

Viking 3 - Screw connection - Metal Base Connecting terminal blocks for protection conductor

Cat. Nos: 371 70/71/72/73/74/75/76/79

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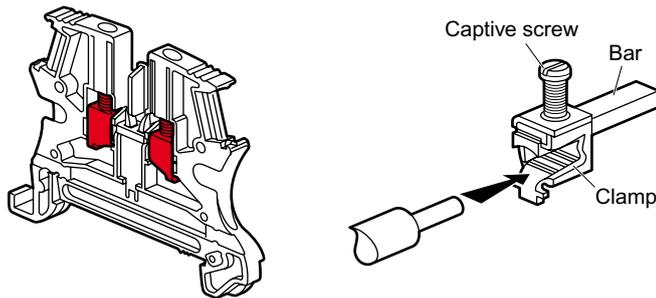


1. GENERAL CHARACTERISTICS

Viking 3 terminal blocks provide the electrical connection between two flexible or rigid copper conductors.

The terminal blocks for protection conductor have a metal base which allows to use the fixing rail as protection conductor.

These terminal blocks are green/yellow.

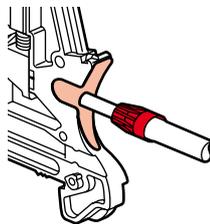


- Insulating polyamide body,
- Tin-coated brass bar ensuring optimum contact quality.
- Galvanized steel screws and clamps for an excellent resistance to corrosion.

A locking pin on the insulating body holds the Viking 3 blocks together, making them easier to handle and contributing to perfect alignment on the rail. Blocks can still be fitted or taken apart without having to remove adjacent blocks.

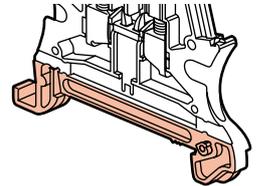
Conductors are easy to insert due to the ergonomic shape of their entry system.

Starfix cabling ferrules provide an equipotential link for all the strands of a flexible conductor.



The blocks have 2 areas for identification (except bare block Cat.no 371 76)

The base enables blocks to be fitted on the rails below :



	-	EN 60715	
Material	Steel		
Thickness (mm)	1.5	1	2.2
Depth (mm)	15	7.5	15

Quick and easy use thanks to screwless fixing on rail up to 10mm pitch.
Screw fixing for the blocks with 12 and 15mm pitch.
Brass base providing a good electrical connection with the rail.

ATEX

Refer to the specific technical data sheet regarding use in explosive atmosphere.

2. RANGE

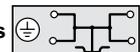
Cross-section according to IEC EN 60947-7-2.

2.1 Blocks with 1 connection - 1 entry/1 outlet



Cat. Nos	Nominal cross-section (mm ²)	Pitch (mm)
371 70	2.5	5
371 71	4	6
371 72	6	8
371 73	10	10
371 74	16	12
371 75	35	15
371 76	35	15

2.2 Blocks with 1 connection - 2 entries/2 outlets



Cat. Nos	Nominal cross-section (mm ²)	Pitch (mm)
371 79	4	6

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3. STANDARDS

- **IEC EN 60947-1:**
Low-voltage switchgear and controlgear,
- **IEC EN 60947-7-2:**
Low voltage switchgear and controlgear - Part 7-2: ancillary equipment
- Protective conductor terminal block for copper conductors,
- **C22-2 N°158:**
Terminal blocks,
- **UL 1059:**
Terminal blocks,
- **NF C 15-100 § 558.3.2.2.1:**
Earthing of exposed conductive parts,
- **NF C 15-100 § 542.4.2:**
Main earth terminals or bars,
- **IEC 60364-5-52:**
Electrical installations of buildings - Part 5-52: Selection and erection of electrical equipment - Wiring systems.
- **IEC EN 60664-1:**
Insulation coordination for equipment within low-voltage systems (networks) - Part 1: principles, requirements and tests.
- **UL 94:**
Tests for flammability of plastic materials for parts in devices and appliances.

4. TECHNICAL CHARACTERISTICS

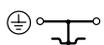
4.1 Type of conductor

Connection conductors shall be in copper - flexible or rigid:

- Class 1, rigid core,
- Class 2, cabled rigid core,
- Class 5, flexible core,
- Flexible core with ferrule.

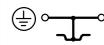
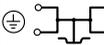
4.2 Connection cross-section

According to IEC EN 60947-7-2

	Cat. Nos	Nominal cross-section (mm ²)	Pitch (mm)	Capacity (mm ²)	
				Rigid conductor	Flexible conductor
	371 70	2.5	5	0.25 to 4	0.25 to 2.5
	371 71	4	6	0.25 to 6	0.25 to 4
	371 72	6	8	0.5 to 10	0.25 to 6
	371 73	10	10	1.5 to 16	2.5 to 10
	371 74	16	12	1.5 to 25	4 to 16
	371 75	35	15	2.5 to 50	4 to 35
	371 76	35	15	2.5 to 50	4 to 35
	371 79	4	6	0.25 to 6	0.25 to 4

The Viking 3 terminal block take account of the dimensions of the ferrule for the flexible conductor.

According to CSA No. 22-2 No. 158 and UL 1059

	Cat. Nos	Nominal cross-section (AWG)	Pitch (mm)
	371 70	12	5
	371 71	10	6
	371 72	8	8
	371 73	6	10
	371 74	4	12
	371 75	2	15
	371 79	10	6

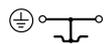
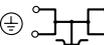
Normative indications

- For each entry and outlet of protection conductor, a separate connection point must exist (NF C 15-100 §558.3.2.2.1).
- Viking 3 terminal block enable to realize a main earth terminal (block + rail), on which each conductor should be able to be disconnected individually and only with a tool (according to the NF C 15-100 §542.4.2 standard).

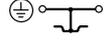
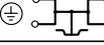
4.3 Conductor stripping length

Cat. Nos	Pitch (mm)	Length (mm)
371 70	5	6 to 8
371 71/79	6	
371 72	8	10 to 12
371 73	10	
371 74	12	13 to 17
371 75/76	15	14 to 18

4.4 Tightening torque

	Cat. Nos	Connection			Fixing on the rail	
		Torque (Nm)	Screwdriver blade Ø (mm)	Other tool	Torque (Nm)	Screwdriver blade Ø (mm)
	371 70	0.8	3.5	-	Without screw	
	371 71	1.4	4			
	371 72	1.4	4			
	371 73	2	5.5	PZ2	1.4	4
	371 74	2	5.5		1.4	4
	371 75	4	6.5	PZ2	1.4	4
371 76	5	8	-	-		
	371 79	1.4	4	-	Without screw	

4.5 Insulating voltage and current

	Cat. Nos	Voltage			Current	
		IEC	CSA	UL	le	IEC
	371 70	800	600	600	-	-
	371 71	800	600	600	-	-
	371 72	800	600	600	-	-
	371 73	800	600	600	63	57
	371 74	800	600	600	85	76
	371 75	800	600	600	138	125
	371 79	500	300	300	-	-

IEC EN 60947-7-2, CSA N°22-2 N°158, UL 1059

le: operating current:

- insulated conductors PR/EPR (θ max 90°C), NF C 15-100 table 52H,
- insulated conductors PVC (70°C), fitting system C, IEC 60364-5-52 table 52.2,
- insulated conductors PR/EPR (θ max 90°C), fitting system B2, IEC 60364-5-52 table 52.5.

The blocks Cat. Nos 371 73/74/75 are PNE.

Use category according to IEC EN 60947-1:

- Material group II,
- Proof tracking index: 400 to 600 V,
- Overvoltage category III.

4.6 Equivalent copper cross-section of the rails

Steel rail type	Copper equivalent cross-section
↳ Depth 15 mm (thickness: 1.5 mm)	35 mm ²
↳ Depth 7.5 mm EN 60715	16 mm ²
↳ Depth 15 mm EN 60715	50 mm ²

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4. TECHNICAL CHARACTERISTICS (continued)

4.7 Operating conditions

Transport temperature	- 25°C /+ 55°C (+ 70°C during 24 hours)
Ambient temperature	- 5°C / + 40°C
Average temperature	35°C max. over 24 hours
Relative humidity	90% max. to 20°C
	50% max. to 40°C
Altitude	2,000 m max.
Pollution level	3 according to IEC EN 60664-1 and IEC EN 60947-1

4.8 Fire resistance

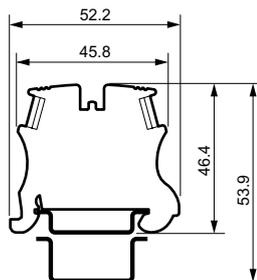
- Polyamide V2 according to UL94,
- Glow wire: 960°C according to IEC EN 60695-2-11,
- Corrosiveness of fumes: 5% according to NF C 20453,
- Limiting oxygen index (LOI): 27 according to EN ISO 4589-2.

5. DIMENSIONS

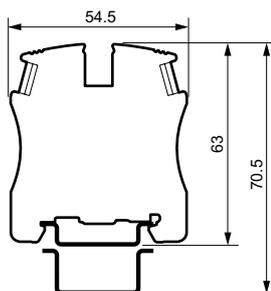
Viking 3 blocks provide aesthetic terminal strips via:

- a single block profile from pitch 5 to 10,
- identical height of blocks from pitch 12 to 22.

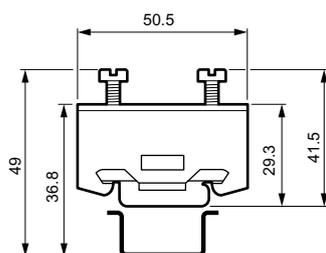
Cat. Nos 371 70/71/72/73:



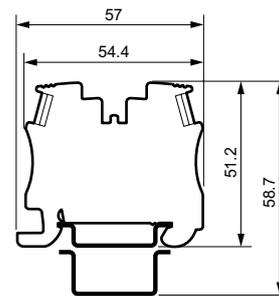
Cat. Nos 371 74/75:



Cat. Nos 371 76:



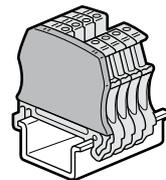
Cat. Nos 371 79:



6. ACCESSORIES

6.1 End caps

Polyamide dark grey.
960 °C according to IEC EN 60695-2-11.



Cat. Nos	For blocks	Thickness (mm)
375 50	1 entry/1 outlet - Pitch 5/6/8/10	2
375 51	1 entry/1 outlet - Pitch 12/15 (*)	2.5
375 52	2 entries/2 outlets	2

(*) Except block Cat. No 371 76.

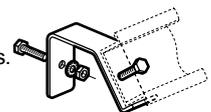
6.2 Rails

- Length 2 m,
- Galvanized steel.

Cat. Nos	Rail
374 04	EN 60715 depth 7.5 mm
374 07	Depth 15 mm
477 22	Depth 7.5 mm with oblong holes
477 23	Depth 15 mm with oblong holes

6.3 45° mounting bracket, Cat. No 394 49

- Set of 2 brackets providing a 45° rail angle,
- Galvanized steel,
- Supplied with 4 M6 screws, nuts and washers.



6.4 Marking

6.4.1 Manual marking

CAB 3 markers:

International colour code digits, letters, conventional symbols.



Terminal block marking capacity:

- 4 CAB 3 markers 0.15 to 0.5 mm², up to 7 markers with marker holder Cat. No. 383 92,
- 3 CAB 3 markers 0.5 to 1.5 mm², up to 6 markers with marker holder Cat. No. 383 92.

Pre-printed markers:

- For blocks with pitch 5/6/8,
- Provided as pre-cut plates,
- Digits and numbers,
- Horizontal or vertical reading,
- Rapid marker fitting via band on terminal strip.



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6. ACCESSORIES (continued)

6.4.1 Manual marking (continued)

Blank markers:

Cat. No. 395 00 for blocks with pitch 5.

Cat. No. 395 01 for blocks with pitch 6.

Cat. No. 395 02 for blocks with pitch 8.

- Provided as pre-cut plates.

- Permanent marking with black felt-tip pen

Cat. No. 395 98,

- Rapid marker fitting via band on terminal strip.



LEGRAND'S ADVANTAGE

The single length of the marking areas on Viking 3 blocks allows markers to be fitted singly on a block with a pitch larger than the marker.

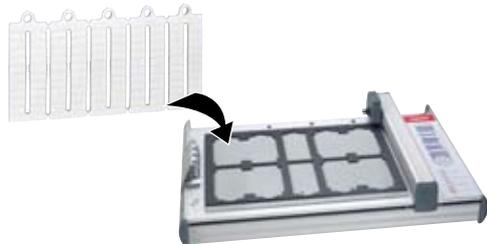
Example: Marker Cat. No. 395 00 can be fixed on a block with pitch 12 mm.

6.4.2 Logicab 2 digital marking

Plotter:

Marking on blank markers using the plotter kit.

Cat. Nos 395 00/01/02.



Printer:

Marking on blank markers using the printer kit.

Provided as pre-cut plates.

Cat. No. 387 43 - Pitch of 5.

Cat. No. 387 44 - Pitch of 6.

