31.5 kA	50
	40 kA	30
Capacitive current breaking capacity	Class	C1
Operating conditions		–25°C to +40°C
Average relative humidity	Over 24 h	< 95%
	Over 1 month	< 90%

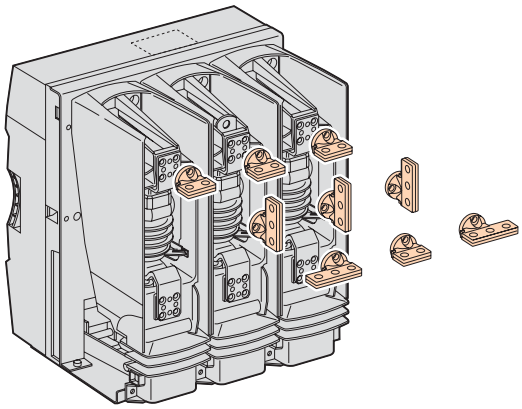
Description of functions
MV connection

DE56864



Connection terminal

DE56865



3 connector sets

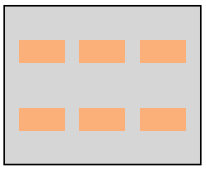
Composition

The basic circuit breaker is equipped with drilled copper connection terminals, at the top and bottom of the breaking units.
The connectors are fitted to the terminals using the corresponding bolts.
Several variants are possible.

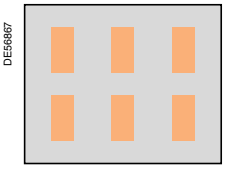
Fixed connectors

Horizontal connectors (H) **Vertical connectors (V)** **Mixed connectors**

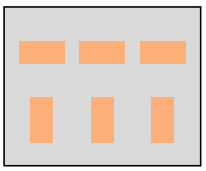
DE58866



DE58867



DE58868

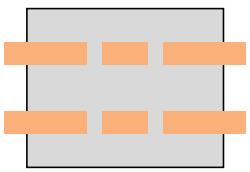


An adjustable connector enables the vertical distance to be increased to enable rotation of 90°.

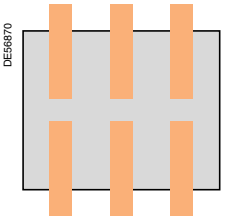
Adjustable gap connectors

Extendable connectors horizontal (H) **Extendable connectors vertical (V)**

DE58869



DE58870

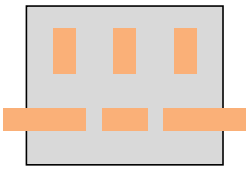


An adjustable connector enables the connection distance to be increased from 0 to 25 mm.

Mixed solution

Example

DE56871



Comment:
The insulation withstand values given in the performance table, do not take account of the connectors.
With these connectors it is possible to use unplated or tin-plated copper conductors or tin-plated aluminium conductors, without any specific precautions being required.
The shape and dimensions of these conductors must be determined by the panel builder according to the dielectric withstand and temperature rise characteristics of the whole connection system.
Typical examples are provided in the Installation Guide.