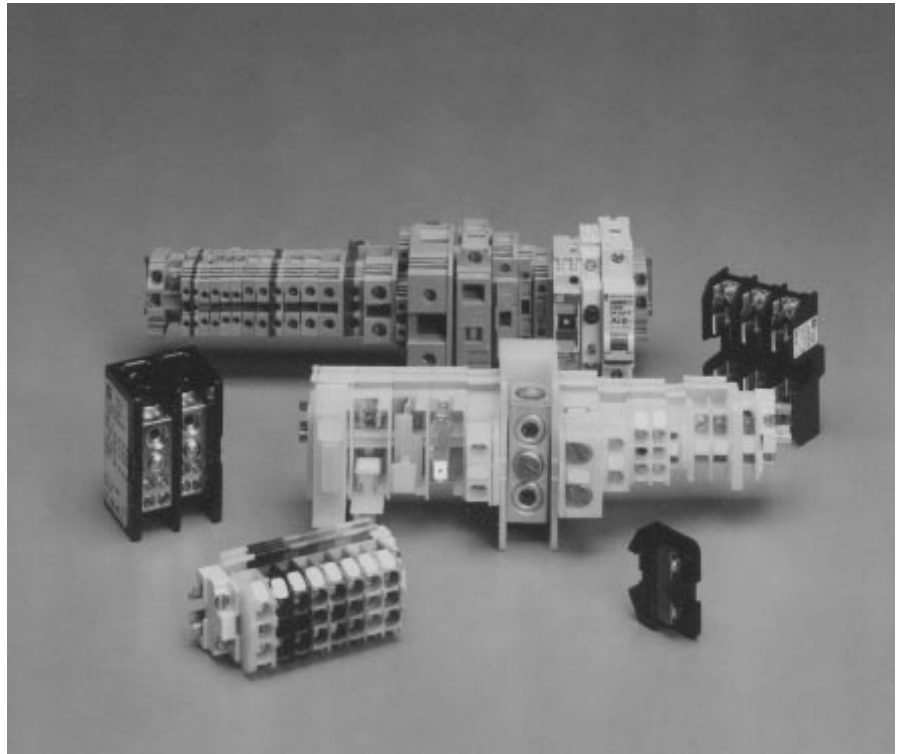


Terminal Blocks IEC Type

Class 9080



CATALOG CONTENTS

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HOW TO ORDER

To Order Specify:	Catalog Number	
<ul style="list-style-type: none">• Class Number• Type Number	Class	Type
	9080	M4/6G



IEC Type Terminal Blocks

FAMILY	DESCRIPTION
 <p>CLASS 9080 TYPE G</p>	<p style="text-align: center;">NEMA TYPE TERMINAL BLOCKS</p> <p>This family of blocks and accessories offers a wide variety of features like DIN 3 track mounting, colored blocks, terminal screws shipped backed out, captive screws and higher density to save you both money and time. This line also includes a direct mount block that can be panel or track mounted. Standard track comes in common lengths and breakoff styles. All blocks are UL component recognized and CSA approved. REFER to Catalog 9080CT9601.</p>
 <p>CLASS 9080 TYPE M (Pages 2-12)</p>	<p style="text-align: center;">IEC TYPE TERMINAL BLOCKS</p> <p>This family of blocks and accessories is accepted around the world. These blocks mount on 35mm (DIN 3) track, making it convenient when other IEC type products are being used in a control panel. Blocks like the grounding block, the thermocouple block, the glass fuse holder and the stripless box lug block make this a very complete line. The newest additions to this family are the 5mm blocks, the miniature blocks and the direct mount blocks. Most blocks are UL component recognized and CSA approved.</p>
 <p>CLASS 9080 TYPE FB</p>	<p style="text-align: center;">FUSE HOLDERS</p> <p>This family of fuse holders will accept Types H, R, CC, M and J fuses up to 200 amperes. Both 250 V and 600 V versions are available. All Class H, R and J fuses are supplied as standard with reinforced fuse clips to provide long reliable service. All fuse holders are UL Listed and CSA approved. REFER to Catalog 9080CT9603.</p>
 <p>CLASS 9080 TYPE LB</p>	<p style="text-align: center;">POWER DISTRIBUTION BLOCKS</p> <p>These power distribution and splicer blocks are available in one, two and three pole versions, with either aluminum or copper lugs, which are available in a wide variety of sizes. Whatever your application is, this family should have a block to meet your needs. A wide selection of covers makes this family complete. All these power distribution blocks are UL component recognized and CSA approved. REFER to Catalog 9080CT9603.</p>
 <p>CLASS 9080 TYPE K</p>	<p style="text-align: center;">OPEN STYLE NEMA TYPE TERMINAL BLOCKS</p> <p>These blocks are ideal for those applications with high ambient temperatures or where it is desirable to have easy accessibility to the lugs. Some of the blocks are UL component recognized and CSA approved. REFER to Catalog 9080CT9601.</p>
 <p>CLASS 9080 TYPE GCB GB2 (Pages 9-10)</p>	<p style="text-align: center;">CIRCUIT PROTECTORS</p> <p>There are two families of circuit protectors. One will be right for your application. The Class 9080 Type GCB thermal magnetic product is available from 0.1 amp through 15 amp and offers high density. The Telemecanique GB2 thermal magnetic product is available from 0.5 amp through 12 amp and is available world wide.</p>
<p>(Pages 13-16)</p>	<p style="text-align: center;">DIMENSIONS</p>



IEC Type Terminal Blocks

Box Lug Termination

CLASS 9080	TYPE MA2.5/5	TYPE M4/6	TYPE M6/8
Maximum Voltage Rating	600	600	600
Maximum Amperage Rating *	20	30	50
Wire Range	#22 to #12 AWG	#22 to #10 AWG	#22 to #8 AWG
Maximum Wire Combination	1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22	1 - #10 1 or 2 - #18 1 - #12 1 to 3 - #20 1 - #14 1 to 3 - #22 1 or 2 - #16	1 - #8 1 or 2 - #16 1 - #10 1 to 3 - #18 1 - #12 1 to 3 - #20 1 or 2 - #14 1 to 3 - #22
Wire Type	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire
Density - Sections per foot (per meter)	60 (200)	50 (166)	38 (125)
Approx. Dimensions (D)x(H)x(W)	1.75 x 1.89 x .20 inches 44.5 x 48.0 x 5.0 mm	1.75 x 1.89 x .24 inches 44.5 x 48.0 x 6.0 mm	1.75 x 1.89 x .31 inches 44.5 x 48.0 x 8.0 mm
Temperature Rating	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C
Flammability Rating	UL94V2	UL94V2	UL94V2
Recommended Screw Tightening Torque	3.5-5.3 lbf-in 0.4-0.6 N-m	3.5-5.3 lbf-in 0.4-0.6 N-m	7.1-8.9 lbf-in 0.8-1.0 N-m
Listings	File E60616	Guide XCFR2	
Block: Grey	MA2.5/5G	M4/6G	M6/8G
Blue		M4/6B	M6/8B
End Barrier	MFEM6	MFEM6	MFEM6
DIN 3 Mounting Track: ▲ Track Listings			
Galvanized Steel:			
0.5 Meter Long	MH220	MH220	MH220
1.0 Meter Long	MH239	MH239	MH239
2.0 Meter Long	MH279	MH279	MH279
Galvanized Steel - Prepunched:			
0.5 Meter Long	MH320	MH320	MH320
1.0 Meter Long	MH339	MH339	MH339
2.0 Meter Long	MH379	MH379	MH379
End Clamps: Screw-in	MH10 or MHA10	MH10 or MHA10	MH10 or MHA10
10 Pole Jumper Bar for Top	MH705	MH70	MH72
10 Pole Comb Side Jumper Bar	MH715	MH71	MH73
Stripless Jumper - 1 pole	MH76	MH76	MH76
Circuit Separator		MH63	MH63
Vinyl Marking Strip		MH20	MH20
Blank Marking Tabs - 100	MH25	MH21	MH26
Marked Tabs - from 1 to 100		MH22	MH26100
Marked Tabs - from 101 to 200		MH21200	
Marked Tabs - from 201 to 300		MH21300	
Marked Tabs - from 1 to 50 (2 sets)		MH23	MH2650
Screw in test probe adapter		MH91	MH91
Test Probe		MH90	MH90
Removable Test Probe Adapter	MH94	MH92	MH93

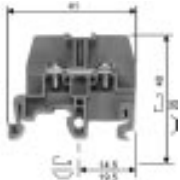
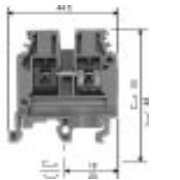
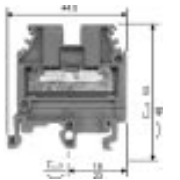

▲ See page 11 for additional track listings.

* These maximum current values assume the use of insulated copper conductors with 75° C temperature rating, and are calculated based on NEC Article 310, Table 310-16. In most cases this value is the maximum ampacity of that wire or combination of wires (as listed in the above table) which has the greatest current carrying capacity. The actual allowable current for a particular application is dependent upon the number, size, insulation class and other characteristics of the wires used.



IEC Type Terminal Blocks

Other Terminations

CLASS 9080	TYPE M6/9EE	TYPE M1.5/6ADV	TYPE MTC6
	 Flat Terminal Connector	 Stripless Lug	 Thermocouple Block
Maximum Voltage Rating	600	600	N/A
Maximum Amperage Rating *	40	20	N/A
Wire Range	#22 to #8 AWG	#20 to #14 AWG	N/A
Maximum Wire Combination	1 - #8 1 - #16 1 - #10 1 - #18 1 - #12 1 - #20 1 - #14 1 - #22	1 - #14 1 - #18 1 - #16 1 - #20	N/A
Wire Type	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Any Type of Thermocouple
Density - Sections per foot (per meter)	32 (105)	50 (166)	50 (166)
Approx. Dimensions (D)x(H)x(W)	1.61 x 1.38 x .37 inches 41.0 x 35.0 x 9.5 mm	1.75 x 1.89 x .24 inches 44.5 x 48.0 x 6.0 mm	1.75 x 1.89 x .24 inches 44.5 x 48.0 x 6.0 mm
Temperature Rating	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C
Flammability Rating	UL94V2	UL94V2	UL94V2
Recommended Screw Tightening Torque	7.1-8.9 lbf-in 0.8-1.0 N-m	3.5-5.3 lbf-in 0.4-0.6 N-m	3.5-5.3 lbf-in 0.4-0.6 N-m
Listings	 File E60616 Guide XCFR2		
Block: Grey	M6/9EE	M1.5/6ADV	MTC6
Blue			
End Barrier	MFEM9	MFEM6	MFEM6
DIN 3 Mounting Track: ▲ Track Listings			
Galvanized Steel:			
0.5 Meter Long	MH220	MH220	MH220
1.0 Meter Long	MH239	MH239	MH239
2.0 Meter Long	MH279	MH279	MH279
Bichromated Zinc Steel:			
0.5 Meter Long	MH320	MH320	MH320
1.0 Meter Long	MH339	MH339	MH339
2.0 Meter Long	MH379	MH379	MH379
End Clamps: Screw-in	MH10 or MHA10	MH10 or MHA10	MH10 or MHA10
10 Pole Jumper Bar for Top	MH79	MH70	
10 Pole Comb Side Jumper Bar		MH71	
Stripless Jumper - 1 pole		MH76	
Circuit Separator		MH63	
Vinyl Marking Strip	MH20	MH20	MH20
Blank Marking Tabs - 100		MH21	MH21
Marked Tabs - from 1 to 100		MH22	MH22
Marked Tabs - from 101 to 200		MH21200	MH21200
Marked Tabs - from 201 to 300		MH21300	MH21300
Marked Tabs - from 1 to 50 twice		MH23	MH23
Screw in test probe adapter		MH91	
Test Probe		MH90	
Removable Test Probe Adapter		MH92	

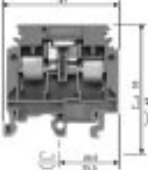

▲ See page 11 for additional track listings.

* These maximum current values assume the use of insulated copper conductors with 75° C temperature rating, and are calculated based on NEC Article 310, Table 310-16. In most cases this value is the maximum ampacity of that wire or combination of wires (as listed in the above table) which has the greatest current carrying capacity. The actual allowable current for a particular application is dependent upon the number, size, insulation class and other characteristics of the wires used.



IEC Type Terminal Blocks

Other Blocks

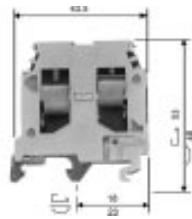
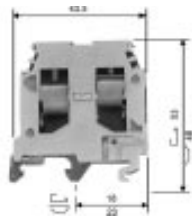
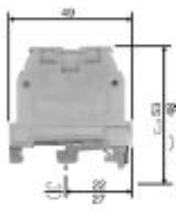

TYPE M4/6D2	TYPE M4/6DE1	TYPE MD2.5/6D	TYPE M6/8SN
 Two Tier Block	 Diode Block	 Three Tier Block	 Circuit Isolating Switch
300	300	300	600
20	20	15	20
#22 to # 12 AWG	#22 to #12 AWG	#22 to #16 AWG	#22 to #8 AWG
1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22	1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22	1 - #16 1 - #20 1 - #18 1 - #22	1 - #8 1 or 2 - #16 1 - #10 1 to 3 - #18 1 - #12 1 to 3 - #20 1 or 2 - #14 1 to 3 - #22
Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire
50 (166)	50 (166)	50 (166)	38 (125)
2.58 x 2.34 x .24 inches 65.5 x 59.5 x 6.0 mm	2.58 x 2.34 x .24 inches 65.5 x 59.5 x 6.0 mm	3.19 x 2.01 x .24 inches 81.0 x 51.0 x 6.0 mm	1.85 x 1.89 x .31 inches 47.0 x 48.0 x 8.0mm
-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C
UL94V2	UL94V2	UL94V2	UL94V2
3.5-5.3 lbf-in 0.4-0.6 N-m	3.5-5.3 lbf-in 0.4-0.6 N-m	3.5 lbf-in 0.4 N-m	7.1-8.9 lbf-in 0.8-1.0 N-m
	File E60616 Guide XCFR2		 File E60616 Guide XCFR2
M4/6D2	M4/6DE1	MD2.5/6D	M6/8SN
MFEM6D	MFEM6D	MFED3E	MFEM8
▲			
MH220	MH220	MH220	MH220
MH239	MH239	MH239	MH239
MH279	MH279	MH279	MH279
MH320	MH320	MH320	MH320
MH339	MH339	MH339	MH339
MH379	MH379	MH379	MH379
MH10 or MHA10	MH10 or MHA10	MH10 or MHA10	MH10 or MHA10
MH76	MH76	MH76	MH76
MH20	MH20		
MH21	MH21	DH20	MH26
MH22	MH22	DH21	MH26100
MH21200	MH21200		
MH21300	MH21300		
MH23	MH23		MH2650
MH91	MH91		
MH90	MH90		
MH92	MH92		

▲ See page 11 for additional track listings.



IEC Type Terminal Blocks

Grounding Terminal Blocks

CLASS 9080	TYPE MA2.5/5P	TYPE M6/8P	TYPE M16/12P
			
Wire Range	#22 to #12 AWG	#22 to #8 AWG	#14 to #4 AWG
Maximum Wire Combination	1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22	1 - #8 1 or 2 - #16 1 - #10 1 to 3 - #18 1 - #12 1 to 3 - #20 1 or 2 - #14 1 to 3 - #22	1 - #4 1 or 2 - #10 1 - #6 1 or 2 - #12 1 or 2 - #8 1 to 3 - #14
Wire Type	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire
Density - Sections per foot (per meter)	60 (200)	38 (125)	25 (83)
Approx. Dimensions (D)x(H)x(W)	1.71 x 1.89 x .20 inches 43.5 x 48.0 x 5.0 mm	1.71 x 1.89 x .31 inches 43.5 x 48.0 x 8.0 mm	1.93 x 1.89 x .47 inches 49.0 x 48.0 x 12.0 mm
Temperature Rating	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C
Flammability Rating	UL94V2	UL94V2	UL94V2
Recommended Screw Tightening Torque	3.5-5.3 lbf-in 0.4-0.6 N-m	7.1-8.9 lbf-in 0.8-1.0 N-m	10.6-12.3 lbf-in 1.2-1.4 N-m
Listings		 File E60616	Guide XCFR2
Block: Yellow/Green	MA2.5/5P	M6/8P	M16/12P
End Barrier	MFEM6	MFEM6	
DIN 3 Mounting Track: ▲ Track Listings			
Galvanized Steel:			
0.5 Meter Long	MH220	MH220	MH220
1.0 Meter Long	MH239	MH239	MH239
2.0 Meter Long	MH279	MH279	MH279
Bichromated Zinc Steel:			
0.5 Meter Long	MH320	MH320	MH320
1.0 Meter Long	MH339	MH339	MH339
2.0 Meter Long	MH379	MH379	MH379
End Clamps: Screw-in	MH10 or MHA10	MH10 or MHA10	MH10 or MHA10
Vinyl Marking Strip		MH20	MH20
Blank Marking Tabs - 100	MH25	MH26	MH26
Marked Tabs - from 1 to 100		MH26100	MH26100
Marked Tabs - from 1 to 50 (2 sets)		MH2650	MH2650
Removable Test Probe Adapter	MH94	MH93	

▲ See page 11 for additional track listings.



IEC Type Terminal Blocks Fuse Blocks

CLASS 9080	TYPE M4/8SF	TYPE M10/16SFL	TYPE M10/22S
Maximum Voltage Rating	600	600	600
Maximum Amperage Rating *	6.3	16	32
Wire Range	#22 to #12 AWG	#18 to #8 AWG	#18 to #6AWG
Maximum Wire Combination	1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22	1 - #8 1 - #14 1 - #10 1 - #16 1 - #12 1 - #18	1 - #6 1 - #14 1 - #8 1 - #16 1 - #10 1 - #18 1 - #12
Wire Type	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire
Density - Poles per foot (per meter)	38 (125)	19 (62)	13 (45)
Approx. Dimensions (D)x(H)x(W)	2.22 x 1.85 x .31 inches 56.5 x 47.0 x 8.0 mm	2.68 x 2.91 x .63 inches 68.0 x 74.0 x 16.0 mm	3.52 x 2.93 x .87 inches 89.5 x 74.5 x 22.0 mm
Temperature Rating	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C
Flammability Rating	UL94V2	UL94V2	UL94V2
Recommended Screw Tightening Torque	3.5-5.3 lbf-in 0.4-0.6 N-m	7.1-8.9 lbf-in 0.8-1.0 N-m	20 lbf-in 2.6 N-m
Listings	File E60616 Guide XCFR2		
1 Pole Fuse Block without Blown Fuse Indicator	M4/8SF	M10/16SFL	M10/22SFL
1 Pole Fuse Block with 110-220V Blown Fuse Indicator	M4/8SFL		
1 Pole Fuse Block with 24V Blown Fuse Indicator	M4/8SFD		
2 Pole Fuse Block without Blown Fuse Indicator			M10/22SD2
3 Pole Fuse Block without Blown Fuse Indicator			M10/22SD3
End Barrier	MFEM8S		
DIN 3 Mounting Track: ▲ Track Listings			
Galvanized Steel:			
0.5 Meter Long	MH220	MH220	MH220
1.0 Meter Long	MH239	MH239	MH239
2.0 Meter Long	MH279	MH279	MH279
Bichromated Zinc Steel:			
0.5 Meter Long	MH320	MH320	MH320
1.0 Meter Long	MH339	MH339	MH339
2.0 Meter Long	MH379	MH379	MH379
End Clamps: Screw-in	MH10 or MHA10	MH10 or MHA10	MH10 or MHA10
Blown Fuse Indicator:			
24 VDC LED		MH83	MH83
110-380 V Neon		MH81	MH81
10 Pole Jumper	MH30	MH31	MH32
Blank Marking Tabs - 100	MH26	MH26	MH26
Marked Tabs - from 1 to 100	MH26100	MH26100	MH26100
Marked Tabs - from 1 to 50 (2 sets)	MH2650	MH2650	MH2650

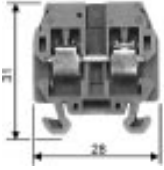
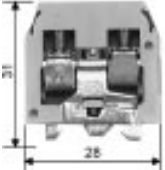
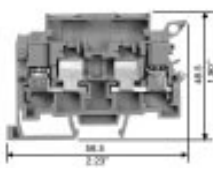



▲ See page 11 for additional track listings.

* These maximum current values assume the use of insulated copper conductors with 75° C temperature rating, and are calculated based on NEC Article 310, Table 310-16. In most cases this value is the maximum ampacity of that wire or combination of wires (as listed in the above table) which has the greatest current carrying capacity. The actual allowable current for a particular application is dependent upon the number, size, insulation class and other characteristics of the wires used.

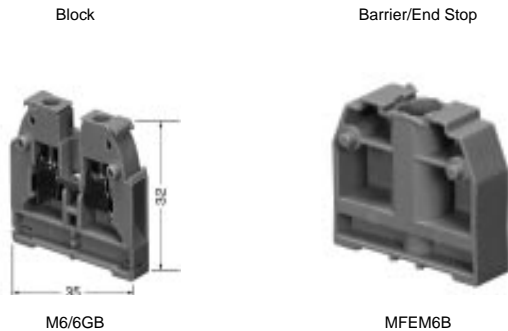



IEC Type Terminal Blocks

DIN 2 Miniature Blocks & Direct Mount Blocks

CLASS 9080	TYPE DR4/6G	TYPE DR4/6P	TYPE DR4/8SF
	 Miniature Box Lug Block	 Miniature Grounding Terminal Block	 Miniature Fuse Block for 5x20mm or 5x25mm fuses
Maximum Voltage Rating	250	N/A	600
Maximum Amperage Rating *	20	N/A	6.3
Wire Range	#28 to #12 AWG	#18 to #12 AWG	#22 to #12 AWG
Maximum Wire Combination	1 - #12 1 - #20 1 - #14 1 - #22 1 - #16 1 - #24 1 - #18 1 - #28	1 - #12 1 - #16 1 - #14 1 - #18	1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22
Wire Type	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire	Solid or Stranded Copper Wire
Density - Sections per foot (per meter)	50 (166)	50 (166)	38 (125)
Approx. Dimensions (D)x(H)x(W)	1.10 x 1.22 x .24 inches 28.0 x 31.0 x 6.0 mm	1.10 x 1.22 x .24 inches 28.0 x 31.0 x 6.0 mm	2.34 x 1.49 x .31 inches 59.5 x 38.0 x 8.0 mm
Temperature Rating	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C	-67 to 230° F -55 to 110° C
Flammability Rating	UL94V2	UL94V2	UL94V2
Recommended Screw Tightening Torque	3.5-5.3 lbf-in 0.4-0.6 N-m	3.5-5.3 lbf-in 0.4-0.6 N-m	3.5-5.3 lbf-in 0.4-0.6 N-m
Listings	 File E60616 Guide XCFR2	 File E102162 Guide KDER2	 File E60616 Guide XCFR2
Block:	DR4/6G	DR4/6P	DR4/8SF
End Barrier	DFEDR61		MFEM8S
DIN 2 Mounting Track:	DH179	DH179	DH179
End Clamps: Screw-in	DH10	DH10	DH10
Blank Marking Tabs - 100	DH20	DH20	DH20
Marked Tabs - from 1 to 100	DH21	DH21	DH21
10 Pole Jumper	MH33	MH33	MH30

CLASS 9080 DIRECT MOUNT BLOCKS

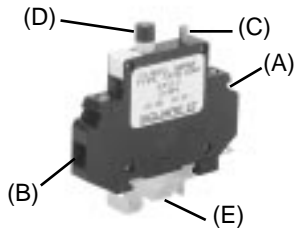


Maximum Voltage Rating	600
Maximum Amperage Rating *	20
Wire Range	#22 to #12 AWG
Maximum Wire Combination	1 - #12 1 - #18 1 - #14 1 - #20 1 - #16 1 - #22
Wire Type	Solid or Stranded Copper Wire
Density - Sections per foot (per meter)	50 (166)
Approx. Dimensions (D)x(H)x(W)	1.38 x 1.26 x .24 35.0 x 32.0 x 6.0 mm
Temperature Rating	-67 to 230° F -55 to 110° C
Flammability Rating	UL94V2
Recommended Screw Tightening Torque	3.5-5.3 lbf-in 0.4-0.6 N-m
Listings	 File E60616 Guide XCFR2

* These maximum current values assume the use of insulated copper conductors with 75° C temperature rating, and are calculated based on NEC Article 310, Table 310-16. In most cases this value is the maximum ampacity of that wire or combination of wires (as listed in the above table) which has the greatest current carrying capacity. The actual allowable current for a particular application is dependent upon the number, size, insulation class and other characteristics of the wires used.



IEC Type Terminal Blocks Supplementary Protectors One Pole Thermal-Magnetic Control Circuit Protectors



Single Pole Type GCB Circuit Protector Blocks

- A. Thermal-Magnetic circuit protector
- B. 14 different stock current ratings – 0.1 to 15 Amp
- C. On - Off switch
- D. Visible trip indication
- E. Mounts on Class 9080 Type GH track and on DIN mounting track.

The 9080GCB... have solderless box lugs. They accept 1 #10 - 16 Cu AWG wire.

The 9080GCB... circuit protectors come standard with the track adapter for mounting on 9080GH track (replacement adapter is 9080GH64. Removal of this adapter permits mounting on 9080MH2xx, MH3xx, and AM1 track. See page 8 for complete listing of available tracks. Use the 9080MH62 mounting adapter for the 9080MH1xx DIN 1 track.

Track adapter to mount 9080 GCB circuit breakers on 9080 MH1XX track or DIN 1 track	MH62
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Type GCB Circuit Protector Application Data

Technical Data:

Maximum voltage rating
250Vac/65Vdc (GCB01 through 70)
125Vac/65Vdc (GCB100 and 150)

Maximum interrupting rating 200 Amperes, but not exceeding 10,000% (100 times) rated current

Selection:

In order to properly select a Class 9080 Type GCB circuit protector, follow the following steps:

1. Determine the inrush correction factor from Table A at right.
2. Determine the temperature correction factor from Table B at right.
3. Determine the sealed current of the load that is being protected.
4. Multiply the sealed current by the two correction factors and choose the closest circuit protector. Note: Choosing a circuit protector with a value lower than the calculated value might cause nuisance tripping, while choosing the larger might provide a protector that will not properly protect the load.

Example: Solenoid with sealed current of .75 Amps, an inrush ratio of 1:6 and in an ambient temperature of 85°F.

$$0.75 \times 1.5 \times 1.05 = 1.18$$

Choose the 1.2 Amp protector

Technical Data:

Dielectric Strength	1500 Vac
Insulation Resistance	100 MΩ
Weight	approx. 2.2 oz.
Terminals	Box lug type
Recommended Tightening Torque	8-10 lbf-in (0.9-1.1 N-m)
Approvals	File E152841 CCN QVNU2 File LR25490
Fingersafe per DIN 57470	Yes

Maximum Current ▲	Internal Resistance (Ω)	Maximum Voltage	Catalog Number
0.1 0.5 0.8 1.0 1.2 1.5	1.33 6.6 2.55 1.97 1.22 .86	250Vac 65Vdc	GCB01 GCB05 GCB08 GCB10 GCB12 GCB15
2.0 2.5 3.0 4.0 5.0 7.0	.49 .31 .20 .10 .08 .03		GCB20 GCB25 GCB30 GCB40 GCB50 GCB70
10.0 15.0	< 0.02 < 0.02	125Vac 65Vdc	GCB100 GCB150

▲ These maximum current values assume the use of insulated copper conductors with 75°C temperature rating, and are calculated based on NEC Article 310, Table 310-16. In most cases this value is the maximum ampacity of that wire or combination of wires (as listed in the above table) which has the greatest current carrying capacity. The actual allowable current for a particular application is dependent upon the number, size, insulation class and other characteristics of the wires used.

**Table A
Inrush Ratio Correction Table**
NOTE: For resistive loads, use inrush correction factor of 1.0.

Inrush Ratio	1:1 to 1:4	1:5	1:6	1:7	1:8
Factor	1.3	1.4	1.5	1.6	1.7

**Table B
Ambient Temperature Correction Table**

Ambient Temperature	70°F (21.1°C)	100°F (37.8°C)	120°F (48.9°C)	140°F (60°C)	160°F (71.1°C)	180°F (82.2°C)	200°F (93.3°C)
Factor	1.0	1.1	1.2	1.3	1.4	1.5	1.6

Tripping Time:

Tripping time of the circuit protector is determined from Table C below. Divide the circuit protector value by the temperature correction factor from Table B above to determine actual rated current referenced in Table C.

**Table C
Tripping times in seconds at 70°F (21.1°C)**

Percent rated current	100%	200%	300%	400%	500%	600%	1000%	2000% and greater
Tripping Time (seconds)	no trip	10-40	38	1.5-9	.8-6	.003-4	.003-2	Max. .02

Note: When several protectors are channel mounted adjacent to each other, the "no trip" current will be 80% of rated current at 70°F.



IEC Type Terminal Blocks

Supplementary Protectors

One Pole Thermal-Magnetic Control Circuit Protectors



GB2-CB06

Specifications

Conformity to standards	UL Guide QVNU2 File # E164873 tested per UL standard 1077 supplemental protectors CSA Class 3215 01 IEC 157-1 VDE 0660
Protective treatment	Tropical climate finish
Enclosure rating	IP 201 conforming to IEC 144 finger safe terminals
Ambient temperature	-4 to 140°F (-20 to 60°C) mounted in open air
Operating position	± 30° from the vertical plane

Technical characteristics

Rated insulation voltage	300 Vac max								
Thermal ratings	0.5A, 1A, 2A, 3A, 4A, 5A, 6A, 8A, 10A, 12A								
Rating selection according to average ambient temperature Factor	Average ambient temperature in °C								
	-20	-10	0	+10	+20	+30	+40	+50	+60
	1.2	1.15	1.1	1.05	1.0	.95	.90	.85	.80
Breaking capacity	1.5 kA/220V conforming to IEC 157-1 (P1)								
Operating current of magnetic trips	12 to 16 times thermal rating								
Mechanical life	8,000 operations								
Maximum wire sizes	Number of conductors			1			2		
	Flexible			4mm ² (12AWG)			1 to 2.5mm ² (16AWG)		
Recommended Tightening Torque	11 lbf-in (1.2 N-m)								
Mounting	35 mm Din 3 or Din 1								















Description	Thermal Rating (A)	Standard Pack ▲	Catalog Number
One pole Thermal Magnetic Control Circuit Protector 	0.5	6	GB2 CB05
	1	6	GB2 CB06
	2	6	GB2 CB07
	3	6	GB2 CB08
	4	6	GB2 CB09
	5	6	GB2 CB10
	6	6	GB2 CB12
	8	6	GB2 CB14
	10	6	GB2 CB16
	12	6	GB2 CB20

Description	Thermal Rating (A)	Standard Pack ▲	Catalog Number
Two pole Thermal Magnetic Control Circuit Protector 	0.5	6	GB2-CD05
	1	6	GB2-CD06
	2	6	GB2-CD07
	3	6	GB2-CD08
	4	6	GB2-CD09
	5	6	GB2-CD10
	6	6	GB2-CD12
	8	6	GB2-CD14
	10	6	GB2-CD16
	12	6	GB2-CD20

▲ Must order in multiples of Standard Pack









IEC Type Terminal Blocks Accessories

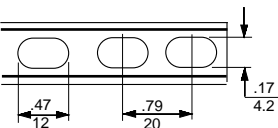



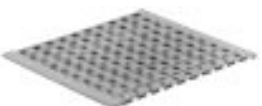
DESCRIPTION	LENGTH (inches)	CATALOG NUMBER	
35 mm DIN 3 MOUNTING TRACK:			
	15 mm depth, 1 mm steel, zinc chromated	2 m 78.74"	
	15 mm depth, 1.5 mm steel, zinc chromated	2 m 78.74"	
	7.5 mm depth, 1 mm steel, zinc chromated	2 m 78.74"	
 Symmetrical rail 35 x 7.5mm (1.38" x .295") in compliance with EN50022 standard (DIN 46277-3).	Galvanized steel (no mounting holes)	.5 m (19.68") 1 m (39.37") 2 m (78.74")	
	Galvanized steel, prepunched	.5 m (19.68") 1 m (39.37") 2 m (78.74")	
	DIN 1  Assymmetrical 32 mm (1.26 in) G rail in compliance with EN 50035 standard (DIN 46277-1). Bichromated zinc steel (no mounting holes).	Galvanized steel, prepunched	.5 m (19.68") 1 m (39.37") 2 m (78.74")
		Galvanized steel, prepunched	.5 m (19.68") 1 m (39.37") 2 m (78.74")
		Galvanized steel, prepunched	.5 m (19.68") 1 m (39.37") 2 m (78.74")
	END CLAMP:		
9080 MHA10 	9080 MH10 	Screw-on End Clamp for DIN 3 track. Made of Polycarbonate. Screws are zinc plated steel with iridescent chromate film. Screws are shipped backed out.	
		Screw-on End Clamp for DIN 1 or DIN 3 track. Made of Polycarbonate. Screws are zinc plated steel with iridescent chromate film. Screws are shipped backed out.	
ANGLE BRACKET:			
Angle Bracket Kit - Includes 2 brackets and hardware for mounting track to a panel at a 45° angle.		 9080 MH82	
JUMPERS:			
Assembled Jumper Bar-10 pole top of terminal block 	5 mm center for MA2.5/5G	MH705	
	6 mm center for M4/6G and M4/6B	MH70	
	6 mm center for MD2.5/6D	MH34	
	8 mm center for M6/8G and M6/8B	MH72	
	12 mm center for M 16/12G	MH74	
Comb Type Side Jumper-10 pole 	5 mm center for MA2.5/5G	MH715	
	6 mm center for M4/6G and M4/6B	MH71	
	6 mm center for M4/6D2, M4/6DE1, DR4/6G, DR4/6P	MH33	
	8 mm center for M6/8G and M6/8B	MH73	
	10 mm center for M10/10G	MH75	
Stripless Jumper 	For tying terminals together (with #14 CU AWG wire) of various widths. Can be used with M4/6G, M4/6B, M6/8G, M6/8B, M10/10G, M10/10B, M4/6D2, and M4/6DE1 blocks.	MH76	
Bus Bar-20 holes 	Cut to desired length. Use with MH67 screw and post to attach to the terminal block. 300V 30 Amp maximum. For use on 9080 M4/6G and 9080 M4/6B blocks.	MH66	
Screw and Post 	For use with MH66.	MH67	
Shielding Connector 	Provides termination for grounding connection of a shielded cable. Accepts .110x.032 in. slip on connectors or solder terminal points. Used with M4/6G, M4/6B and MTC6 only.	MH78	





IEC Type Terminal Blocks Accessories

DESCRIPTION	CATALOG NUMBER	
MARKING:		
0.5 m (19.70") blank vinyl marking strip for top marking of terminal blocks M4/6, M6/8, M10/10, M16/12, M6/9EE, M1.5/6ADV, MTC6, and M4/6D.	MH20	
Blank Marking tabs-100		
 Marker width-5mm	MH25	
Marker width-6mm	MH21	
Marker width-8mm	MH26	
Marking tabs-1 to 100		
 Marker width-6mm	MH22	
Marker width-8mm	MH26100	
Marking tabs-101 to 200	Marker width-6mm	MH21200
Marking tabs-201 to 300	Marker width-6mm	MH21300
Marking tabs-2 sets 1 to 50		
 Marker width-6mm	MH23	
Marker width- 8mm	MH2650	
	End clamp Marking Tab-Fits 9080 MH10 End Clamp	MH24
TEST PROBES:		
	Test probe. To be used with the test probe adapters below.	MH90
	Screw in test probe adapter for M4/6, M6/8, M10/10, M16/12, M1.5/6ADV, and M4/6D.	MH91
Removable test probe adapter	For the MA2.5/5G (Green)	MH94
	For the M4/6G and M4/6B (Yellow)	MH92
	For the M6/8G, M4/6B and M6/8SN (Orange).	MH93

DESCRIPTION	VOLTAGE	CATALOG NUMBER
ACCESSORIES FOR FUSE BLOCKS LISTED ON PAGE 7.		
Blown Fuse Indicators For fuse block types:	24VDC LED	MH83
M10/16SFL M10/22SFL	110-380V-Neon	MH81
10 pole Jumper for M4/8SF	—	MH30
10 pole Jumper for M10/16SFL	—	MH31
10 pole Jumper for M10/22SFL	—	MH32

DESCRIPTION	CATALOG NUMBER	
ACCESSORIES FOR MINIATURE BLOCKS LISTED ON PAGE 8.		
	DIN 2 track- 2 meter length (1)	DH179
	End Clamp for DIN 2 track.	DH10
	10 pole jumper for DR4/6G	MH33
	100 Blank Markers for 9080 DR4/6 and MD2.5/6D.	DH20
	100 Markers-marked 1-100 for 9080 DR4/6 and MD2.5/6D.	DH21

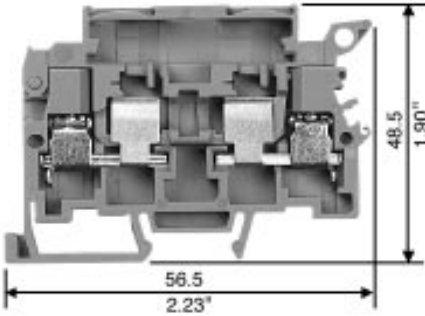
(1) As the rail can be used as a grounding bar, the current value of the 9080DR179 is 47A.

SEPARATORS:		
	Circuit Separators-snaps onto top of open terminal block when in an assembly. Used on M4/6, M6/8, and M10/10 blocks.	MH63
	Separator End Section-snaps onto mounting channel between terminal block sections. Will work with any block that uses a 9080 MFEM6 barrier.	MH61

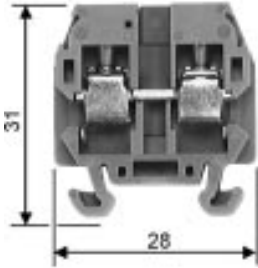


IEC Type Terminal Blocks

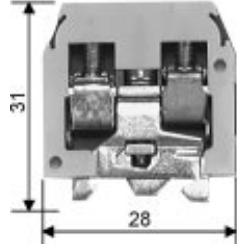
Approximate Dimensions



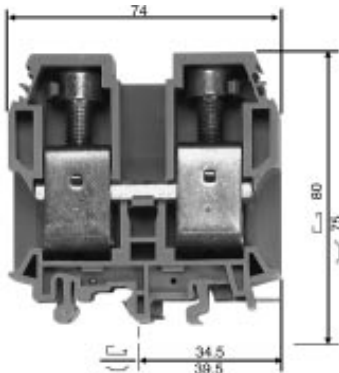
DR4/8SF (8 mm wide)



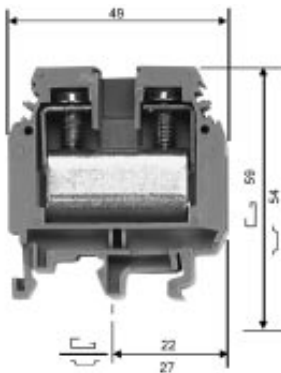
DR4/6G (6 mm wide)



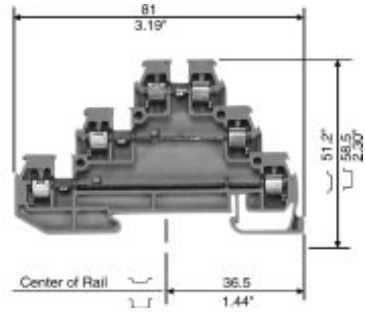
DR4/6P (6 mm wide)



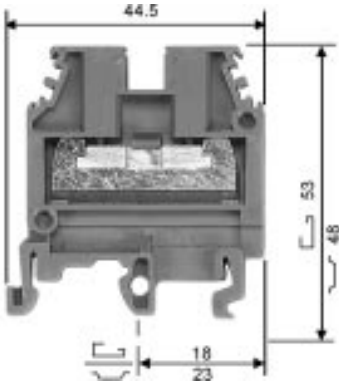
M70/22G (22 mm wide)



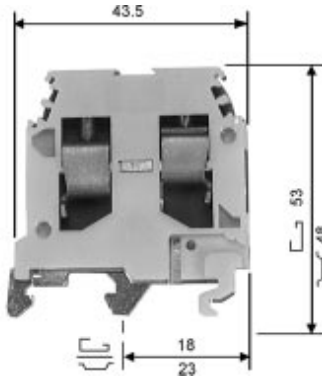
M35/16G (16 mm wide)



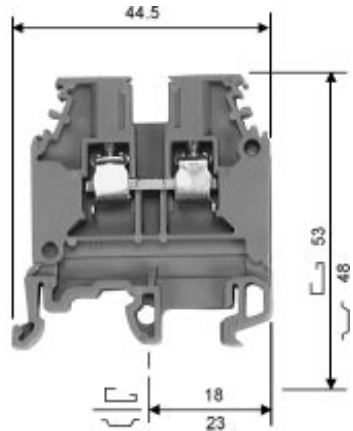
MD2.5/6D (6 mm wide)



MTC (6 mm wide)



MA2.5/5P (5 mm wide)
M6/8P (8 mm wide)

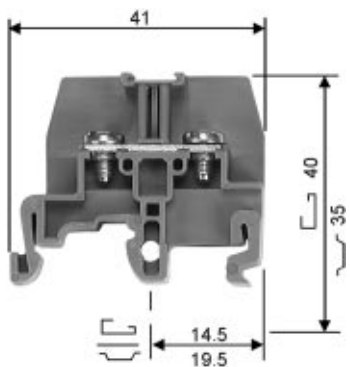


MA2.5/5G (5mm wide)
M4/6G (6 mm wide)
M4/6B (6 mm wide)
M6/8G (8 mm wide)
M6/8B (8 mm wide)
M10/10G (10 mm wide)
M10/10B (10 mm wide)
M16/12G (12 mm wide)

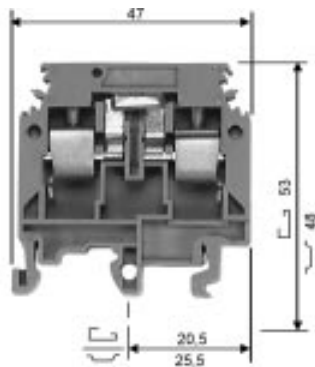


IEC Type Terminal Blocks

Approximate Dimensions



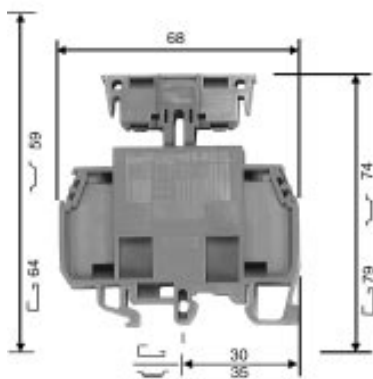
M6/9EE (9 mm wide)



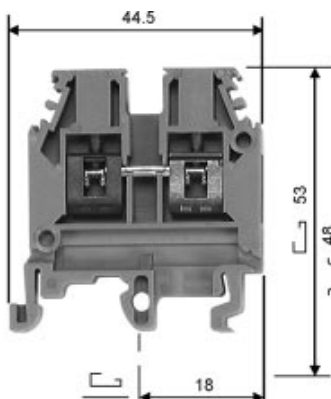
M6/8S (8 mm wide)



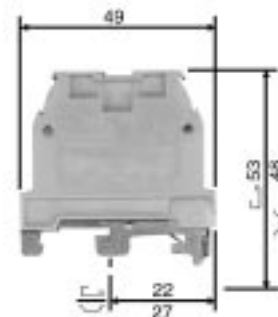
M6/6GB (6 mm wide)



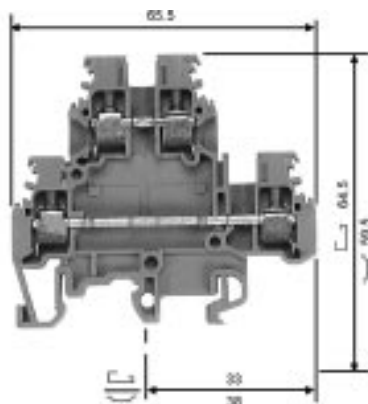
M10/16SFL (12 mm wide)



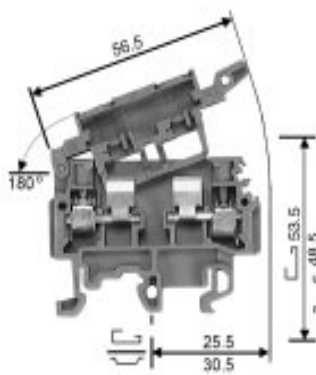
M1.5/6ADV (6 mm wide)



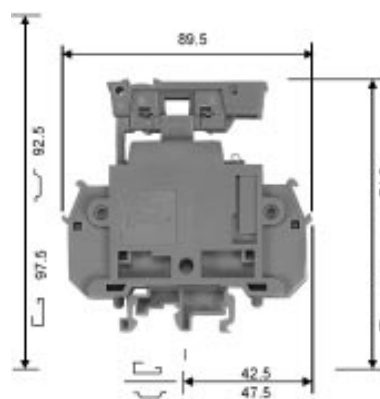
M16/12P (12 mm wide)



M4/6D2 (6 mm wide)
M4/6DE1 (6 mm wide)



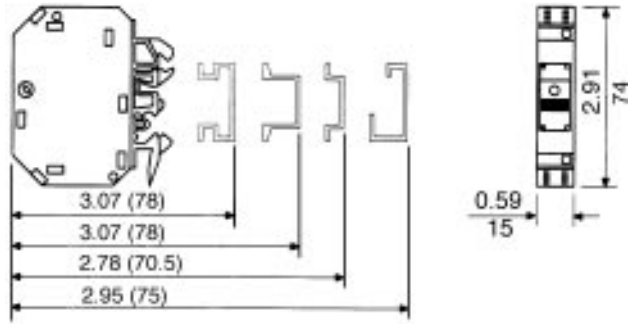
M4/8SF (8 mm wide)
M4/8SFL (8 mm wide)
M4/8SFD (8 mm wide)



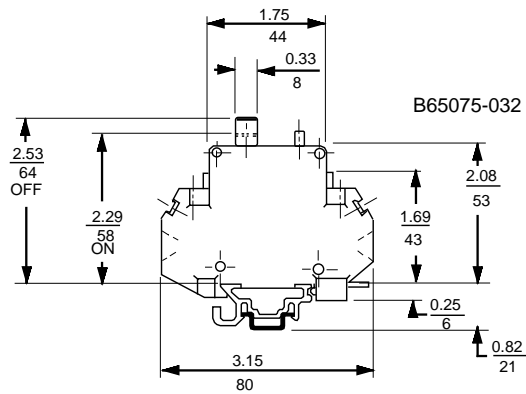
M10/22SFL (22 mm wide)
M10/22 SD2 (8 mm wide)
M10/22 SD3 (8 mm wide)



IEC Type Terminal Blocks
Circuit Protectors
Approximate Dimensions



GB2

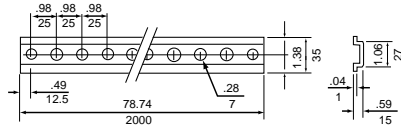


Type GCB

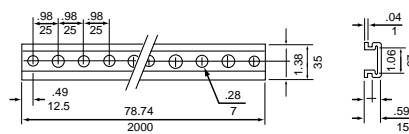
9080 GCB



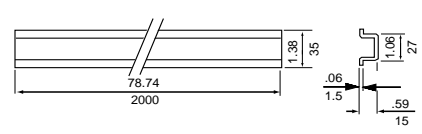
IEC Type Terminal Blocks Mounting Track and End Clamps Approximate Dimensions



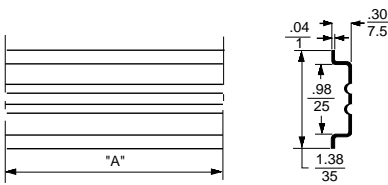
AM1DP200



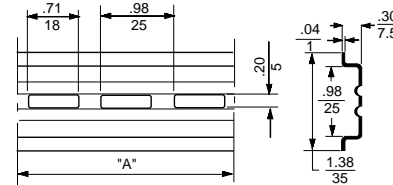
AM1ED200



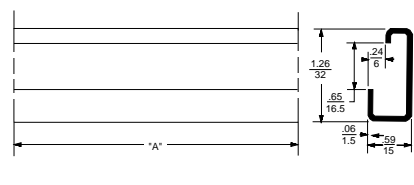
AM1DE200



9080MH2**

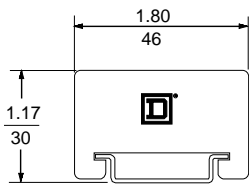


9080MH3**

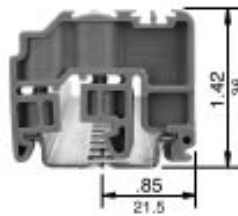


9080MH1**

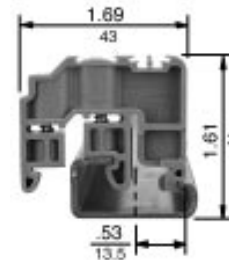
If the last two digits of the catalog number is 20, then "A" is equal to 1/2 m (19.7 in).
If the last two digits of the catalog number is 39, then "A" is equal to 1 m (39.4 in).
If the last two digits of the catalog number is 79, then "A" is equal to 2 m (78.7 in).



9080MHA10



9080MH10 on
9080MH2**
or AM1DP200 track



9080MH10 on
9080MH1** track


Dual Dimensions: Inches
Millimeters





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