








# Standard and ground Terminal blocks

Screw clamp  DIN 1-3



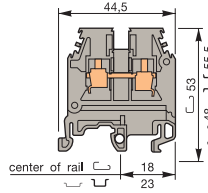
EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail. The use of ground terminal blocks do not decrease the standard terminal block's voltage ratings

\* UL - Hazardous locations Class I - Zone I - Ex e II T6  
File # E199332

End stop		th. 9 mm	BADL	V0	1SNA 399 903 F0200
End stop		th. 9,1 mm	BAM	V2	1SNA 103 002 F2600
End stop		th. 9,1 mm	BAM V0	V0	1SNA 199 306 F0300
Rail		35 x 7,5 x 1	PR3.Z2		1SNA 174 300 R1700
Rail		35 x 15 x 2,3	PR4		1SNA 168 500 R1200
Rail		35 x 15 x 1,5	PR5		1SNA 168 700 F2200
Rail		32 x 15 x 1,5	PR1.Z2		1SNA 163 050 F0400

## MA 2,5/5...Ex

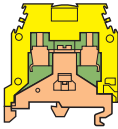
Spacing 5 mm .200"



Standard 5 mm block

## MA 2,5/5.P.Ex

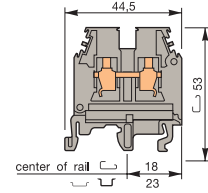
Spacing 5 mm .200"



Terminal block for ground wire.

## M 4/6...Ex

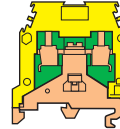
Spacing 6 mm .238"



Standard 6 mm block

## M 4/6.P.Ex

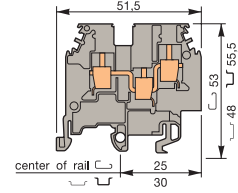
Spacing 6 mm .238"



Terminal block for ground wire.

## M 4/6.3A...Ex

Spacing 6 mm .238"

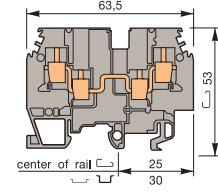


Standard 6 mm block

One circuit and three clamps












## M 4/6.4A...Ex

Spacing 6 mm .238"












Standard 6 mm block

One circuit and four clamps

	Type	P/N	Type	P/N	Type	P/N
Standard blocks UL 94 V0	 Grey body		 Grey body		 Grey body	
	 Blue body		 Blue body		 Blue body	
	 Green body		 Green body		 Green body	
Terminal blocks for ground wires UL 94 V0	 Green/yellow body (without rail contact)		 Green/yellow body (with rail contact)			

Characteristics	IEC			UL			CSA		
	NFC DIN	UL	CSA	NFC DIN	UL	CSA	NFC DIN	UL	CSA
Wire size	Solid wire			Flexible wire					
mm <sup>2</sup> / AWG	0.2 - 4	22-12 AWG	22-12 AWG	0.2 - 4	22-10AWG	22-10 AWG	0.2 - 4	22-10AWG	22-10AWG
Rated wire size	0.22 - 2.5			0.22 - 4			0.22 - 4		
Short circuit current (for ground blocks)	300 A / 1 s			480 A / 1 s			4 mm <sup>2</sup>	10 AWG	12 AWG
Wire stripping length	10 mm / .39"			9.5 mm / .37"			9.5 mm / .37"		
Recommended torque	0.4-0.6 Nm / 3.5-5.3 lb-in			0.5-0.8 Nm / 4.4-7.1 lb-in			0.5-0.8 Nm / 4.4-7.1 lb-in		
Voltage	EExe : 750 V EExi : 90 V			EExe : 750 V EExi : 375 V			EExe : 420 V EExi : 190 V		
Current	EEx : 24 A			EEx : 32 A			EEx : 32 A		
ATEX marking	Ⓔ I M2 / M1 Ⓔ II 2G / 1G			Ⓔ I M2 / M1 Ⓔ II 2G / 1G			Ⓔ I M2 / M1 Ⓔ II 2G / 1G		
ATEX certificate	EEx e/i I / II			EEx e/i I / II			EEx e/i I / II		
	LCIE 02 ATEX 0025U			LCIE 02 ATEX 0014U			LCIE 02 ATEX 0028U		

Accessories	Type	P/N	Type	P/N	Type	P/N		
1 End section	grey  blue  yellow  orange  green  beige V0 	FEM6 V0 • th. 2,8 1SNA 146 259 R1500 FEM6 V0 • th. 2,8 1SNA 199 302 R0700 FEM6 V0 • th. 2,8 1SNA 199 305 F0200 FEM6 • th. 2,8 1SNA 103 126 R1600 FEM6 • th. 2,8 1SNA 103 125 R1500 FEM6 V0 • th. 2,5 1SNA 198 368 R1700	FEM6 V0 • th. 2,8 1SNA 146 259 R1500 FEM6 V0 • th. 2,8 1SNA 199 302 R0700 FEM6 V0 • th. 2,8 1SNA 199 305 F0200 FEM6 • th. 2,8 1SNA 103 126 R1600 FEM6 • th. 2,8 1SNA 103 125 R1500 FEM6 V0 • th. 2,5 1SNA 198 368 R1700	FEM6 V0 (4) th. 2,8 1SNA 146 261 F0700 FEM6 V0 (4) th. 2,8 1SNA 126 576 R1700 FEM6 V0 (5) th. 2,8 1SNA 146 262 F0000 FEM6 V0 (5) th. 2,8 1SNA 126 629 F2400	SCM6 • 1SNA 113 003 R1000 SCM6 • 1SNA 118 707 R0300 SCFM6 th. 3 1SNA 114 825 R0500 SCFM6 th. 3 1SNA 114 825 R0500	AL2 (1) • 1SNA 163 043 R2100 AL2 (1) • 1SNA 163 261 R0000 AL3 (1) • 1SNA 163 043 R2100 AL3 (1) • 1SNA 163 261 F0000	DCJ • 1SNA 173 059 F0300 DCJ • 1SNA 007 865 F2600 DCJ • 1SNA 176 663 R0000 DCJ • 1SNA 176 664 F0100 DCJ • 1SNA 176 665 F0200 DCJ • 1SNA 176 666 F0300 DCJ • 1SNA 176 667 F0400	DCJ • 1SNA 173 059 F0300 DCJ • 1SNA 007 865 F2600 DCJ • 1SNA 176 663 R0000 DCJ • 1SNA 176 664 F0100 DCJ • 1SNA 176 665 F0200 DCJ • 1SNA 176 666 F0300 DCJ • 1SNA 176 667 F0400
2 Circuit separator	grey 	SCMA5 • 1SNA 116 728 R2500	SCM6 • 1SNA 113 003 R1000	SCM6 • 1SNA 113 003 R1000	SCM6 • 1SNA 113 003 R1000	SCM6 • 1SNA 113 003 R1000		
3 Separator end section (block)	grey 	SCF6 th. 3 1SNA 118 707 F0300	SCF6 th. 3 1SNA 118 707 F0300	SCF6 th. 3 1SNA 118 707 F0300	SCF6 th. 3 1SNA 118 707 F0300	SCF6 th. 3 1SNA 118 707 F0300		
4 Separator end section (rail)	grey 	SCFM6 th. 3 1SNA 114 825 R0500	SCFM6 th. 3 1SNA 114 825 R0500	SCFM6 th. 3 1SNA 114 825 R0500	SCFM6 th. 3 1SNA 114 825 R0500	SCFM6 th. 3 1SNA 114 825 R0500		
5 Test socket	DIA. 2 mm DIA. 3 mm DIA. 4 mm	AL2 (1) 1SNA 163 046 F2400	AL2 (1) • 1SNA 163 043 R2100 AL3 (1) • 1SNA 163 261 R0000	AL2 (1) • 1SNA 163 043 R2100 AL3 (1) • 1SNA 163 261 F0000	AL2 (1) • 1SNA 163 043 R2100 AL3 (1) • 1SNA 163 261 F0000	AL2 (1) • 1SNA 163 043 R2100 AL3 (1) • 1SNA 163 261 F0000		
6 Test device		DCB • 1SNA 105 028 F2100	DCJ • 1SNA 173 059 F0300	DCJ • 1SNA 173 059 F0300	DCJ • 1SNA 173 059 F0300	DCJ • 1SNA 173 059 F0300		
7 Test plug	DIA. 2 mm	FC2 • 1SNA 007 865 F2600	FC2 • 1SNA 007 865 F2600	FC2 • 1SNA 007 865 F2600	FC2 • 1SNA 007 865 F2600	FC2 • 1SNA 007 865 F2600		
8 Preassembled jumper bar IP 20 touchproof	2 poles 3 poles 4 poles 5 poles 10 poles	BJM5 (1) • 1SNA 176 278 R1600 BJM5 (1) • 1SNA 176 279 R1700 BJM5 (1) • 1SNA 176 280 F0500 BJM5 (1) • 1SNA 176 281 F2200 BJM5 (1) • 1SNA 176 282 R2300	BJM5 (1) • 1SNA 176 278 R1600 BJM5 (1) • 1SNA 176 279 R1700 BJM5 (1) • 1SNA 176 280 F0500 BJM5 (1) • 1SNA 176 281 F2200 BJM5 (1) • 1SNA 176 282 R2300	BJM5 (1) • 1SNA 176 278 R1600 BJM5 (1) • 1SNA 176 279 R1700 BJM5 (1) • 1SNA 176 280 F0500 BJM5 (1) • 1SNA 176 281 F2200 BJM5 (1) • 1SNA 176 282 R2300	BJM5 (1) • 1SNA 176 278 R1600 BJM5 (1) • 1SNA 176 279 R1700 BJM5 (1) • 1SNA 176 280 F0500 BJM5 (1) • 1SNA 176 281 F2200 BJM5 (1) • 1SNA 176 282 R2300	BJM5 (1) • 1SNA 176 278 R1600 BJM5 (1) • 1SNA 176 279 R1700 BJM5 (1) • 1SNA 176 280 F0500 BJM5 (1) • 1SNA 176 281 F2200 BJM5 (1) • 1SNA 176 282 R2300		
9 Connector plate		EL6 • 1SNA 173 627 R2100	EL6 • 1SNA 173 627 R2100	EL6 • 1SNA 173 627 R2100	EL6 • 1SNA 173 627 R2100	EL6 • 1SNA 173 627 R2100		
10 Jumper bar not preassembled Post + screw + washer	20 poles	BJS5 (1) 1SNA 177 652 R0600 EV5 • 1SNA 168 629 R1600	BJS5 (1) • 1SNA 174 784 R2000 EV6 • 1SNA 168 604 R1600	BJS5 (1) • 1SNA 174 784 R2000 EV6 • 1SNA 168 604 R1600	BJS5 (1) • 1SNA 174 784 R2000 EV6 • 1SNA 168 604 R1600	BJS5 (1) • 1SNA 174 784 R2000 EV6 • 1SNA 168 604 R1600		
11 Preassembled jumper bar without screw IP20		BUE • see accessories	BUE • see accessories	BUE • see accessories	BUE • see accessories	BUE • voir accessoires		
12 Comb-type jumper bar	10 poles	PC5 (3) • 1SNA 113 544 R1200 EIP • 1SNA 113 550 R2400	PC6 (3) • 1SNA 113 548 R2600 EIP • 1SNA 113 550 R2400	PC6 (3) • 1SNA 113 548 R2600 EIP • 1SNA 113 550 R2400	PC6 (3) • 1SNA 113 548 R2600 EIP • 1SNA 113 550 R2400	PC6 (3) • 1SNA 113 548 R2600 EIP • 1SNA 113 550 R2400		
13 Shielding connector	th. 0.5 th. 0.8	CBM5 • 1SNA 178 745 R1400 CBM8 • 1SNA 178 746 R1500	CBM5 • 1SNA 178 745 R1400 CBM8 • 1SNA 178 746 R1500	CBM5 • 1SNA 178 745 R1400 CBM8 • 1SNA 178 746 R1500	CBM5 • 1SNA 178 745 R1400 CBM8 • 1SNA 178 746 R1500	CBM5 • 1SNA 178 745 R1400 CBM8 • 1SNA 178 746 R1500		
14 Protection label	4 blocks		EP6 • 1SNA 163 427 R1700 VSP6 • 1SNA 163 433 R1500	EP6 • 1SNA 163 427 R1700 VSP6 • 1SNA 163 433 R1500	EP6 • 1SNA 163 427 R1700 VSP6 • 1SNA 163 433 R1500	EP6 • 1SNA 163 427 R1700 VSP6 • 1SNA 163 433 R1500		
R See markers section		RC 55 - RC510	RC 65 - RC610	RC 65 - RC610	RC 65 - RC610	RC 65 - RC610		

(1) A circuit separator SC is required with the use of these accessories. (2) Use of these accessories requires the cut-out of the block body (precut). (3) For other configurations of poles, see accessories. (4) For M 4/6.3A...Ex. (5) For M 4/6.4A...Ex.

# Standard and ground Terminal blocks

Screw clamp DIN 1-3



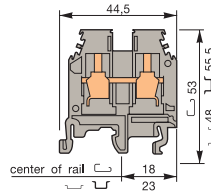
EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail. The use of ground terminal blocks do not decrease the standard terminal block's voltage ratings.

\* UL - Hazardous locations Class I - Zone I - Ex e II T6  
File # E199332

End stop		th. 9 mm	BADL	V0	1SNA 399 903 R0200
End stop		th. 9,1 mm	BAM	V2	1SNA 103 002 R2600
End stop		th. 9,1 mm	BAM V0	V0	1SNA 199 306 R0300
Rail		35 x 7,5 x 1	PR3.Z2		1SNA 174 300 R1700
Rail		35 x 15 x 2,3	PR4		1SNA 168 500 R1200
Rail		35 x 15 x 1,5	PR5		1SNA 168 700 R2200
Rail		32 x 15 x 1,5	PR1.Z2		1SNA 163 050 R0400

## M 6/8...Ex

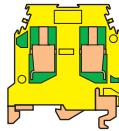
Spacing 8 mm .315"



Standard 8 mm block

## M 6/8.P.Ex

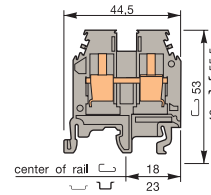
Spacing 8 mm .315"



Terminal block for ground wire.

## M 10/10...Ex

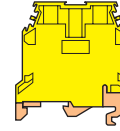
Spacing 10 mm .394"



Standard 10 mm block

## M 10/10.P.Ex

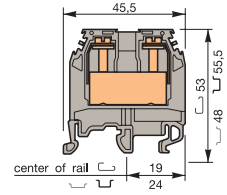
Spacing 10 mm .394"



Terminal block for ground wire.  
(M 10/10.P.Ex closed terminal block)

## M 16/12...Ex

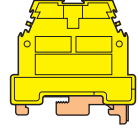
Spacing 12 mm .473"



Standard 12 mm block with partition

## M 16/12.P.Ex

Spacing 12 mm .473"



Terminal block for ground wire.  
(M 16/12.P.Ex closed terminal block)

Standard blocks UL 94 V0 Grey body  
 Blue body

Terminal blocks for ground wires UL 94 V0  Green/yellow body (without rail contact)	<b>M 6/8.P.Ex</b>	1SNA 146 238 R0000	<b>M 10/10.P.Ex</b>	1SNA 146 239 R0100	<b>M 16/12.P.Ex</b>	1SNA 146 043 R2000
Terminal blocks for ground wires UL 94 V0  Green/yellow body (with rail contact)	<b>M 6/8.Ex*</b>	1SNA 146 003 R2100	<b>M 10/10.Ex*</b>	1SNA 146 005 R2300	<b>M 16/12.Ex*</b>	1SNA 146 027 R1000
	<b>M 6/8.N.Ex*</b>	1SNA 146 004 R2200	<b>M 10/10.N.Ex*</b>	1SNA 146 006 R2400	<b>M 16/12.N.Ex*</b>	1SNA 146 028 R2100

Characteristics	M 6/8			M 10/10			M 16/12			
	IEC NFC DIN	UL	CSA	IEC NFC DIN	UL	CSA	IEC NFC DIN	UL	CSA	
Wire size	Solid wire Flexible wire	0.5 - 10 0.5 - 6	22-8 AWG 24-8 AWG	0.5 - 16 0.5 - 10	20-6 AWG 18-6 AWG	0.5 - 25 0.5 - 16	18-6 AWG 8-4 AWG			
mm <sup>2</sup> / AWG										
Rated wire size	mm <sup>2</sup> / AWG	6 mm <sup>2</sup> / 8 AWG	8 AWG	10 mm <sup>2</sup> / 6 AWG	6 AWG	6 AWG	16 mm <sup>2</sup> / 4 AWG	4 AWG	4 AWG	
Short circuit current (for ground blocks)	A / s	720 A/1 s		1200 A/1 s			1920 A/1 s			
Wire stripping length	mm / inches	12 mm / .47"			12 mm / .47"			14 mm / .55"		
Recommended torque	Nm / lb.in	0.8-1 Nm / 7.1-8.9 lb.in			1.2-1.4 Nm / 10.6-12.3 lb.in			1.2-1.4 Nm / 10.6-12.3 lb.in		
Voltage	EN 50019 / EN 50020	EExe : 420 V EExi : 190 V			EExe : 420 V EExi : 190 V			EExe : 550 V EExi : 375 V		
Current	EN 50019 / EN 50020	EEx : 41 A			EEx : 57 A			EEx : 76 A		
ATEX marking		⊕ I M2 / M1 ⊕ II 2G / 1G			⊕ I M2 / M1 ⊕ II 2G / 1G			⊕ I M2 / M1 ⊕ II 2G / 1G		
ATEX certificate		LCIE 02 ATEX 0014U			LCIE 02 ATEX 0014U			LCIE 02 ATEX 0014U		

## Accessories

	Type	P/N	Type	P/N	Type	P/N	
<p>1 End section</p> <p>2 Circuit separator</p> <p>3 Separator end section (block)</p> <p>4 Separator end section (rail)</p> <p>5 Test socket</p> <p>6 Test device</p> <p>7 Test plug</p> <p>8 Preassembled jumper bar IP20 touchproof</p> <p>not IP20 see section : accessories</p> <p>9 Connector plate</p> <p>10 Jumper bar not preassembled Post + screw + washer</p> <p>11 Preassembled jumper bar without screw IP20</p> <p>12 Comb-type jumper bar Isolating cover</p> <p>13 Shielding connector</p> <p>14 Protection label</p> <p>Screw for protection label</p>	grey	FEM6 V0 • th. 2,8  1SNA 146 259 R1500	FEM6 V0 • th. 2,8  1SNA 146 259 R1500	FEM6 V0 • th. 2,8  1SNA 146 259 R1500	FEM12 V0 • th. 2,8  1SNA 146 270 R1400		
	blue	FEM6 V0 • th. 2,8  1SNA 199 302 R0700	FEM6 V0 • th. 2,8  1SNA 199 302 R0700	FEM6 V0 • th. 2,8  1SNA 199 302 R0700	FEM12 • th. 2,8  1SNA 128 618 R0300		
	yellow	FEM6 V0 • th. 2,8  1SNA 199 305 R0200	FEM6 V0 • th. 2,8  1SNA 199 305 R0200	FEM6 V0 • th. 2,8  1SNA 199 305 R0200	FEM12 • th. 2,8  1SNA 103 065 R2400		
	orange	FEM6 • th. 2,8  1SNA 103 126 R1600	FEM6 • th. 2,8  1SNA 103 126 R1600	FEM6 • th. 2,8  1SNA 103 126 R1600	FEM12 V0 • th. 2,8  1SNA 198 618 R0200		
	green	FEM6 • th. 2,8  1SNA 103 125 R1500	FEM6 • th. 2,8  1SNA 103 125 R1500	FEM6 • th. 2,8  1SNA 103 125 R1500			
	beige V0	FEM6 V0 • th. 2,5  1SNA 198 368 R1700	FEM6 V0 • th. 2,5  1SNA 198 368 R1700	FEM6 V0 • th. 2,5  1SNA 198 368 R1700			
	grey	SCM6  1SNA 113 003 R1000	SCM6  1SNA 113 003 R1000	SCM6  1SNA 113 003 R1000			
	grey	SCF6 • th. 3  1SNA 118 707 R0300	SCF6 • th. 3  1SNA 118 707 R0300	SCF6 • th. 3  1SNA 118 707 R0300	SCF12 • th. 3  1SNA 113 102 R1000		
	grey	SCFM6 • th. 3  1SNA 114 825 R0500	SCFM6 • th. 3  1SNA 114 825 R0500	SCFM6 • th. 3  1SNA 114 825 R0500	SCFM6 • th. 3  1SNA 114 825 R0500		
	DIA. 2 mm	AL2 (1) • 1SNA 163 043 R2100	AL2 (1) • 1SNA 163 043 R2100	AL2 (1) • 1SNA 163 043 R2100	AL2 • 1SNA 163 043 R2100		
	DIA. 3 mm	AL3 (1) • 1SNA 163 261 R0000	AL3 (1) • 1SNA 163 261 R0000	AL3 (1) • 1SNA 163 261 R0000	AL3 • 1SNA 163 261 R0000		
	DIA. 4 mm	AL4 (1) • 1SNA 163 262 R0100	AL4 (1) • 1SNA 163 262 R0100	AL4 (1) • 1SNA 163 262 R0100	AL4 • 1SNA 163 262 R0100		
	DCO •	1SNA 173 060 R0000	FC2 • 1SNA 007 865 R2600	FC2 • 1SNA 007 865 R2600	FC2 • 1SNA 007 865 R2600		
	BJM18 (1) • 1SNA 176 669 R1600	BJM10 (1) • 1SNA 176 675 R0400	BJM10 (1) • 1SNA 176 675 R0400	BJM12 (2) • 1SNA 179 626 R0600			
BJM18 (1) • 1SNA 176 670 R1300	BJM10 (1) • 1SNA 176 676 R0500	BJM10 (1) • 1SNA 176 676 R0500	BJM12 (2) • 1SNA 179 628 R1000				
BJM18 (1) • 1SNA 176 671 R0000	BJM10 (1) • 1SNA 176 677 R0600	BJM10 (1) • 1SNA 176 677 R0600	BJM12 (2) • 1SNA 179 629 R1100				
BJM18 (1) • 1SNA 176 672 R0100	BJM10 (1) • 1SNA 176 678 R1700	BJM10 (1) • 1SNA 176 678 R1700	BJM12 (2) • 1SNA 179 630 R1600				
BJM18 (1) • 1SNA 176 673 R0200	BJM10 (1) • 1SNA 176 679 R1000	BJM10 (1) • 1SNA 176 679 R1000	BJM12 (2) • 1SNA 179 631 R0300				
EL6 • 1SNA 173 627 R2100	BJS10 (1) • 1SNA 177 654 R0000	BJS10 (1) • 1SNA 177 654 R0000	BJS12 (2) • 1SNA 177 653 R0700				
EV6 • 1SNA 168 604 R1600	EV6 • 1SNA 168 604 R1600	EV6 • 1SNA 168 604 R1600	EV12 • 1SNA 168 664 R1100				
BJE • see accessories	BJE • see accessories	BJE • see accessories	see accessories				
PC8 (3) • 1SNA 163 313 R2400	PC10 • 1SNA 163 315 R2600	PC10 • 1SNA 163 315 R2600					
th. 0.5							
th. 0.8							
EP6 • 1SNA 163 427 R1700	EP8 • 1SNA 163 428 R2000	EP8 • 1SNA 163 428 R2000	EP10 • 1SNA 163 429 R2100				
EP8 • 1SNA 163 428 R2000	EP10 • 1SNA 163 429 R2100	EP10 • 1SNA 163 429 R2100	EP12 • 1SNA 163 430 R2600				
VSP6 • 1SNA 163 433 R1500	VSP6 • 1SNA 163 433 R1500	VSP6 • 1SNA 163 433 R1500	VSP12 • 1SNA 163 432 R1400				
	• These accessories cannot be mounted on M 6/8.P.Ex block	• These accessories cannot be mounted on M 10/10.P.Ex block	• These accessories cannot be mounted on M 16/12.P.Ex block				
R See markers section	RC 65 - RC610 - RC810	RC 65 - RC610 - RC810	RC 65 - RC610 - RC810				
Other accessories see section accessories	(1) Use of these accessories requires the cut-out of the block body (precut).						

# Standard and ground Terminal blocks

Screw clamp DIN 1-3



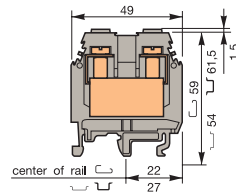
EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail. The use of ground terminal blocks do not decrease the standard terminal block's voltage ratings.

\* UL - Hazardous locations Class I - Zone I - Ex e II T6  
File # E199332

End stop		th. 12 mm	BADH	V2	1SNA 116 900 F2700
End stop		th. 12 mm	BAEH	V2	1SNA 116 934 F0400
End stop		th. 9,1 mm	BAMH V0	V0	1SNA 194 836 F0100
Rail		35 x 7,5 x 1	PR3.Z2		1SNA 174 300 F1700
Rail		35 x 15 x 2,3	PR4		1SNA 168 500 F1200
Rail		35 x 15 x 1,5	PR5		1SNA 168 700 F2200
Rail		32 x 15 x 1,5	PR1.Z2		1SNA 163 050 F0400

## M 35/16...Ex

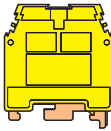
Spacing 16 mm .630"



Standard 16 mm block with partition

## M 35/16.P.Ex

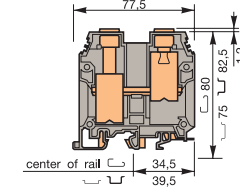
Spacing 16 mm .630"



Terminal block for ground wire.  
(M 35/16.P.Ex closed terminal block)

## M 70/22...Ex

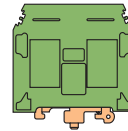
Spacing 22mm .866"



Standard 22 mm block with partition

## M 70/22.P.Ex

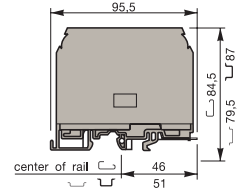
Spacing 22 mm .866"



Terminal block for ground wire.  
(M 70/22.P.Ex closed terminal block)

## M 95/26...Ex

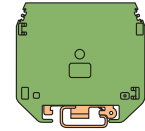
Spacing 26 mm 1.02"



Standard 26 mm block with partition

## M 95/26.P.Ex

Spacing 26 mm 1.02"



Terminal block for ground wire.  
(M 95/26.P.Ex closed terminal block)

	Type	P/N	Type	P/N	Type	P/N	
Standard blocks UL 94 V0	Grey body	M 35/16.Ex*	1SNA 146 029 F2200	M 70/22.Ex*	1SNA 146 025 R1600	M 95/26.Ex	1SNA 146 020 F2500
	Blue body	M 35/16.N.Ex*	1SNA 146 030 F2700	M 70/22.N.Ex*	1SNA 146 026 R1700	M 95/26.N.Ex	1SNA 146 024 F1500
Terminal blocks for ground wires UL 94 V0	Green/yellow body (with rail contact)	M 35/16.P.Ex	1SNA 146 044 F2100	M 70/22.P.Ex	1SNA 146 073 F2600	M 95/26.P.Ex	1SNA 146 068 F0100

## Characteristics

	IEC NFC DIN	UL	CSA	IEC NFC DIN	UL	CSA	IEC NFC DIN	UL	CSA		
<b>Wire size</b>	Solid wire		1 - 50	10-0 AWG	10-0 AWG	16 - 95	4-00 AWG	4-00 AWG	35 - 120	0000 AWG	000 AWG
	Flexible wire		1 - 35	10-1 AWG	10-1 AWG	16 - 70			35 - 95		
<b>mm² / AWG</b>			17 mm / .67"			25 mm / .98"			26 mm / 1.02"		
<b>Rated wire size</b>	mm² / AWG		35 mm²	0 AWG	0 AWG	70 mm²	00 AWG	00 AWG	95 mm²	0000 AWG	000 AWG
<b>Short circuit current (for ground blocks)</b>	A / s		4200 A/1s			8400 A/1s			11400 A/1s		
<b>Wire stripping length</b>	mm / inches		17 mm / .67"			25 mm / .98"			26 mm / 1.02"		
<b>Recommended torque</b>	Nm / lb.in		2.8-3 Nm / 24.9-26.7 lb.in			6-7 Nm / 53.4-62.3 lb.in			8.5-9.5 Nm / 74-83 lb.in		
<b>Voltage</b>	EN 50019 / EN 50020		EExe : 750 V EExi : 375 V			EExe : 660 V EExi : 375 V			EExe : 750 V EExi : 375 V		
<b>Current</b>	EN 50019 / EN 50020		EEx : 125 A			EEx : 192 A			EEx : 232 A		
<b>ATEX marking</b>			Ex I M2 / M1 Ex II 2G / 1G			Ex I M2 / M1 Ex II 2G / 1G			Ex I M2 / M1 Ex II 2G / 1G		
			EEx e/i I / II			EEx e/i I / II			EEx e/i I / II		
<b>ATEX certificate</b>			LCIE 02 ATEX 0014U			LCIE 02 ATEX 0027U / 0023U			LCIE 02 ATEX 0022U / 0023U		

## Accessories

	Type	P/N	Type	P/N	Type	P/N	
1 End section	grey	FEM16 V0 • th. 3	1SNA 146 271 F0100	FEM22 V0	th. 3	1SNA 146 269 R1700	
	blue	FEM16 V0 • th. 3	1SNA 199 304 F0100				
	yellow	FEM16 • th. 3	1SNA 103 061 F2000				
	beige V0	FEM16 V0 • th. 3	1SNA 198 233 F2000	FEM22 V0	th. 3	1SNA 193 065 R1600	
2 Separator end section (block)	grey	SCF22	th. 3	1SNA 113 851 R1600			
	3 Test socket	DIA. 4 mm	AL4 •	1SNA 168 237 F0500			
		4 Test plug	DIA. 4 mm	FC4 •	1SNA 167 860 F0100		
			2 poles	BJM16 (1) •	1SNA 179 613 F0100		
			3 poles	BJM16 (1) •	1SNA 179 614 F0200		
			4 poles	BJM16 (1) •	1SNA 179 615 F0300		
5 Preassembled jumper bar IP 20 touchproof	5 poles	BJM16 (1) •	1SNA 179 616 F0400				
	10 poles	BJM16 (1) •	1SNA 179 617 F0500				
	not IP20 see section : accessories						
6 Jumper bar not preassembled Post + screw + washer	20 poles	BJS16 (1) • 10 poles	1SNA 168 238 F1600	BJS22(1) • 2 poles	1SNA 173 316 F2100	BJS261 • 2 poles	1SNA 177 508 F0700
		EV16 •	1SNA 179 627 F0700	BJS22(1) • 3 poles	1SNA 173 317 F2200	BJS261 • 3 poles	1SNA 177 509 F0000
				BJS22(1) • 5 poles	1SNA 173 318 F0300	BJS261 • 5 poles	1SNA 177 510 F2400
7 Protection label	3 blocks	EP12 •	1SNA 163 430 F2600	BJS22(1) • 10 poles	1SNA 173 319 F0400	BJS261 • 10 poles	1SNA 177 511 R1100
	4 blocks	EP16 •	1SNA 163 431 F1300	VSJ51 • screw	1SNA 173 320 F0100	VSJ51 • screw	1SNA 173 320 F0100
	Screw for protection label	VSP16 •	1SNA 173 147 F2000	RDUJ51 • washer	1SNA 173 331 F2000	RDUJ51 • washer	1SNA 173 331 F2000
				EP223 •	1SNA 173 327 F2400		
				EP224 •	1SNA 173 328 F0500		
				VSP22 •	1SNA 173 323 F2000		

R See markers section

Other accessories see section accessories

• These accessories cannot be mounted on M 35/16.P.Ex block

• These accessories cannot be mounted on M 70/22.P.Ex block

• These accessories cannot be mounted on M 95/26.P.Ex block

RC 65 - RC610 - RC810








(1) A circuit separator SC is required with the use of these accessories. (2) Use of these accessories requires the cut-out of the block body (precut).

## Double-deck terminal blocks

Screw clamp   DIN 1-3

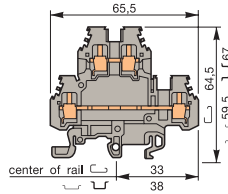


EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail.

End stop		th. 12 mm	BADH	V2	1SNA 116 900 R2700
End stop		th. 12 mm	BAEH	V2	1SNA 116 934 R0400
End stop		th. 9,1 mm	BAMH V0	V0	1SNA 194 836 R0100
Rail		35 x 7,5 x 1	PR3.Z2		1SNA 174 300 R1700
Rail		35 x 15 x 2,3	PR4		1SNA 168 500 R1200
Rail		35 x 15 x 1,5	PR5		1SNA 168 700 R2200
Rail		32 x 15 x 1,5	PR1.Z2		1SNA 163 050 R0400

### MA 2,5/5.D2... .Ex

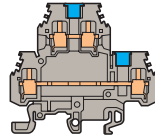
Spacing 5 mm .200"



Standard 5 mm block

### MA 2,5/5.D2.1.Ex

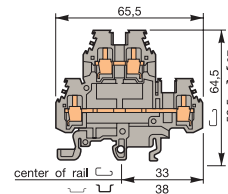
Spacing 5 mm .200"





M 2,5/5.D2.Ex with partition





### M 4/6.D2.Ex

Spacing 6 mm .238"







Standard 6 mm block

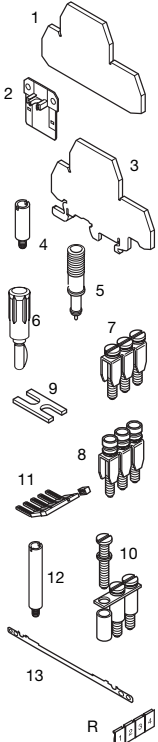


















Standard blocks UL 94 V0  Grey body  
 Blue body

Type	P/N	Type	P/N
MA 2,5/5.D2.Ex 	1SNA 146 017 R1600	M 4/6.D2.Ex 	1SNA 146 009 R0700
MA 2,5/5.D2.N.Ex 	1SNA 146 018 R2700		
MA 2,5/5.D2.1.Ex 	1SNA 146 019 R2000		

## Characteristics

	IEC NFC DIN	UL	CSA	IEC NFC DIN	UL	CSA
<b>Wire size</b>	Solid wire 0.2 - 4	22-12 AWG	20-12 AWG	0.2 - 4	22-12 AWG	24-12 AWG
	Flexible wire 0.22 - 2.5			0.22 - 4		
<b>mm<sup>2</sup> / AWG</b>						
<b>Rated wire size</b>	mm <sup>2</sup> / AWG	2.5 mm <sup>2</sup> / 12 AWG	12 AWG	4 mm <sup>2</sup> / 12 AWG	12 AWG	12 AWG
<b>Wire stripping length</b>	mm / inches	9 mm / .35"		8.5 mm / .33"		
<b>Recommended torque</b>	Nm / lb.in	0.4-0.6 Nm / 3.5-5.3 lb.in		0.5-0.8 Nm / 4.4-7.1 lb.in		
<b>Voltage</b>	EN 50019 / EN 50020	EExe : 380 V EExi : 90 V		EExe : 380 V EExi : 190 V		
<b>Current</b>	EN 50019 / EN 50020	EEx : 24 A		EEx : 32 A		
<b>ATEX marking</b>		 I M2 / M1  II 2G / 1G		 I M2 / M1  II 2G / 1G		
		EEx e/i I / II		EEx e/i I / II		
<b>ATEX certificate</b>		LCIE 02 ATEX 0026U		LCIE 02 ATEX 0019U		

## Accessories

	Type	P/N	Type	P/N
	<b>1</b> End section	grey  blue  Beige V0 	FEM6D V0 th. 1  1SNA 146 260 R1200 FEM6 th. 1  1SNA 128 499 R2500 FEM6D V0 th. 1  1SNA 198 499 R2400	FEM6D V0 th. 1  1SNA 146 260 R1200 FEM6D th. 1  1SNA 128 499 R2500 FEM6D V0 th. 1  1SNA 198 499 R2400
	<b>2</b> Circuit separator	grey  Beige V0 	SCMA5D (3) th. 1  1SNA 116 720 R2100	SCM6D (3) th. 1  1SNA 113 482 R0500 SCM6D V0 (3) th. 1  1SNA 193 482 R0600
	<b>3</b> Separator end section (block)	grey 		SCF6D th. 1  1SNA 118 495 R1700
	<b>4</b> Test socket	DIA. 2 mm DIA. 3 mm	AL2 (1) 1SNA 164 950 R0000	AL2 (1) 1SNA 163 070 R0000 AL3 (1) 1SNA 163 261 R0000
	<b>5</b> Test device		DCV  1SNA 173 058 R0200	DCG  1SNA 163 218 R0500
	<b>6</b> Test plug	DIA. 2 mm	FC2 1SNA 007 865 R2600	FC2 1SNA 007 865 R2600
	<b>7</b> Preassembled jumper bar not IP 20	2 poles 3 poles 4 poles 5 poles 10 poles	BJM5D (1) (2) 1SNA 176 226 R2200 BJM5D (1) (2) 1SNA 176 227 R2300 BJM5D (1) (2) 1SNA 176 228 R0400 BJM5D (1) (2) 1SNA 176 229 R0500 BJM5D (1) (2) 1SNA 176 230 R0200	BJM6D (1) (2) 1SNA 173 515 R1100 BJM6D (1) (2) 1SNA 173 516 R1200 BJM6D (1) (2) 1SNA 173 517 R1300 BJM6D (1) (2) 1SNA 173 519 R2500 BJM6D (1) (2) 1SNA 173 520 R2200
	<b>8</b> Preassembled jumper bar with IP 20 touchproof	2 poles 3 poles 4 poles 5 poles 10 poles	BJM6D (1) (2) 1SNA 176 736 R2100 BJM6D (1) (2) 1SNA 176 737 R2200 BJM6D (1) (2) 1SNA 176 738 R0300 BJM6D (1) (2) 1SNA 176 739 R0400 BJM6D (1) (2) 1SNA 176 740 R1100	BJM6D (1) (2) 1SNA 179 668 R2000 BJM6D (1) (2) 1SNA 179 669 R2100 BJM6D (1) (2) 1SNA 179 670 R2600 BJM6D (1) (2) 1SNA 179 671 R1300 BJM6D (1) (2) 1SNA 179 672 R1400
	<b>9</b> Connector plate		EL6 1SNA 173 627 R2100	EL6 1SNA 173 627 R2100
	<b>10</b> Jumper bar not preassembled Post + screw + washer	20 poles	BJS5D (1) (2) 1SNA 177 651 R0500	BJS61 (1) (2) 10 poles 1SNA 168 485 R2700
	<b>11</b> Comb-type jumper bar Isolating cover	10 poles	EV5D 1SNA 176 260 R1000 PC5 1SNA 113 544 R1200 EIP 1SNA 113 550 R2400	EV6D 1SNA 168 400 R1600 PC61 1SNA 163 311 R2200
	<b>12</b> Vertical interconnection		ITV5 1SNA 176 259 R1300	ITV6 1SNA 168 962 R0400
	<b>13</b> Shielding connector	th. 0.5	CBM5D 1SNA 173 530 R2400	CBM5D 1SNA 173 530 R2400
<b>R</b> See markers section		RC510	RC65 - RC610	

Other accessories see section accessories

(1) A circuit separator SC is required with the use of these accessories.

(2) Use of these accessories requires the cut-out of the block body (precut). (3) Except M 2,5/5.D2.1.Ex and M 4/6.D2.1.Ex

### Three level sensor terminal blocks

Screw clamp  DIN 3

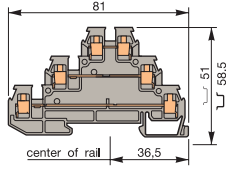


EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail.

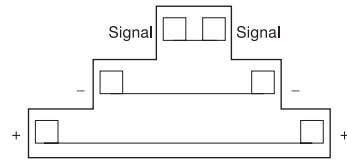
End stop		th. 12 mm	<b>BADH</b>	V2	1SNA 116 900 F2700
End stop		th. 9,1 mm	<b>BAMH V0</b>	V0	1SNA 194 836 F0100
Rail		35 x 7,5 x 1	<b>PR3.Z2</b>		1SNA 174 300 F1700
Rail		35 x 15 x 2,3	<b>PR4</b>		1SNA 168 500 F1200
Rail		35 x 15 x 1,5	<b>PR5</b>		1SNA 168 700 F2200

### D 2,5/6.DA...Ex

Spacing 6 mm .238"



Three level block for power without ground protection.



Power supply block for sensors/actuators - Three-wires without Led.

		Type	P/N
Standard blocks UL 94 V0	Grey body	<b>D 2,5/6.DA.Ex</b>	1SNA 146 098 F2000
	Blue body	<b>D 2,5/6.DA.N.Ex</b>	1SNA 146 104 F2300

### Characteristics

		IEC NFC DIN	UL	CSA
Wire size	Solid wire	0.2 - 2.5	20-12 AWG	22-14 AWG
	Stranded wire	0.22 - 2.5		
mm <sup>2</sup> / AWG				
Rated wire size	mm <sup>2</sup> / AWG	2.5 mm <sup>2</sup>	12 AWG	14 AWG
Wire stripping length	mm / inches	6 mm / .24"		
Recommended torque	Nm / lb.in	0.4-0.6 Nm / 3.5-5.3 lb-in		
Voltage	EN 50019 / EN 50020	EExe : 60 V	EExi : 30 V	
Current	EN 50019 / EN 50020	EEx : 22 A		
ATEX marking				
		EEx e/i I / II		
ATEX certificate		LCIE 03 ATEX 0024U		

### Accessories

		Type	P/N	
	1 End section	grey	FED3E th. 3  1SNA 116 771 F2000	
	2 Preassembled jumper bar	2 poles	BJD6	1SNA 178 024 F2500
		3 poles	BJD6	1SNA 178 025 F2600
		4 poles	BJD6	1SNA 178 026 F2700
		5 poles	BJD6	1SNA 178 027 F2000
		10 poles	BJD6	1SNA 178 032 F2500
	20 poles	BJD6	1SNA 178 033 F2600	
3 Connector plate	22 A	EL61	1SNA 177 812 F1700	
4 IDC jumper	24 A	AD2,5	1SNA 114 205 F2000	
	R See markers section	RC65 red - blank	1SNA 103 776 F0100	
		RC65 blue - blank	1SNA 103 775 F0000	

Other accessories see section accessories



## Safety connection terminal blocks

Screw clamp  DIN 1-3



EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail.

End stop		th. 9 mm	BADL	V0	1SNA 399 903 P0200
End stop		th. 9,1 mm	BAM	V2	1SNA 103 002 P2600
End stop		th. 9,1 mm	BAM V0	V0	1SNA 199 306 P0300
Rail		35 x 7,5 x 1	PR3.Z2		1SNA 174 300 R1700
Rail		35 x 15 x 2,3	PR4		1SNA 168 500 R1200
Rail		35 x 15 x 1,5	PR5		1SNA 168 700 R2200
Rail		32 x 15 x 1,5	PR1.Z2		1SNA 163 050 R0400

Standard blocks UL 94 V0 Grey body

### Characteristics

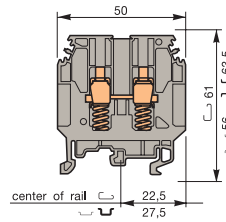
<b>Wire size</b>	Screw clamp	Solid wire Flexible wire
<b>mm<sup>2</sup> / AWG</b>	Lugs	Flexible wire mm <sup>2</sup> / AWG
<b>Rated wire size</b>		mm <sup>2</sup> / AWG
<b>Wire stripping length</b>		mm / inches
<b>Recommended torque</b>		Nm / lb.in
<b>Voltage</b>		EN 50019 / EN 50020
<b>Current</b>		EN 50019 / EN 50020
<b>ATEX marking</b>		
<b>ATEX certificate</b>		

### Accessories

	1 End section	grey beige V0
	2 Test socket	DIA. 2 mm DIA. 4 mm
	3 Test plug	
	4 Jumper bar not assembled	
	5 Assembled jumper bar not IP 20	Screw + post + washer Central socket for isolated interconnection Screw for central socket
	6 Assembled jumper bar with IP 20 touchproof	
	7 Bridging plug	
	R See markers section	
	Other accessories see section accessories	

### M 6/8.RS.Ex

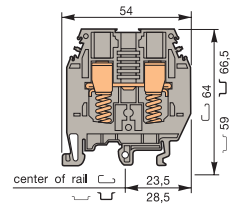
Spacing 8 mm .315"



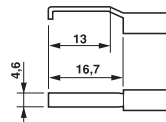
Compression clamp terminal for bare wire or equipped with bent lug.  
- 1 spring under each wire-clamp

### M 10/10.RS.Ex

Spacing 10 mm .394"



Compression clamp terminal for bare wire or equipped with bent lug.  
- 1 spring under each wire-clamp



Ground wire-clamp holds 2 bent lugs, as above (not supplied) for connection of wires :

- 0.28 to 1.5 mm<sup>2</sup>
- 1.0 to 2.5 mm<sup>2</sup>
- 2.5 to 6.0 mm<sup>2</sup> (only for M 10/10.RS.Ex)

Type	P/N	Type	P/N		
<b>M 6/8.RS.Ex</b>	1SNA 146 211 P2500	<b>M 10/10.RS.Ex</b>	1SNA 146 212 P2600		
<b>IEC NFC DIN</b>	<b>BS TS 50-18</b>	<b>UL/CSA</b>	<b>IEC NFC DIN</b>	<b>BS TS 50-18</b>	<b>UL/CSA</b>
0.5 - 10		20-12 AWG	0.5 - 16		20-6 AWG
0.5 - 6			0.5 - 10		
	0.28 - 2.5			0.28 - 6	
6 mm <sup>2</sup>	2.5 mm <sup>2</sup>	12 AWG	10 mm <sup>2</sup>	6 mm <sup>2</sup>	6 AWG
13 mm / .51"			14 mm / .55"		
0.8-1 Nm / 7.1-8.9 lb-in			1.2-1.4 Nm / 10.6-12.3 lb-in		
EExe : 550 V		EExi : 375 V	EExe : 550 V		EExi : 375 V
EEx : 41 A			EEx : 41 A		
Ex I M2 / M1		Ex II 2G / 1G	Ex I M2 / M1		Ex II 2G / 1G
EEx e/i I / II			EEx e/i I / II		
LCIE 02 ATEX 0012U			LCIE 02 ATEX 0012U		
Type	P/N	Type	P/N		
FEMR8	th. 2,8  1SNA 146 272 P0200	FEMR10	th. 2,8  1SNA 146 273 P0300		
FEMR8 V0	th. 2,8  1SNA 196 987 P0300	FEMR10 V0	th. 2,8  1SNA 194 434 P0600		
AL4	1SNA 179 762 P1600	AL4	1SNA 168 237 P0500		
FC4	1SNA 167 860 P0100	FC4	1SNA 167 860 P0100		
BJS8 (1)	2 poles 1SNA 164 581 R1300	BJS10 (1)	2 poles 1SNA 164 585 R1700		
BJS8 (1)	3 poles 1SNA 164 582 R1400	BJS10 (1)	3 poles 1SNA 164 586 R1000		
BJS8 (1)	4 poles 1SNA 164 583 R1500	BJS10 (1)	4 poles 1SNA 164 587 R1100		
BJS8 (1)	5 poles 1SNA 164 737 P2600	BJS10 (1)	5 poles 1SNA 168 273 R1100		
BJS8 (1)	10 poles 1SNA 164 584 R1600	BJS10 (1)	10 poles 1SNA 164 588 P2200		
BJS8 (1)	15 poles 1SNA 174 788 P0400	BJS10 (1)	20 poles 1SNA 177 654 P0000		
BJS8 (1)	20 poles 1SNA 174 789 P0500				
EV6	1SNA 168 604 R1600	PT101	1SNA 163 181 R1100		
		VSJ11	1SNA 163 394 P2600		
BJM8 (1)	2 poles 1SNA 168 520 P0500		2 poles		
BJM8 (1)	3 poles 1SNA 168 521 P2200		3 poles		
BJM8 (1)	4 poles 1SNA 168 522 P2300		4 poles		
BJM8 (1)	5 poles 1SNA 168 523 P2400		5 poles		
BJM8 (1)	10 poles 1SNA 168 974 P0000		10 poles		
BJM8 (1)	2 poles 1SNA 176 669 R1600		2 poles		
BJM8 (1)	3 poles 1SNA 176 670 R1300		3 poles		
BJM8 (1)	4 poles 1SNA 176 671 P0000		4 poles		
BJM8 (1)	5 poles 1SNA 176 672 P0100		5 poles		
BJM8 (1)	10 poles 1SNA 176 673 P0200		10 poles		
BP8.A4	1SNA 173 888 P2000				
RC810		RC610- RC810			








(1) Use of these accessories requires the cut-out of the block body (precut).

# Thermocouple terminal blocks

Screw clamp  DIN 1-3



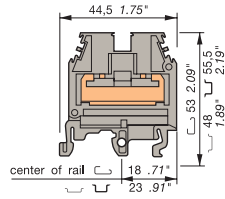
EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail.

End stop		th. 9 mm	<b>BADL</b>	V0	1SNA 399 903 F0200
End stop		th. 9,1 mm	<b>BAM</b>	V2	1SNA 103 002 F2600
End stop		th. 9,1 mm	<b>BAM V0</b>	V0	1SNA 199 306 F0300
Rail		35 x 7,5 x 1	<b>PR3.Z2</b>		1SNA 174 300 F1700
Rail		35 x 15 x 2,3	<b>PR4</b>		1SNA 168 500 F1200
Rail		35 x 15 x 1,5	<b>PR5</b>		1SNA 168 700 F2200
Rail		32 x 15 x 1,5	<b>PR1.Z2</b>		1SNA 163 050 F0400

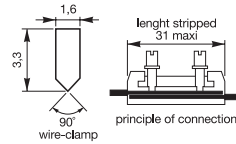
Standard blocks UL 94 V0  Grey body

## MTC 6.Ex

Spacing 6 mm .238"



6 mm block for thermocouple wires.



## Thermocouple terminal blocks

ABB Entelec's MTC 6.Ex thermocouple terminal block provides an interface for connecting thermocouple wire with virtually no loss of signal integrity. The interface design ensures positive wire continuity and allows selection and inventory of one terminal block for all thermocouple material.



Figure 1 : MTC 6.Ex with shield connector

The thermocouple principle is based on the reaction of different metals to temperature. When thermocouple wires are terminated or connected, the "metal balance" must be maintained. The introduction of a foreign material (such as copper) results in loss of signal strength and integrity.

When running extended or intermittent lengths of thermocouple wire, to a measurement instrument, two solutions are available :

1. When signals are carried over a long distance, a thermocouple transmitter is required. The thermocouple signal, in millivolts (mV), is converted to a milliampere (mA) signal (i.e. 4-20 mA) for ease of transmission.
2. When thermocouple wire is of insufficient length, termination and interconnection, using terminal blocks, will extend its length.

### Universal terminal block

Other thermocouple terminal blocks are available with hardware (screws, clamps and connecting bar) which match the thermocouple

material being used. This requires inventory of many different terminal block types.

ABB Entelec's MTC 6.Ex terminal block adapts to all thermocouple material. This "neutral" method of connection limits the introduction of foreign materials to an insignificant level. The thermocouple wire insulation is stripped (31 mm maximum) and the bare wires are superimposed on one another. The thermocouple wires are in contact over their complete 31 mm length and tightened at two points by round tip screws (see figure 2).

## Characteristics

<b>Wire size</b>	Solid wire Flexible wire With isolated ferrule	2 Conductors for thermocouple (DIA. 0.9 - 1.5 mm)
<b>mm<sup>2</sup> / AWG</b>		
<b>Rated wire size</b>	mm <sup>2</sup> / AWG	
<b>Wire stripping length</b>	mm / inches	31 mm max. / 1.22"
<b>Recommended torque</b>	Nm / lb.in	0.4-0.6 Nm / 3.5-5.3 lb.in
<b>Voltage</b>	EN 50019 / EN 50020	EExe : 550 V EExi : 90 V
<b>Current</b>	EN 50019 / EN 50020	
<b>ATEX marking</b>		Ex I M2 / M1 Ex II 2G / 1G EEx e/i I / II
<b>ATEX certificate</b>		LCIE 02 ATEX 0025U

## Accessories

	Type	P/N
1 End section	grey <input type="checkbox"/>	FEM6 V0 th. 2.8 1SNA 146 259 F1500
2 Shield connector		CBM5 th. 0.5 1SNA 178 745 F1400 CBM6 th. 0.8 1SNA 178 746 F1500

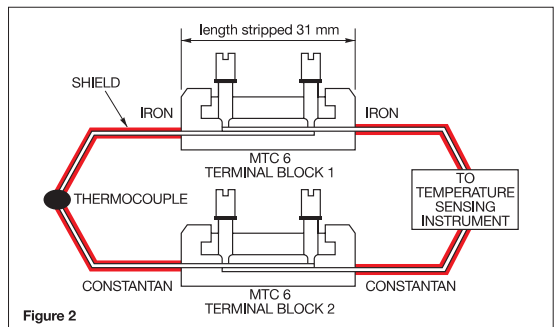
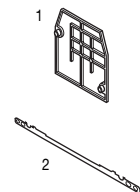


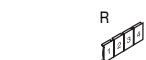
Figure 2

The screws, made of plated brass, have only a mechanical function, that of holding the wires together with a point contact. Thus, the pressure points are not relevant in the connection environment. One thermocouple lead connects through one terminal block.

The MTC 6 requires only 6 mm of space, allowing 50 terminals per foot of rail.

### Thermocouple shield wire connector bar

The MTC 6.Ex can be field of factory equipped with a shield connector bar (see figure 1). This bar, made of treated brass, mounts in the lower part of the terminal block. It ensures the continuity of the thermocouple wire shield through the terminal block or to ground with no additional spacing.



R See markers section RC65 - RC610

Other accessories see section accessories

# Power terminal blocks

**DIN 3 with bistable foot and base mounting**

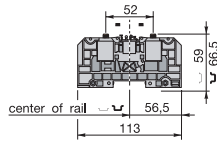


EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail.

End stop		th. 12 mm	BADH	V2	1SNA 116 900 R2700
End stop		th. 9,1 mm	BAMH V0	V0	1SNA 194 836 R0100
Rail		35 x 7,5 x 1	PR3.Z2		1SNA 174 300 R1700
Rail		35 x 15 x 2,3	PR4		1SNA 168 500 R1200
Rail		35 x 15 x 1,5	PR5		1SNA 168 700 R2200

## D 35/27.FF.Ex

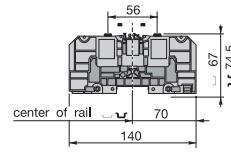
Spacing 27 mm 1.06"



2 studs M10

## D 70/32.FF.Ex

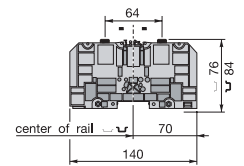
Spacing 32 mm 1.26"



2 studs M8

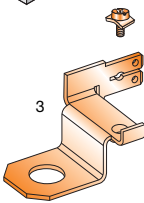
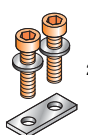
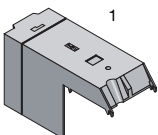
## D 120/42.FF.Ex

Spacing 42 mm 1.65"



2 studs M10

		Type	P/N	Type	P/N	Type	P/N
Standard block UL 94 V0 <input type="checkbox"/> Grey body		D 35/27.FF.Ex <input type="checkbox"/> 1SNA 146 307 R0600		D 70/32.FF.Ex <input type="checkbox"/> 1SNA 146 308 R1700		D 120/42.FF.Ex <input type="checkbox"/> 1SNA 146 309 R1000	
		Delivered with 2 covers		Delivered with 2 covers		Delivered with 2 covers	
		D 35/27.FF.Ex <input type="checkbox"/> 1SNA 146 302 R0100		D 70/32.FF.Ex <input type="checkbox"/> 1SNA 146 303 R0200		D 120/42.FF.Ex <input type="checkbox"/> 1SNA 146 304 R0300	
		Without cover		Without cover		Without cover	
<b>Characteristics</b>		IEC NFC	IEC DIN	UL/CSA	IEC NFC	IEC DIN	UL/CSA
Wire size	Lug Solid wire	(C4) 2.5 - 35	2.5 - 50	1 AWG	(C6) 6 - 95	6 - 70	000 AWG
	Flexible wire	(C4) 2.5 - 35	2.5 - 35	1 AWG	(C6) 6 - 70	6 - 70	000 AWG
mm <sup>2</sup> / AWG							
Rated wire size	mm <sup>2</sup> / AWG	35 mm <sup>2</sup>	35 mm <sup>2</sup>	1 AWG	70 mm <sup>2</sup>	70 mm <sup>2</sup>	000 AWG
Recommended wrench	Lug / Central bolt	H10 mm / 6 pans creux 6 mm		H13 mm / 6 pans creux 6 mm		H17 mm / 6 pans creux 6 mm	
Recommended torque	Nm / lb.in	3 Nm / 26.1 lb-in / 6 Nm / 52 lb-in		6 Nm / 52 lb-in / 6 Nm / 52 lb-in		10 Nm / 87 lb-in / 6 Nm / 52 lb-in	
Voltage	EN 50019	750 V		750 V		750 V	
Current	EN 50019	125 A		192 A		269 A	
ATEX marking		Ⓔ I M1 - II 2G		Ⓔ I M1 - II 2G		Ⓔ I M1 - II 2G	
ATEX certificate		LCIE 03 ATEX 0034U		LCIE 03 ATEX 0034U		LCIE 03 ATEX 0034U	
<b>Accessories</b>		Type	P/N	Type	P/N	Type	P/N
1 Rotating protective cover IP20 Grey		CPUF35	1SNA 190 016 R1600	CPUF70	1SNA 190 017 R1700	CPUF120	1SNA 190 018 R2000
2 Jumper bar with CHc screws							
		BJS27	1SNA 205 772 R1300	BJS32	1SNA 205 774 R1500	BJS42	1SNA 205 776 R1700
		BJS27	1SNA 205 773 R1400	BJS32	1SNA 205 775 R1600	BJS42	1SNA 205 777 R1000
3 TAP for faston 6.35 x 0.8 mm and screw		DRF6	1SNA 205 767 R1600	DRF8	1SNA 205 768 R2700	DRF10	1SNA 205 769 R2000
R See marking chapter		RC810 (on cover) - RC810, RPC (on the middle)		RC810 (on cover) - RC810, RPC (on the middle)		RC810 (on cover) - RC810, RPC (on the middle)	
Other accessories see section accessories							










## Power terminal blocks

 **DIN 3 with bistable foot and base mounting**

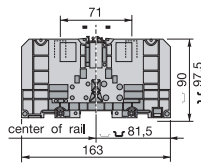


EExe and EExi voltage ratings apply to terminal blocks only without any accessory and mounted on DIN 3 rail.

End stop		th. 12 mm	<b>BADH</b>	V2	1SNA 116 900 R2700
End stop		th. 9,1 mm	<b>BAMH V0</b>	V0	1SNA 194 836 R0100
Rail		35 x 7,5 x 1	<b>PR3.Z2</b>		1SNA 174 300 R1700
Rail		35 x 15 x 2,3	<b>PR4</b>		1SNA 168 500 R1200
Rail		35 x 15 x 1,5	<b>PR5</b>		1SNA 168 700 R2200

### D 185/55.FF.Ex

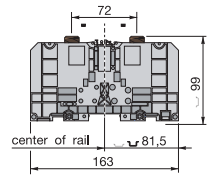
Spacing 55 mm 2.16"



2 studs M12

### D 300/55.FF.Ex



Spacing 55 mm 2.16"



2 studs M16

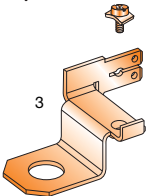
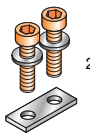
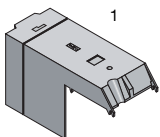
	Type	P/N	Type	P/N
Standard block UL 94 V0 <input type="checkbox"/> Grey body	<b>D 185/55.FF.Ex</b> <input type="checkbox"/> 1SNA 146 310 R0400		<b>D 300/55.FF.Ex</b> <input type="checkbox"/> 1SNA 146 311 R2100	
	Delivered with 2 covers		Delivered with 2 covers	
	<b>D 185/55.FF.Ex</b> <input type="checkbox"/> 1SNA 146 305 R0400		<b>D 300/55.FF.Ex</b> <input type="checkbox"/> 1SNA 146 306 R0500	
	Without cover		Without cover	

## Characteristics

	IEC NFC	IEC DIN	UL/CSA	IEC NFC	IEC DIN	UL/CSA
<b>Wire size</b>						
Lug	Solid wire	(C11) 25 - 240	6 - 185	500 MCM	25 - 300	6 - 300
	Flexible wire	(C11) 6 - 185		500 MCM	6 - 300	1000 MCM
<b>mm<sup>2</sup> / AWG</b>						
<b>Rated wire size</b>	mm <sup>2</sup> / AWG/MCM	185 mm <sup>2</sup>	185 mm <sup>2</sup>	500 MCM	300 mm <sup>2</sup>	300 mm <sup>2</sup>
<b>Recommended wrench</b>	lug / central bolt	H19 mm / 6 pans creux 6 mm			H24 mm / 6 pans creux 6 mm	
<b>Recommended torque</b>	Nm / lb.in	14 Nm / 121 lb-in / 6 Nm / 52 lb-in			25 Nm / 217 lb-in / 6 Nm / 52 lb-in	
<b>Voltage</b>	EN 50019	750 V			750 V	
<b>Current</b>	EN 50019	353 A			520 A	
<b>ATEX marking</b>		 I M1 - II 2G			 I M1 - II 2G	
<b>ATEX certificate</b>		EEx e			EEx e	
		LCIE 03 ATEX 0034U			LCIE 03 ATEX 0034U	

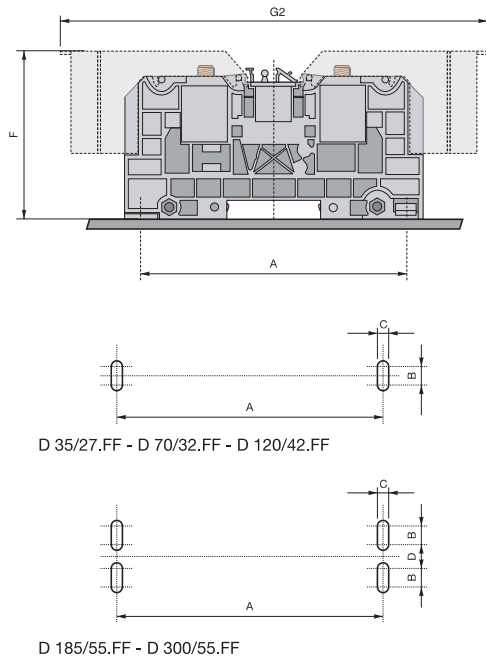
## Accessories

	Type	P/N	Type	P/N	
<b>1</b> Rotating protective cover IP20 Grey	CPUF185	1SNA 190 019 R2100	CPUF185	1SNA 190 019 R2100	
<b>2</b> Jumper bar with CHc screws	2 poles	BJS51	1SNA 205 778 R2100	BJS51	1SNA 205 778 R2100
	3 poles	BJS51	1SNA 205 779 R2200	BJS51	1SNA 205 779 R2200
<b>3</b> TAP for faston 6.35 x 0.8 mm and screw	DRF12	1SNA 205 770 R2500	DRF16	1SNA 205 771 R1200	
<b>R</b> See marking chapter	RC810 (on cover) - RC810, RPC (on the middle)		RC810 (on cover) - RC810, RPC (on the middle)		
Other accessories see section accessories					

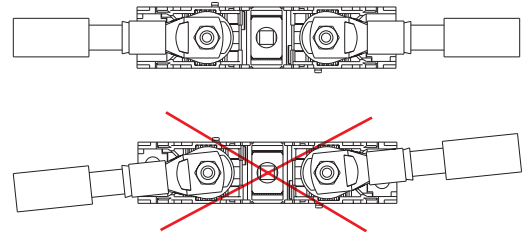


# Power terminal blocks

## Drilling position for base mounting and dimensions with covers



### Particular conditions for mounting



Type	Mounting with	A	B	C	D	F	G1	G2	H
D 35/27...	2 Screws	100,5	7,5	6,5	/	63,5	136,5	160	82,5
D 70/32...	2 Screws	120	7,5	6,5	/	72,5	165	190,5	105,7
D 120/42...	2 Screws	120	7,5	6,5	/	83,5	197	255,5	129,7
D 185/55...	4 Screws	135	13,5	6,5	8,5	103,5	228,5	295	151,5
D 300/55...	4 Screws	135	13,5	6,5	8,5	105	/	295	/

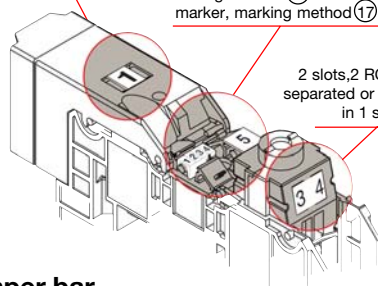
Dimensions in mm.

### Marking

2 RC 810 or 1 RC 1010, marking method (17)(28)

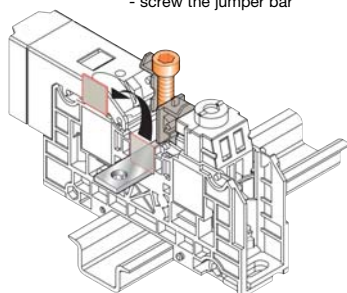
RPC type setting marker, marking method (20) or RC 810 marker, marking method (17)

2 slots, 2 RC810 not separated or 1 RC 1010 in 1 slot



### Jumper bar

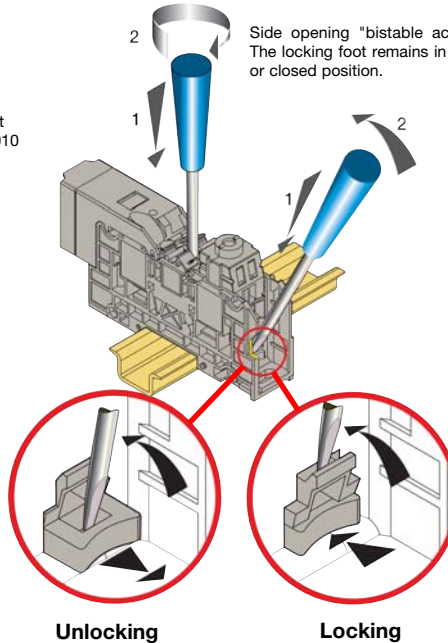
- move the marker holders up
- cut out the partition
- screw the jumper bar



### Locking foot operating with screwdriver DIA. 4

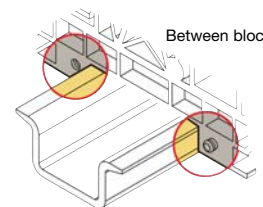
Center opening (to be made after jumper bar has been removed) "monostable action". As soon as the screwdriver is removed, the locking foot comes back to closed position

Side opening "bistable action". The locking foot remains in open or closed position.

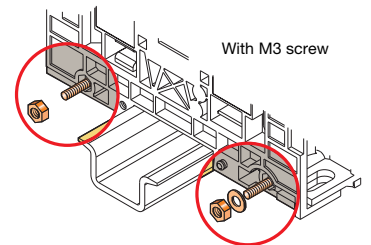


### Locking

Between blocks with stul

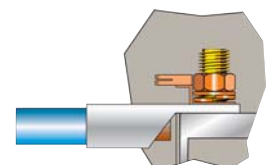


With M3 screw



M3 nut on one side  
M3 nut + washer on the other side

### Mounting of the derivative system



# Standard and ground Terminal blocks

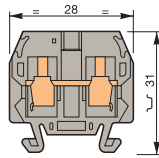
Screw clamp  DIN 2



EExe and EExi voltage ratings apply to terminal blocks only without any accessory.  
The use of ground terminal blocks do not decrease the standard terminal block's voltage ratings.

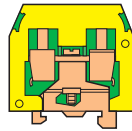
## DR 4/6... .Ex

Spacing 6 mm .238"








DR 4/6.Ex : Standard block 6 mm  
DR 4/6.1.Ex : Standard block 6 mm with partition.

## DR 4/6.P.Ex



Terminal block for ground wire.





End stop		th. 6.5 mm	BADRL	V0	1SNA 199 420 F2100
Rail		15 x 5 x 1	PR2		1SNA 164 600 F1200

	Type	P/N
Standard blocks UL 94 V0	DR 4/6.Ex  1SNA 146 199 F2200	
	DR 4/6.1.Ex  1SNA 146 200 F1700	
	DR 4/6.N.Ex  1SNA 146 276 F0600	
	DR 4/6.1.N.Ex  1SNA 146 277 F0700	
Terminal blocks for ground wires UL 94 V0	DR 4/6.P.Ex  1SNA 146 201 F0400	

## Characteristics

	IEC NFC DIN	UL	CSA
Wire size	Solid wire 0.2 - 4 Flexible wire 0.22 - 4	18-12 AWG	18-12 AWG
mm <sup>2</sup> / AWG	With isolated ferrule		
Rated wire size	mm <sup>2</sup> / AWG	4 mm <sup>2</sup> 12 AWG	12 AWG
Wire stripping length	mm / inches	9.5 mm max. / .37"	
Recommended torque	Nm / lb.in	0.5-0.8 Nm / 4.4-7.1 lb.in	
Voltage	EN 50019 / EN 50020	EExe : 275 V	EExi : 90 V
Current	EN 50019 / EN 50020	30 A	
ATEX marking		Ex I M2 / M1 Ex II 2G / 1G	
ATEX certificate		EEEx e/i I / II	
		LCIE 02 ATEX 0017U / 0024U	

## Accessories

	Type	P/N
1 End section	grey  FEDR61 V0 th. 1 1SNA 146 293 F2000	
	blue  FEDR61 th. 1 1SNA 127 600 F0500	
	yellow  FEDR63 th. 1 1SNA 103 975 F2100	
2 Circuit separator	white  SCDR61 th. 0,3 1SNA 173 016 F1000	
3 Test socket	DIA. 2 mm AL2 1SNA 167 319 F0600	
4 Test device		
5 Test plug	DIA. 2 mm FC2 1SNA 007 865 F2600	
6 Assembled jumper bar not IP20	2 poles BJM62 (1) 32 A 1SNA 173 217 F2600	
	3 poles BJM62 (1) 32 A 1SNA 173 218 F0700	
	4 poles BJM62 (1) 32 A 1SNA 173 219 F0000	
	5 poles BJM62 (1) 32 A 1SNA 173 221 F2200	
	6 poles BJM62 (1) 32 A 1SNA 174 112 F1600	
	7 poles BJM62 (1) 32 A 1SNA 174 113 F1700	
	8 poles BJM62 (1) 32 A 1SNA 174 114 F1000	
	9 poles BJM62 (1) 32 A 1SNA 174 115 F1100	
	10 poles BJM62 (1) 32 A 1SNA 173 226 F2700	
7 Jumper bar not assembled		
Post + screw + washer		
8 Pivoting jumper bar	BJPD6 1SNA 173 223 F2400	
9 Comb-type jumper bar	10 poles PC61 1SNA 163 311 F2200	
10 Protection label	3 blocks EPD61 1SNA 173 206 F0400	
Screw for protection label	VSPD61 1SNA 173 207 F0500	
R See markers section	RC65	
Other accessories see section accessories		

(1) Use of these accessories requires the cut-out of the block body (precut).