



Brochure

# Solution series

## Distribution blocks

### DBL range

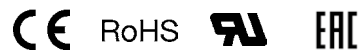
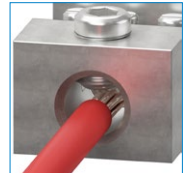
# Solutions series, distribution blocks

## DBL range



### The clever distribution concept

The exclusive compact and modular design of our distribution blocks allows easy installation combined with a great flexibility of use.



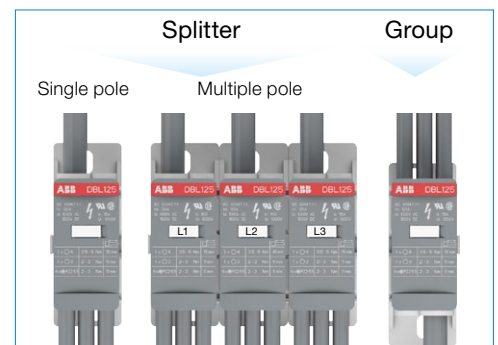
### Improve installation efficiency

Easy to use

The benefit of **3 configurations in 1 product**:

- **Single pole splitter** of power main input into several outputs
- **Multiple poles splitter**: interlocking function and ready to use marking kit (L1, L2, L3, N,  $\perp$ ) delivered with each block.
- **Grouping** several inputs into 1 output.

**Flexible cover facilitates identification & wiring**: Reversible, two directions opening, snap-on, all wiring data's and specifications visible on top.

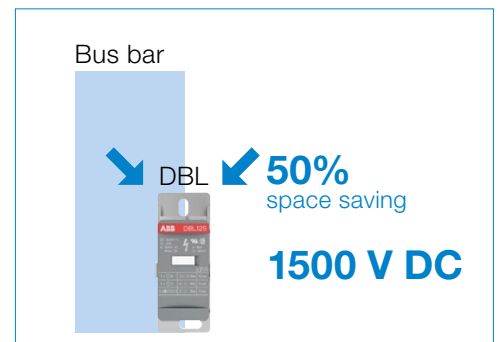


### More control in smaller space

Panel space saving

**Save up to 50%** rail space compare to conventional distribution bars thanks to our modular compact design.

Ready for the future: up to **1500 V DC voltage rating** adapted to most recent solar inverters requirements.



### Cost effective solution

Increased productivity

**Reduce wiring, inventories, hardware and assembly costs**:

- Compatible with **aluminum** or **copper** conductor
- Stocks 1 product get 3 configurations
- **Reduces assembly time by 80%** compare to conventional systems. Our modular and touch proof concept eliminates the need for bus bars, isolators, fasteners, protection screens...

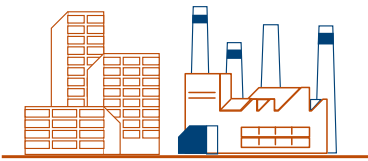


# A great flexibility of use whatever your application

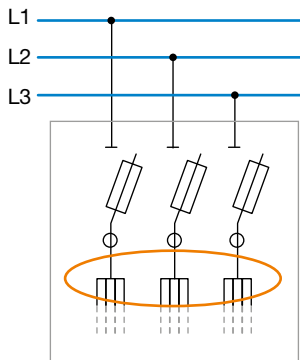
## Applications

### Commercial & industrial control panels

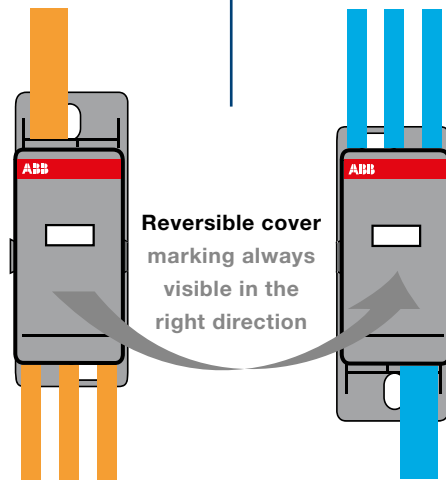
Convenient single pole or multipole splitter



### Typical schematic for splitter

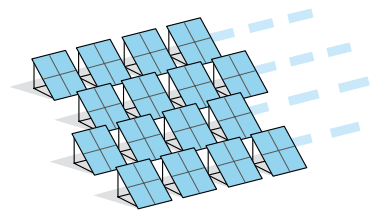


1 product  
2 applications

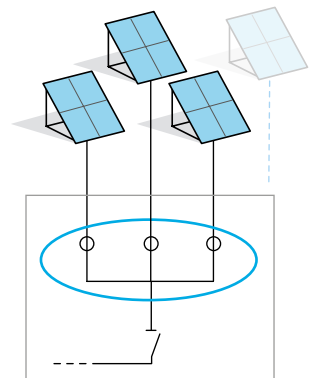


### Solar panels

Grouping signals from solar strings



### Typical schematic for grouping



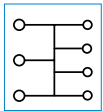
# Solutions series, distribution blocks

## DBL range

Overview from 80 to 400 A  
Single pole or multipole

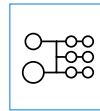
### DBL80

7 connections



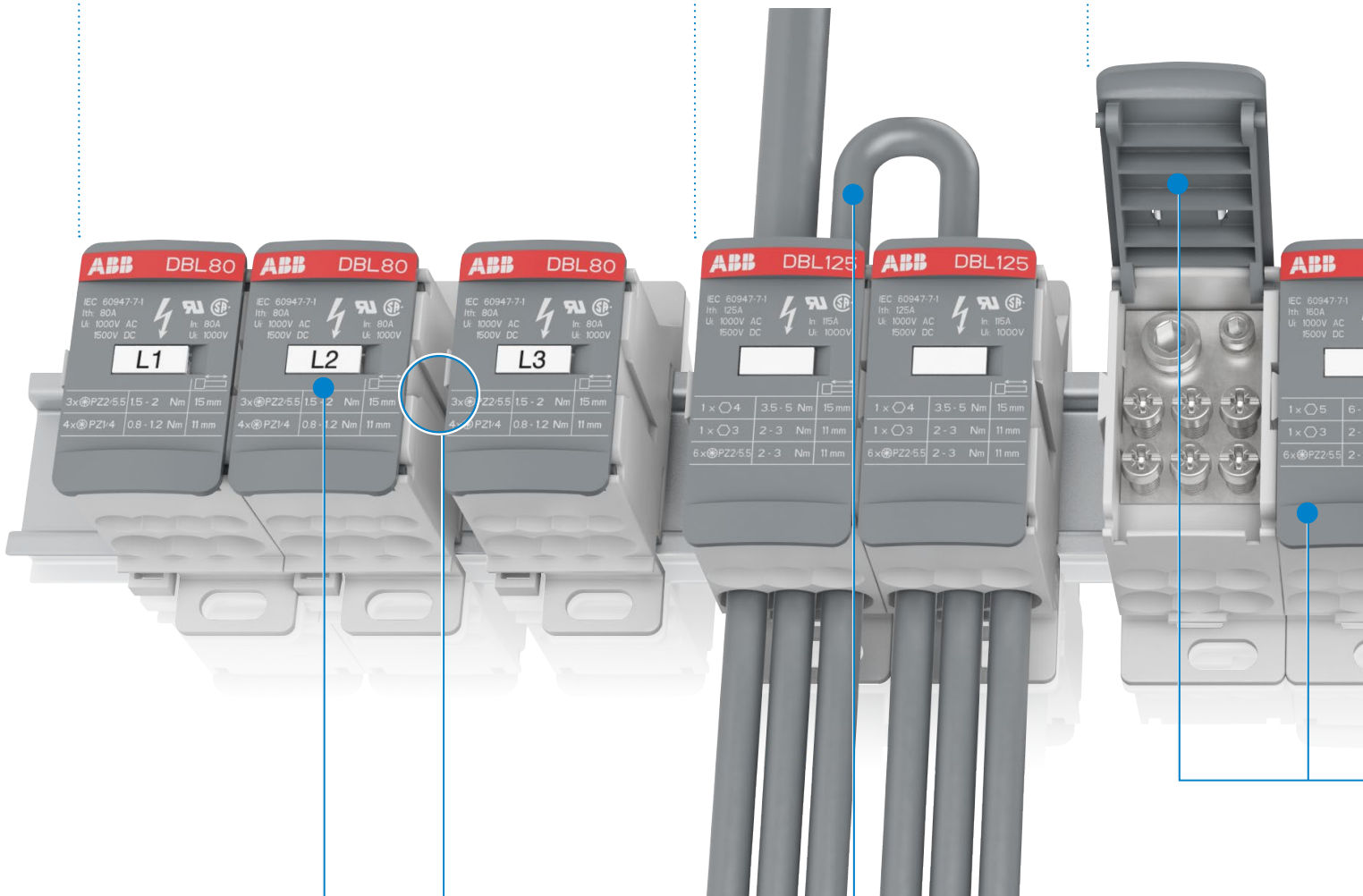
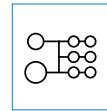
### DBL125

8 connections



### DBL160

8 connections



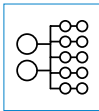
**Marking kit**  
(L1, L2, L3, N,  $\perp$ )  
delivered with  
each block

**Easily creates  
multiple  
assemblies with  
interlocking piece**

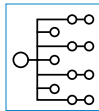


**Easy jumpering,  
DBL80...175  
incorporate a double  
connection point**

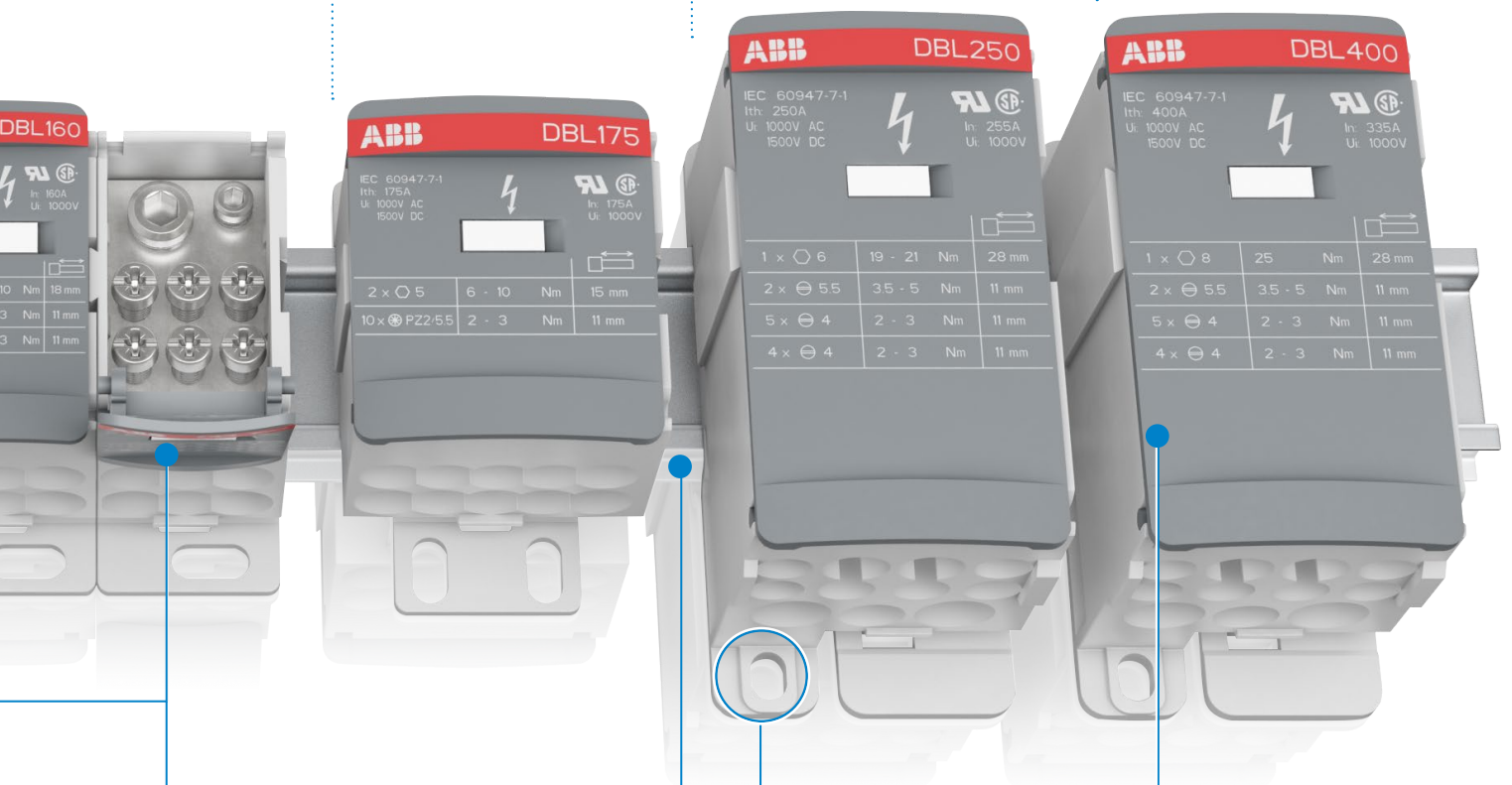
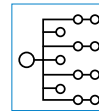
**DBL175**  
12 connections



**DBL250**  
12 connections



**DBL400**  
12 connections



**Flexible cover ease the wiring:**  
- Two directions opening  
- Removable & snap-on

**Panel or  
DIN rail mounting**

**All wiring data's  
and specifications  
visible from top**

# DBL80 distribution terminal blocks

## Single pole - 28.4 mm 1.11 in spacing



DBL80

### Description

- Save installation time with our modular solutions,
- Ease the installation with plate or rail mounting options on our modular blocks,
- Easily increase the number of outputs using jumpers.

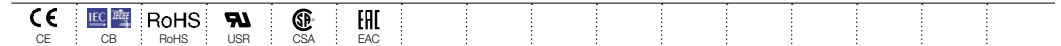
### Ordering details

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
Feed-through Single pole distribution, 7 connections	Grey	<input type="checkbox"/> DBL80	1SNL308010R0000	1	9.70

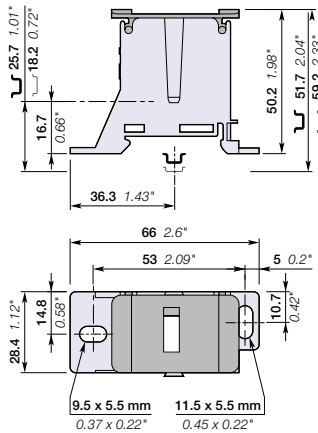
### Main technical data

Connecting capacity	IEC	UL	Connection type	Cross section
Max current / Max cross section	Copper Aluminium	80 A / 16 mm <sup>2</sup> 63 A / 16 mm <sup>2</sup>	80 A / 4 AWG	2.5 ... 16 mm <sup>2</sup> 14 ... 4 AWG
Rated voltage		1000 V AC / 1500 V DC	1000 V	2.5 ... 6 mm <sup>2</sup> 14 ... 10 AWG
Rated impulse voltage				14 ... 10 AWG
Short-time withstand current (I <sub>cw</sub> 1s)		1900 A		
Short Circuit Current Rating (SCCR)			100 kA	
Rated peak withstand current (I <sub>pk</sub> )		27 kA		
Protection		IP20	NEMA 1	

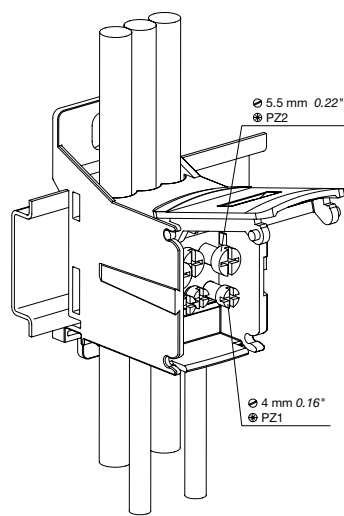
The connecting capacity data for one Rigid - Solid / Stranded - Flexible conductor (when applicable) is a mandatory information required by IEC, UL and CSA standards (Copper conductors). All other data are provided as supplementary information only. For more details, please consult our CB, UL or CSA certificates and technical datasheet available on <http://www.ABB.com>



### Mounting instructions



28.4 mm 1.11 in spacing



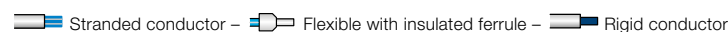
Rail	TH 35-7.5, TH 35-15			
Tool	Diameter of cable Ø	Wire stripping length	Recommended torque	
Posidriv - flat screwdriver	5.5 mm 0.22 in	6.6 mm 0.26 in	15 mm 0.59 in	1.5 ... 2 Nm 13.5...18 lb.in
Posidriv - flat screwdriver	4 mm 0.16 in	4.5 mm 0.18 in	11 mm 0.43 in	0.8 ... 1.2 Nm 7.2 ... 10.8 lb.in

### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
1 End stops	Grey	<input type="checkbox"/> BAM2	1SNA206351R1600	50	12.00
		<input type="checkbox"/> BADL	1SNA399903R0200	50	4.70
		<input type="checkbox"/> BADH	1SNA116900R2700	50	20.00
2 Terminal block markers	White	<input type="checkbox"/> MC512PA	1SNK149002R0000	1	10.00
		<input type="checkbox"/> MC512	1SNK140000R0000	22	9.00

Complete list of accessories is indicated in the terminal block datasheet including end stops.

Some accessories such as jumper bars may modify the terminal block's ratings: Complete information available in the accessories section of the catalog.



All the technical data for UL/CSA standard and dimensions in inches are in italic.



# DBL125 distribution terminal blocks

## Single pole - 28.2 mm 1.11 in spacing



DBL125

### Description

- Save installation time with our modular solutions,
- Ease the installation with plate or rail mounting options on our modular blocks,
- Easily increase the number of outputs using jumpers.

### Ordering details

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
Feed-through Single pole distribution, 8 connections	Grey <input type="checkbox"/>	DBL125	1SNL312510R0000	1	120 g

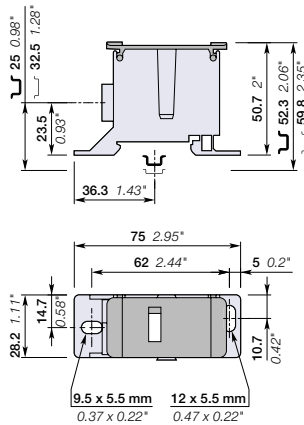
### Main technical data

Connecting capacity	IEC		UL	Connection type	Cross section	
	Copper	Aluminium				
Max current / Max cross section	125 A / 35 mm <sup>2</sup>	100 A / 35 mm <sup>2</sup>	115 A / 2 AWG	1 x Ø 9.8 mm	10 ... 35 mm <sup>2</sup>	10 ... 35 mm <sup>2</sup>
Rated voltage	1000 V AC / 1500 V DC		1000 V	1 x Ø 6.8 mm	2.5 ... 16 mm <sup>2</sup>	8 ... 2 AWG
Rated impulse voltage					14 ... 6 AWG	10 ... 6 AWG
Short-time withstand current (I <sub>cw</sub> 1s)	4000 A			6 x Ø 6.4 mm	2.5 ... 16 mm <sup>2</sup>	2.5 ... 16 mm <sup>2</sup>
Short Circuit Current Rating (SCCR)			100 kA		14 ... 6 AWG	14 ... 6 AWG
Rated peak withstand current (I <sub>pk</sub> )	30 kA					
Protection	IP20		NEMA 1			

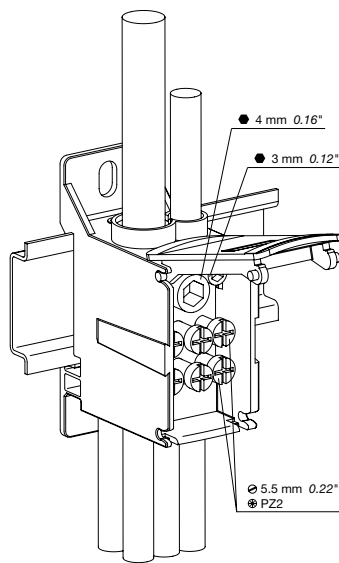
The connecting capacity data for one Rigid - Solid / Stranded - Flexible conductor (when applicable) is a mandatory information required by IEC, UL and CSA standards (Copper conductors). All other data are provided as supplementary information only. For more details, please consult our CB, UL or CSA certificates and technical datasheet available on <http://www.ABB.com>



### Mounting instructions



28.2 mm 1.11 in spacing



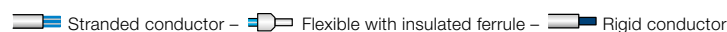
Rail	TH 35-7.5, TH 35-15			
Tool	Diameter of cable Ø	Wire stripping length	Recommended torque	
Allen key	4 mm 0.16 in	9.8 mm 0.39 in	15 mm 0.59 in	3.5 ... 5 Nm 31 ... 44 lb.in
Allen key	3 mm 0.12 in	6.8 mm 0.27 in	11 mm 0.43 in	2 ... 3 Nm 18 ... 26.5 lb.in
Posidriv - flat screwdriver	5.5 mm 0.22 in	6.4 mm 0.25 in	11 mm 0.43 in	2 ... 3 Nm 18 ... 26.5 lb.in

### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
1 End stops	Grey <input type="checkbox"/>	BAM2	1SNA206351R1600	50	12.00
		BADL	1SNA39903R0200	50	4.70
		BADH	1SNA116900R2700	50	20.00
2 Terminal block markers	White <input type="checkbox"/>	Pre-printed marker card	MC512PA	1	10.00
		Blank card	MC512	22	9.00

Complete list of accessories is indicated in the terminal block datasheet including end stops.

Some accessories such as jumper bars may modify the terminal block's ratings: Complete information available in the accessories section of the catalog.



All the technical data for UL/CSA standard and dimensions in inches are in *italics*.

# DBL160 distribution terminal blocks

## Single pole - 28.2 mm 1.11 in spacing



DBL160

### Description

- Save installation time with our modular solutions,
- Ease the installation with plate or rail mounting options on our modular blocks,
- Easily increase the number of outputs using jumpers.

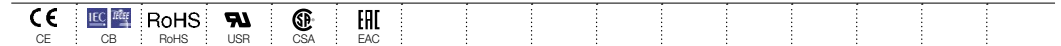
### Ordering details

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
Feed-through Single pole distribution, 8 connections	Grey	DBL160	1SNL316010R0000	1	120

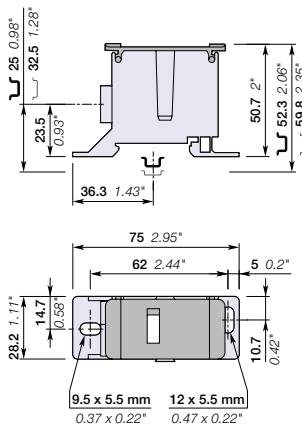
### Main technical data

Connecting capacity	IEC		UL	Connection type	Cross section	
	Copper	Aluminium				
Max current / Max cross section	160 A / 70 mm <sup>2</sup>	135 A / 70 mm <sup>2</sup>	160 A / 2/0 AWG	1 x Ø 11.8 mm	16 ... 50 mm <sup>2</sup>	16 ... 70 mm <sup>2</sup>
Rated voltage	1000 V AC / 1500 V DC		1000 V	1 x Ø 6.8 mm	2.5 ... 16 mm <sup>2</sup>	6 ... 2/0 AWG
Rated impulse voltage					14 ... 6 AWG	10 ... 6 AWG
Short-time withstand current (I <sub>tw</sub> 1s)	11000 A			6 x Ø 6.4 mm	2.5 ... 16 mm <sup>2</sup>	2.5 ... 16 mm <sup>2</sup>
Short Circuit Current Rating (SCCR)			100 kA		14 ... 6 AWG	14 ... 6 AWG
Rated peak withstand current (I <sub>pk</sub> )	30 kA					
Protection	IP10		NEMA 1			

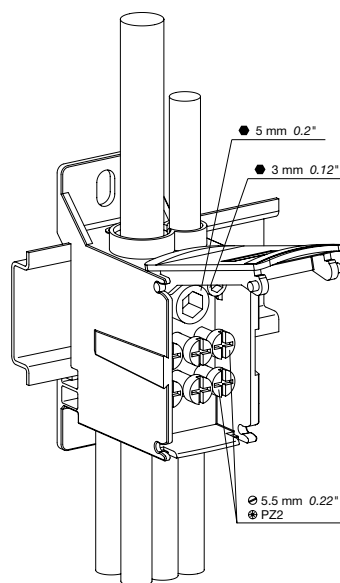
The connecting capacity data for one Rigid - Solid / Stranded - Flexible conductor (when applicable) is a mandatory information required by IEC, UL and CSA standards (Copper conductors). All other data are provided as supplementary information only. For more details, please consult our CB, UL or CSA certificates and technical datasheet available on <http://www.ABB.com>



### Mounting instructions



28.2 mm 1.11 in spacing

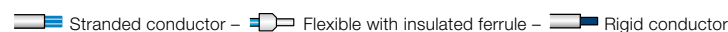


Rail	TH 35-7.5, TH 35-15			
Tool	Diameter of cable Ø	Wire stripping length	Recommended torque	
Allen key	5 mm 0.20 in	11.8 mm 0.46 in	18 mm 0.708 in	6... 10 Nm 53... 88 lb.in
Allen key	3 mm 0.12 in	6.8 mm 0.27 in	11 mm 0.43 in	2... 3 Nm 18... 26.5 lb.in
Posidriv - flat screwdriver	5.5 mm 0.22 in	6.4 mm 0.25 in	11 mm 0.43 in	2... 3 Nm 18... 26.5 lb.in

### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
1 End stops	Grey	BAM2	1SNA206351R1600	50	12.00
		BADL	1SNA399903R0200	50	4.70
		BADH	1SNA116900R2700	50	20.00
2 Terminal block markers	White	MC512PA	1SNK149002R0000	1	10.00
		MC512	1SNK140000R0000	22	9.00

Complete list of accessories is indicated in the terminal block datasheet including end stops. Some accessories such as jumper bars may modify the terminal block's ratings: Complete information available in the accessories section of the catalog.



All the technical data for UL/CSA standard and dimensions in inches are in italic.

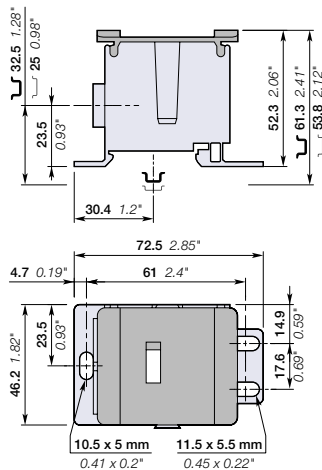


# DBL175 distribution terminal blocks

## Single pole - 46.2 mm 1.81 in spacing



DBL175



46.2 mm 1.81 in spacing

### Description

- Save installation time with our modular solutions,
- Ease the installation with plate or rail mounting options on our modular blocks,
- Thanks to the two inputs, easily increase the number of outputs using jumper, or increase the current rating with two wires, 300 A with 50 mm<sup>2</sup> wires and 350 A with 2/0 AWG wires.

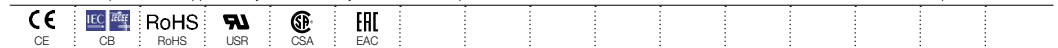
### Ordering details

Description	Color	Type	Order code	Pkg qty	Weight (1 pce) g
Feed-through Single pole distribution, 12 connections	Grey <input type="checkbox"/>	DBL175	1SNL317510R0000	1	200

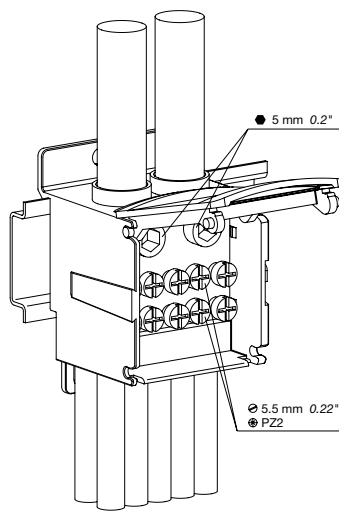
### Main technical data

Connecting capacity	IEC		UL	Connection type	Cross section	
	Copper	Aluminium				
Max current / Max cross section	175 A / 70 mm <sup>2</sup>	135 A / 70 mm <sup>2</sup>	175 A / 2/0 AWG	2 x Ø 11.8 mm	10 ... 50 mm <sup>2</sup>	10 ... 70 mm <sup>2</sup>
Rated voltage	1000 V AC / 1500 V DC		1000 V	10 x Ø 6.4 mm	8 ... 1/0 AWG	6 ... 2/0 AWG
Rated impulse voltage					2.5 ... 16 mm <sup>2</sup>	2.5 ... 16 mm <sup>2</sup>
Short-time withstand current (I <sub>ctw</sub> 1s)	11000 A				14 ... 6 AWG	14 ... 6 AWG
Short Circuit Current Rating (SCCR)			100 kA			
Rated peak withstand current (I <sub>pk</sub> )	30 kA					
Protection	IP10		NEMA 1			

The connecting capacity data for one Rigid - Solid / Stranded - Flexible conductor (when applicable) is a mandatory information required by IEC, UL and CSA standards (Copper conductors). All other data are provided as supplementary information only. For more details, please consult our CB, UL or CSA certificates and technical datasheet available on <http://www.ABB.com>



### Mounting instructions



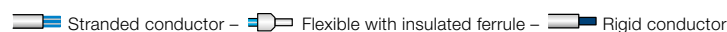
Rail	TH 35-7.5, TH 35-15		
Tool	Diameter of cable Ø	Wire stripping length	Recommended torque
Allen key			
5 mm 0.20 in	11.8 mm 0.46 in	15 mm 0.708 in	6... 10 Nm 53... 88 lb.in
Posidriv - flat screwdriver			
5.5 mm 0.22 in	6.4 mm 0.25 in	11 mm 0.43 in	2... 3 Nm 18... 26.5 lb.in



### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce) g
1 End stops	Grey <input type="checkbox"/>	BAM2	1SNA206351R1600	50	12.00
		BADL	1SNA399903R0200	50	4.70
		BADH	1SNA116900R2700	50	20.00
2 Terminal block markers	White <input type="checkbox"/>	MC512PA	1SNK149002R0000	1	10.00
		MC512	1SNK140000R0000	22	9.00

Complete list of accessories is indicated in the terminal block datasheet including end stops. Some accessories such as jumper bars may modify the terminal block's ratings: Complete information available in the accessories section of the catalog.



All the technical data for UL/CSA standard and dimensions in inches are in *italics*.

# DBL250 distribution terminal blocks

## Single pole - 46 mm 1.81 in spacing



### Description

- Save installation time with our modular solutions,
- Ease the installation with plate or rail mounting options on our modular blocks.

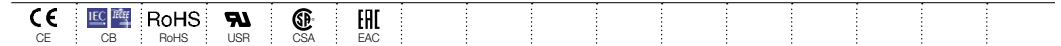
### Ordering details

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
Feed-through Single pole distribution, 12 connections	Grey	DBL250	1SNL325010R0000	1	425 g

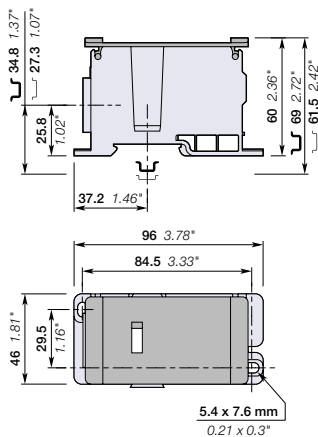
### Main technical data

Connecting capacity	IEC	UL	Connection type	Cross section	
				mm²	Kcmil
Max current / Max cross section	Copper Aluminium	250 A / 120 mm² 200 A / 120 mm²	255 A / 250 Kcmil	1 x Ø 15.3 mm	35 ... 95 mm² 2 ... 3/0 AWG
Rated voltage		1000 V AC / 1500 V DC	1000 V	2 x Ø 8.7 mm	2.5 ... 25 mm² 14 ... 4 AWG
Rated impulse voltage				5 x Ø 6.4 mm	2.5 ... 16 mm² 14 ... 6 AWG
Short-time withstand current (I <sub>tw</sub> 1s)		21000 A		4 x Ø 5.7 mm	2.5 ... 10 mm² 14 ... 8 AWG
Short Circuit Current Rating (SCCR)			100 kA		
Rated peak withstand current (I <sub>pk</sub> )		51 kA			
Protection		IP10	NEMA 1		

The connecting capacity data for one Rigid - Solid / Stranded - Flexible conductor (when applicable) is a mandatory information required by IEC, UL and CSA standards (Copper conductors). All other data are provided as supplementary information only. For more details, please consult our CB, UL or CSA certificates and technical datasheet available on <http://www.ABB.com>



DBL250



46 mm 1.81 in spacing

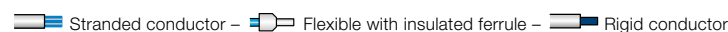
### Mounting instructions

Tool	Diameter of cable Ø	Wire stripping length	Recommended torque
Allen key	6 mm 0.24 in	28 mm 1.10 in	19 ... 21 Nm 168 ... 185 lb.in
Flat screwdriver	5.5 mm 0.22 in	11 mm 0.43 in	3.5 ... 5 Nm 31 ... 44 lb.in
Flat screwdriver	4 mm 0.16 in	11 mm 0.43 in	2 ... 3 Nm 18 ... 26.5 lb.in
Flat screwdriver	4 mm 0.16 in	5.7 mm 0.22 in	2 ... 3 Nm 18 ... 26.5 lb.in

### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce)
1 End stops	Grey	BAM2	1SNA206351R1600	50	12.00
		BADL	1SNA399903R0200	50	4.70
		BADH	1SNA116900R2700	50	20.00
2 Terminal block markers	White	MC512PA	1SNK149002R0000	1	10.00
		MC512	1SNK140000R0000	22	9.00

Complete list of accessories is indicated in the terminal block datasheet including end stops. Some accessories such as jumper bars may modify the terminal block's ratings: Complete information available in the accessories section of the catalog.



All the technical data for UL/CSA standard and dimensions in inches are in *italics*.

# DBL400 distribution terminal blocks

## Single pole - 46 mm 1.81 in spacing



DBL400

### Description

- Save installation time with our modular solutions,
- Ease the installation with plate or rail mounting options on our modular blocks.

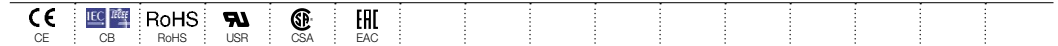
### Ordering details

Description	Color	Type	Order code	Pkg qty	Weight (1 pce) g
Feed-through Single pole distribution, 12 connections	Grey	DBL400	1SNL340010R0000	1	410

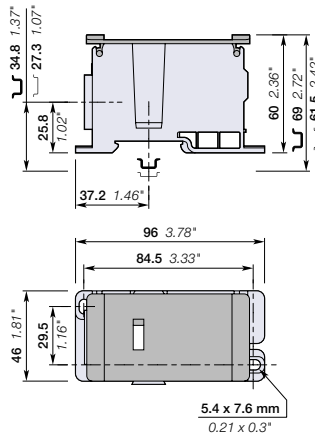
### Main technical data

Connecting capacity	IEC		UL	Connection type	Cross section	
	Copper	Aluminium				
Max current / Max cross section	400 A / 185 mm <sup>2</sup>	300 A / 185 mm <sup>2</sup>	335 A / 400 Kcmil	1 x Ø 18.8 mm	95 ... 150 mm <sup>2</sup>	95 ... 185 mm <sup>2</sup>
Rated voltage	1000 V AC / 1500 V DC		1000 V	2 x Ø 8.7 mm	2.5 ... 25 mm <sup>2</sup>	2.5 ... 35 mm <sup>2</sup>
Rated impulse voltage				5 x Ø 6.4 mm	14 ... 4 AWG	14 ... 2 AWG
Short-time withstand current (I <sub>cw</sub> 1s)	21000 A			4 x Ø 5.7 mm	2.5 ... 16 mm <sup>2</sup>	2.5 ... 16 mm <sup>2</sup>
Short Circuit Current Rating (SCCR)			100 kA		14 ... 6 AWG	14 ... 6 AWG
Rated peak withstand current (I <sub>pk</sub> )	51 kA				2.5 ... 10 mm <sup>2</sup>	2.5 ... 10 mm <sup>2</sup>
Protection	IP10		NEMA 1		14 ... 8 AWG	14 ... 8 AWG

The connecting capacity data for one Rigid - Solid / Stranded - Flexible conductor (when applicable) is a mandatory information required by IEC, UL and CSA standards (Copper conductors). All other data are provided as supplementary information only. For more details, please consult our CB, UL or CSA certificates and technical datasheet available on <http://www.ABB.com>



### Mounting instructions



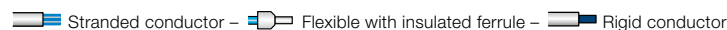
46 mm 1.81 in spacing

Tool	Diameter of cable Ø	Wire stripping length	Recommended torque
Allen key	8 mm 0.31 in	28 mm 1.10 in	25 Nm 221 lb.in
Flat screwdriver	5.5 mm 0.22 in	11 mm 0.43 in	3.5 ... 5 Nm 31 ... 44 lb.in
Flat screwdriver	4 mm 0.16 in	11 mm 0.43 in	2 ... 3 Nm 18 ... 26.5 lb.in
Flat screwdriver	4 mm 0.16 in	11 mm 0.43 in	2 ... 3 Nm 18 ... 26.5 lb.in

### Accessories

Description	Color	Type	Order code	Pkg qty	Weight (1 pce) g
1 End stops	Grey	BAM2	1SNA206351R1600	50	12.00
		BADL	1SNA399903R0200	50	4.70
		BADH	1SNA116900R2700	50	20.00
2 Terminal block markers	White	MC512PA	1SNK149002R0000	1	10.00
		MC512	1SNK140000R0000	22	9.00

Complete list of accessories is indicated in the terminal block datasheet including end stops. Some accessories such as jumper bars may modify the terminal block's ratings: Complete information available in the accessories section of the catalog.



All the technical data for UL/CSA standard and dimensions in inches are in *italics*.