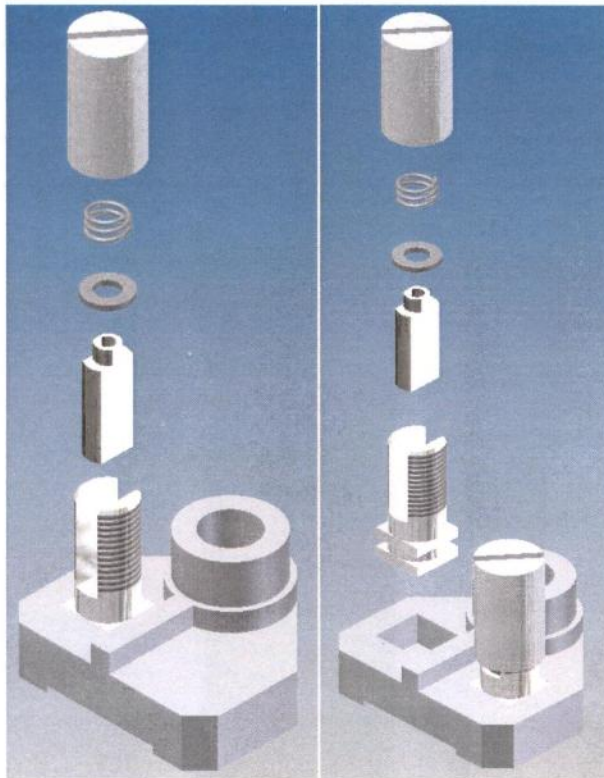




SHOMAL Engineering & Manufacturing Co.

## OPERATING INSTRUCTIONS

Pillar Terminal Block Types 1 and 2



### Pillar Terminal Block SERIES

WI-19(PCD-P-01)/01



0035

THIS GUIDE SHOULD BE READ CAREFULLY BEFORE INSTALLATION.  
INCORRECT INSTALLATION AND USE OF THE TERMINAL BLOCK CAN INVALIDATE THE GUARANTEE!

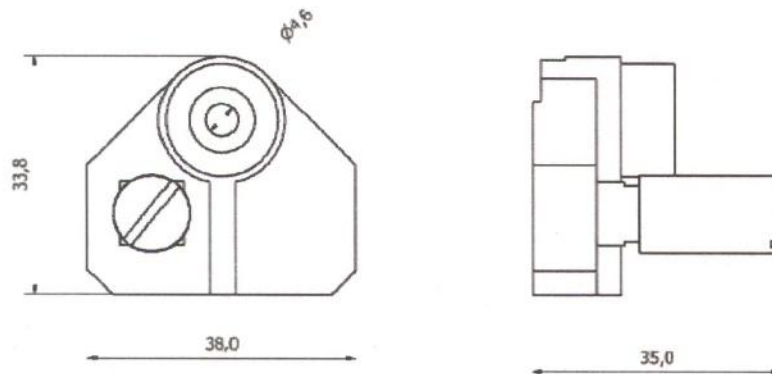


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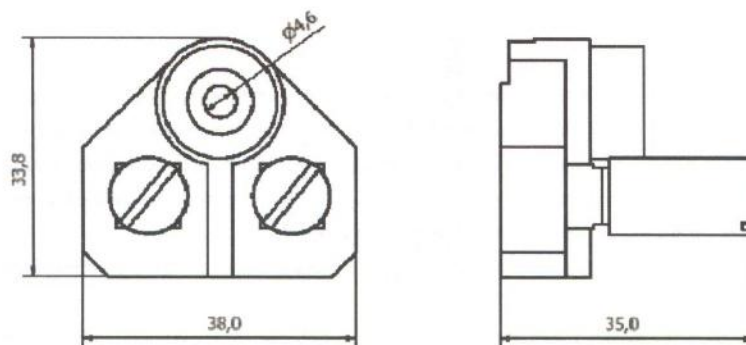
DIMENTIONAL DRAWINGS  
Pillar Terminal Block Type 1



**Pillar Terminal Block Type 1**

DIMENSIONS (mm)		
	EXTERNAL	INSTALLATION HOLE DIMENSION
LENGTH	38,0	$\varnothing 4,6$
WIDTH	33,8	
HEIGHT	35,0	

Pillar Terminal Block Type 2



**Pillar Terminal Block Type 2**

DIMENSIONS (mm)		
	EXTERNAL	INSTALLATION HOLES DIMENSION
LENGTH	38,0	$\varnothing 4,6$
WIDTH	33,8,0	
HEIGHT	35,7	

#### IMPORTANT NOTES

- 1) THE GUIDE SHOULD BE READ CAREFULLY BEFORE INSTALLATION
- 2) INCORRECT INSTALLATION AND USE OF THE JUNCTION BOXES CAN INVALIDATE THE GUARANTEE

#### CONFORMITY WITH STANDARDS

THE PILLAR TERMINAL TYPE 1 AND 2 ARE MET THE REQUIREMENTS OF IEC 60079-0, IEC 60079-7, DIRECTIVE 94/9/EC: EQUIPMENT AND PROTECTIVE SYSTEMS INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES.

THE TERMINAL BLOCKS HAVE BEEN DESIGNED, MANUFACTURED AND TESTED ACCORDING TO THE ISO 9001:2008.

#### SAFETY INSTRUCTIONS



THE TERMINAL BLOCK ARE NOT SUITABLE FOR ZONE 0 AND ZONE 20 HAZARDOUS AREAS.  
MODIFICATIONS TO THE TERMINAL BLOCK OR CHANGES OF THEIR DESIGN ARE NOT PERMITTED. THEY SHALL BE USED FOR INTENDED PURPOSE AND IN PERFECT AND CLEAN CONDITION.  
FOR REPLACEMENT AND REPAIR, ONLY GENUINE SHOMAL SPARE PARTS SHALL BE USED.

OBSERVE THE NATIONAL SAFETY RULES AND REGULATIONS FOR PREVENTION OF ACCIDENTS AS WELL AS SAFETY INSTRUCTIONS INCLUDED IN THIS OPERATING INSTRUCTION.

#### FIELD OF APPLICATION

CAT II 2G for use in zone 1 or zone 2. Area as defined in IEC 60079-14.  
Rated Voltage up to 500V  
Rated current Max. 36A  
Rated cross section Max. 6 mm<sup>2</sup>

#### SERVICE TEMPERATURE

-30°C TO +160°C

#### PERMANENT STORAGE TEMPERATURE IN ORIGINAL PACKAGE

-20°C TO +80°C

#### CERTIFICATION MARKING

ATEX Marking

II 2 G, Ex e IIC Gb

IECEx Marking

Ex e IIC Gb

#### General Description

- 1- Leads connected to the terminals shall have insulation extending to within 3mm of the terminal throat and the bare end of each lead shall not extend more than 3mm beyond the other side of slot and shall remain straight. Maximum stripping length 11mm.
- 2- The terminal cap of each terminal, used and unused, shall be fully tightened down by the end user. (tightening torque: 2.5 N.m)
- 3- Conductors of different sized and configurations shall not be inserted into the same terminal throat/slot except for the specific combinations listed in Tables 1 & 2. Pin terminal recommended on conductors.
- 4- When installed in an enclosure the creep age and clearance distance between the terminal, adjacent equipment and enclosure wall must comply with the requirements of IEC/EN 60079-7
- 5- When installed in plastic enclosure, there shall be at least 3mm clearance between the inside of the removable cover /lid of the enclosure and the terminal screws after the connections have been made and the terminal screws and cover/lid have been fully tightened down
- 6- For conductor sizes less than 1mm<sup>2</sup> but not less than 0.5mm<sup>2</sup>, the maximum current rating shall not exceed 1 amp
- 7- The service temperature range must not exceed -30°C to +160°C.
- 8- The terminal block shall be secured in enclosure using base plate. There is a 4,6mm hole provided on the Bakelite terminal base (see the dimensional drawings) which allows to path through M4mm screw to attach the block on to the base plate. Screw details: Din - 84 M4x15, fixing screw with head height of maximum 3.0mm for fixing the base block on to the base plate or directly on the enclosure

#### DISPOSAL / RECYCLING

When the components is disposed of, the respective national regulations on waste disposal will have to be observed.



Max. No. conductors of same size

Table 1

connected to each terminal

Conductor Size (sq.mm.)	Maximum No. Of Cores
6	3
4	4
Smaller Conductors > or = 0.5 sq. mm	4

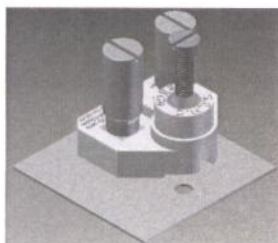
Table

2

1.5mm <sup>2</sup> solid with	1.5mm <sup>2</sup> solid or 2.5mm <sup>2</sup> stranded or 4mm <sup>2</sup> stranded or 6mm <sup>2</sup> stranded
1.5mm <sup>2</sup> stranded with	0.9mm <sup>2</sup> stranded or 1.2 mm <sup>2</sup> stranded, 1.5mm <sup>2</sup> or 2.2mm <sup>2</sup> or 2.5mm <sup>2</sup> stranded or 4mm <sup>2</sup> stranded or 6mm <sup>2</sup> stranded
2.5mm <sup>2</sup> solid with	0.9mm <sup>2</sup> stranded or 1.2 mm <sup>2</sup> stranded, or 2.2mm <sup>2</sup> solid or 2.5mm <sup>2</sup> solid or 4mm <sup>2</sup> solid or 6mm <sup>2</sup> stranded
2.5mm <sup>2</sup> stranded with	2.5mm <sup>2</sup> stranded or 4mm <sup>2</sup> stranded or 6mm <sup>2</sup> stranded
4mm <sup>2</sup> stranded with	4mm <sup>2</sup> stranded or 6mm <sup>2</sup> stranded
6mm <sup>2</sup> stranded with	6mm <sup>2</sup> stranded
Alternatively, the following THREE of conductor combinations may be fitted in one terminal Two 2.5mm <sup>2</sup> solid conductors and one 6mm <sup>2</sup> stranded conductor	

Alternatively, the following PAIRS of conductor combinations may be fitted in one terminal

#### Installation method



An installation screw Din84 - M4x15mm (with head height of maximum 3.0mm) will go through the terminal base block to be tightened into a base plate as it is presented in the figure above. Base plate is made of stainless steel or galvanized steel.





EC – Declaration of conformity  
TUV 11ATEXxxxxU



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We hereby declare in our sole responsibility, that the increase safety range of Pillar terminal Blocks:

**PTB ...**

Which is the subject of this declaration, is in conformity with the following standards and Normative documents and directives.

**IEC 60079-0:2007, EN 60079-0; 2009** Electrical apparatus for potentially explosive atmospheres – Part 0: Equipment, General requirements.

**IEC 60079-7:2006 & EN 60079-7:2007** Electrical apparatus for potentially explosive atmospheres – Increased safety 'e'.

Terms of the directive:

**94 / 9 / EC:** Equipment and protective system intended for use in potentially explosive atmospheres.

Has been certified by: TÜV Rhineland Industry Service GmbH.

Place and date: Tehran – December, 2012

Managing Director

For the safe use of this apparatus, the information given in the accompanying operation instructions must be followed.

FOR ANY ADDITIONAL INFORMATION, PLEASE CONTACT THE MANUFACTURER.  
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DC-08/00

WI-19(PCD-P-4)