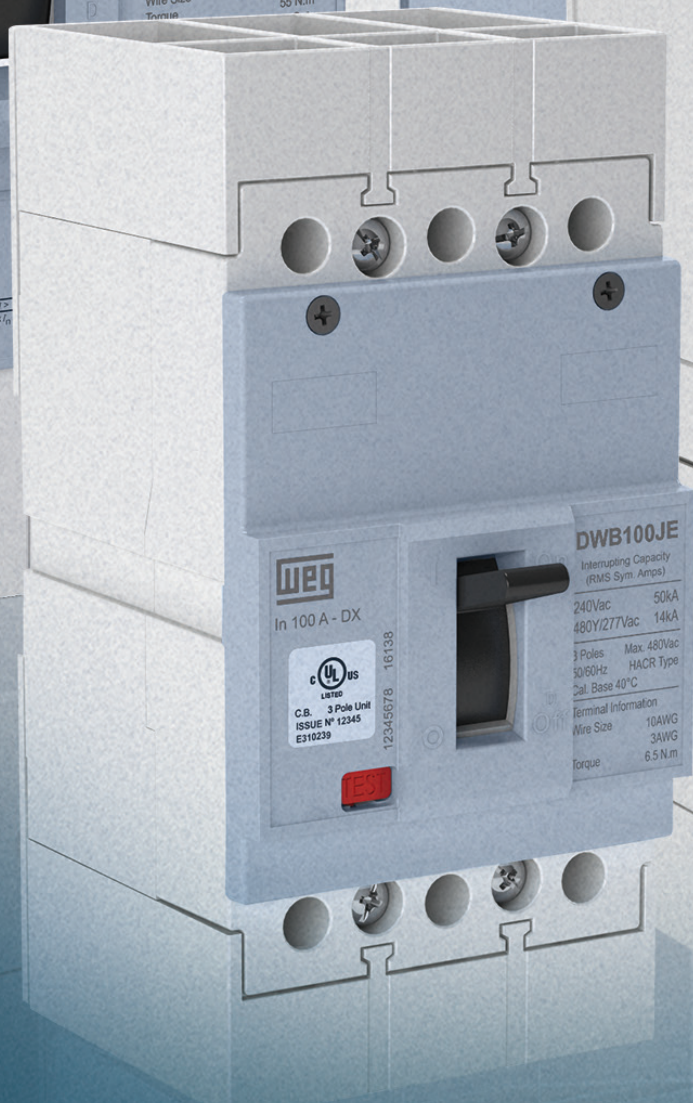


DWB - MOLDED CASE CIRCUIT BREAKERS UL 489 LISTED

The right molded case circuit breaker for your application



Motors | Automation | Energy | Transmission & Distribution | Coatings

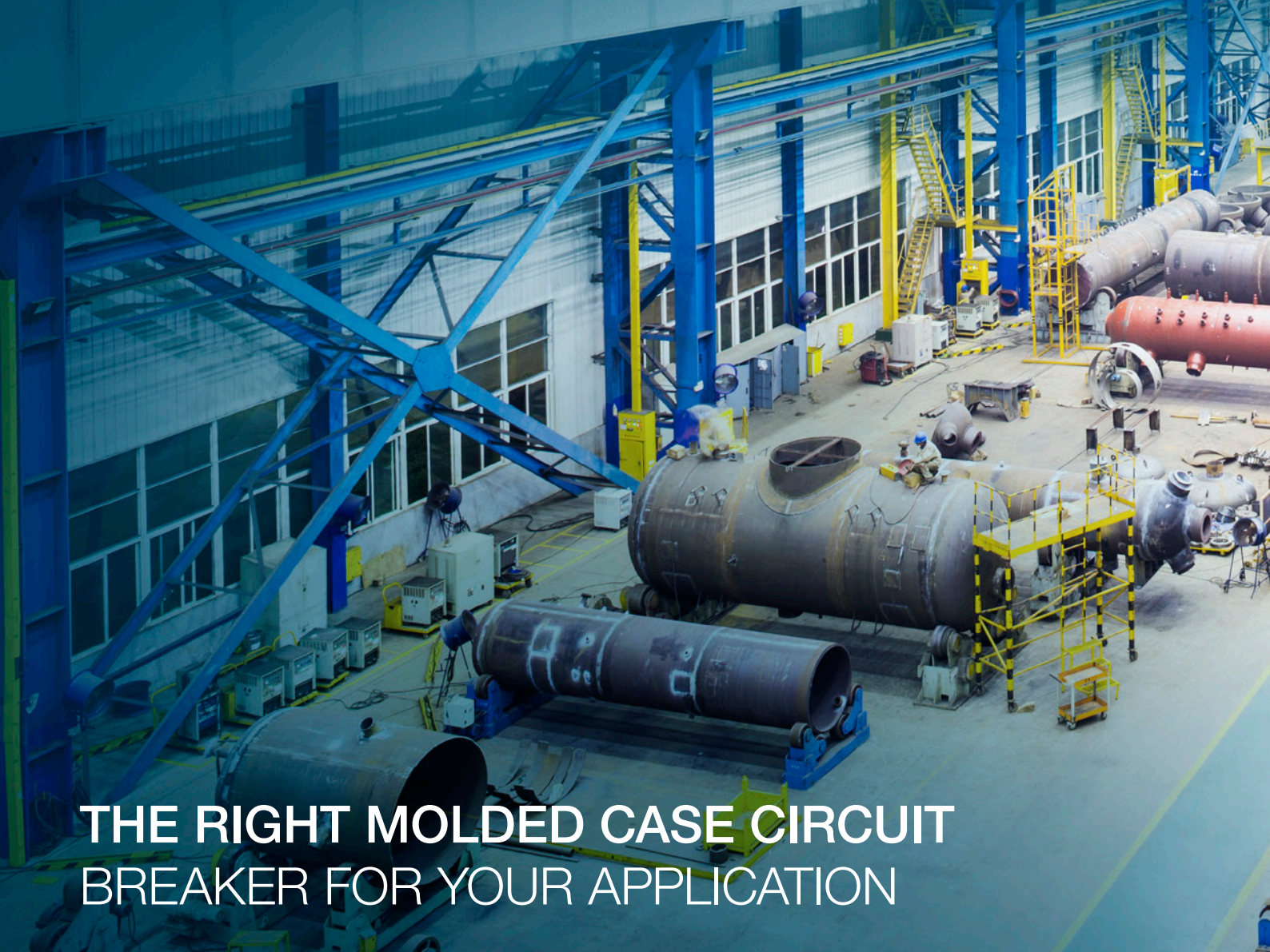


Molded Case Circuit Breakers

UL 489 Listed - DWB Line

Summary

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THE RIGHT MOLDED CASE CIRCUIT BREAKER FOR YOUR APPLICATION

Introducing the WEG DWB Series of Molded Case Circuit Breakers now available with UL 489 certification. With its four compact frames, the DWB UL provides protection from 20 to 600 amperes in two versions: Standard 80% rated and Premium 100% rated.

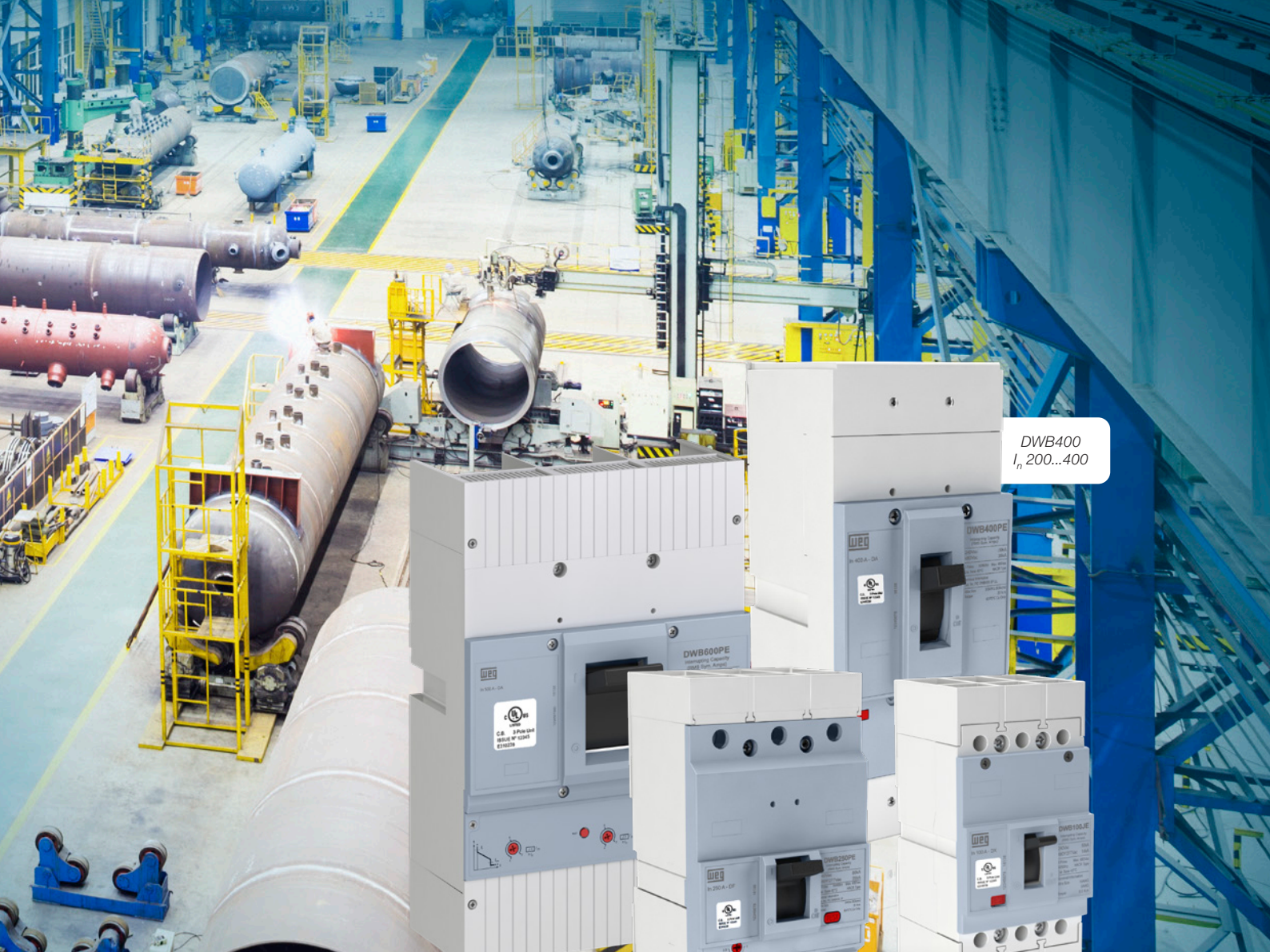
The DWB UL also counts with three levels of short circuit interrupting capacity, and common¹⁾ internal accessories that simplify field installation and minimize inventory variations.

Main Characteristics

UL Interrupting Rating (kA)

MCCB	DWB100		DWB250		DWB400		DWB600
Type	C	J	J	P	J	P	P
240 V ac	25	50	50	80	50	80	80
480Y/277 V ac	10	14	14	35	-	-	-
480 V ac	-	-	-	-	18	35	35

Note: 1) For DWB400, contact and alarm blocks only.



DWB400
 I_n 200...400

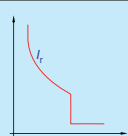
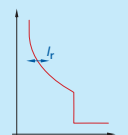
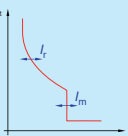
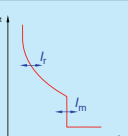
DWB600
 I_n 325...600

DWB250
 I_n 80...250

DWB100
 I_n 20...100

Main Characteristics

Current Ratings and Trip Units

Reference code	Rated current I_n (A)	Trip unit		Curve
DWB100	20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Fixed thermal	Fixed magnetic ¹⁾ ($10 \times I_n$)	
DWB250	80-100, 100-125, 120-150, 160-200, 200-250	Adjustable thermal ($0.8...1 \times I_n$)	Fixed magnetic ($10 \times I_n$)	
DWB400	160-200, 180-225, 200-250, 220-275, 240-300, 260-325, 280-350, 320-400	Adjustable thermal ($0.8...1 \times I_n$)	Adjustable magnetic ($5...10 \times I_n$)	
DWB600	228-325, 245-350, 280-400, 315-450, 350-500, 385-550, 420-600	Adjustable thermal ($0.7...1 \times I_n$)	Adjustable magnetic ($5...10 \times I_n$)	

Note: 1) Circuit breakers with rated currents of 20 and 25 A, the magnetic trip point is 300 A.

Selection Guide

DWB100 for Distribution - Standard 80% Rated - Fixed Thermal and Fixed Magnetic Trip Unit

Rated current (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480Y/277 V ac	3 poles
DWB100CE				
20	300	25	10	DWB100CE20-3DX
25	300	25	10	DWB100CE25-3DX
30	300	25	10	DWB100CE30-3DX
40	400	25	10	DWB100CE40-3DX
50	500	25	10	DWB100CE50-3DX
60	600	25	10	DWB100CE60-3DX
70	700	25	10	DWB100CE70-3DX
80	800	25	10	DWB100CE80-3DX
90	900	25	10	DWB100CE90-3DX
100	1000	25	10	DWB100CE100-3DX
DWB100JE				
20	300	50	14	DWB100JE20-3DX
25	300	50	14	DWB100JE25-3DX
30	300	50	14	DWB100JE30-3DX
40	400	50	14	DWB100JE40-3DX
50	500	50	14	DWB100JE50-3DX
60	600	50	14	DWB100JE60-3DX
70	700	50	14	DWB100JE70-3DX
80	800	50	14	DWB100JE80-3DX
90	900	50	14	DWB100JE90-3DX
100	1000	50	14	DWB100JE100-3DX

DWB250 for Distribution - Standard 80% Rated - Adjustable Thermal and Fixed Magnetic Trip Unit

Current range (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480Y/277 V ac	3 poles
DWB250JE				
80-100	1000	50	14	DWB250JE100-3DF
100-125	1250	50	14	DWB250JE125-3DF
120-150	1500	50	14	DWB250JE150-3DF
160-200	2000	50	14	DWB250JE200-3DF
200-250	2500	50	14	DWB250JE250-3DF
DWB250PE				
80-100	1000	80	35	DWB250PE100-3DF
100-125	1250	80	35	DWB250PE125-3DF
120-150	1500	80	35	DWB250PE150-3DF
160-200	2000	80	35	DWB250PE200-3DF
200-250	2500	80	35	DWB250PE250-3DF

DWB400 for Distribution - Standard 80% Rated - Adjustable Thermal and Magnetic Trip Unit

Current range (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480 V ac	3 poles
DWB400JE				
160-200	1600-2000	50	18	DWB400JE200-3DA
180-225	1800-2250	50	18	DWB400JE225-3DA
200-250	2000-2500	50	18	DWB400JE250-3DA
220-275	2200-2750	50	18	DWB400JE275-3DA
240-300	2400-3000	50	18	DWB400JE300-3DA
260-325	2600-3250	50	18	DWB400JE325-3DA
280-350	2800-3500	50	18	DWB400JE350-3DA
320-400	3200-4000	50	18	DWB400JE400-3DA
DWB400PE				
160-200	1600-2000	80	35	DWB400PE200-3DA
180-225	1800-2250	80	35	DWB400PE225-3DA
200-250	2000-2500	80	35	DWB400PE250-3DA
220-275	2200-2750	80	35	DWB400PE275-3DA
240-300	2400-3000	80	35	DWB400PE300-3DA
260-325	2600-3250	80	35	DWB400PE325-3DA
280-350	2800-3500	80	35	DWB400PE350-3DA
320-400	3200-4000	80	35	DWB400PE400-3DA

DWB600 for Distribution - Standard 80% Rated - Adjustable Thermal and Magnetic Trip Unit

Current range (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480 V ac	3 poles
DWB600PE				
227.5-325	1625-3250	80	35	DWB600PE325-3DA
245-350	1750-3500	80	35	DWB600PE350-3DA
280-400	2000-4000	80	35	DWB600PE400-3DA
315-450	2250-4500	80	35	DWB600PE450-3DA
350-500	2500-5000	80	35	DWB600PE500-3DA
385-550	2750-5500	80	35	DWB600PE550-3DA
420-600	3000-6000	80	35	DWB600PE600-3DA

Notes: Wiring terminals (lugs) built-in for DWB100 and supplied as standard with DWB250, DWB400 and DWB600. Lugs are also available as an accessory for DWB250, DWB400 and DWB600, see the section Accessories.

Selection Guide

DWB100 for Distribution - Premium 100% Rated - Fixed Thermal and Fixed Magnetic Trip Unit

Rated current (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480Y/277 V ac	3 poles
DWB100CH				
20	300	25	10	DWB100CH20-3DX
25	300	25	10	DWB100CH25-3DX
30	300	25	10	DWB100CH30-3DX
40	400	25	10	DWB100CH40-3DX
50	500	25	10	DWB100CH50-3DX
60	600	25	10	DWB100CH60-3DX
70	700	25	10	DWB100CH70-3DX
80	800	25	10	DWB100CH80-3DX
90	900	25	10	DWB100CH90-3DX
100	1000	25	10	DWB100CH100-3DX
DWB100JH				
20	300	50	14	DWB100JH20-3DX
25	300	50	14	DWB100JH25-3DX
30	300	50	14	DWB100JH30-3DX
40	400	50	14	DWB100JH40-3DX
50	500	50	14	DWB100JH50-3DX
60	600	50	14	DWB100JH60-3DX
70	700	50	14	DWB100JH70-3DX
80	800	50	14	DWB100JH80-3DX
90	900	50	14	DWB100JH90-3DX
100	1000	50	14	DWB100JH100-3DX

DWB250 for Distribution - Premium 100% Rated - Adjustable Thermal and Fixed Magnetic Trip Unit

Current range (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480Y/277 V ac	3 poles
DWB250JH				
80-100	1000	50	14	DWB250JH100-3DF
100-125	1250	50	14	DWB250JH125-3DF
120-150	1500	50	14	DWB250JH150-3DF
160-200	2000	50	14	DWB250JH200-3DF
200-250	2500	50	14	DWB250JH250-3DF
DWB250PH				
80-100	1000	80	35	DWB250PH100-3DF
100-125	1250	80	35	DWB250PH125-3DF
120-150	1500	80	35	DWB250PH150-3DF
160-200	2000	80	35	DWB250PH200-3DF
200-250	2500	80	35	DWB250PH250-3DF

DWB400 for Distribution - Premium 100% Rated - Adjustable Thermal and Magnetic Trip Unit

Current range (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480 V ac	3 poles
DWB400JH				
160-200	1600-2000	50	18	DWB400JH200-3DA
180-225	1800-2250	50	18	DWB400JH225-3DA
200-250	2000-2500	50	18	DWB400JH250-3DA
220-275	2200-2750	50	18	DWB400JH275-3DA
240-300	2400-3000	50	18	DWB400JH300-3DA
260-325	2600-3250	50	18	DWB400JH325-3DA
280-350	2800-3500	50	18	DWB400JH350-3DA
320-400	3200-4000	50	18	DWB400JH400-3DA
DWB400PH				
160-200	1600-2000	80	35	DWB400PH200-3DA
180-225	1800-2250	80	35	DWB400PH225-3DA
200-250	2000-2500	80	35	DWB400PH250-3DA
220-275	2200-2750	80	35	DWB400PH275-3DA
240-300	2400-3000	80	35	DWB400PH300-3DA
260-325	2600-3250	80	35	DWB400PH325-3DA
280-350	2800-3500	80	35	DWB400PH350-3DA
320-400	3200-4000	80	35	DWB400PH400-3DA

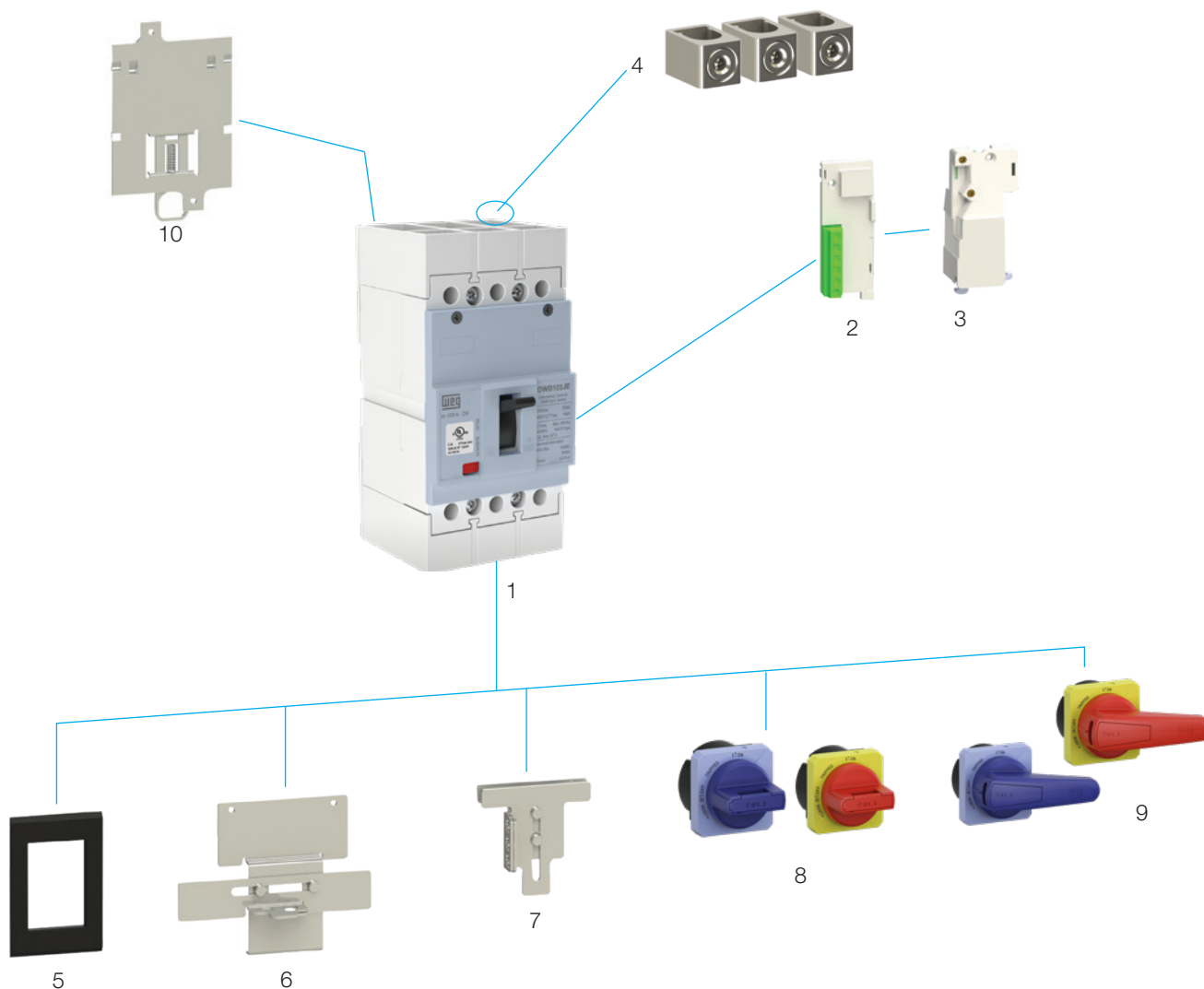
DWB600 for Distribution - Standard 100% Rated - Adjustable Thermal and Magnetic Trip Unit

Current range (A)	Magnetic trip point (A)	Interrupting ratings (kA)		Reference code
		240 V ac	480 V ac	3 poles
DWB600PH				
227.5-325	1625-3250	80	35	DWB600PH325-3DA
245-350	1750-3500	80	35	DWB600PH350-3DA
280-400	2000-4000	80	35	DWB600PH400-3DA
315-450	2250-4500	80	35	DWB600PH450-3DA
350-500	2500-5000	80	35	DWB600PH500-3DA
385-550	2750-5500	80	35	DWB600PH550-3DA
420-600	3000-6000	80	35	DWB600PH600-3DA

Notes: Wiring terminals (lugs) built-in for DWB100 and supplied as standard with DWB250, DWB400 and DWB600. Lugs are also available as an accessory for DWB250, DWB400 and DWB600, see the section Accessories.

Accessories

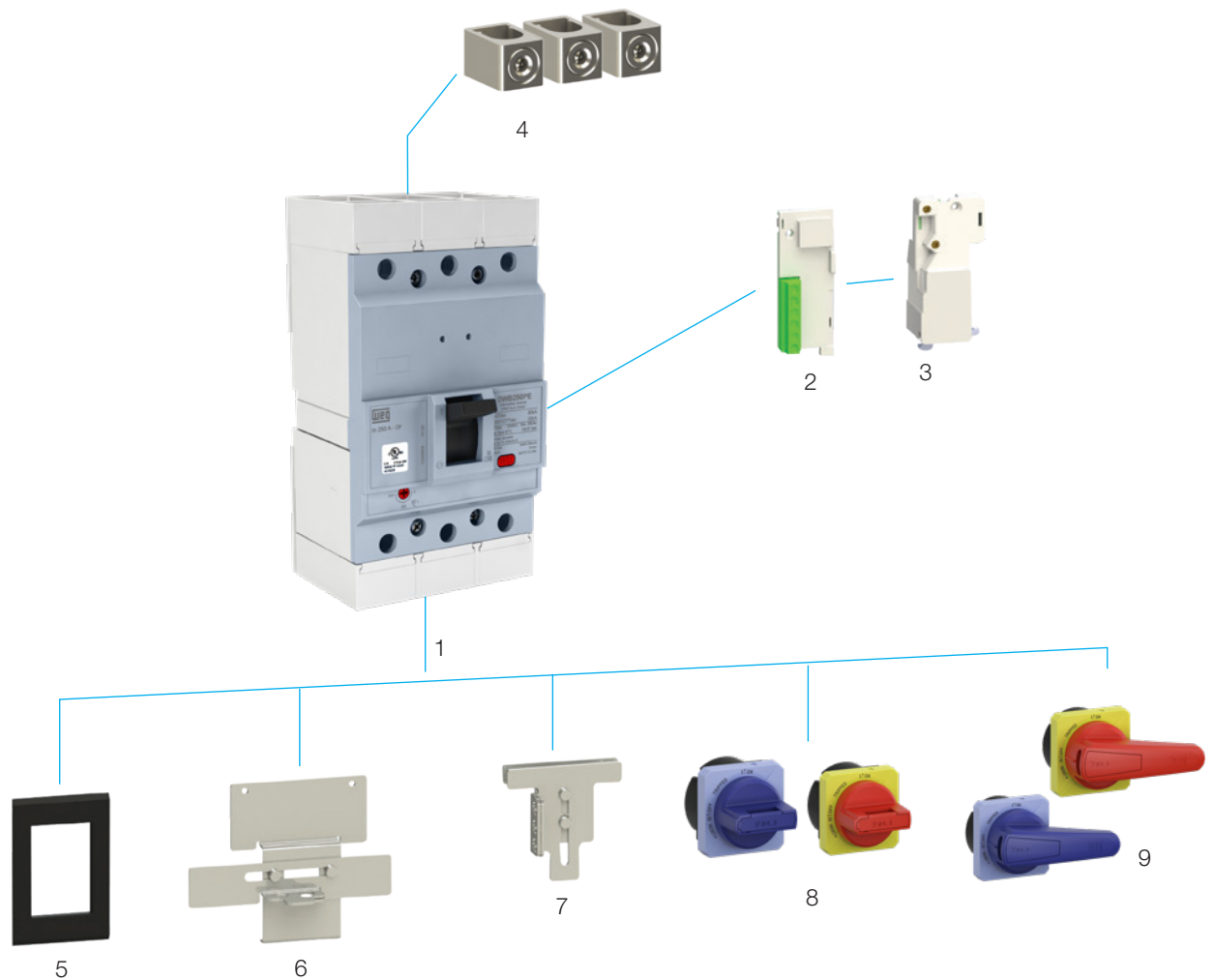
Overview of DWB100 and Accessories



- 1 - Molded case circuit breaker DWB100
- 2 - Auxiliary contact block BC, alarm auxiliary contact block AL, alarm/auxiliary contact block BCAL
- 3 - Undervoltage-trip release BS, shunt trip release BD
- 4 - Wiring terminal (lug) PC (built-in 6 units)
- 5 - Escutcheon MP DWB100
- 6 - Mechanical interlock BLIM DWB100 3P
- 7 - Lock-OFF device PLW DWB100 3P
- 8 - MRXS - Panel door rotary operating handle MRXL
- 9 - MRXL - Panel door rotary operating handle MRXL (length of handle 105 mm)
- 10 - DIN rail base BFR DWB100 3P UL

Accessories

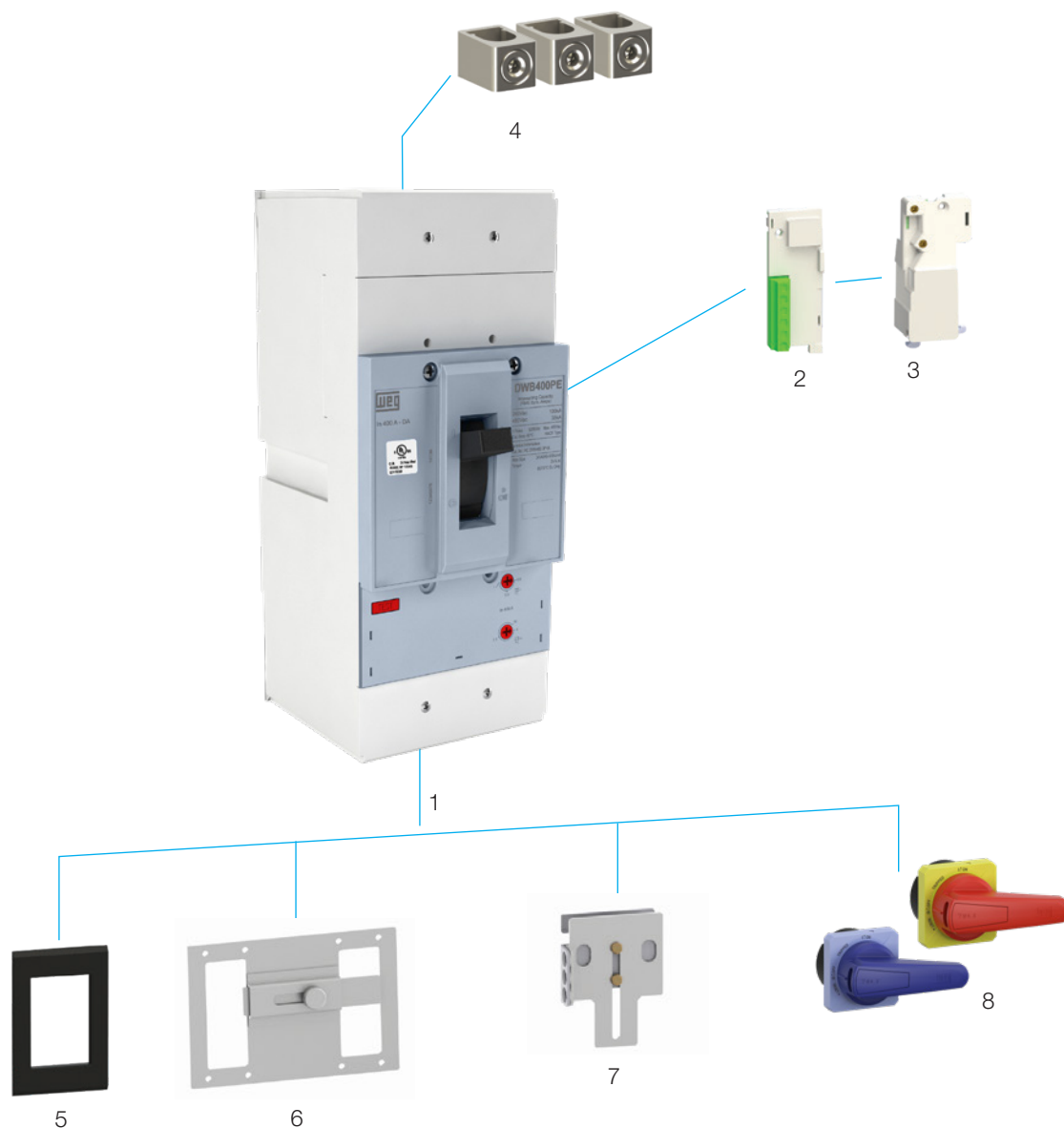
Overview of DWB250 and Accessories



- 1 - Molded case circuit breaker DWB250
- 2 - Auxiliary contact block BC, alarm auxiliary contact block AL, alarm/auxiliary contact block BCAL
- 3 - Undervoltage release BS, shunt release BD
- 4 - Wiring terminal (lug) PC (supplied as standard with 6 units)
- 5 - Escutcheon MP DWB250
- 6 - Mechanical interlock BLIM DWB250 3P
- 7 - Lock-OFF device PLW DWB250
- 8 - MRXS - Panel door rotary operating handle MRXL
- 9 - MRXL - Panel door rotary operating handle MRXL (length of handle 4.13 in / 105 mm)

Accessories

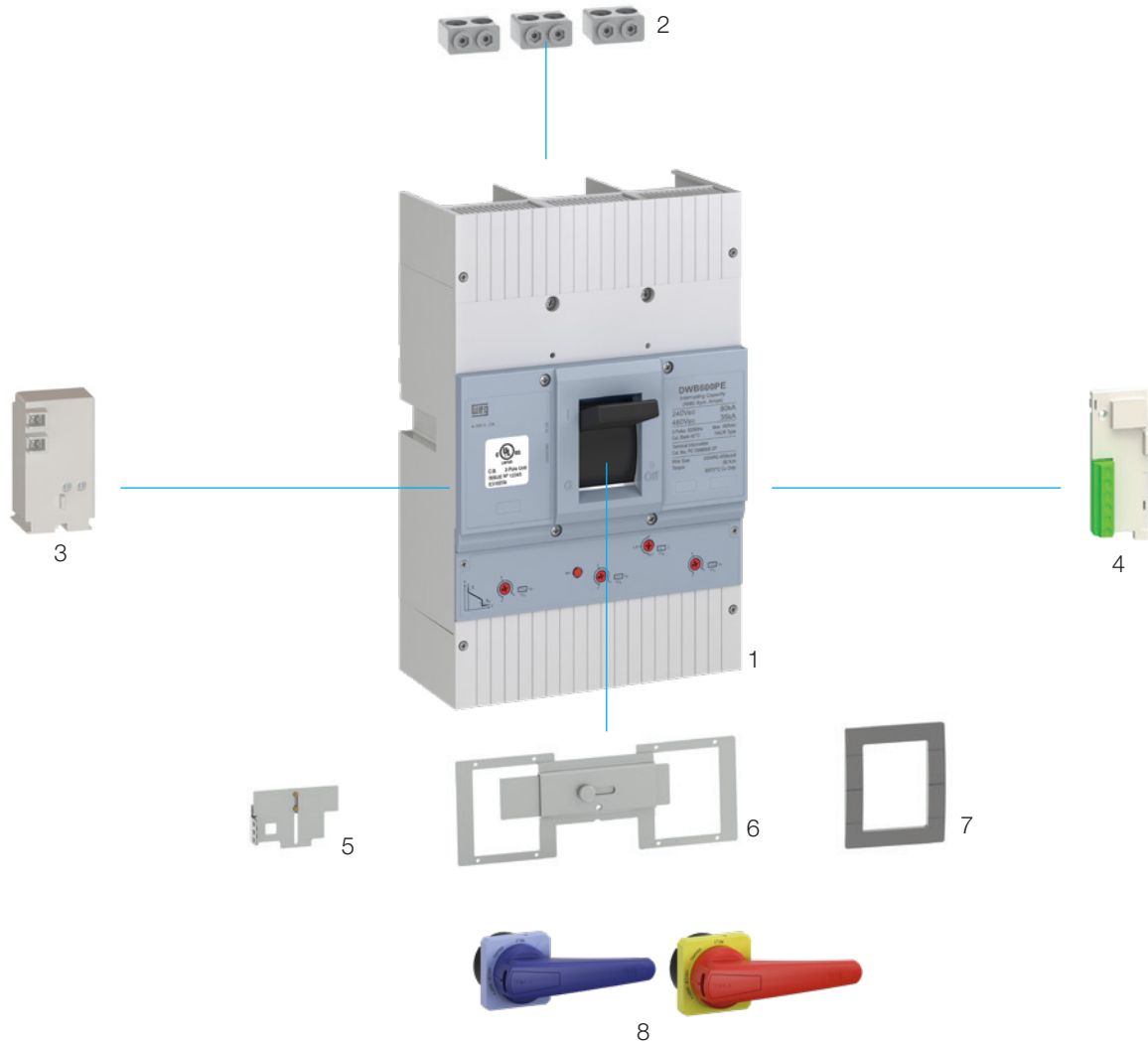
Overview of DWB400 and Accessories



- 1 - Molded case circuit breaker DWB400
- 2 - Auxiliary contact block BC, alarm auxiliary contact block AL, alarm/auxiliary contact block BCAL
- 3 - Undervoltage release BS, shunt release BD
- 4 - Wiring terminal (lug) PC (supplied as standard with 6 units)
- 5 - Escutcheon MP DWB400
- 6 - Mechanical interlock BLIM DWB400 3P
- 7 - Lock-OFF device PLW DWB400
- 8 - MRXL - Panel door rotary operating handle MRXL (length of handle 4.13 in / 105 mm)

Accessories

Overview of DWB600 and Accessories



- | | |
|--|---|
| 1 - DWB600 circuit breaker | 6 - BLIM - mechanical interlock |
| 2 - Wiring terminal (lug) PC (supplied as standard with 6 units) | 7 - MP - escutcheon |
| 3 - BS or BD - undervoltage release or shunt release | 8 - MRXL - panel door rotary operating handle (length of handle 6.22 in / 158 mm) |
| 4 - BC/AL - alarm/contact block | |
| 5 - PLW - padlocking device | |

Internal Accessories

Auxiliary and Alarm Contact Blocks

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

BC Auxiliary Contact Block

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

AL Alarm Contact Block

- Indicates circuit breaker's trip due to overload, short-circuit, shunt trip or undervoltage-trip release conditions through a changeover contact (SPDT or form C contact)
- The contact opens when the circuit breaker is reset
- Offers provisions for audio or visual indication of the under the conditions described above

BCAL Auxiliary and Alarm Contact Set

- Ensemble comprised of an auxiliary contact + alarm contact. The BCAL block performs the 2 functions above in different contacts in a single set.



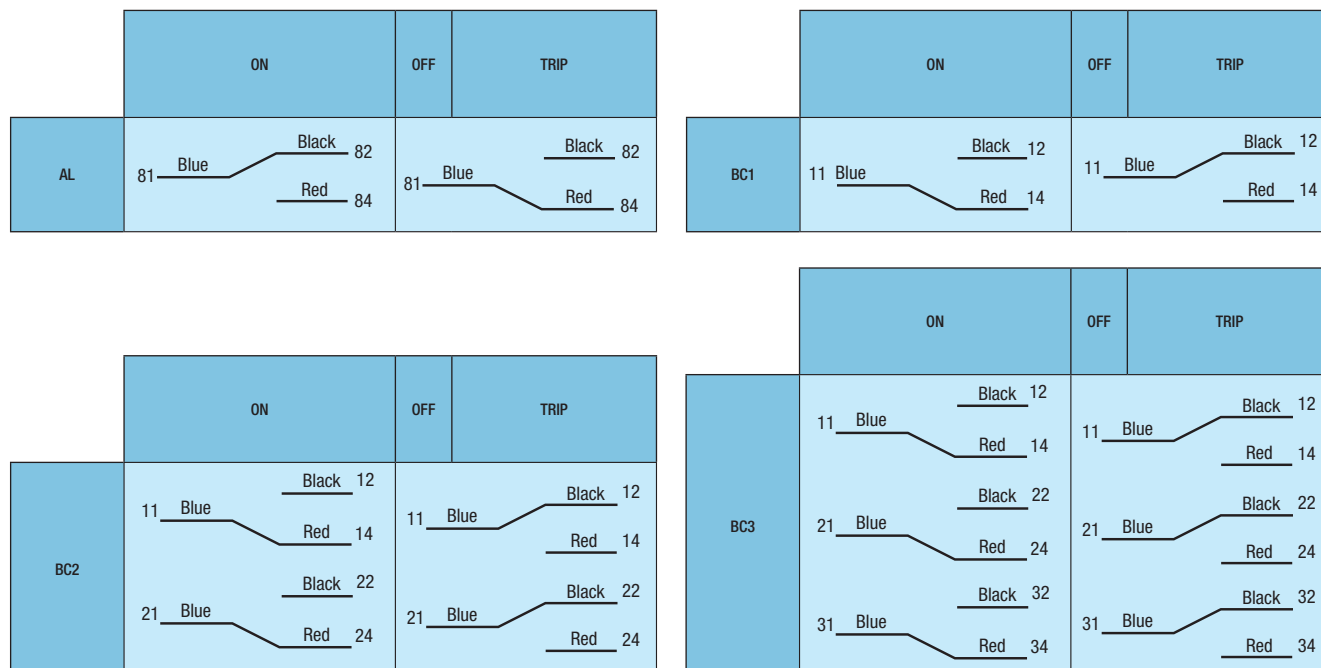
Internal accessory	Number of contacts	Reference code			
		DWB100	DWB250	DWB400	DWB600
Auxiliary contact block BC	1 changeover	BC-1 DWB BC-2 DWB			
	2 changeover				
Alarm contact block AL	1 changeover	AL-1 DWB			
Auxiliary and alarm contact set BCAL	1BC + 1AL	BCAL-2 DWB			
Electrical characteristics					
Rated voltage	Type of load	Switching capacity (A)			
125 V ac	Resistive	6			
250 V ac	Resistive	6			

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

Auxiliary and Alarm Contact Blocks

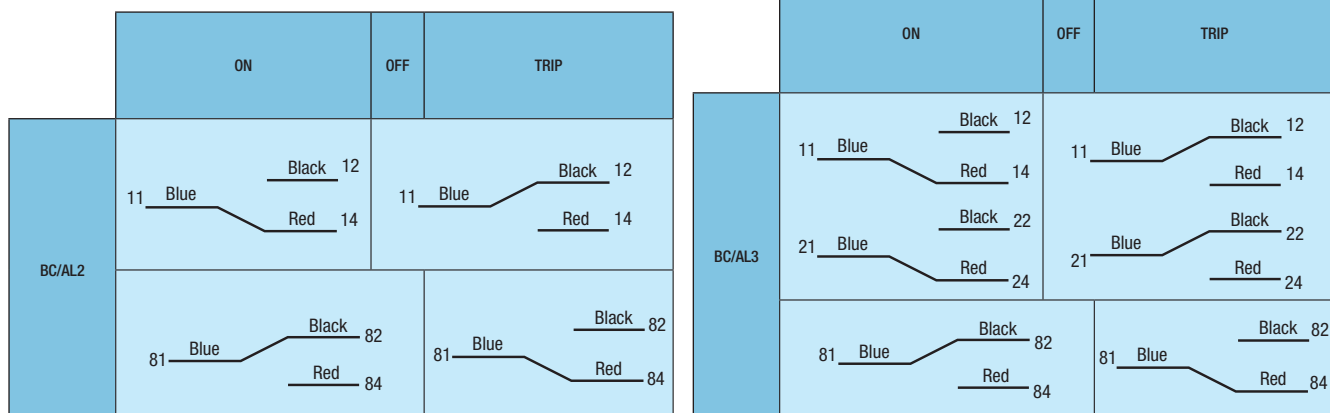
BC, AL and BCAL contacts already come with built-in terminal blocks. These terminal blocks accept wires of 20 to 16 AWG (0.5 to 1.5 mm²) and tightening torque of 6.9 lb.in (0.8 N.m).

Wiring Diagrams



Internal Accessories

Wiring Diagrams



Shunt and Undervoltage Release

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

BD Shunt Release

- When energized by a pulse or maintained signal of voltage, the shunt release trips the circuit breaker (trip position).
The shunt release works from 70 to 110% of the rated voltage ($0.70 \times U_n < U_e < 1.1 \times U_n$)
- This release features a device to keep it not energized after the tripping pulse

BS Undervoltage Release

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



	Rated Voltage (U _n)	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	-	-	-	-	-	-
Shunt trip BD ¹⁾	110-130 V ac / V dc	E10	11338324	1,5 VA	-	-	-	-	-	-
	220-250 V ac / V dc	E15	10853866	2,5 VA	-	-	-	-	-	-
	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	-	-	-	-	-	-
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.

Internal Accessories

Internal accessory	Rated voltage - Ue	Reference code
Undervoltage release BS	24 / 48 / 60 / 110-130 / 220-250 V ac/dc	BS DWB160-250 ●
Shunt release BD		BD DWB160-250 ●
Undervoltage release BS		BS DWB400 ●
Shunt release BD		BD DWB400 ●
Under voltage release BD		BS DWB600 ●
Shunt release BD		BD DWB600 ●

To Complete the Reference Code, Replace " ● " with the Appropriate Voltage Code

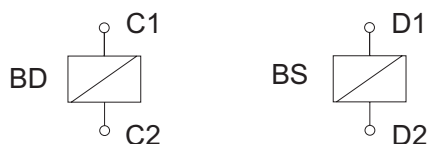
E26	E27	E28	E10	E15
24 V ac/dc	48 V ac/dc	60 V ac/dc	110-130 V ac/dc	220-250 V ac/dc

Note: Other voltages upon request.

Using BD and BS Releases

BD and BS releases already come with built-in terminal blocks. These terminal blocks accept wires of 20 to 16 AWG (0.5 to 1.5 mm²) and tightening torque of 6.9 lb.in (0.8 N.m). After BD or BS releases have operated, the circuit breaker have to be reset before being closed again.

Wiring Diagrams



Maximum Configurations - Internal Accessories

Internal accessory	DWB100				DWB250				DWB400				DWB600			
Auxiliary contact block BC	2	1 ¹⁾	2	1 ¹⁾	2	1 ¹⁾	2	1 ¹⁾	2	1 ¹⁾	2	1 ¹⁾	4	3	4	3
Alarm contact block AL	0	1 ¹⁾	0	1 ¹⁾	0	1 ¹⁾	0	1 ¹⁾	0	1 ¹⁾	0	1 ¹⁾	0	1	0	1
Shunt release BD	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
Undervoltage release BS	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1

Note: 1) Use BCAL contact block when applications require auxiliary contact and alarm contact fitted in the same circuit breaker.

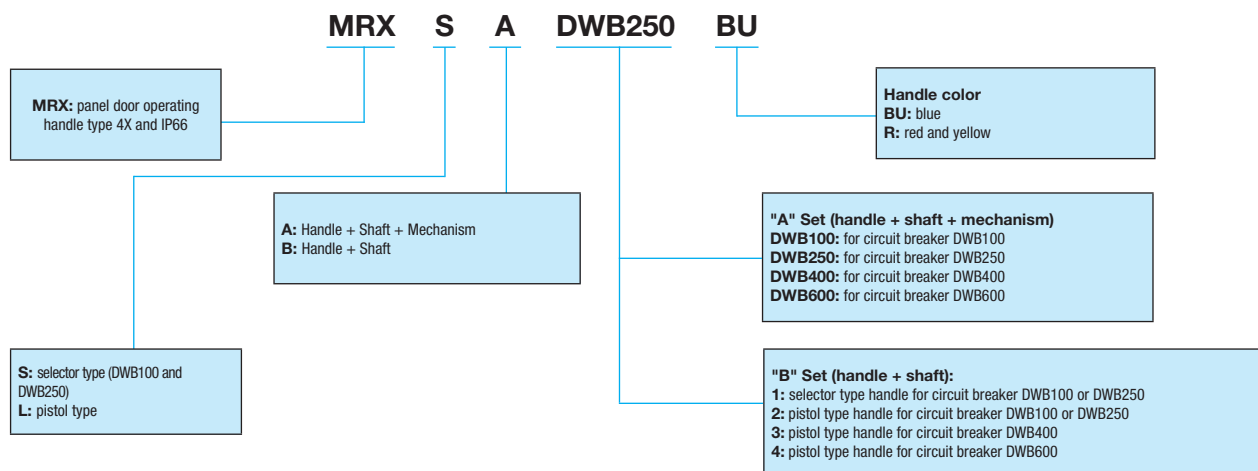
External Accessories

Panel Door Operating Handles

Handle (NEMA 4X/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



External Accessories

Panel Door Operating Handles (NEMA 4X/IP66)

"A" Set: Handle + Shaft + Mechanism

	Description	Circuit breaker	Shaft in (mm)	Length of handle in (mm)	Handle color
 MRXS  MRXL  MRXL	MRXS-A-DWB160-R	DWB100	18.11 (460)	2.42 (61.6)	Red and yellow
	MRXS-A-DWB250-R	DWB250	18.11 (460)	2.42 (61.6)	Red and yellow
	MRXL-A-DWB160-R	DWB100	18.11 (460)	4.13 (105)	Red and yellow
	MRXL-A-DWB250-R	DWB250	18.11 (460)	4.13 (105)	Red and yellow
	MRXL-A-DWB400-R	DWB400	18.11 (460)	4.13 (105)	Red and yellow
	MRXL-A-DWB1000-R	DWB600	18.11 (460)	6.22 (158)	Red and yellow
	MRXS-A-DWB160-BU	DWB100	18.11 (460)	2.42 (61.6)	Blue
	MRXS-A-DWB250-BU	DWB250	18.11 (460)	2.42 (61.6)	Blue
	MRXL-A-DWB160-BU	DWB100	18.11 (460)	4.13 (105)	Blue
	MRXL-A-DWB250-BU	DWB250	18.11 (460)	4.13 (105)	Blue
	MRXL-A-DWB400-BU	DWB400	18.11 (460)	4.13 (105)	Blue
	MRXL-A-DWB1000-BU	DWB600	18.11 (460)	6.22 (158)	Blue

Notes: 1) Padlocks 0.16 up to 0.31 in may be fit to the handles.

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

Panel Door Operating Handles (NEMA 4X/IP66)

"B" Set: Handle + Shaft

Description	Circuit breaker	Shaft in (mm)	Length of handle in (mm)	Handle color
MRXS-B-1-R	DWB100 / DWB250	18.11 (460)	2.42 (61.6)	Red and yellow
MRXL-B-2-R	DWB100 / DWB250	18.11 (460)	4.13 (105)	Red and yellow
MRXL-B-3-R	DWB400	18.11 (460)	4.13 (105)	Red and yellow
MRXL-B-4-R	DWB600	18.11 (460)	6.22 (158)	Red and yellow
MRXS-B-1-BU	DWB100 / DWB250	18.11 (460)	2.42 (61.6)	Blue
MRXL-B-2-BU	DWB100 / DWB250	18.11 (460)	4.13 (105)	Blue
MRXL-B-3-BU	DWB400	18.11 (460)	4.13 (105)	Blue
MRXL-B-4-BU	DWB600	18.11 (460)	6.22 (158)	Blue

Notes: 1) Padlocks 0.16 up to 0.31 in may be fit to the handles.

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

Only Mechanism

Description	Circuit breaker
MRH DWB160	DWB100
MRH DWB250	DWB250
MRH DWB400	DWB400
MRH DWB1000E	DWB600

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

Shaft Support

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



Description	Circuit breaker	Shaft length to use of support
MR DWB400	DWB400	> 14.96 in / 380 mm
MR DWB800-1600	DWB600	> 12.59 in / 320 mm

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

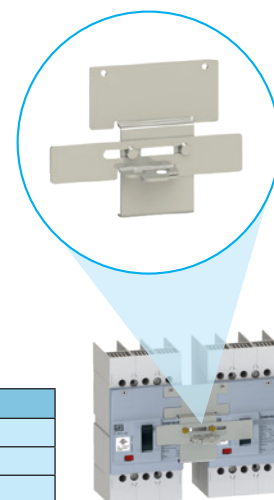
Changeover Device

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

BLIM Mechanical Interlock

- Provides safe operation in a manual-operated changeover system
- Makes the mechanical interlock of 2 circuit breakers of the same frame size, preventing both MCCBs to be in ON position
- Interlock is assembled directly to the front cover of the circuit breakers
- It can be padlocked in 2 positions: MCCB1 ON and MCCB2 OFF, MCCB1 OFF and MCCB2 ON
- BLIM allows padlocks with diameters of Ø0.16...0.31 inches (4...8 mm)
- It is possible to interlock 3 MCCBs side-by-side using 2 BLIMs
- Padlocks are not supplied

External accessory	MCCB	Reference code
Mechanical interlock BLIM	DWB100	BLIM DWB100 3P
	DWB250	BLIM DWB250 3P
	DWB400	BLIM DWB400 3P
	DWB600	BLIM DWB800-1600 3P



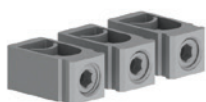
External Accessories

Accessory for Connection and Installation

Depending on the application and local standards, the MCCB may be installed and connected through bus bars or cables. Given these requirements, the DWB range of circuit breakers have the specific connection accessory to comply with.

PC Wiring Terminals (Lugs)

- Provides the means for connecting the circuit breaker to the power source and the load
- PC is supplied with 3 pieces that are suitable for either line or load terminals
- Built-in on DWB100 in the 6 terminals
- Lugs are supplied with 6 units for DWB250, DWB400 and DWB600 (supplied as standard)
- Pack with 3 units for spare parts



External accessory	Spare part (units)	MCCB	Minimum cross-section (AWG / mm²)	Maximum cross-section (AWG / mm²)	Tightening torque (lb.in / N.m)	Reference code
Wiring terminal PC	3	DWB250	4 / 25 (1 cable)	250 kcmil / 120 (1 cable)	220 / 25	PC DWB250 3P
		DWB400	3/0 / 95 (1 cable)	500 kcmil / 240 (1 cable)	265 / 35	PC DWB400 3P
		DWB600	400 kcmil / 240 (1 cable) or 3/0 / 95 (2 cables)	350 kcmil / 185 (2 cables)	310 / 55	PC DWB800-1000 3P

DIN Rail Base

- Quick assembly of DWB100 on 35 mm DIN rails
- Fast replacement when panel is under maintenance

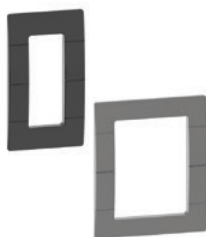


External accessory	MCCB	Reference code
DIN rail base	DWB100	BFR DWB160 3P UL

Escutcheons and Lock-OFF Devices

MP Escutcheons

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



External accessory	MCCB	Reference code
Escutcheon MP	DWB100 3P	MP DWB100
	DWB250 3P	MP DWB250
	DWB400 3P	MP DWB400
	DWB600 3P	MP DWB800-1600

Note: degree of protection rating (IP) according to IEC 60529.

PLW Lock-OFF Devices

- The PLW is a fixed-type device that is installed on the front of the MCCB ensuring the MCCB locking in OFF position
- It can be padlocked using 1 to 3 padlocks. PLW allows padlocks with diameters of Ø0.16...0.31 inches (4...8 mm)
- Padlocks are not supplied



External accessory	MCCB	Reference code
Lock-OFF device PLW	DWB100 3P	PL DWB100
	DWB250 3P	PL DWB250
	DWB400 3P	PL DWB400
	DWB600 3P	PL DWB800-1600

Technical Data

Reference code			DWB100	DWB250	DWB400	DWB600
Frame size			100	250	400	600
Electrical characteristics according to UL 489						
Rated operational voltage - E _u	V ac (60 Hz)		480Y/277	480Y/277	480	480
Maximum rated continuous current - I _n (40 °C)	A		100	250	400	600
MCCB rating design			80%, 100% ¹⁾			
Rated current - I _n (40 °C)	A		20, 25, 30, 40, 50, 60, 70, 80, 90, 100	80-100, 100-125, 120-150, 160-200, 200-250	160-200, 180-225, 200-250, 220-275, 240-300, 260-325, 280-350, 320-400	227.5-325, 245-350, 280-400, 315-450, 350-500, 385-550, 420-600
Number of poles			3	3	3	3
Short-circuit breaking capacity levels			C	J	J	P
UL interrupting rating - max RMS symmetrical	kA rms		-	-	-	-
	240 V ac		35	50	50	80
	480Y/277 V ac		10	14	14	35
	480 V ac		-	-	18	35
Mechanical lifespan (C-0)	Number of operations		10,000	6,000	6,000	6,000
	Operations per hour		360	240	240	240
Electrical lifespan (C-0) @ 480 V ac	Number of operations		6,000	1,000	1,000	1,000
	Operations per hour		360	240	240	240
Protection						
Against short-circuit & overload (fixed thermomagnetic)			Yes	No	No	No
Against short-circuit & overload (adjustable thermal and fixed magnetic)			No	Yes	No	No
Against short-circuit & overload (adjustable thermal and magnetic)			No	No	Yes	Yes
Accessories						
Internal	Auxiliary contact BC		Yes	Yes	Yes	Yes
	Alarm contact AL		Yes	Yes	Yes	Yes
	Auxiliary and alarm contacts BCAL		Yes	Yes	Yes	Yes
	Shunt trip release BD		Yes	Yes	Yes	Yes
	Undervoltage-trip release BS		Yes	Yes	Yes	Yes
External	Mechanical interlock BLIM		Yes	Yes	Yes	Yes
	Lock-OFF device PLW		Yes	Yes	Yes	Yes
	Escutcheons MP		Yes	Yes	Yes	Yes
	Wiring terminal (lug) PC		Built-in	Standard	Standard	Standard
Handles	Panel door rotary operating handle		Yes	Yes	Yes	Yes
Installation and connections						
Suitable for reverse connection			Yes	Yes	Yes	Yes
Cables - Cu ²⁾	Maximum cross-section		3 AWG	250 kcmil	500 kcmil	400 kcmil
	Minimum cross-section		10 AWG	4 AWG	3/0 AWG	3/0 AWG
	Tightening torque	lb.in (N.m)	57.5 (6.5)	220 (25)	265 (35)	310 (55)
Busbar	Tightening torque	lb.in (N.m)	-	70 (8)	175 (20)	175 (20)
Dimensions (W x D x H)	Inches (mm)		3.07 x 2.87 x 6.30 (78 x 73 x 160)	4.13 x 3.15 x 7.87 (105 x 80 x 200)	4.22 x 3.9 x 12.72 (107 x 99 x 323)	8.27 x 3.9 x 12.72 (210 x 99 x 323)
Weight	3 poles	Pounds (kg)	2.09 (0.95)	3.97 (1.8)	7.85 (3.56)	16.31 (7.4)

Notes: 1) For DWB100: suitable for continuous operation at 100 percent of rating only if used in a circuit breaker enclosure in a cubicle space 23.6 x 15.7 x 7.9 inches (600 x 400 x 200 mm) or equivalent.

For DWB250: suitable for continuous operation at 100 percent of rating only if used in a circuit breaker enclosure in a cubicle space 31.5 x 23.6 x 11.8 inches (800 x 600 x 300 mm) or equivalent.

For DWB400 and DWB600: suitable for continuous operation at 100 percent of rating only if used in a circuit breaker enclosure in a cubicle space 47.2 x 23.6 x 15.8 inches (1,200 x 600 x 400 mm) or equivalent.

2) Use only 90 °C rated wire with ampacity based on 75 °C rated conductors.

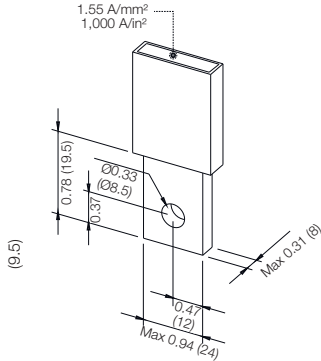
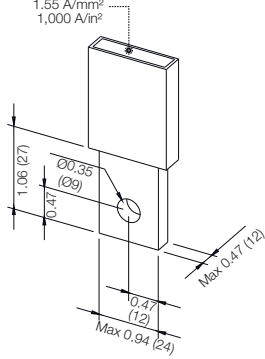
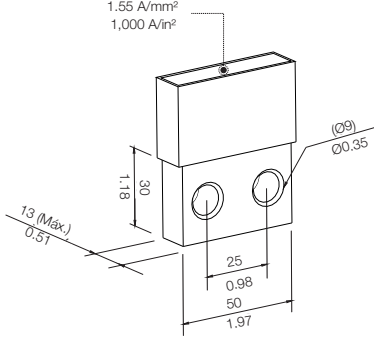
Installation and Connections

Minimum Mounting Distances

		DWB100	DWB250	DWB400	DWB600
Recommended mounting distances (inch / mm)	A	1.97 / 50	1.97 / 50	2.76 / 70	3.94 / 100
	B	0.79 / 20	0.79 / 20	1.18 / 30	1.18 / 30
	C	0.79 / 20	0.79 / 20	1.18 / 30	1.18 / 30
Recommended distances between circuit breakers for side by side assembly (inch / mm)	D	0.394 / 10	0.394 / 10	0.394 / 10	0
Recommended distances between circuit breakers for vertical assembly (inch / mm)	E	3.54 / 90	5.91 / 150	7.09 / 180	7.87 / 200
Mounting position					
Drilling for fixing the circuit breakers (inch / mm) DWB100/DWB250/DWB400/DWB600		See section dimensions	See section dimensions	See section dimensions	See section dimensions
Dimensions of fixing screw to the plate (inch / mm)		M4 x 2.99 / 76 (2 pieces)	M4 x 2.99 / 76 (2 pieces)	M5 x 1.97 / 50 (4 pieces)	M5 x 60 x 4
Surpass of the fixing screw in relation to the circuit breaker (inch / mm)	H	0.315 / 8	0.236 / 6	0.59 / 15	0.59 / 15
Tightening torque - fixing screw (lb.in / N.m)		35.2 / 4	35.2 / 4	25 / 2.5	26.5 / 3

Installation and Connections

Conductor Installation - Bars

Reference code	Tightening torque (lb.in / N.m)	Conductor - Inch (mm)
DWB250	70 / 8	
DWB400	175	
DWB600	175	

Thermal Dissipation

Distribution MCCB											
DWB100	In (A)	20	25	32	40	50	63	70	80	90	100
	Watts/pole	1	2	4	4	5	8	4	5	6	7

DWB250	In (A)	100	125	160	200	250
	Watts/pole	14	19	17	14	20

DWB400	In (A)	200	250	320	400
	Watts/pole	14	20	19	30

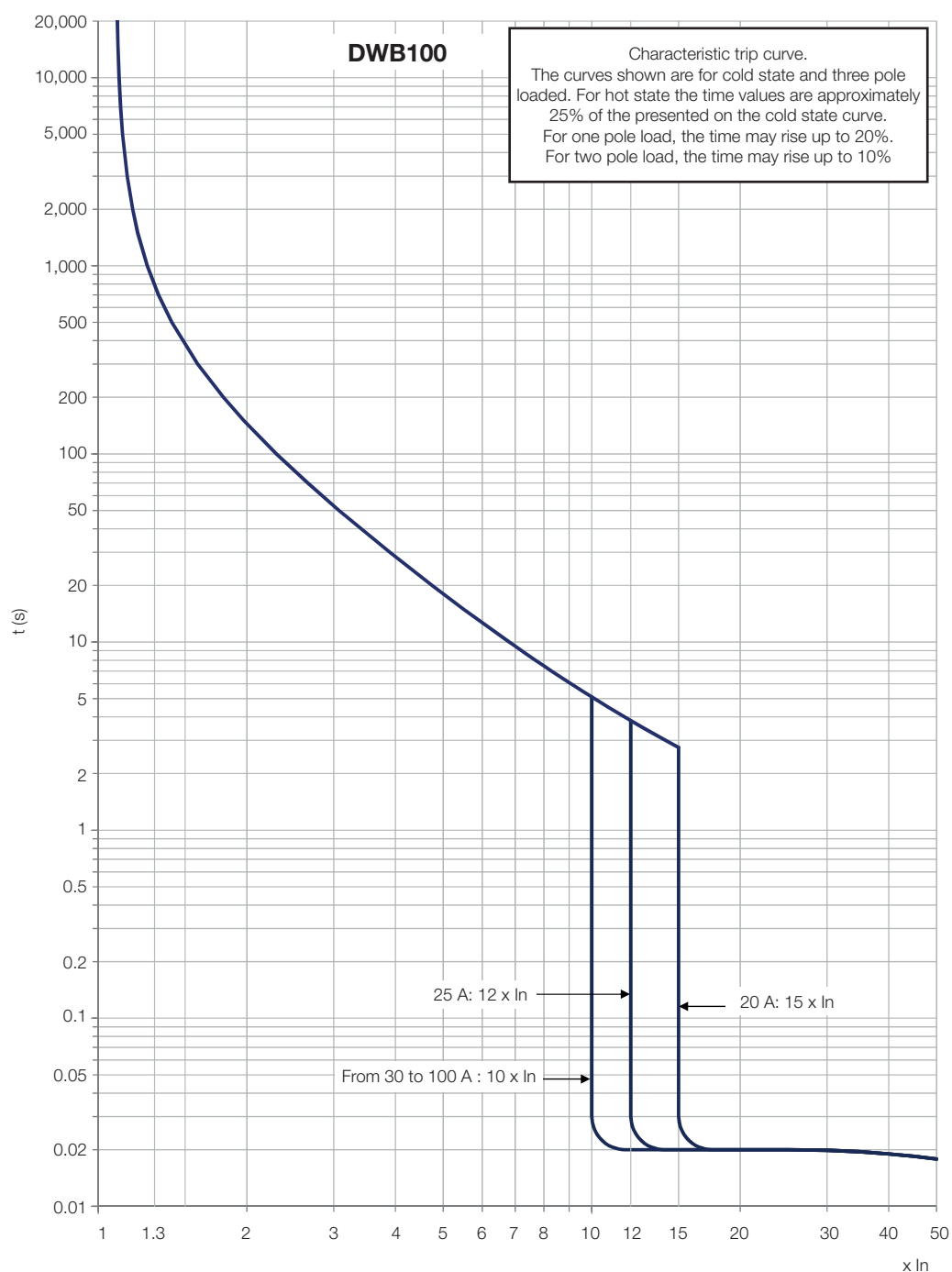
DWB600	In (A)	320	400	500	600
	Watts/pole	19	30	38	47

Temperature derating											
	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	55 °C	60 °C
DWB100	1.16	1.12	1.09	1.07	1.02	1.02	1.00	0.97	0.95	0.91	0.88
DWB250	1.15	1.13	1.10	1.08	1.05	1.02	1.00	0.98	0.95	0.92	0.88
DWB400	1.15	1.13	1.10	1.08	1.05	1.02	1.00	0.98	0.95	0.92	0.88
DWB600	1.15	1.13	1.11	1.08	1.05	1.03	1.00	0.97	0.94	0.91	0.88

Altitude derating		
Altitude (m)	In	U _e (V)
2,000	100%	100%
3,000	98%	88%
4,000	93%	78%
5,000	90%	68%

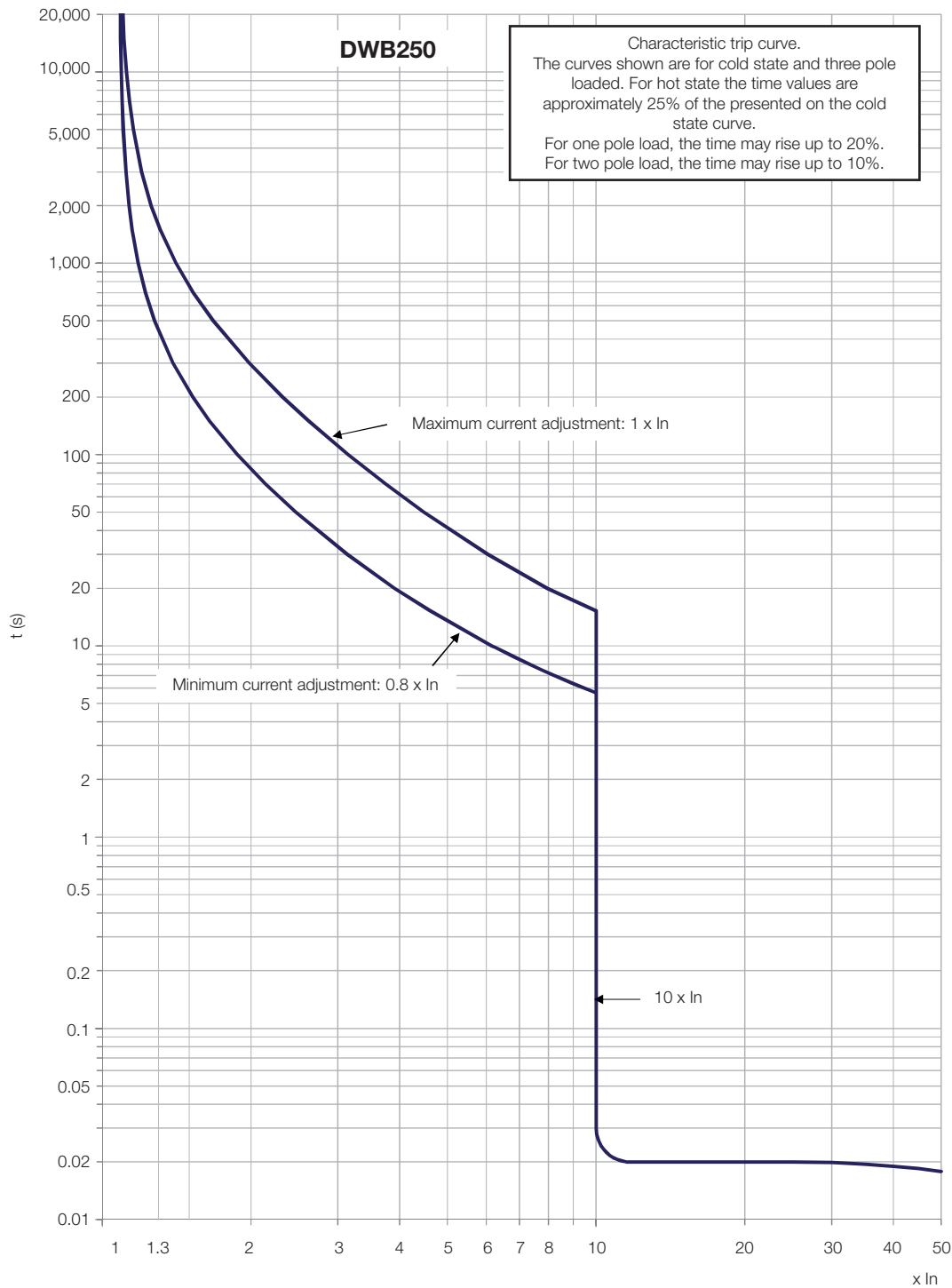
Trip Curves

DWB100 - Fixed Thermal and Fixed Magnetic (20...100 A)



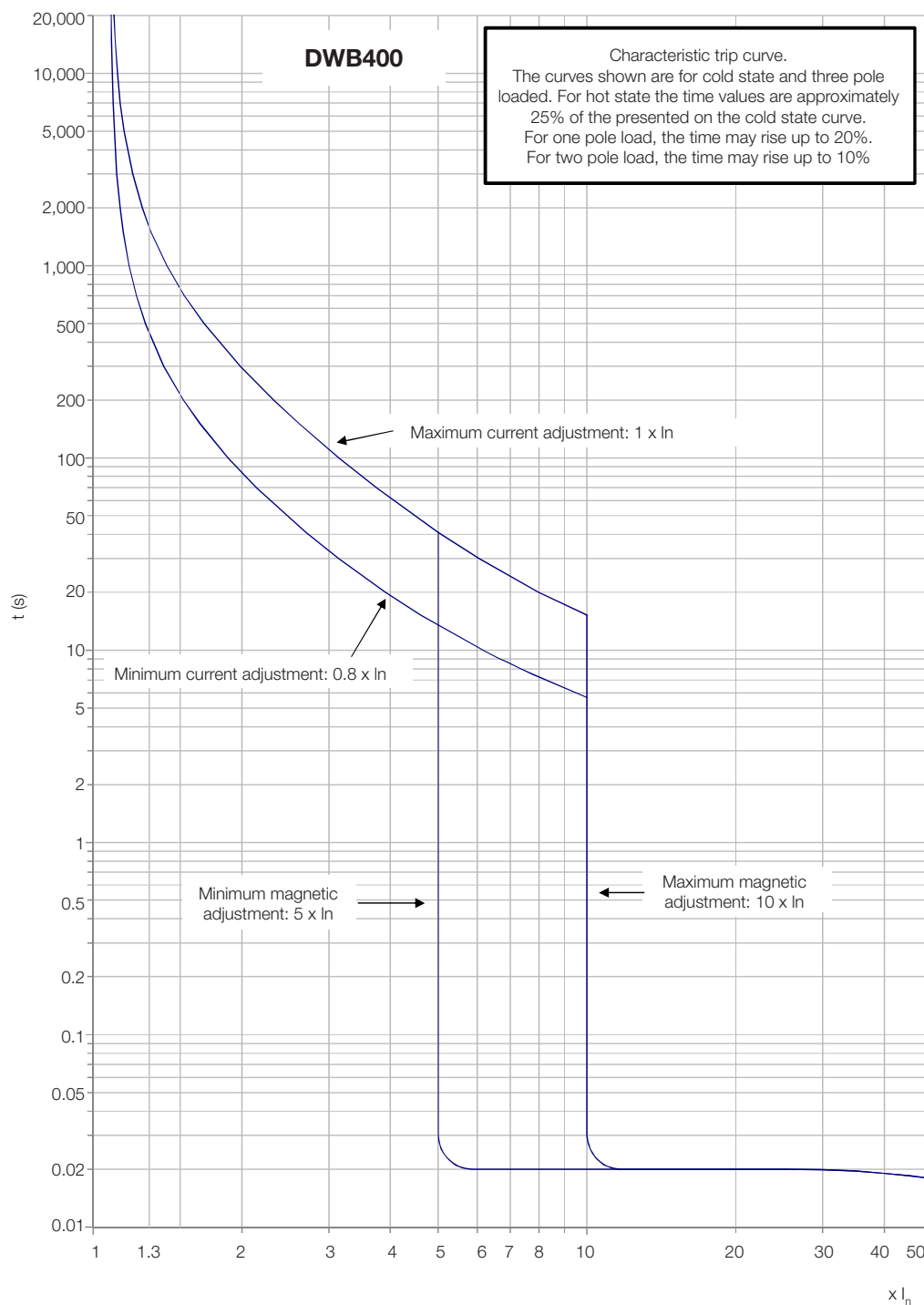
Trip Curves

DWB250 - Adjustable Thermal and Fixed Magnetic (80...250 A)



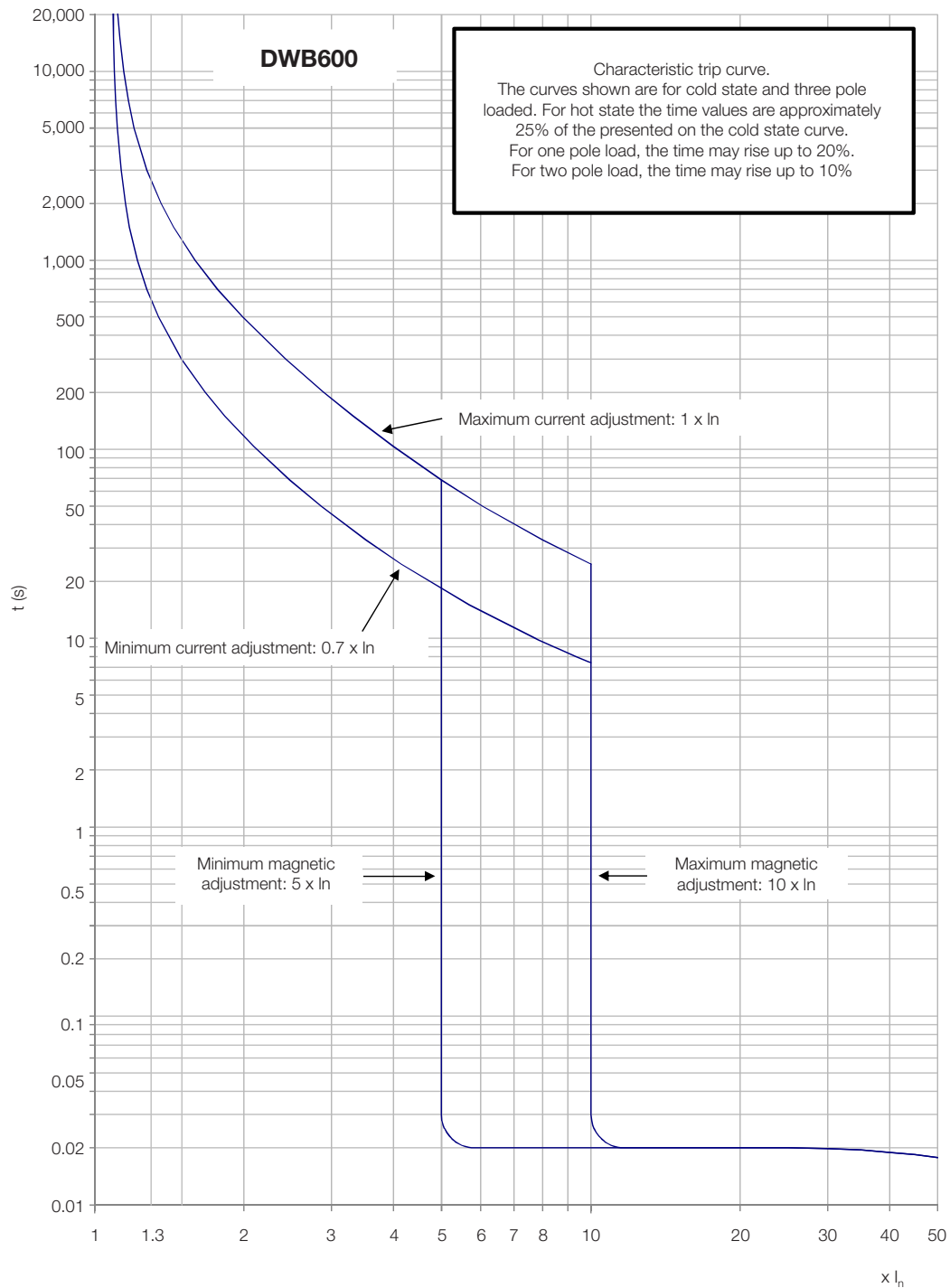
Trip Curves

DWB400 - Adjustable Thermal and Magnetic (200...400 A)



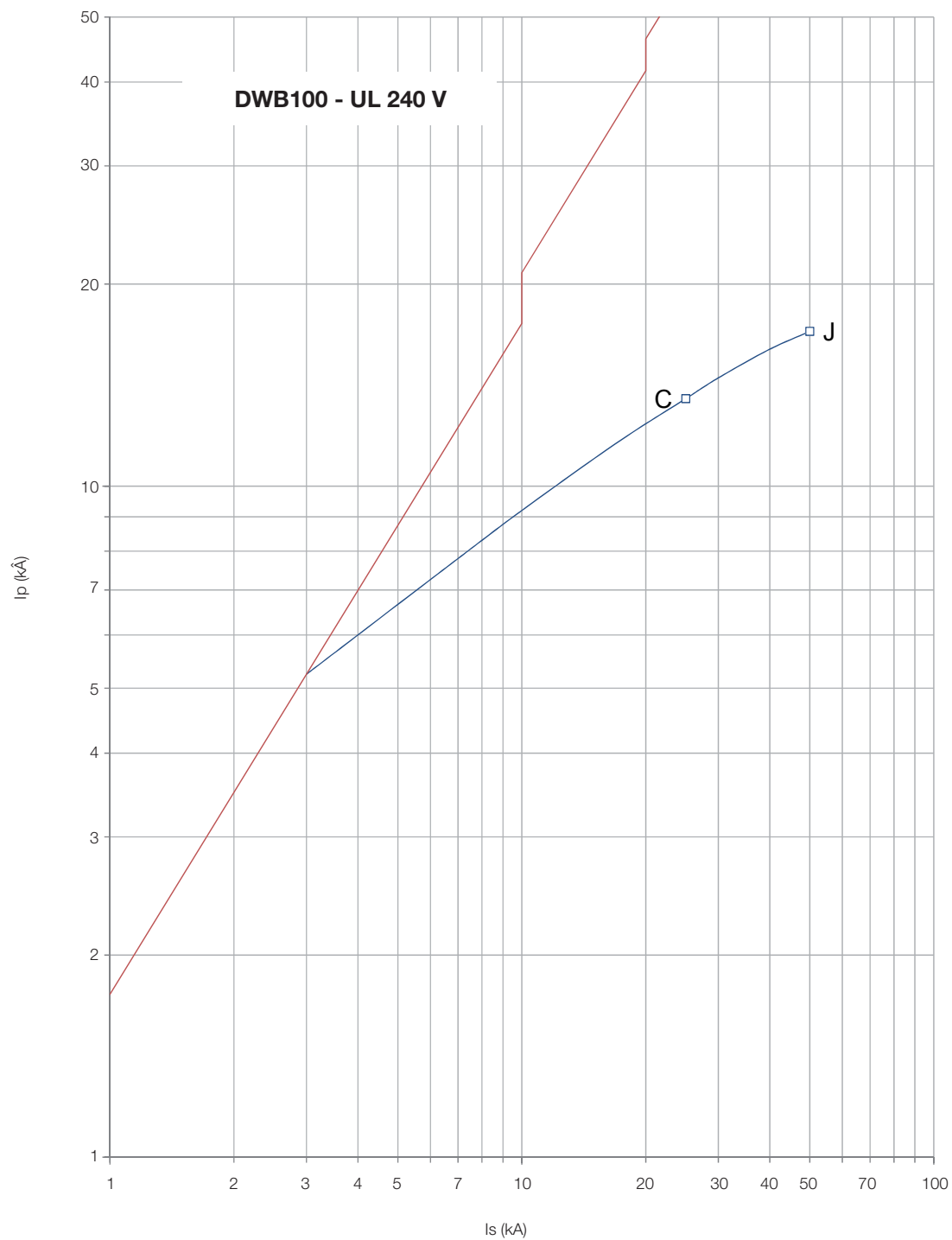
Trip Curves

DWB600 - Adjustable Thermal and Magnetic (200...600 A)



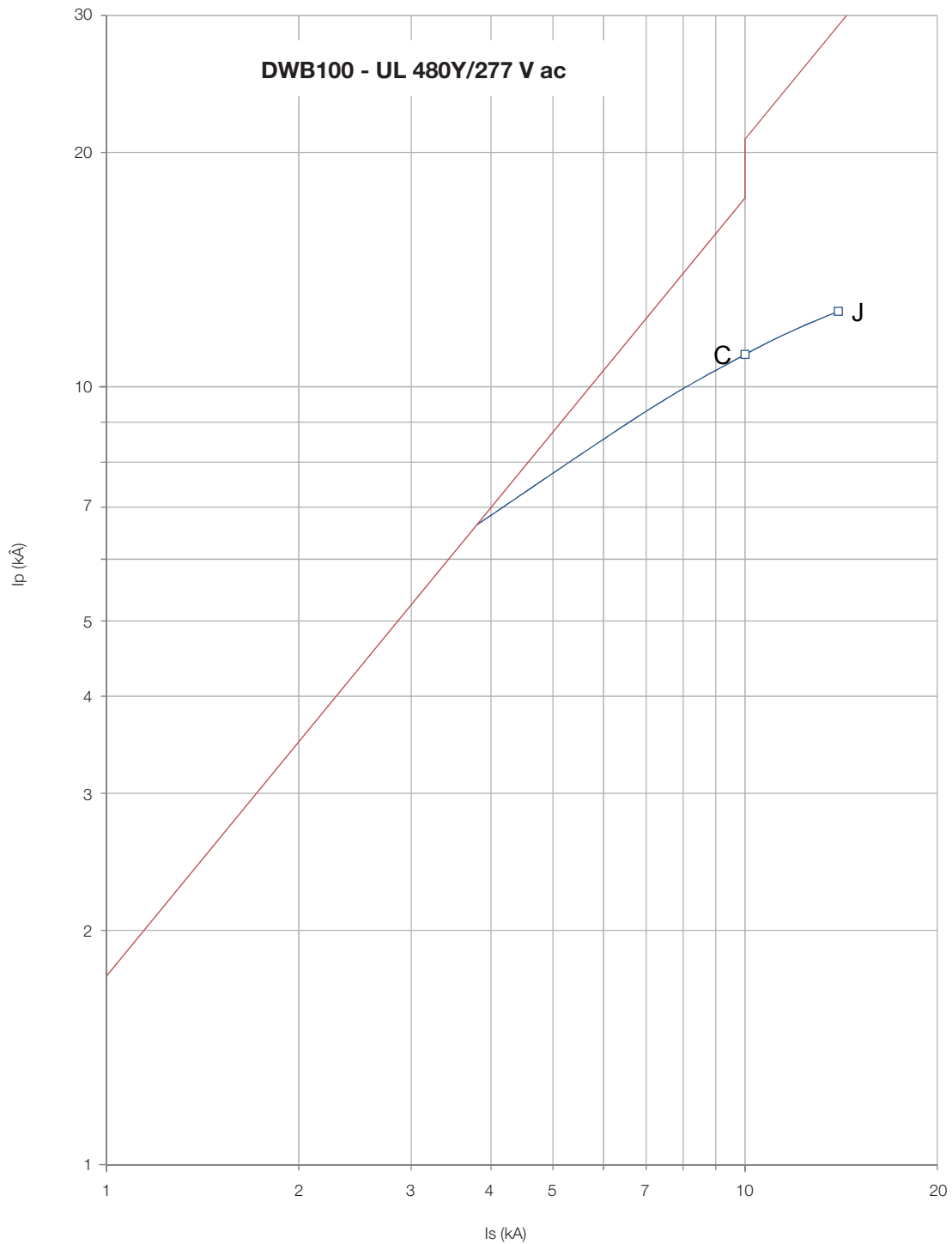
Trip Curves

DWB100 - Short-Circuit Limiting Curves @ 240 V ac



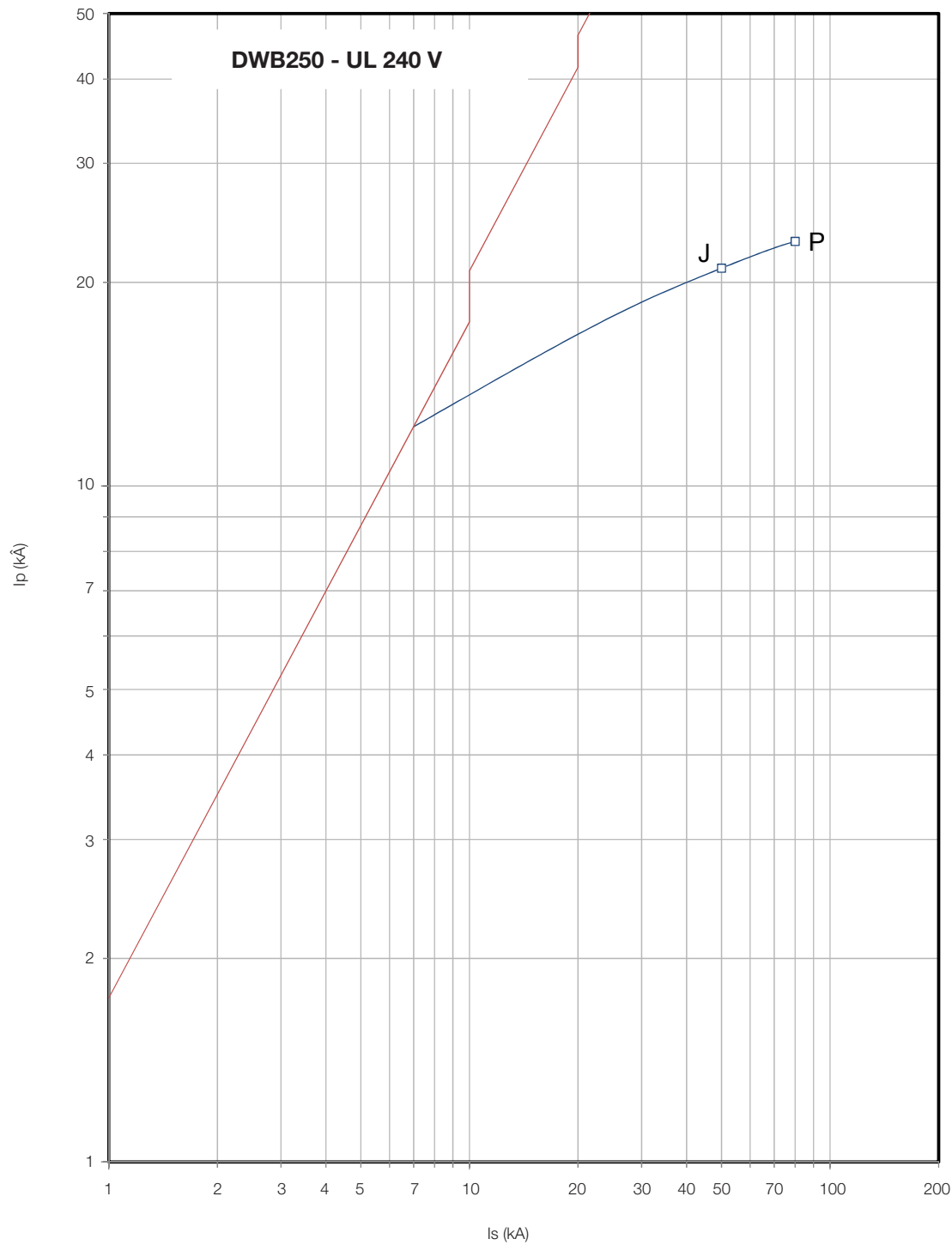
Trip Curves

DWB100 - Short-Circuit Limiting Curves @ 480Y/277 V ac



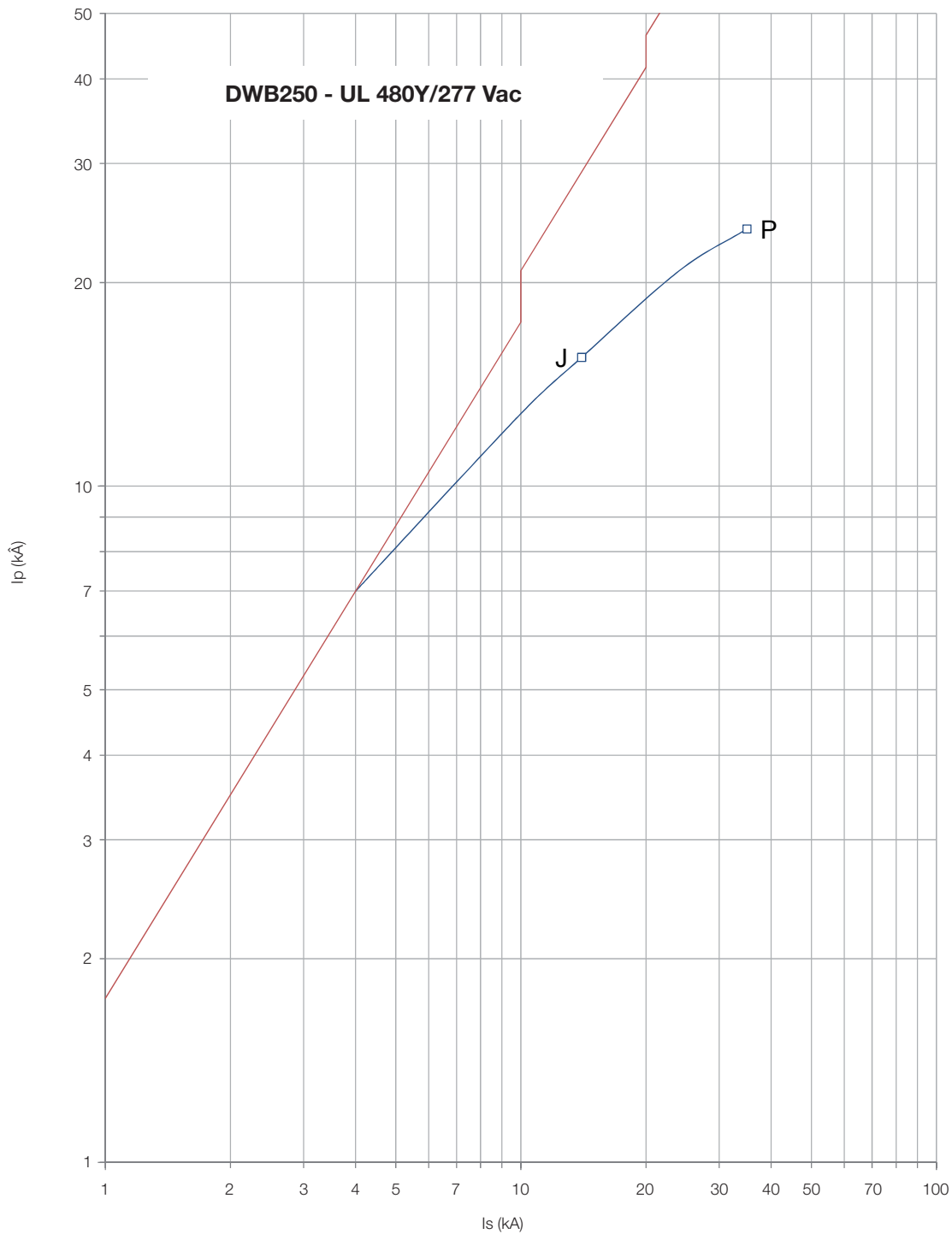
Trip Curves

DWB250 - Short-Circuit Limiting Curves @ 240 V ac



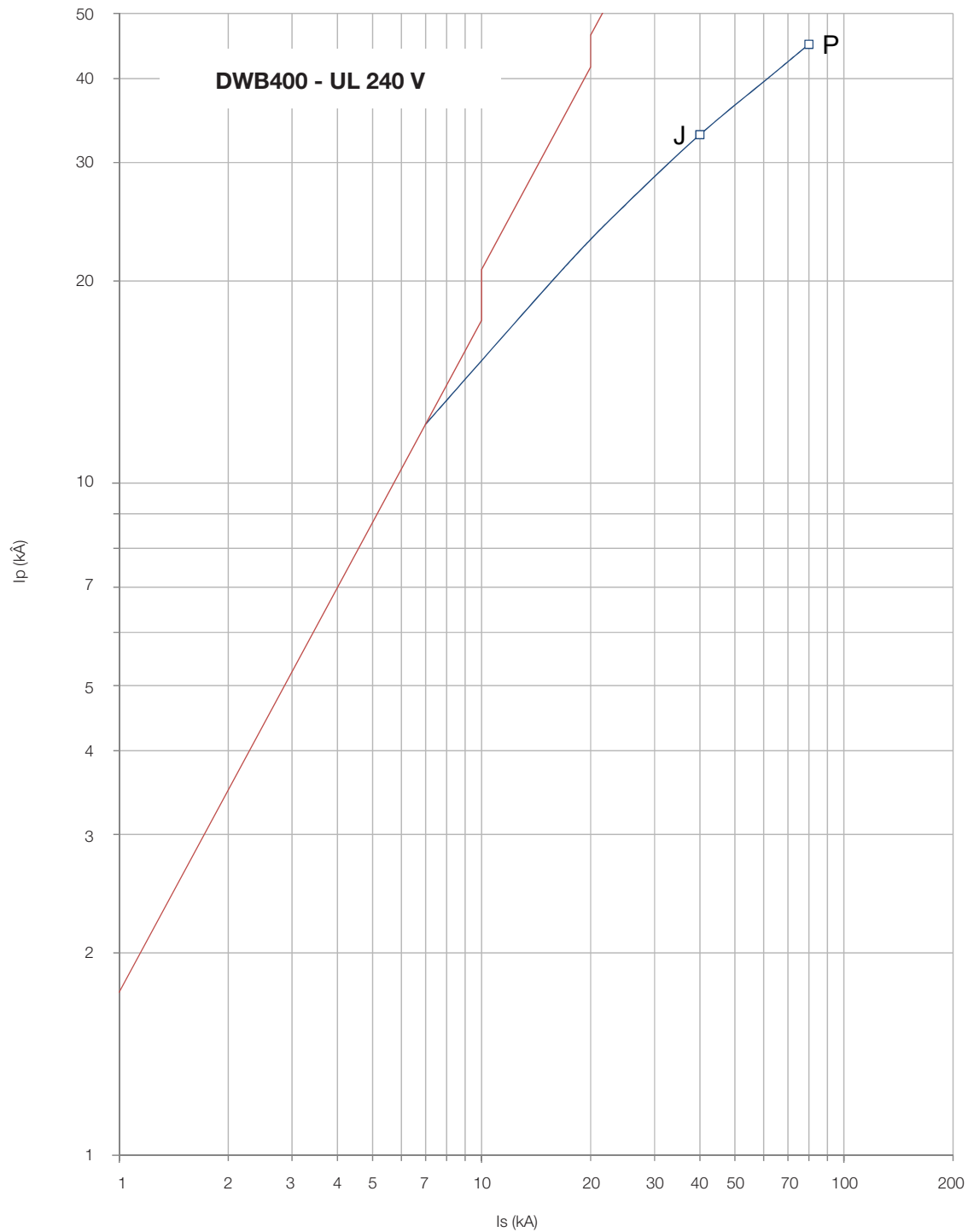
Trip Curves

DWB250 - Short-Circuit Limiting Curves @ 480Y/277 V ac



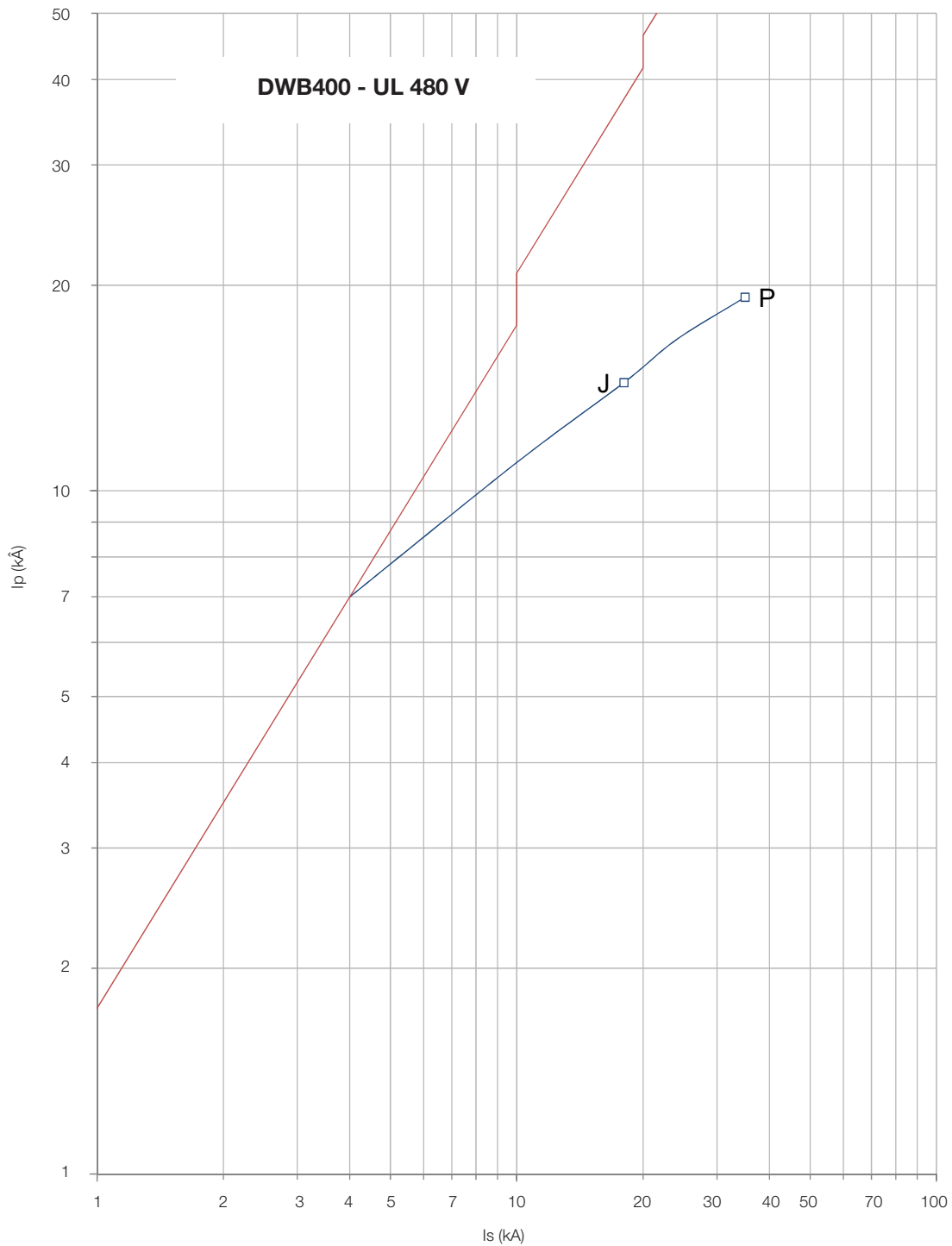
Trip Curves

DWB400 - Short-Circuit Limiting Curves @ 240 V ac



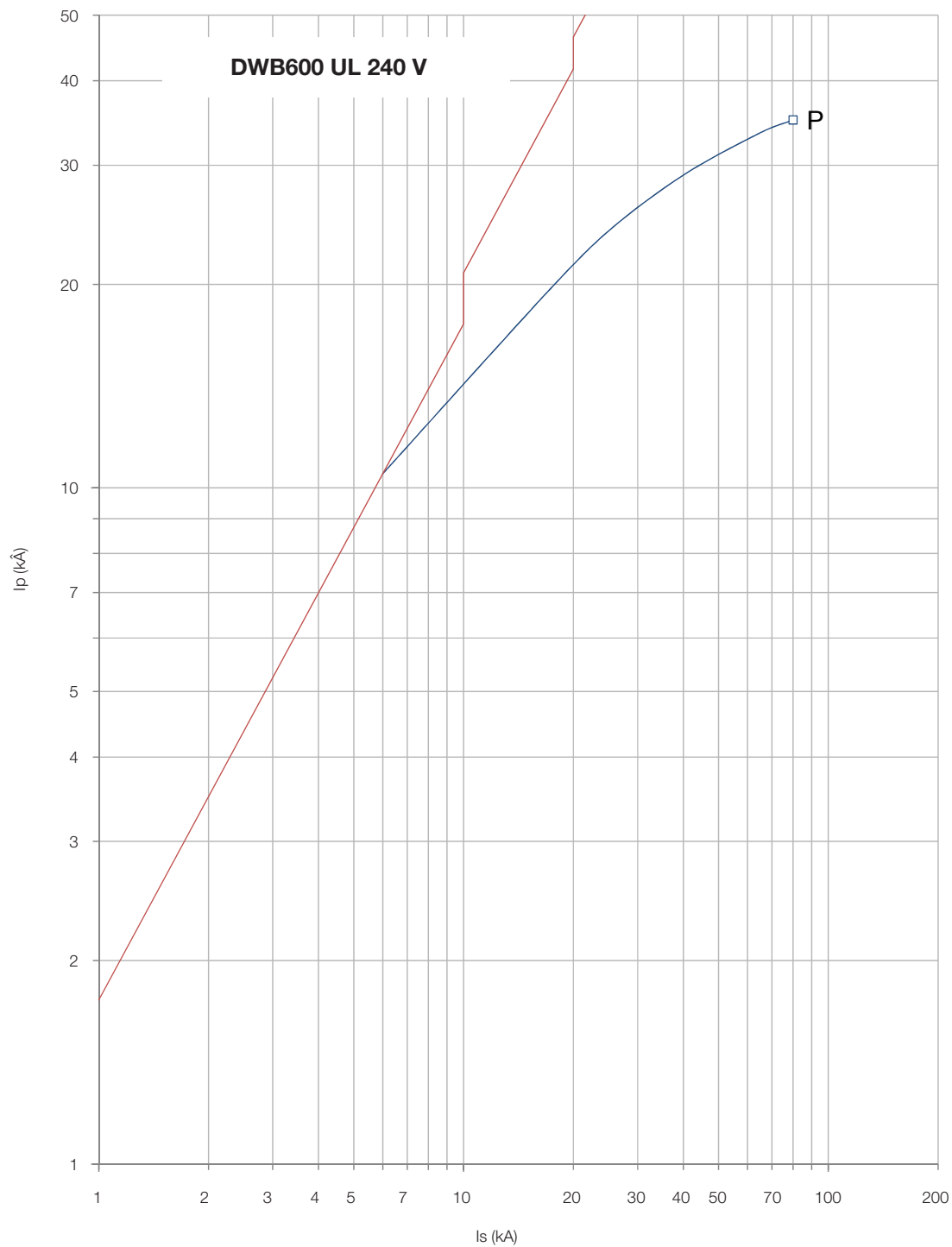
Trip Curves

DWB400 - Short-Circuit Limiting Curves @ 480 V ac



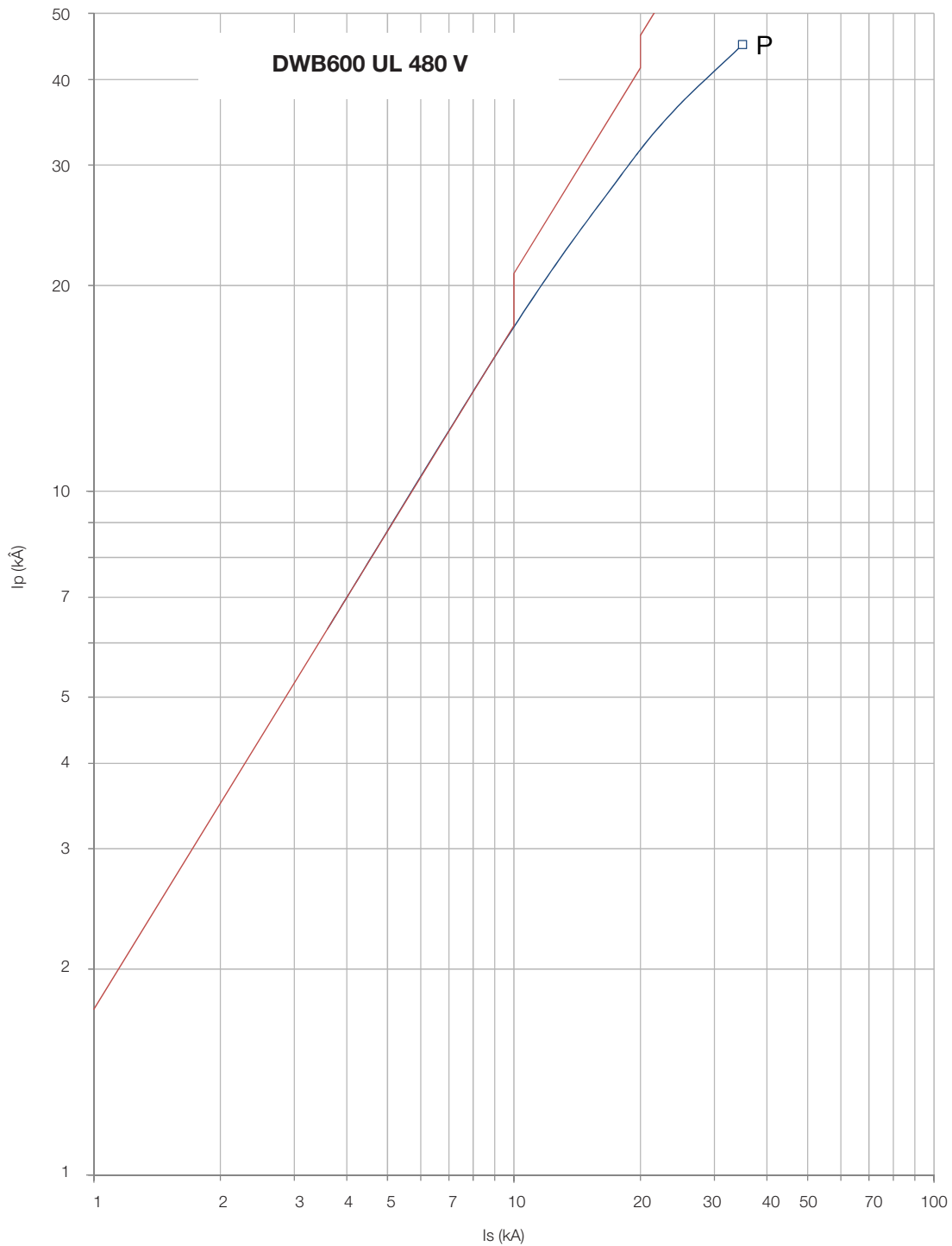
Trip Curves

DWB600 - Short-Circuit Limiting Curves @ 240 V ac



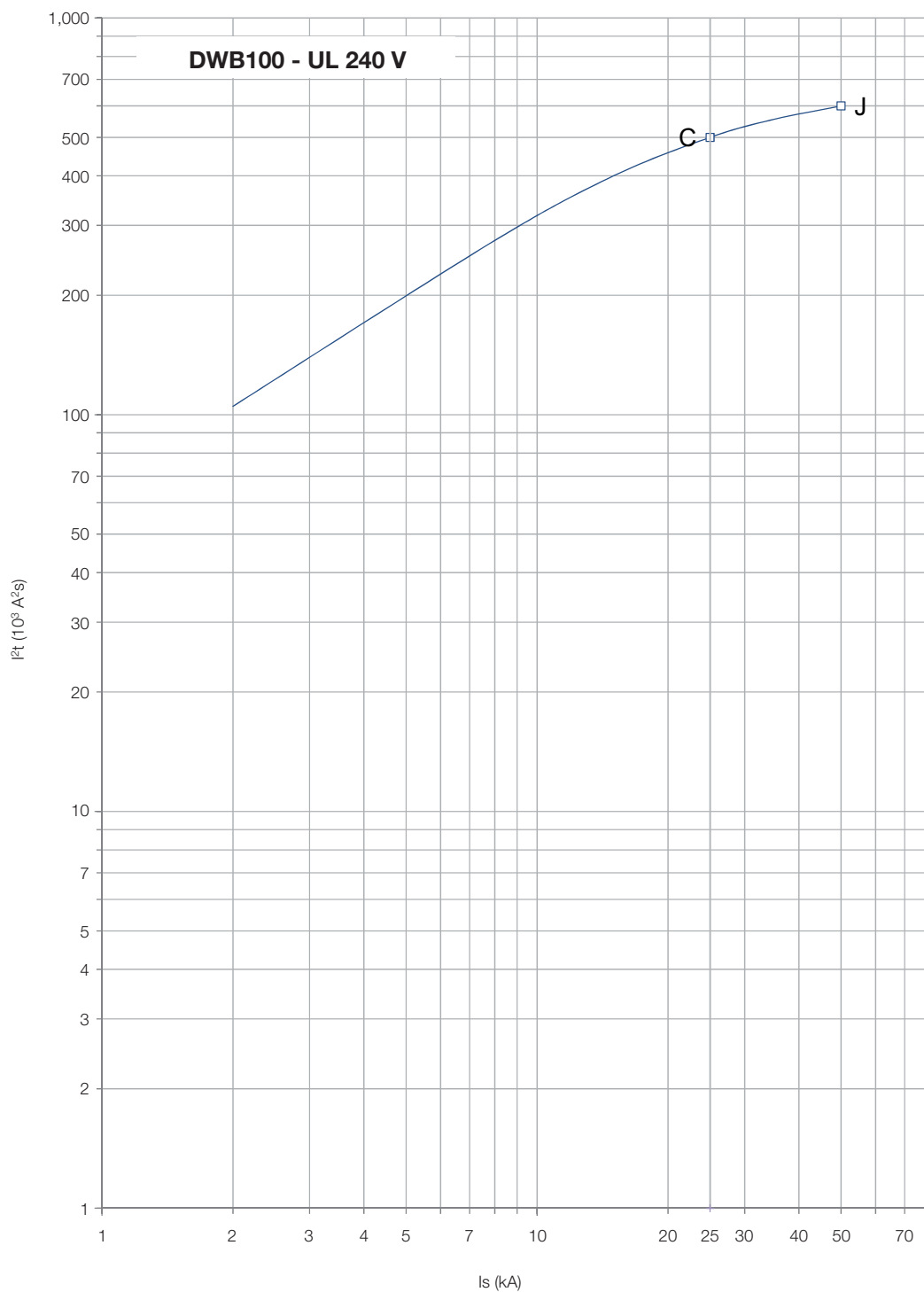
Trip Curves

DWB600 - Short-Circuit Limiting Curves @ 480 V ac



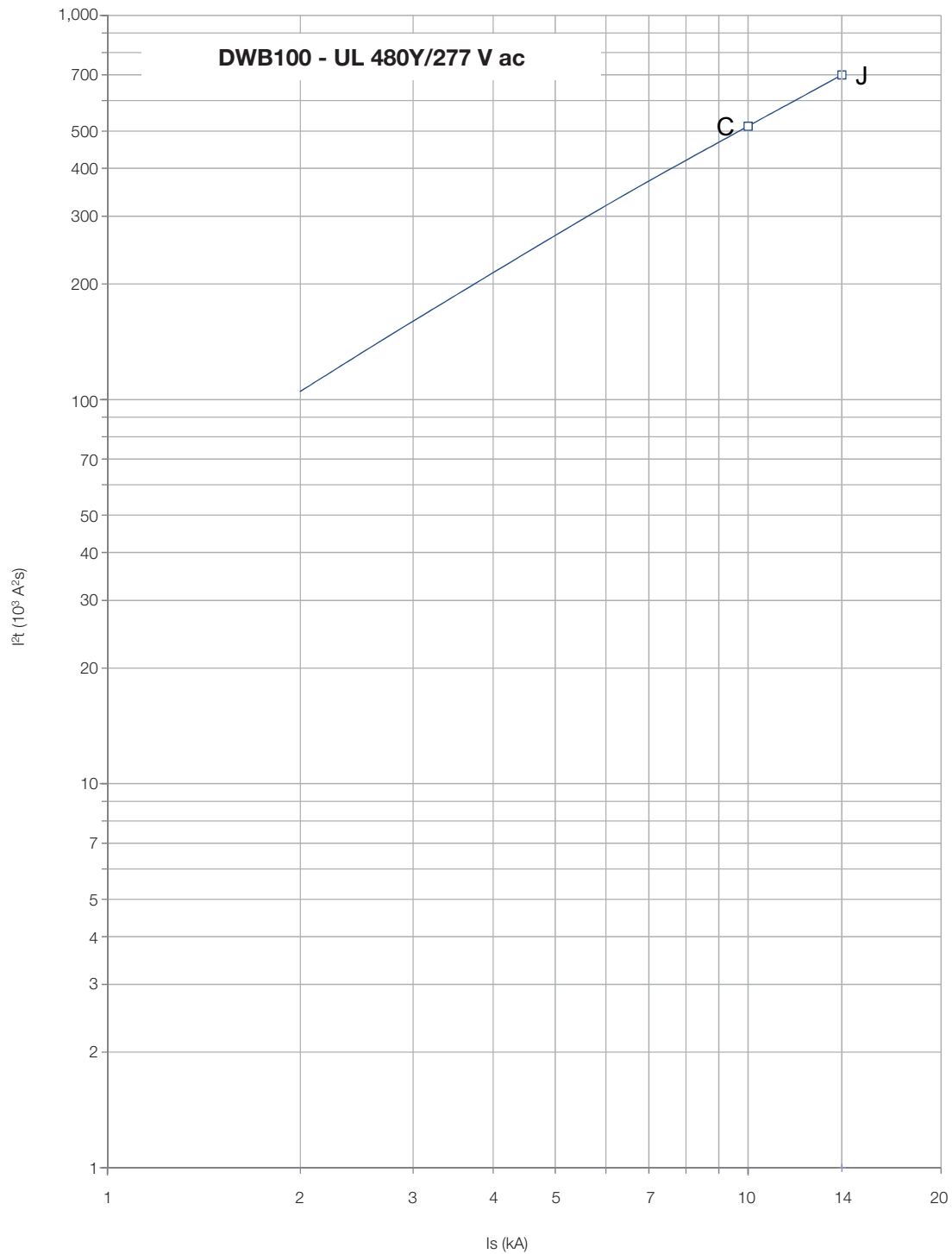
Trip Curves

DWB100 - I²t @ 240 V ac



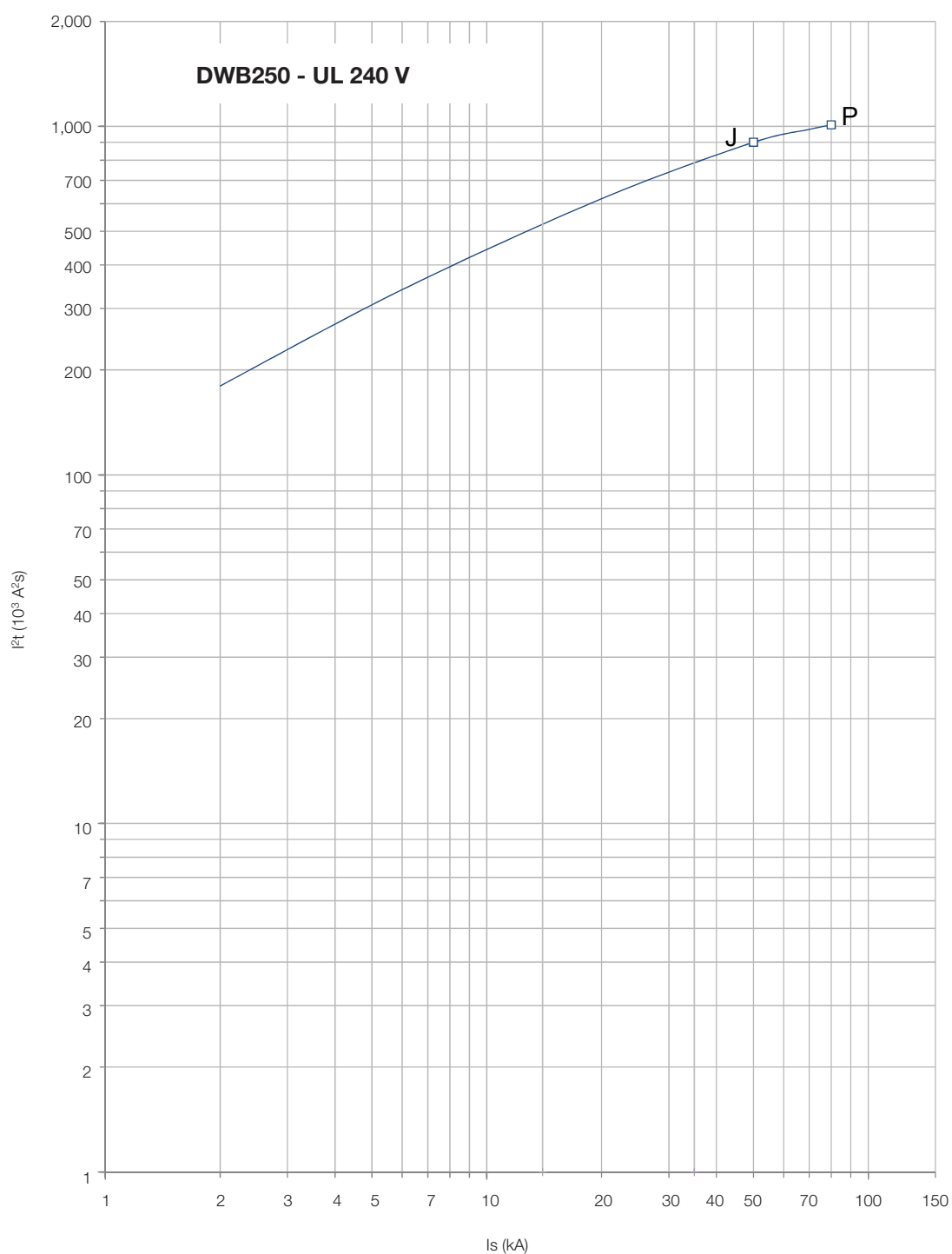
Trip Curves

DWB100 - I²t @ 480Y/277 V ac



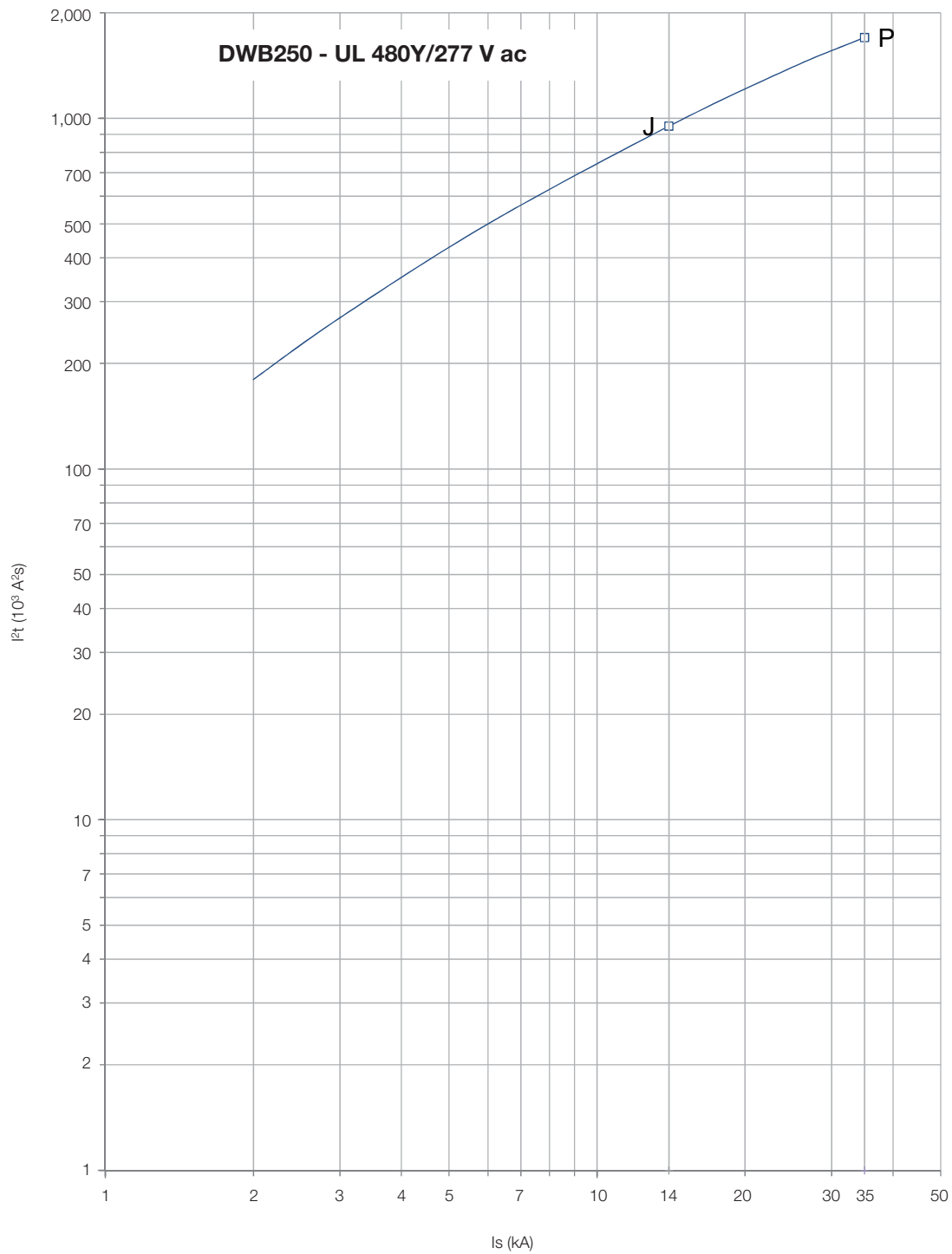
Trip Curves

DWB250 - I²t @ 240 V ac



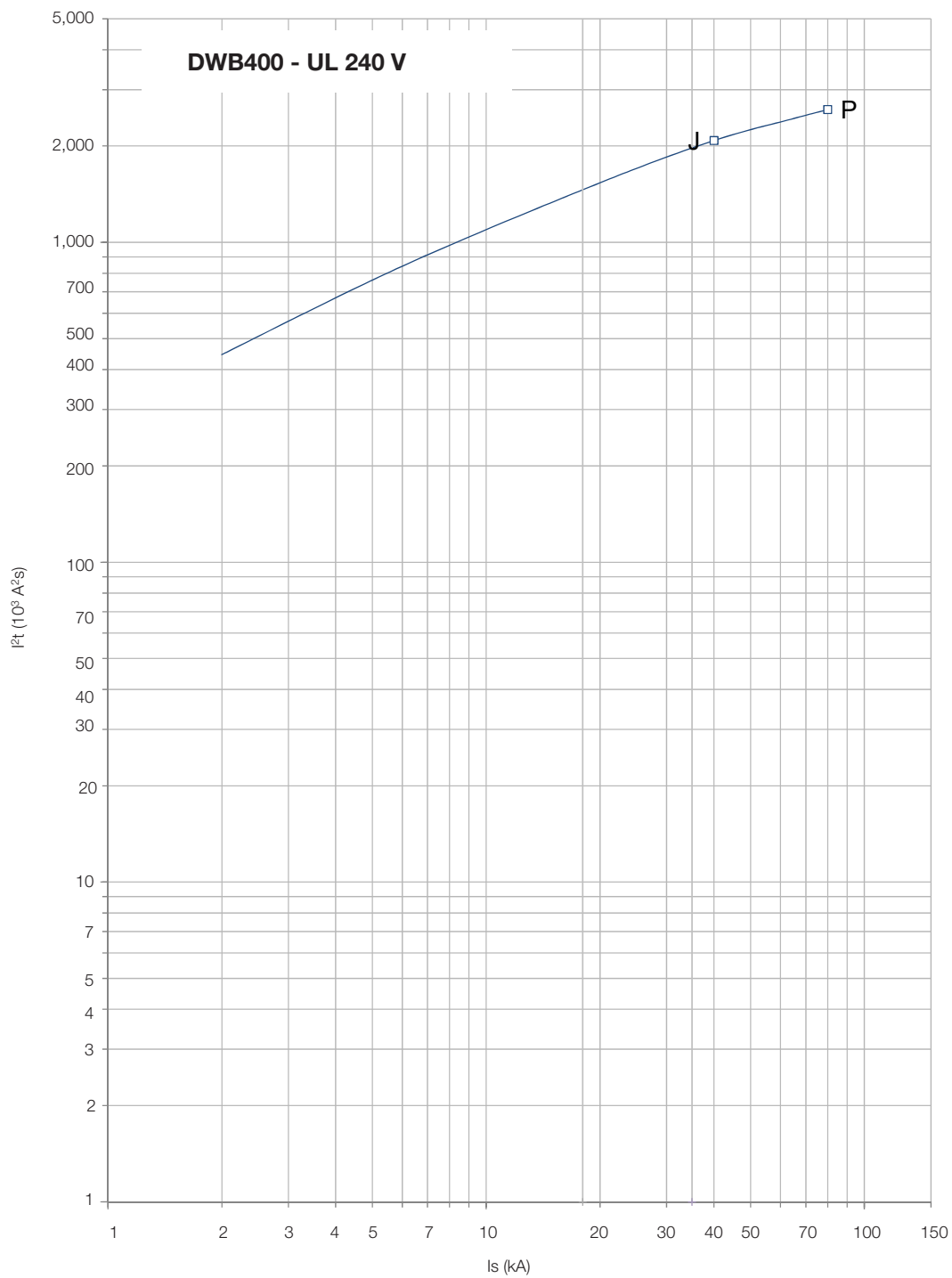
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DWB250 - I²t @ 480Y/277 V ac



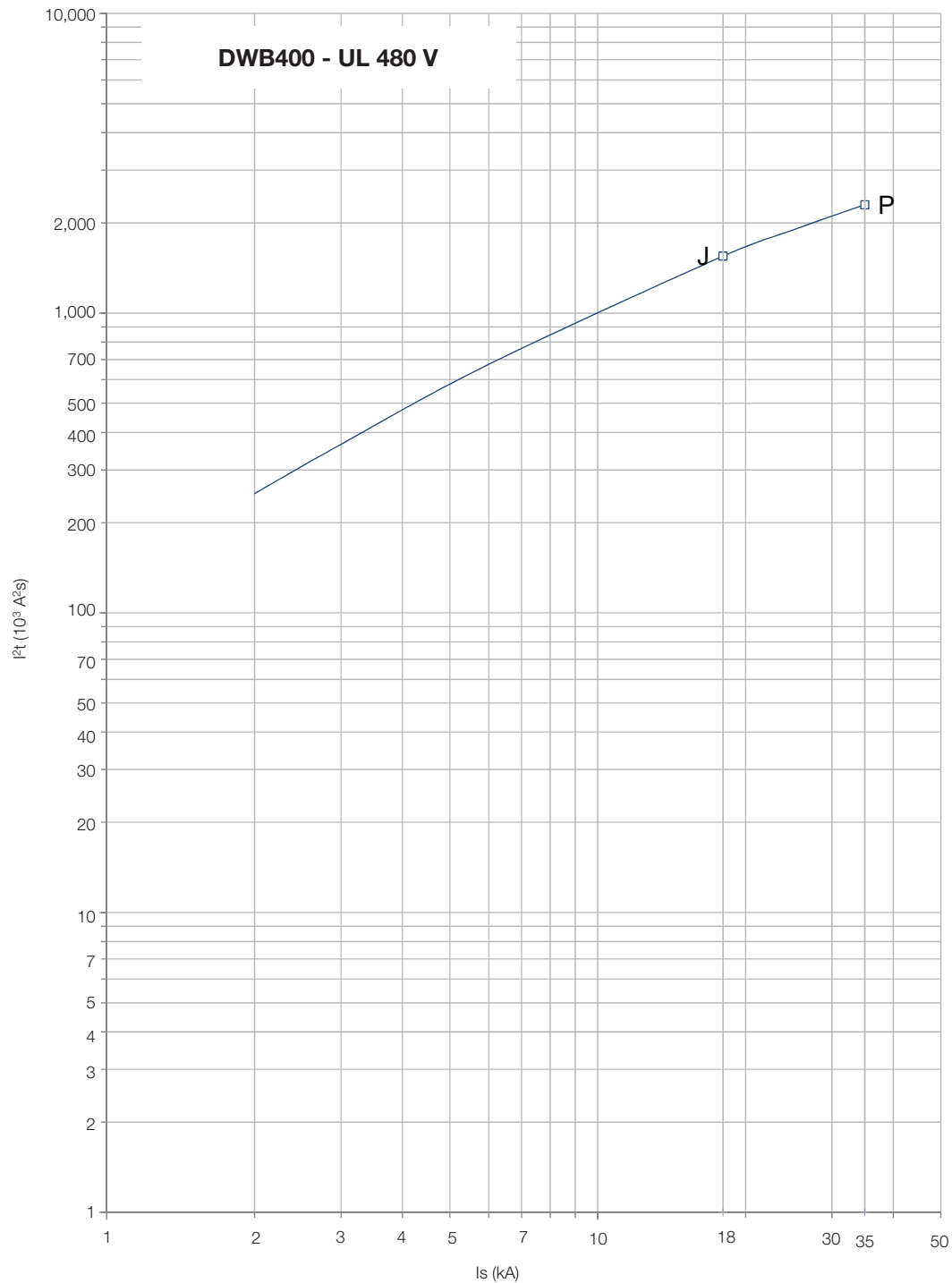
Trip Curves

DWB400 - I^2t @ 240 V ac



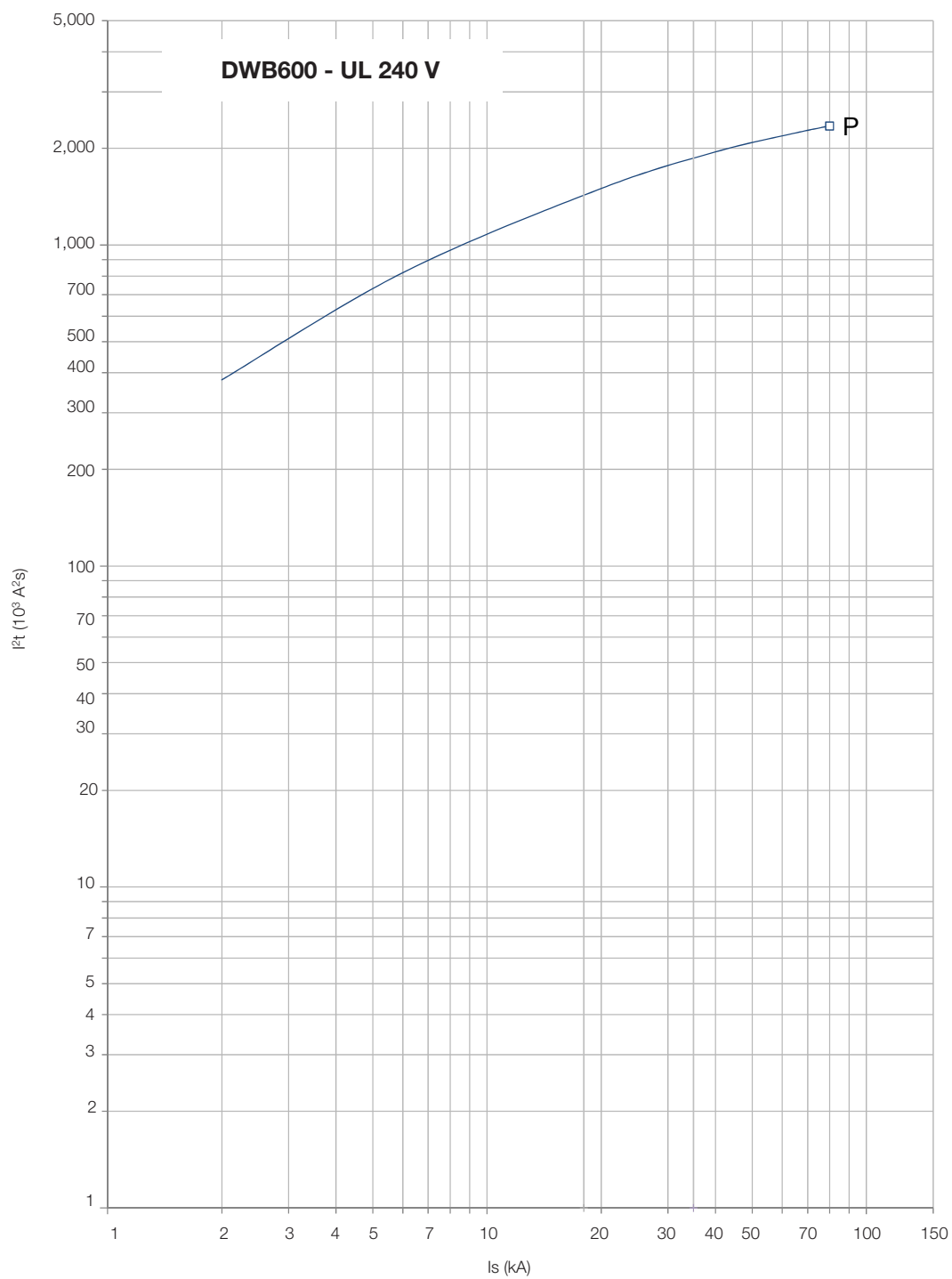
Trip Curves

DWB400 - I^2t @ 480 V ac



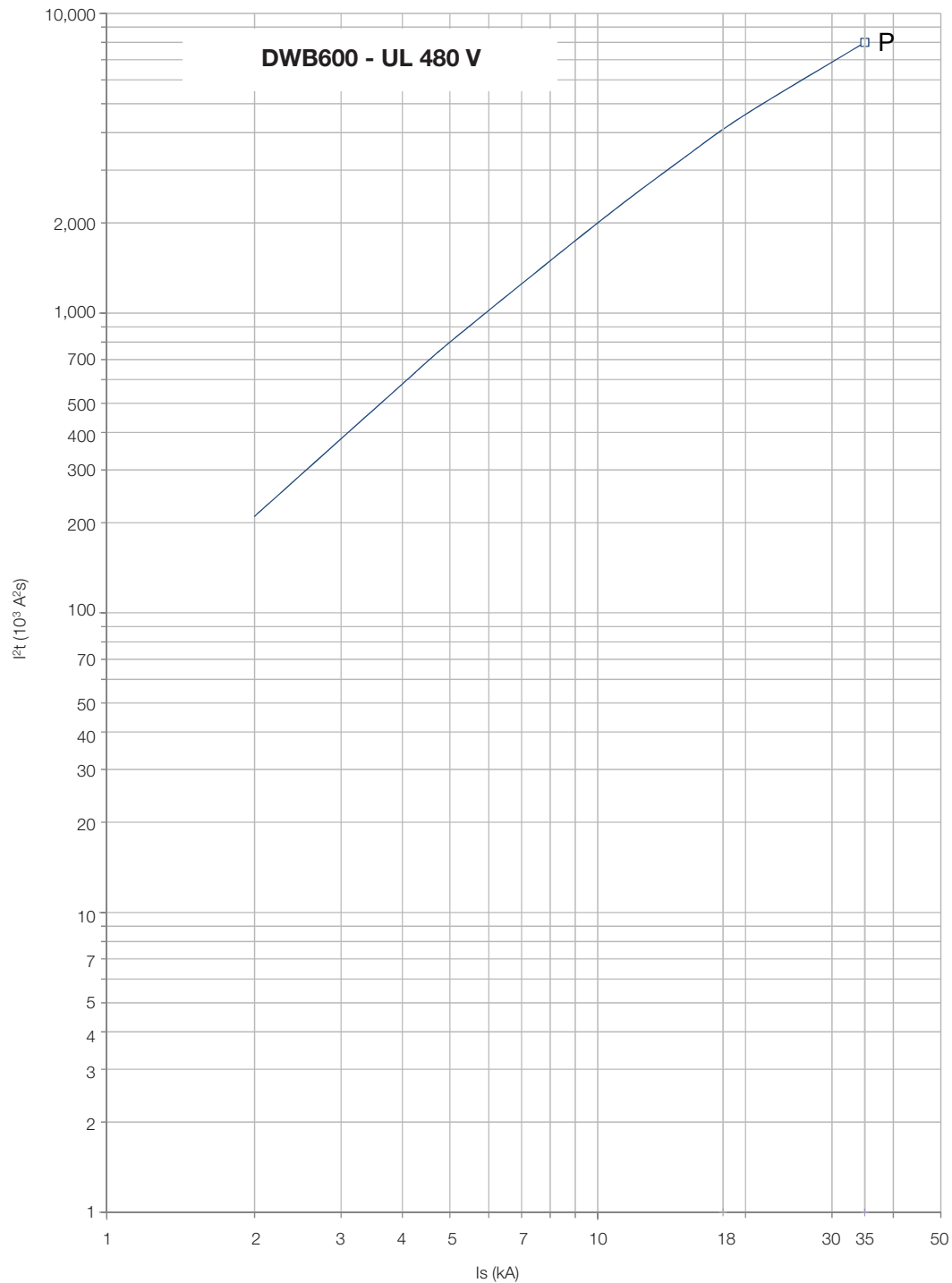
Trip Curves

DWB600 - I^2t @ 240 V ac



Trip Curves

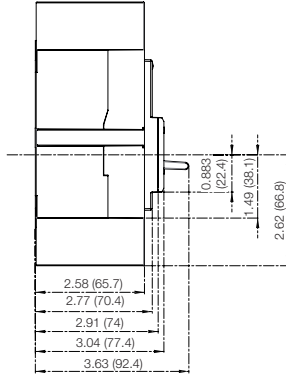
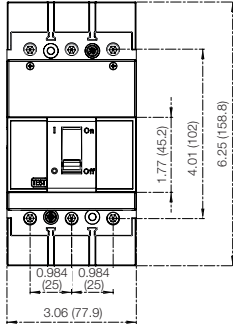
DWB600 - I^2t @ 480 V ac



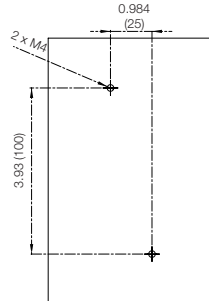
Dimensions - Inch (mm)

Circuit Breakers

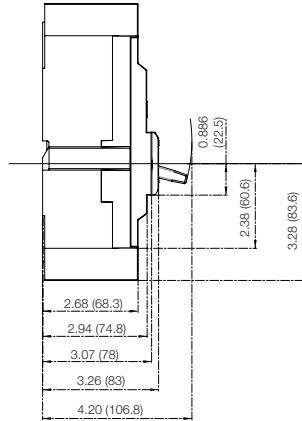
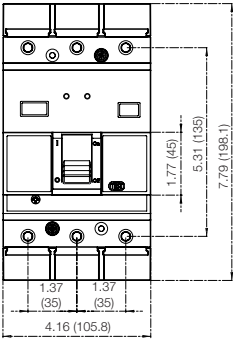
DWB100



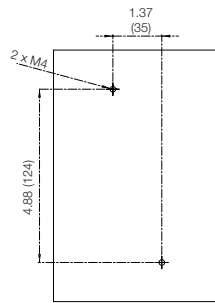
Drilling for Fixing



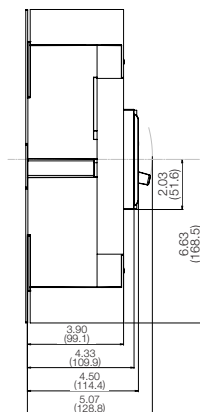
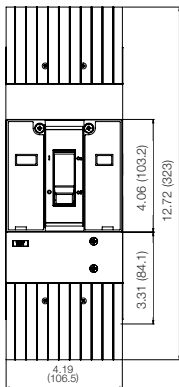
DWB250



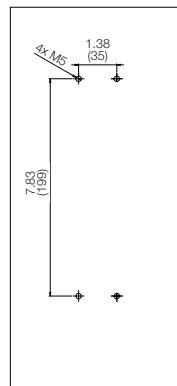
Drilling for Fixing



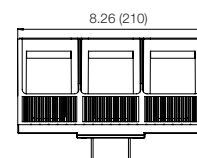
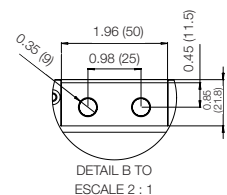
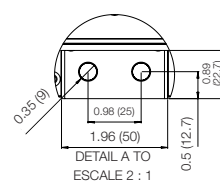
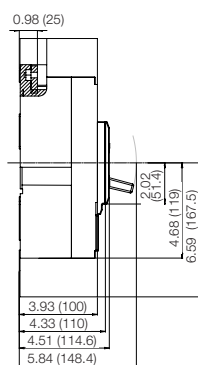
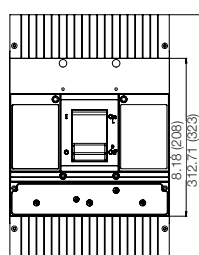
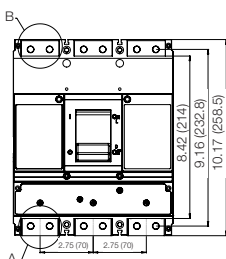
DWB400



Drilling for Fixing



DWB600

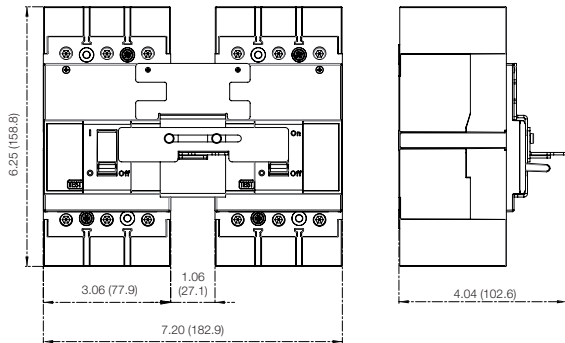


Dimensions - Inch (mm)

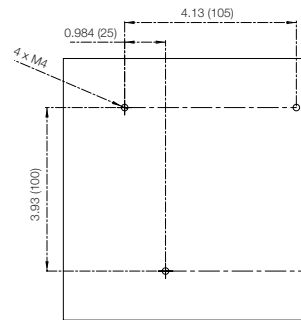
Accessories

BLIM - Mechanical Interlock

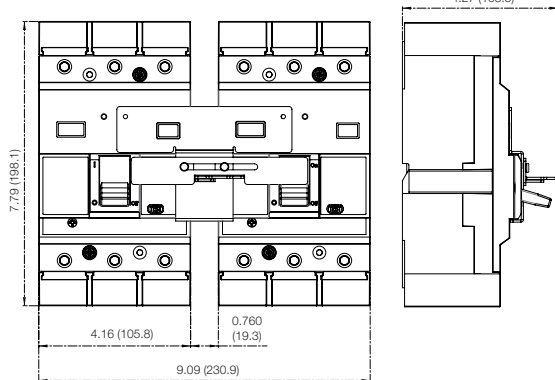
2 x Frame 100 + BLIM DWB100 3P



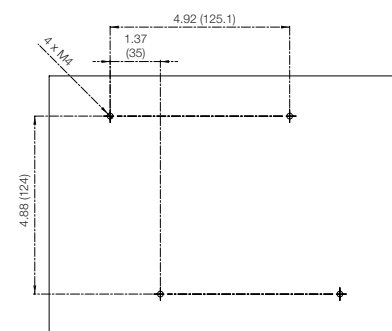
Drilling for Fixing



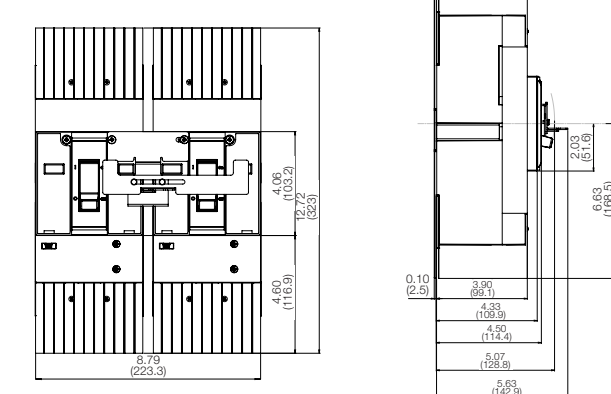
2 x Frame 250 + BLIM DWB250 3P



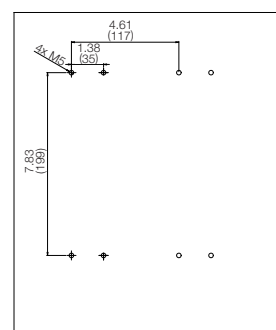
Drilling for Fixing



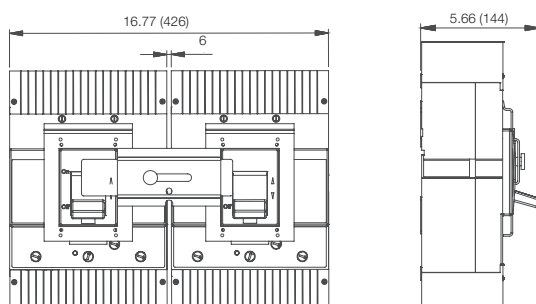
2 x Frame 400 + BLIM DWB400 3P



Drilling for Fixing



2 x Frame 600 + BLIM DWB600 3P

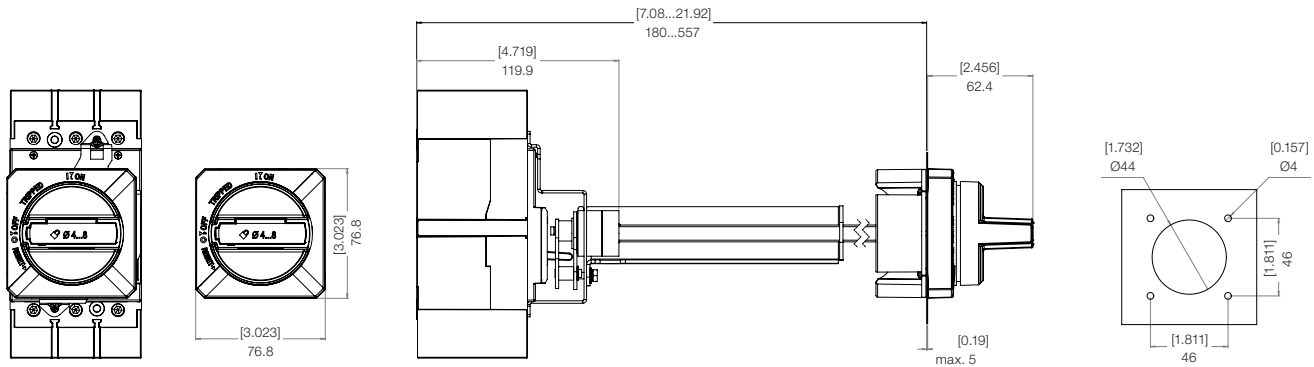


Dimensions - Inch (mm)

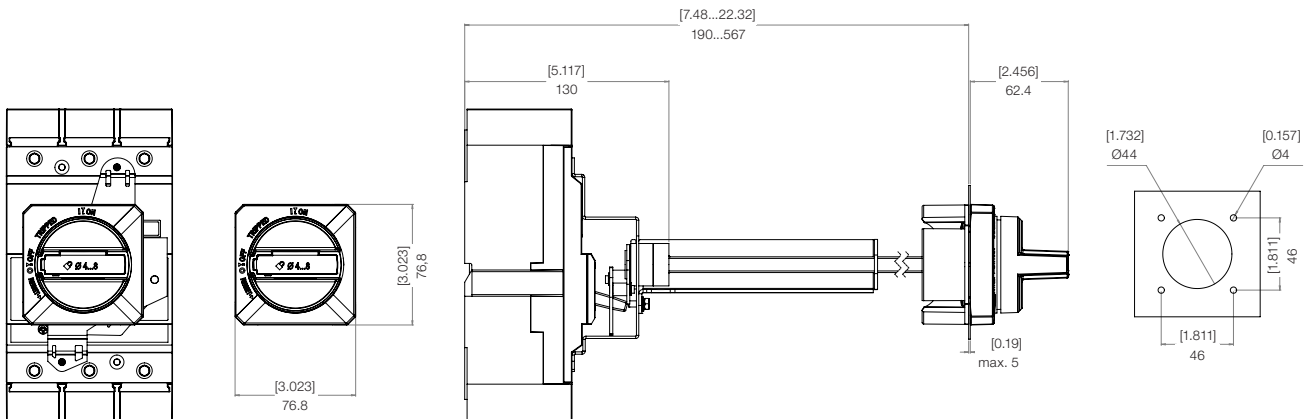
Accessories

MRX - Panel Door Rotary Operating Handles

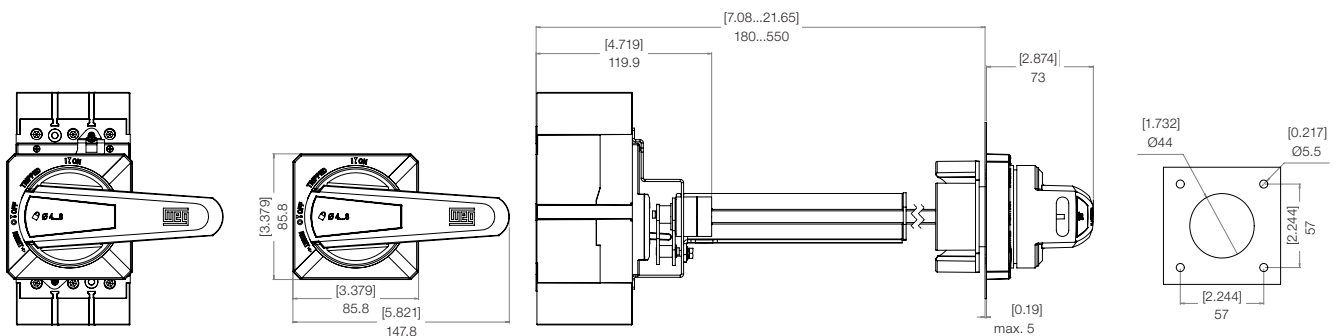
Frame 100 + MRXS DWB100



Frame 250 + MRXS DWB250



Frame 100 + MRXL DWB100

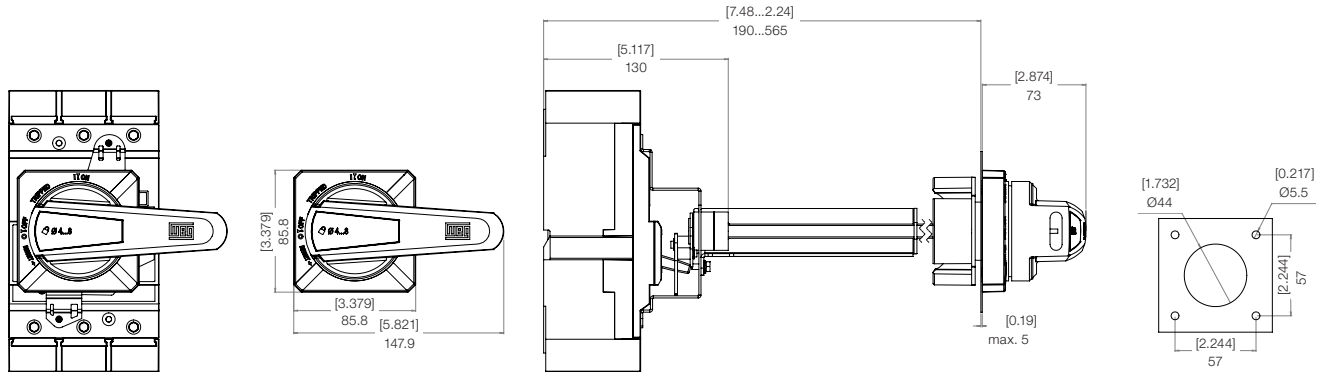


Dimensions - Inch (mm)

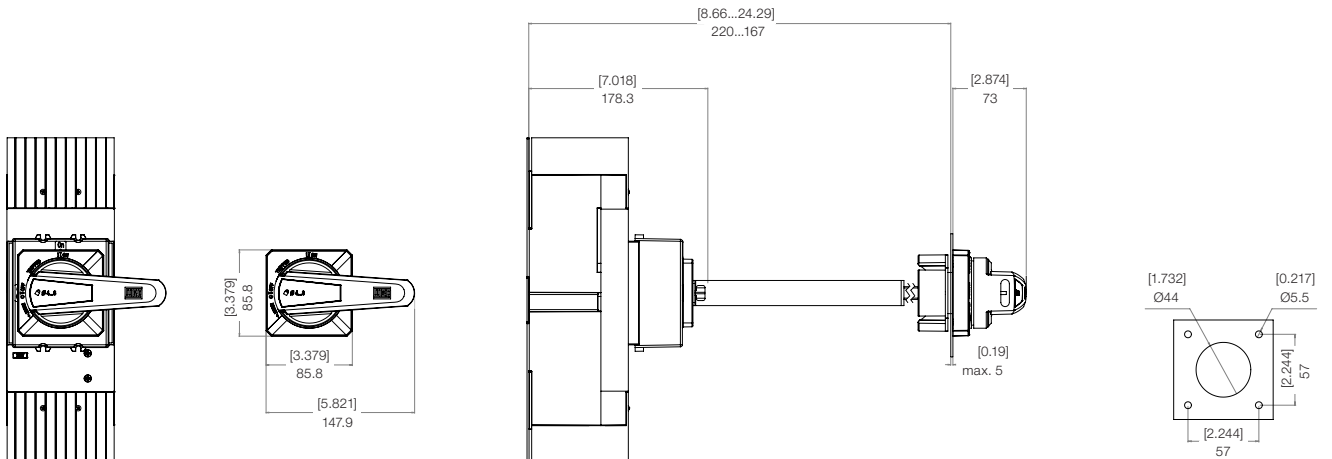
Accessories

MRX - Panel Door Rotary Operating Handles

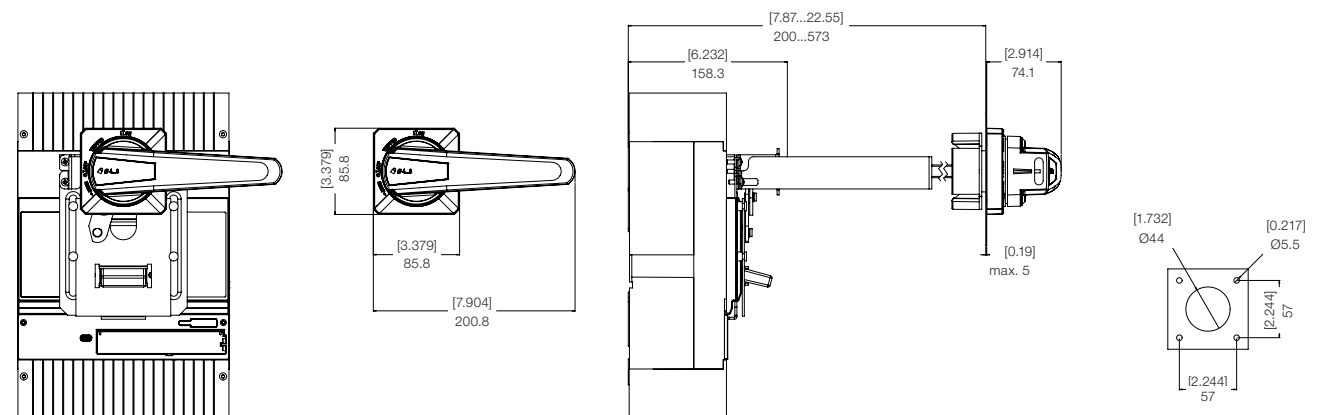
Frame 250 + MRXL DWB250



Frame 400 + MRXL DWB400



Frame 600 + MRXL DWB600

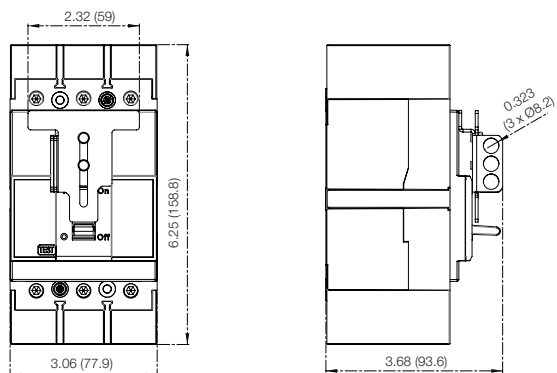


Dimensions - Inch (mm)

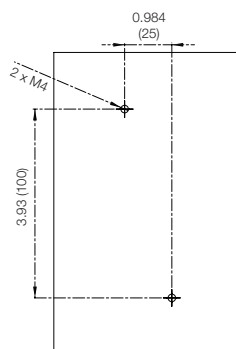
Accessories

PLW - Lock-OFF Devices

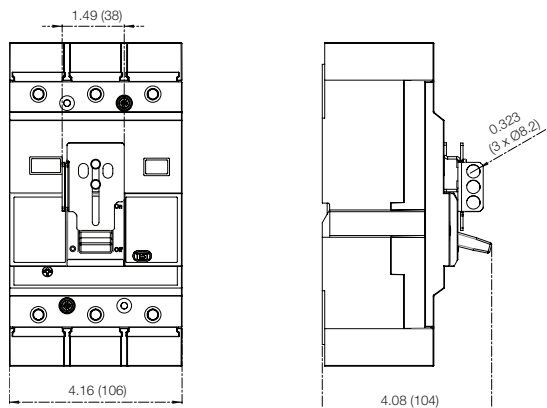
Frame 100 + PLW DWB100 3P



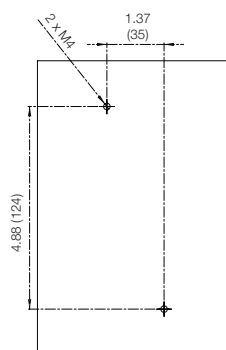
Panel Door Cutout



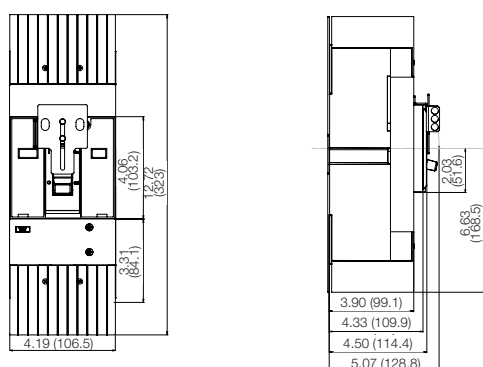
Frame 250 + PLW DWB250



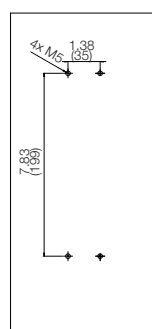
Panel Door Cutout



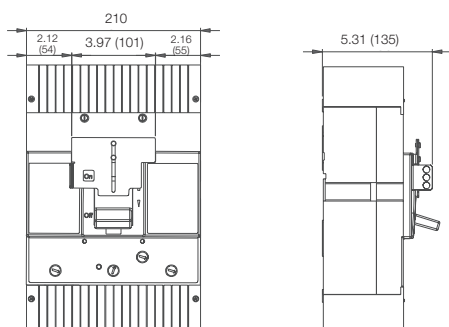
Frame 400 + PLW DWB400



Panel Door Cutout



Frame 600 + PLW DWB600

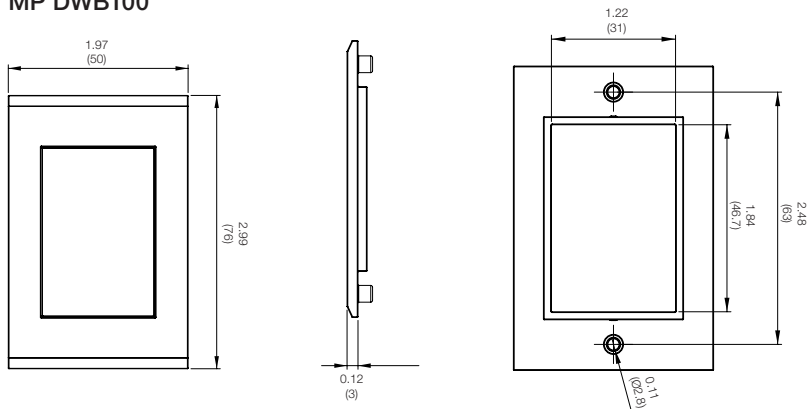


Dimensions - Inch (mm)

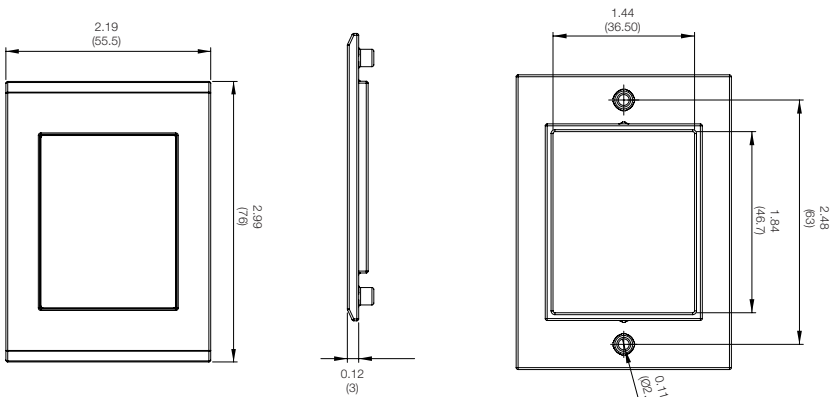
Accessories

MP - Escutcheons

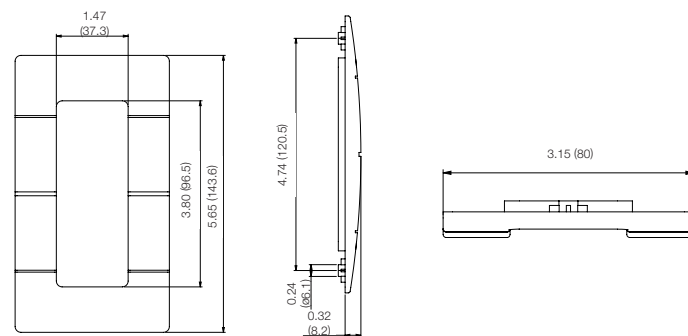
MP DWB100



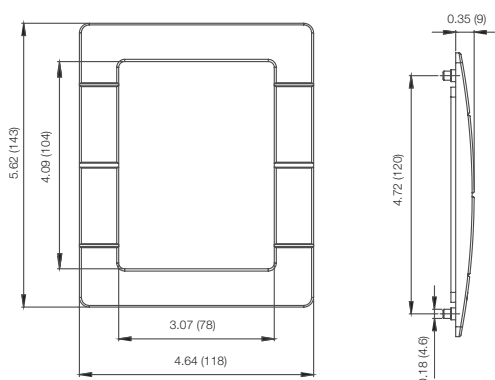
MP DWB250



MP DWB400



MP DWB600

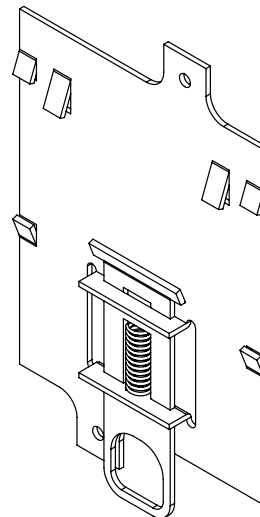
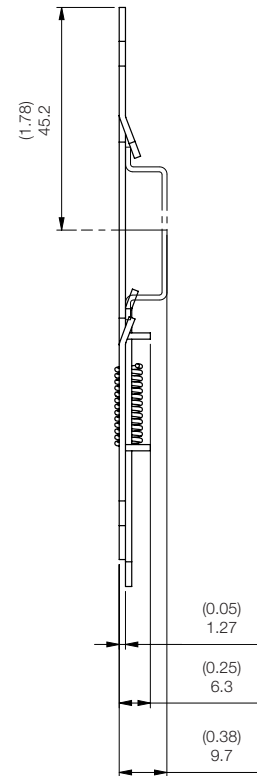
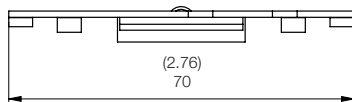
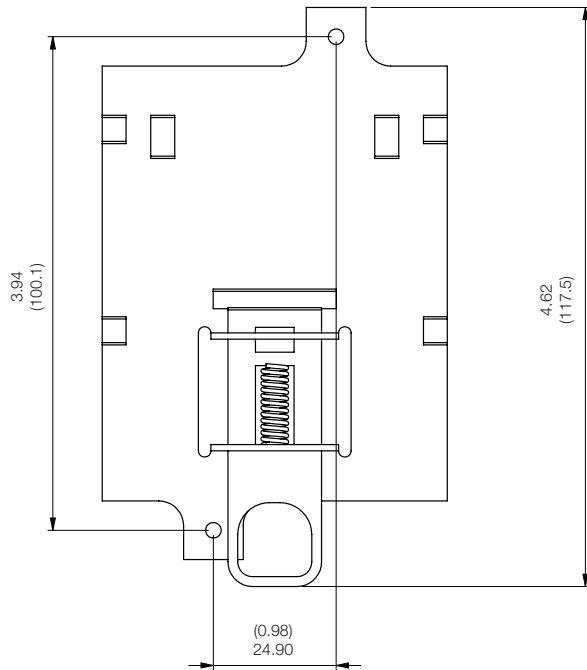


Dimensions - Inch (mm)

Accessories

BFR - DIN Rail Base

BFR DWB100 3P UL





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Cod: 50066667 | Rev: 05 | Date (m/a): 08/2020.

The values shown are subject to change without prior notice.
The information contained is reference values.