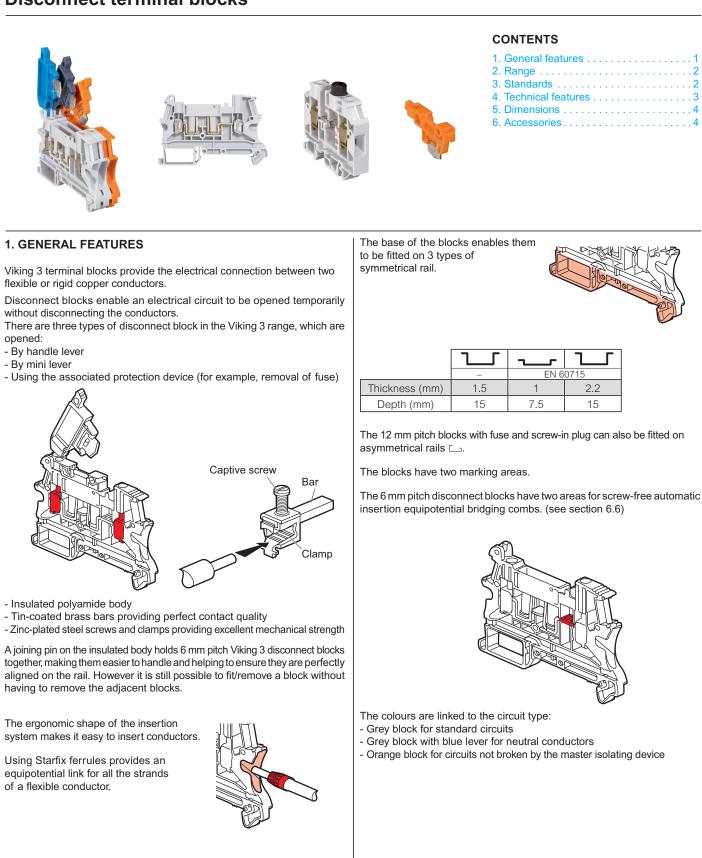


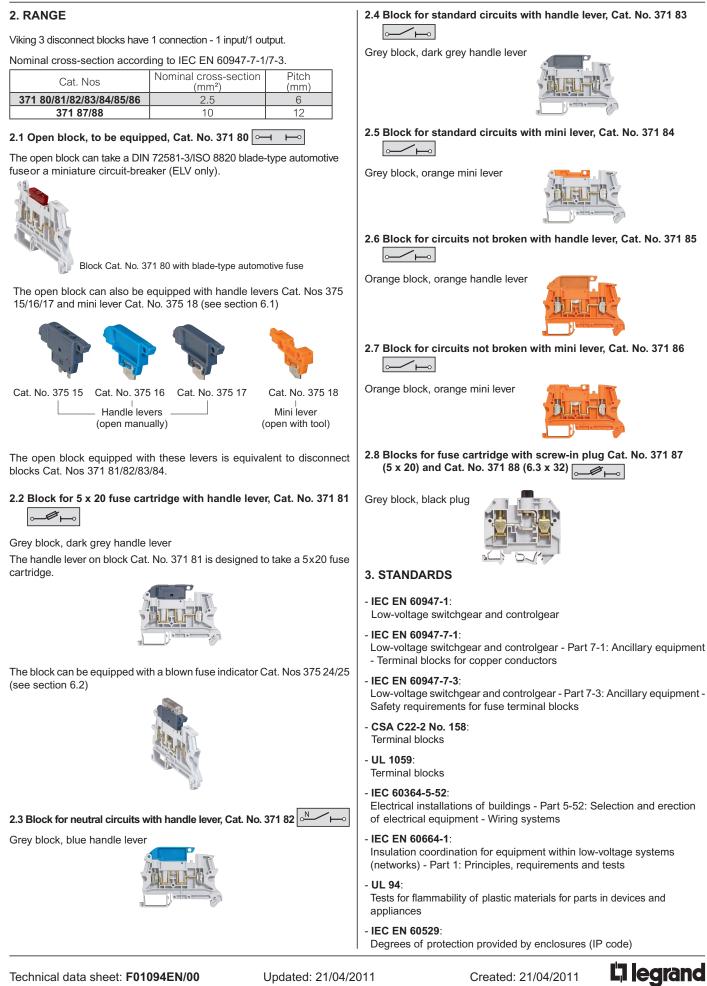
87045 LIMOGES Cedex Telephone: (+33) 05 55 06 87 87 - Fax: (+33) 05 55 06 88 88

Viking 3 - Screw connection Disconnect terminal blocks

Catalogue numbers: 371 80/81/82/83/84/85/86/87/88 375 15/16/17/18



Catalogue numbers: 371 80/81/82/83/84/85/86/87/88 375 15/16/17/18



Updated: 21/04/2011

Created: 21/04/2011



Catalogue numbers:	371	80/81/82/83/84/85/86/87/88
-	375	15/16/17/18

4. TECHNICAL FEATURES

4.1 Type of conductor

Conductors connected must be flexible or rigid copper:

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

4.2 Connection cross-section

According to IEC EN 60947-7-1/7-3

	Nominal		Capacity (mm ²)		
Cat. Nos cross- section (mm ²)	Pitch (mm)	Rigid conductor	Flexible conductor with or without ferrule		
371 80/81/82/83/84/85/86	2.5	6	0.25 to 2.5	0.25 to 2.5	
371 87/88	10	12	0.25 to 10	0.25 to 10	

Viking 3 terminal blocks take the dimensions of the ferrule into account for flexible conductors (Starfix double ferrules, see section 4.9).

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

Cat. Nos	Nominal cross-section (AWG)	Pitch (mm)
371 80/81/82/83/84/85/86	12	6
371 87/88	6	12

4.3 Conductor stripping length

Cat. Nos	Pitch (mm)	Length (mm)
371 80/81/82/83/84/85/86	6	6 to 8
371 87/88	12	11 to 14

4.4 Tightening torque

Cat. Nos	Torque (Nm)	Flat screwdriver blade Ø (mm)
371 80/81/82/83/84/85/86	1.4	4
371 87/88	4	6.5

The connection screws remain accessible when the handle lever or mini lever is closed.

4.5 Insulation voltage and current

The AC and DC performance of Viking 3 blocks is identical.

Cat. Nos	Voltage (V)			Current (A)		
	IEC	CSA	UL	IEC	CSA	UL
371 80/82/83/84/85/86	500	300	300	15	15	15
371 80 + blade-type automotive fuse		ELV		10	-	-
371 81 or 371 80 + 375 15	250	250	250	6.3	6.3	6.3
371 87/88	250	250	250	10	10	10

IEC EN 60947-7-1/7-3, CSA No. 22-2 No. 158, UL 1059

Insulation voltage of shunted blocks: see section 6.6

4.6 Power according to IEC EN 60947-7-3

Cat. Nos	Short-o	circuit	Short-circuit + overload	
Cal. NOS	Separate blocks	Assembled blocks	Separate blocks	Assembled blocks
371 81 or	4 W/6.3 A	1.6 W/6.3 A	1.6 W/6.3 A	-
371 80 + 375 15 ⁽¹⁾	Pvk = 4.75 W	Pvk = 2 W	Pv = 1.65 W	-
371 87/88	4 W	2.5 W	1.6 W	-
3/10//00	Pvk = 5 W	Pvk = 2.7 W	Pv = 1.8 W	-

(1): with or without blown fuse indicator Cat. No. 375 25.

4.7 Utilisation category and protection class

Utilisation category according to IEC EN 60947-1 (6 mm pitch blocks): - Material group I

- Comparative tracking index (CTI): ≥ 600 V

- Overvoltage category III

- Pollution degree 3

Protection class according to IEC EN 60529:

- 6 mm pitch blocks: IPXXB

4.8 Tap-off

It is possible to connect 2 conductors at a single connection point under the following conditions:

- Do not mix flexible and rigid cores

- Do not mix 2 rigid core conductors with different cross-sections

Combinations of 2 conductors per connection point are permitted as shown in the following table (mm²):

	Class 1 Solid rigid core	Class 2 Stranded rigid core	Class 5 Flexible core	Flexible core with single ferrule	Class 5 Flexible core (different cross-sections)
Blocks 6 mm pitch	2 x 2 x	0.5 0.75 1 1.5	2 x 0.5 2 x 0.75 2 x 1 2 x 1.5	2 x 0.5	$\begin{array}{c} 0.5 + 0.75 \\ \hline 0.5 + 1 \\ 0.75 + 1 \\ \hline 0.75 + 1.5 \\ \hline 1 + 1.5 \\ \hline 1 + 2.5 \end{array}$

4.9 Compatibility with Starfix double ferrules

		Double ferrule (mm ²)			
		376 87 376 88 376 89 376 90			Cat. No. 376 90 2 x 2.5
6	mm pitch blocks	1	1	1	X
12	2 mm pitch blocks	1	1	1	1

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4.10 Usage conditions

Ambient temperature	-5°C/+40°C
	Average 35°C max. over Ílí24 hours
Relative humidity	90% max. at 20°C
	50% max. at 40°C
Altitude	2000 m max.
Pollution degree	3 according to IEC EN 60664-1 and IEC EN 60947-1

Transport temperature: -25°C/+55°C (+70°C for 24 hours) Polyamide -30 to +100°C

4.11 Fire resistance

- Polyamide V2 according to UL94, halogen-free
- 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

Public buildings

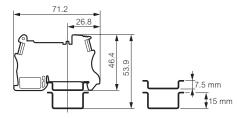
The 960°C glow wire resistance according to standard IEC EN 60695-2-11 enables Viking 3 terminal blocks to be used in public buildings, including in safety circuits.

5. DIMENSIONS

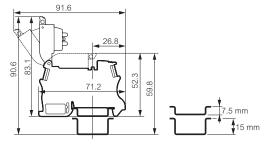
The 6 mm pitch disconnect blocks enable attractive terminal blocks to be created, as:

- The height of the blocks with mini lever is identical to that of the 5 to 10 mm pitch blocks with 1 connection in the rest of the Viking 3 screw connection range
- The heights of the blocks are identical irrespective of the type of lever

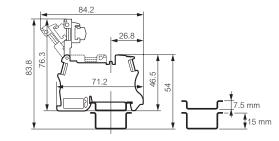
Cat. No. 371 80:



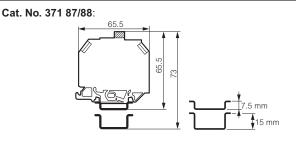
Cat. No. 371 81/82/83/85:



Cat. No. 371 84/86:



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6. ACCESSORIES

6.1 Handle levers/mini lever

A handle lever can be used for manual opening.

A tool is required for the mini lever.

Cat. Nos	Туре		
375 15	Handle lever for 5 x 20 fuse cartridge - dark grey		
375 16	375 16 Handle lever for neutral - blue		
375 17 Handle lever - dark grey			
375 18	Mini lever - orange		

The open block Cat. No. 37180 equipped with these accessories is equivalent to disconnect blocks Cat. Nos 37181/82/83/84:

	Equivalence table				
	Open block Cat. No. 371 80	+ Cat. No. 375 15 = block Cat. No. 371 81			
		+ Cat. No. 375 16 = block Cat. No. 371 82			
		+ Cat. No. 375 17 = block Cat. No. 371 83			
		+ Cat. No. 375 18 = block Cat. No. 371 84			

Polyamide V2 acc. to UL94, halogen-free, 960°C acc. to IEC EN 60695-2-11

LEGRAND ADVANTAGE

The handle levers and mini lever are compatible with the Viking 3 spring connection range (open block Cat. No. 372 80).

6.2 Blown fuse indicators



The handle lever on the block with 5x20 fuse cartridge Cat. No. 371 81 (or handle lever Cat. No. 375 15) can take a snap-on blown fuse indicator (attached with power off).



Cat. Nos	Туре	Appearance
375 24	12/24/48 V ₌₌ √	bluish
375 25	110/250 V \sim	colourless

Indicators Cat. Nos 375 24/25 can also be used with the Viking 3 spring connection range.

6.3 Joining rods

These treated steel rods are used to join several disconnect block handle levers or mini levers together (for example for simultaneous opening of the phase and neutral).



Cat. Nos	Number of blocks
375 21	for 2 blocks
375 22	for 3 blocks

6. ACCESSORIES (continued)

Catalogue numbers: 371 80	/81/82/83/84/85/86/87/88
375 15	/16/17/18

LEGRAND ADVANTAGE

Up to 8 mm pitch, the combs are the same for the Viking 3 screw connection 6.4 End caps and spring connection ranges. Polyamide, dark grey, halogen-free V2 according to UL 94 The 2 areas enable tapping off for a continuous equipotential link of more 960°C according to IEC EN 60695-2-11. than 10 blocks The insulated combs maintain the insulation voltages of the disconnect terminal blocks. When there are 2 groups of shunted blocks side by side: - A separation and insulation divider must be inserted between the Cat. Nos For blocks Thickness (mm) 2 groups to maintain the initial insulation voltage: 375 55 2 6 mm pitch Max. voltage = 500 V⁽¹⁾ 375 56 12 pitch - screw-in plug 1.4 6.5 Separation and insulation divider Polyamide, dark grey, halogen-free (1) 371 81, 371 80 + V2 according to UL 94 375 15: 250 V max 960°C according to IEC EN 60695-2-11 Separation and insulation divider - Otherwise, the voltage will be derated: Max. voltage = 400 V⁽¹⁾ (1) 371 81, 371 80 + 375 15; 250 V max. Cat. Nos Thickness (mm) For blocks If the comb is cut to length, it is essential to use a separation and insulation 375 62 6 mm pitch 25 divider to maintain the insulation voltage: 6.6 Equipotential bridging combs Max. voltage = 500 V⁽¹⁾ - Front fitting, automatic insertion, screw-free for faster fitting - Insulated and separable - For consecutive or alternating connection - Tin-plated copper and coloured polyamide Cat. Nos Colour Capacity 375 03 Blue 10 blocks - 6 mm pitch Separation and 375 04 Red 10 blocks - 6 mm pitch insulation divider (1) 371 81, 371 80 + 375 15: 250 V max. 375 05 Red 2 blocks - 6 mm pitch The 6 mm pitch disconnect blocks have 2 areas for equipotential bridging The voltage is derated in the case of an alternating connection combs. configuration: Max. voltage = 400 V⁽¹⁾ Max. voltage = 250 V (1) 371 81, 371 80 + 375 15: 250 V max. The combs remain visible when the handle lever is closed, and remain accessible when the mini lever is closed.

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Catalogue numbers: 371 80/81/82/83/84/85/86/87/88 375 15/16/17/18

6. ACCESSORIES (continued)

6.7 Measurement accessories

6.7.1 Measurement socket



The socket is fitted in one of the 2 areas for automatic insertion equipotential bridging combs. Its particular shape enables measurement even on a block fitted with a comb.

It is not possible to fit 2 sockets side by side with disconnect blocks.

6.7.2 IP2X safety tip adaptor, Cat. No. 394 95

- ø 2 mm test plug retractable tube - For performing ad-hoc tests in accordance with regulations on the protection of workers
- Can be directly fitted with a ø 4 mm plug

6.8 Shielding accessories

These accessories ensure safe, simple connection of cable shielding

6.8.1 Shielding clamps

Cat. Nos	For cables ø (mm)	
375 30	375 30 3 to 8	
375 31 4 to 13.5		
375 32	10 to 20	

Fitting on 10 x 3 bar Cat. No. 375 34

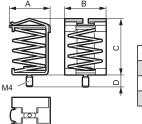
Fitting on rail with accessory Cat. No. 364 69







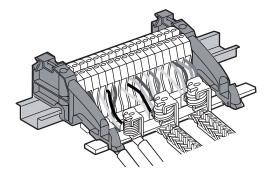




1				Dimensions (mm)			
	O		Cat. Nos	А	В	С	D
	,		375 30	13.5	18	26	5.6
	۵	-	375 31	20	20.3	31.4	5.3
	1		375 32	24.8	26	40	5.3

- 6.8.2 Shielding bar, Cat. No. 375 34
- For use with end stops Cat. No. 375 12 (see section 6.12)
- 10 x 3 mm
- Length 1 m - Steel

Shielding terminal block with end stops Cat. No. 375 12, bar Cat. No. 375 34 and clamps Cat. No. 375 30/31:



6.9 Rails

- Length 2 m
- Zinc-plated steel

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

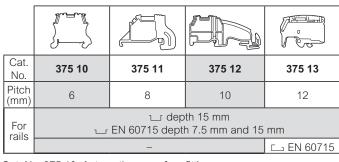
6.10 45° mounting bracket, Cat. No. 394 49

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

6.11 Adaptor for fixing on asymmetrical rail, Cat. No. 364 66

- For fitting blocks on 🗀 rail
- Width 17 mm
- Increases the height of the block by 6 mm
- PC/ABS 960°C according to IEC EN
- 60695-2-11

6.12 End stops



Cat. No. 375 10: Automatic screw-free fitting.

Cat. No. 375 12: End stop for bar bracket, protective conductor or shielding.

Note: other characteristics listed in the specific end stops technical data sheet.

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Catalogue numbers: 371 80/81/82/83/84/85/86/87/88 375 15/16/17/18

6. ACCESSORIES (continued)

6.13 Marking

6.13.1 Manual marking

CAB 3 markers:

International colour code digits, letters and conventional symbols.

Terminal block marking capacity:

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

- 3 x 0.5 to 1.5 $\rm mm^2$ CAB 3 markers, up to 6 markers with marker holder Cat. No. 383 92



The CAB 3 range provides consistency of marking on both terminal blocks and wiring.



Pre-printed markers:

- Pitch 5/6/8 mm

- Supplied in pre-cut sheets
- Digits and numbers
- For reading horizontally or vertically
- Markers fitted quickly in strips on terminal blocks

Blank markers:

Cat. No. 395 00 - 5 mm pitch.

Cat. No. 395 01 - 6 mm pitch. Cat. No. 395 02 - 8 mm pitch.

- Supplied in pre-cut sheets
- Manual marking using indelible black felt-tip pen Cat. No. 395 98
- Markers fitted quickly in strips on terminal blocks

LEGRAND ADVANTAGE

The unique length of the marking areas on Viking 3 blocks enables markers to be fitted as a unit on a block whose pitch is larger than the marker.

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

Visual MUR1 MUR3 MUR3 MUR3 1 1 2 3 6 8 6 7 6 8 2 1 2 3 6 8 6 7 8 8 3 0 3 4 3 8 8 8 8 8 9



6.13.2 Logicab 2 computerised 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. Supplied in pre-cut sheets. Cat. No. 387 43 - 5 mm pitch Cat. No. 387 44 - 6 mm pitch Cannot be fitted on blocks Cat. Nos 371 87/88.



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