

DWB

Molded Case Circuit Breakers DWB



weg

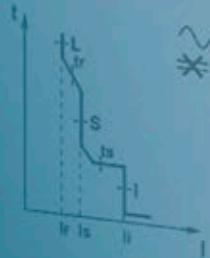
In 1000 A - ET
IEC / EN 60947-2



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DWB1000H

Ue (V)	Icu/Ics (kA)
240 ~	80/40
380 ~	65/35
415 ~	65/35
440 ~	50/35

Molded Case Circuit Breakers DWB

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MOLDED CASE CIRCUIT BREAKERS

Suitable for industrial, commercial and building applications, the ***new version of the DWB line of WEG molded case circuit breakers*** was ***designed and manufactured according to IEC 60947-1 and IEC 60947-2***, meeting the operation and protection needs of distribution circuits up to 1600 A.

The Right Circuit Breaker for Your Application

The new version of DWB circuit breakers is available with three kinds of protection, that is, ***circuit breakers with Thermomagnetic protection, Magnetic protection or circuit breakers with Electronic LSI protection*** specific for each load type. For ***distribution circuits in general up to 800 A***, the circuit breakers with Thermomagnetic element provide enough overload and short circuit protection for both AC and DC applications, allowing the economic and safe assembly of distribution systems. For ***distribution circuits from 500 A to 1600 A***, circuit breakers with Electronic LSI protection provide optimization of the protection circuits and higher operation accuracy by means of the following protections:

- Protection against overload ("L" = Long time delay trip)
- Short-time delay trip for protection against short-circuit ("S" = short-time delay), allowing selective action in case of short-circuit currents
- Instantaneous short-circuit protection ("I" = Instantaneous)

In applications that require the ***operation and protection of motor circuits***, DWB circuit breakers to 800 A have magnetic protection relays especially set for this kind of load, ensuring their correct operation in case of short-circuit currents. The circuit breakers with magnetic protection for motor circuits must be combined with other ***operation and protection devices***, such as overload relays (thermal or electronic).

For the operation and protection of generators WEG DWB circuit breakers are also manufactured with protection relays especially set for that kind of load.

Protecting and Disconnecting in 5 Frames

The new version of the DW line of WEG molded case circuit breakers is available from 16 A to 1600 A in only five sizes, according to the maximum rated current of each frame size:

- DWB160 - maximum rated current of 160 A
- DWB250 - maximum rated current of 250 A
- DWB400 - maximum rated current of 400 A
- DWB800 and DWB1000¹⁾ - maximum rated current of 800 A and 1000 A respectively
- DWB1600¹⁾ - maximum rated current of 1600 A

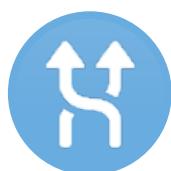
Note: 1) With Electronic LSI protection.



WEG DW molded case circuit breakers are manufactured with Quality and high-Performance raw materials in order to ensure high efficiency for your application.

- Frame made of SMC (Sheet Molding Compound); in addition to high mechanical performance, it also presents high dielectric strength and withstands high temperatures
- Fixed and moving contacts made with special metal alloys to ensure safe operation and long service life
- Electrolytic copper terminals with surface treatment (silver-coated terminals) ensuring protection against corrosion and excessive heating of the connections
- Front cover made of polycarbonate (DWB circuit breakers) providing greater safety for the applications

The special laser engraving system used on DWB circuit breakers ensures indelibility of the product information and characteristic along its useful life.



FLEXIBILITY

DWB circuit breakers allow flexibility in the use of internal accessories. Interchangeability of accessories among circuit breakers from 160 A to 1000 A.



DOUBLE PROTECTION

In order to provide greater safety for the operator, DW circuit breakers have double insulation between live parts (except for the terminals) and the front parts of the equipment. The internal accessories are completely separate from the power circuit, avoiding any risks of contact with the live parts.



HIGH PERFORMANCE

DWB molded case circuit breakers can be used in a wide range of applications with great performance under severe overload and short circuit conditions. When installed in motor circuits combined with WEG contactors (CWB and CWM) and WEG smart relays (SRW), they comply with coordination 2 requirements as per IEC 60947-4-1.

General Characteristics



Frame			DWB160				DWB250		
Standard			IEC 60947-2				IEC 60947-2		
Number of poles			2 ¹⁾ , 3, 4 ¹⁴⁾				2 ¹⁾ , 3, 4 ¹⁴⁾		
Rated operational voltage	U_e	V ac	690 ⁷⁾				690 ⁷⁾		
		V dc	500				500		
Insulation voltage	U_i	V	800				800		
Rated impulse withstand voltage	U_{imp}	kV	8				8		
Utilization category	-	-	A				A		
Reference temperature	T	°C	45				45		
Pollution degree	-	-	3				3		
Breaking capacity level									
Rated ultimate short-circuit breaking capacity - I_{cu}	I_{cu}	KA	B	N	L ²⁾	B	N	L ²⁾	
		240 V~	25	50	120	40	80	120	
		380 V~	18	30 ⁹⁾	80	18	35	80	
		415 V~	16	30 ³⁾	80	16	35	80	
		440 V~	10	20 ⁴⁾	80	15	30	80	
		500 V~	5	8	65	5	8	65	
		550 V~	4	6	25	4	7	25	
		690 V~	3	4	10	3	6	15	
		1 pole	125 V dc	35	65	-	35	65	-
		2 poles in series	250 V dc	35	65	-	35	65	-
		3 poles in series	500 V dc	25	50	-	25	50	-
		KA	B	N	L ²⁾	B	N	L ²⁾	
		240 V~	25	25	80	40	40	80	
Rated service short-circuit breaking capacity - I_{cs}	I_{cs}	380 / 400 V~	16	16	60	16	17	60	
		415 V~	16	16	60	16	17	60	
		440 V~	10	10	60	15	15	60	
		500 V~	5	5	50	5	5	50	
		550 V~	4	4	20	4	4	20	
		690 V~	3	3	8	3	3	8	
Type of protection and application ⁶⁾¹²⁾									
Thermomagnetic for distribution	Fixed thermal and fixed magnetic	I_n	A	16, 20, 25, 32, 40, 50, 63, 70, 80, 90, 100, 110, 125, 150, 160	16, 20, 25, 32, 40, 50, 63, 70, 80, 90, 100, 110, 125		Not applicable		
	Adjustable thermal and fixed magnetic	I_n	A	40, 50, 63, 80, 100, 125, 160	-		100, 125, 160, 200, 250	100, 125, 160, 200	
	Adjustable thermal and adjustable magnetic	I_n	A		Not applicable		Not applicable		
Thermomagnetic for generator	Fixed thermal and fixed magnetic	I_n	A	55, 75, 85, 105, 125, 140, 160	Not applicable		Not applicable		
	Adjustable thermal and fixed magnetic	I_n	A		Not applicable	105, 125, 160, 200, 250		Not applicable	
	Adjustable thermal and adjustable magnetic	I_n	A		Not applicable		Not applicable		
Magnetic for motor	Fixed magnetic	I_n	A	Not applicable	25, 32, 40, 50, 65, 80, 95		Not applicable	80, 105, 150, 185, 200	
	Adjustable magnetic	I_n	A		Not applicable		Not applicable		
Electronic (LSI) for distribution and generator			A		Not applicable		Not applicable		
Switch-disconnector - without thermal and magnetic protection		I_n	A		125, 160		250		
Mechanical lifespan - C-O cycle			Number of operations/operations per hour		8000 / 120		8000 / 120		
Electrical lifespan - C-O cycle (I_n @ 690 V)			Number of operations/operations per hour		1000 / 120		1000 / 120		
Degree of protection			Terminals		IP10		IP10		
			Accessory cover		IP20		IP20		
Maximum air relative humidity					95%		95%		
Connection with cable ¹¹⁾¹³⁾	Recommended	mm ²		See the Connection to Terminals section			See the Connection to Terminals section		
	Tightening torque	Nm		6			25 ⁵⁾		
Connection with bar	Recommended cross section (width x thickness)	mm x mm		See the Connection to Terminals section			See the Connection to Terminals section		
	Tightening torque	Nm		6			8		
Resistance to vibration (IEC 60068-2-6)				2 a 13.2 Hz: amplitude ±1 mm 13.2 a 100 Hz: constant of acceleration 0.7 g			2 a 13.2 Hz: amplitude ±1 mm 13.2 a 100 Hz: constant of acceleration 0.7 g		
Resistance to mechanical shocks (IEC 60068-2-27 - 1/2 sine)				12 g for 11ms			12 g for 11ms		
Dimensions (Width x Depth x Height)			mm x mm x mm	2 poles: 78 x 71 x 122 3 poles: 78 x 71 x 122 4 poles: 102.5 x 71 x 122			2 poles: 105 x 78 x 162 3 poles: 105 x 78 x 162 4 poles: 141 x 75 x 162		
Net weight			kg	2 poles: 0.79 / 3 poles: 0.9 / 4 poles: 1.24			2 poles: 1,42 / 3 poles: 1.85 / 4 poles: 2.5		
				3 poles: 1.84			3 poles: 3.75		

Notes: 1) 2 poles on the 3-pole frame, only available with fixed release and breaking capacity level B.

2) Only available on 3-pole frame; not available with protection for generator.

3) For $I_n \leq 32$ A: $I_{cu} = 20$ kA @ 380 V / 415 V.

4) For $I_n \leq 32$ A: $I_{cu} = 15$ kA @ 440 V.

5) Recommended torque for the terminal lugs accessory - PC (sold separately). If lug terminal is used directly on the circuit breaker terminal, consider the recommended torque for connection with bar.

6) Product height without terminal cover.

7) For applications above 2000 m of altitude, consider the derating indicated in the table of page 31.

8) I_n = rated current (fixed thermal release) or maximum setting value (adjustable thermal release).

General Characteristics



DWB400		DWB800		DWB1000		DWB1600	
IEC 60947-2		IEC 60947-2		IEC 60947-2		IEC 60947-2	
3, 4 ¹⁴⁾		3, 4 ¹⁴⁾		3, 4		3, 4	
690 ⁷⁾		690 ⁷⁾		690 ⁷⁾		440 ⁷⁾	
500		500		-		-	
800		800		800		690	
8		8		8		8	
A		A		A		A	
45		45		45		45	
3		3		3		3	
N	H	S	H	S	H	KA	N
40	80	65	80	65	80	240 V ~	80
35	65	50	65	50	65	380 V ~	35
35	50	50	65	50	65	415 V ~	35
35	50	42	50	42	50	440 V ~	25
20	25	22	25	22	25	500 V ~	20
10	15	12	15	12	15	550 V ~	-
8	10	8	10	8	10	690 V ~	-
35	65	50	65	-	-	125 V dc	-
35	65	50	65	-	-	250 V dc	-
25	50	35	50	-	-	500 V dc	-
N	H	S	H	S	H	KA	N
40	40	40	40	40	40	240 V ~	40
35	35	35	35	35	35	380 V / 400 V ~	25
35	35	35	35	35	35	415 V ~	25
25	25	35	35	35	35	440 V ~	25
12	12	20	20	20	20	500 V ~	20
10	10	10	10	10	10	550 V ~	-
8	8	8	8	8	8	690 V ~	-
Not applicable		Not applicable		Not applicable		Not applicable	
Not applicable		Not applicable		Not applicable		Not applicable	
200, 250, 320, 400		320, 400, 500, 630, 800		Not applicable		Not applicable	
Not applicable		Not applicable		Not applicable		Not applicable	
Not applicable		Not applicable		Not applicable		Not applicable	
200, 250, 320, 400	Not applicable	Not applicable	Not applicable	500, 630, 800, 1000	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	150, 185, 250, 320	Not applicable	420, 500	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	500, 630, 800, 1000	Not applicable	Not applicable	Not applicable
400		630, 800		1000		1250, 1600	
5000 / 120		3000 / 60		3000 / 60		3000 / 60	
1000 / 120	$I_n \leq 630 \text{ A}$: 1000 / 120 $I_n = 800 \text{ A}$: 500 / 60			$I_n = 1000 \text{ A}$: 500 / 60		500 / 60	
IP10		IP10		IP10		IP10	
IP20		IP20		IP20		IP20	
95%		95%		95%		95%	
See the Connection to Terminals section		See the Connection to Terminals section		See the Connection to Terminals section		See the Connection to Terminals section	
30 ⁵⁾		55 ⁵⁾		55 ⁵⁾		55 ⁵⁾	
See the Connection to Terminals section		See the Connection to Terminals section		See the Connection to Terminals section		See the Connection to Terminals section	
20		20		20		30 (M10) / 50 (M12)	
2 a 13.2 Hz: amplitude $\pm 1 \text{ mm}$ 13.2 a 100 Hz: constant of acceleration 0.7 g		2 a 13.2 Hz: amplitude $\pm 1 \text{ mm}$ 13.2 a 100 Hz: constant of acceleration 0.7 g		2 a 13.2 Hz: amplitude $\pm 1 \text{ mm}$ 13.2 a 100 Hz: constant of acceleration 0.7 g		2 a 13.2 Hz: amplitude $\pm 1 \text{ mm}$ 13.2 a 100 Hz: constant of acceleration 0.7 g	
12 g for 11ms		12 g for 11ms		12 g for 11ms		12 g for 11ms	
3 poles: 107 x 99 x 256 4 poles: 141 x 99 x 256		3 poles: 210 x 99 x 256 ⁶⁾ 4 poles: 280 x 99 x 256 ⁶⁾		3 poles: 210 x 99 x 256 ⁶⁾ 4 poles: 280 x 99 x 256 ⁶⁾		3 poles: 210 x 146 x 345 ⁶⁾ 4 poles: 280 x 146 x 345 ⁶⁾	
3 poles: 3.56 / 4 poles: 4.6		3 poles: 7.4 / 4 poles: 9.2		3 poles: 7.4 / 4 poles: 9.2		3 poles: 16.4 / 4 poles: 19.9	

9) Information on thermal dissipation of the circuit breakers available on page 32.

10) Thermal and magnetic operation range available on the Time x Current characteristic curves.

11) See the Installation section. "Connection of cables and bars to terminals", "Direct connection of cables by means of round terminal lugs" and "Direct connection of bar to circuit breaker" tables.

12) For ambient temperature different from 45 °C, consider the deratings of the "Temperature Derating" Table.

13) It is recommended to use terminal lugs accessories - PC (optional accessory for the circuit breakers, except for DWB160, which is supplied with terminal lugs) or BE straight extension bar.

14) DWB160 and DWB250 circuit breakers are available in the four-pole versions with protection on the four poles and 3P+N version with protection on three poles and disconnection on the fourth pole. DWB400 and DWB800 circuit breakers are available in the four-pole versions with protections on three poles and disconnection on the fourth pole.

Protections and Settings

Protections

In order to meet the different requirements of the different types of load of an electrical circuit, DWB has special versions for each type of load, as shown below.

- **Circuit breakers for distribution:** thermal and magnetic protection for electric circuits in general; setting of the short circuit protection from 5 to 10 times the circuit breaker rated current, with tripping curve according to the criteria of IEC 60947-2 standard.
- **Circuit breakers for motors:** magnetic protection only. The short circuit tripping curve is set from 7.5 to 15 times the circuit breaker rated current. Such setting allows starting the motor without premature trip of the protection system. It is necessary to add an overcurrent relay for protection against motor overload.
- **Circuit breakers for generators:** the protection against short circuit is set to trip up to five times the circuit breaker rated current, protecting the generator against current surges that may damage its electronics and compromise its regulation.

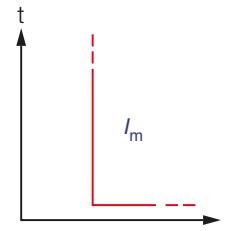
Setting for Circuit Breakers (Motors)

DWB160 and DWB250

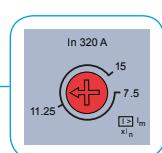


Fixed Magnetic Protection

- The circuit breaker tripping curve is fixed

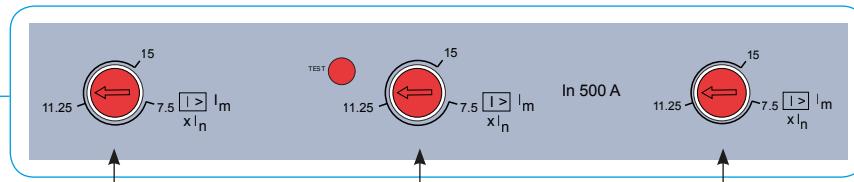
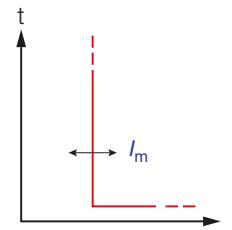


DWB400 and DWB800



Adjustable Magnetic Protection

- 7.5 to 15 x In for motors



Adjustable Magnetic Protection per Phase

- 7.5 to 15 x In for motors

Protections and Settings

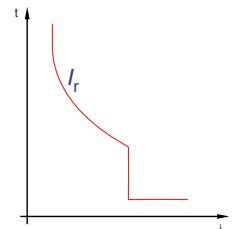
Settings for Circuit Breakers (Distribution and Generators)

DWB160

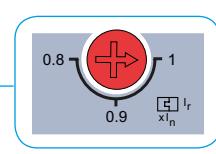
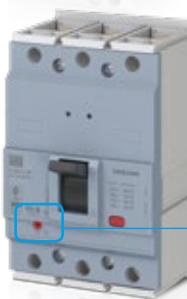
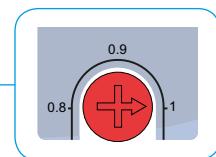


Fixed Thermal and Fixed Magnetic

- The circuit breaker tripping curve is fixed

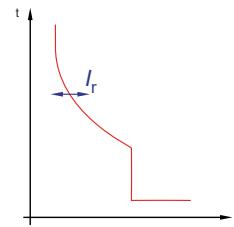


DWB160 and DWB250

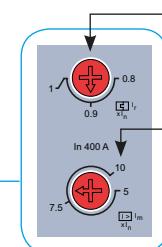


Adjustable Thermal and Fixed Magnetic

- The thermal protection curve allows setting the thermal element from 0.8 to $1 \times I_n$



DWB400 and DWB800



Adjustable Thermal Protection

- The thermal protection curve allows setting the thermal element from 0.8 to $1 \times I_n$

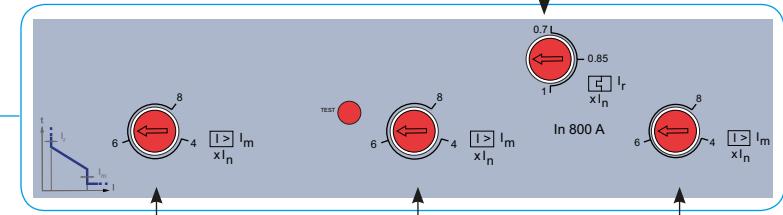
Adjustable Thermal Protection

- 5 to $10 \times I_n$ for distribution
- 2.5 to $5 \times I_n$ for generators



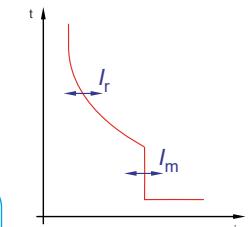
Adjustable Thermal Protection

- The thermal protection curve allows setting the thermal element from 0.7 to $1 \times I_n$



Adjustable Magnetic Protection per Phase¹⁾

- 5 to $10 \times I_n$ for distribution
- 2.5 to $5 \times I_n$ for generators

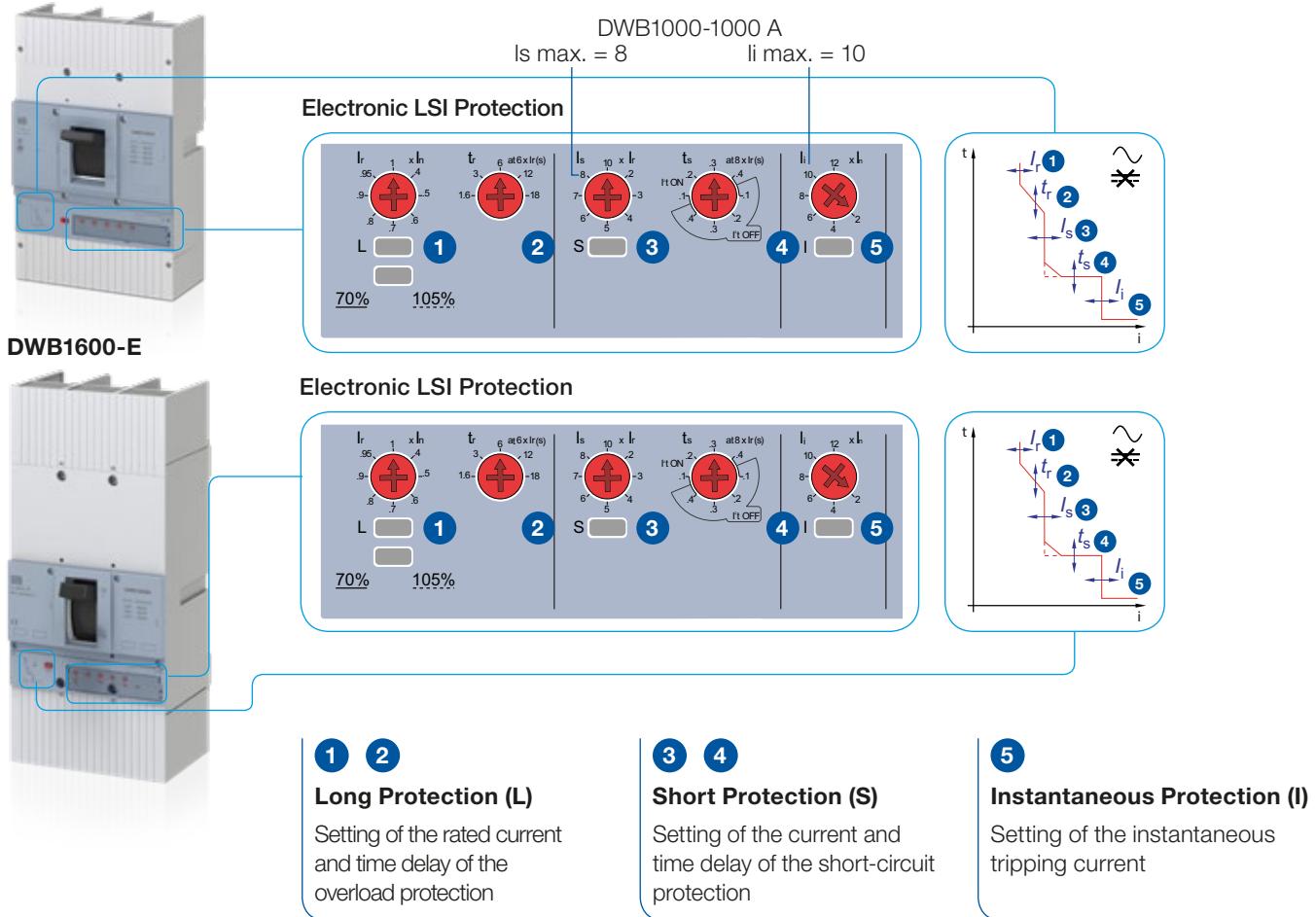


Note: 1) Valid range up to nominal current 630 A. For nominal current 800 A: 4 to $8 \times I_n$ for distribution.

Protections and Settings

Settings for Circuit Breakers (Distribution and Generators)

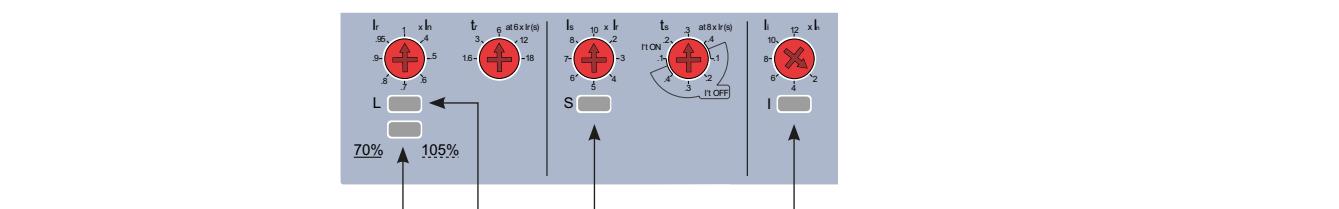
DWB1000



Protections

- **L (Long):** overload protection with reverse time-current curve and adjustable time delay
- **S (Short):** short circuit protection with time delay, having settings of tripping current and response time, and possibility to choose between reverse time-current curve (I^2t ON) or defined time (I^2t OFF)
- **I (Instantaneous):** short circuit protection with setting of the tripping current, without setting of the response time

Indication LEDs

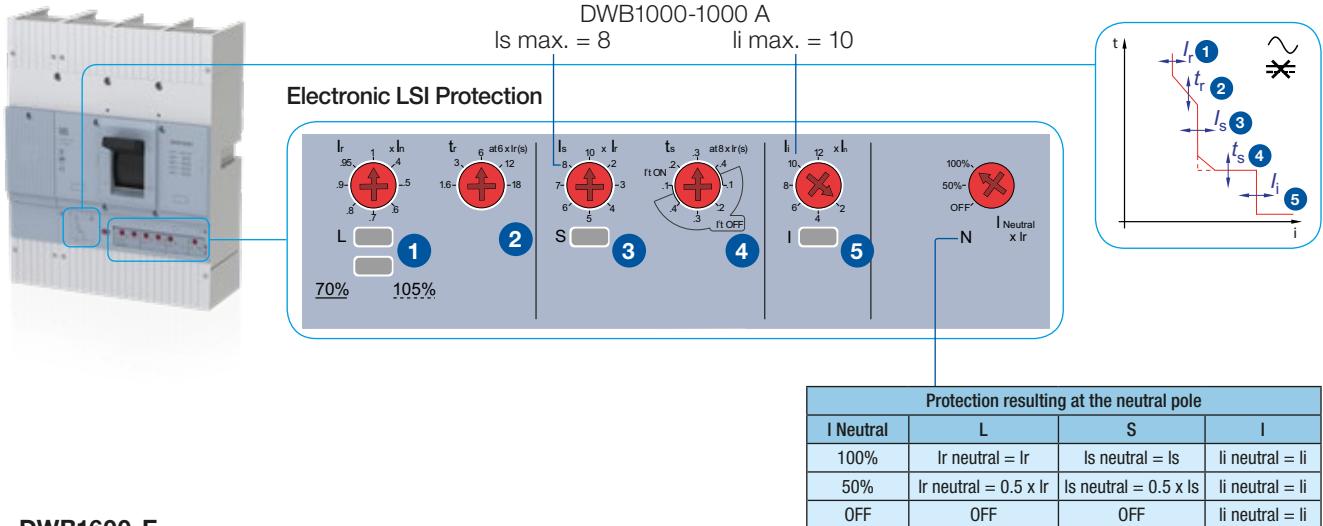


- The electronic protection of the circuit breaker is self-supplied. Thus, the relay will be functional for currents equivalent to $0.2 \times I_n$ for three-phase circuit or $0.35 \times I_n$ for one phase supplied

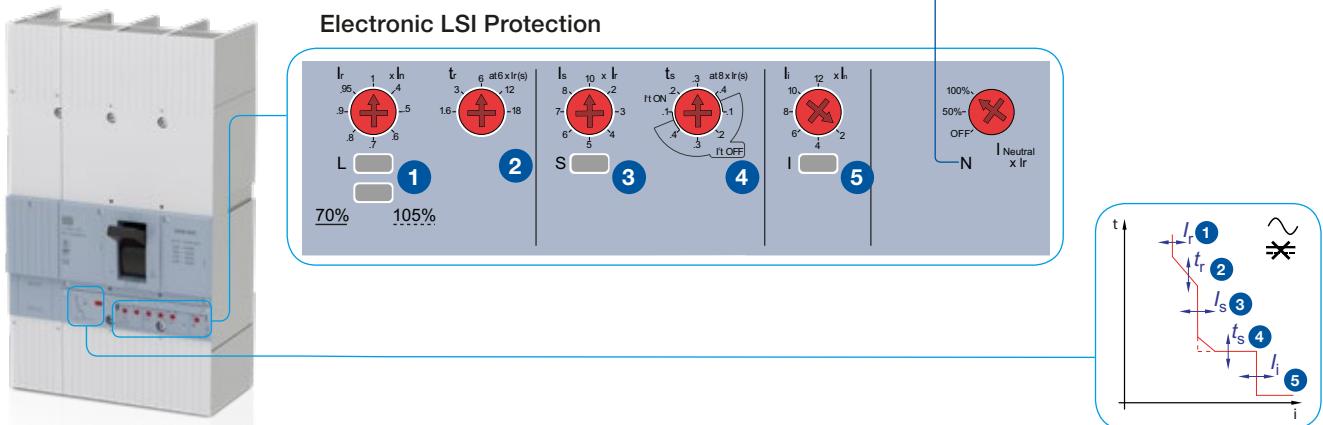
Protections and Settings

Settings for Circuit Breakers (Distribution and Generators)

DWB1000



DWB1600-E



For four-pole circuit breakers with adjustable neutral protection, neutral protection can be selected by the 3-position switch, considering the values:

- **100%:** neutral fully protected to I_r
- **50%:** neutral protected with half the phase value. That is: $0.5 \times I_r$ for overload protection I_r (L - long-time) and short-time (S-short) protection. The instantaneous protection configuration I_i (I - instantaneous) for the neutral is equal to the set value
- **OFF:** disables the I_r overload protection (L - long - time) and I_s (short - time) short - circuit protection. The instantaneous protection configuration I_i (I - instantaneous) for the neutral is equal to the setting value

Motor Operator

DWB400 circuit breakers		Description	
Ref. WEG			
10835559		Motor operator 24 V dc	
10835721		Motor operator 48 V dc - 60 V dc	
10835719		Motor operator 110-127 V ac / 110-125 V dc	
10835720		Motor operator 230 V ac / 220 V dc	
DWB800 and DWB1000 circuit			
Ref. WEG		Description	
13179383		Motor operator 24 V dc	
13179384		Motor operator 48 V dc - 60 V dc	
13179386		Motor operator 110-127 V ac / 110-125 V dc	
13179385		Motor operator 230 V ac / 220 V dc	
DWB1600 circuit			
Ref. WEG		Description	
13178913		Motor operator 24 V dc	
13178914		Motor operator 48 V dc - 60 V dc	
13178916		Motor operator 110-127 V ac / 110-125 V dc	
13178915		Motor operator 230 V ac / 220 V dc	

Note: the motor operator is sold separately from the circuit breaker.

Automatic Changeover Coding - CTM

Smart Code

Base	-	Left circuit breaker			Right circuit breaker			Poles	-	Accessories				
Base type	-	Short-circuit capacity	Rated current	Trip unit	Short-circuit capacity	Rated current	Trip unit	Number of poles	-	Auxiliary contact	Alarm contact	Shunt trip	Undervoltage release	Motor operator

Example:

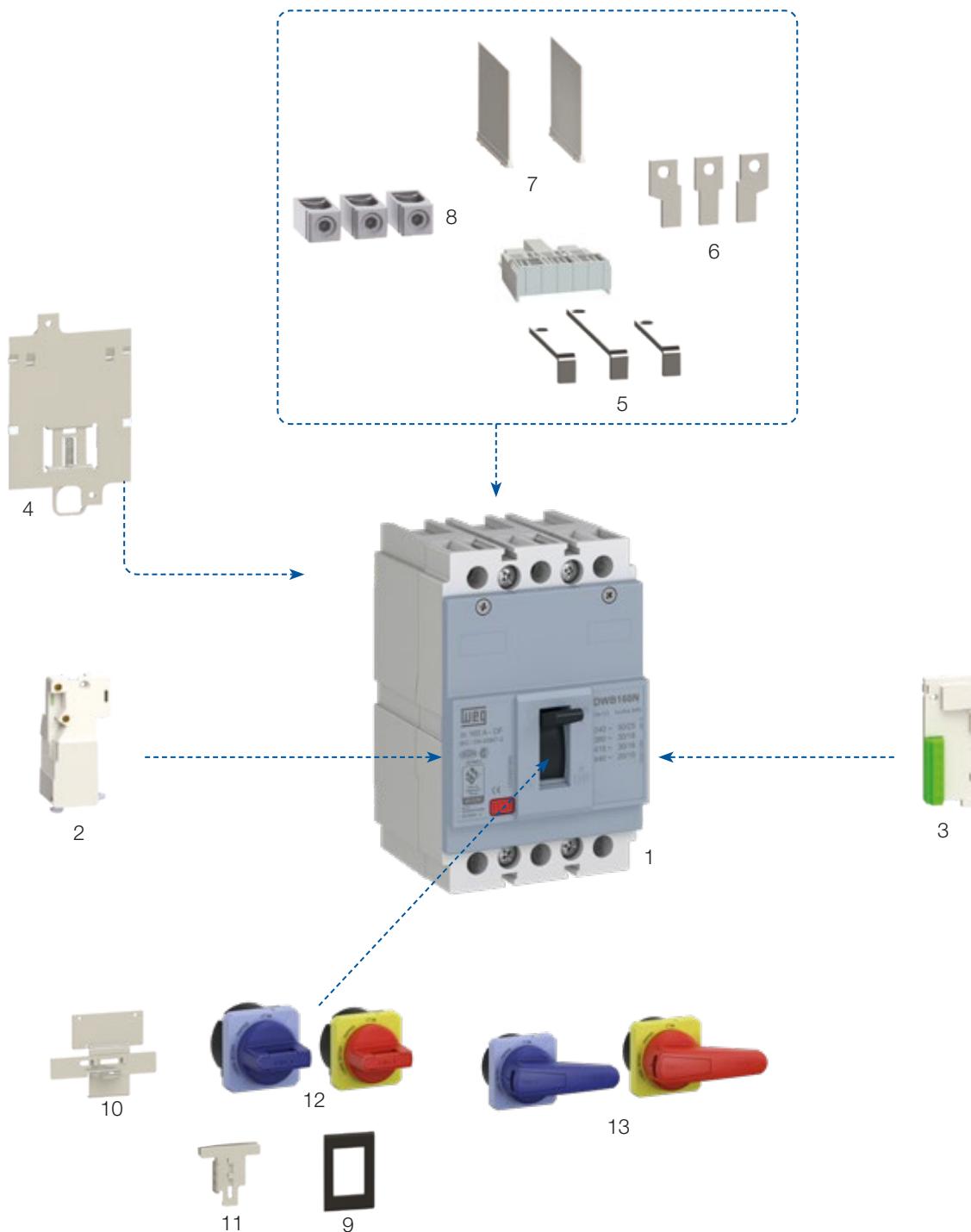
Smart Code

Base	-	Left circuit breaker			Right circuit breaker			Poles	-	Accessories				
Base	-	N	250	IW	H	250	DA	Poles	-	1	1	E26	0	C25
CTM	400							3P						
Base type		I_{cu} 380/400 V ac	Rated current	Trip un.	I_{cu} 380/400 V ac	Rated current	Trip un.	Auxiliary contact		1	1	E26	0	C25
BTIM400 3P		35	250 A	DA: adjustable thermal and magnetic	65 kA	250 A	DA: adjustable thermal and magnetic	Alarm contact		1 NOC	1 NOC	Shunt trip	Undervoltage release	Motor operator

Reference		CTM		Automatic changeover			CTM	
Base		400		Frame			400: DWB400 / 1000: DWB800 / DWB1000 / 1600: DWB1600	
Left circuit breaker	35	Maximum breaking capacity			N: 35 kA / S: 50 kA / H: 65 kA / L: 80 kA / 0: No capacity			
	250	Rated current			200 / 250 / 320 / 400 / 500 / 630 / 800 / 1000 / 1250 / 1600			
	DA	Trip unit / protection			DA: Adjustable thermal and magnetic (distribution) GA: Adjustable thermal and magnetic (generator) MA: Adjustable magnetic (motor) ET: Electronic trip unit (DWB1000/DWB1600) E: Electronic trip unit IW: Switch disconnector			
	65	Maximum breaking capacity			N: 35 kA / S: 50 kA / H: 65 kA / L: 80 kA / 0: No capacity			
	250	Rated current			200 / 250 / 320 / 400 / 500 / 630 / 800 / 1000 / 1250 / 1600			
	DA	Trip unit / protection			DA: Adjustable thermal and magnetic (distribution) GA: Adjustable thermal and magnetic (generator) MA: Adjustable magnetic (motor) ET: Electronic trip unit (DWB1000/DWB1600)			
	3P	Number of poles			IW: Switch disconnector 3P: 3 poles / 4P: 4 poles			
	1	Auxiliary contact			1 / 2			
	1	Alarm contact			0 / 1			
Accessories	E26	Shunt release BD			0: none / E26: 24 V ac - V dc / E27: 48 V ac - V dc E10: 110 - 130 V ac - V dc / E15: 220 - 250 V ac - V dc			
	0	Undervoltage release BS			0: none / C03: 24 V dc / C07: 48 V dc / C13: 125 V dc D60: 110 - 127 V ac / D66: 220 - 240 V ac / D70: 380 - 415 V ac D74: 440 - 480 V ac			
	C25	Motor operator			C03: 24 V dc / C25: 48 - 60 V dc E51: 110-127 V ac / 110-125 V dc / E46: 230 - 220 V ac			

Accessories

Overview - DWB160



1 - DWB160 circuit breaker

2 - BS or BD - undervoltage release or shunt release

3 - BC - auxiliary contact block

4 - BFR - DIN rail base

5 - CT - 90° connection extension bars (CP 90° connection extension bars protection cover included)

6 - BE - straight extension bar

7 - PB - phase barrier

8 - PC - terminal lugs (included in the circuit breaker)

9 - MP - escutcheon

10 - BLIM - mechanical interlock

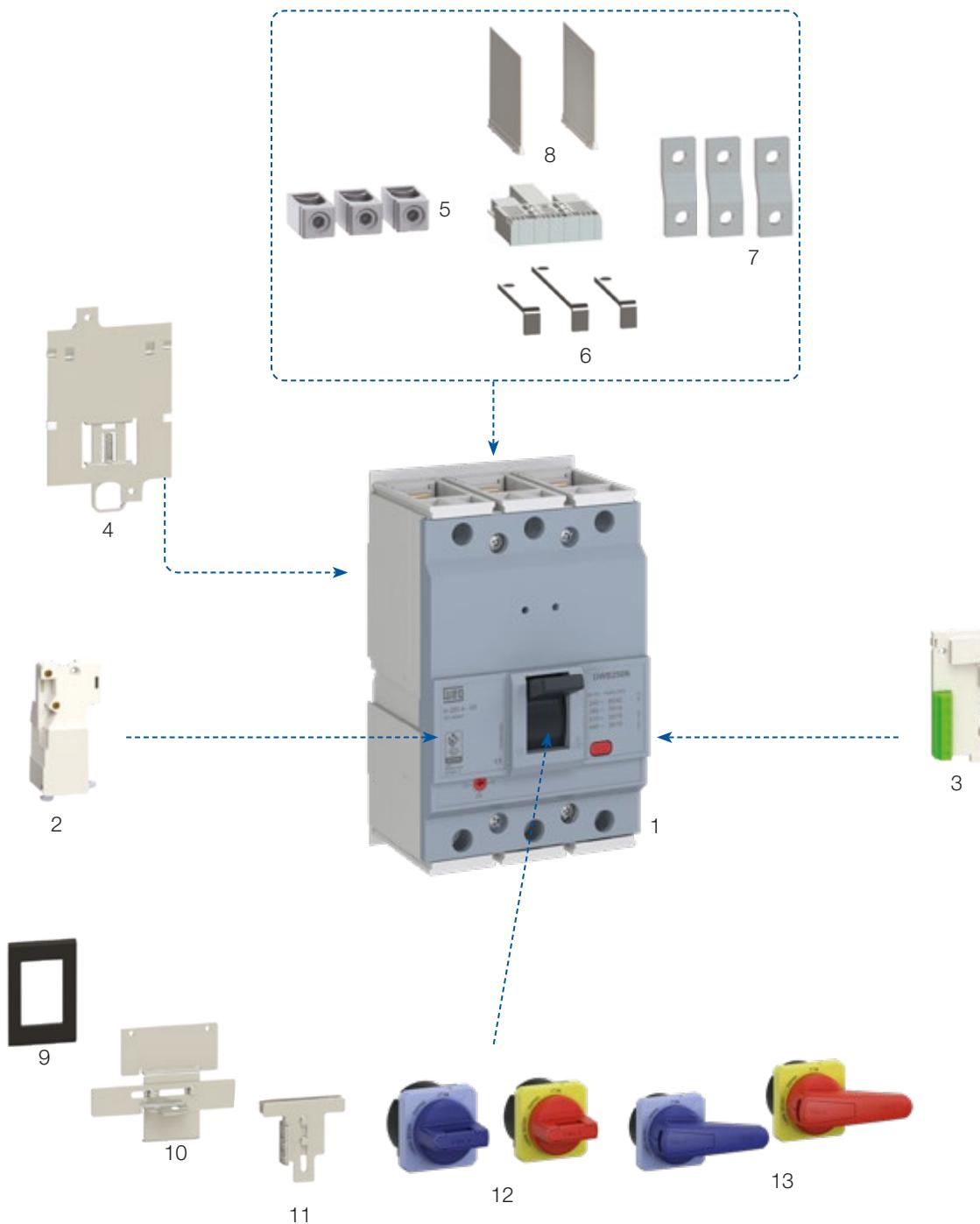
11 - PLW - padlocking device

12 - MRXS - panel door rotary operating handle

13 - MRXL - panel door rotary operating handle (length of handle 105 mm)

Accessories

Overview - DWB250



1 - DWB250 circuit breaker

2 - BS or BD - undervoltage release or shunt release

3 - BC - auxiliary contact block

4 - BFR - DIN rail base

5 - PC - terminal lugs

6 - CT - 90° connection extension bars (CP 90° connection
extension bars protection cover included)

7 - BE - straight extension bar

8 - PB - phase barrier

9 - MP - escutcheon

10 - BLIM - mechanical interlock

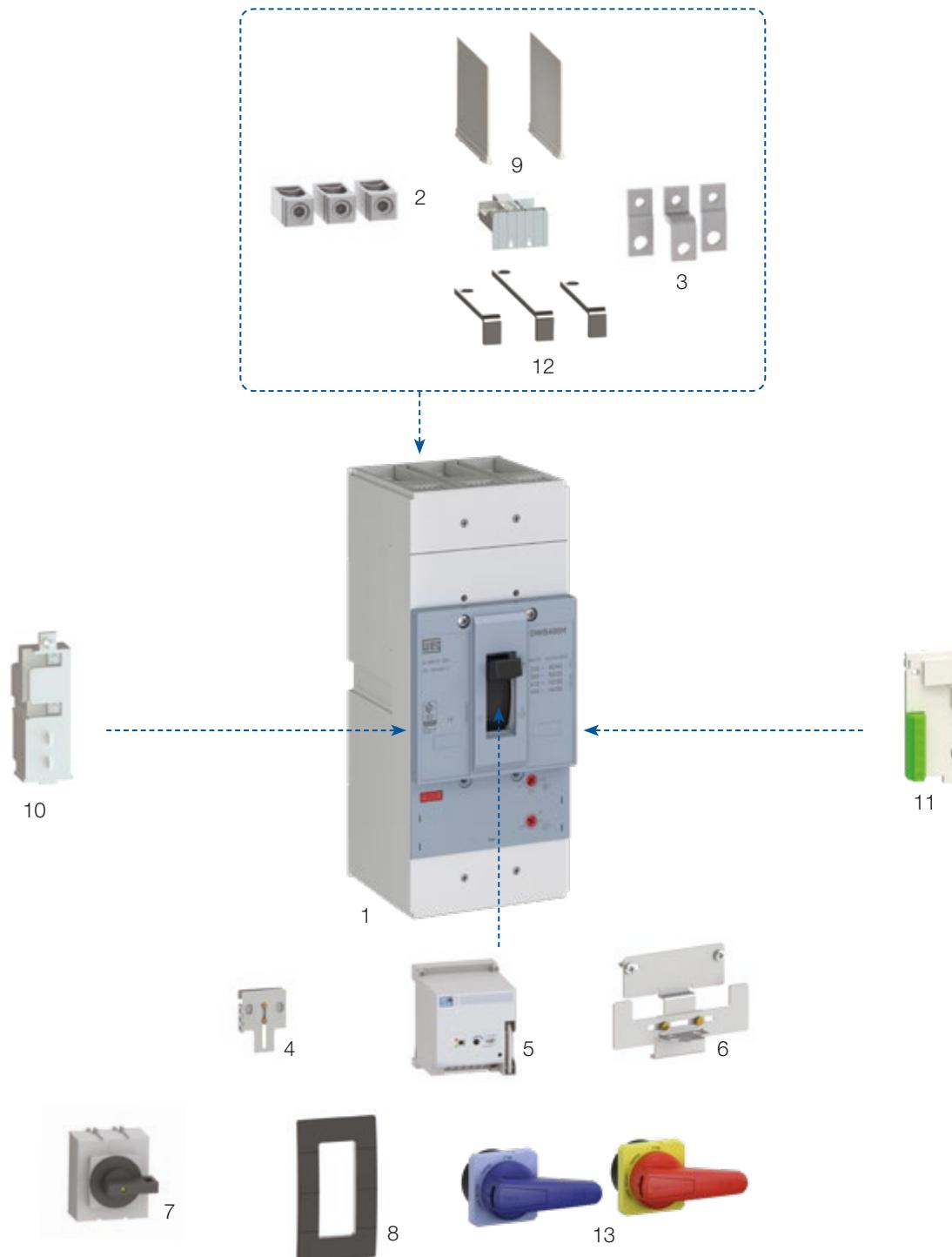
11 - PLW - padlocking device

12 - MRXS - panel door rotary operating handle

13 - MRXL - panel door rotary operating handle
(length of handle 105 mm)

Accessories

Overview - DWB400

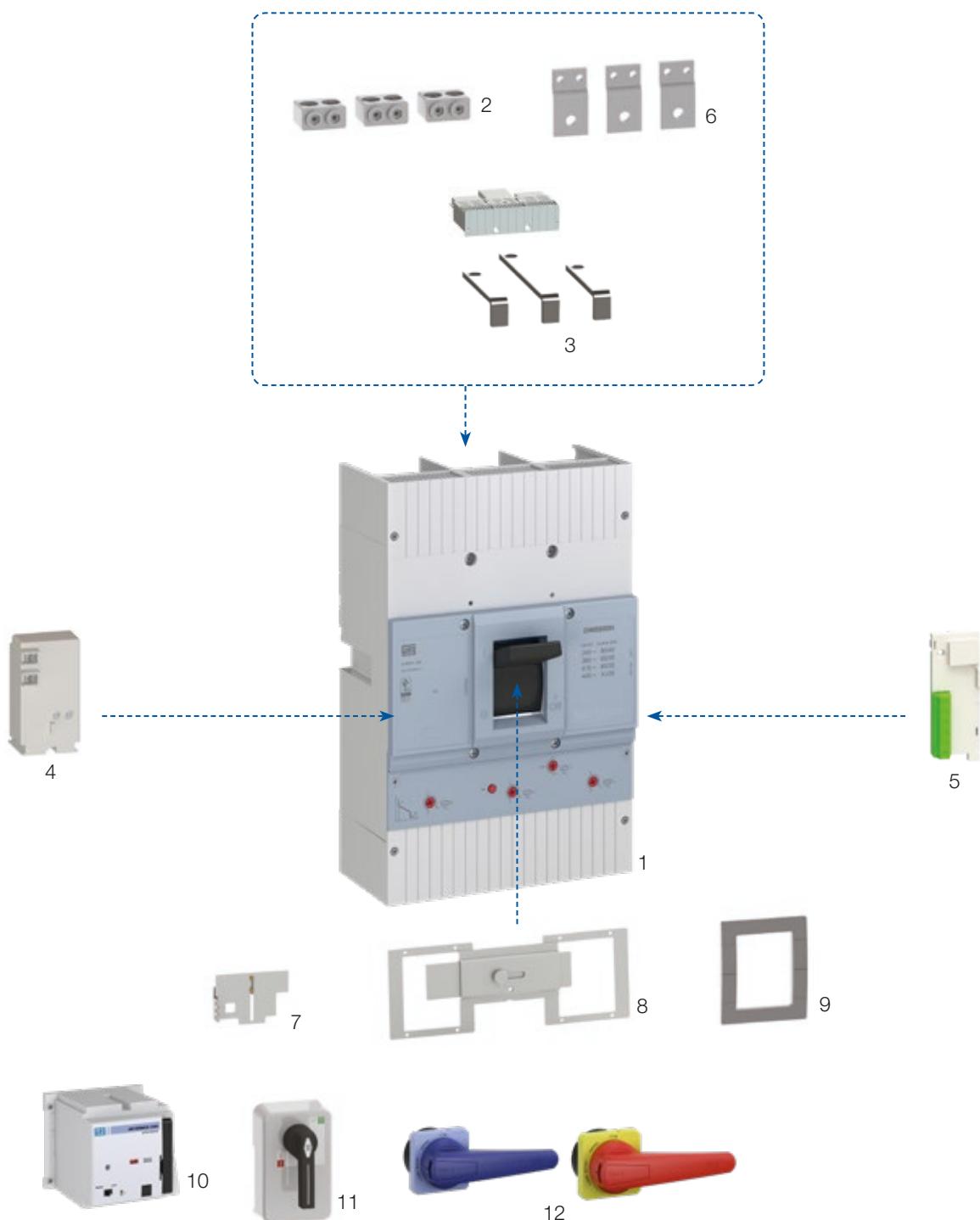


- 1 - DWB400 circuit breaker
- 2 - PC - terminal lugs
- 3 - BE - straight extension bar
- 4 - PLW - padlocking device
- 5 - AM - motor operator
- 6 - BLIM - mechanical interlock
- 7 - MRI - internal rotary operating handle
- 8 - MP - escutcheon

- 9 - PB - phase barrier
- 10 - BS or BD - undervoltage release or shunt release
- 11 - BC - auxiliary contact block
- 12 - CT - 90° connection extension bars (CP 90° connection extension bars protection cover included)
- 13 - MRXL - panel door rotary operating handle (length of handle 105 mm)

Accessories

Overview - DWB800



1 - DWB800 circuit breaker

2 - PC - terminal lugs

3 - CT - 90° connection extension bars (CP 90° connection extension bars protection cover included)

4 - BS or BD - undervoltage release or shunt release

5 - BC/AL - alarm/contact block

6 - BE - straight extension bar

7 - PLW - padlocking device

8 - BLIM - mechanical interlock

9 - MP - escutcheon

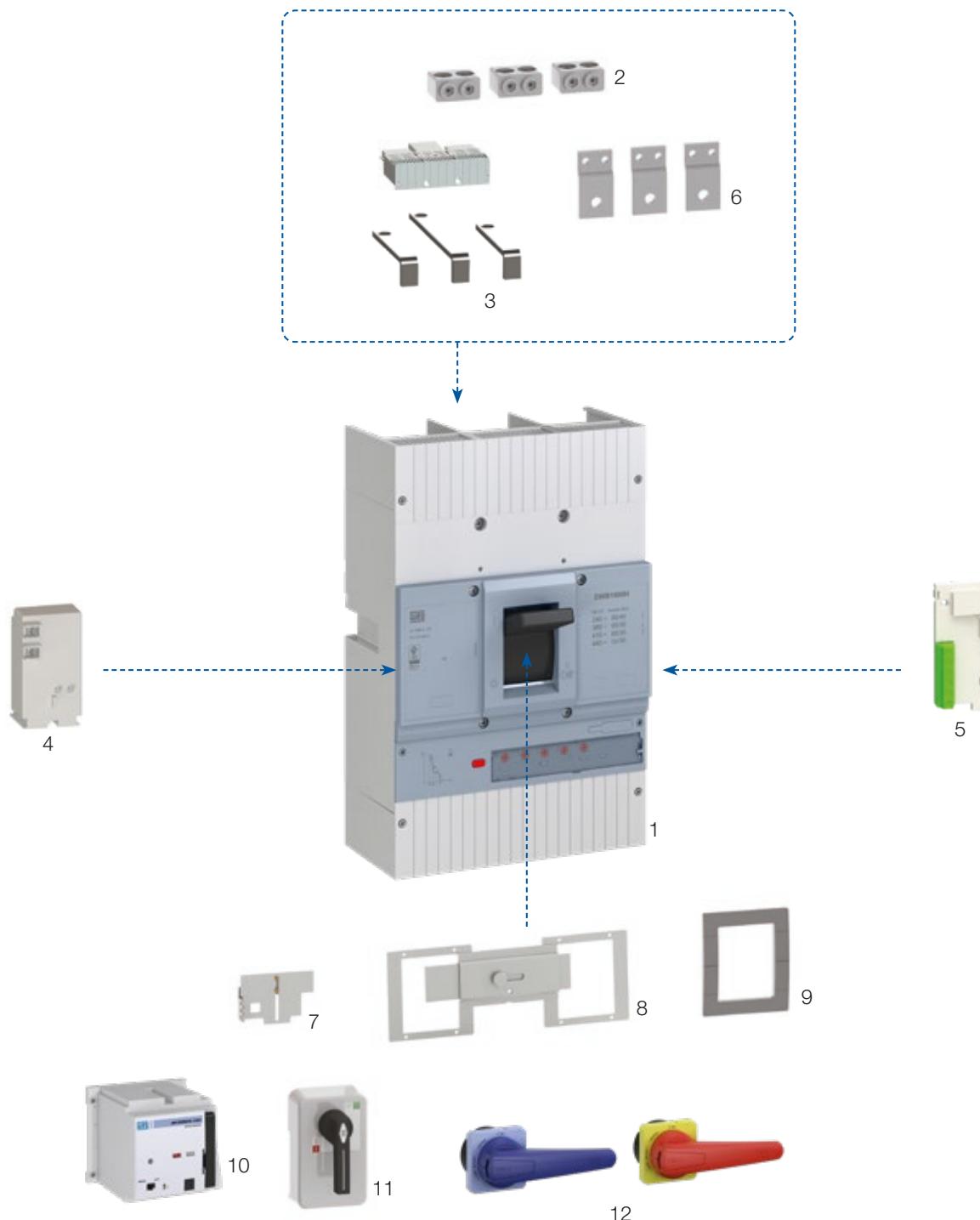
10 - AM - motor operator

11 - MRI - internal rotary operating handle

12 - MRXL - panel door rotary operating handle (length of handle 158 mm)

Accessories

Overview - DWB1000



1 - DWB1000 circuit breaker

2 - PC - terminal lugs

3 - CT - 90° connection extension bars (CP 90° connection extension bars protection cover included)

4 - BS or BD - undervoltage release or shunt release

5 - BC/AL - alarm/contact block

6 - BE - straight extension bar

7 - PLW - padlocking device

8 - BLIM - mechanical interlock

9 - MP - escutcheon

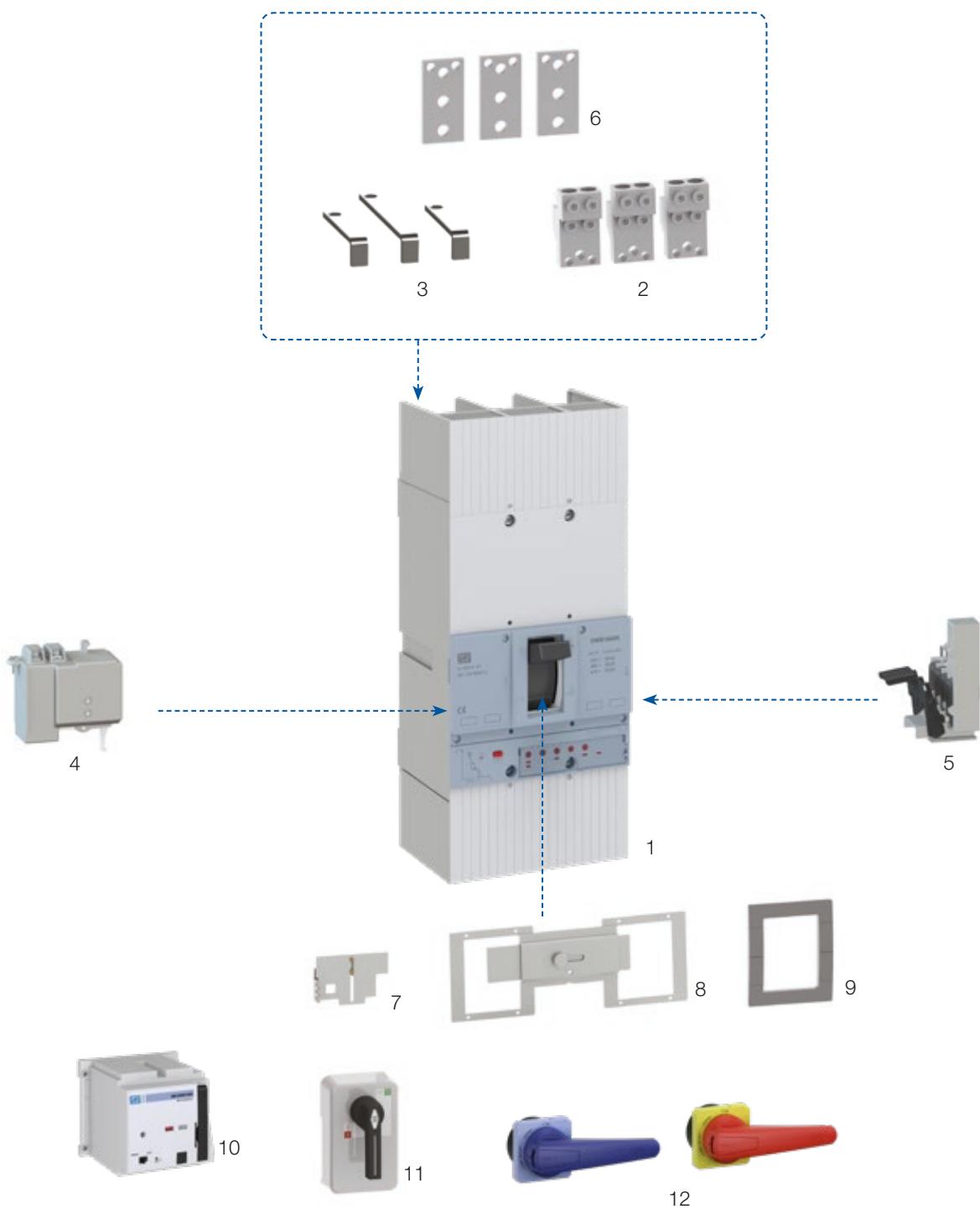
10 - AM - motor operator

11 - MRI - internal rotary operating handle

12 - MRXL - panel door rotary operating handle (length of handle 158 mm)

Accessories

Overview - DWB1600



1 - DWB1600 circuit breaker

2 - PC - terminal lugs

3 - CT - 90° connection extension bars

4 - BS or BD - undervoltage release or shunt release

5 - BC/AL - alarm/contact block

6 - BE - straight extension bar

7 - PLW - padlocking device

8 - BLIM - mechanical interlock

9 - MP - escutcheon

10 - AM - motor operator

11 - MRI - internal rotary operating handle

12 - MRXL - panel door rotary operating handle (length of handle 158 mm)

Note: The DWB1600 circuit breaker does not have the CP 90° connection extension bars protection cover.

Accessories

Overview

Description	Reference	DWB160	DWB250	DWB400	DWB800	DWB1000	DWB1600
Auxiliary/alarm contact ¹⁾	BC1-NOC	✓	✓	✓	✓	✓	✓
	BC2-NOC	✓	✓	✓	✓	✓	✓
	BC3-NOC	-	-	-	-	-	✓
	AL1-NOC	✓	✓	✓	✓	✓	✓
	BC/AL2-NOC	✓	✓	✓	✓	✓	✓
	BC/AL3-NOC	-	-	-	-	-	✓
Undervoltage release BS ²⁾	110/127 V ac	-	-	✓	✓	✓	✓
	220/240 V ac	-	-	✓	✓	✓	✓
	380-415 V ac	-	-	✓	✓	✓	✓
	440-480 V ac	-	-	✓	✓	✓	✓
	24 V dc	-	-	✓	✓	✓	✓
	48 V dc	-	-	✓	✓	✓	✓
	125 V dc	-	-	-	✓	✓	✓
	24 V ac / V dc	✓	✓	-	-	-	-
	48 V ac / V dc	✓	✓	-	-	-	-
	60 V ac / V dc	✓	✓	-	-	-	-
	110/130 V ac / V dc	✓	✓	-	-	-	-
	220/250 V ac / V dc	✓	✓	-	-	-	-
Shunt trip BD ²⁾	24 V ac / V dc	✓	✓	✓	✓	✓	✓
	48 V ac / V dc	✓	✓	✓	✓	✓	✓
	60 V ac / V dc	✓	✓	-	-	-	-
	110/130 V ac / V dc	✓	✓	✓	✓	✓	✓
	220/250 V ac / V dc	✓	✓	✓	✓	✓	✓
Panel door rotary operating handle	MR / MRX	✓	✓	✓	✓	✓	✓
	MRXS	✓	✓	-	-	-	-
	MRXL	✓	✓	✓	✓	✓	✓
Internal rotary handle	MRI	-	-	✓	✓	✓	✓
Din rail base	BFR	✓	✓	-	-	-	-
Front mechanical interlock	BLIM	✓	✓	✓	✓	✓	✓
Padlocking device	PLW	✓	✓	✓	✓	✓	✓
90° connection extension bars	CT	✓	✓	✓	✓	✓	✓
Straight extension bars	BE	✓	✓	✓	✓	✓	✓
Terminal lugs	PC	✓ ³⁾	✓	✓	✓	✓	✓
Escutcheon	MP	✓	✓	✓	✓	✓	✓
Motor operator	AM	-	-	✓	✓	✓	✓
Phase barrier	PB	✓	✓	✓	-	-	-
90° connection extension bars protection cover	CP	✓	✓	✓	✓	✓	-

Notes: 1) For combination of BC + AL, always consider the BC/AL block. It is not possible to assemble individual blocks on the circuit breaker.

For example: BC1 + AL1. Replace this combination by the BC/AL2 block.

2) DWB circuit breakers are supplied without accessories. The accessories must be purchased separately and assembled at the customer's.

3) Included in the product.

4) All accessories indicated can also be used on IWB switch disconnectors.

Internal Accessories

Maximum Combinations of Internal Accessories

Model	DWB160 ¹⁾				DWB250 ¹⁾				DWB400 ¹⁾				DWB800 / DWB1000 ¹⁾				DWB1600 ¹⁾				
	2P / 3P		4P		2P / 3P		4P		2P / 3P		4P		2P / 3P		4P		3P		4P		
Auxiliary contacts BC ²⁾	2	1	2	1	4	3	4	3	2	1	2	1	4	3	4	3	4	3	4	3	8
Alarm contact AL ²⁾	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Shunt trip BD	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
Undervoltage release BS	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0

Notes: 1) Sold separately only. It is not sold assembled on the circuit breaker.

2) For combination of BC + AL, always consider the BC/AL block. It is not possible to assemble individual blocks on the circuit breaker.

BC1 + AL1, replace this combination by the BC/AL2 block.

Assembly Position of the Internal Accessories



Auxiliary and Alarm Contact Blocks

BC - Auxiliary Contact: signals the open and closed position of the main contacts. Reversing type (1 NOC).

AL - Alarm Contact: signals the thermal or magnetic release of the circuit breaker. Reversing type (1 NOC).

BC/AL - Auxiliary + Alarm Contact Set: performs the 2 functions above in different contacts in a single set.



Configuration of the contact/alarm block ¹⁴⁾	DWB160 Ref. WEG ³⁾	DWB250 Ref. WEG ³⁾	DWB400 Ref. WEG ³⁾	DWB800 Ref. WEG ³⁾	DWB1000 Ref. WEG ³⁾	Quantity of contacts	
						Auxiliary	Alarm
BC1			10848664		10046832	1 NOC	-
BC2			11026395		10046833	2 NOC	-
BC3			-		10046834	3 NOC	-
AL1			11026397		10186511	-	1 NOC
BC/AL2			11026396		11648561	1 NOC	1 NOC
BC/AL3			-		11648787	2 NOC	1 NOC

Conduction capacity of the contact blocks			
Voltage	Load type	DWB160 / DWB250 / DWB400 / DWB800 / DWB1000	DWB1600
250 V ac	Resistive	6 A	15 A
	Inductive ²⁾	3 A	12 A
125 V ac	Resistive	6 A	15 A
	Inductive ²⁾	3 A	12 A
250 V dc	Resistive	0.3 A	0.3 A
	Inductive ²⁾	0.2 A	0.3 A
125 V dc	Resistive	0.4 A	0.6 A
	Inductive ²⁾	0.2 A	0.6 A

Notes: 1) For combinations of BC and AL (2 or 3 BCs and BC + AL) always consider the assembled set (BC2, BC3, BC/AL2 or BC/AL3). It is not possible to assemble individual blocks of BC and AL on the circuit breaker.

2) It must not be used to drive motors.

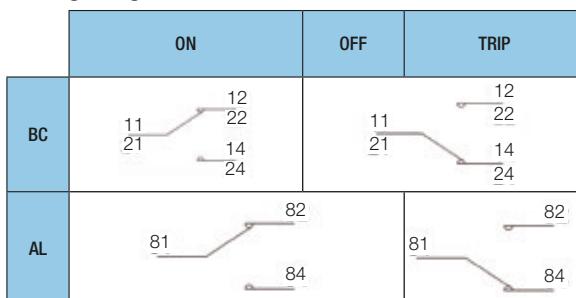
3) Sold separately only. It is not sold assembled on the circuit breaker.

4) For cable connection, consider maximum cross section of 1.5 mm² and torque of 0.8 Nm.

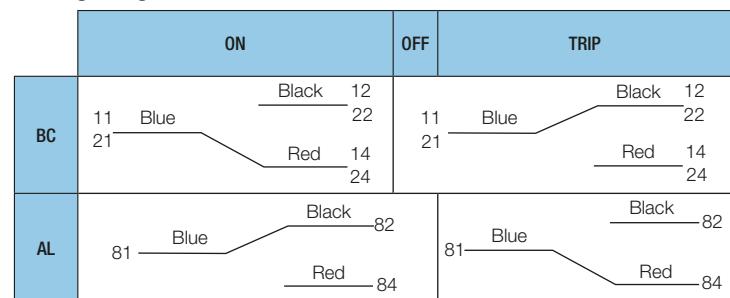
Internal Accessories

Auxiliary and Alarm Contact Blocks

Wiring Diagrams of the DWB Circuit Breaker

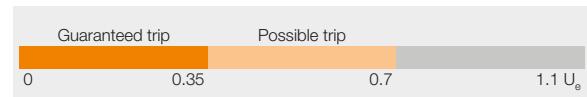


Wiring Diagrams of the DWB1600 Circuit Breaker



Undervoltage Release and Shunt Trip

BS - Undervoltage release: it trips the circuit breaker when its operating voltage is below 35% of its rated value. That is, when the undervoltage release power supply is $U_e \leq 0.35 \times U_{e_r}$, the opening of the circuit breaker is ensured. When the voltage is within the range $0.35 < U_e < 0.7$, trip may occur, and above $0.7 \times U_{e_r}$ trip will not occur.



BD - Shunt Trip: when the shunt trip is energized by a voltage pulse, the circuit breaker trips. The trip is endured when the shunt trip command voltage is $U_e > 0.85$. That is, when its operating range is $0.85 < U_e < 1.10$ of the rated voltage, the circuit breaker will trip.



Note: to close the circuit breaker, BS must be energized.

BS - Undervoltage Release and BD - Shunt Trip



	Rated Voltage (U_e)	Voltage code	DWB160 DWB250 Ref. WEG ²⁾	Consumption	DWB400 Ref. WEG ²⁾	Consumption	DWB800 DWB1000 Ref. WEG ²⁾	Consumption	DWB1600 Ref. WEG ²⁾	Consumption
Undervoltage release BS	110-127 V ac	D60	-	-	12687427	2,5 VA	13421493	5 VA	10046787	5 VA
	220-240 V ac	D66	-	-	12687479	5 VA	13421489	5 VA	10046727	5 VA
	380-415 V ac	D70	-	-	12687480	8 VA	13421495	5 VA	10046726	5 VA
	440-480 V ac	D74	-	-	12687481	9 VA	13421496	5 VA	10046762	5 VA
	24 V dc	C03	-	-	12687425	1 W	13421490	5 W	10046785	5 W
	48 V dc	C07	-	-	12687426	1 W	13421491	5 W	10046786	5 W
	125 V dc	C13	-	-	-	-	-	-	-	-
	24 V ac / V dc	E26	11338330	2.5 VA	-	-	-	-	-	-
	48 V ac / V dc	E27	11338318	2.0 VA	-	-	-	-	-	-
	60 V ac / V dc	E28	11442836	2.5 VA	-	-	-	-	-	-
	110-130 V ac / V dc	E10	11338324	1.5 VA	-	-	-	-	-	-
	220-250 V ac / V dc	E15	10853866	2.5 VA	-	-	-	-	-	-
Shunt trip BD ¹⁾	24 V ac / V dc	E26	11338271	0.5 VA	12687485	130 VA	13421393	90 VA	10046782	90 VA
	48 V ac / V dc	E27	11338248	0.5 VA	12687486	50 VA	13421394	90 VA	10046783	90 VA
	60 V ac / V dc	E28	11442871	0.5 VA	-	-	-	-	-	-
	110-130 V ac / V dc	E10	11338254	0.5 VA	12687482	65 VA	13421391	90 VA	10046725	90 VA
	220-250 V ac / V dc	E15	10850989	0.5 VA	12687483	65 VA	13421392	90 VA	10046724	90 VA
Min./max cable			0.5-1.5 mm ²	20-16 AWG	0.5-1.5 mm ²	20-16 AWG	0.5-1.5 mm ²	20-16 AWG	0.5-1.5 mm ²	20-16 AWG
Length to strip the wire min./max.			4-6 mm		5-7 mm		5-7 mm		5-7 mm	
Tightening torque of the terminal (N.m)			0.8		0.8		0.8		0.8	
Fixing tightening torque (N.m)			0.3		0.8		Snap fit		0.8	

Notes: 1) It has a device to keep the coil de-energized after the trip pulse.

2) Sold separately only. It is not sold assembled on the circuit breaker.

Wiring Diagrams



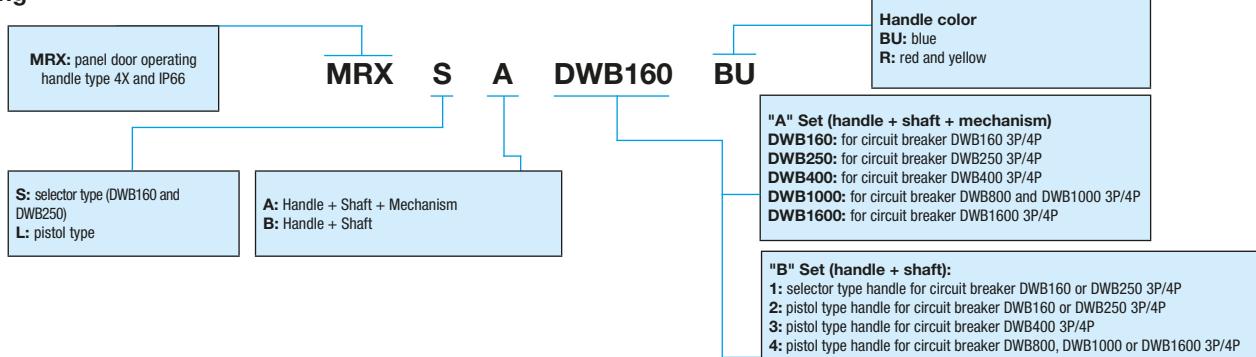
External Accessories

Panel Door Operating Handles

Handle (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.

Coding



Panel Door Operating Handles (IP66)

"A" Set: Handle + Shaft + Mechanism



MRXS



MRXL



MRXL

Ref. WEG	Description	Circuit breaker	Shaft (mm)	Length of handle (mm)	Handle color
13624516	MRXS-A-DWB160-R	DWB160 3P/4P	460	-	Red and yellow
13624549	MRXS-A-DWB250-R	DWB250 3P/4P	460	-	Red and yellow
13624551	MRXL-A-DWB160-R	DWB160 3P/4P	460	105	Red and yellow
13624610	MRXL-A-DWB250-R	DWB250 3P/4P	460	105	Red and yellow
13624612	MRXL-A-DWB400-R	DWB400 3P/4P	460	105	Red and yellow
13624616	MRXL-A-DWB1000-R	DWB800 / DWB1000 3P/4P	460	158	Red and yellow
13624628	MRXL-A-DWB1600-R	DWB1600 3P/4P	460	158	Red and yellow
13624517	MRXS-A-DWB160-BU	DWB160 3P/4P	460	-	Blue
13624550	MRXS-A-DWB250-BU	DWB250 3P/4P	460	-	Blue
13624553	MRXL-A-DWB160-BU	DWB160 3P/4P	460	105	Blue
13624611	MRXL-A-DWB250-BU	DWB250 3P/4P	460	105	Blue
13624613	MRXL-A-DWB400-BU	DWB400 3P/4P	460	105	Blue
13624617	MRXL-A-DWB1000-BU	DWB800 / DWB1000 3P/4P	460	158	Blue
13624629	MRXL-A-DWB1600-BU	DWB1600 3P/4P	460	158	Blue



Notes: 1) Padlocks 4 up to 8 mm may be fit to the handles.

2) Sold separately only. It is not sold assembled on the circuit breaker.

"B" Set: Handle + Shaft

Ref. WEG	Description	Circuit breaker	Shaft (mm)	Length of handle (mm)	Handle color
13624630	MRXS-B-1-R	DWB160 / DWB250 3P/4P	460	-	Red and yellow
13624633	MRXL-B-2-R	DWB160 / DWB250 3P/4P	460	105	Red and yellow
13624635	MRXL-B-3-R	DWB400 3P/4P	460	105	Red and yellow
13624660	MRXL-B-4-R	DWB800 / DWB1000 / DWB1600 3P/4P	460	158	Red and yellow
13624632	MRXS-B-1-BU	DWB160 / DWB250 3P/4P	460	-	Blue
13624634	MRXL-B-2-BU	DWB160 / DWB250 3P/4P	460	105	Blue
13624636	MRXL-B-3-BU	DWB400 3P/4P	460	105	Blue
13624661	MRXL-B-4-BU	DWB800 / DWB1000 / DWB1600 3P/4P	460	158	Blue

Notes: 1) Padlocks 4 up to 8 mm may be fit to the handles.

2) Sold separately only. It is not sold assembled on the circuit breaker.

Only Mechanism

Ref. WEG	Description	Circuit breaker
13624244	MRH DWB160	DWB160 3P/4P
13624246	MRH DWB250	DWB250 3P/4P
13624247	MRH DWB400	DWB400 3P/4P
13624278	MRH DWB1000E	DWB800 / DWB1000 3P/4P
13624279	MRH DWB1600E	DWB1600 3P/4P

Note: 1) Sold separately only. It is not sold assembled on the circuit breaker.

External Accessories



Shaft Support

- Recommended when the shaft length is more than indicated in next table.



MRI - Rotary Operating Handle for Direct Operation of the Circuit Breaker

- It allows rotary operation of the circuit breaker
- Padlocking in the OFF position with up to three padlocks



Mounting

BFR - DIN Rail Base

- It allows fast assembly of the circuit breaker on DIN rail 35 mm



Lock

BLIM - Front Mechanical Interlock

- Mechanical lock between two circuit breakers, preventing simultaneous closing (ON)
- It allows the use of 1 to 3 padlocks of 4...8 mm

Ref. WEG	Description	Circuit breaker	Shaft length to use of support
13878675	MR DWB400	DWB400	> 380 mm
13878676	MR DWB800-1600	DWB800/DWB1000/DWB1600	> 320 mm

Note: sold separately only. It is not sold assembled on the circuit breaker. Accessory may be used on frames 3P and 4P.

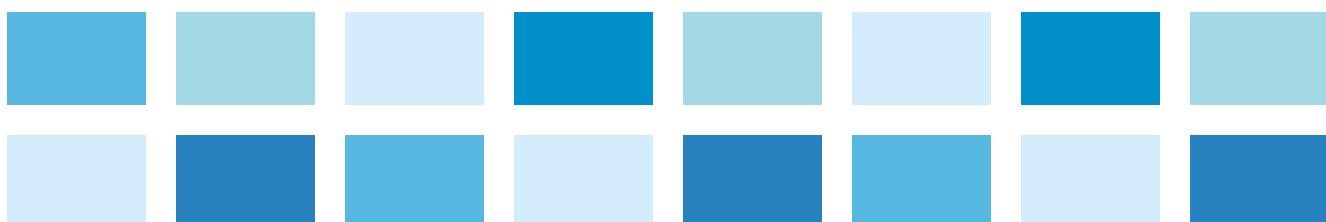
	Circuit	Ref. WEG
MRI DWB400	DWB400	12729396
MRI DWB800-1000	DWB800 DWB1000	13471816
MRI DWB1600	DWB1600	10046795

Note: MRI accessory may be used on frames 3P and 4P.

	Circuit	Ref. WEG
BFR DWB160	DWB160	12730039
BFR DWB250	DWB250	12139063

Note: BFR accessory may be used on frames 3P and 4P.

	Circuit	Ref. WEG
BLIM DWB160 3P	DWB160	11639815
BLIM DWB160 4P	DWB160	12729994
BLIM DWB250 3P	DWB250	11639817
BLIM DWB250 4P	DWB250	12729995
BLIM DWB400 3P	DWB400	12729996
BLIM DWB400 4P	DWB400	11800073
BLIM DWB800-1600 3P	DWB800 / DWB1000 / DWB1600	13471814
BLIM DWB800-1600 4P	DWB800 / DWB1000 / DWB1600	13471815
BLIM DWA800-1600 3P	DWB1600	10046798
BLIM DWA800-1600 4P	DWB1600	11800074



External Accessories¹⁾



Lock

PLW - Padlocking Device

- It allows padlocking the circuit breaker in the OFF position. It complies with the requirements of Regulatory Standard - NR10
- It allows the use of 1 to 3 padlocks of 4...8 mm

Circuit	Ref. WEG
PL DWB160 3P	DWB160
PL DWB160 4P	DWB160
PL DWB250	DWB250 (three poles and four poles)
PL DWB400	DWB400 (three poles and four poles)
PL DWB800-1600	DWB800 / DWB1000 / DWB1600 (three poles and four poles)
PL1600	DWB1600 (three poles and four poles)



Connection

CT - 90° Connection Extension Bars

- It allows direct connection of bars or cables from the back side of the circuit breaker

Circuit	Cable / bar	Ref. WEG
CT DWB160 3P ¹⁾	DWB160	12730075
CT DWB250 3P ¹⁾	DWB250	12288234
CT DWB400 3P ¹⁾	DWB400	12730076
CT DWB800-1000 3P ¹⁾	DWB800 DWB1000	13471874
CT DWB1600 3P	DWB1600	10046808

Note: 1) CP 90° connection extension bars protection cover included.



CP - 90° Connection Extension Bars Protection Cover

- Accessory only used with 90° connection extension bars to protect terminals and bars
- It protects the operators and everyone involved in the process against inadvertent contact

Circuit	Ref. WEG
CP protection cover DWB160 3P	DWB160
CP protection cover DWB250 3P	DWB250
CP protection cover DWB400 3P	DWB400
CP protection cover DWB800-1000 3P	DWB800 / DWB1000

Note: The codes of this table refer to the supply of the CP 90° connection extension bars protection cover only. 1 unit refers to the covering of the 3 phases. No protection cover for 4 poles is available. Accessory available for DWB circuit breakers only. The DWB1600 circuit breaker, for example, does not have the 90° connection extension bars protection cover.



BE - Straight Extension Bars

- It extends the terminal length and allows connecting busbars and mounting cables with terminals
- 3-piece set

Circuit	Cable / bar	Ref. WEG
BE DWB160 3P	DWB160	11279346
BE DWB160 4P	DWB160	11780009
BE DWB250 3P	DWB250	11279347
BE DWB250 4P	DWB250	12714046
BE DWB400 3P	DWB400	12730070
BE DWB400 4P	DWB400	11780016
BE DWB800-1000 3P	DWB800 / DWB1000	13471872
BE DWB800-1000 4P	DWB800 / DWB1000	13471873
BE DWB1600 3P	DWB1600	10046553
BE DWB1600 4P	DWB1600	11780050



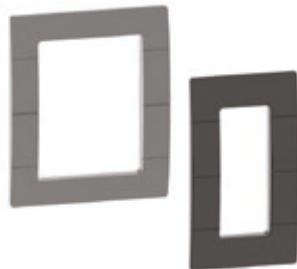
PC - Cable Connection Terminal

- It allows direct connection of cables to the circuit breaker
- 3-piece set

Round terminal lugs schematic drawing	DWB160 ³⁾	DWB250	DWB400	DWB800 / DWB1000	DWB1600
Description	PC DWB250 3P	PC DWB400 3P	PC DWB800-1000 3P	PC DWB1600 3P	
Number of cables	Round terminal lugs for one cable	Round terminal lugs for one cable (accessory)	Round terminal lugs for one cable (accessory)	Round terminal lugs for two cables (accessory)	Round terminal lugs for four cables (accessory)
Maximum cable cross section (mm ²) ²⁾	70	120	240	240	240
Minimum cable cross section (mm ²) ²⁾	4	25	35	95	185
Tightening torque (mm)	6	25	30	55	55
Cable length to be stripped to use terminal lugs (mm)	16	25	25	28	38
Reference WEG	Supplied with the circuit breaker	11277469	12730045	13471871	10046555

External Accessories

Finishing⁴⁾



MP - Escutcheon for Circuit Breaker Operation on Panel Door

- It provides perfect finishing between the circuit breaker and panel door

Circuit	Ref. WEG
MP DWB160	DWB160
MP DWB250	DWB250
MP DWB400	DWB400
MP DWB800-1600	DWB800 DWB1000 DWB1600
MP DWB1600	DWB1600

Notes: 1) The accessories are not sold assembled on the DWB circuit breakers. Sold separately only.

2) Recommended cross sections for cables with stranding class 2, insulation of PVC -70 °C.

3) On DWB160 circuit breakers, the cable connection terminal is included in the factory supply. Not sold as accessory.

4) MP accessory can be used on frames 3P and 4P.

PB - Phase Barrier

- The circuit breakers are supplied with two phase barriers. Those barriers must be installed on the line input side. For voltages above 500 Volts, phase barriers must also be installed on the circuit breaker outputs. For such application, the phase barriers must be purchased. They are not supplied with the circuit breaker.

	Circuit breaker	Ref. WEG
PB DWB160-250	DWB160 / DWB250	12403111
PB DWB400	DWB400	12731651

Note: see table with directions to use the phase barriers on page 30.

Motor Operator

The motor operator is a mechanical and electrical device whose main characteristics are:

- It allows remote operation of the circuit breaker
- Option of manual or automatic operation. Operation from the front of the motor operator
- Control voltage (motor power supply) in the following levels:
110-127 V ac / 110-125 V dc, 230 V ac / 220 V dc, 48-60 V dc and 24 V dc
- Motor operator with direct operation on the circuit breaker handle for DWB400 circuit breakers
- Motor operator with spring pre-charge for DWB800, DWB1000 and DWB1600 circuit breakers



AM DWB400



AM DWB800 - DWB1000



AM DWB1600

External Accessories

DWB400 Motor Operator

The motor operator of the **DWB400** circuit breaker allows choosing between Local and Remote operation on its front part. Assembly of AM400 must be done with the circuit breaker in the OFF position.

For MANUAL operation, it is necessary:

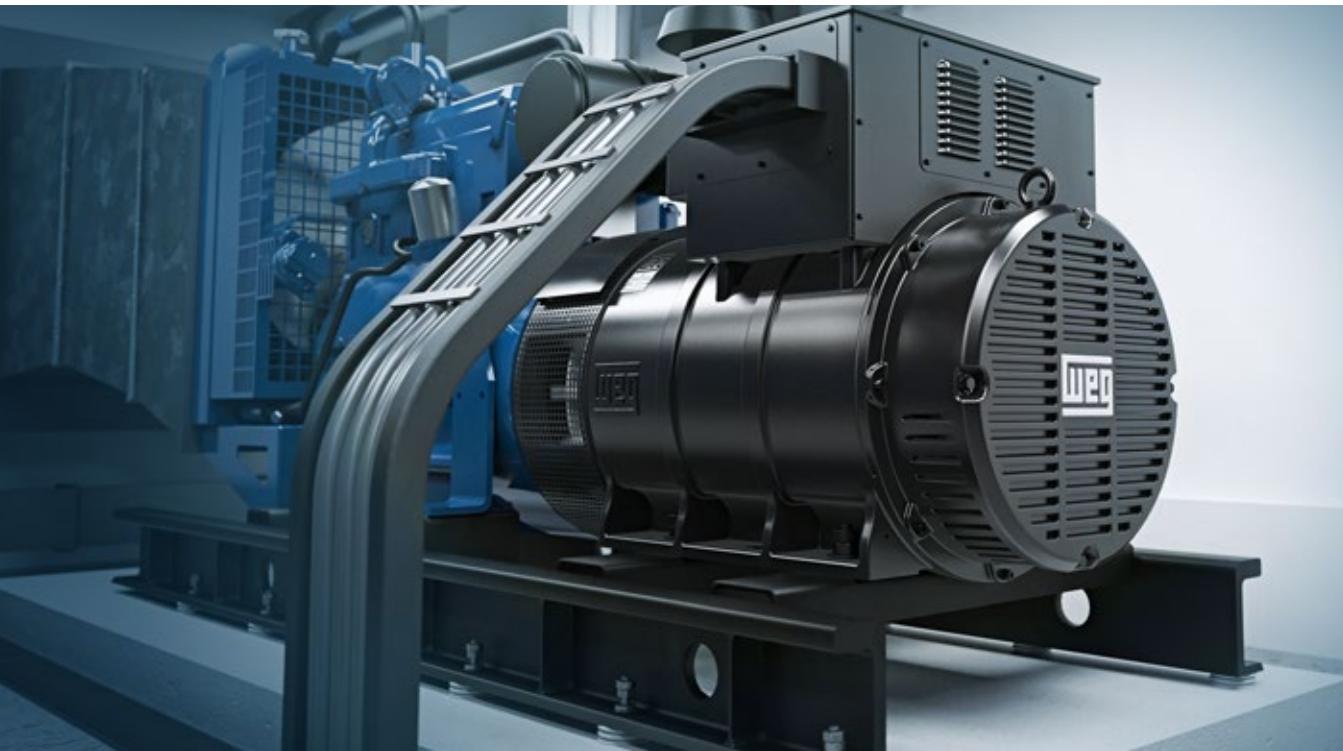
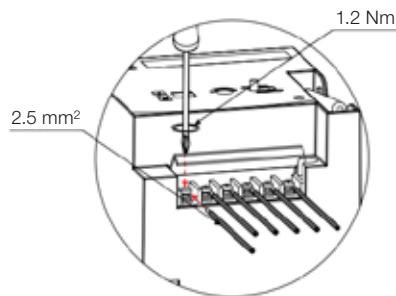
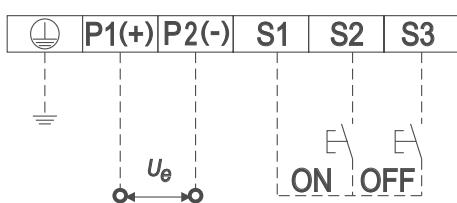
1. Set the slide switch to MANUAL. Insert the operating handle (located on the side bracket) into the front slot and rotate it 180° clockwise;
2. It must be rotated only 180° clockwise for safely operating the micro switch;
3. Return the handle to the side bracket.

For AUTOMATIC operation, it is necessary:

1. Set the slide switch to AUTO. In this position it is possible to operate the circuit breaker remotely by sending ON/OFF signals;
2. Please, do not send ON/OFF signals simultaneously to the motor operator;
3. If the circuit breaker is equipped with undervoltage release, please charge it before operating the motor operator.



Wiring Diagram (DWB400)

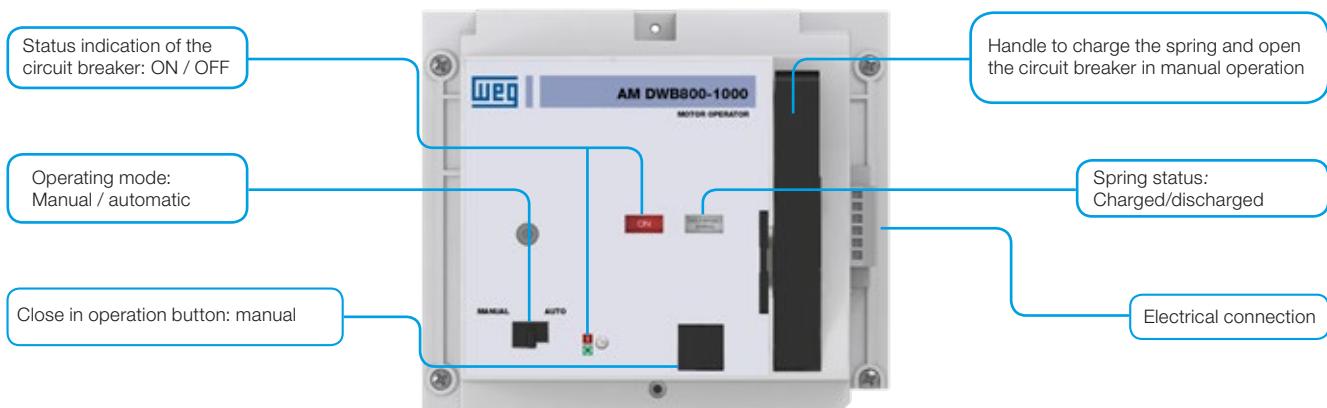


External Accessories

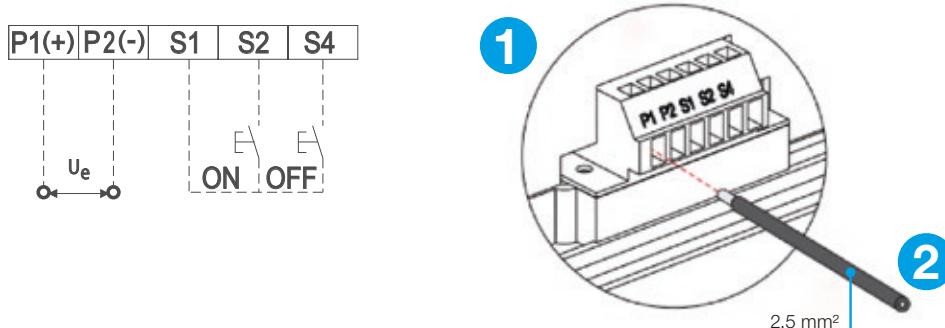
DWB800 / DWB1000 / DWB1600 Motor Operator

The functions of the motor operator, for **DWB800**, **DWB1000** and **DWB1600** circuit breakers, are operated on the front of the product through buttons and through the spring charging handle.

The motor operator must be assembled with the spring discharged and the circuit breaker in the ON position.



Wiring Diagram (DWB800-DWB1000-DWB1600)



Technical Data of the Motor Operator¹⁾²⁾³⁾

		Rated Voltage (U _e)	Voltage code	DWB400	Consumption	DWB800 DWB1000	Consumption	DWB1600	Consumption			
Motor operator without spring pre-charge	110-125 V dc / 110-127 V ac 50/60 Hz	E51	10835719	500 VA	-	-	-	-	-			
	220V dc / 230V ac 50/60 Hz	E46	10835720	500 VA	-	-	-	-	-			
	48-60 V dc	C25	10835721	500 W	-	-	-	-	-			
	24 V dc	C03	10835559	500 W	-	-	-	-	-			
Motor operator with spring pre-charge	110-125 V dc / 110-127 V ac 50/60 Hz	E51	-	-	13179386	750 VA	13178916	750 VA				
	230 V ac / 220V dc 50/60 Hz	E46	-	-	13179385	750 VA	13178915	750 VA				
	48-60 V dc	C25	-	-	13179384	600 W	13178914	600 W				
	24 V dc	C03	-	-	13179383	600 W	13178913	600 W				
Voltage range				0.85 a 1.1 U _e								
ON time				500ms	80ms	80ms	90ms	90ms	90ms			
OFF time	Using motor operating			500ms	700ms	700ms	800ms	800ms	800ms			
	Using shunt trip or undervoltage release ⁴⁾			15ms	15ms	15ms	20ms	20ms	20ms			
Min./max cable				0.5-2.5 mm ² 20-14 AWG	0.5-1.5 mm ² 20-16 AWG							
Length to strip the wire min./max.				5-7 mm								
Tightening torque of the terminal (N.m)				1.2	Spring terminal							
Fixing tightening torque (N.m)				1.2	2	2	2	2	2			

Notes: 1) The connections with the motor operator AM are done through the connection terminals.

2) The motor operator of the DWB800 circuit breaker is identical to the motor operator of the DWB1000, therefore, they can be used without restrictions.

3) The motor operator is sold separately from the circuit breaker.

4) When using the shunt trip or undervoltage release to turn off, the alarm block will indicate tripping of the circuit breaker.

External Accessories

CTM - Automatic Changeover

The CTM is a product set, according to IEC 60947-2, which works together to form an automatic changeover, ensuring a mechanical interlock with versatility. The system is composed of two DWB molded case circuit breakers, circuit breaker accessory (if necessary), two motor operators and mechanical interlock base (BTIM). Both circuit breakers must be connected in parallel.

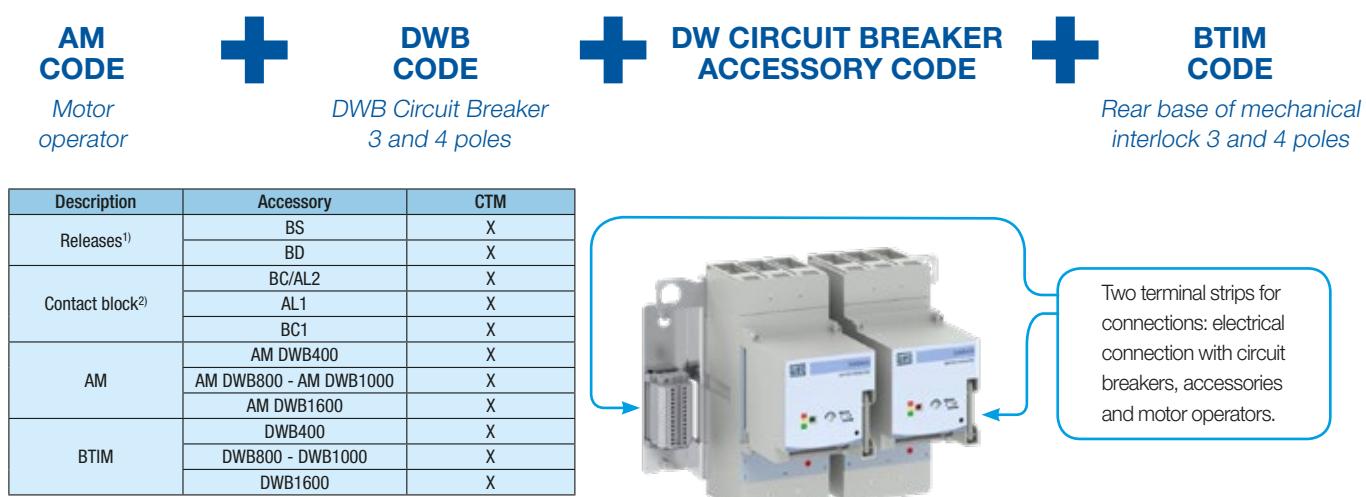
Characteristics:

- Greater safety
- Easy maintenance
- Very simple assembly of the installation

Notes: The CTM set is supplied assembled.

The 90° connection extension bars cannot be used as accessory in the CTM set.

The circuit breaker accessory table presented on page 19 is valid for the two circuit breakers of the CTM simultaneously, that is, both circuit breakers (left and right side) must have the same accessories (mirrored configuration).



Notes: 1) Both circuit breakers must have the same release.

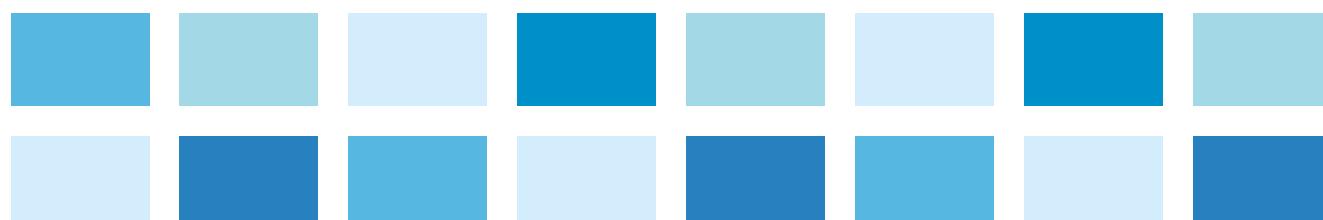
2) Both circuit breakers must have the same contact or alarm block set.

3) Both circuit breakers must have the same frame.

4) Both motor operators must be identical.

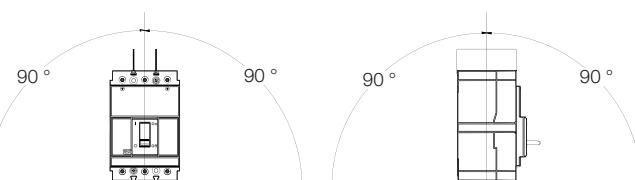
Total closing + opening time between circuit breakers of a CTM		
CTM	Without trip coil	With trip coil
400	1000ms	515ms
800-1000	780ms	95ms
1600	890ms	110ms

Opening and closing times of the motor operators			
Motor operators	DWB400	DWB800 / DWB1000	DWB1600
ON time	500ms	80ms	90ms
OFF time	500ms	700ms	800ms
Trip time (using shunt trip)	15ms	15ms	20ms



Installation

Installation of the Circuit Breakers

IEC 60947-2 standard	Un.	DWB160	DWB250	DWB400	DWB800	DWB1000	DWB1600
Recommended mounting distances (mm)	mm	A: 50 C: 20 D: 20	A: 50 C: 20 D: 20	A: 70 C: 30 D: 30	A: 100 C: 30 D: 30	A: 100 C: 30 D: 30	A: 100 C: 30 D: 30
Recommended distances between circuit breakers for side by side mounting	mm	B:10	B:10	0	0	0	0
Recommended distances between circuit breakers for vertical mount 1) Non-insulated connection; 2) Insulated cable; 3) Terminal lugs.	mm	90	150	180	200	200	200
Assembly positions	-						
Dimensional drawing and mounting 2P and 3P	mm	A: 100/121 (limiter) B: 25	A: 124/149 (limiter) B: 35	A: 199 B: 35	A: 230 B: 70	A: 230 B: 70	A: 265 B: 70
DWB160 / DWB250 DWB400 / DWB800 / DWB1000 / DWB1600							
Dimensional drawing and mounting 4P	mm	A: 100/121 (limiter) B=B': 25	A: 121/149 (limiter) B=B': 35	A: 199 B=B': 35	A: 230 B=B': 70	A: 230 B=B': 70	A: 265 B: 70 B'=74
DWB160 / DWB250 DWB400 / DWB800 / DWB1000 / DWB1600							
Fixing screw to plate 2P 3P	-	B/N: M4x76 x 2 parts L: M4x76 x 1 part + M4x144 x 1 part	B/N: M4x76 x 2 parts L: M4x76 x 1 part + M4x144 x 1 part	M5 x 100 x 4 parts	M5 x 60 x 4 parts	M5 x 60 x 4 parts	M8 x 140 x 4 parts
Fixing screw to plate 4P	-	B/N: M4x76 x 3 parts	B/N: M4x76 x 3 parts	M5 x 100 x 6 parts	M5 x 60 x 6 parts	M5 x 60 x 6 parts	M8 x 140 x 6 parts
Parts surpass of the fixing screw in relation to the circuit breaker	mm	10	8	15	15	15	18
Tightening torque - mounting (Nm)	Nm	1.5	1.5	3	3	3	6

Installation

DWB circuit breakers were designed to simplify installation on panels, as they can be supplied from the top or bottom, without compromising the technical characteristics of the components.

Cable and Bar Connection to Terminals

The connections to circuit breaker terminals must observe the following recommended limit:

		DWB160	DWB250		DWB400		DWB800	DWB1000	DWB1600
Connection with cable	1 cable	Bare wire cord End terminal	Direct to the circuit breaker terminal		Through round terminal lugs		Through round terminal lugs		Through round terminal lugs - up to 800 A only
		Lug terminal	Through straight extension bar	Direct to the circuit breaker terminal ²⁾	Through straight extension bar	Direct to the circuit breaker terminal ²⁾	Through straight extension bar	Through straight extension bar	Through straight extension bar
	2 cables	Bare wire cord End terminal	Not recommended	Not recommended		Not recommended		Through round terminal lugs	Through round terminal lugs - up to 800 A only
		Lug terminal	Through straight extension bar	Through straight extension bar		Through straight extension bar		Through straight extension bar	Through straight extension bar
	3 and 4 cables	Bare wire cord End terminal	Not recommended	Not recommended		Not recommended		Not recommended	Not recommended
		Lug terminal	Through straight extension bar	Through straight extension bar		Through straight extension bar		Through straight extension bar	Through straight extension bar
	More than 4 cables	Bare wire cord End terminal	Not recommended	Not recommended		Not recommended		Not recommended	Not recommended
		Lug terminal	Through straight extension bar	Through straight extension bar		Through straight extension bar		Through straight extension bar	Through straight extension bar
Connection with bar		Direct to the circuit breaker terminal	Direct to the circuit breaker terminal		Direct to the circuit breaker terminal		Direct to the circuit breaker terminal	Direct to the circuit breaker terminal	Direct to the circuit breaker terminal

Notes: 1) The cross section of cables and bars must be observed, as well as the tightening torque informed in the product catalog.

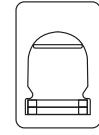
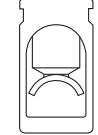
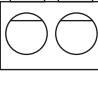
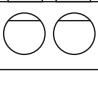
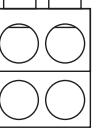
2) Pay attention to the lug terminal size, comparing its dimension to the circuit breaker dimension. Some lug terminal models are bigger than the opening and depth of the circuit breaker terminal, and it is not possible to connect them directly to the circuit breaker terminal.

Examples of Use

Direct connection of the lug terminal to the circuit breaker - 1 cable per terminal:



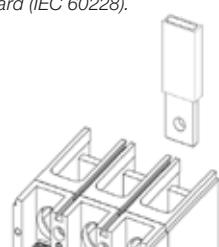
Direct Cable Connection by Round Terminal Lugs

	DWB160	DWB250	DWB400	DWB800	DWB1000	DWB1600
Round terminal lugs schematic drawing						
Number of cables	Round terminal lugs for one cable	Round terminal lugs for one cable (accessory)	Round terminal lugs for one cable (accessory)	Round terminal lugs for two cables (accessory)	Round terminal lugs for two cables (accessory)	Round terminal lugs for four cables (accessory)
Maximum cable cross section (mm ²) ³⁾	70	120	240	240	240	240
Minimum cable cross section (mm ²) ³⁾	4	25	35	95	150	185
Cable length to be stripped to use terminal lugs (mm)	16	25	25	28	28	38
Tightening torque (N.m)	6	25	30	55	55	55

Note: recommended cross sections for cables with stranding class 2, insulation of PVC - 70 °C, according to the NM NBR 280 standard (IEC 60228).

Direct Connection to the Circuit Breaker Bar

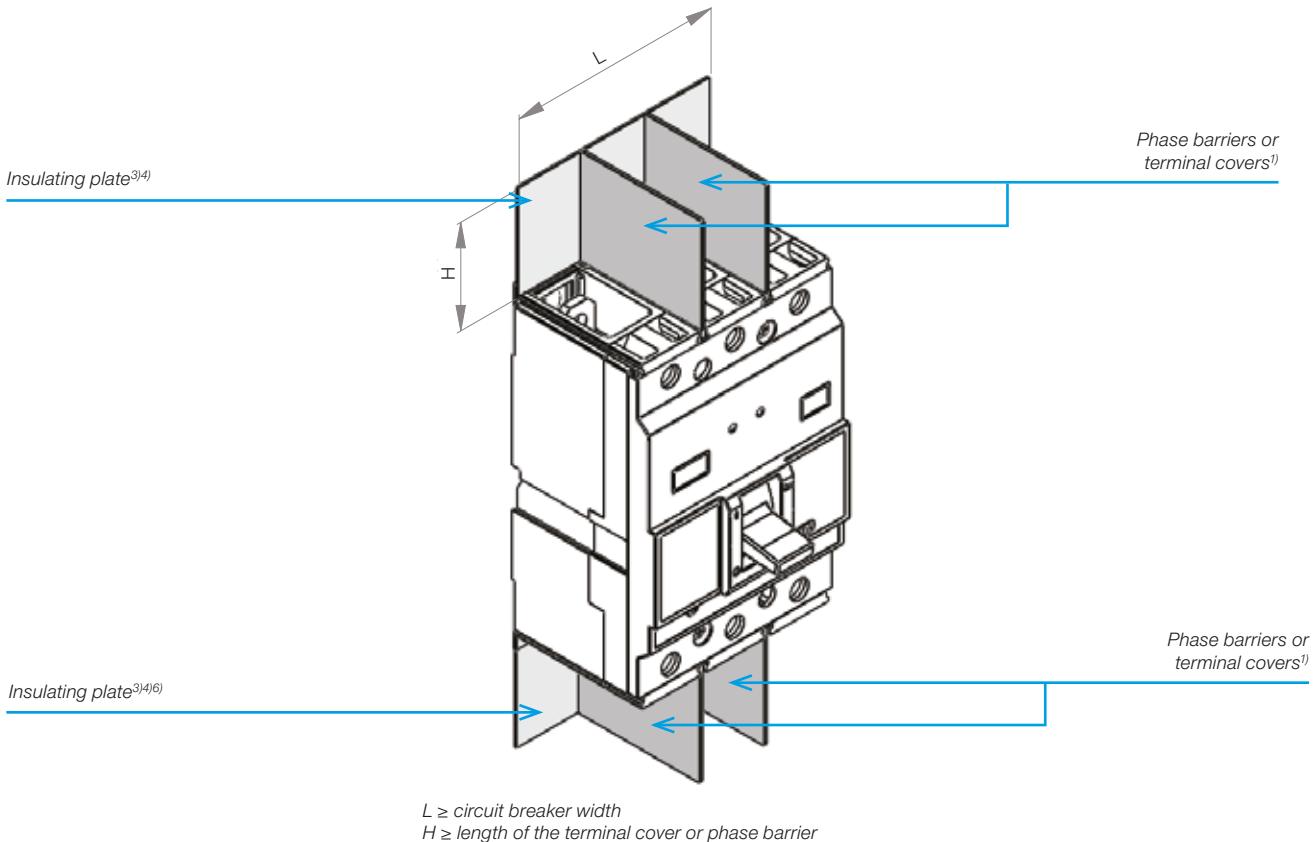
Quantity	DWB160	DWB250	DWB400	DWB800	DWB1000	DWB1600
Maximum width (mm)	10	20	20	50	50	50
Maximum thickness (mm)	7	6	12	10	10	20
Tightening torque (N.m)	6	8	20	20	20	30 (M10) / 50 (M12)



Installation

Use of Phase Barrier and Terminal Cover

The connections to the circuit breaker terminals must observe the following recommended limit:



	Ue <500 V		Ue ≥500 V	
	Input	Output	Input	Output
Connection with cable	Bare wire/cord end terminal	Mandatory use of phase barrier ¹⁾ or terminal cover	Optional use of phase barrier ¹⁾ or terminal cover	Mandatory use of phase barrier ¹⁾ or terminal cover
	Lug terminal	Mandatory use of phase barrier ¹⁾ or terminal cover	Optional use of phase barrier ¹⁾ or terminal cover	Mandatory use of phase barrier ¹⁾ or terminal cover
Connection with insulated bar		Mandatory use of phase barrier ¹⁾ or terminal cover	Optional use of phase barrier ¹⁾ or terminal cover	Mandatory use of phase barrier ¹⁾ or terminal cover
Connection with 90° connection extension bars ²⁾		Mandatory use of protection cover	Mandatory use of protection cover	Mandatory use of protection cover
Insulating plate ³⁾⁴⁾⁵⁾	Optional	Optional	Mandatory	Mandatory

Notes: 1) 2 phase barriers are supplied on DWB160, DWB250 and DWB400 circuit breakers. When two more barriers are necessary, those parts are sold as accessory.

2) Protection cover supplied with the 90° connection extension bars DWB circuit breaker. For DWB1600, use the terminal cover included in the product.

3) Not supplied with the molded case circuit breakers. It must be produced by the user.

4) Minimum characteristics requirements of the material to be used as insulating plate: Dielectric strength ≥12 kV/mm.
Material not propagating flame.

Recommended material: phenolite, polycarbonate.

5) Installation according to the figure above.

6) Insulating plate already included in circuit breaker DWB1600.

Deratings

Altitude Derating

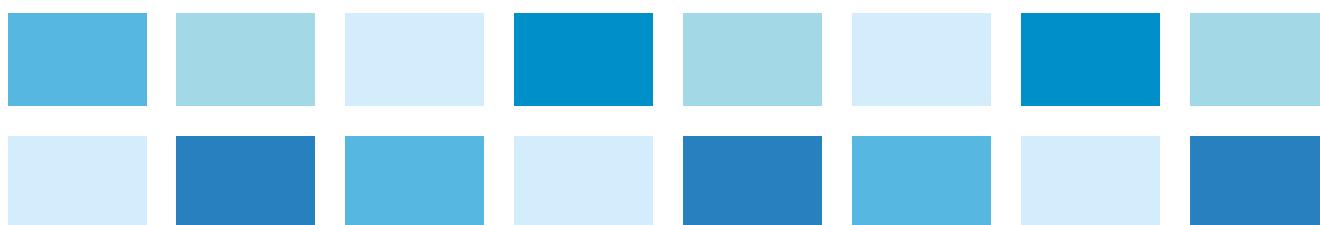
Application of circuit breakers in altitude		
Altitude (m)	Derating for the rated current I_n	Maximum rated operating voltage U_e (V)
2000	1	1
3000	0.98	0.88
4000	0.93	0.78
5000	0.90	0.68

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	1.20	1.16	1.13	1.10	1.06	1.05	1.03	1.00	0.98	0.94	0.91
DWB250	1.18	1.16	1.13	1.10	1.08	1.05	1.02	1.00	0.98	0.94	0.90
DWB400	1.18	1.16	1.13	1.10	1.08	1.05	1.02	1.00	0.98	0.94	0.90
DWB800	1.19	1.17	1.14	1.12	1.09	1.06	1.03	1.00	0.97	0.94	0.91
DWB1000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.90	0.80
DWB1600	1.13	1.12	1.10	1.08	1.06	1.04	1.02	1.00	0.98	0.97	0.95

Notes: The recommended temperature refers to the place where the circuit breaker is installed.

Apply the recommended derating to the rated current of the relevant circuit breaker.



Thermal Dissipation

Circuit Protection

DWB160	I_n (A)	16	20	25	32	40	50	63	70	80	90	100	110	125	150	160
	Thermal dissipation (W/pole)	1	1	2	4	4	5	8	4	5	6	7	7	10	11	12
DWB160L	I_n (A)	16	20	25	32	40	50	63	70	80	90	100	110	125		
	Thermal dissipation (W/pole)	1	1	2	4	4	6	10	5	7	9	11	12	15		
DWB250	I_n (A)	100	125	160	200	250										
	Thermal dissipation (W/pole)	14	19	17	14	20										
DWB250L	I_n (A)	100	125	160	200											
	Thermal dissipation (W/pole)	17	24	25	26											
DWB400	I_n (A)	200	250	320	400											
	Thermal dissipation (W/pole)	14	20	19	30											
DWB800	I_n (A)	320	400	500	630	800	800									
	Thermal dissipation (W/pole)	19	30	38	47	47	47									
DWB1000	I_n (A)	500	630	800	1000											
	Thermal dissipation (W/pole)	16	25	40	63											
DWB1600	I_n (A)	1250	1600	1600												
	Thermal dissipation (W/pole)	51	96													

Motor Protection

DWB160	I_n (A)	25	32	40	50	65	80	95
	Thermal dissipation (W/pole)	2	4	4	5	6	7	7
DWB160L	I_n (A)	25	32	40	50	65	80	95
	Thermal dissipation (W/pole)	2	4	4	6	8	9	9
DWB250	I_n (A)	80	95	105	125	150	185	200
	Thermal dissipation (W/pole)	2	3	3.5	5	7	10.5	12
DWB250L	I_n (A)	80	95	105	125	150	185	200
	Thermal dissipation (W/pole)	4	5.5	7	9.5	13.5	21	24
DWB400	I_n (A)	150	185	250	320			
	Thermal dissipation (W/pole)	14	14	20	19			
DWB800	I_n (A)	420	500					
	Thermal dissipation (W/pole)	32	38					

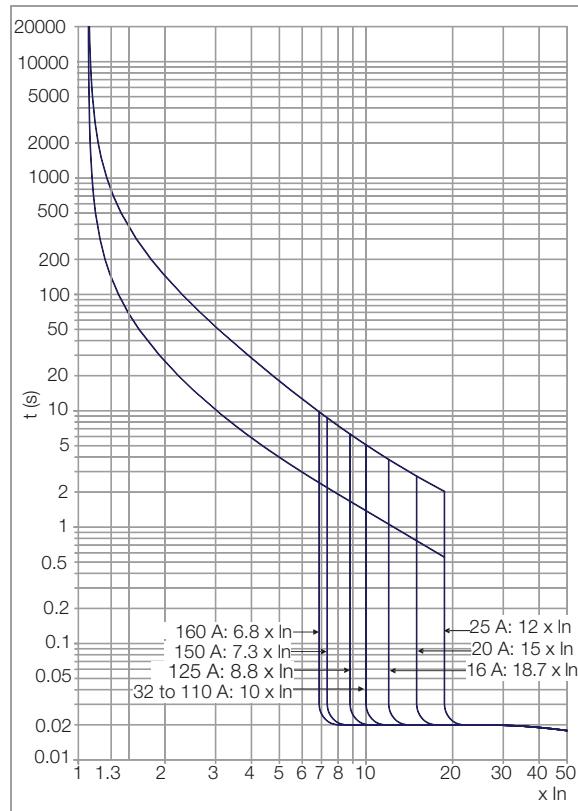
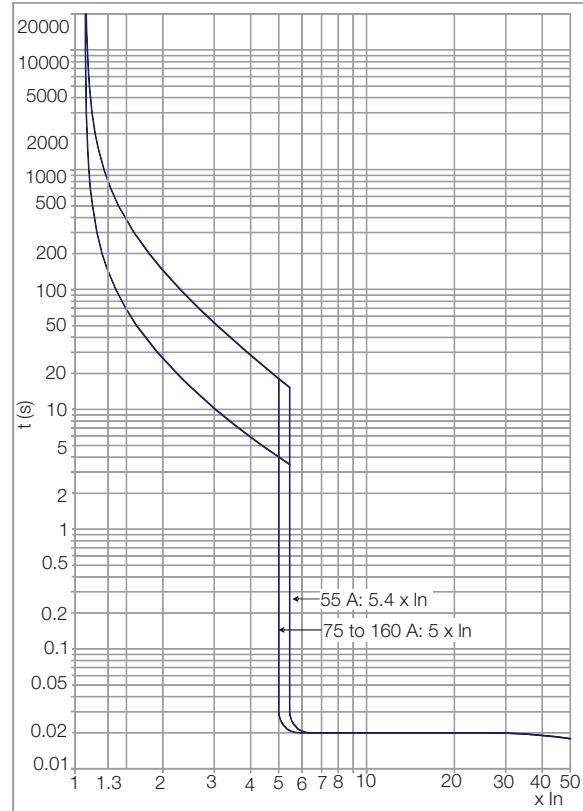
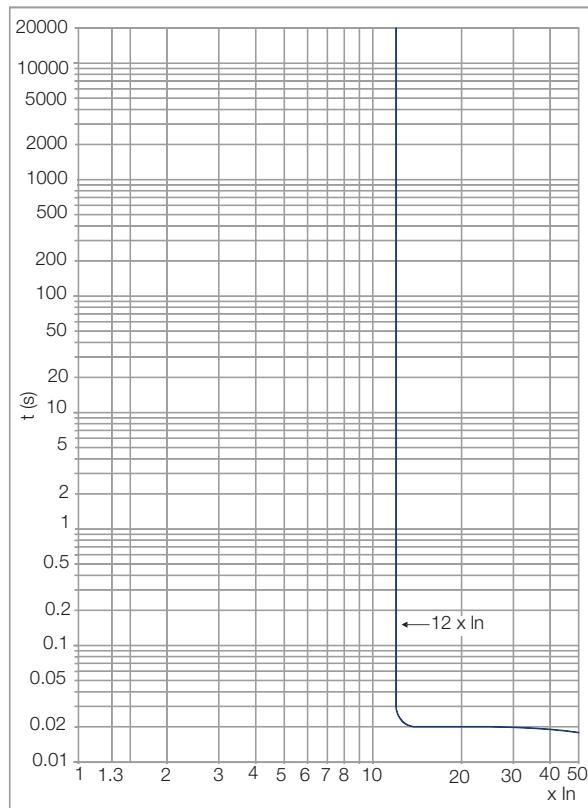
Generator Protection

DWB160	I_n (A)	55	75	85	105	125	140	160
	Thermal dissipation (W/pole)	7	5	6	7	10	11	12
DWB250	I_n (A)	105	125	160	200	250		
	Thermal dissipation (W/pole)	14	19	17	14	20		
DWB400	I_n (A)	200	250	320	400			
	Thermal dissipation (W/pole)	14	20	19	30			
DWB800	I_n (A)	320	400	500	630	800		
	Thermal dissipation (W/pole)	19	30	38	47	47		

Disconnectors

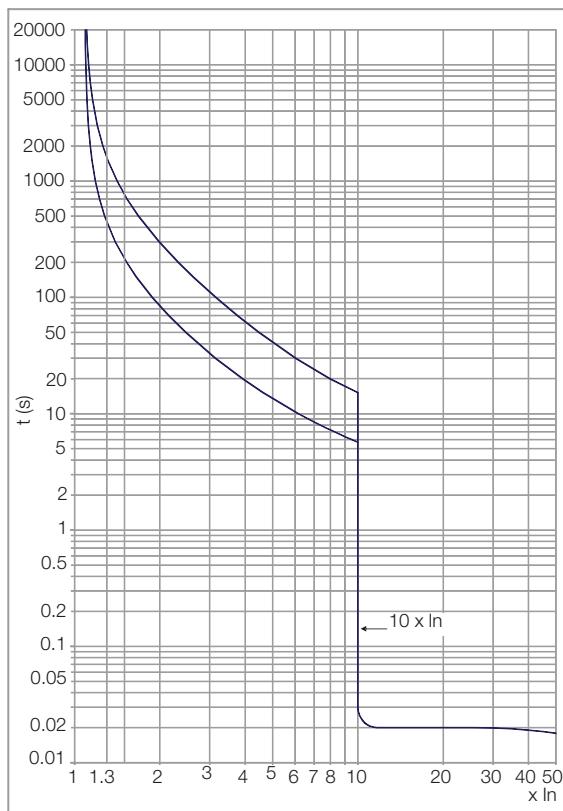
IWB160	I_n (A)	125	160
	Thermal dissipation (W/pole)	10	12
IWB250	I_n (A)	250	
	Thermal dissipation (W/pole)	20	
IWB400	I_n (A)	400	
	Thermal dissipation (W/pole)	25	
IWB800	I_n (A)	630	800
	Thermal dissipation (W/pole)	40	40
IWB1000	I_n (A)	1000	
	Thermal dissipation (W/pole)	63	

Characteristic Curves - $I \times t$

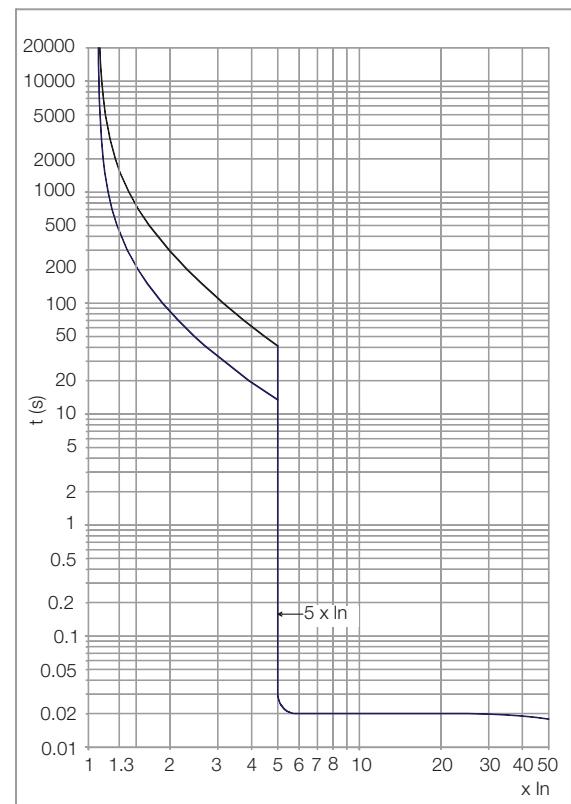
DWB160_D (Distribution)**DWB160_G (Generator)****DWB160_M (Motor)**

Characteristic Curves - $I \times t$

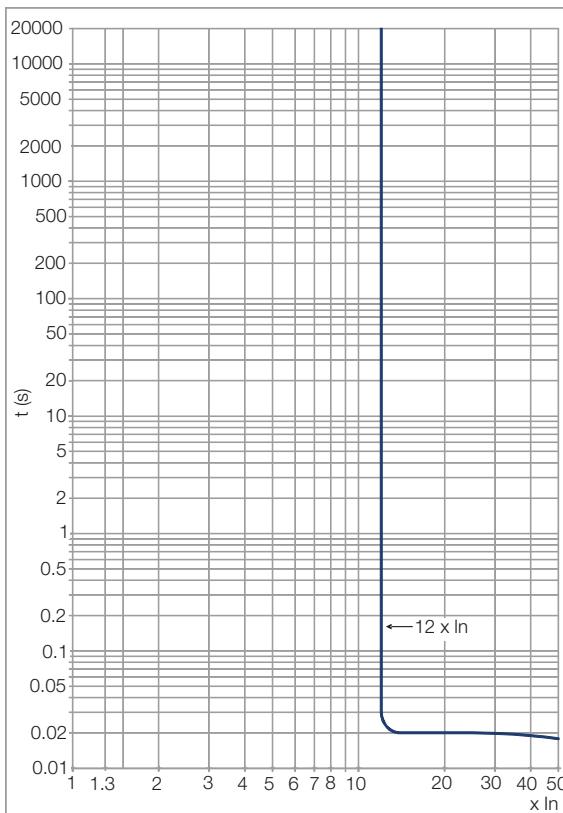
DWB250_D (Distribution)



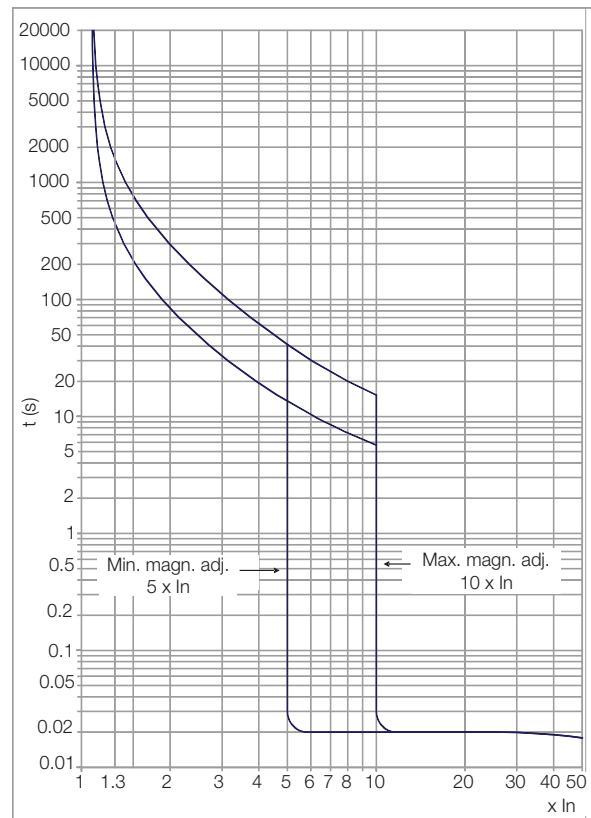
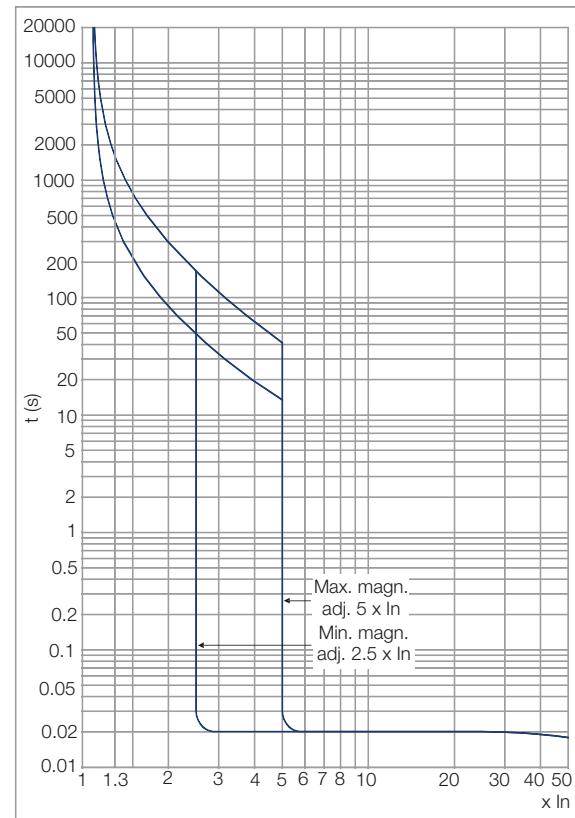
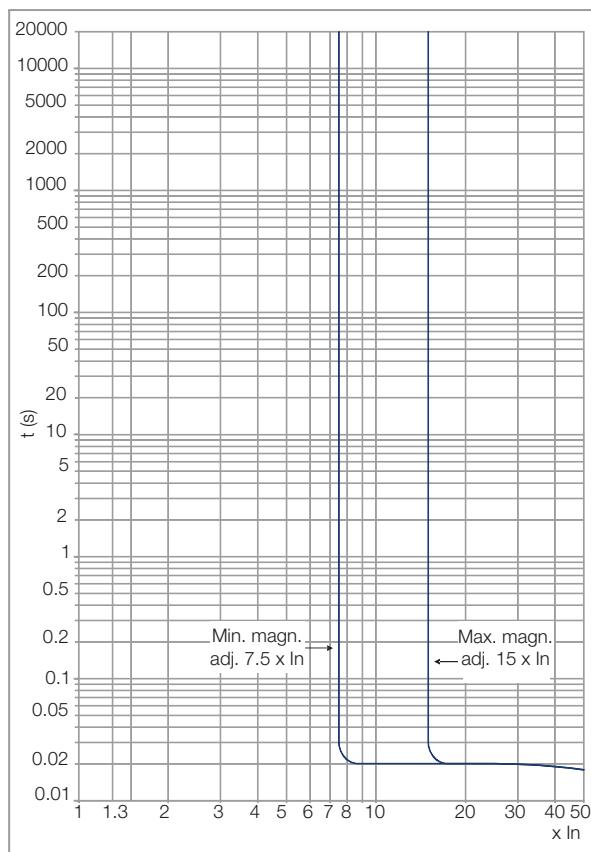
DWB250_G (Generator)



DWB250_M (Motor)

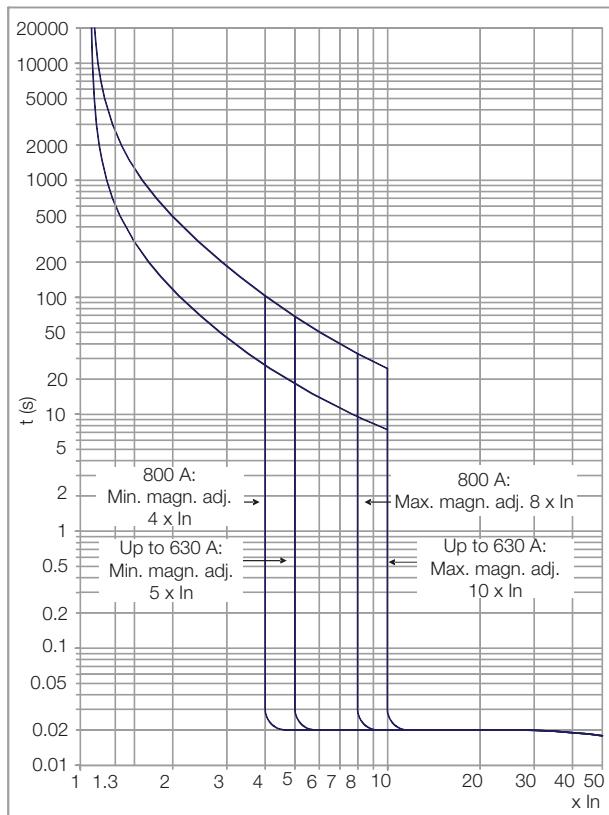


Characteristic Curves - $I \times t$

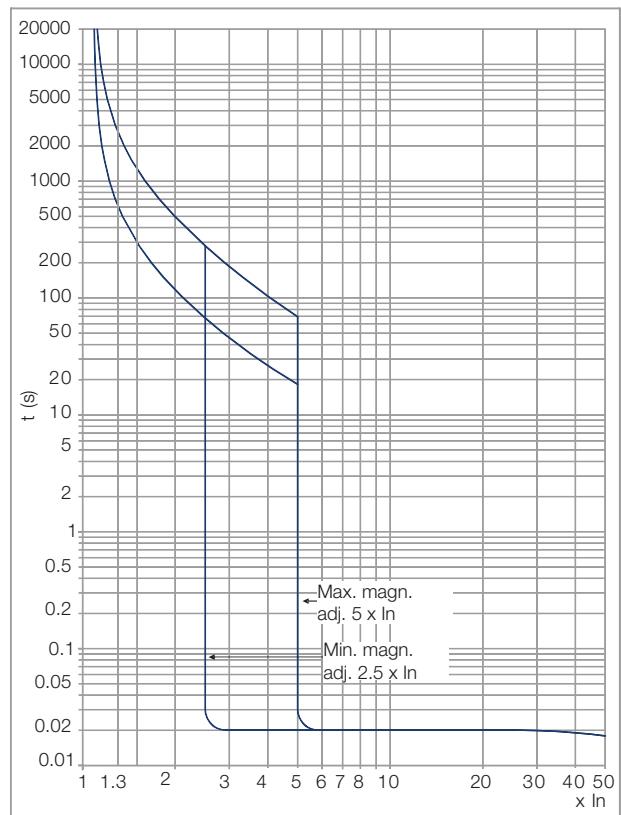
DWB400_D (Distribution)**DWB400_G (Generator)****DWB400_M (Motor)**

Characteristic Curves - $I \times t$

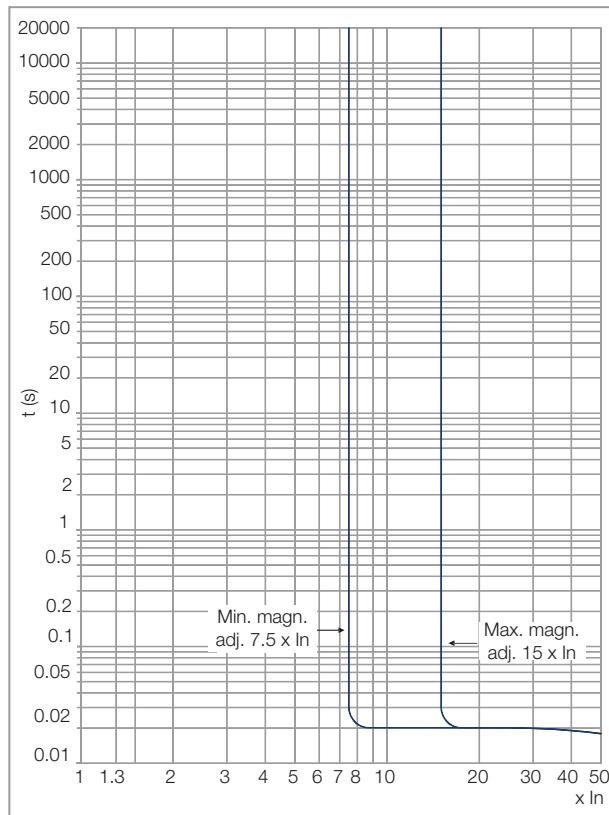
DWB800 (Distribution)



DWB800 (Generator)

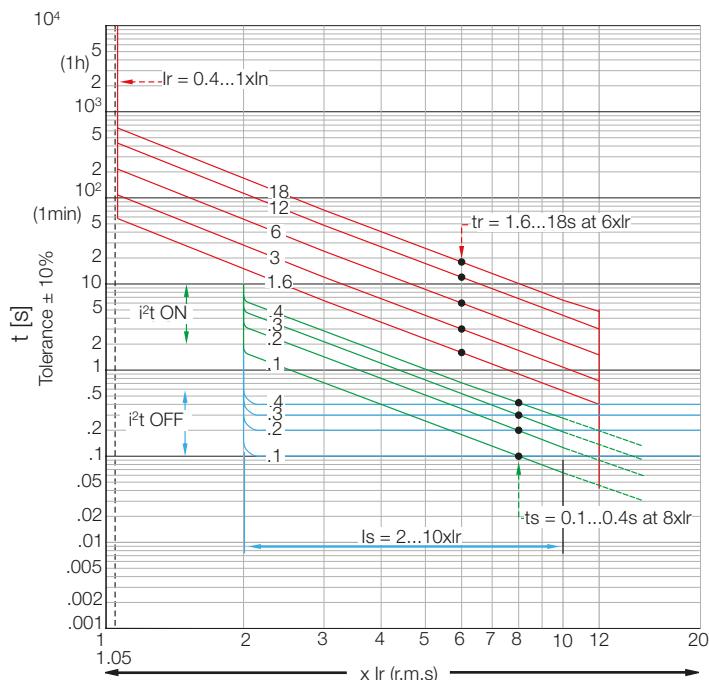


DWB800 (Motor)

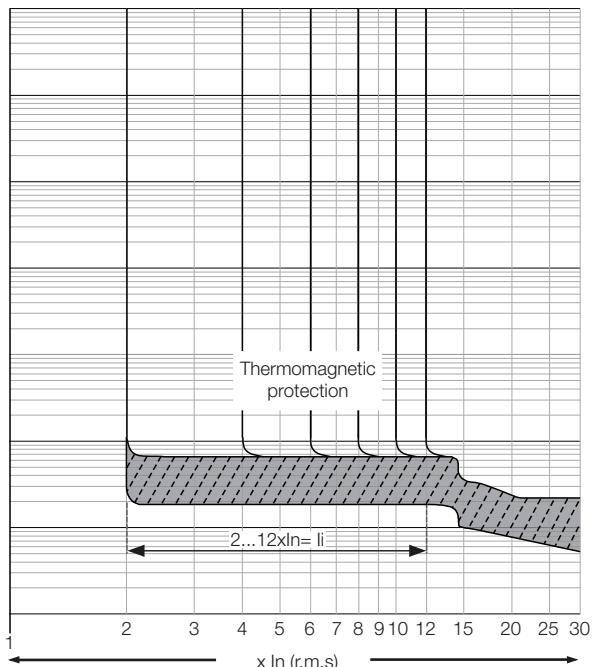


Characteristic Curves - $I \times t$

DWB1000 - Overload Protection (L and S)

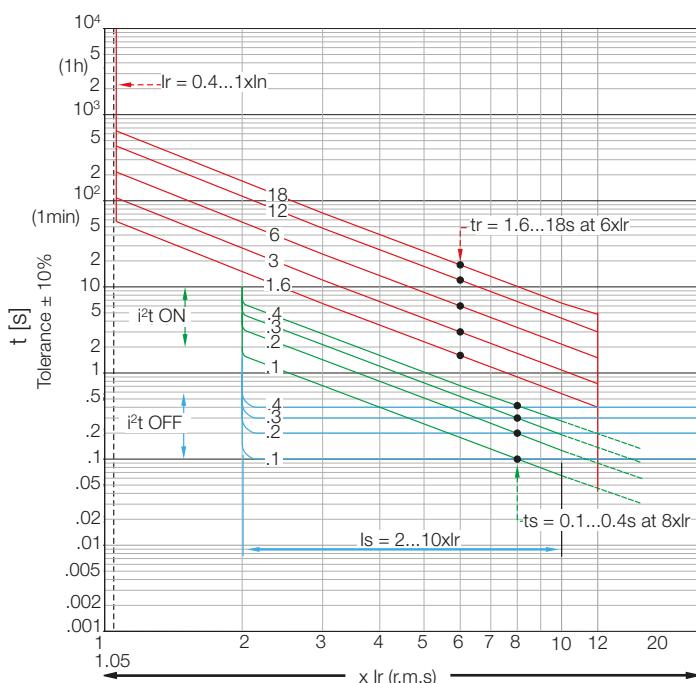


DWB1000 - Short Circuit Protection (I - Instantaneous)

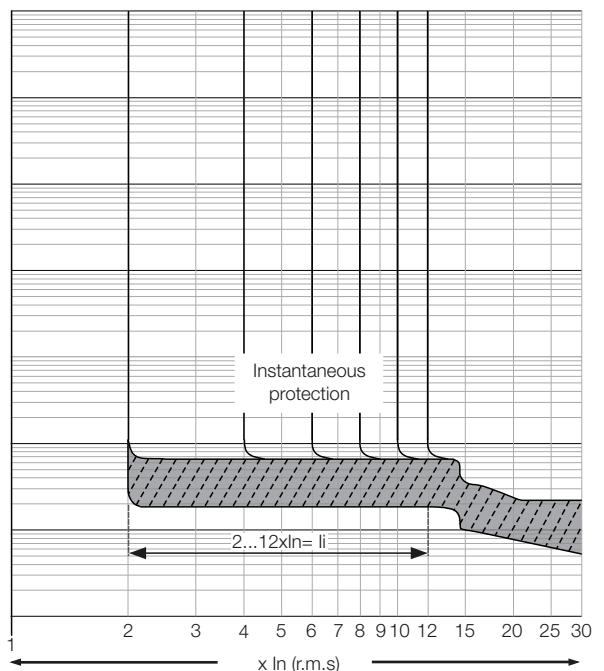


Note: The DWB1000 can be used for the protection of both electric circuits and generators.

DWB1600 - Overload Protection (L and S)



DWB1600 - Short Circuit Protection (I - Instantaneous)

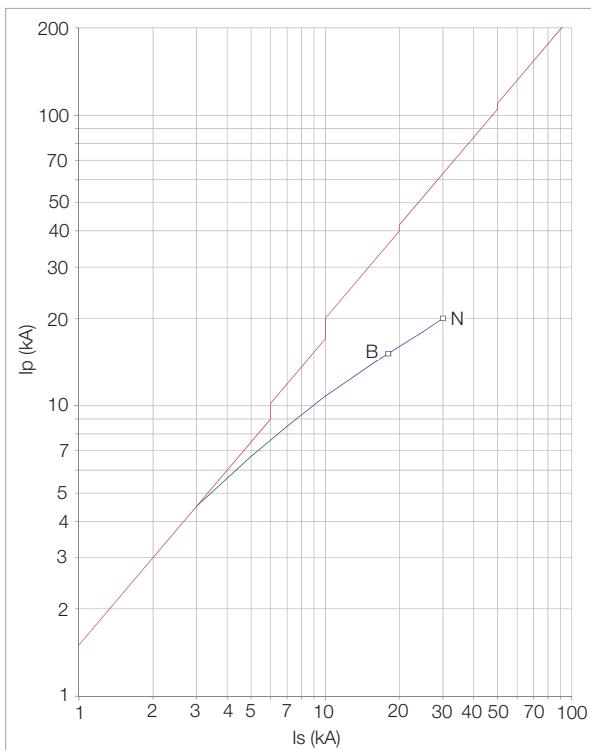


Note: The DWB1600-ET can be used for the protection of both electric circuits and generators.

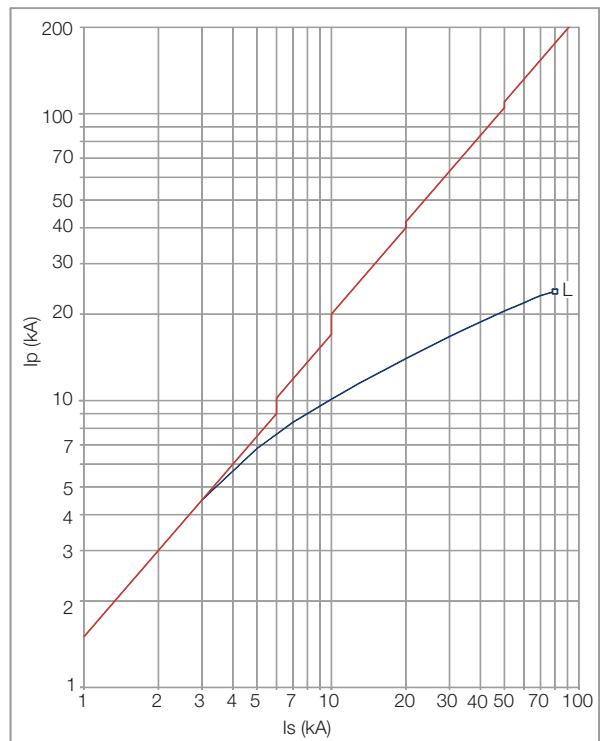
Characteristic Curves - $I \times t$

380/415 V ac

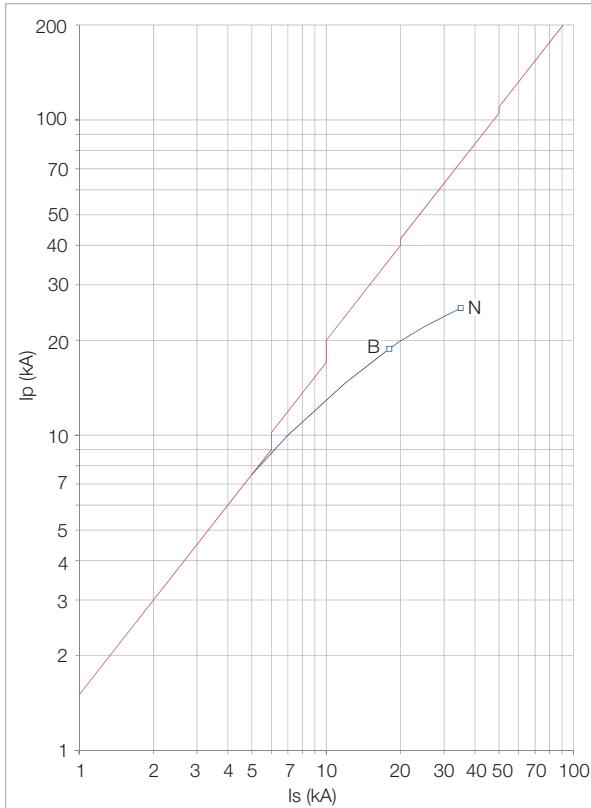
DWB160 B/N



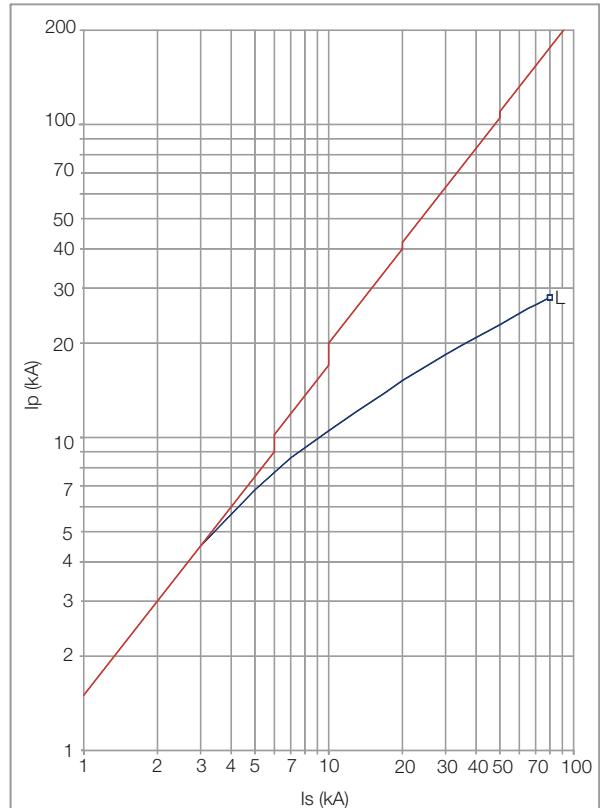
DWB160 L



DWB250 B/N



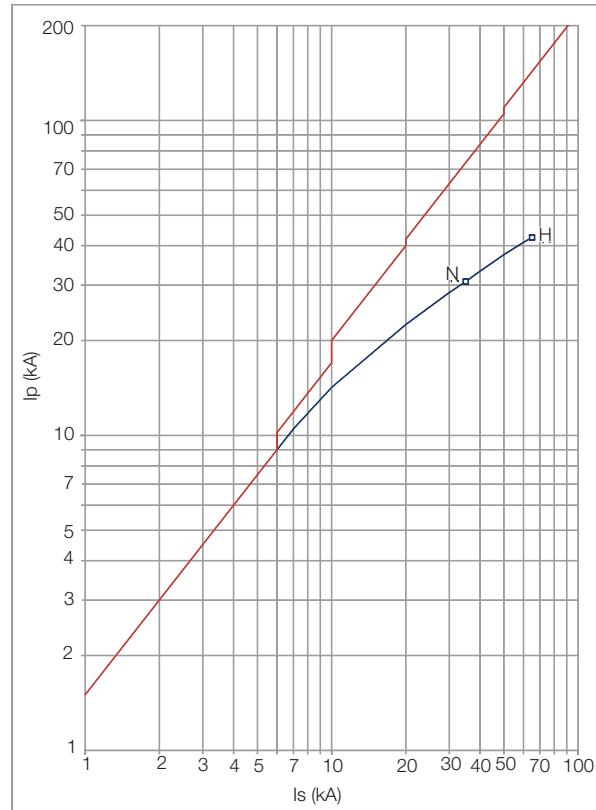
DWB250 L



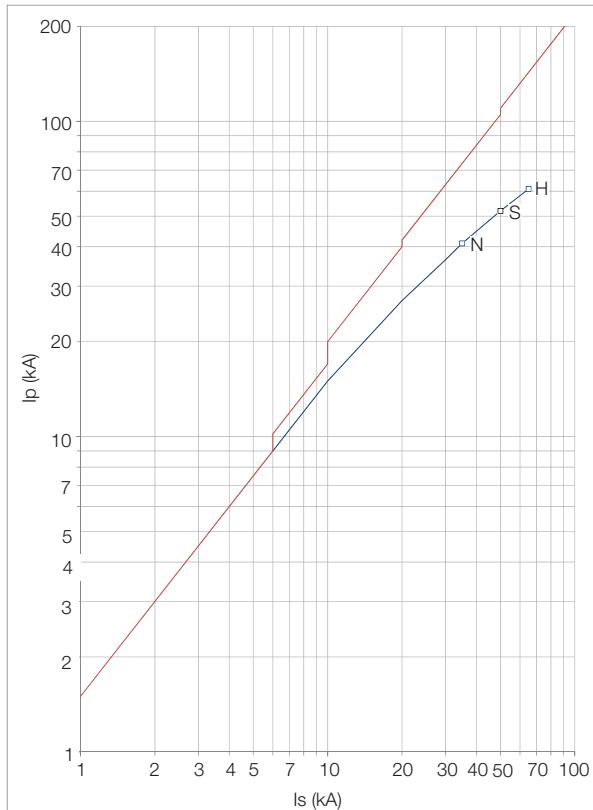
Short Circuit Limiting Characteristic Curve

380/415 V ac

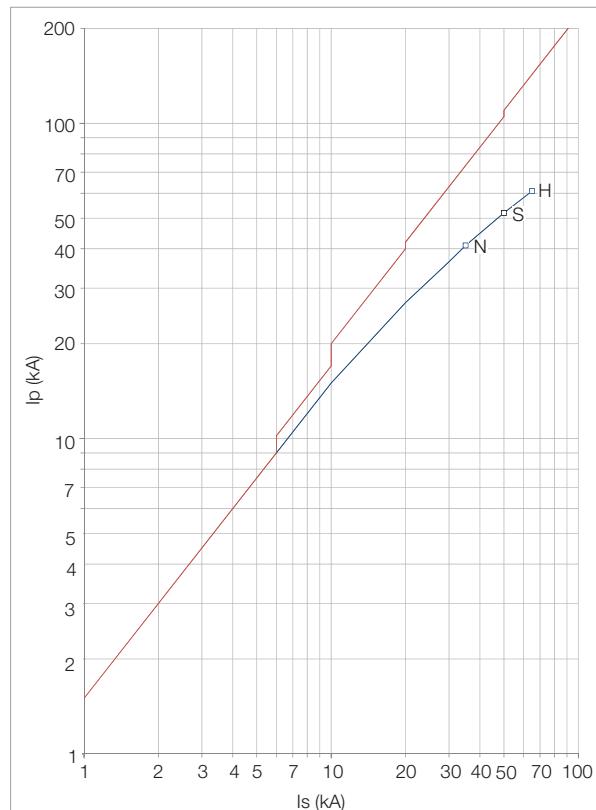
DWB400



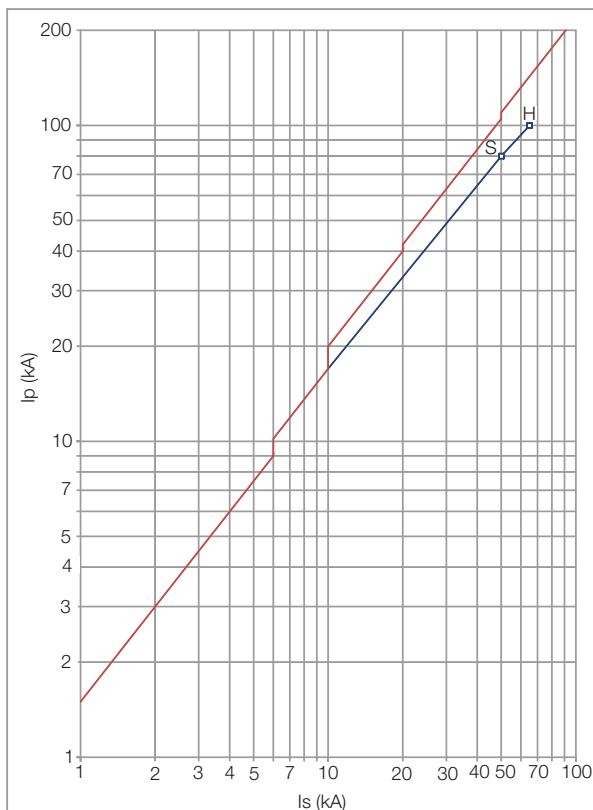
DWB800



DWB1000



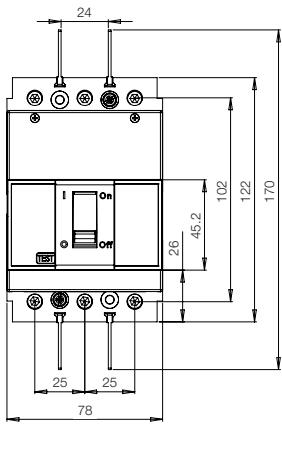
DWB1600



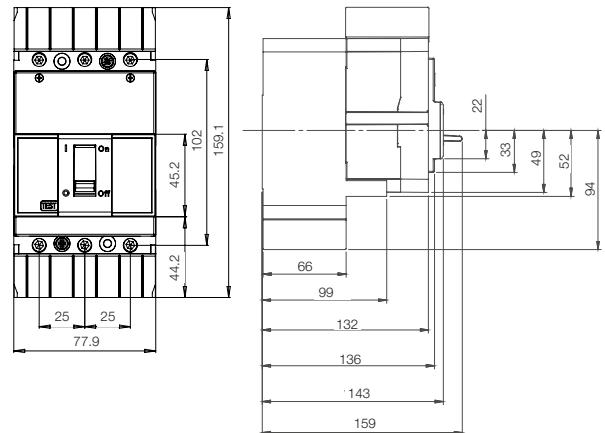
Dimensions

Circuit Breakers

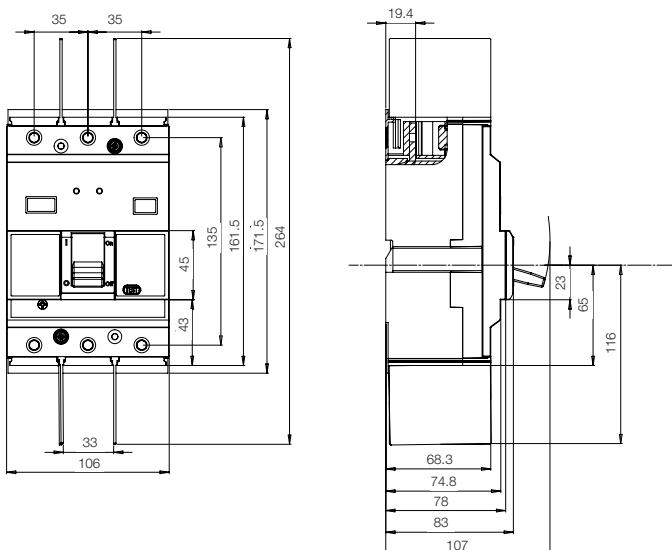
DWB160 B/N / IWB160



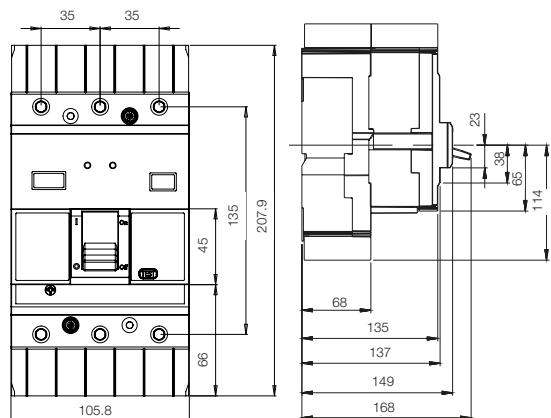
DWB160 L



DWB250 B/N / IWB250



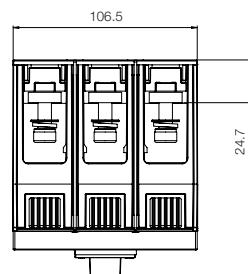
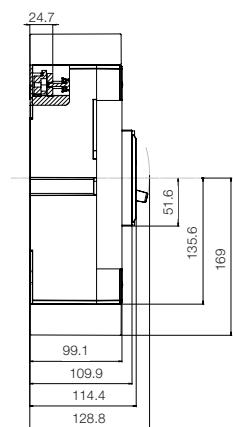
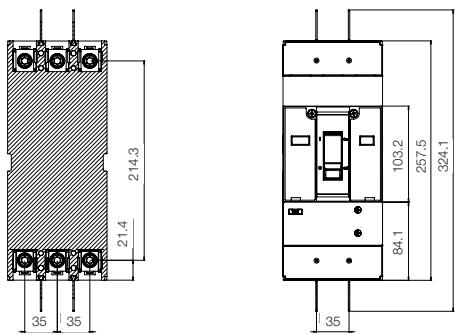
DWB250 L



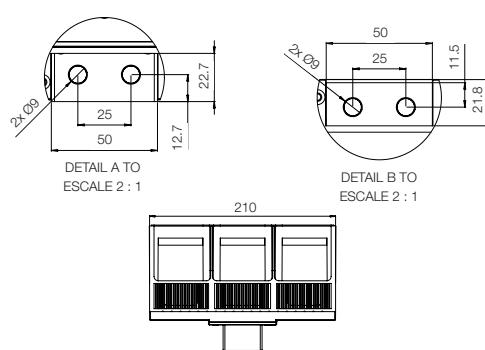
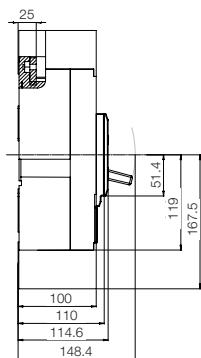
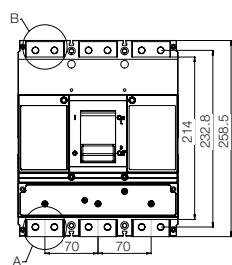
Dimensions

Circuit Breakers

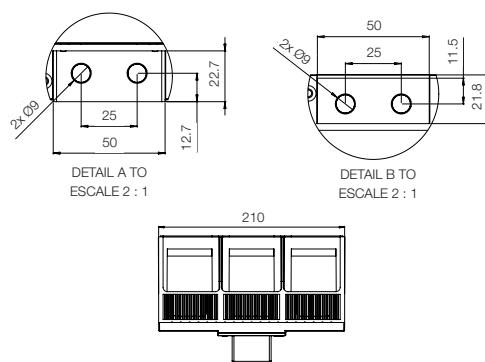
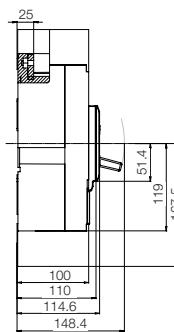
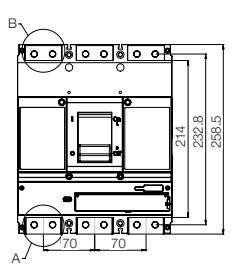
DWB400 / IWB400



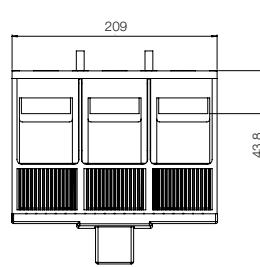
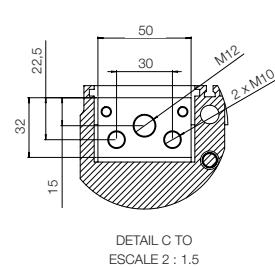
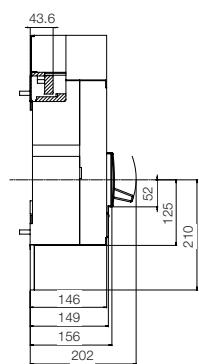
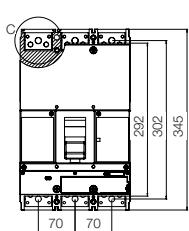
DWB800 / IWB800



DWB1000 / IWB1000



DWB1600

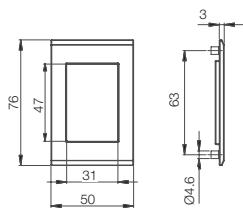


Dimensions

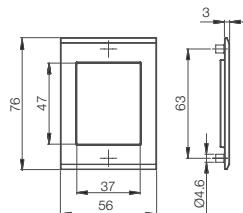
Accessories

MP - Escutcheons

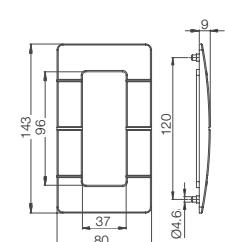
MP DWB160



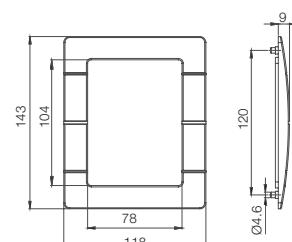
MP DWB250



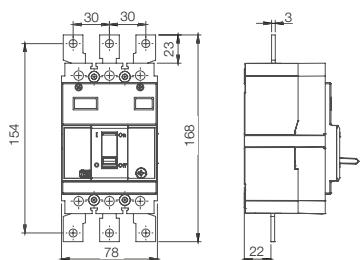
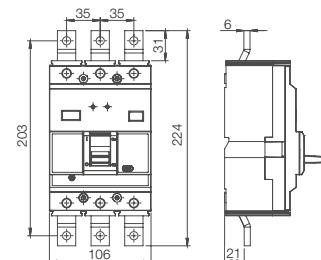
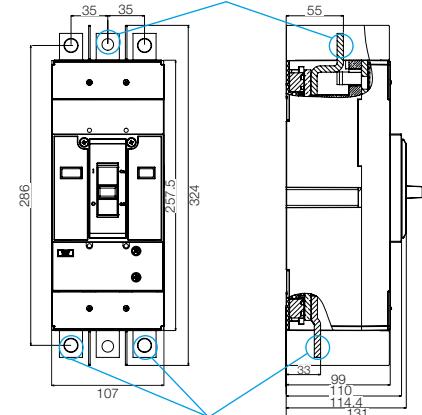
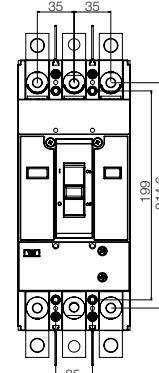
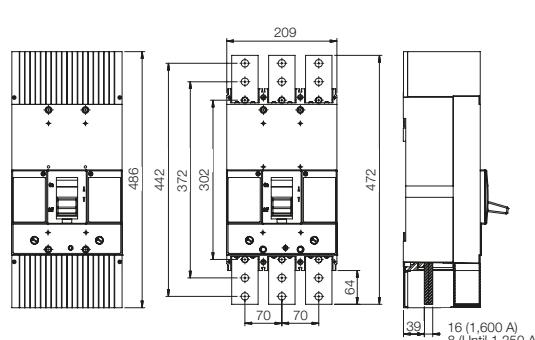
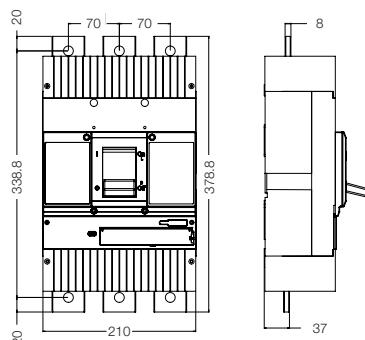
MP DWB400



MP DWB800 / DWB1000 / DWB1600



BE - Straight Extension Bars

Frame 160 3P + BE
DWB160 3PFrame 250 3P + BE
DWB250 3PFrame 400 3P + BE
DWB400 3PFrame DWB800-1000 3P + BE
DWB800-1000Frame 1600 3P + BE
DWB1600

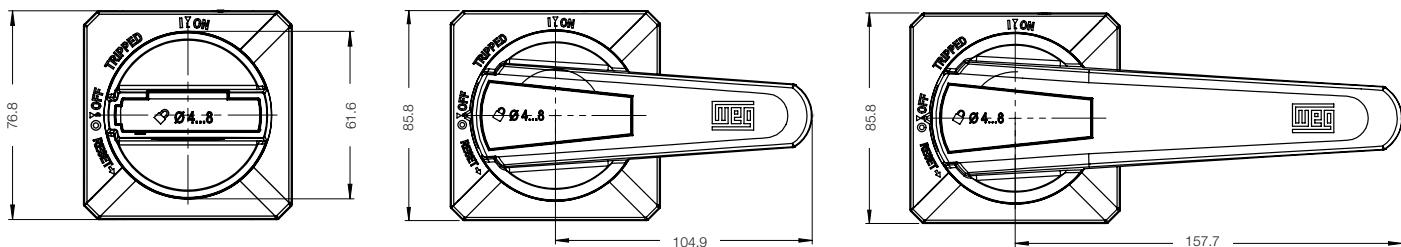
Dimensions

Panel Door Operating Handle

MRXS - DWB160 - DWB250

MRXL - DWB160 - DWB250 - DWB400

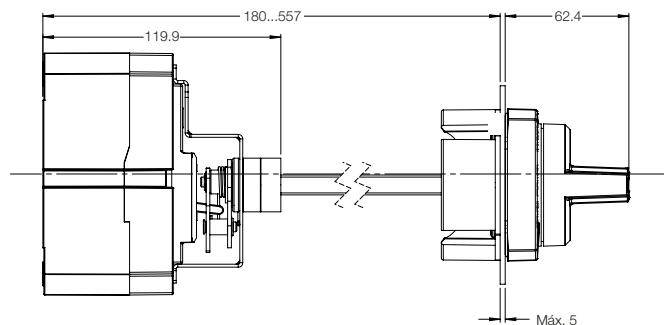
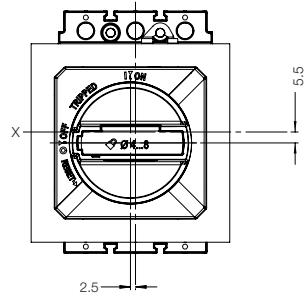
MRXL - DWB800 - DWB1000 - DWB1600



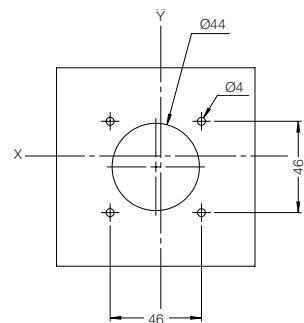
Accessories

MRXS - Panel Door Operating Handle

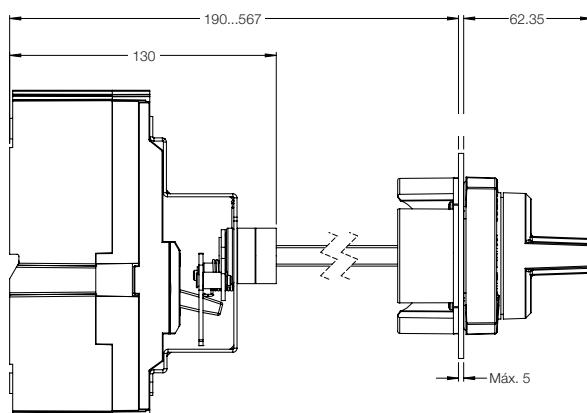
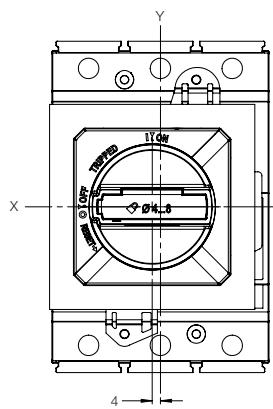
Frame 160 3P/4P + MRXS DWB160 (B and N Versions)



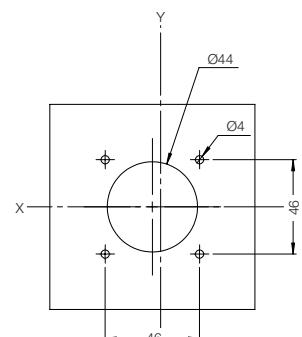
Panel Door Cutout



Frame 250 3P/4P + MRXS DWB250 (B and N Versions)



Panel Door Cutout

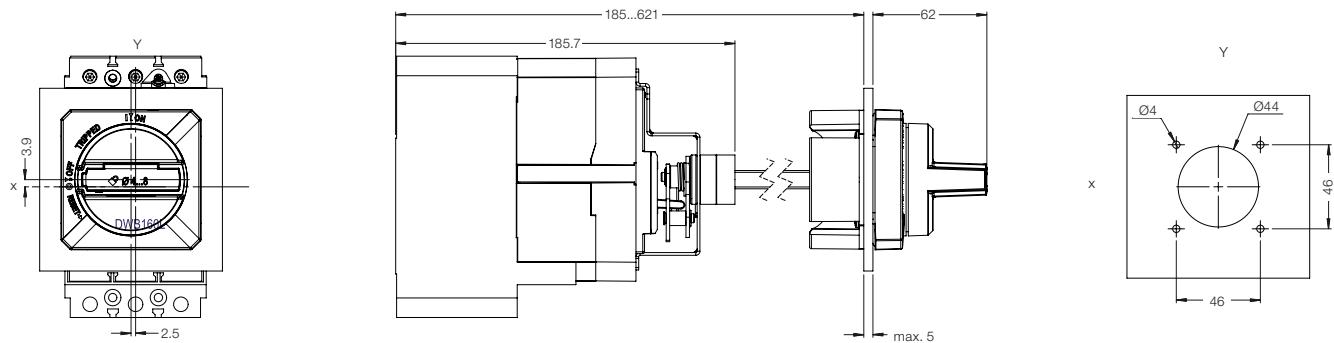


Dimensions

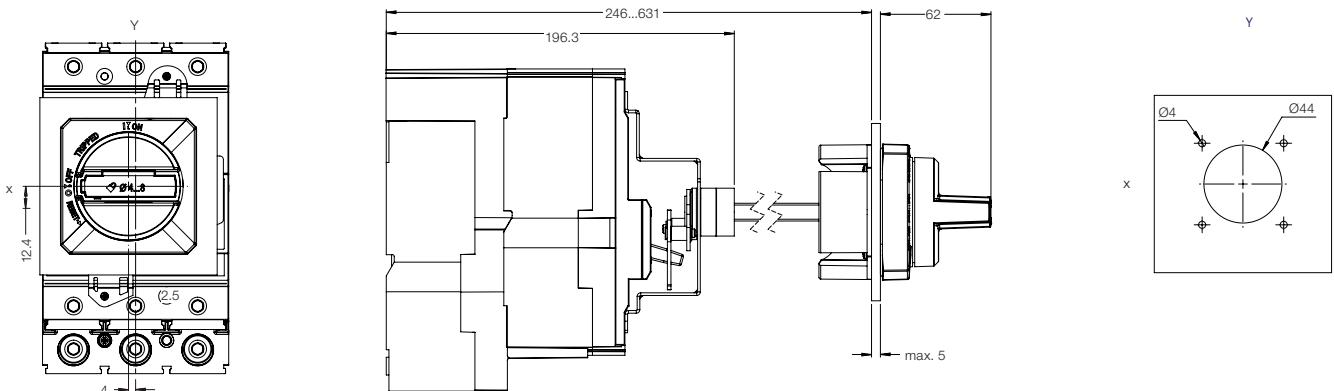
Accessories

MRXS - Panel Door Operating Handle

Frame 160 3P/4P + MRXS DWB160 (L Version)



Frame 250 3P/4P + MRXS DWB250 (L Version)

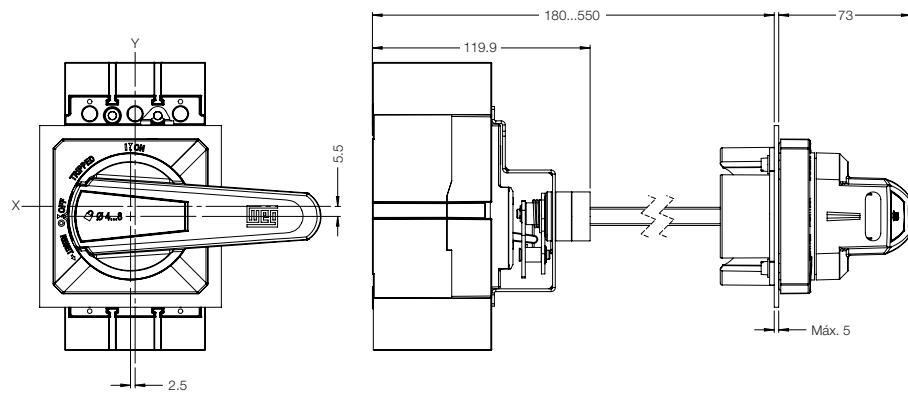


Dimensions

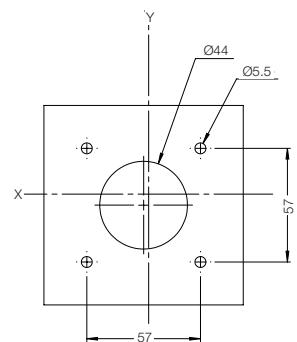
Accessories

MRXL - Panel Door Operating Handle

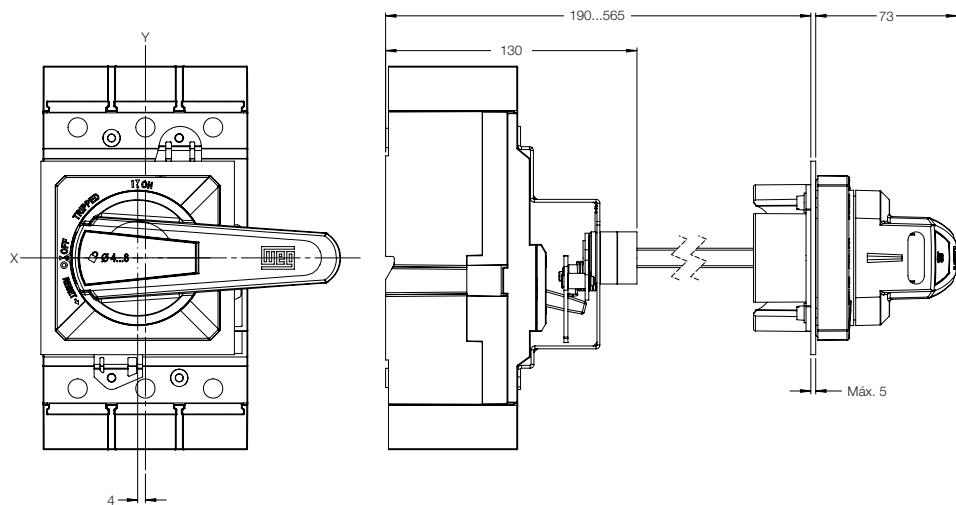
Frame 160 3P/4P + MRXL DWB160 (B and N Versions)



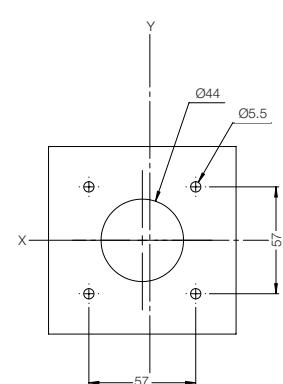
Panel Door Cutout



Frame 250 3P/4P + MRXL DWB250 (B and N Versions)



Panel Door Cutout

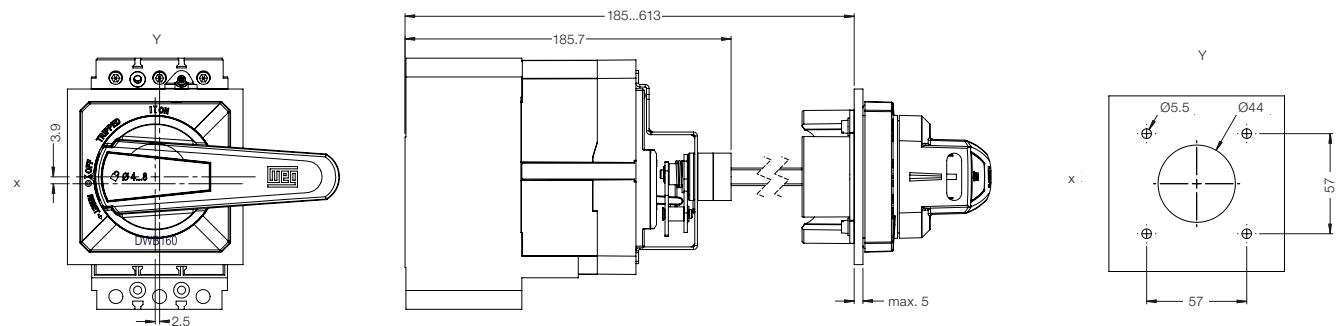


Dimensions

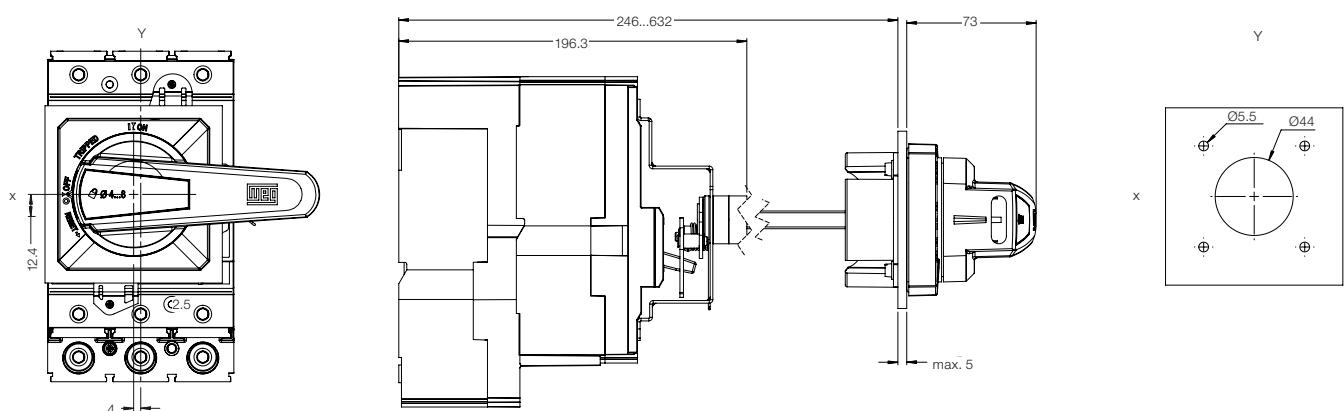
Accessories

MRXL - Panel Door Operating Handle

Frame 160 3P/4P + MRXL DWB160 (L Version)



Frame 250 3P/4P + MRXL DWB250 (L Version)

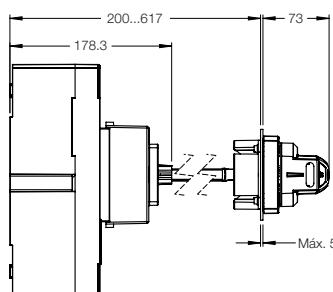
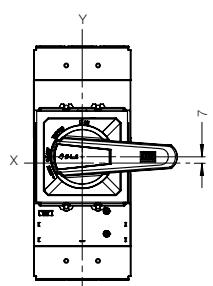


Dimensions

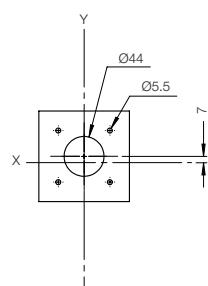
Accessories

MRXL - Panel Door Operating Handle

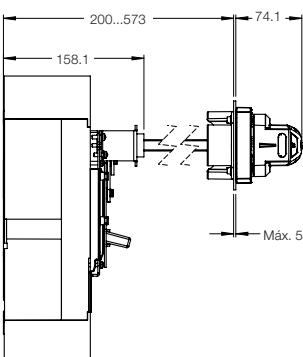
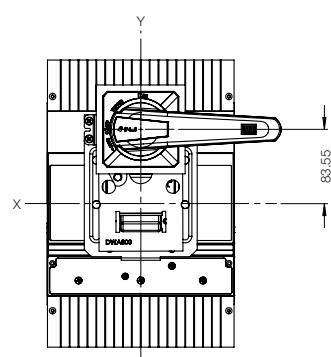
Frame 400 3P/4P + MRXL DWB400



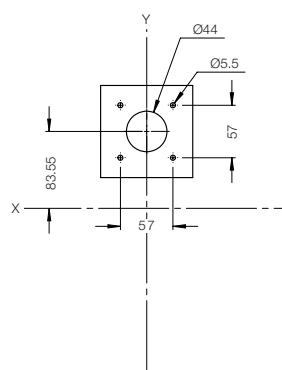
Panel Door Cutout



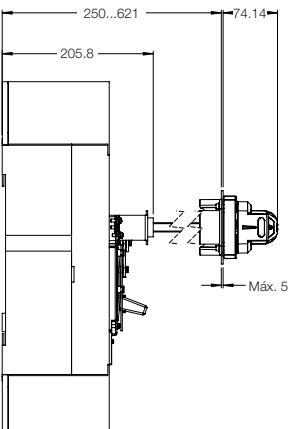
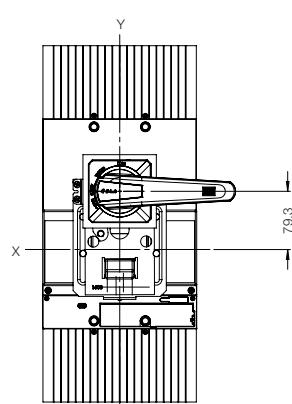
Frame DWB800-1000 + MRXL DWB800-1000



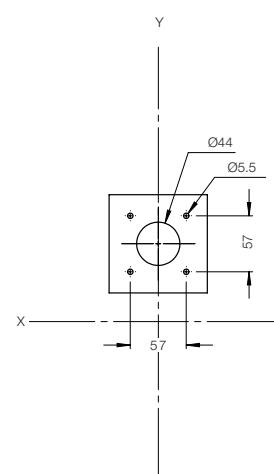
Panel Door Cutout



Frame 1600 3P/4P + MRXL DWB1600



Panel Door Cutout

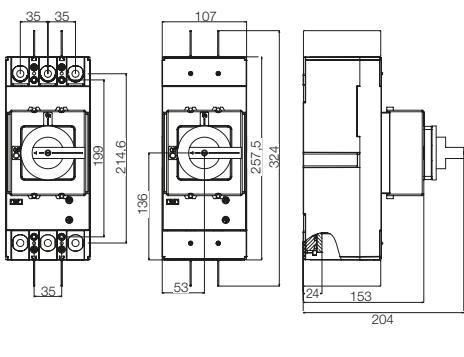


Dimensions

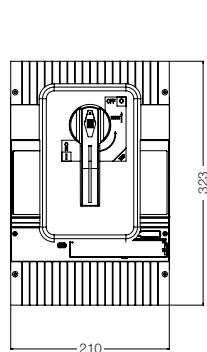
Accessories

MRI - Internal Rotary Handle

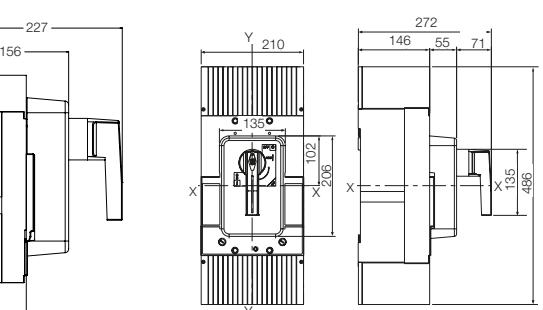
Frame 400 3P + MRI DWB400



Frame 800-1000 3P + MRI DWB800-1000

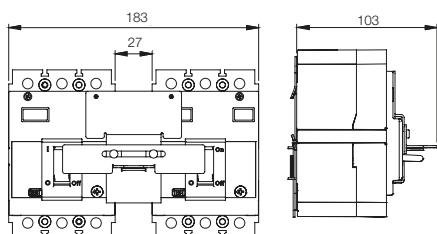


Frame 1600 3P + MRI DWB1600

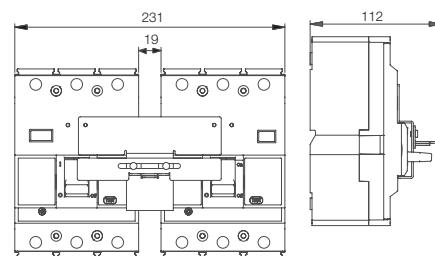


BLIM - Mechanical Interlock

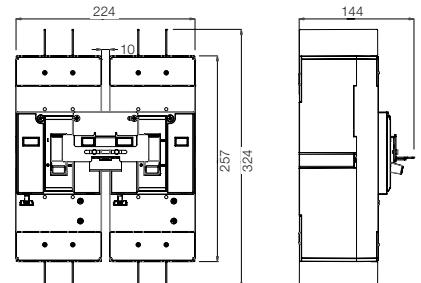
Frame 160 3P + BLIM DWB160 3P



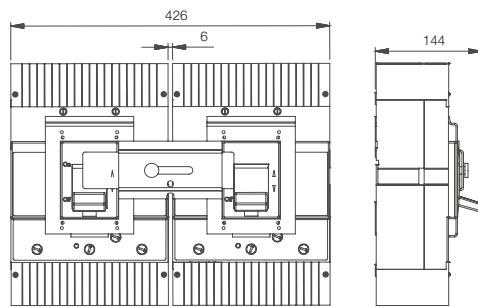
Frame 250 3P + BLIM DWB250 3P



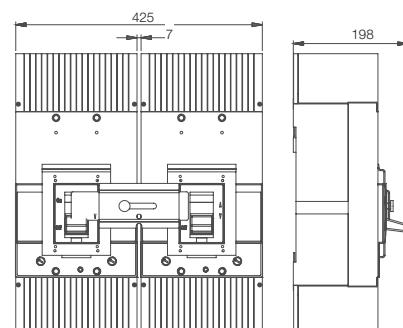
Frame 400 3P + BLIM DWB400 3P



Frame 800 3P + BLIM DWB800 / DWB1000



Frame 1600 3P + BLIM DWB1600

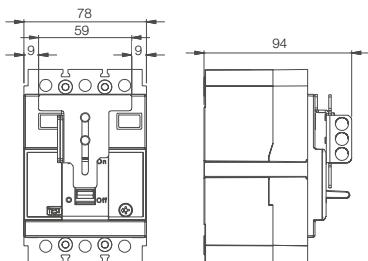


Dimensions

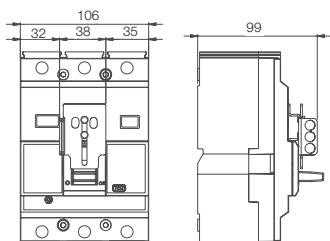
Accessories

PLW - Padlocking Device

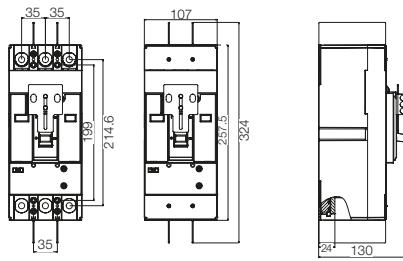
Frame 160 3P + PLW DWB160 3P



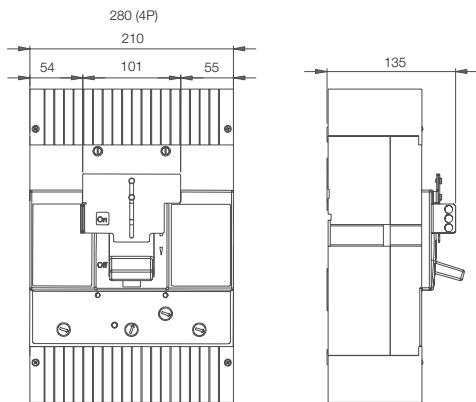
Frame 250 3P + PLW DWB250



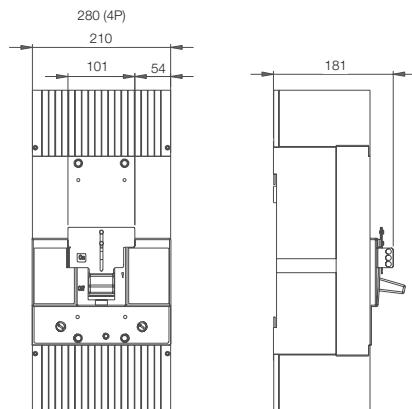
Frame 400 3P + PLW DWB400



Frame 800-1000 + PLW800-1000

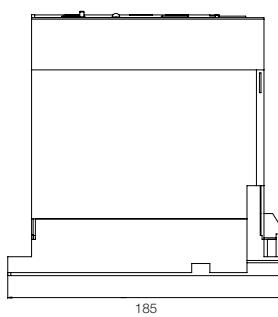
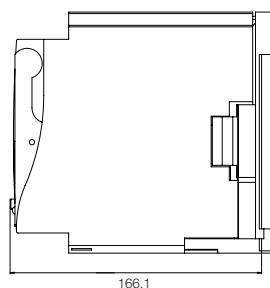
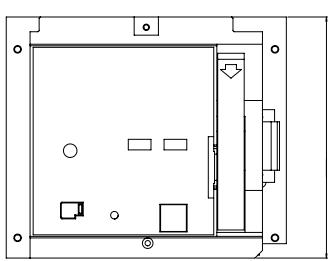


Frame 1600 + PLW1600

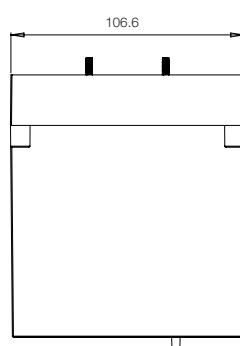
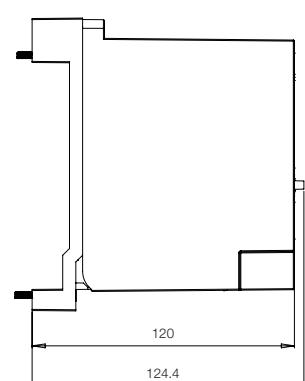
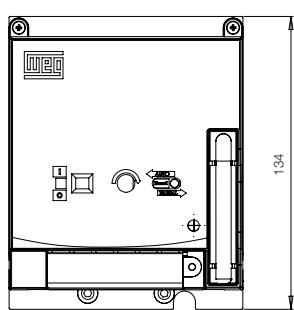


AM - Motor Operator

AM DWB800 / DWB1000 / DWB1600



AM DWB400

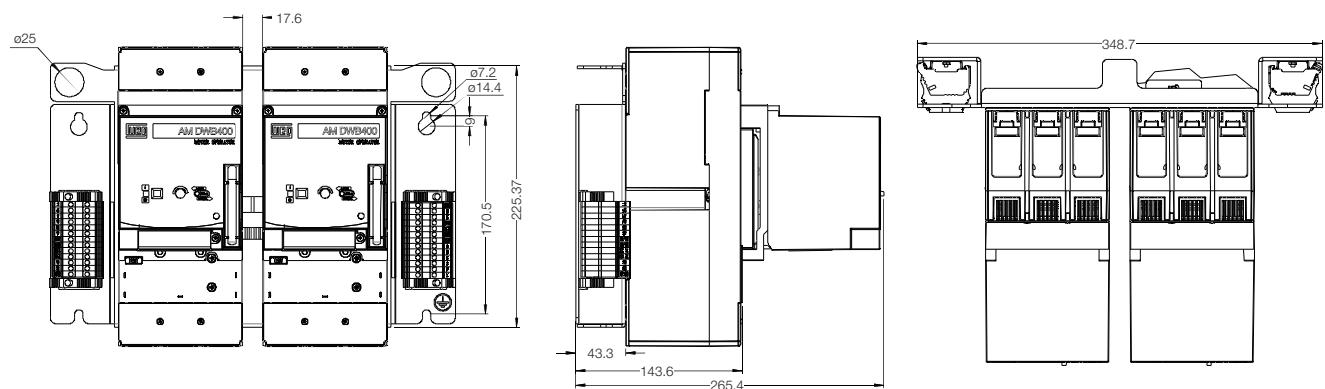


Dimensions

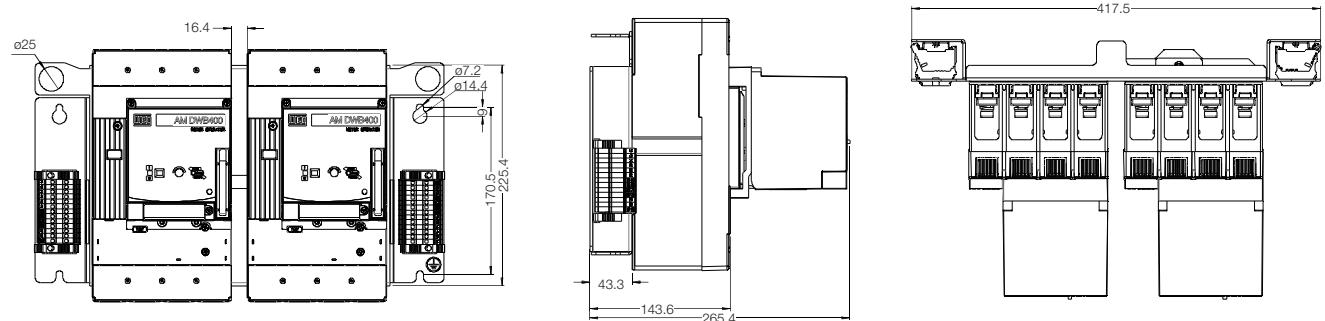
Accessories

CTM - Automatic Changeover

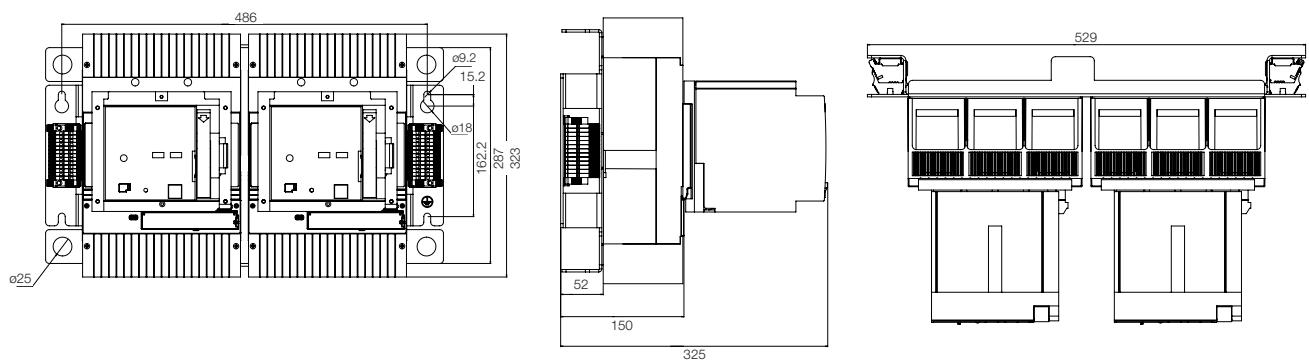
CTM 400-3P



CTM 400-4P



CTM 800-3P / CTM 1000-3P

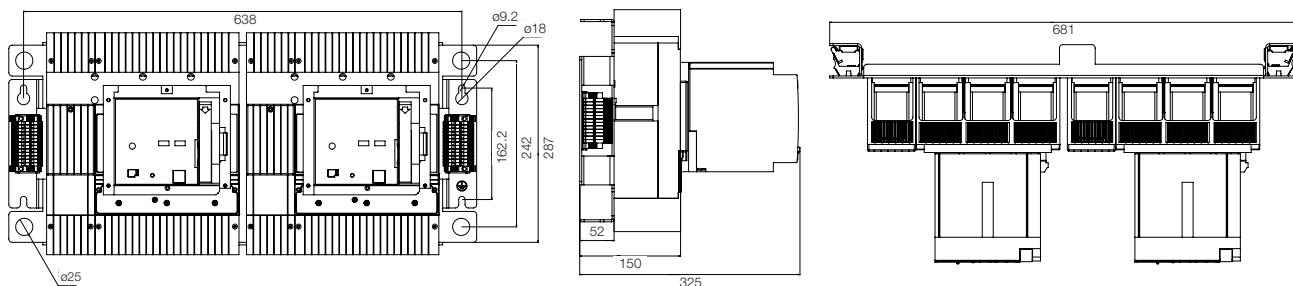


Dimensions

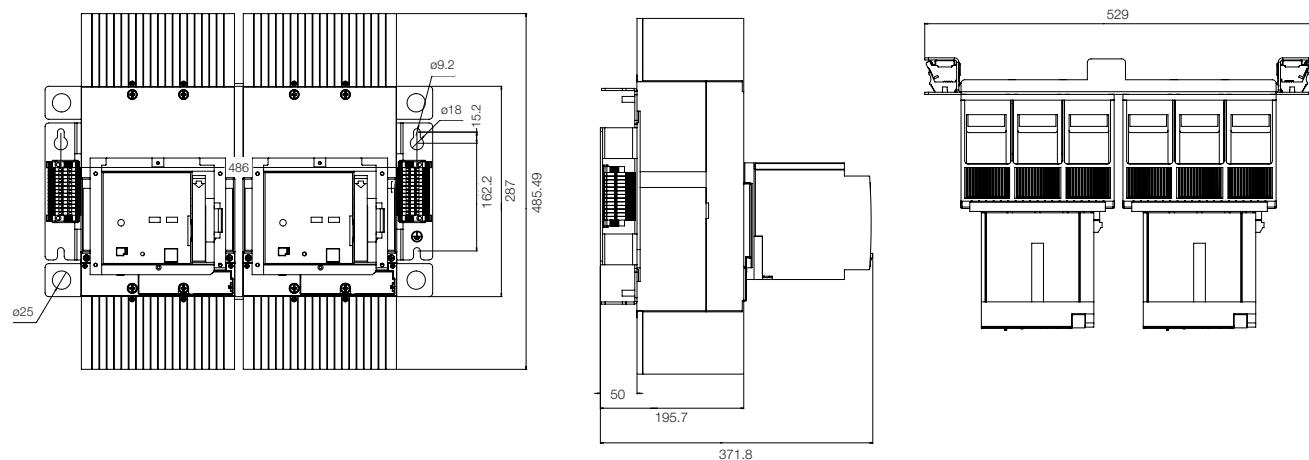
Accessories

CTM - Automatic Changeover

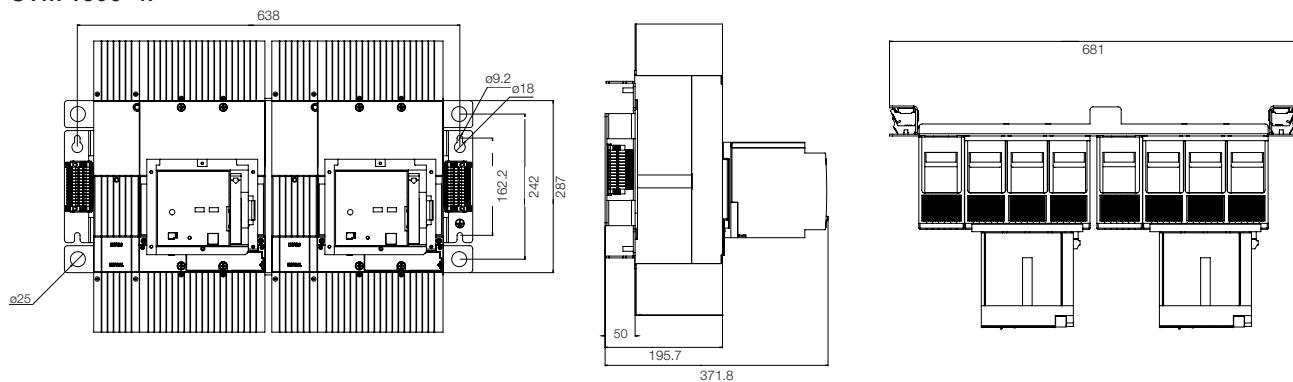
CTM 800-4P / CTM 1000-4P



CTM 1600-3P



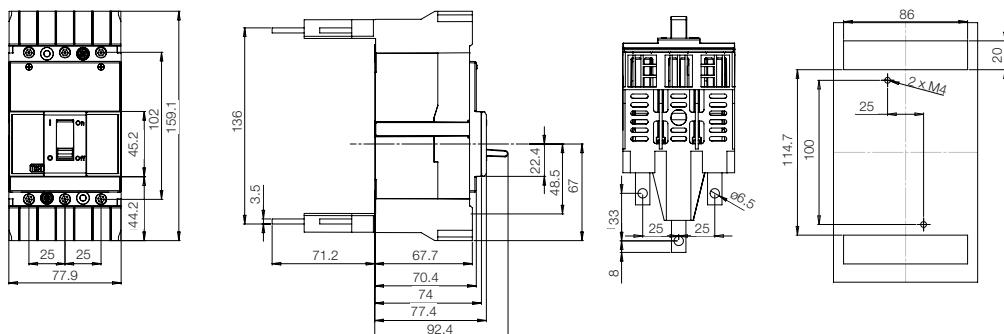
CTM 1600-4P



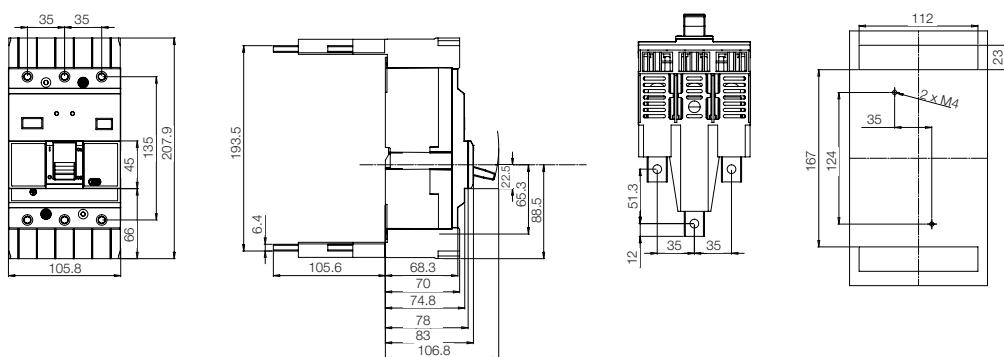
Dimensions

Accessories

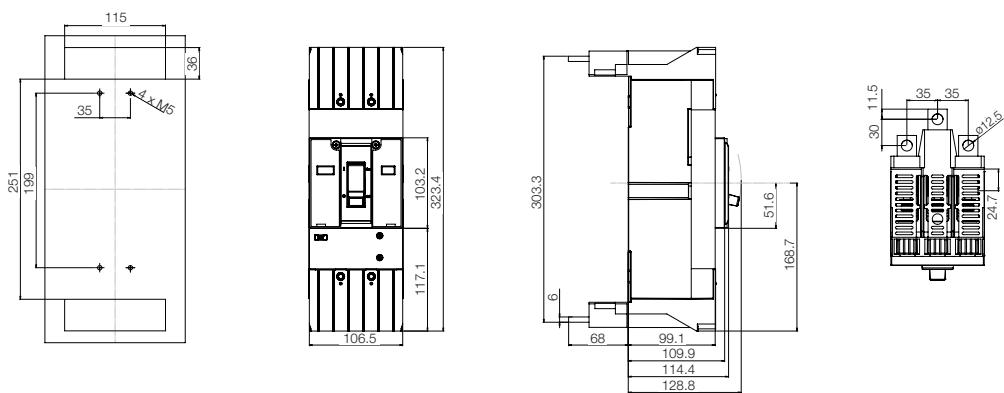
Protection Cover + DWB160 + CT DWB160



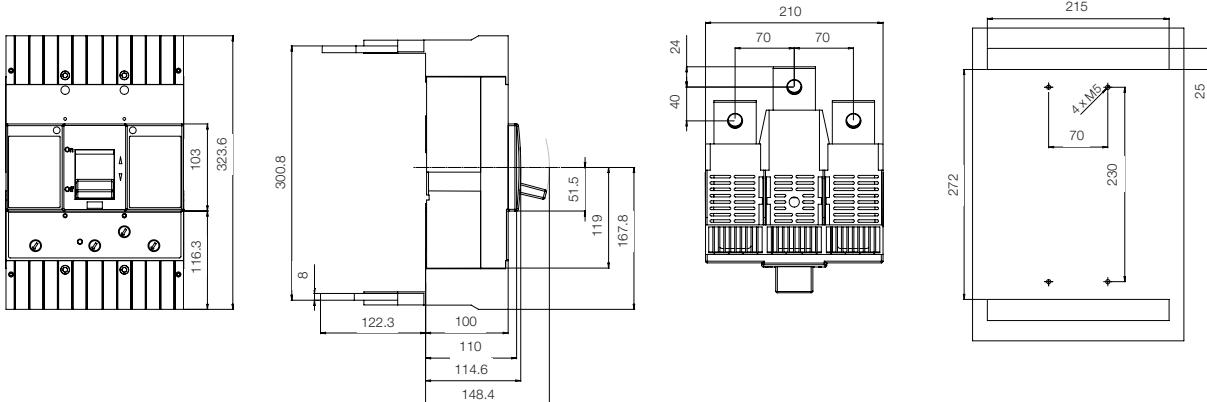
Protection Cover + DWB250 + CT DWB250



Protection Cover + DWB400 + CT DWB400



Protection Cover + DWB800 / DWB1000 + CT DWB800 / DWB1000



Circuit Breaker List - Reference and Code

Generator

Fixed Thermal and Fixed Magnetic Release

Reference	I_n	I_m	I_{cu} (380 V)
			B (18 kA)
			3 poles
DWB160	55	275	11340061
	75	375	11340062
	85	425	11340063
	105	525	11340064
	125	625	11340066
	140	700	11340067
	160	800	11340068

Adjustable Thermal and Fixed Magnetic Release

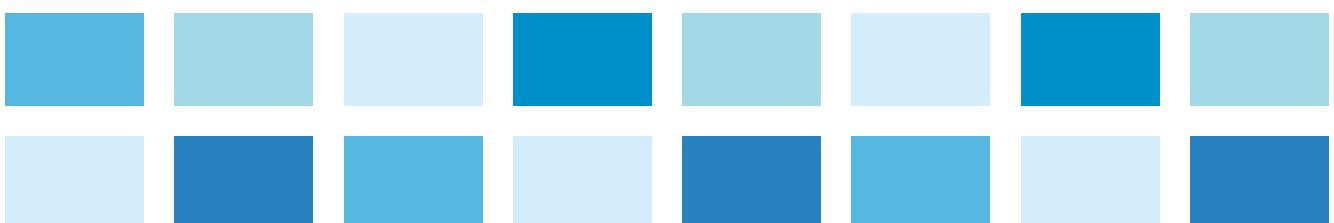
Reference	I_n	I_m	I_{cu} (380 V)
			B (18 kA)
			3 poles
DWB250	105	525	11340071
	125	625	11340072
	160	800	11340073
	200	1000	11340074
	250	1250	11340075

Adjustable Thermal and Adjustable Magnetic Release

Reference	I_n	I_m	I_{cu} (380 V)	
			N (35 kA)	
			3 poles	4 poles (3P+N)
DWB400	200	1000	12534082	12531407
	250	1250	12534079	12530983
	320	1600	12534078	12533771
	400	2000	12534077	12533775
DWB800	320	1600	13467967	-
	400	2000	13467988	-
	500	2500	13467989	-
	630	3150	13467991	-
	800	4000	13467992	-

Disparador Electrónico - LSI

Reference	I_n	I_m	I_{cu} (380 V)	
			S (50 kA)	
			3 poles	4 poles (3P+N)
DWB1000	500	6000	13468912	13468916
	630	7500	13468913	13468917
	800	9600	13468914	13468928
	1000	12000	13469615	13468929



Circuit Breaker List - Reference and Code

Motor

Fixed Magnetic Release

Reference	I_n	I_m	I_{cu} (380 V)	
			N (30 kA)	L (80 kA)
			3 poles	3 poles
DWB160	25	300	11339864	11339936
	32	384	11339865	11339937
	40	480	11339866	11339948
	50	600	11339867	11339950
	65	780	11339928	11339951
	80	960	11339929	11339952
	95	1140	11339930	11339953

Reference	I_n	I_m	N (35 kA)	L (80 kA)
DWB250	80	960	11340029	11340035
	105	1260	11340031	11340037
	150	1800	11340032	11340058
	185	2220	11340033	11340059
	200	2400	11631304	11631305

Adjustable Magnetic Release

Reference	I_n	I_m	I_{cu} (380 V)	
			H (65 kA)	
			3 poles	
DWB400	150	2250	12534076	
	185	2775	12534075	
	250	3750	12534074	
	320	4800	12534073	
DWB800	420	6300	13467997	
	500	7500	13468019	

Switch Disconnector

Reference	I_n	3 poles	4 poles
IWB 160	125	11340102	-
	160	11340103	12652603
IWB 250	250	11344866	12652606
IWB 400	400	12530957	12533963
IWB 800	630	13468817	13468859
	800	13468858	13468860
IWB 1000	1000	13468861	13468862



Notes



Global presence is essential, as much as understanding your needs.

Global Presence

With more than 30.000 employees worldwide, WEG is one of the largest electric motors, electronic equipments and systems manufacturers. We are constantly expanding our portfolio of products and services with expertise and market knowledge. We create integrated and customized solutions ranging from innovative products to complete after-sales service.

WEG's know-how guarantees our **molded case circuit breakers DWB** is the right choice for your application and business, assuring safety, efficiency and reliability.



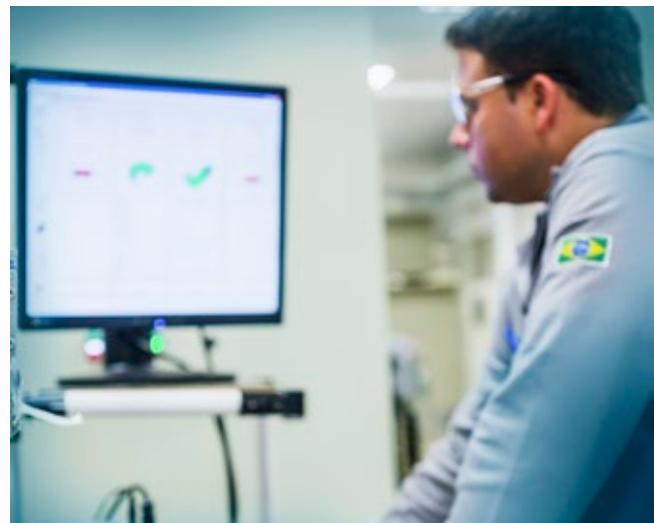
Availability is to have a global support network



Partnership is to create solutions that suit your needs



Competitive edge is to unite technology and innovation





Know More

Full Circuit Breaker Solutions

**Dimensions
(frames)**



**Currents
(A)**



**Thermomagnetic
Protection**



**Electronic
Protection**



**Breaking capacity
 I_{cu} @ 380 V ac**



MDW Miniature Circuit



Frame 1

2 to 63

Fixed

3

Frame 2

70 to 125

MDWH Miniature Circuit Breaker¹⁾



1 frame

6 to 63

Fixed

10¹⁾

DW Molded Case Circuit Breaker



160

250

400

800/1000

1600

16 to 160

100 to 250

200 to 400

320 to 1000

1250 to 1600

Fixed and ajustable

Ajustable
Ajustable

18 - 80

18 - 80

35 - 65

35 - 65

35

ACW High-Capacity Molded Case Circuit Breaker



100/160

101/161/250

400/630

800

20 to 160

16 to 250

160 to 400

630 to 800

Fixed and
ajustable

Ajustable

85 - 150

85 - 150

85 - 150

100

ABW Open Circuit Breaker



800/1600

2000/2500/3200

4000/5000

6300

320 to 1600

800 to 3200

1600 to 5000

2520 to 6300

-

Ajustable

65

85

100

120

Note: 1) MDWH at 220 V AC $I_{cu} = 20$ kA.

WEG Worldwide Operations

ARGENTINA

San Francisco - Cordoba
Phone: +54 3564 421484
info-ar@weg.net

Cordoba - Cordoba
Phone: +54 3514 641366
weg-morbe@weg.com.ar

Buenos Aires
Phone: +54 1142 998000
ventas@pulverlux.com.ar

AUSTRALIA

Scoresby - Victoria
Phone: +61 3 97654600
info-au@weg.net

AUSTRIA

Markt Piesting - Wiener Neustadt-Land
Phone: +43 2 633 4040
watt@wattdrive.com

Vienna
Phone: +43 1 796 2048
wtr@weg.net

BELGIUM

Nivelles - Belgium
Phone: +32 67 888420
info-be@weg.net

BRAZIL

Jaraguá do Sul - Santa Catarina
Phone: +55 47 32764000
info-br@weg.net

CHILE

La Reina - Santiago
Phone: +56 2 27848900
info-cl@weg.net

CHINA

Nantong - Jiangsu
Phone: +86 513 85989333
info-cn@weg.net

Changzhou - Jiangsu
Phone: +86 519 88067692
info-cn@weg.net

Rugao - Jiangsu
Phone: +86 513 80672011
zhuhua@weg.net

COLOMBIA

San Cayetano - Bogota
Phone: +57 1 4160166
info-co@weg.net

Sabaneta - Antioquia
Phone: +57 4 4449277
info-co@weg.net

ECUADOR

El Batán - Quito
Phone: +593 2 5144339
wegecuador@weg.net

FRANCE

Saint-Quentin-Fallavier - Isère
Phone: +33 4 74991135
info-fr@weg.net

GERMANY

Türnich - Kerpen
Phone: +49 2237 92910
info-de@weg.net

Balingen - Baden-Württemberg
Phone: +49 7433 90410
info@weg-antriebe.de

Homberg (Efze) - Hesse
Phone: +49 5681 99520
info@akh-antriebstechnik.de

GHANA

Accra
Phone: +233 30 2766490
ghana@zestweg.com

INDIA

Bangalore - Karnataka
Phone: +91 080 46437450
info-in@weg.net

Hosur - Tamil Nadu
Phone: +91 4344 301577
info-in@weg.net

ITALY

Cinisello Balsamo - Milano
Phone: +39 2 61293535
info-it@weg.net

JAPAN

Yokohama - Kanagawa
Phone: +81 45 5503030
info-jp@weg.net

MALAYSIA

Shah Alam - Selangor
Phone: +60 3 78591626
info@wattdrive.com.my

MEXICO

Huehuetoca - Mexico
Phone: +52 55 53214275
info-mx@weg.net

Tizayuca - Hidalgo
Phone: +52 77 97963790
info-mx@weg.net

NETHERLANDS

Oldenzaal - Overijssel
Phone: +31 541 571080
info-nl@weg.net

PERU

La Victoria - Lima
Phone: +51 1 2097600
info-pe@weg.net

PORTUGAL

Maia - Porto
Phone: +351 22 9477700
info-pt@weg.net

RUSSIA and CIS

Saint Petersburg
Phone: +7 812 363 2172
sales-wes@weg.net

SOUTH AFRICA

Johannesburg
Phone: +27 (0) 11 7236000
info@zestweg.com

SOUTH AFRICA

Cape Town
Phone: +27 (0) 21 507 7200
gentsets@zestweg.com

HEIDELBERG

Heidelberg
Phone: +27 (0) 16 349 2683/4/5
wta@zestweg.com

SPAIN

Coslada - Madrid
Phone: +34 91 6553008
info-es@weg.net

Valencia

Valencia
Phone: +34 96 1379296
info@autrial.es

SINGAPORE

Singapore
Phone: +65 68589081
info-sg@weg.net

Singapore
Phone: +65 68622220
info-sg@weg.net

SCANDINAVIA

Mölnlycke - Sweden
Phone: +46 31 888000
info-se@weg.net

UK

Redditch - Worcestershire
Phone: +44 1527 513800
info-uk@weg.net

UNITED ARAB EMIRATES

Jebel Ali - Dubai
Phone: +971 4 8130800
info-ae@weg.net

USA

Duluth - Georgia
Phone: +1 678 2492000
info-us@weg.net

Bluffton - Indiana
Phone: +1 800 5798527
info-us@weg.net

Minneapolis - Minnesota
Phone: +1 612 3788000
info-us@weg.net

Washington - Missouri
Phone: +1 636-239-9300
wegwill@weg.net

VENEZUELA

Valencia - Carabobo
Phone: +58 241 8210582
info-ve@weg.net

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WEG Group - Automation Business Unit
Jaraguá do Sul - SC - Brazil
Phone: +55 47 3276 4000
automacao@weg.net
www.weg.net

