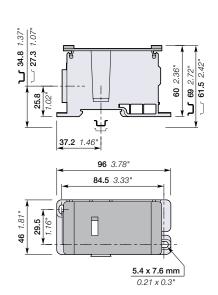


TECHNICAL DATASHEET 1SNC166017D0201 - CATALOGUE PAGE 1SNC166017S0201

## **DBL** distribution blocks

# Single pole





3D CAD outline drawings available on "Control Product 3D" portal

150 mm²
300 Kcmil

- copper bars
   Reduce the assembly time by 80% by avoiding to use fastening and isolating components
  - Easy identification with the reversible cover and delivered pre-printed markers L1, L2, L3, N. PE, +, –.

- 3 configurations: distribute unipolar and

multipolar power lines, or combine several

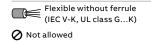
- Mount it on Din rail or plate and save up to 50% rail space compared to conventional

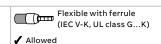
#### Ordering details

Color	Туре	Order code	EAN code	Pkg	Weight
				qty	<b>(1 pce)</b> 9
Grey	□ DBL400	1SNL340010R0000	3472599856547	1	425

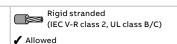
#### **Declarations and certificates**

Deciara	tions an	u certiii	cates			
€	IEC THE	RoHS	27	<b>(</b>	EAC	0
CE	CB	RoHS	USR	CSA	EAC	BV









#### **Declarations and certificates Document Part Number** ČE UE 1SND225005U1000 IEC REE СВ 1SND166005A0201 RoHS RoHS 1SND230557F0201 **SAL** USR USR 1SND166006A0201 **(1)** CSA 1SND166007A0201 EAC EAC 1SND161011A1100 ΒV 1SND166008A0200 General information\* The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance. IEC 60947-1 Protection IP10 NEMA 1 Rail TH 35-7.5, TH 35-15 Mounting instructions

		Circuit	: 1		Circuit 2		
Operating tool	Allen key			Allen key			
		8 mm	0.31 in		4 mm	0.16 in	1- О
Torque	Ó	25 Nm	221 lb.in	<b>©</b>	3.5 5 Nm	31 44 lb.in	2- <b>         </b>
Wire stripping length	□ H	28 mm	1.10 in	<b>□</b>	11 mm	0.43 in	4-6

		Circuit	3		Circuit 4	4
Operating tool	Allen key			Allen key		
		3 mm	0.12 in		3 mm	0.12 in
Torque	Ó	2 3 Nm	18 26.5 lb.in	Ó	2 3 Nm	18 26.5 lb.in
Wire stripping length	H H	11 mm	0.43 in	H H	11 mm	0.43 in

<sup>\*</sup> instructions given for 1 pole, to be repeated on each block module

#### **Material specifications**

Insulating material		Polyamide
СТІ		600 V
Flammability	UL94	VO
	EN 45545	HL3 R22
	Needle flame test IEC 60695-11-5	Compliant
Connector Material		Brass with tin platting

#### Connecting capacity per circuit

			Circuit 1		Circuit 2
1 Rigid - Solid / Stranded conductor	Norme	IEC 60947-7-1	UL1059	IEC60947-7-1	UL1059
	Value	95 185 mm²	3/0 400 Kcmil	2.5 35 mm²	14 2 AWG
Flexible conductor with ferrule	Norme	IEC 60947-7-1		IEC60947-7-1	
	Value	95 150 mm²	3/0 300 Kcmil	2.5 25 mm²	14 4 AWG
			Circuit 3		Circuit 4
Rigid - Solid / Stranded conductor	Norme				
	Value	2.5 16 mm²	14 6 AWG	2.5 10 mm²	14 8 AWG
. Flexible conductor with ferrule	Norme				
	Value	2.5 16 mm²	14 6 AWG	2.5 10 mm²	14 8 AWG

 $The \ "Connecting \ capacity \ with \ ferrule" \ data \ is \ guaranteed \ with \ ABB \ crimping \ tool \ PS-3 \ (crimping \ capacity \ up \ to \ 10 \ mm^2).$ 

Flexible without ferrule (IEC V-K, UL class GK)	Flexible with ferrule (IEC V-K, UL class GK)	Solid (IEC V-U class 1, UL solid)	Rigid stranded (IEC V-R class 2, UL class B/C)
Not allowed	✓ Allowed	<b>✓</b> Allowed	<b>✓</b> Allowed

#### Multi connecting capacity per clamp

2 Rigid - Solid / Stranded	Norme	
conductors	Value	
2 Flexible conductors	Norme	
	Value	
2 Flexible conductors with twin ferrule	Norme	
	Value	

Don't mix solid and flexible conductors in the same clamp.

Don't mix solid or flexible conductors of different sizes in the same clamp.

The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3 (crimping capacity up to 10 mm²).

#### **Cross section**

Rated cross section	IEC60947-7-1	150 mm²	UL1059	300 Kcmil
Maximum cross section	Manufacturer data	185 mm²	Manufacturer data	400 Kcmil

#### **Electrical characteristics**

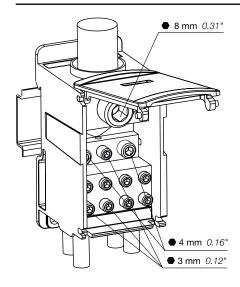
#### Current

Current				
Rated current		IEC60947-7-1	400 A	
	Field and factory wiring Cat.2	UL 1059	335 A	
	Factory wiring Cat.1	UL 1059		
		CSA-C-22.2 n° 158	335 A	
Maximum Exe current		IEC/EN 60079-7		
Rated short-time withstand current	1 s (lcw)	IEC60947-7-1	18000 A	
Short-time withstand current	0.5 s	Manufacturer data		
	5 s	Manufacturer data		
	10 s	Manufacturer data		
	30 s	Manufacturer data		
	1 mn	Manufacturer data		
Rated short-circuit withstand currer	nt	UL 1059		
Max. current (45° temperature increa	ase) / Max. cross section (mm²)	Manufacturer data	400 A	185 mm²
Maximum short circuit current (1s)		Manufacturer data	18000 A	

### Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR		<b>UL 1059</b> 100 kA
With the following configurations:		
	Suitable conductor wire range	3/0 400 Kcmil
	Maximum voltage	600 V
	Fuse class / Max. amp. Rating	<b>J</b> 600 A
		<b>T</b> 450 A
		<b>RK1</b> 400 A
		<b>RK5</b> 200 A
		<b>G</b> 60 A
		CC 30 A

#### **Mounting instructions**





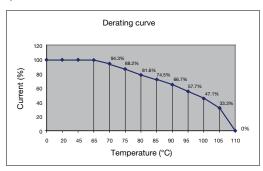
#### Voltage

IEC 60947-1	1500 V DC	1000 V AC
UL 1059	1000 V AC	
UL 1059	E	
CSA-C-22.2 n° 158	1000 V AC	
IEC/EN 60079-7		
IEC 60947-1	8000 V	
IEC 60947-1	2200 V	
IEC 60947-1	3	
IEC 60947-1	III	
	UL 1059 UL 1059 CSA-C-22.2 n° 158 IEC/EN 60079-7 IEC 60947-1 IEC 60947-1	IEC 60947-1 1500 V DC  UL 1059 1000 V AC  UL 1059 E  CSA-C-22.2 n° 158 1000 V AC  IEC/EN 60079-7  IEC 60947-1 8000 V  IEC 60947-1 2200 V  IEC 60947-1 3  IEC 60947-1 III

#### Temperature range

Ambient temperature min/max	<b>Storage</b> -55 +110 °C	-67 +230 °F
	Installing -5 +40 °C	+23 +104 °F
	<b>Service</b> -55 +110 °C	-67 +230 °F

#### Current Derating curve for continuous service temperature



#### **Dissipated power**

Maximum dissipated power at rated current	IEC 60947-7-1 12.8 W
Maximum dissipated power at maximum Exe current	IEC 60079-7

#### DBL terminal block accessories compatibility

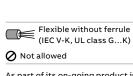
Some accessories may modify the terminal block's rating. See complete information in the accessories "Technical Datasheet".

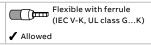
#### Environmental characteristics Additional climatic tests

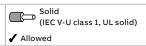
Cyclic damp heat		IEC 60068-2-30	Compliant
	Conditions	Temperature	55 °C
		Relative humidity	95 %
		Number of cycles (1 cycle = 24h)	2
Damp heat steady state		IEC 60068-2-78	Compliant
	Conditions	Temperature	40 °C
		Relative humidity	93 %
		Duration of test	96 h

#### DBL terminal block accessories compatibility

Description			Color	Туре	Order code	Pkg Weig
						qty (1 pce)
End stops	10 mm	0.394 in	Dark	BAM4	1SNK900001R0000	50 14.
	5.2 mm	0.205 in	grey	BAZ1	1SNK900002R0000	50 5.
	10 mm	0.394 in	••••••	BAZH1	1SNK900102R0000	20 24.
Terminal block Blank marker		White [	☐ MG-CPM 13 41790	1SNB041790R0512	1960 0.2	
markers	Blank car	d		MC512PA	1SNK149999R0000	20 10.
			Green	MC512PA-GN	1SNK149997R0000	20 10.
			Blue	MC512PA-BL	1SNK149998R0000	20 10.











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ABB France Electrification Products Division Low voltage Products and systems

3, rue Jean Perrin F-69687 Chassieu cedex / France

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