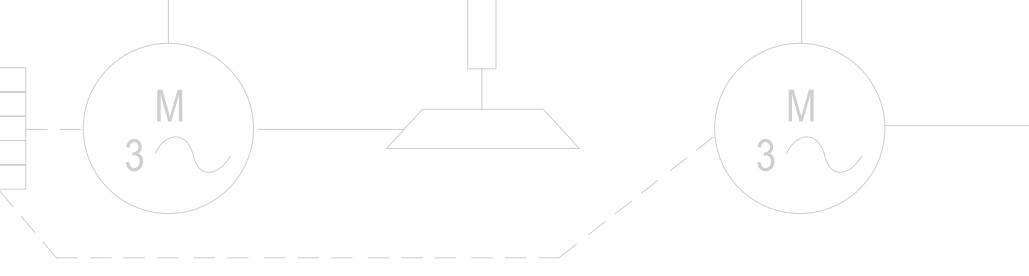


# Automation

## Molded Case Circuit Breakers IEC Style



A vertical color palette consisting of 12 rectangular swatches in various shades of blue and cyan, arranged in two columns. Below the palette is the WEG logo, which consists of the letters 'WEG' in a stylized, bold, blue font.





# Molded Case Circuit Breakers

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ON

A

V

A

ICB = 50% Icu

VOA

CAT. A

1

## Molded Case Circuit Breakers

DWB and DWA circuit breakers were developed according to IEC 60947-2 standard to protect electrical circuits for distribution, generator and motor applications in a wide range of rated currents from 16 to 1600 A.

### The Right Circuit Breaker for Your Application

For power distribution and electric circuits the circuit breakers DWB\_D up to 400 A and DWA up to 800 A ensure overload and short-circuit protections through thermal and magnetic releases, respectively. The DWA1600 features an electronic trip unit providing LSI protection.

DWB\_M and DWM circuit breakers are designed to protect motor branch circuit against short-circuits, therefore, these circuit breakers trip units have magnetic releases only. Moreover, they are set in order to avoid the motor tripping during the starting time of the motor, when the motor current is up to 8 times its rated current. These circuit breakers are used in three-component starters along with the contactor as switching device and the overload relay for overload protection of the motor.

In generator applications, DWB\_G and DWG circuit breakers are applied to protect generators and, then, avoid any risks due to short-circuit and overload situations. Their trip units are composed of thermal and magnetic releases especially designed to meet the specific requirements of low fault levels when protecting a generator.

Finally, IWB and IWA switch-disconnectors are applied to switch on and off electrical circuits under normal conditions, this way, these devices are not applied as protection, therefore they do not have trip units.



### Protecting and Disconnecting in 5 Frames

The new DWB circuit breakers are very compact saving space in electrical panels. Its rated current goes from 16 to 400 A in 3 frame sizes:

- DWB160 - currents from 16 to 160 A
- DWB250 - currents from 80 to 250 A
- DWB400 - currents from 160 to 400 A

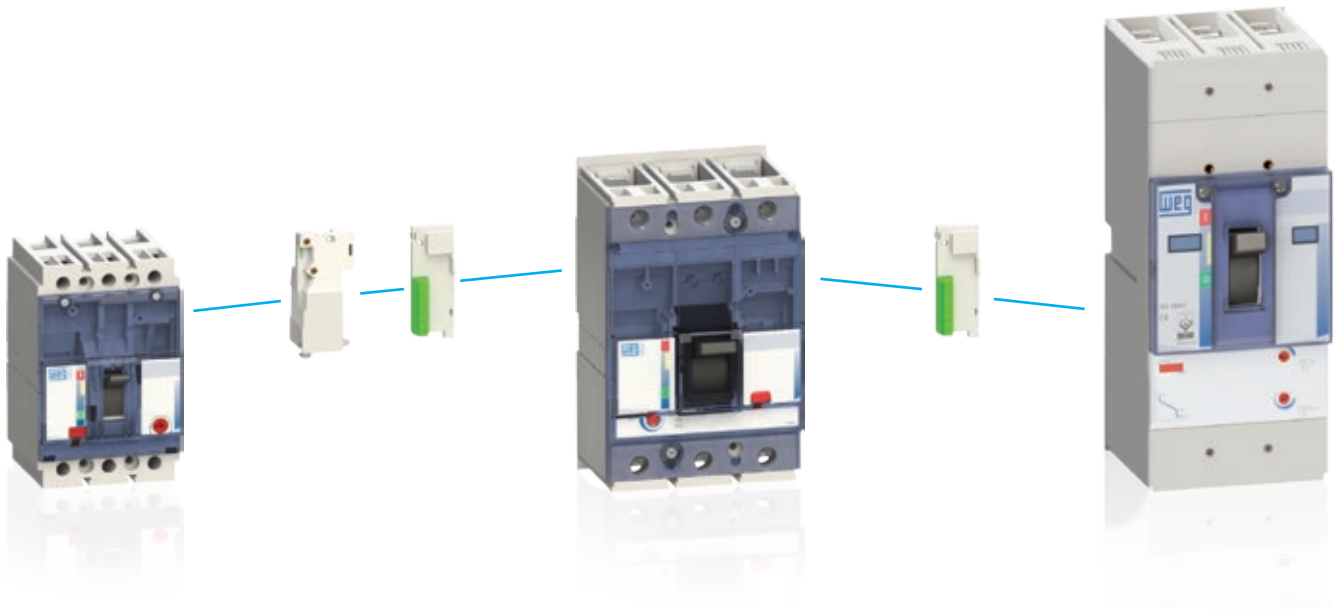
In applications above 400 A, DWA circuit breakers complement the solution providing protection up to 1600 A.

- DWA800 - currents from 350 to 800 A
- DWA1600\_E - currents from 500 to 1600 A

## Molded Case Circuit Breakers

### Flexibility

WEG DWB range offers full flexibility for customers when fitting internal accessories, because the auxiliary contact blocks are common for frames 160, 250 and 400 moreover the shunt and undervoltage releases are common for frames 160 and 250.



### Easiness for Replacement

Through the transparent front cover of DWB circuit breakers, it can be easily identified which accessories are installed.



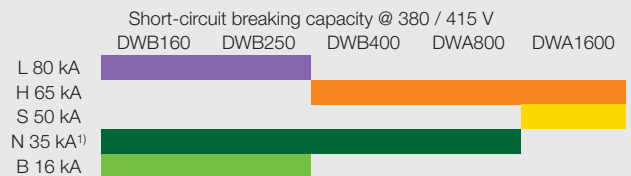
### Double Protection

Oriented to provide safe solutions to electricians, WEG circuit breakers have double insulation between live parts and the front of the equipment, except terminals. Besides that, internal accessories were designed to be completely separate from the power circuit, this way avoiding any risk of contact with live parts.

### High Performance

The WEG molded case circuit breakers can be used in a wide range of applications providing quick protection against short-circuits.

Along with WEG contactors and WEG smart relay, DWB range fulfills the requirements of type 2 coordination according to standard IEC 60947-4-1.



Note: 1) Except DWB160N that breaks up to 30 kA.

## Overview and Technical Data



DWB160



DWB250

Common characteristics		
Designed according to		IEC 60947-2
Rated voltages		
Rated operational voltage - Ue	V ac (50 / 60 Hz)	690
	V dc	250 <sup>1)</sup>
Rated impulse withstand voltage - Uimp	kV	8
Other characteristics		
Selectivity category		A
Pollution degree		3
Maximum relative humidity		95%

Electrical characteristics according to IEC 60947-2									
Rated current - In (45 °C) <sup>2)</sup>		A	160			250			
Number of poles			2, 3, 4			2, 3, 4			
Insulation voltage - Ui		V	800			800			
Short-circuit breaking capacity levels			B	N	L	B	N	L	
Rated ultimate short-circuit breaking capacity - Icu	kA rms								
	220-240 V	25	50	120	42	85	120		
	380-415 V	16	30 <sup>3)</sup>	80	16	35	80		
	440 V	10	20 <sup>4)</sup>	80	15	30	80		
	460-500 V	5	8	65	5	8	65		
	525-550 V	4	6	25	4	7	25		
Rated service short-circuit breaking capacity - Ics	% Icu								
	220-240 V	100%	50%	75%	100%	50%	75%		
	380-415 V	100%	50%	75%	100%	50%	75%		
	440 V	100%	50%	75%	100%	50%	75%		
	460-500 V	100%	50%	75%	100%	50%	50%		
	525-550 V	100%	50%	75%	100%	50%	100%		
Mechanical lifespan (C-0)	Number of operations	8000			8000				
	Operations per hour	120			120				
Electrical lifespan (C-0)	Number of operations	1000			1000				
	Operations per hour	120			120				
Protection									
Against short-circuit & overload (fixed thermomagnetic)			Yes			No			
Against short-circuit & overload (adjustable thermal and fixed magnetic)			Yes			Yes			
Against short-circuit & overload (adjustable thermomagnetic)			No			No			
LSI (electronic)			No			No			
Against short-circuit (magnetic only)			Yes			Yes			
Switch-disconnector (no trip unit)			Yes			Yes			
Installation and connections									
Cables	Maximum cross-section	mm <sup>2</sup>	70			120			
	Minimum cross-section	mm <sup>2</sup>	4			25			
	Torque tightening	Nm	6			25			
Busbars	Maximum width	mm <sup>2</sup>	11			24			
	Torque tightening	Nm	6			8			
Dimensions W (W-4P) x D x H		mm	78 (102.5) x 71 x 122 <sup>6)</sup>		78 x 136 x 143 <sup>6)</sup>		105 (141) x 78 x 162 <sup>6)</sup>		105 x 137 x 191 <sup>6)</sup>
Weight	2/3 poles (4 poles)	kg	0.95 (1.2)		1.84		1.85 (1.92)		3.8

Notes: 1) Not applicable for DWA1600.

2) For other temperatures, see section Installation and connections.

3) Circuit breakers with rated currents of 16, 20, 25 and 32 A, the short-circuit breaking capacity Icu is 20 kA.

4) Circuit breakers with rated currents of 16, 20, 25 and 32 A, the short-circuit breaking capacity Icu is 15 kA.

5) Valid for DWA800 up to 630 A.

6) Not considering phase barriers and/or terminal covers.



DWB400



DWA800

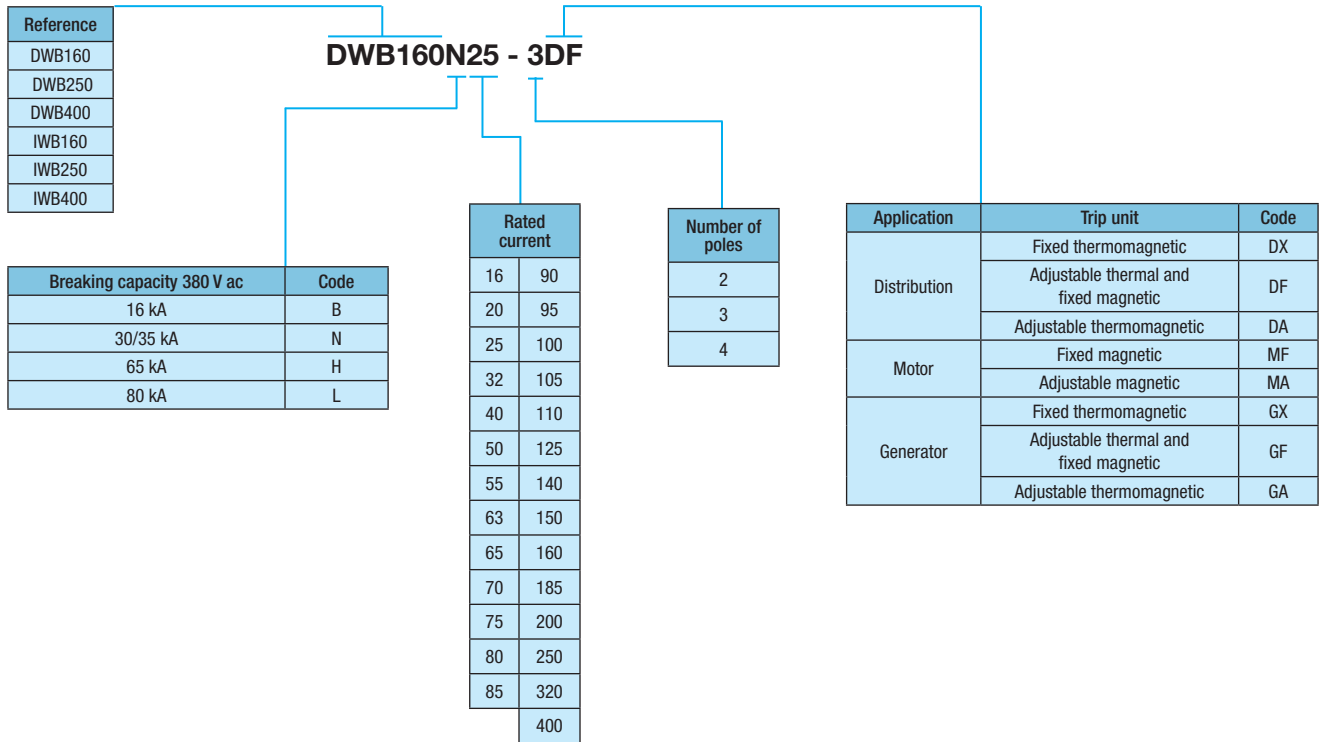


DWA1600

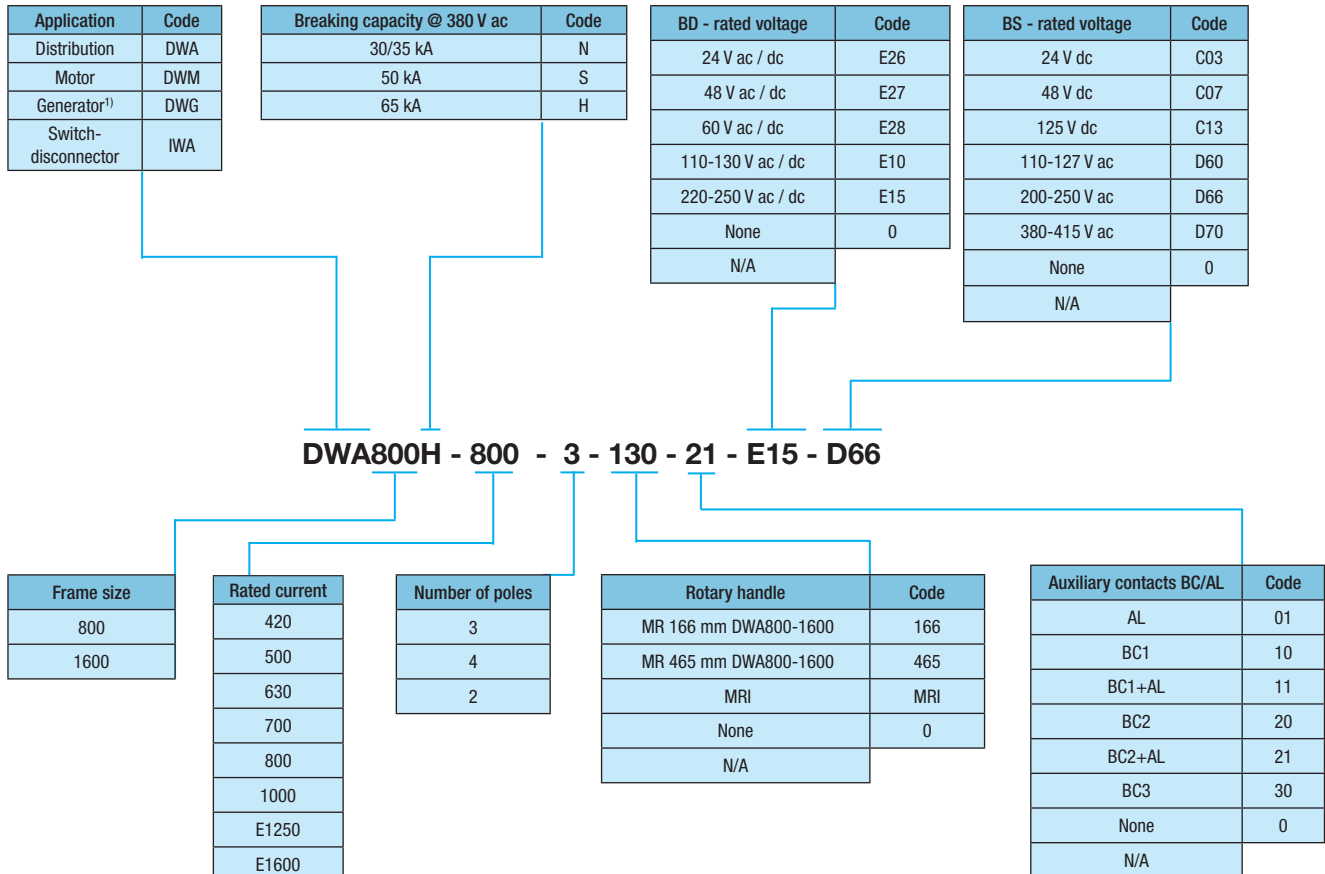
400		800		1600	
2, 3, 4		2, 3, 4		2, 3, 4	
800		690		690	
N	H	N	H	S	H
65	80	65	80	80	100
35	65	35	65	50	65
35	65	35	65	50	65
25	50	25	50	40	50
-					
20	25	20	25	30	35
100%	75%	100%	75%	100%	75%
100%	75%	100%	75%	100%	75%
100%	75%	100%	75%	100%	75%
100%	75%	100%	75%	100%	75%
100%	75%	100%	75%	100%	75%
5000		5000		3000	
120		120		120	
1000		1000 <sup>5)</sup>	500	500	
120		120 <sup>5)</sup>	120	120	
No		No		No	
No		No		No	
Yes		Yes		No	
No		No		Yes	
Yes		Yes		Yes	
Yes		Yes		Yes	
240		2 x 240		4 x 240	
35		1 x 185		3 x 185 / 2 x 240	
30		40		45	
22		50		50	
20		20 (M8) / 50 (M12)		30 (M10) / 50 (M12)	
107 (141) x 99 x 257 <sup>6)</sup>		210 (280) x 97 x 257 <sup>6)</sup>		210 (280) x 146 x 345 <sup>6)</sup>	
3.6 (4.6)		7.4 (9.2)		19 (25)	

## Reference Code

### DWB



### DWA



Nota: 1) For generator protection on the frame 1600 use DWA1600.

# Selection Guide

## Circuit Breakers for Distribution Circuit Protection - 2 and 3 Poles

### DWB160

In	Rated current (A)			Short-circuit breaking capacity Icu (kA)						Reference code	
	Thermal protection current setting		Magnetic protection current setting	220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac	660-690 V ac	3 poles	2 poles <sup>1)</sup>
	Minimum	Maximum									
<b>DWB160B - Fixed thermomagnetic</b>											
16	16		300	25	16	10	5	4	3	DWB160B16-3DX	DWB160B16-2DX
20	20		300	25	16	10	5	4	3	DWB160B20-3DX	DWB160B20-2DX
25	25		300	25	16	10	5	4	3	DWB160B25-3DX	DWB160B25-2DX
32	32		320	25	16	10	5	4	3	DWB160B32-3DX	DWB160B32-2DX
40	40		400	25	16	10	5	4	3	DWB160B40-3DX	DWB160B40-2DX
50	50		500	25	16	10	5	4	3	DWB160B50-3DX	DWB160B50-2DX
63	63		630	25	16	10	5	4	3	DWB160B63-3DX	DWB160B63-2DX
70	70		700	25	16	10	5	4	3	DWB160B70-3DX	DWB160B70-2DX
80	80		800	25	16	10	5	4	3	DWB160B80-3DX	DWB160B80-2DX
90	90		900	25	16	10	5	4	3	DWB160B90-3DX	DWB160B90-2DX
100	100		1000	25	16	10	5	4	3	DWB160B100-3DX	DWB160B100-2DX
110	110		1100	25	16	10	5	4	3	DWB160B110-3DX	DWB160B110-2DX
125	125		1100	25	16	10	5	4	3	DWB160B125-3DX	DWB160B125-2DX
150	150		1100	25	16	10	5	4	3	DWB160B150-3DX	DWB160B150-2DX
160	160		1100	25	16	10	5	4	3	DWB160B160-3DX	DWB160B160-2DX
<b>DWB160N - Fixed thermomagnetic</b>											
16	16		300	50	20	15	8	6	4	DWB160N16-3DX	DWB160N16-2DX
20	20		300	50	20	15	8	6	4	DWB160N20-3DX	DWB160N20-2DX
25	25		300	50	20	15	8	6	4	DWB160N25-3DX	DWB160N25-2DX
32	32		320	50	20	15	8	6	4	DWB160N32-3DX	DWB160N32-2DX
40	40		400	50	30	20	8	6	4	DWB160N40-3DX	DWB160N40-2DX
50	50		500	50	30	20	8	6	4	DWB160N50-3DX	DWB160N50-2DX
63	63		630	50	30	20	8	6	4	DWB160N63-3DX	DWB160N63-2DX
70	70		700	50	30	20	8	6	4	DWB160N70-3DX	DWB160N70-2DX
80	80		800	50	30	20	8	6	4	DWB160N80-3DX	DWB160N80-2DX
90	90		900	50	30	20	8	6	4	DWB160N90-3DX	DWB160N90-2DX
100	100		1000	50	30	20	8	6	4	DWB160N100-3DX	DWB160N100-2DX
110	110		1100	50	30	20	8	6	4	DWB160N110-3DX	DWB160N110-2DX
125	125		1100	50	30	20	8	6	4	DWB160N125-3DX	DWB160N125-2DX
150	150		1100	50	30	20	8	6	4	DWB160N150-3DX	DWB160N150-2DX
160	160		1100	50	30	20	8	6	4	DWB160N160-3DX	DWB160N160-2DX
<b>DWB160L - Fixed thermomagnetic</b>											
16	16		300	120	80	80	65	25	10	DWB160L16-3DX	DWB160L16-2DX
20	20		300	120	80	80	65	25	10	DWB160L20-3DX	DWB160L20-2DX
25	25		300	120	80	80	65	25	10	DWB160L25-3DX	DWB160L25-2DX
32	32		320	120	80	80	65	25	10	DWB160L32-3DX	DWB160L32-2DX
40	40		400	120	80	80	65	25	10	DWB160L40-3DX	DWB160L40-2DX
50	50		500	120	80	80	65	25	10	DWB160L50-3DX	DWB160L50-2DX
63	63		630	120	80	80	65	25	10	DWB160L63-3DX	DWB160L63-2DX
70	70		700	120	80	80	65	25	10	DWB160L70-3DX	DWB160L70-2DX
80	80		800	120	80	80	65	25	10	DWB160L80-3DX	DWB160L80-2DX
90	90		900	120	80	80	65	25	10	DWB160L90-3DX	DWB160L90-2DX
100	100		1000	120	80	80	65	25	10	DWB160L100-3DX	DWB160L100-2DX
110	110		1100	120	80	80	65	25	10	DWB160L110-3DX	DWB160L110-2DX
125	125		1100	120	80	80	65	25	10	DWB160L125-3DX	DWB160L125-2DX
<b>DWB160B - Adjustable thermal and fixed magnetic</b>											
40	32	40	400	25	16	10	5	4	3	DWB160B40-3DF	DWB160B40-2DF
50	40	50	500	25	16	10	5	4	3	DWB160B50-3DF	DWB160B50-2DF
63	50	63	630	25	16	10	5	4	3	DWB160B63-3DF	DWB160B63-2DF
80	64	80	800	25	16	10	5	4	3	DWB160B80-3DF	DWB160B80-2DF
100	80	100	1000	25	16	10	5	4	3	DWB160B100-3DF	DWB160B100-2DF
125	100	125	1100	25	16	10	5	4	3	DWB160B125-3DF	DWB160B125-2DF
160	128	160	1100	25	16	10	5	4	3	DWB160B160-3DF	DWB160B160-2DF
<b>DWB160N - Adjustable thermal and fixed magnetic</b>											
40	32	40	400	50	30	20	8	6	4	DWB160N40-3DF	DWB160N40-2DF
50	40	50	500	50	30	20	8	6	4	DWB160N50-3DF	DWB160N50-2DF
63	50	63	630	50	30	20	8	6	4	DWB160N63-3DF	DWB160N63-2DF
80	64	80	800	50	30	20	8	6	4	DWB160N80-3DF	DWB160N80-2DF
100	80	100	1000	50	30	20	8	6	4	DWB160N100-3DF	DWB160N100-2DF
125	100	125	1100	50	30	20	8	6	4	DWB160N125-3DF	DWB160N125-2DF
160	128	160	1100	50	30	20	8	6	4	DWB160N160-3DF	DWB160N160-2DF

Note: 1) 2-pole circuit breaker in a 3-pole frame.

# Selection Guide

## Circuit Breakers for Distribution Circuit Protection - 2 and 3 Poles

### DWB250

In	Rated current (A)				Short-circuit breaking capacity Icu (kA)						Reference code	
	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac	660-690 V ac	3 poles	2 poles <sup>1)</sup>
	Minimum	Maximum	Minimum	Maximum								
DWB250B - Adjustable thermal and fixed magnetic												
100	80	100		1000	42	16	15	5	4	3	DWB250B100-3DF	DWB250B100-2DF
125	100	125		1250	42	16	15	5	4	3	DWB250B125-3DF	DWB250B125-2DF
160	125	160		1600	42	16	15	5	4	3	DWB250B160-3DF	DWB250B160-2DF
200	160	200		2000	42	16	15	5	4	3	DWB250B200-3DF	DWB250B200-2DF
250	200	250		2500	42	16	15	5	4	3	DWB250B250-3DF	DWB250B250-2DF
DWB250N - Adjustable thermal and fixed magnetic												
100	80	100		1000	85	35	30	8	7	6	DWB250N100-3DF	DWB250N100-2DF
125	100	125		1250	85	35	30	8	7	6	DWB250N125-3DF	DWB250N125-2DF
160	125	160		1600	85	35	30	8	7	6	DWB250N160-3DF	DWB250N160-2DF
200	160	200		2000	85	35	30	8	7	6	DWB250N200-3DF	DWB250N200-2DF
250	200	250		2500	85	35	30	8	7	6	DWB250N250-3DF	DWB250N250-2DF
DWB250L - Adjustable thermal and fixed magnetic												
100	80	100		1000	120	80	80	65	25	15	DWB250L100-3DF	DWB250L100-2DF
125	100	125		1250	120	80	80	65	25	15	DWB250L125-3DF	DWB250L125-2DF
160	125	160		1600	120	80	80	65	25	15	DWB250L160-3DF	DWB250L160-2DF
200	160	200		2000	120	80	80	65	25	15	DWB250L200-3DF	DWB250L200-2DF

### DWB400

In	Rated current (A)					Short-circuit breaking capacity Icu (kA)					Reference code	
	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	3 poles	2 poles <sup>1)</sup>	
	Minimum	Maximum	Minimum	Maximum								
DWB400N - Adjustable thermomagnetic												
200	160	200	1000	2000	65	35	35	25	20	DWB400N200-3DA	DWB400N200-2DA	
250	200	250	1250	2500	65	35	35	25	20	DWB400N250-3DA	DWB400N250-2DA	
320	250	320	1600	3200	65	35	35	25	20	DWB400N320-3DA	DWB400N320-2DA	
400	320	400	2000	4000	65	35	35	25	20	DWB400N400-3DA	DWB400N400-2DA	
DWB400H - Adjustable thermomagnetic												
200	160	200	1000	2000	80	65	65	50	25	DWB400H200-3DA	DWB400H200-2DA	
250	200	250	1250	2500	80	65	65	50	25	DWB400H250-3DA	DWB400H250-2DA	
320	250	320	1600	3200	80	65	65	50	25	DWB400H320-3DA	DWB400H320-2DA	
400	320	400	2000	4000	80	65	65	50	25	DWB400H400-3DA	DWB400H400-2DA	

### DWA800

In	Rated current (A)				Short-circuit breaking capacity Icu (kA)						Reference code	
	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	3 poles	2 poles <sup>1)</sup>	
	Minimum	Maximum	Minimum	Maximum								
DWA800N - Adjustable thermomagnetic												
500	350	500	2500	5000	65	35	35	25	20	DWA800N-500-3	DWA800N-500-2	
630	440	630	3150	6300	65	35	35	25	20	DWA800N-630-3	DWA800N-630-2	
800	560	800	3200	6400	65	35	35	25	20	DWA800N-800-3	DWA800N-800-2	
DWA800H - Adjustable thermomagnetic												
500	350	500	2500	5000	80	65	65	50	25	DWA800H-500-3	DWA800H-500-2	
630	440	630	3150	6300	80	65	65	50	25	DWA800H-630-3	DWA800H-630-2	
800	560	800	3200	6400	80	65	65	50	25	DWA800H-800-3	DWA800H-800-2	

### DWA1600

In	Rated current (A)				Short-circuit breaking capacity Icu (kA)						Reference code	
	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	3 poles	2 poles <sup>1)</sup>	
	Minimum	Maximum	Minimum	Maximum								
DWA1600S-E - Electronic LSI												
1250	500	1250	2500	15000	80	50	50	40	30	DWA1600S-E1250-3	DWA1600S-E1250-2	
1600	640	1600	3200	19200	80	50	50	40	30	DWA1600S-E1600-3	DWA1600S-E1600-2	
DWA1600H-E - Electronic LSI												
1250	500	1250	2500	15000	100	65	65	50	35	DWA1600H-E1250-3	DWA1600H-E1250-2	
1600	640	1600	3200	19200	100	65	65	50	35	DWA1600H-E1600-3	DWA1600H-E1600-2	

Note: 1) 2-pole circuit breaker in a 3-pole frame.

# Selection Guide

## Circuit Breakers for Distribution Circuit Protection - 4 Poles

### DWB160

In	Rated current (A)		Magnetic protection current setting	Short-circuit breaking capacity Icu (kA)						Reference code (4 poles)		
	Thermal protection current setting			220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac	660-690 V ac	Neutral not protected	Neutral 50% protected	Neutral 100% protected
	Minimum	Maximum										
<b>DWB160B - Fixed thermomagnetic</b>												
16	16		300	25	16	10	5	4	3	DWB160B16-4DX		DWB160B16-4DXT
20	20		300	25	16	10	5	4	3	DWB160B20-4DX		DWB160B20-4DXT
25	25		300	25	16	10	5	4	3	DWB160B25-4DX		DWB160B25-4DXT
32	32		320	25	16	10	5	4	3	DWB160B32-4DX		DWB160B32-4DXT
40	40		400	25	16	10	5	4	3	DWB160B40-4DX		DWB160B40-4DXT
50	50		500	25	16	10	5	4	3	DWB160B50-4DX		DWB160B50-4DXT
63	63		630	25	16	10	5	4	3	DWB160B63-4DX		DWB160B63-4DXT
70	70		700	25	16	10	5	4	3	DWB160B70-4DX		DWB160B70-4DXT
80	80		800	25	16	10	5	4	3	DWB160B80-4DX		DWB160B80-4DXT
90	90		900	25	16	10	5	4	3	DWB160B90-4DX		DWB160B90-4DXT
100	100		1000	25	16	10	5	4	3	DWB160B100-4DX		DWB160B100-4DXT
110	110		1100	25	16	10	5	4	3	DWB160B110-4DX		DWB160B110-4DXT
125	125		1100	25	16	10	5	4	3	DWB160B125-4DX		DWB160B125-4DXT
150	150		1100	25	16	10	5	4	3	DWB160B150-4DX	DWB160B150-4DXP	DWB160B150-4DXT
160	160		1100	25	16	10	5	4	3	DWB160B160-4DX	DWB160B160-4DXP	DWB160B160-4DXT
<b>DWB160N - Fixed thermomagnetic</b>												
16	16		300	50	20	15	8	6	4	DWB160N16-4DX		DWB160N16-4DXT
20	20		300	50	20	15	8	6	4	DWB160N20-4DX		DWB160N20-4DXT
25	25		300	50	20	15	8	6	4	DWB160N25-4DX		DWB160N25-4DXT
32	32		320	50	20	15	8	6	4	DWB160N32-4DX		DWB160N32-4DXT
40	40		400	50	30	20	8	6	4	DWB160N40-4DX		DWB160N40-4DXT
50	50		500	50	30	20	8	6	4	DWB160N50-4DX		DWB160N50-4DXT
63	63		630	50	30	20	8	6	4	DWB160N63-4DX		DWB160N63-4DXT
70	70		700	50	30	20	8	6	4	DWB160N70-4DX		DWB160N70-4DXT
80	80		800	50	30	20	8	6	4	DWB160N80-4DX		DWB160N80-4DXT
90	90		900	50	30	20	8	6	4	DWB160N90-4DX		DWB160N90-4DXT
100	100		1000	50	30	20	8	6	4	DWB160N100-4DX		DWB160N100-4DXT
110	110		1100	50	30	20	8	6	4	DWB160N110-4DX		DWB160N110-4DXT
125	125		1100	50	30	20	8	6	4	DWB160N125-4DX		DWB160N125-4DXT
150	150		1100	50	30	20	8	6	4	DWB160N150-4DX	DWB160N150-4DXP	DWB160N150-4DXT
160	160		1100	50	30	20	8	6	4	DWB160N160-4DX	DWB160N160-4DXP	DWB160N160-4DXT
<b>DWB160B - Adjustable thermal and fixed magnetic</b>												
40	32	40	400	25	16	10	5	4	3	DWB160B40-4DF		DWB160B40-4DFT
50	40	50	500	25	16	10	5	4	3	DWB160B50-4DF		DWB160B50-4DFT
63	50	63	630	25	16	10	5	4	3	DWB160B63-4DF		DWB160B63-4DFT
80	64	80	800	25	16	10	5	4	3	DWB160B80-4DF		DWB160B80-4DFT
100	80	100	1000	25	16	10	5	4	3	DWB160B100-4DF		DWB160B100-4DFT
125	100	125	1100	25	16	10	5	4	3	DWB160B125-4DF		DWB160B125-4DFT
160	128	160	1100	25	16	10	5	4	3	DWB160B160-4DF	DWB160B160-4DFP	DWB160B160-4DFT
<b>DWB160N - Adjustable thermal and fixed magnetic</b>												
40	32	40	400	50	30	20	8	6	4	DWB160N40-4DF		DWB160N40-4DFT
50	40	50	500	50	30	20	8	6	4	DWB160N50-4DF		DWB160N50-4DFT
63	50	63	630	50	30	20	8	6	4	DWB160N63-4DF		DWB160N63-4DFT
80	64	80	800	50	30	20	8	6	4	DWB160N80-4DF		DWB160N80-4DFT
100	80	100	1000	50	30	20	8	6	4	DWB160N100-4DF		DWB160N100-4DFT
125	100	125	1100	50	30	20	8	6	4	DWB160N125-4DF		DWB160N125-4DFT
160	128	160	1100	50	30	20	8	6	4	DWB160N160-4DF	DWB160N160-4DFP	DWB160N160-4DFT



# Selection Guide

## Circuit Breakers for Distribution Circuit Protection - 4 Poles

### DWB250

In	Rated current (A)		Magnetic protection current setting		Short-circuit breaking capacity Icu (kA)					Reference code (4 poles)			
	Thermal protection current setting				220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac	660-690 V ac	Neutral not protected	Neutral 50% protected	Neutral 100% protected
	Minimum	Maximum											
<b>DWB250B - Adjustable thermal and fixed magnetic</b>													
100	80	100	1000		42	16	15	5	4	3	DWB250B100-4DF		DWB250B100-4DFT
125	100	125	1250		42	16	15	5	4	3	DWB250B125-4DF		DWB250B125-4DFT
160	125	160	1600		42	16	15	5	4	3	DWB250B160-4DF	DWB250B160-4DFP	DWB250B160-4DFT
200	160	200	2000		42	16	15	5	4	3	DWB250B200-4DF	DWB250B200-4DFP	DWB250B200-4DFT
250	200	250	2500		42	16	15	5	4	3	DWB250B250-4DF	DWB250B250-4DFP	DWB250B250-4DFT
<b>DWB250N - Adjustable thermal and fixed magnetic</b>													
100	80	100	1000		85	35	30	8	7	6	DWB250N100-4DF		DWB250N100-4DFT
125	100	125	1250		85	35	30	8	7	6	DWB250N125-4DF		DWB250N125-4DFT
160	125	160	1600		85	35	30	8	7	6	DWB250N160-4DF	DWB250N160-4DFP	DWB250N160-4DFT
200	160	200	2000		85	35	30	8	7	6	DWB250N200-4DF	DWB250N200-4DFP	DWB250N200-4DFT
250	200	250	2500		85	35	30	8	7	6	DWB250N250-4DF	DWB250N250-4DFP	DWB250N250-4DFT

### DWB400

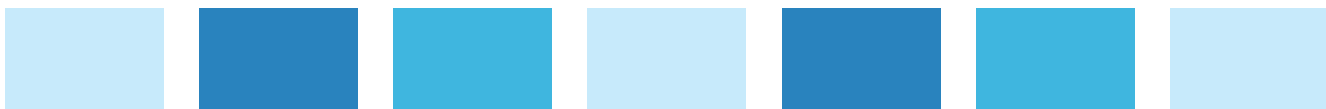
In	Rated current (A)		Magnetic protection current setting		Short-circuit breaking capacity Icu (kA)					Reference code (4 poles)			
	Thermal protection current setting				220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	Neutral not protected	Neutral 50% protected	Neutral 100% protected	
	Minimum	Maximum											
<b>DWB400N - Adjustable thermomagnetic</b>													
200	160	200	1000		2000	65	35	35	25	20		DWB400N200-4DA	
250	200	250	1250		2500	65	35	35	25	20		DWB400N250-4DA	
320	250	320	1600		3200	65	35	35	25	20		DWB400N320-4DA	
400	320	400	2000		4000	65	35	35	25	20		DWB400N400-4DA	
<b>DWB400H - Adjustable thermomagnetic</b>													
200	160	200	1000		2000	80	65	65	50	25		DWB400H200-4DA	
250	200	250	1250		2500	80	65	65	50	25		DWB400H250-4DA	
320	250	320	1600		3200	80	65	65	50	25		DWB400H320-4DA	
400	320	400	2000		4000	80	65	65	50	25		DWB400H400-4DA	

### DWA800

In	Rated current (A)		Magnetic protection current setting		Short-circuit breaking capacity Icu (kA)					Reference code (4 poles)			
	Thermal protection current setting				220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	Neutral not protected	Neutral 50% protected	Neutral 100% protected	
	Minimum	Maximum											
<b>DWA800N - Adjustable thermomagnetic</b>													
500	350	500	2500		5000	65	35	35	25	20		DWA800N-500-4	
630	440	630	3150		6300	65	35	35	25	20		DWA800N-630-4	
800	560	800	3200		6400	65	35	35	25	20		DWA800N-800-4	
<b>DWA800H - Adjustable thermomagnetic</b>													
500	350	500	2500		5000	80	65	65	50	25		DWA800H-500-4	
630	440	630	3150		6300	80	65	65	50	25		DWA800H-630-4	
800	560	800	3200		6400	80	65	65	50	25		DWA800H-800-4	

### DWA1600

In	Rated current (A)		Magnetic protection current setting		Short-circuit breaking capacity Icu (kA)					Reference code (4 poles)			
	Thermal protection current setting				220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	Neutral not protected	Neutral 50% protected	Neutral 100% protected	
	Minimum	Maximum											
<b>DWA1600S-E Electronic LSI</b>													
1250	500	1250	2500		15000	80	50	50	40	30		DWA1600S-E1250-4	
1600	640	1600	3200		19200	80	50	50	40	30		DWA1600S-E1600-4	
<b>DWA1600H-E Electronic LSI</b>													
1250	500	1250	2500		15000	100	65	65	50	35		DWA1600H-E1250-4	
1600	640	1600	3200		19200	100	65	65	50	35		DWA1600H-E1600-4	



# Selection Guide

## Circuit Breakers for Generator Protection

### DWB160

Rated current (A)				Short-circuit breaking capacity Icu (kA)						Reference code 3 poles
I <sub>n</sub>	Thermal protection current setting		Magnetic protection current setting	220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac	660-690 V ac	
	Minimum	Maximum								
<b>DWB160B - Fixed thermomagnetic</b>										
55	55		300	25	16	10	5	4	3	DWB160B55-3GX
75	75		375	25	16	10	5	4	3	DWB160B75-3GX
85	85		425	25	16	10	5	4	3	DWB160B85-3GX
105	105		525	25	16	10	5	4	3	DWB160B105-3GX
125	125		630	25	16	10	5	4	3	DWB160B125-3GX
140	140		700	25	16	10	5	4	3	DWB160B140-3GX
160	160		800	25	16	10	5	4	3	DWB160B160-3GX
<b>DWB160B - Adjustable thermal and fixed magnetic</b>										
55	44	55	300	25	16	10	5	4	3	DWB160B55-3GF
75	60	75	375	25	16	10	5	4	3	DWB160B75-3GF
85	68	85	425	25	16	10	5	4	3	DWB160B85-3GF
105	84	105	525	25	16	10	5	4	3	DWB160B105-3GF
125	100	125	630	25	16	10	5	4	3	DWB160B125-3GF
140	112	140	700	25	16	10	5	4	3	DWB160B140-3GF
160	128	160	800	25	16	10	5	4	3	DWB160B160-3GF

### DWB250

Rated current (A)				Short-circuit breaking capacity Icu (kA)						Reference code 3 poles
I <sub>n</sub>	Thermal protection current setting		Magnetic protection current setting	220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac	660-690 V ac	
	Minimum	Maximum								
<b>DWB250B - Adjustable thermal and fixed magnetic</b>										
105	80	105	500	42	16	15	5	4	3	DWB250B105-3GF
125	100	125	630	42	16	15	5	4	3	DWB250B125-3GF
160	125	160	800	42	16	15	5	4	3	DWB250B160-3GF
200	160	200	1000	42	16	15	5	4	3	DWB250B200-3GF
250	200	250	1250	42	16	15	5	4	3	DWB250B250-3GF

### DWB400

Rated current (A)					Short-circuit breaking capacity Icu (kA)					Reference code 3 poles
I <sub>n</sub>	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	
	Minimum	Maximum	Minimum	Maximum						
<b>DWB400N - Adjustable thermomagnetic</b>										
200	160	200	500	1000	65	35	35	25	20	DWB400N200-3GA
250	200	250	625	1250	65	35	35	25	20	DWB400N250-3GA
320	250	320	800	1600	65	35	35	25	20	DWB400N320-3GA
400	320	400	1000	2000	65	35	35	25	20	DWB400N400-3GA

### DWG800

Rated current (A)					Short-circuit breaking capacity Icu (kA)					Reference code 3 poles
I <sub>n</sub>	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	
	Minimum	Maximum	Minimum	Maximum						
<b>DWG800N - Adjustable thermomagnetic</b>										
500	350	500	1250	2500	65	35	35	25	20	DWG800N-500-3
630	440	630	1575	3150	65	35	35	25	20	DWG800N-630-3
800	560	800	2000	4000	65	35	35	25	20	DWG800N-800-3

### DWA1600

Rated current (A)					Short-circuit breaking capacity Icu (kA)					Reference code 3 poles
I <sub>n</sub>	Thermal protection current setting		Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	
	Minimum	Maximum	Minimum	Maximum						
<b>DWA1600S-E - Electronic LSI</b>										
1250	500	1250	2500	15000	80	50	50	40	30	DWA1600S-E1250-3
1600	640	1600	3200	19200	80	50	50	40	30	DWA1600S-E1600-3
<b>DWA1600H-E - Electronic LSI</b>										
1250	500	1250	2500	15000	100	65	65	50	35	DWA1600H-E1250-3
1600	640	1600	3200	19200	100	65	65	50	35	DWA1600H-E1600-3

# Selection Guide

## Circuit Breakers for Motor Branch Circuit Protection

### DWB160

Rated current (A)			Short-circuit breaking capacity Icu (kA)					Reference code	
In	Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac		660-690 V ac
<b>DWB160N - Fixed magnetic</b>									
25	300		50	25	15	8	6	4	DWB160N25-3MF
32	385		50	25	15	8	6	4	DWB160N32-3MF
40	480		50	30	20	8	6	4	DWB160N40-3MF
50	600		50	30	20	8	6	4	DWB160N50-3MF
65	780		50	30	20	8	6	4	DWB160N65-3MF
80	960		50	30	20	8	6	4	DWB160N80-3MF
95	1140		50	30	20	8	6	4	DWB160N95-3MF
<b>DWB160L - Fixed magnetic</b>									
25	300		120	80	80	65	25	10	DWB160L25-3MF
32	385		120	80	80	65	25	10	DWB160L32-3MF
40	480		120	80	80	65	25	10	DWB160L40-3MF
50	600		120	80	80	65	25	10	DWB160L50-3MF
65	780		120	80	80	65	25	10	DWB160L65-3MF
80	960		120	80	80	65	25	10	DWB160L80-3MF
95	1140		120	80	80	65	25	10	DWB160L95-3MF

### DWB250

Rated current (A)			Short-circuit breaking capacity Icu (kA)					Reference code	
In	Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	525-550 V ac		660-690 V ac
<b>DWB250N - Fixed magnetic</b>									
80	960		85	35	30	8	7	6	DWB250N80-3MF
105	1260		85	35	30	8	7	6	DWB250N105-3MF
150	1800		85	35	30	8	7	6	DWB250N150-3MF
185	2220		85	35	30	8	7	6	DWB250N185-3MF
200	2400		85	35	30	8	7	6	DWB250N200-3MF
<b>DWB250L - Fixed magnetic</b>									
80	960		120	80	80	65	25	15	DWB250L80-3MF
105	1260		120	80	80	65	25	15	DWB250L105-3MF
150	1800		120	80	80	65	25	15	DWB250L150-3MF
185	2220		120	80	80	65	25	15	DWB250L185-3MF
200	2400		120	80	80	65	25	15	DWB250L200-3MF

### DWB400

Rated current (A)			Short-circuit breaking capacity Icu (kA)					Reference code
In	Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	
	Minimum	Maximum						
<b>DWB400H - Adjustable magnetic</b>								
150	1125	2250	80	65	65	50	25	DWB400H150-3MA
185	1400	2775	80	65	65	50	26	DWB400H185-3MA
250	1900	3750	80	65	65	50	27	DWB400H250-3MA
320	2400	4800	80	65	65	50	28	DWB400H320-3MA

### DWM800

Rated current (A)			Short-circuit breaking capacity Icu (kA)					Reference code
In	Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 V ac	
	Minimum	Maximum						
<b>DWM800H - Adjustable magnetic</b>								
420	3150	6300	65	35	35	25	20	DWM800H-420-3
500	3750	7500	65	35	35	25	20	DWM800H-500-3

### DWM1600

Rated current (A)			Short-circuit breaking capacity Icu (kA)					Reference code
In	Magnetic protection current setting		220-240 V ac	380-415 V ac	440 V ac	460-500 V ac	660-690 W	
	Minimum	Maximum						
<b>DWM1600H - Adjustable magnetic</b>								
700	5000	10500	100	65	65	50	35	DWM1600H-700-3
800	6000	12000	100	65	65	50	35	DWM1600H-800-3
1000	7500	15000	100	65	65	50	35	DWM1600H-1000-3

## Selection Guide

### Switch-Disconnectors - No Trip Units

#### IWB160/250/400 and IWA800/1600

Rated current (A) In	Reference code	
	3 poles	4 poles
<b>IWB160</b>		
160	IWB160-160-3XX	IWB160-160-4XX
<b>IWB250</b>		
250	IWB250-250-3XX	IWB250-250-4XX
<b>IWB400</b>		
250	IWB400-250-3XX	IWB400-250-4XX
400	IWB400-400-3XX	IWB400-400-4XX
<b>IWA800</b>		
630	IWA800-630-3	IWA800-630-4
800	IWA800-800-3	IWA800-800-4
<b>IWA1600</b>		
1000	IWA1600-1000-3	IWA1600-1000-4
1250	IWA1600-1250-3	IWA1600-1250-4
1600	IWA1600-1600-3	IWA1600-1600-4



## Trip Units

WEG breakers have a wide range of trip units to better fit into the application. Thermomagnetic and electronic trip units are available depending on the frame size.

### Fixed Thermal and Fixed Magnetic

Ratings In (A) @ 45 °C	16	20	25	32	40	50	55	63	70	75	80	85	90	100	105	110	125	140	150	160
DWB160_DX	x	x	x	x	x	x		x	x		x		x	x		x	x		x	x
DWB160_GX							x			x	x			x		x	x	x		x
<b>Thermal protection</b>																				
Current setting (A) - I <sub>r</sub>	Fixed I <sub>r</sub> = I <sub>n</sub>																			
<b>Magnetic protection</b>																				
I <sub>m</sub> (A)	Fixed																			
DWB160_DX	300	300	300	320	400	500		630	700		800		900	1000		1100	1100		1100	1100
DWB160_GX							300			375		425			525		630	700		800

### Adjustable Thermal and Fixed Magnetic

Ratings In (A) @ 45 °C	40	50	55	63	75	80	85	100	105	125	140	160	200	250
DWB160_DF	x	x		x		x		x		x		x		
DWB250_DF								x		x		x	x	x
DWB160_GF			x		x		x		x	x	x			
DWB250_GF									x	x		x	x	x
<b>Thermal protection</b>														
Current setting (A) - I <sub>r</sub>	Adjustable from 0.8 to 1 x I <sub>n</sub>													
<b>Magnetic protection</b>														
I <sub>m</sub> (A)	Fixed													
DWB160_DF	400	500		630		800		1000		1100		1100		
DWB250_DF								1000		1250		1600	2000	2500
DWB160_GF			300		375		425		525	630	700	800		
DWB250_GF									500	630		800	1000	1250

### Adjustable Thermal and Adjustable Magnetic

Ratings In (A) @ 45 °C	100	125	160	200	250	320	400	500	630	800	1000	1250	1600
DWB400_DA	x	x	x	x	x	x	x						
DWA800						x	x	x	x	x			
DWB400_GA				x	x	x	x						
DWG800						x	x	x	x	x			
<b>Thermal protection</b>													
Current setting (A) - I <sub>r</sub>	Adjustable from 0.8 to 1 x I <sub>n</sub> <sup>1)</sup>												
<b>Magnetic protection</b>													
I <sub>m</sub> (A)	Adjustable from 5 to 10 x I <sub>n</sub>												
DWB400_DA	1000	1250	1600	2000	2500	3200	4000						
DWA800						3200	4000	5000	6300	6400 <sup>2)</sup>			
I <sub>m</sub> (A)	Adjustable from 2.5 to 5 x I <sub>n</sub>												
DWB400_GA				1000	1250	1600	2000						
DWG800						1600	2000	2500	3150	4000			

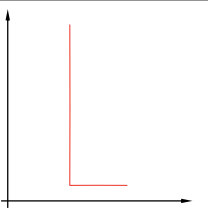
Notes: 1) Thermal protection of DWA800 and DWG800 frames is adjustable from 0.7 to 1 x I<sub>n</sub>,  
 2) Magnetic protection of DWA800 800 A is adjustable from 4 to 8 x I<sub>n</sub>.



# Trip Units

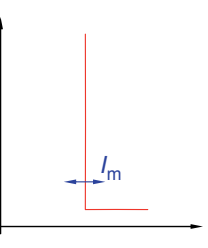
## Fixed Magnetic

Ratings I <sub>n</sub> (A) @ 45 °C	25	32	40	50	65	80	95	105	150	185	200
DWB160_MF	x	x	x	x	x	x	x				
DWB250_MF						x		x	x	x	x
<b>Thermal protection</b>											
Current setting (A) - I <sub>r</sub>	Not available										
<b>Magnetic protection</b>											
I <sub>m</sub> (A)	Fixed										
DWB160_MF	300	385	480	600	780	960	1140				
DWB250_MF						960		1260	1800	2220	2400



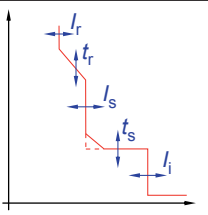
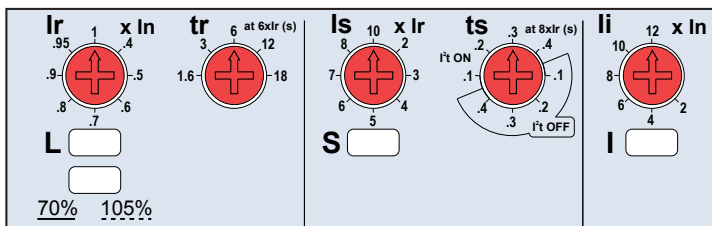
## Adjustable Magnetic

Ratings I <sub>n</sub> (A) @ 45 °C	150	185	250	320	420	500	700	800	1000
DWB400_MA	x	x	x	x					
DWM800					x	x			
DWM1600							x	x	x
<b>Thermal protection</b>									
Current setting (A) - I <sub>r</sub>	Not available								
<b>Magnetic protection</b>									
I <sub>m</sub> (A)	Adjustable from 7.5 to 15 x I <sub>n</sub>								
DWB400_MA	2250	2775	3750	4800					
DWM800					6300	7500			
DWM1600							10500	12000	15000



## Electronic LSI

Ratings I <sub>n</sub> (A) @ 45 °C	1250	1600
DWA1600	x	x
<b>Thermal protection</b>		
Current setting (A) - I <sub>r</sub>	Adjustable from 0.4 to 1 x I <sub>n</sub>	
<b>Magnetic protection</b>		
I <sub>m</sub> (A)	Adjustable from 2 to 12 x I <sub>n</sub>	
DWA1600	15000	19200

L - Long time delay trip function (protection against overloads).  
 S - Short time delay trip function (protection against short-circuit with time delay).  
 I - Instantaneous trip function (instantaneous protection against short-circuit).

## Status Signaling

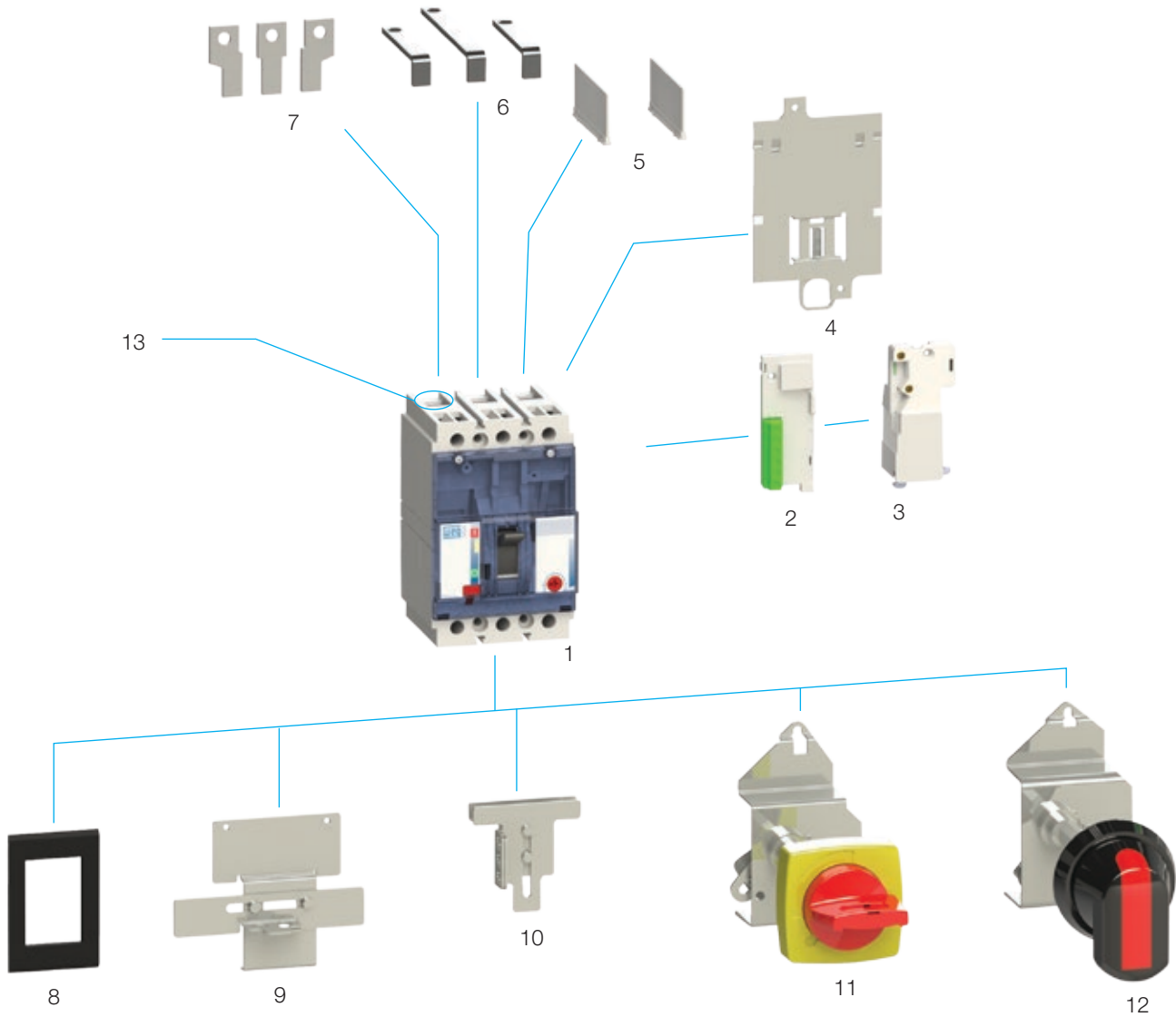
70% / 105%:

- LED ON when the current passing through the device reaches 70% of I<sub>n</sub>
- LED intermittent when the current passing through the device reaches 105% of I<sub>n</sub>

During circuit breaker reset, LEDs will indicate which protection (L, S or I) was actuated in the last trip, flashing 10 times. The electronic protection of the circuit breaker is self-powered since the protected circuit provides the necessary energy for its operation.

## Accessories

### Overview of DWB160

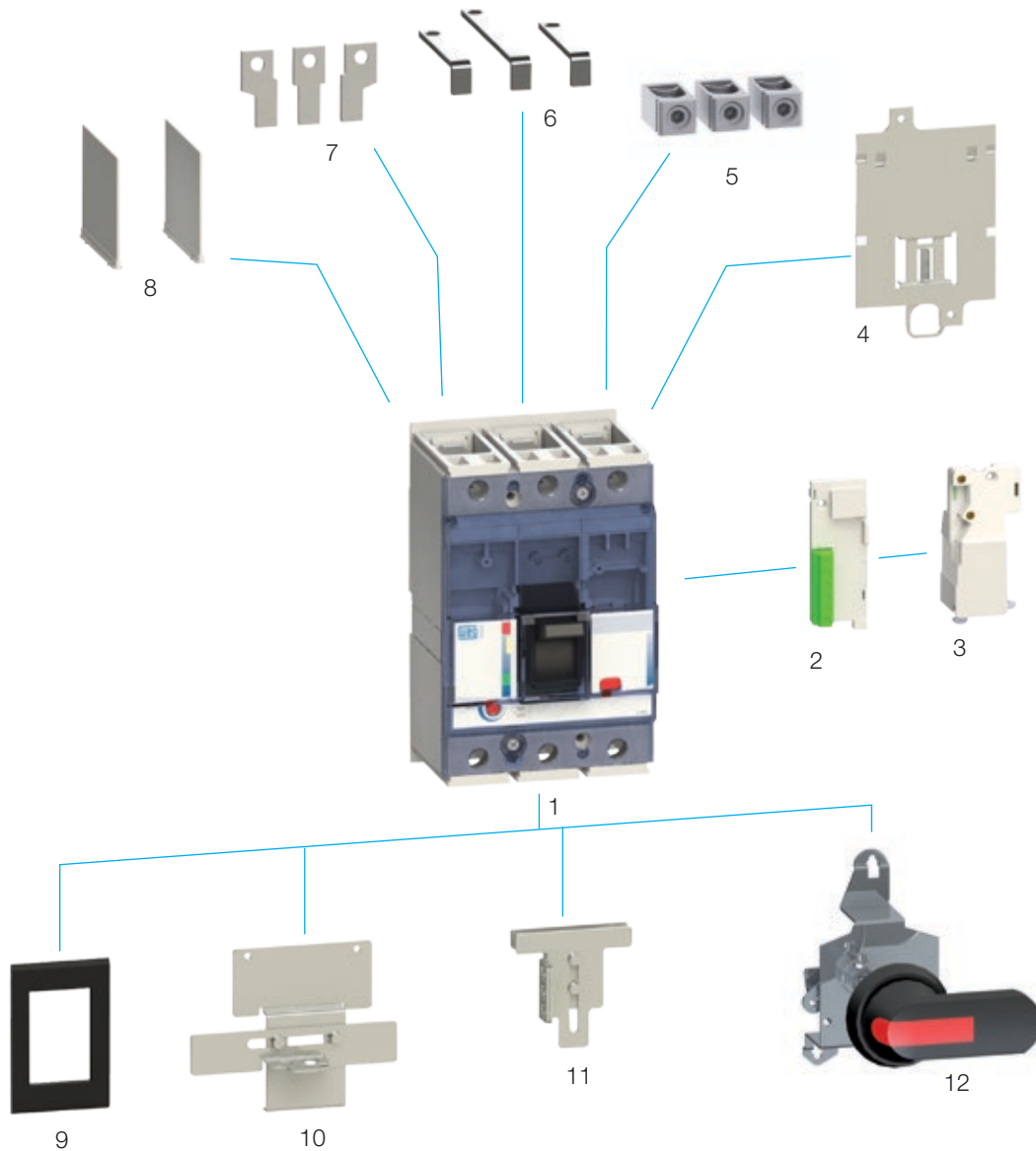


- |   |   |
|---|---|
| <p>1 - MCCB DWB160<br/>         2 - Auxiliary contact block BC, alarm block AL, alarm/contact block BCAL<br/>         3 - Undervoltage release BS, shunt release BD<br/>         4 - DIN rail base BFR DWB160 3P<br/>         5 - Phase barriers of DWB160 (line side supplied as standard, load side supplied as optional)<br/>         6 - 90° connection extension bars CT DWB160 3P</p> | <p>7 - Straight extension bars BE DWB160 3P (terminal tabs)<br/>         8 - Escutcheon MP DWB160<br/>         9 - Mechanical interlock BLIM DWB160 3P<br/>         10 - Padlocking device PL DWB160 3P<br/>         11 - Panel door rotary operating handle MRX<br/>         12 - Panel door rotary operating handle MR<br/>         13 - Terminal lugs (supplied as standard)</p> |
|---|---|

*Note: 2 and 4-pole DWBs use the same accessories of 3-pole DWBs.*

## Accessories

### Overview of DWB250

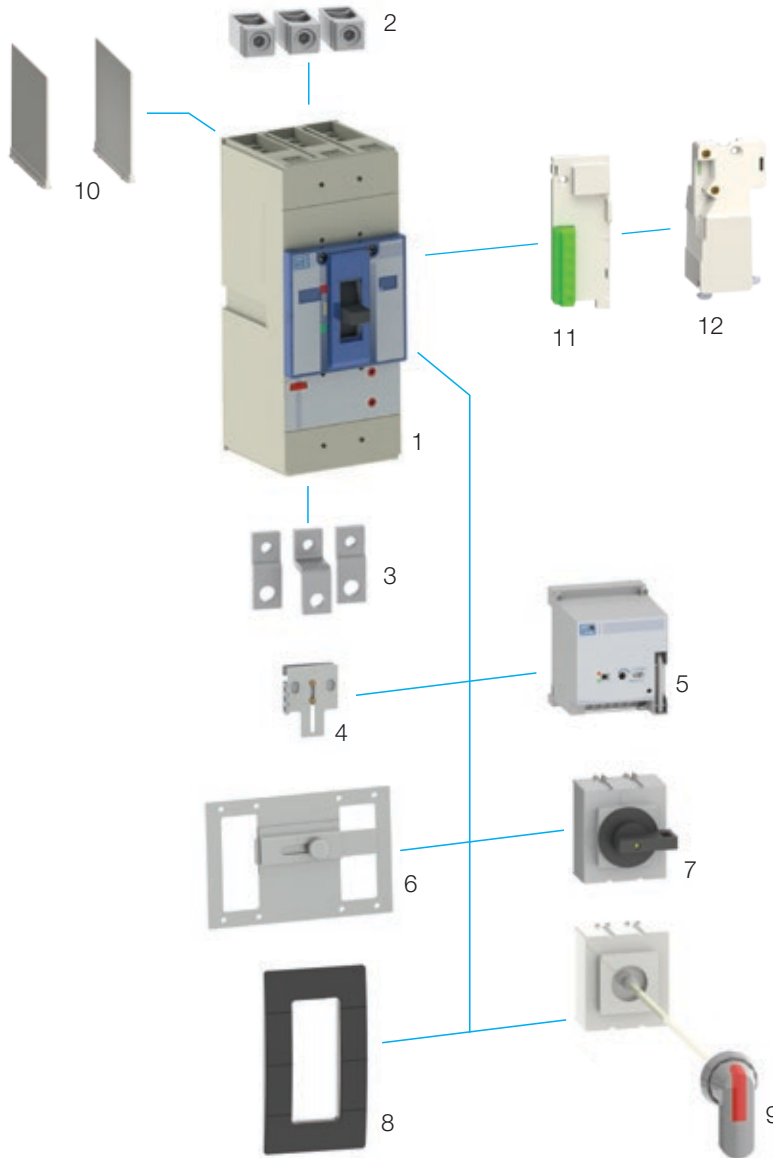


- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 - MCCB DWB250</li> <li>2 - Auxiliary contact block BC, alarm block AL, alarm/contact block BCAL</li> <li>3 - Undervoltage release BS, shunt release BD</li> <li>4 - DIN rail base BFR DWB250 3P</li> <li>5 - Terminal lugs PC DWB250 3P</li> <li>6 - 90° connection extension bars CT DWB250 3P</li> </ul> | <ul style="list-style-type: none"> <li>7 - Straight extension bars BE DWB250 3P (terminal tabs)</li> <li>8 - Phase barriers of DWB250<br/>(supplied as standard and as an accessory)</li> <li>9 - Escutcheon MP DWB250</li> <li>10 - Mechanical interlock BLIM DWB250 3P</li> <li>11 - Padlocking device PL DWB250</li> <li>12 - Panel door rotary operating handle MR</li> </ul> |
|---|---|

*Note: 2 and 4-pole DWBs use the same accessories of 3-pole DWBs.*

## Accessories

### Overview of DWB400

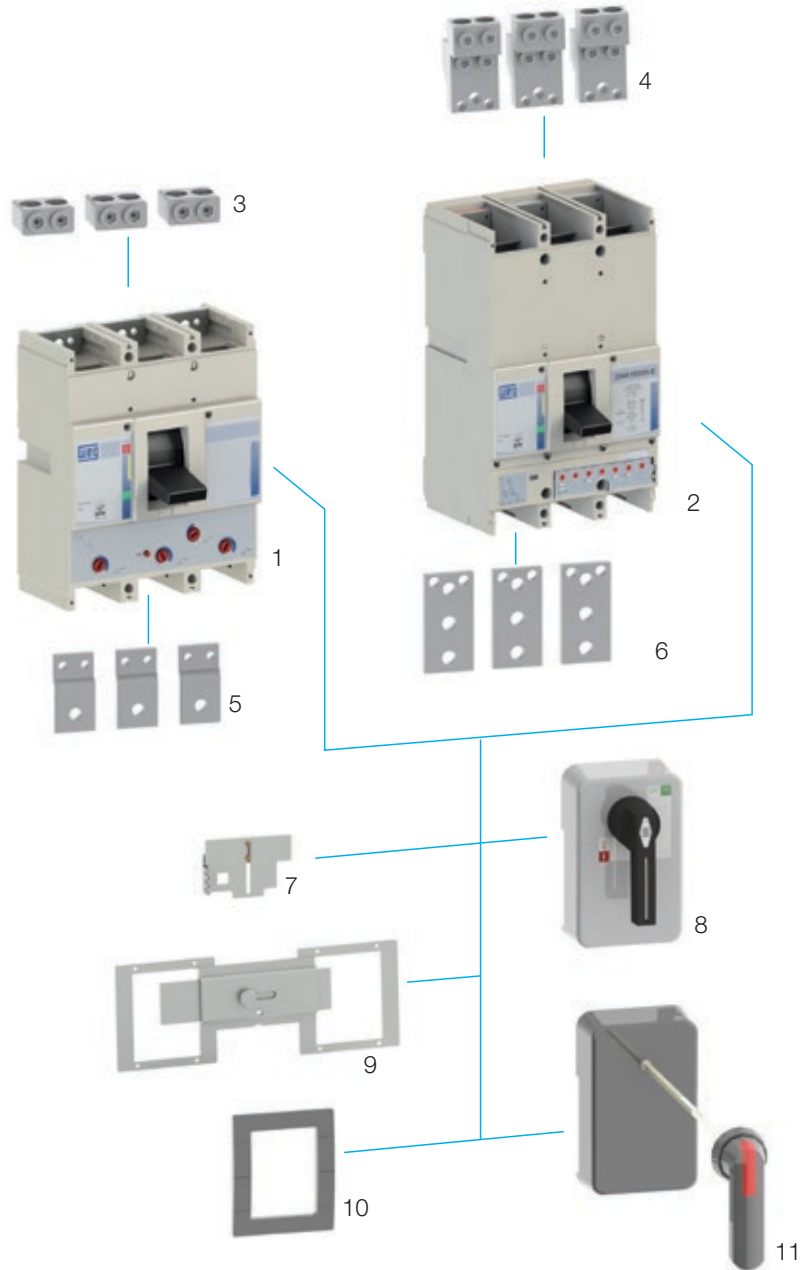


- 1 - MCCB DWB400
- 2 - Round cable terminals PC DWB400 3P (lugs)
- 3 - Straight extension bars BE DWB400 3P (terminal tabs)
- 4 - Padlocking device PL DWB400
- 5 - Motor operator AM DWB400
- 6 - Mechanical interlock BLIM DWB400
- 7 - Direct rotary handle MRI DWB400
- 8 - Escutcheon MP DWB400
- 9 - Panel door rotary operating handle MR DWB400
- 10 - Phase barriers of DWB400 (supplied as standard and as an accessory)
- 11 - Auxiliary contact block BC, alarm block AL, alarm/contact block BCAL
- 12 - Undervoltage release BS, shunt release BD

*Note: 2 and 4-pole DWBs use the same accessories of 3-pole DWBs.*

## Accessories

### Overview of DWA800 and 1600



- 1 - MCCB DWA800
- 2 - MCCB DWA1600
- 3 - Round cable terminals PC DWA800 (lugs)
- 4 - Round cable terminals PC DWA1600 (lugs)
- 5 - Straight extension bars BE DWA800 (terminal tabs)
- 6 - Straight extension bars BE DWA1600 (terminal tabs)
- 7 - Padlocking device PLW800-1600
- 8 - Direct rotary handle MRI DWA800 or MRI DWA1600
- 9 - Mechanical interlock BLIM DWA800-1600
- 10 - Escutcheon MP DWA800-1600
- 11 - Panel door rotary operating handle MR DWA800 or MR DWA1600

Notes: DWA internal accessories only sold factory-fitted.  
2 and 4-pole DWAs use the same accessories of 3-pole DWAs.

## Internal Accessories

### Auxiliary Contact and Alarm Contact Blocks

The auxiliary contact and alarm blocks have the function to signal remotely the status of circuit breakers power contacts. There are 3 types of contact blocks available:

#### BC Auxiliary Contact Block

- Indicates the main contacts status open/closed (ON/OFF) through a changeover contact (1 SPDT)

#### AL Alarm Contact Block

- Indicates circuit breakers trip due to overload or short-circuit condition through a changeover contact (1SPDT)

#### BCAL

- Ensemble comprised of an auxiliary contact block + alarm contact block. The BCAL block makes both functions described above



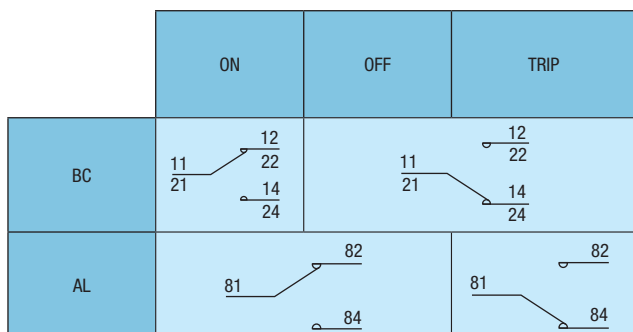
Internal accessory	Number of contacts	Reference code				
		DWB160	DWB250	DWB400	DWA800 <sup>1)</sup>	DWA1600 <sup>1)</sup>
Auxiliary contact block BC	1 changeover	BC-1 DWB			BC-1 DWA800	BC-1 DWA1600
	2 changeover	BC-2 DWB			BC-2 DWA800	BC-2 DWA1600
	3 changeover	-			BC-3 DWA800	BC-3 DWA1600
Alarm contact block AL	1 changeover	AL-1 DWB			AL-1 DWA800-1600	
Auxiliary contact and alarm block BCAL	1BC + 1AL	BCAL-2 DWB			BCAL-2 DWA800	BCAL-2 DWA1600
	2BC + 1AL	-			BCAL-3 DWA800	BCAL-3 DWA1600
Electrical characteristics						
Rated voltage	Type of load	Switching capacity <sup>2)</sup> (A)				
125 V ac	Resistive	6		5	15	15
	Inductive	3		3	12	12
250 V ac	Resistive	6		3	15	15
	Inductive	3		2	12	12
125 V dc	Resistive	0.4		0.4	0.6	0.6
	Inductive	0.2		0.2	0.6	0.6
250 V dc	Resistive	0.2		0.2	0.3	0.3
	Inductive	0.2		0.2	0.3	0.3

Notes: 1) Use BCAL blocks when applications require auxiliary contact block and alarm block fitted in the same circuit breaker.  
2) Not applicable for motor switching.

### Using BC and AL Blocks

BC, AL and BCAL blocks already come with built-in terminal blocks. These terminal blocks accept wires of 0.5 to 1.5 mm<sup>2</sup> (20 to 16 AWG) and tightening torque of 0.8 Nm (6.9 lb. inch).

### Wiring Diagrams



## Internal Accessories

### Shunt and Undervoltage Releases

Voltage releases function to trip remotely the circuit breaker. They are often used for remote emergency stop purpose.

#### BD Shunt Release

- When energized by a pulse or maintained signal of voltage, the shunt release trips the circuit breaker (trip position). The shunt release works from 70 to 110% of the rated voltage ( $0.70 \times U_n < U_e < 1.10 \times U_n$ )
- This release features a device to keep it not energized after the tripping pulse



#### BS Undervoltage Release

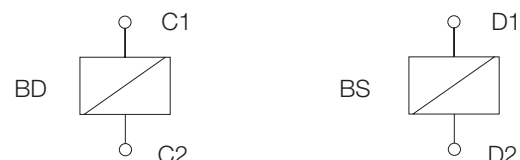
- Trips the circuit breaker when the voltage drops below 35% of the rated voltage ( $U_e < 0.35 \times U_n$ )
- When voltage is between 35 to 70% of the rate voltage, it may open the circuit breaker ( $0.35 \times U_n < U_e < 0.7 \times U_n$ )
- After the operation of BS release, circuit breaker can only be closed if supply voltage is above 85% of the rated voltage ( $U_e > 0.85 \times U_n$ )
- The BS undervoltage release along with an emergency stop push button makes possible the fail-safe operation of the circuit breaker

	Rated voltage (Ue)	Voltage code	Reference code					
			DWB160 / DWB250	Consumption	DWB400	DWA800	DWA1600	Consumption
BS undervoltage release	110/127 V ac	D60			BS DWB400 D60	BS D60 DWA800	BS D60 DWA1600	5 VA
	220/240 V ac	D66			BS DWB400 D66	BS D66 DWA800	BS D66 DWA1600	5 VA
	380-415 V ac	D70			BS DWB400 D70	BS D70 DWA800	BS D70 DWA1600	5 VA
	440-480 V ac	D74			BS DWB400 D74	BS D74 DWA800	BS D74 DWA1600	5 VA
	24 V dc	C03			BS DWB400 C03	BS C03 DWA800	BS C03 DWA1600	1 W
	48 V dc	C07			BS DWB400 C07	BS C07 DWA800	BS C07 DWA1600	1 W
	125 V dc	C13				BS C13 DWA800	BS C13 DWA1600	4 W
	24 V ac / V dc	E26	BS DWB160-250 E26	1.5 VA				
	48 V ac / V dc	E27	BS DWB160-250 E27	1.5 VA				
	60 V ac / V dc	E28	BS DWB160-250 E28	1.5 VA				
110/130 V ac / V dc	E10	BS DWB160-250 E10	1.5 VA					
220/250 V ac / V dc	E15	BS DWB160-250 E15	1.5 VA					
BD shunt release	24 V ac / V dc	E26	BD DWB160-250 E26	150 VA	BD DWB400 E26	BD E26 DWA800	BD E26 DWA1600	65 VA
	48 V ac / V dc	E27	BD DWB160-250 E27	150 VA	BD DWB400 E27	BD E27 DWA800	BD E27 DWA1600	65 VA
	60 V ac / V dc	E28	BD DWB160-250 E28	150 VA				
	110/130 V ac / V dc	E10	BD DWB160-250 E10	150 VA	BD DWB400 E10	BD E10 DWA800	BD E10 DWA1600	65 VA
	220/250 V ac / V dc	E15	BD DWB160-250 E15	150 VA	BD DWB400 E15	BD E15 DWA800	BD E15 DWA1600	65 VA

### Using BD and BS Releases

BD and BS releases already come with built-in terminal blocks. These terminal blocks accept wires of 0.5 to 1.5 mm<sup>2</sup> (20 to 16 AWG) and tightening torque of 0.8 Nm (6.9 lb.inch). After BD or BS releases have operated, the circuit breaker have to be reset before being closed again.

### Wiring Diagrams



### Possible Configurations of Internal Accessories

Internal accessory	DWB160				DWB250				DWB400				DWA800		DWA1600	
	2	1	2	1	2	1	2	1	2	1	2	1	3	3	3	3
Auxiliary contact	2	1	2	1	2	1	2	1	2	1	2	1	3	3	3	3
Alarm contact	0	1	0	1	0	1	0	1	0	1	0	1	1	1	1	1
Shunt release	1	1	0	0	1	1	0	0	1	1	0	0	1	0	1	0
Undervoltage release	0	0	1	1	0	0	1	1	0	0	1	1	0	1	0	1

## External Accessories

### Panel Door Rotary Operating Handles

The MR rotary handles allow external operation of a circuit breaker installed in an electrical panel. WEG has 2 options to better fit according to customer needs.

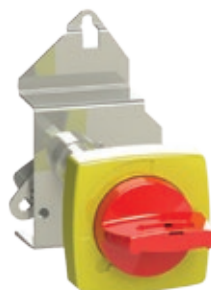
#### MR

- Degree of protection IP55
- When in ON position, panel door cannot be opened, unless a tool is used to bypass the panel door locking system, allowing thermometry of the panel
- Circuit breaker and panel door padlocking in OFF position using 1 to 3 padlocks. MR allows padlocks with diameters of Ø5...8 mm
- Handle shaft length can be adjusted up to 465 mm
- Available in 2 color versions: black handle/gray background and red handle/yellow background



#### MRX

- Higher degree of protection IP66
- When in ON position, panel door cannot be opened, unless a tool is used to bypass the panel door locking system, allowing thermometry of the panel
- Circuit breaker and panel door padlocking in OFF position using 1 to 3 padlocks. MRX allows padlocks with diameters of Ø4...8 mm
- Handle shaft length can be adjusted up to 130 mm
- Available in 2 color versions: black handle/gray background and red handle/yellow background



Rotary operating handle	Thermometry feature	Degree of protection	Shaft length (mm)	Handle length (mm)	Handle color / background color	Reference code				
						DWB160	DWB250	DWB400	DWA800	DWA1600
MR	Yes	IP55	130	45 / 80 <sup>1)</sup>	Black / gray	MR DWB160 130	MR DWB250 130	MR DWB400 130		
					Red / yellow	MR DWB160 130 E	MR DWB250 130 E	MR DWB400 130 E		
			166	125	Black / gray				MR166 DWA800	MR166 DWA1600
					Red / yellow				MR166E DWA800	MR166E DWA1600
			430	45 / 80 <sup>1)</sup>	Black / gray	MR DWB160 430	MR DWB250 430	MR DWB400 430		
					Red / yellow	MR DWB160 430 E	MR DWB250 430 E	MR DWB400 430 E		
			465	125	Black / gray				MR465 DWA800	MR465 DWA1600
					Red / yellow				MR465E DWA800	MR465E DWA1600
MRX	Yes	IP66	130	-	Black / gray	MRX DWB160 130				
					Red / yellow	MRX DWB160 130 E				
			430	-	Black / gray	MRX DWB160 430				
					Red / yellow	MRX DWB160 430 E				

Note: 1) DWB160 handle length of 45 mm / DWB250 and DWB400: handle length of 80 mm.



## External Accessories

### Direct Rotary Operating Handles

The MRI direct rotary handles allow direct and rotary operation of circuit breakers.



#### MRI

- Degree of protection IP20
- Padlocking in OFF position using 1 to 3 padlocks

Direct rotary operating handle	Thermometry feature	Degree of protection	Handle color/ Background color	Reference code		
				DWB400	DWA800	DWA1600
MRI	No	IP20	Black/Gray	MRI DWB400	MRI DWA800	MRI DWA1600

### Motor Operator

The AM motor operator makes possible complete remote operation of 400 A circuit breakers or switch-disconnectors.

#### AM

- Remote operation device
- Automatic and manual selection through front switch
- In automatic operation, the switching on and off control is done by electrical signals using pushbuttons. The maximum operation frequency is 60 operations/hour
- In manual operation, the AM motor operator can be only used locally using the switching lever
- After installing the AM device, the status of the circuit breaker is shown on the front of the motor operator
- Besides using the circuit breaker + AM operator for remote switching of motors and electrical circuits, the configuration of 2 x MCCB+AM creates an automatic changeover system (see CTM topic)
- The AM motor operator can be used in 3-pole and 4-pole 400 A frame size circuit breakers



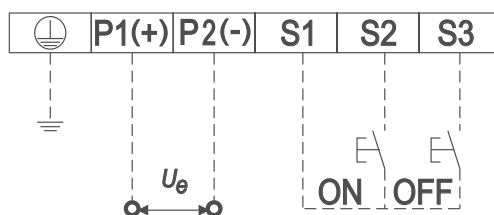
External accessory	Rated voltage - Ue	Consumption (W)	Reference code
			DWB400
Motor operator AM	24 V dc	10	AM DWB400 C03
	48-60 V dc	10	AM DWB400 C25
	110 V ac /dc	10	AM DWB400 E51
	230 V ac / 220 V dc	10	AM DWB400 E46

Note: Other voltages upon request.

### Using AM Motor Operator

AM device already comes with built-in terminal blocks. These terminal blocks accept tightening torque of 1.2 Nm (12.2 kgf.cm).

### Wiring Diagrams



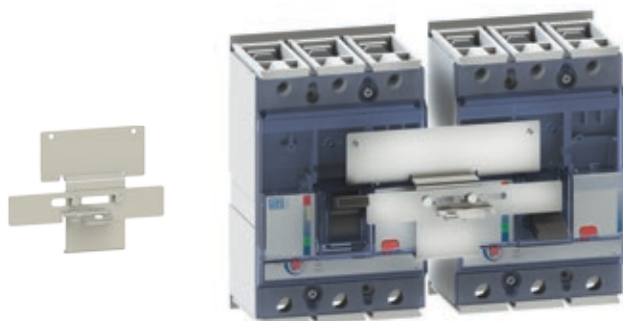
## External Accessories

### Changeover Devices

Manual-operated or automatic changeovers are used to make safe switching of two different circuits.

#### BLIM Mechanical Interlock

- Provides safe operation in a manual-operated changeover system
- Makes the mechanical interlock of 2 circuit breakers of the same frame size, preventing both MCCBs to be in ON position at the same time
- It can be padlocked in 2 positions: MCCB1 ON and MCCB2 OFF, MCCB1 OFF and MCCB2 ON
- BLIM allows padlocks with diameters of Ø4...8 mm
- For DWB160 and DWB250, it is possible to interlock 3 MCCBs side-by-side using 2 BLIMs
- Also available for 4-pole circuit breakers



External accessory	MCCB	Reference code
Mechanical interlock BLIM	DWB160 3P	BLIM DWB160 3P
	DWB160 4P	BLIM DWB160 4P
	DWB250 3P	BLIM DWB250 3P
	DWB250 4P	BLIM DWB250 4P
	DWB400 3P	BLIM DWB400 3P
	DWB400 4P	BLIM DWB400 4P
	DWA800 3P / DWA1600 3P	BLIM DWA800-1600
	DWA800 4P / DWA1600 4P	BLIM DWA800-1600 4P

#### CTM Automatic Changeover

- The most widely used changeover system, no human-interference is required
- Remote operation is made by AM motor operators
- The changeover system may be built between 2 MCCBs, 2 switch-disconnectors or 1 MCCB and 1 switch-disconnector
- The CTM ensemble is also comprised 2 AM motor operators + 2 BC2 contact blocks + mounting plate + rear mechanical interlock device
- To prevent erroneous manual operation in case of a electrical fault, the CTM features the mechanical interlock

#### Product Selection

Type of protection		Reference		
Circuit breaker / Switch-disconnector left	Circuit breaker / Switch-disconnector right	24 V dc	110 V ac/dc	230 V ac/ 220 V dc
Distribution	Generator	CTM400- ●▲DA●▲GA3P-C03-2000	CTM400- ●▲DA●▲GA3P-E51-2000	CTM400- ●▲DA●▲GA3P-E46-2000
Distribution	None <sup>1)</sup>	CTM400- ●▲DA▲I3P-C03-2000	CTM400- ●▲DA▲I3P-E51-2000	CTM400- ●▲DA▲I3P-E46-2000
Distribution	Distribution	CTM400- ●▲DA●▲DA3P-C03-2000	CTM400- ●▲DA●▲DA3P-E51-2000	CTM400- ●▲DA●▲DA3P-E46-2000
None <sup>1)</sup>	None <sup>1)</sup>	CTM400- ▲I▲I3P-C03-2000	CTM400- ▲I▲I3P-E51-2000	CTM400- ▲I▲I3P-E46-2000
Generator	Generator	CTM400- ●▲GA●▲GA3P-C03-2000	CTM400- ●▲GA●▲GA3P-E51-2000	CTM400- ●▲GA●▲GA3P-E46-2000
Generator	None <sup>1)</sup>	CTM400- ●▲GA▲I3P-C03-2000	CTM400- ●▲GA▲I3P-E51-2000	CTM400- ●▲GA▲I3P-E46-2000

Replace ▲ by	Rated current
200	160...200
250 <sup>1)</sup>	200...250
320	250...320
400 <sup>1)</sup>	320...400

Replace ● by	Short-circuit breaking capacity 380/415 V ac
N	35 kA
H	65 kA

Note: 1) The rated currents available for switch-disconnectors (without trip unit) are 250 or 400 A.

## External Accessories

### Accessories for Connection and Installation

Depending on the application and local standards, the MCCB may be installed in several positions in a panel and connected through busbars or cables. Given these requirements, the DWA and DWB range of circuit breakers have the specific connection accessories to comply with.

#### BE Straight Extension Bars (Terminal Tabs)

- Extends the MCCB busbars for connection using busbars or cables with ring terminals
- Also available for 4-pole circuit breakers



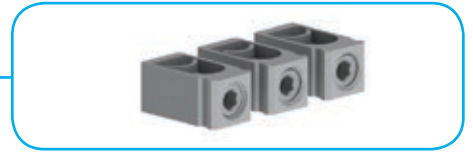
#### CT 90° Extension Bars (Terminal Tabs)

- Allows direct connection using busbars or cables from the back side of the MCCB
- CT is supplied with 3 pieces
- Also available for 4-pole circuit breakers



#### PC Round Cable Terminals (Lugs)

- Allows the MCCB for connection using cables
- PC is supplied with 3 pieces
- Also available for 4-pole circuit breakers
- Built-in for DWB160 models



#### BFR DIN Rail Base

- Quick assembly of DWB160 and DWB250 on 35 mm DIN rails
- Fast replacement when panel is under maintenance



External accessory	MCCB	Supplied with (units)	Maximum cross-section (mm <sup>2</sup> )	Reference code
Straight extension busbar BE	DWB160 3P	3	See installation and connections on page 6.	BE DWB160 3P
	DWB160 4P	4		BE DWB160 4P
	DWB250 3P	3		BE DWB250 3P
	DWB250 4P	4		BE DWB250 4P
	DWB400 3P	3		BE DWB400 3P
	DWB400 4P	4		BE DWB400 4P
	DWA800 3P	3		BE DWA800
	DWA800 4P	4		BE DWA800-4P
	DWA1600 3P (up to 1250 A)	3		BE DWA1600-1250
	DWA1600 4P (up to 1250 A)	4		BE DWA1600-1250-4P
90° extension bar CT	DWA1600	3	See installation and connections on page 6.	BE DWA1600
	DWA1600-4P	4		BE DWA1600-4P
	DWB160 3P	3		CT DWB160 3P
	DWB160 4P	4		CT DWB160 4P
	DWB250 3P	3		CT DWB250 3P
	DWB250 4P	4		CT DWB250 4P
	DWB400 3P	3		CT DWB400 3P
	DWB400 4P	4		CT DWB400 4P
Round cable terminal PC	DWA800 3P / 4P	3	120 (1 cable) 120 (1 cable) 240 (1 cable) 240 (1 cable) 240 (2 cables) 240 (4 cables)	CT DWA800
	DWA1600 3P / 4P	3		CT DWA1600
	DWB250 3P	3		PC DWB250 3P
	DWB250 4P	4		PC DWB250 4P
	DWB400 3P	3		PC DWB400 3P
	DWB400 4P	4		PC DWB400 4P
DIN rail base BFR <sup>1)</sup>	DWA800	3	PC DWA800	
	DWA1600	3	PC DWA1600	
DIN rail base BFR <sup>1)</sup>	DWB160 3P	1	N/A	BFR DWB160
	DWB250 3P	1	N/A	BFR DWB250

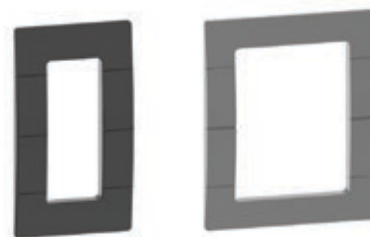
Note: 1) Only for DWB160B, DWB160N, DWB250B and DWB250N.

## External Accessories

### Escutcheons, Padlocking devices and Phase Barriers

#### MP Escutcheons

- Escutcheons are frames for cutouts in panel doors
- It makes possible the external switching of the MCCB through the front door when the circuit breakers is installed close to the panel door, maintaining the degree of protection
- Degree of protection IP40
- See section Dimensions for cutout details



External accessory	MCCB	Reference code
Escutcheon MP	DWB160 3P / 4P	MP DWB160
	DWB250 3P / 4P	MP DWB250
	DWB400 3P / 4P	MP DWB400
	DWA800 / DWA1600 - 3P / 4P	MP DWA800-1600

#### PLW Padlocking Device

- The PLW is a fixed-type device that is installed on the front of the MCCB ensuring the MCCB locking in OFF position
- It can be padlocked using 1 to 3 padlocks. PLW allows padlocks with diameters of Ø4...8 mm

External accessory	MCCB	Reference code
Padlocking device PLW	DWA160 4P	PL DWB160 3P
	DWB160 3P	PL DWB160 4P
	DWB250 3P / 4P	PL DWB250
	DWB400 3P / 4P	PL DWB400
	DWA800 / DWA1600 - 3P / 4P	PLW800-1600



#### PB Phase Barriers

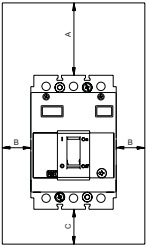
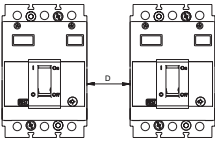
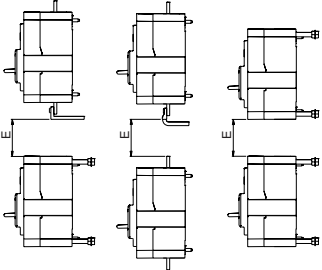
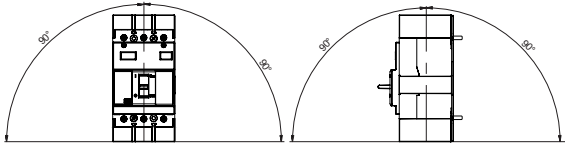
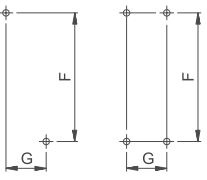
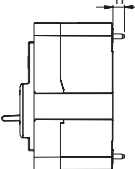
- The circuit breakers are supplied with phase barriers for the line side, but depending on the application, additional phase barriers are required on the load side (see page 30)

External accessory	MCCB	Supplied with (units)	Reference code
Phase Barrier PB	DWB160 3P / DWB250 3P	2	PB DWB160-250 3P
	DWB160 4P / DWB250 4P	3	PB DWB160-250 4P
	DWB400 3P	2	PB DWB400 3P
	DWB400 4P	3	PB DWB400 4P



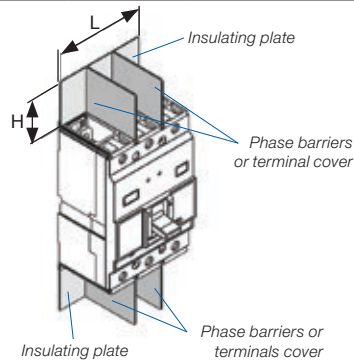
# Installation and Connections

## Minimum Mounting Distances

	DWB160	DWB250	DWB400	DWA800	DWA1600
<p>Recommended mounting distances (mm)</p> 	A: 50 B: 20 C: 20	A: 50 B: 20 C: 20	A: 70 B: 30 C: 30	A: 100 B: 30 C: 30	A: 100 B: 30 C: 30
<p>Recommended distances between circuit breakers for side by side assembly (mm)</p> 	D: 10	D: 10	D: 0	D: 0	D: 0
<p>Recommended distances between circuit breakers for vertical assembly (mm)</p> 	E: 90	E: 150	E: 180	E: 200	E: 200
<p>Mounting position</p> 					
<p>Drilling for fixing the circuit breakers</p>  <p>DWB160/DWB250    DWB400/DWA800/DWA1600</p>	F: 100 (DWB160B/N) 121 (DWB160L)	F: 124 (DWB250B/N) 149 (DWB250L)	F: 199	F: 230	F: 265
	G: 25	G: 35	G: 35	G: 70	G: 70
<p>Dimensions of fixing screw to the plate (mm)</p>	M4x70 (2 pieces)	M4x70 (2 pieces)	M5x50 (4 pieces)	M5x60 (4 pieces)	M8x140 (4 pieces)
<p>Surpass of the fixing screw in relation to the circuit breaker (mm)</p> 	H: 10	H: 8	H: 15	H: 15	H: 18
<p>Tightening torque - fixing screw (Nm)</p>	4	4	5	5	12

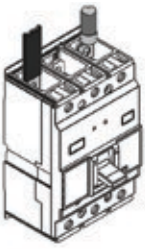
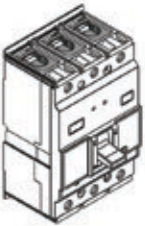
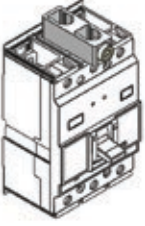
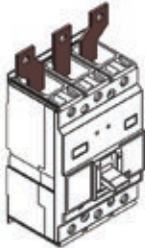
# Installation and Connections

## Phase Barriers, Terminal Covers and Insulating Plates



Notes:  
 1) Supplied with the molded case circuit breaker.  
 2) Minimum characteristic requirements of the material to be used as insulating plate:  
 - Dielectric strength  $\geq 12$  kV/mm.  
 - Material not propagating flame.  
 - Recommended material: phenolite, polycarbonate.  
 3) Install as picture on the left.

$W \geq$  width of the circuit breaker.  
 $L \geq$  length of the terminal cover or phase barrier of the circuit breaker.

Connection type	Phase barriers or terminal covers <sup>1)</sup>				Insulating plates <sup>1) 2) 3)</sup>			
	Ue < 500 V		Ue $\geq$ 500 V		Ue < 500 V		Ue $\geq$ 500 V	
	Line	Load	Line	Load	Line	Load	Line	Load
 Direct to the circuit breaker terminal	Mandatory	Optional	Mandatory		Optional		Mandatory	
 Using lugs	Mandatory	Optional	Mandatory		Optional		Mandatory	
 Using extended lugs	Mandatory		Mandatory		Mandatory		Mandatory	
 Using extension bars	Mandatory		Mandatory		Mandatory		Mandatory	

# Installation and Connections

## Thermal Dissipation

Distribution MCCB																
Rated current - In	A	16	20	25	32	40	50	63	70	80	90	100	110	125	150	160
Power loss	W/pole															
	DWB160_D	1	1	2	4	4	5	8	4	5	6	7	7	10	11	12
	DWB160L_D	1	1	2	4	4	6	10	5	7	9	11	12	15		
Rated current - In	A	100	125	160	200	250	320	400	500	630	800	1000	1250	1600		
Power loss	W/pole															
	DWB250_D	14	19	17	14	20										
	DWB250L_D	17	24	25	26											
	DWB400_D	9	9	14	14	20	19	30								
	DWA800						19	30	38	47	47					
	DWA1600												51	96		
Motor branch circuit protection MCCB																
Rated current - In	A	25	32	40	50	65	80	95								
Power loss	W/pole															
	DWB160_M	2	4	4	5	6	7	7								
	DWB160L_M	2	4	4	6	8	9	9								
Rated current - In	A	80	95	105	125	150	185	200	250	320	420	500	700	800	1000	
Power loss	W/pole															
	DWB250_M	2	3	3.5	5	7	10.5	12								
	DWB250L_M	4	5.5	7	9.5	13.5	21	24								
	DWB400_M					14	14		20	19						
	DWM800											32	38			
	DWM1600												18	21	33	
Generator protection MCCB																
Rated current - In	A	55	75	85	105	125	140	160								
Power loss	W/pole															
	DWB160_G	7	5	6	7	10	11	12								
Rated current - In	A	100	125	160	200	250	320	400	500	630	800	1250	1600			
Power loss	W/pole															
	DWB250_G	14	19	17	14	20										
	DWB400_G				14	20	19	30								
	DWG800						19	30	38	47	47					
	DWA1600											51	96			
Switch-disconnectors																
Rated current - In	A	160	250	400	630	800	1000	1250	1600							
Power loss	W/pole															
	IWB160	12														
	IWB250		20													
	IWB400		20	25												
	IWA800				40	40										
	IWA1600						33	51	96							

## Deratings

Temperature derating	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	55 °C	60 °C
DWB160	1.2	1.16	1.128	1.105	1.056	1.048	1.032	1	0.984	0.944	0.912
DWB250	1.18	1.16	1.128	1.104	1.076	1.048	1.024	1	0.976	0.94	0.9
DWB400											
DWA800	1.19	1.167	1.143	1.116	1.087	1.06	1.032	1	0.968	0.941	0.913
DWA1600	1.13	1.115	1.1	1.08	1.06	1.04	1.02	1	0.98	0.966	0.95

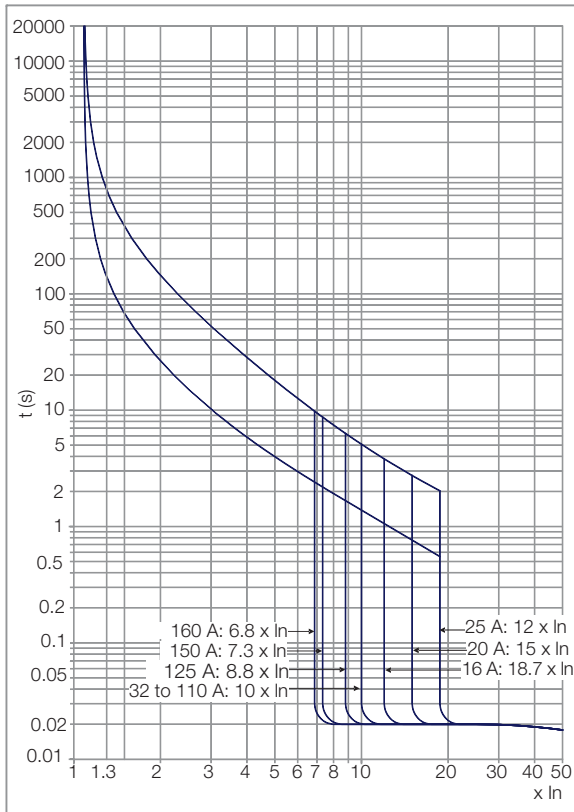
Altitude derating		2000 m	3000 m	4000 m	5000 m
Rated current - In	%	100	98	93	90
Rated operational voltage - Ue	V	800 <sup>1)</sup>	600	500	400

Note: 1) For DWA MCCBs the rated operational voltage is 690 V.

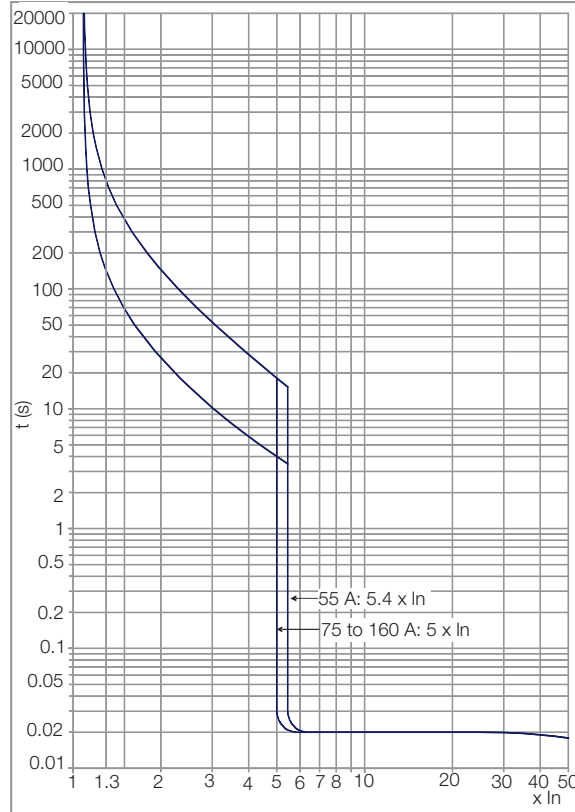
# Characteristic Curves

## Tripping Curves of DWB160

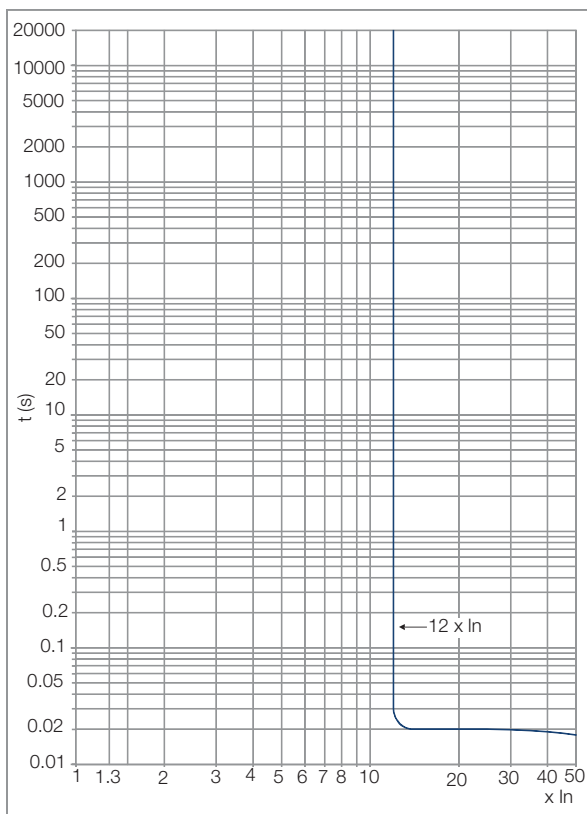
**DWB160\_D**



**DWB160\_G**



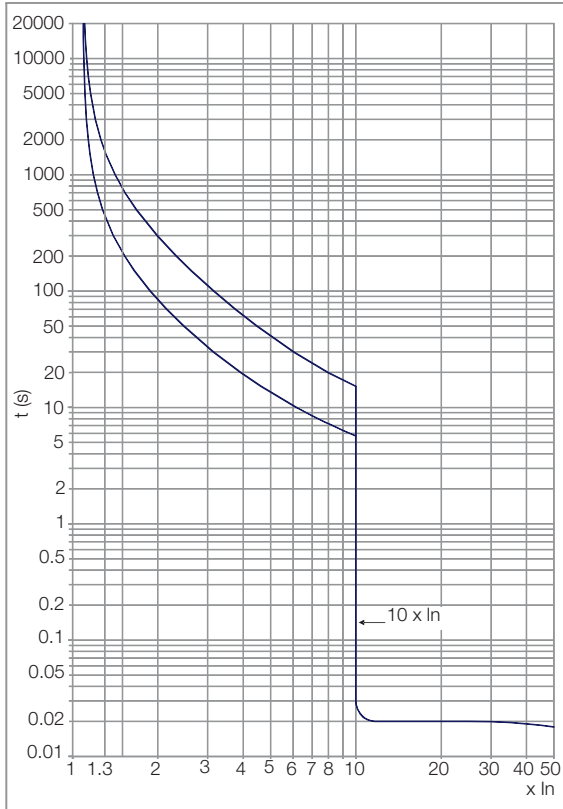
**DWB160\_M**



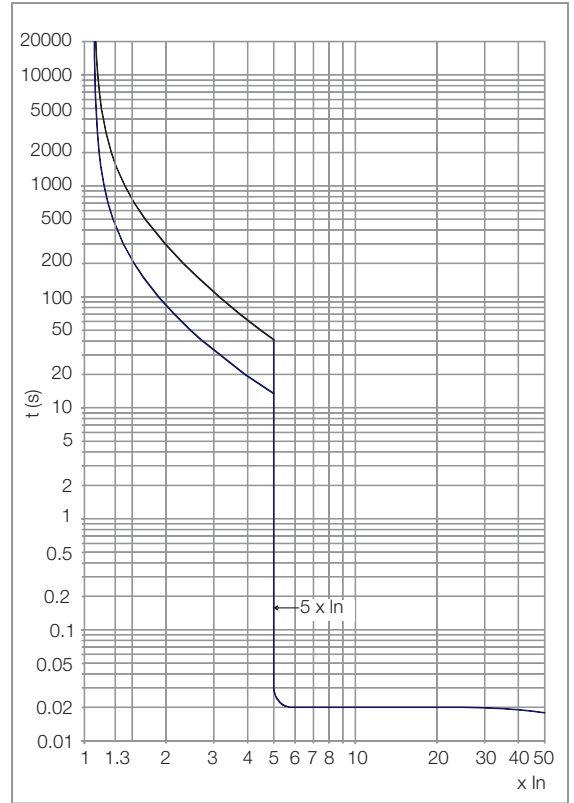
# Characteristic Curves

## Tripping Curves of DWB250

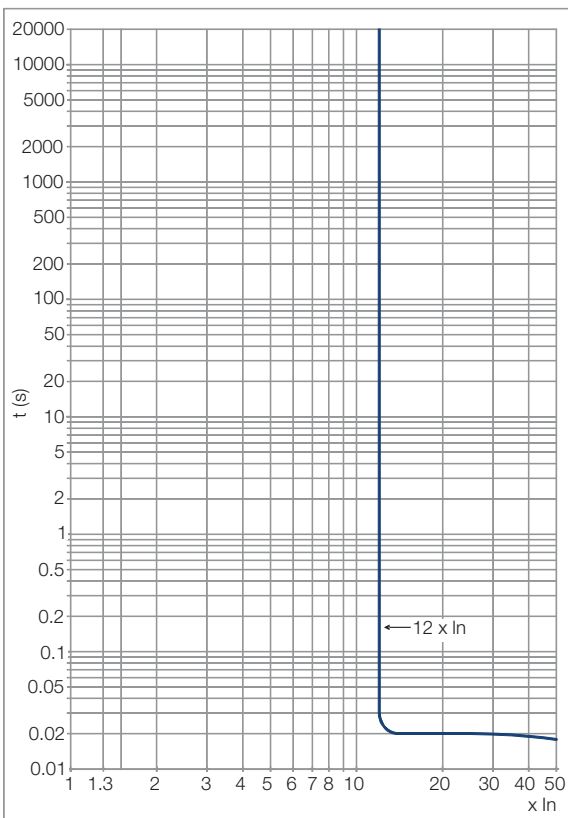
**DWB250\_D**



**DWB250\_G**



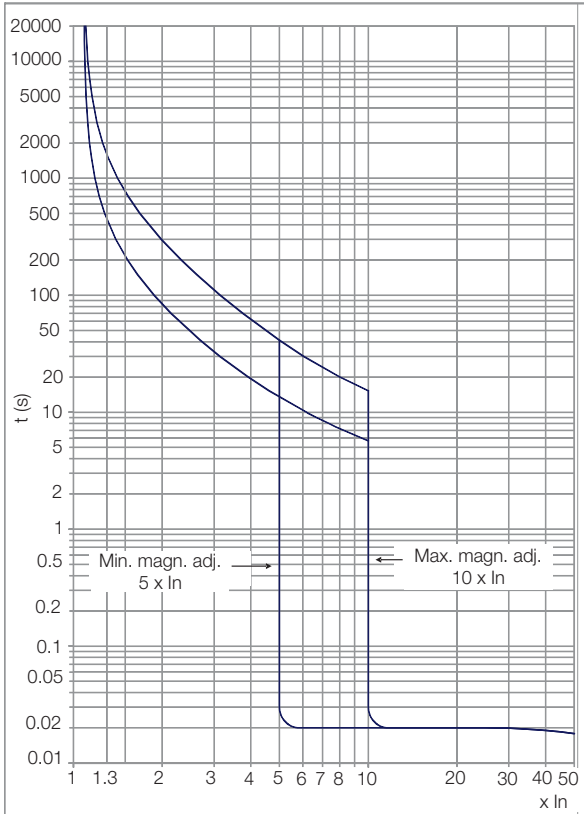
**DWB250\_M**



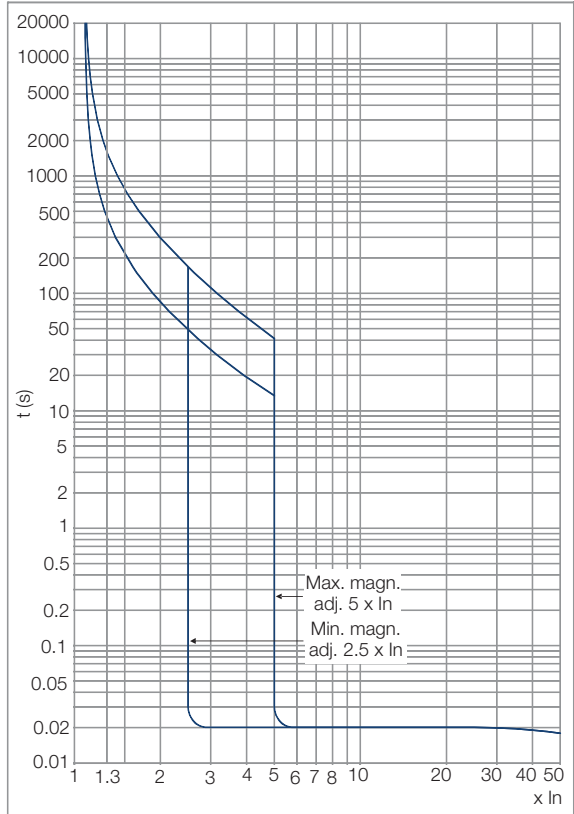
# Characteristic Curves

## Tripping Curves of DWB400

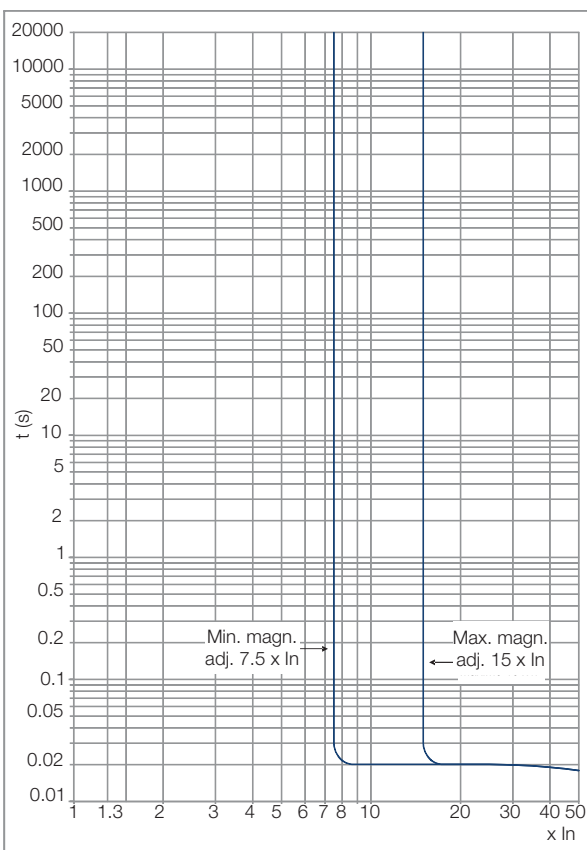
**DWB400\_D**



**DWB400\_G**



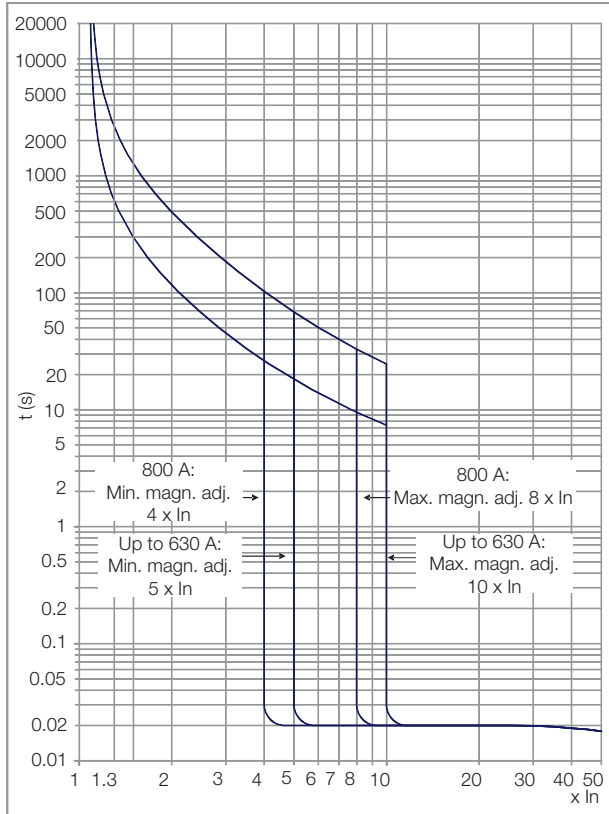
**DWB400\_M**



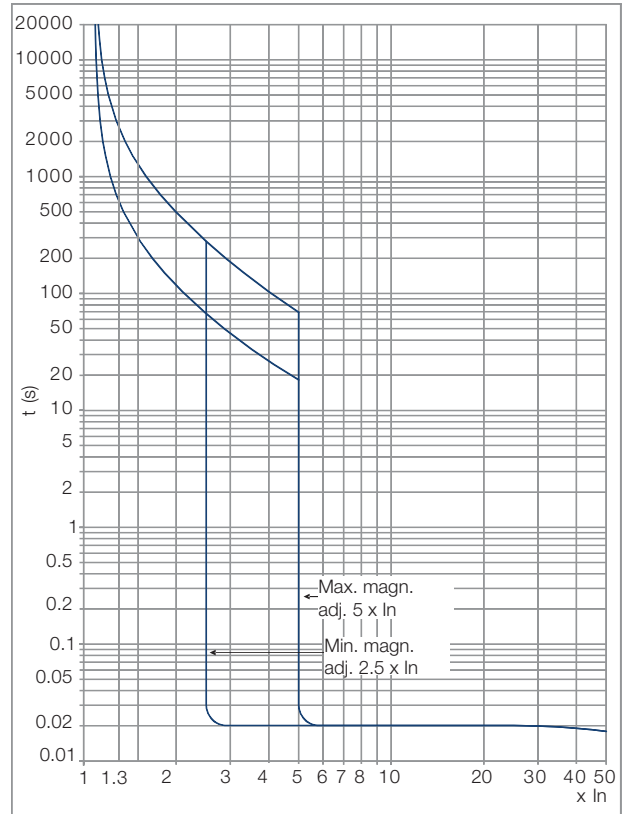
# Characteristic Curves

## Tripping Curves of DW800

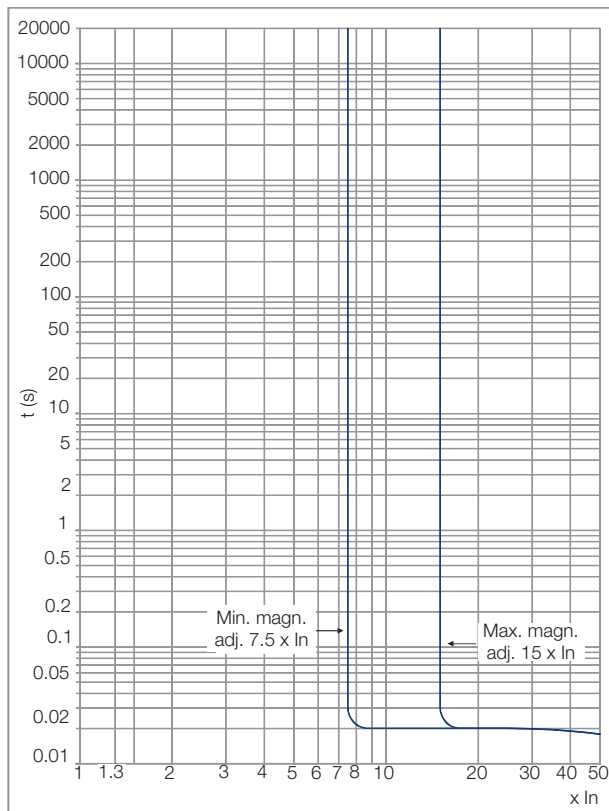
**DWA800**



**DWG800**



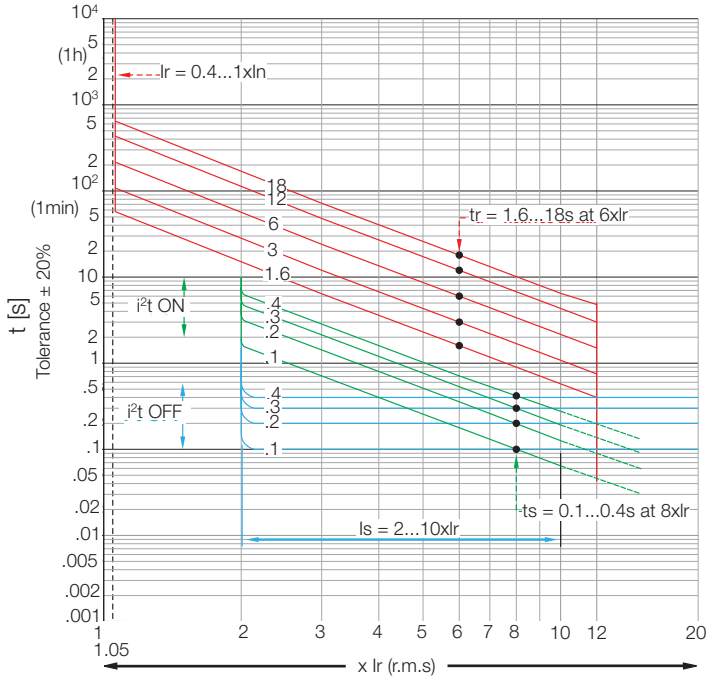
**DWM800**



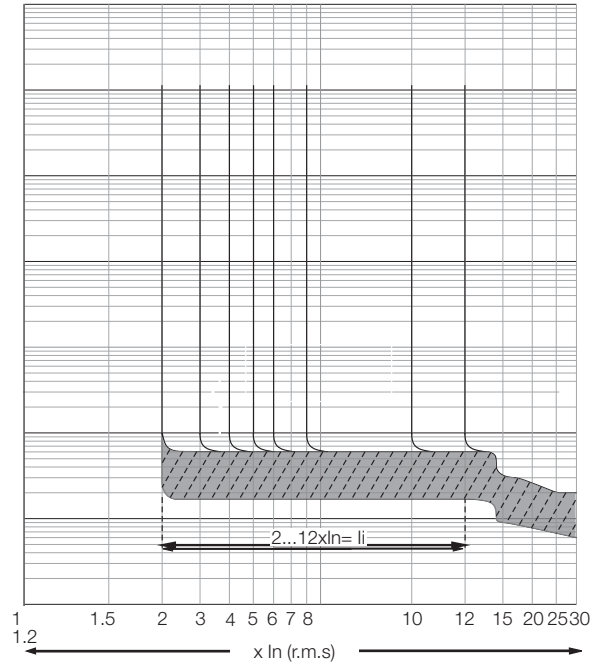
# Characteristic Curves

## Tripping Curves of DW1600

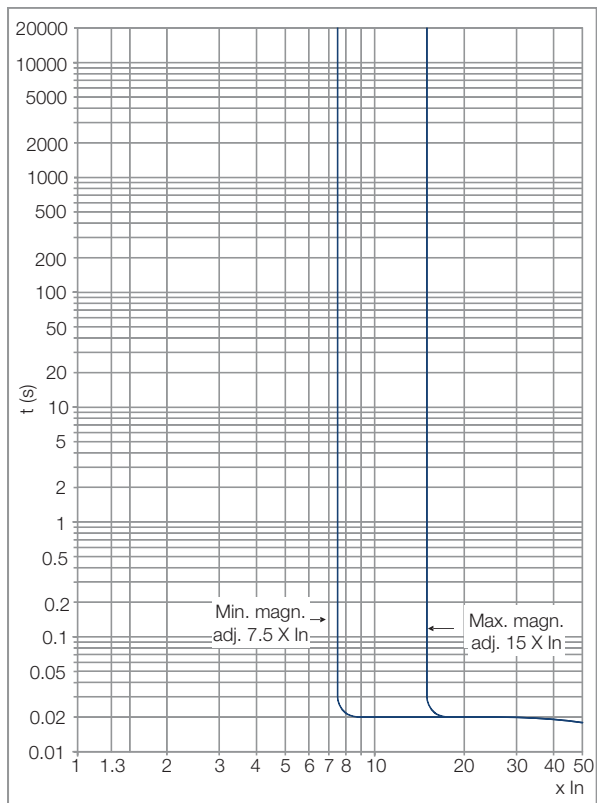
**DWA1600 - Long and Short Protection**



**DWA1600 - Instantaneous Protection**



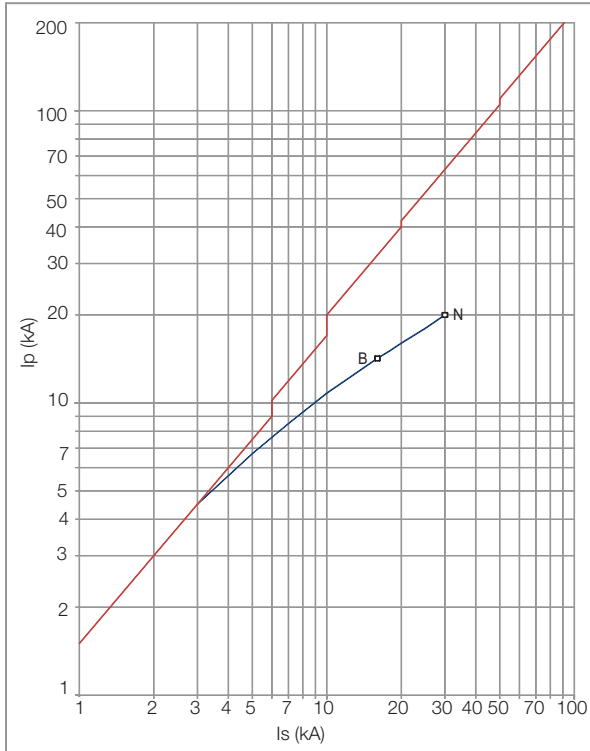
**DWM1600**



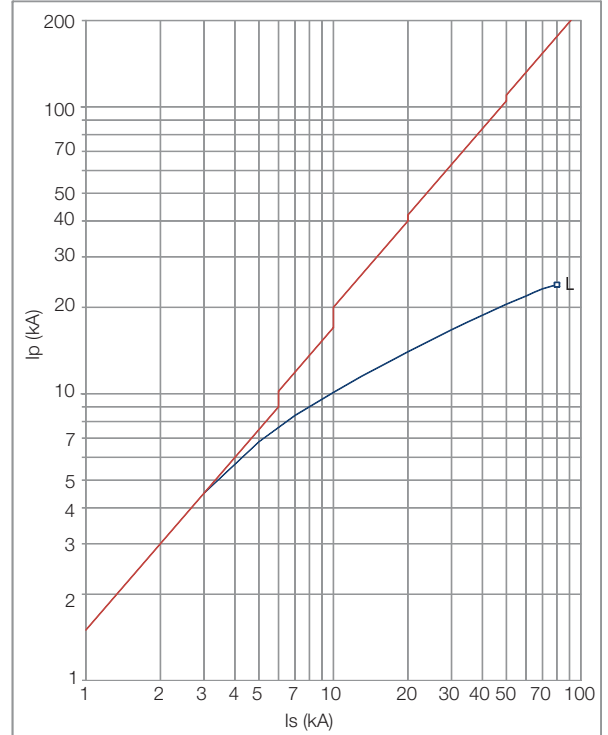
# Characteristic Curves

## Short-Circuit Limiting Curves @ 380/415 V ac

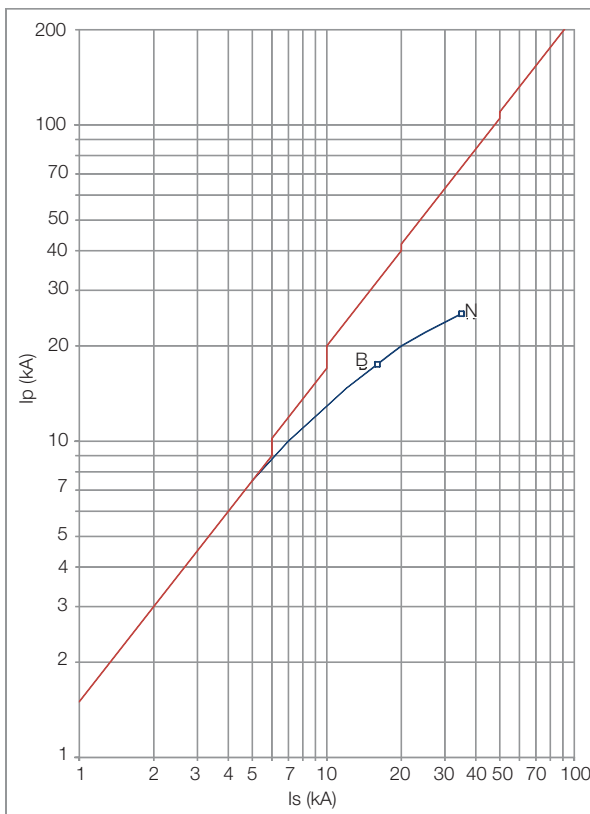
**DWB160 B/N**



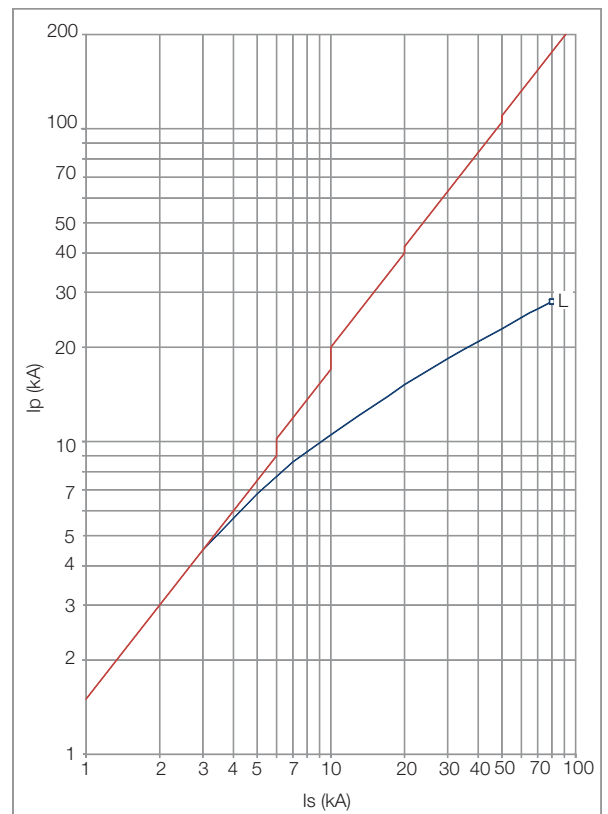
**DWB160 L**



**DWB250 B/N**



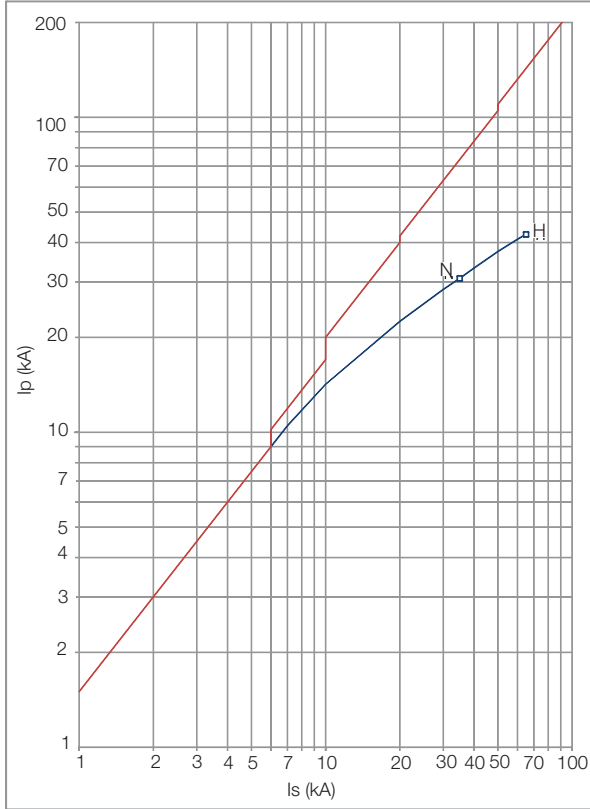
**DWB250 L**



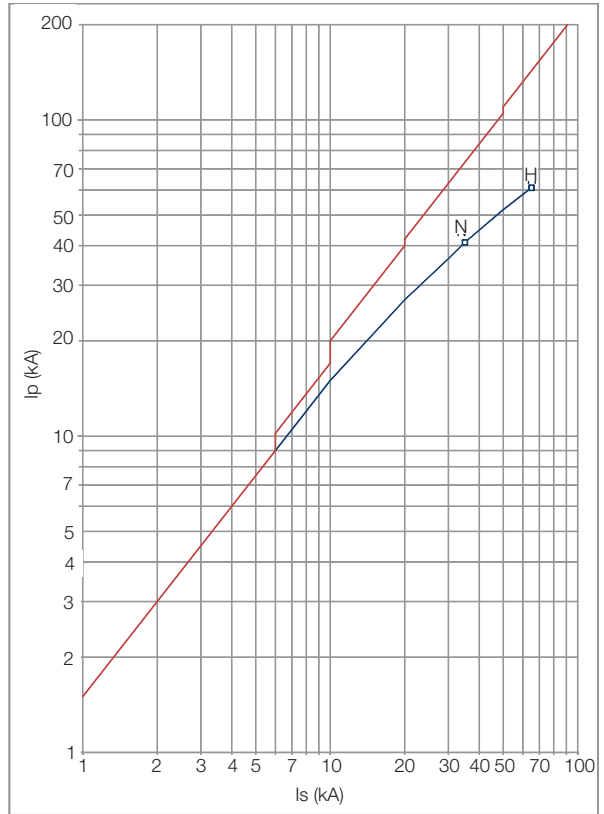
# Characteristic Curves

## Short-Circuit Limiting Curves @ 380/415 V ac

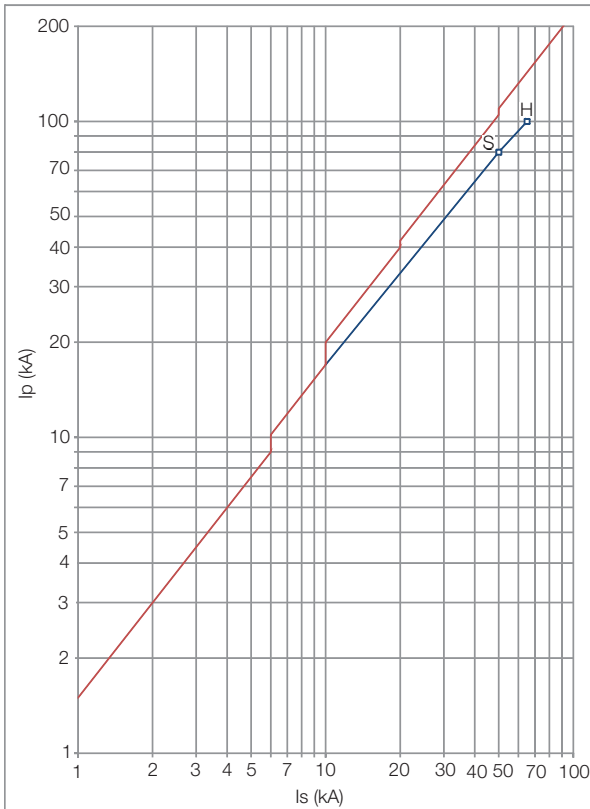
**DWB400**



**DWA800**



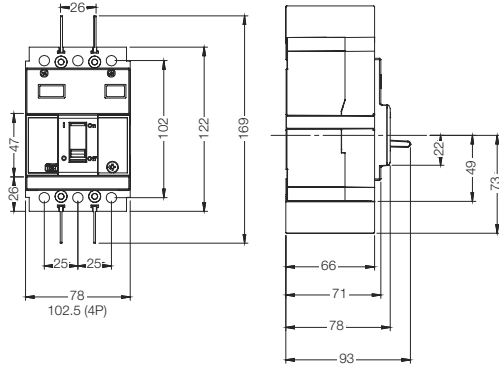
**DWA1600**



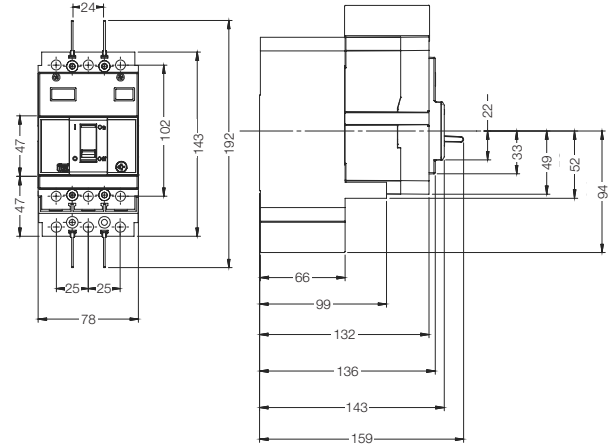
# Dimensions (mm)

## Circuit Breakers

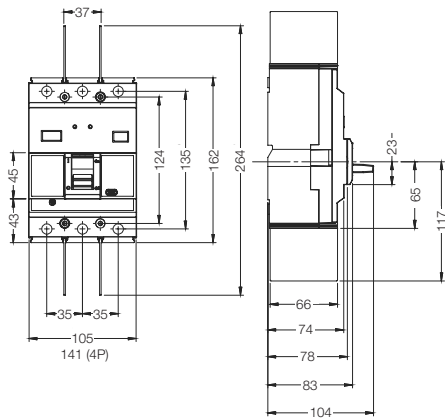
**DWB160 B/N / IWB160**



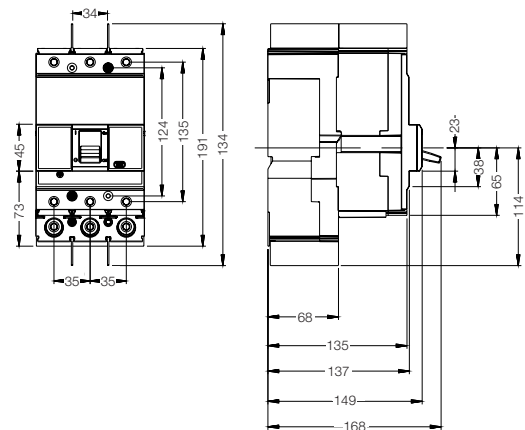
**DWB160 L**



**DWB250 B/N / IWB250**



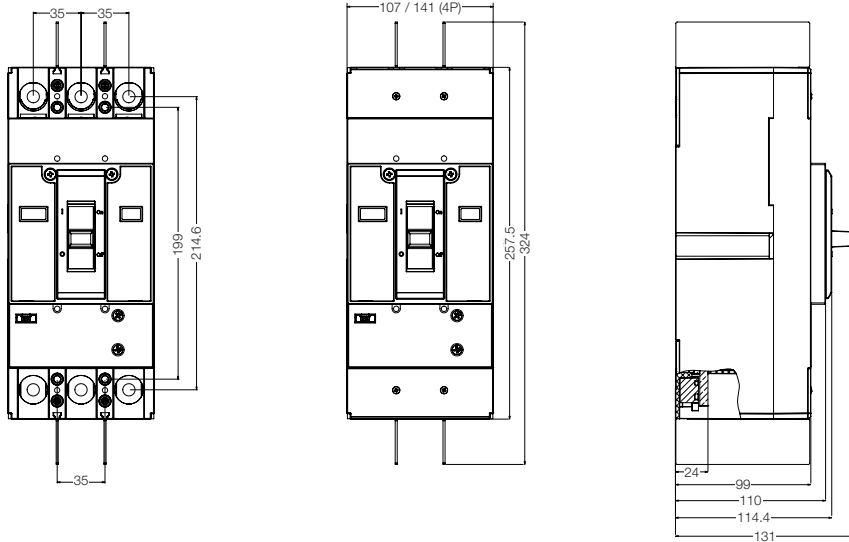
**DWB250 L**



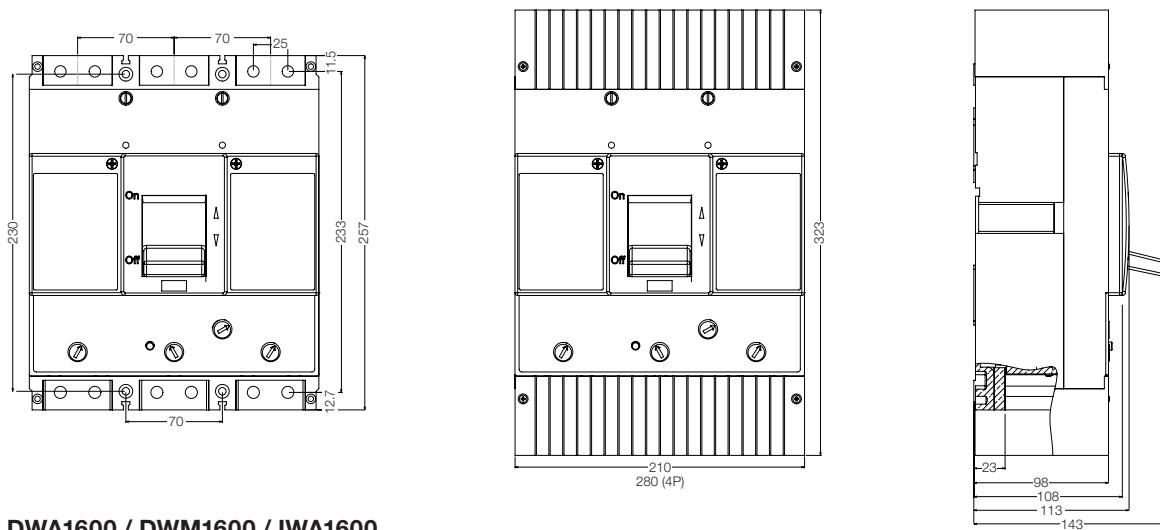
# Dimensions (mm)

## Circuit Breakers

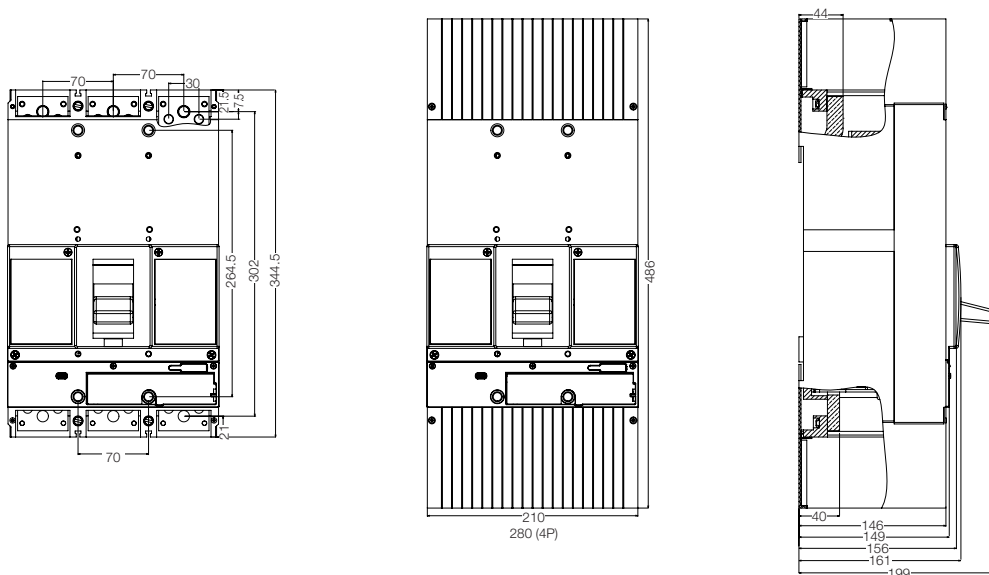
### DWB400 / IWB400



### DWA800 / DWG800 / DWM800 / IWA800



### DWA1600 / DWM1600 / IWA1600

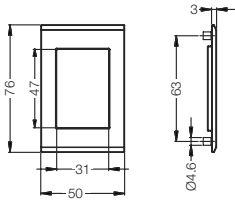


## Dimensions (mm)

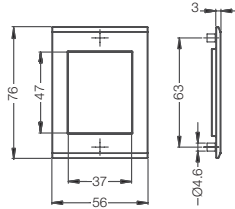
### Accessories

#### MP - Escutcheons

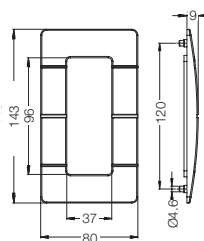
MP DWB160



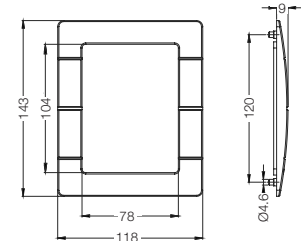
MP DWB250



MP DWB400

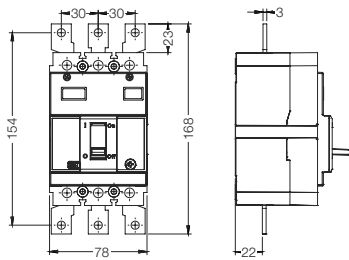


MP DWA800-1600

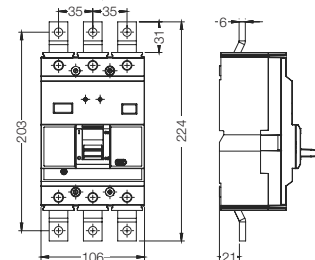


#### BE - Extension Bars

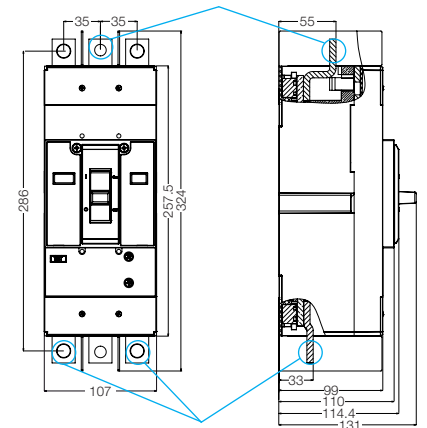
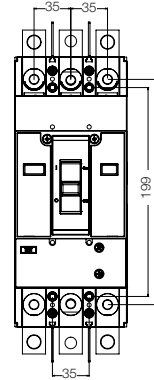
Frame 160 3P +  
BE DWB160 3P



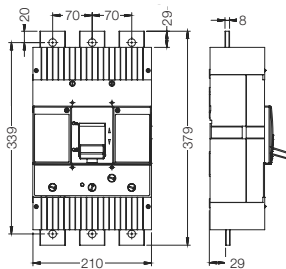
Frame 250 3P +  
BE DWB250 3P



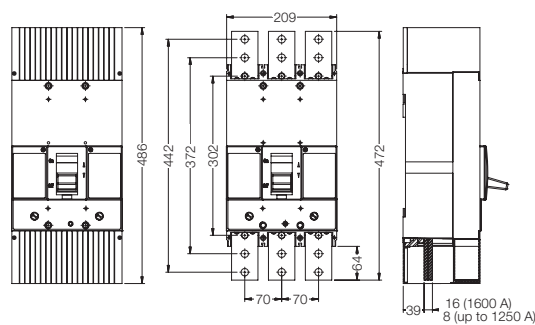
Frame 400 3P +  
BE DWB400 3P



Frame 800 3P +  
BE DWA800



Frame 1600 3P +  
BE DWA1600

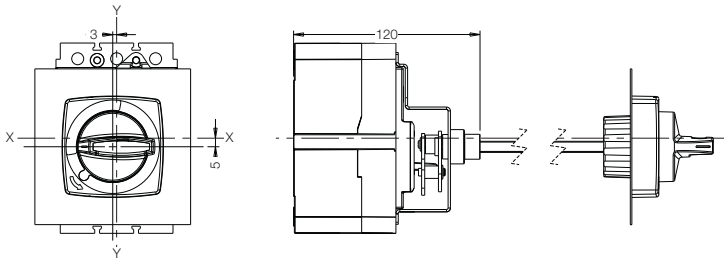


## Dimensions (mm)

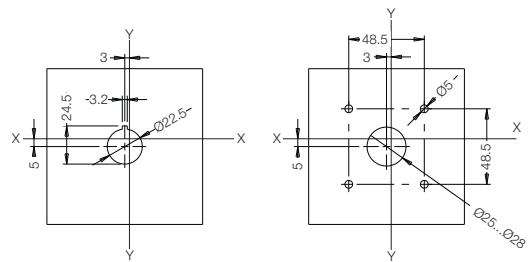
### Accessories

#### MR - Panel Door Rotary Operating Handles

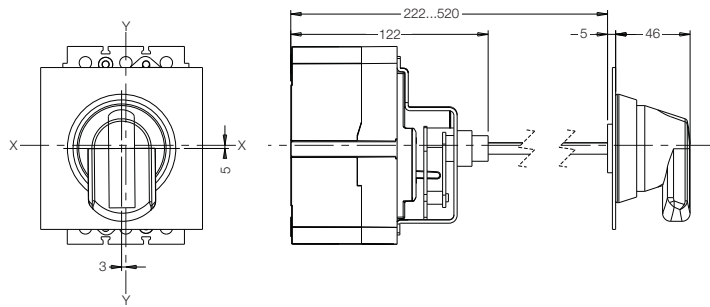
Frame 160 3P/4P + MRX DWB160



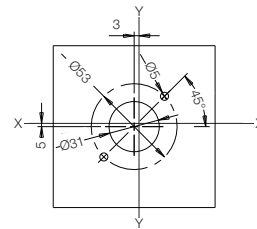
Panel Door Cutout



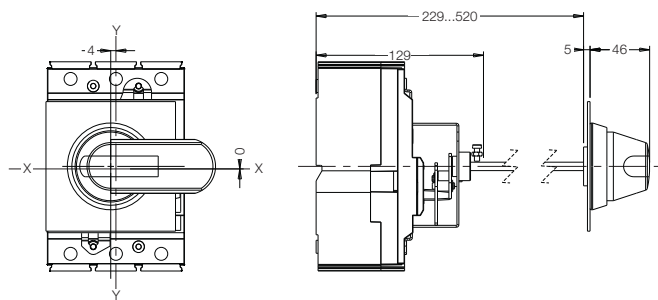
Frame 160 3P/4P + MR DWB160



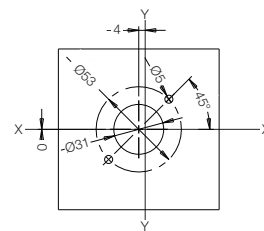
Panel Door Cutout



Frame 250 3P/4P + MR DWB250



Panel Door Cutout

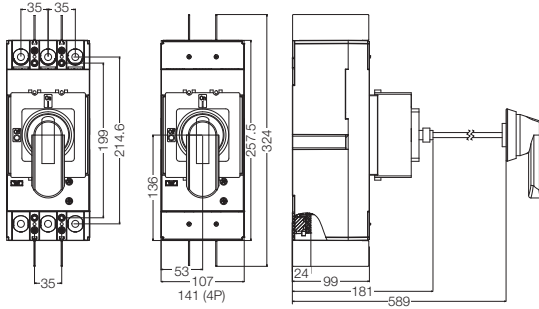


## Dimensions (mm)

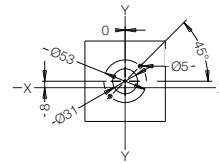
### Accessories

#### MR - Panel Door Rotary Operating Handles

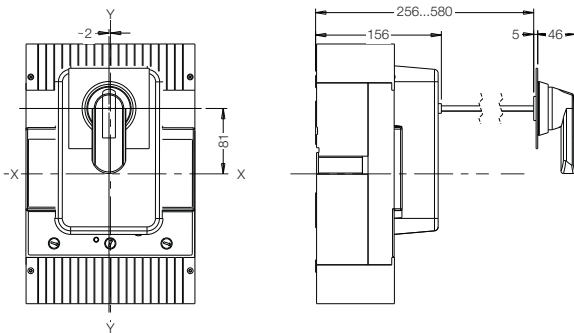
##### Frame 400 3P/4P + MR DWB400



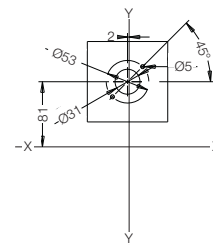
##### Panel Door Cutout



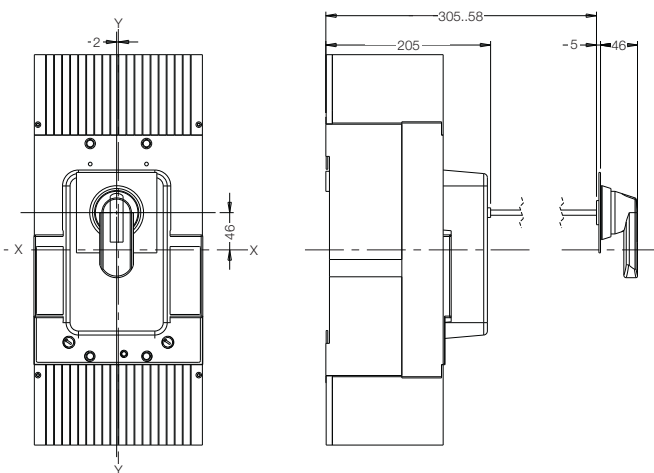
##### Frame 800 3P/4P + MR DWA800



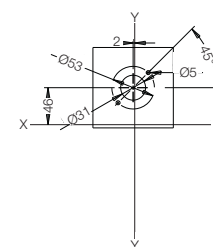
##### Panel Door Cutout



##### Frame 1600 3P/4P + MR DWA1600



##### Panel Door Cutout

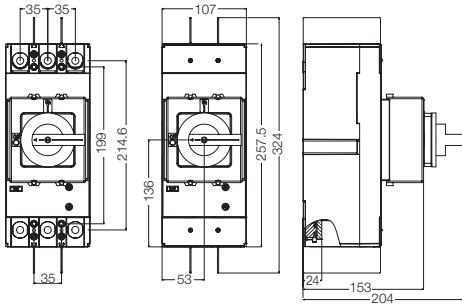


## Dimensions (mm)

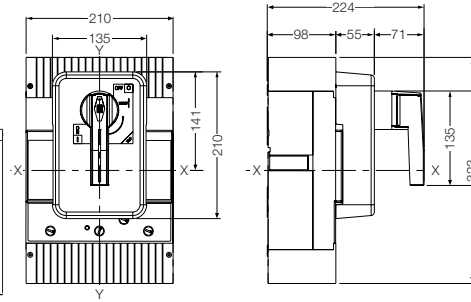
### Accessories

#### MRI - Direct Rotary Operating Handles

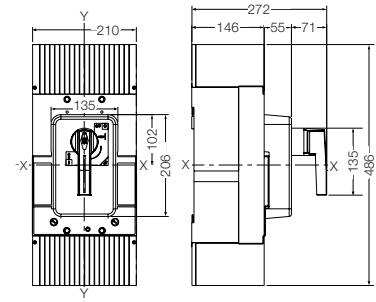
Frame 400 3P + MRI DWB400



Frame 800 3P + MRI DWA800

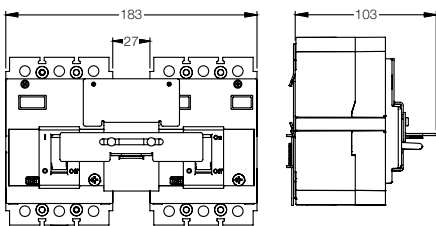


Frame 1600 3P + MRI DWA1600

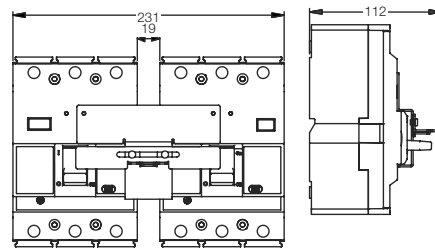


#### BLIM - Mechanical Interlock

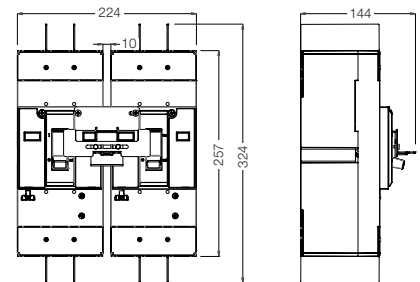
Frame 160 3P + BLIM DWB160 3P



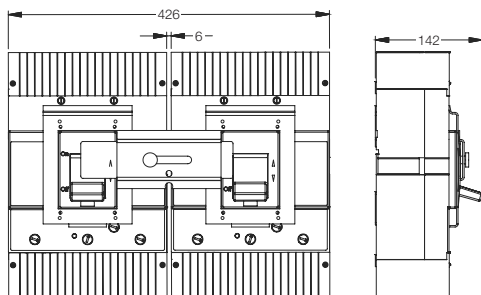
Frame 250 3P + BLIM DWB250 3P



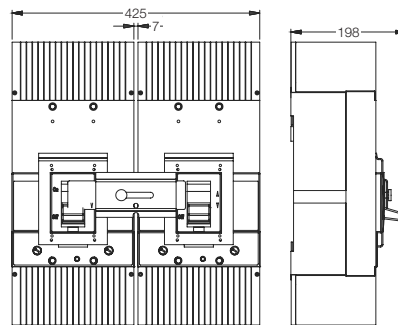
Frame 400 3P + BLIM DWB400 3P



Frame 800 3P + BLIM DWA800-1600



Frame 1600 3P + BLIM DWA800-1600

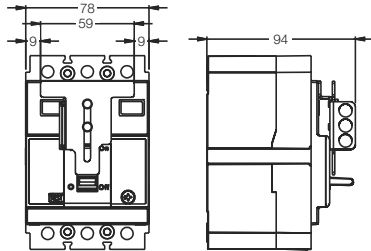


## Dimensions (mm)

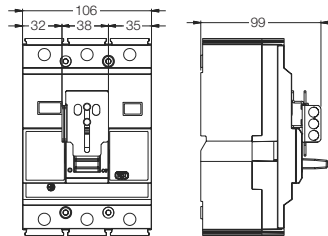
### Accessories

#### PLW - Padlocking Device

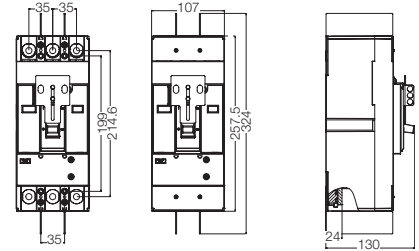
Frame 160 3P + PLW DWB160 3P



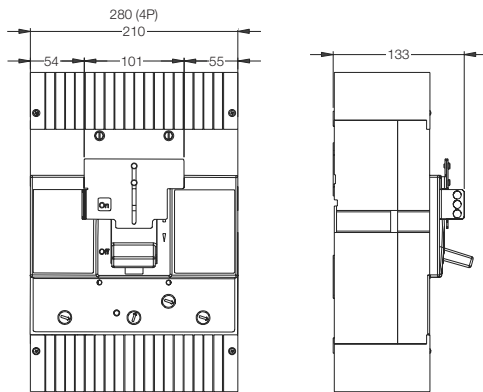
Frame 250 3P + PLW DWB250



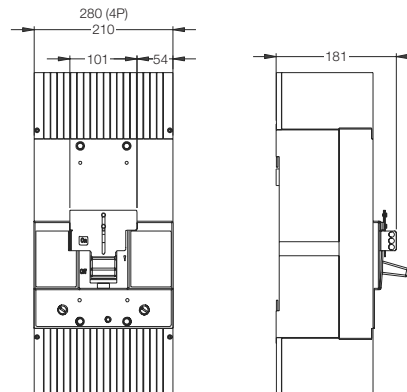
Frame 400 3P + PLW DWB400



Frame 800 + PLW800-1600

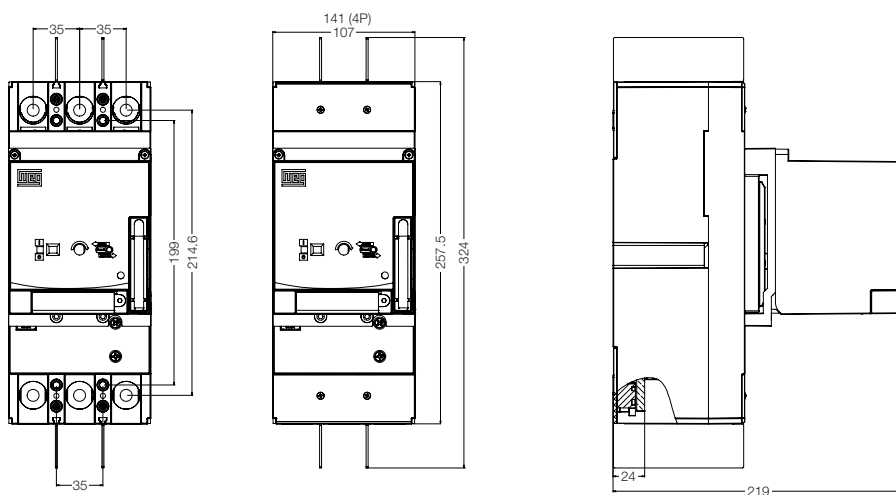


Frame 1600 + PLW800-1600



#### AM - Motor Operator

Frame 400 3P/4P + AM DWB400





Industrial systems enhancing productivity.



# The Global Solution with Electric Machines and Automation for Industry and Energy Systems.

WEG, one of the largest global manufacturers of Electric Motors with Quality and Efficiency recognized in different industrial areas worldwide, is also present in Energy, Transmission and Distribution, Coatings and Industrial Automation sectors, and produces and offers a wide range of electric components for Motor Control and Protection and Electric Circuit Protection.



## Motor Protection and Starters

- Modular contactors up to 800 A (AC-3)
- Compact contactors up to 22 A (AC-3)
- Control relays
- Motor protective circuit breakers up to 100 A
- Enclosed starters (plastic or metallic enclosures)
- Customized starters for OEM applications
- Overload relays

## Electrical Circuit Protection

- Miniature circuit breakers up to 125 A
- Molded case circuit breakers up to 1600 A (3P and 4P)
- Air circuit breakers up to 6300 A
- D gL-gG fuses up to 63 A
- NH gL-gG fuses up to 630 A
- NH aR fuses up to 1000 A
- Switch-disconnectors for door or base mounting up to 160 A
- Residual current circuit breaker up to 100 A (30 or 300 mA)
- Surge suppressors

## Electrical Connections

- Terminal blocks with screw type connection
- Terminal block with spring type connection
- Terminal blocks for fuses
- Busbar and busbar connectors
- Identifiers for terminals and cables
- Printing system

## Capacitors

- Power factor compensation
- Lighting
- Motor-run

## Pushbuttons and Pilot Lights

- IP66 pushbuttons and pilot lights
- Flush, guarded, extended or mushroom illuminated or non illuminated pushbuttons
- Selector switches lever or knob illuminated or non illuminated or with key
- Emergency pushbuttons (according EN 418)
- Contact blocks with "positive break" system
- Double pushbutton
- Pilot lights with LED technology
- Customized descriptions
- Decentralized control stations - PBW

## Smart Relay

- Low voltage electric motor management system
- Compact and modular concept
- Full motor protection and monitoring through current and voltage measurements
- Multiple operating modes including PLC functions
- Easy network module change via exclusive drawer system (Modbus, DeviceNet, Profibus modules)
- USB communication
- Free WLP programming software

## Electronic Relays

- Timing, monitoring and level relays
- 22.5 mm width frame
- LED for status indication
- Multifunction three-phase monitoring relays and timer relays

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