



Terminal Blocks and Connectors for PCB

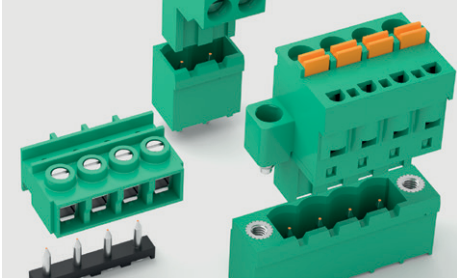
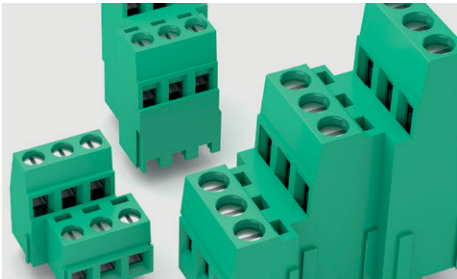
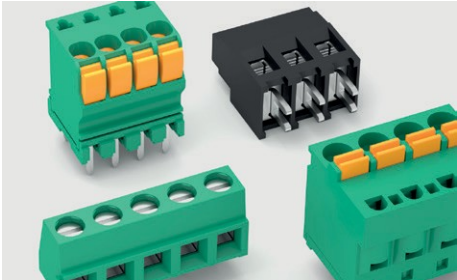
Product Overview



Quality
Environment
Health And Safety



Green Electronics



Saur[®]
ELECTRONIC CONNECTORS
by the law

By the law

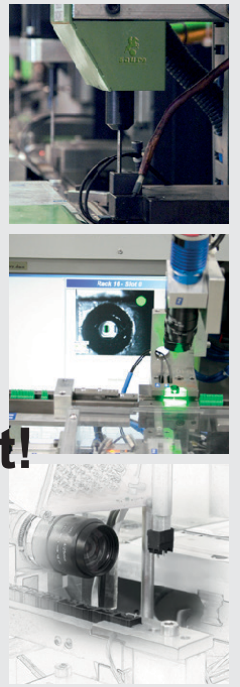
- ✓ Respect of the industrial law
- ✓ Respect of the environment
- ✓ Respect of International Regulations
- ✓ Respect for human health
- ✓ Competitive prices



Strategy

- SAURO performs 100% pole by pole:
- ✓ Functional testing
 - ✓ Visual automated inspections

zero functional defect!



STH[®] Technology

(SMD Through Hole similar to THR: Through Hole Reflow, PiP: Pin in Paste)

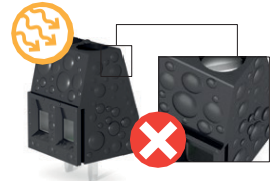
- ✓ New insulating material rated as **MSL1** (Moisture Sensitivity Level 1), according to IPC/JEDEC J-STD-020E



STH[®] Technology



MSL1 Not moisture sensitive

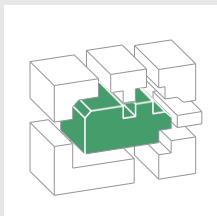
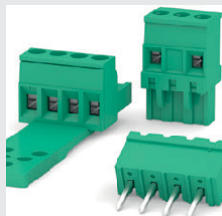
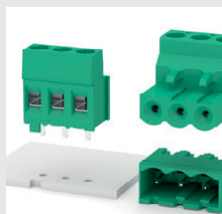


Blistering effect does not occur in Sauro products

Can be used in all lead-free reflow process

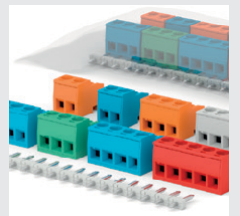
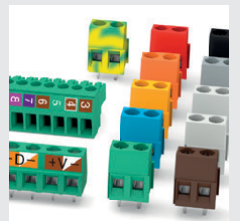
Engineering customers' solutions

- ✓ Modular housing
- ✓ Integrated polarization
- ✓ Desing-in



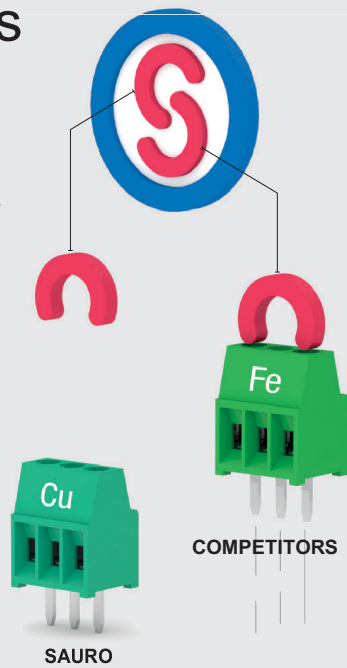
Personalization

- ✓ Pad printing
- ✓ Colour
- ✓ Accessories
- ✓ Packaging in kits



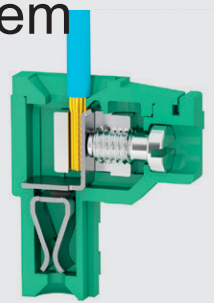
Metallic parts

- ✓ Made of special COPPER ALLOYS only

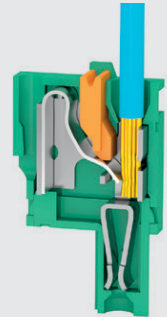


Wire clamping system

- ✓ **Clamp technology:** exclusively with rising clamp

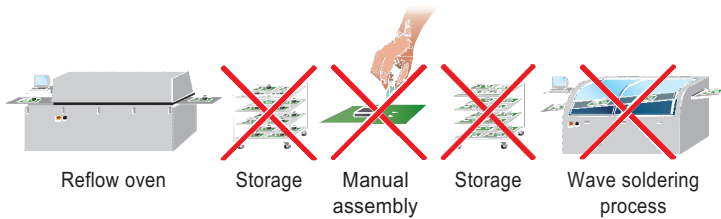
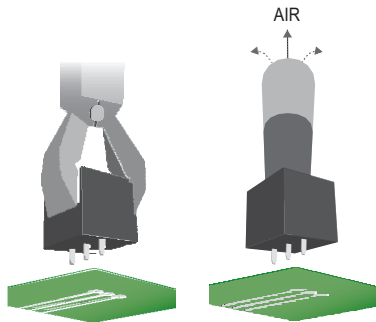


- ✓ **Spring technology:** with $F_r > 250$ N wire retention force



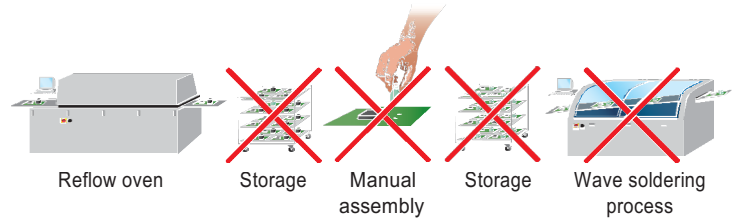
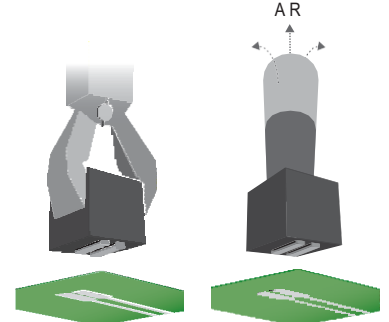
STH® Full Lean Technology

70%
Cost reduction



SMD Full Lean Technology

75%
Cost reduction



Packaging

- ✓ Standard
- ✓ Industrial
- ✓ Tape on reel
- ✓ Tray
- ✓ Tube



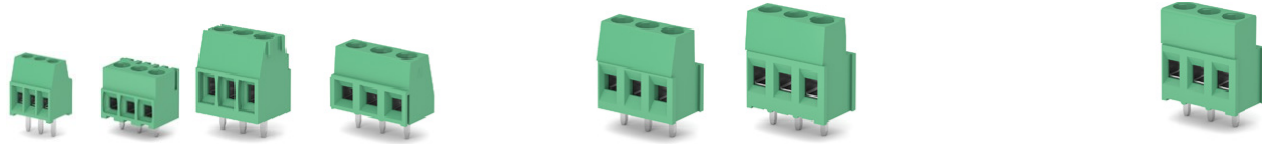
Markets and industries

- ✓ Safety and Security
- ✓ Industry
- ✓ HVACR
- ✓ Factory Test and Measurement
- ✓ Process Automation and Utility Management
- ✓ Building Technology
- ✓ Control Devices
- ✓ Lighting
- ✓ Oil and Gas
- ✓ Medical
- ✓ Digital Technology
- ✓ Home Automation and Domotics compliant to EN 60335-1
- ✓ Wireless Connection Devices

Terminal blocks

Clamp technology

TRADITIONAL
for wave soldering



Series		MSD	MTB	MTS	MSB	MSG	MSM	MSS
Height		10 mm .394 in	8.5 mm .335 in	12.6 mm .496 in	10 mm .394 in	13.5 mm .531 in	15.2 mm .598 in	15.2 mm .598 in
Mounting type & Version	Side stackable	0°	0°, 55°		55°, 90°, 180°, 360°	0°	0°	90°
	Modular		0°, 55°	0°, 90°	0°, 55°, 90°, 180°, 360°	0°, 90°, 270°	0°, 35°, 90°, 225°, 270°	0°, 90°, 270°
	Polarized							
	Flanges							
Pitch mm/in.	2.54 .100	2.54 (x)						
	3.5 .138		3.5 (x)	3.5 (x)				
	3.81 .150		3.81 (x)	3.81 (x)				
	5 .197				5 (x)	5 (x)	5 (x)	5 (x)
	5.08 .200	5.08 (*)			5.08 (x)	5.08 (x)	5.08 (x)	5.08 (x)
	6.35 .250							
	7 .276		7 (*)	7 (*)				
	7.5 .295					7.5 (*)	7.5 (*)	7.5 (*)
	7.62 .300		7.62 (*)	7.62 (*)		7.62 (*)	7.62 (*)	7.62 (*)
	9.52 .375							
	10 .394				10 (*)	10 (*)	10 (*)	10 (*)
	10.16 .400				10.16 (*)	10.16 (*)	10.16 (*)	10.16 (*)
12.7 .500								
15 .591								
Rated voltage		150 V (x) 300 V (*)	300 V (x) 750 V (*)	300 V (x) 750 V (*)	300 V (x) 750 V (*)	300 V (x) 750 V (*)	300 V (x) 750 V (*)	300 V (x) 750 V (*)
Wire section mm²		0.05+1	0.05+1.5	0.05+1.5	0.05+1.5	0.05+2.5	0.05+2.5	0.05+2.5
Wire section AWG		30÷16	28÷16	30÷14	30÷16	30÷14	30÷12	30÷12
Rated current		12 A	17.5 A	17.5 A	17.5 A	24 A	24 A	24 A



STH® & SMD
for reflow soldering



Series		MSDH	MTBH	MSBH	MSBD(SMD)	MSGH	MSMH	MSMH N.	MSFH	MSSH
Height		10 mm .394 in	8.5 mm .335 in	10 mm .394 in	10.15 mm .400 in	13.5 mm .531 in	15.2 mm .598 in	17.05 mm .671 in	15.5 mm .610 in	15.2 mm .598 in
Mounting type & Version	Side stackable	0°	0°, 55°	0°, 55°, 90°	0°	0°, 90°	0°	0°	0°	0°, 90°
	Modular		0°, 55°	0°, 55°, 90°		0°, 90°	0°, 35°			0°, 90°
	Polarized									
	Flanges									
Pitch mm/in.	2.54 .100	2.54 (x)								
	3.5 .138		3.5 (x)							
	3.81 .150		3.81 (x)							
	5 .197			5 (x)	5 (x)	5 (x)	5 (x)	5 (x)		5 (x)
	5.08 .200	5.08 (*)		5.08 (x)		5.08 (x)	5.08 (x)			
	6.35 .250									
	7 .276		7 (*)							
	7.5 .295					7.5 (*)	7.5 (*)			7.5 (*)
	7.62 .300		7.62 (*)			7.62 (*)	7.62 (*)		7.62 (*)	7.62 (*)
	9.52 .375									
	10 .394			10 (*)		10 (*)	10 (*)			10 (*)
	10.16 .400			10.16 (*)		10.16 (*)	10.16 (*)			
12.7 .500										
15 .591										
Rated voltage		150 V (x) 300 V (*)	300 V (x) 750 V (*)	300 V (x) 750 V (*)	300 V (x)	300 V (x) 750 V (*)	300 V (x) 750 V (*)	300 V (x)	750 V (*)	300 V (x) 750 V (*)
Wire section mm²		0.05+1	0.05+1.5	0.05+1.5	0.05+1.5	0.05+2.5	0.05+2.5	0.05+2.5	0.05+2.5	0.05+2.5
Wire section AWG		30÷16	28÷16	30÷16	30÷16	30÷14	30÷12	30÷12	30÷12	30÷12
Rated current		12 A	17.5 A	17.5 A	17.5 A	24 A	24 A	24 A	24 A	24 A



Spring technology

Multi-level terminal blocks































MSQ	MSP	MPS	MPP	MMT	MCM	MCQ	MCQ D.	PSB	PSM
19 mm .748 in	21.5 mm .846 in	29.3 mm 1.154 in	39 mm 1.535 in	14.85 mm .585 in	14.45 mm .569 in	17.9 mm .705 in	17.9 mm .705 in	28 mm (B) 1.102 in	35.6 mm (B) 1.402 in
0°	0°, 35°, 90°	0°	0°	90°	0°	0°, 90°	90°	A, B, C, D, E	A, B, C, D, E
0°, 90°		0°	0°		0°				
				3.5 (x) 3.81 (x)					
5 (x) 5.08 (x)	6.35 (x)			7 (•)	5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)
7.5 (•) 7.62 (•)	7.62 (x) 9.52 (•)			7.62 (•)	7.5 (•) 7.62 (•)				
10 (•) 10.16 (•)	12.7 (□)	10.16 (•)			10 (•) 10.16 (•)	10 (•) 10.16 (•)	10 (•)	10 (•) 10.16 (•)	10 (•) 10.16 (•)
15 (•)			15 (•)						
300V(x) 750V(•)	450V(x) 750V(•) 600V(□)	1000V(•)	1000V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)
0.05÷4 30÷12 32 A	0.05÷6 30÷10 41 A	0.5÷16 20÷6 76 A	0.5÷35 20÷1 135 A	0.2÷1.5 30÷16 10 A	0.2÷2.5 30÷12 16 A	0.2÷2.5 30÷12 16 A	0.2÷2.5 26÷12 16 A	0.05÷1.5 30÷16 17.5 A	0.05÷2.5 30÷12 24 A






























MSQH	MSPH	MPSH	MPPH	MMTH	MCCH	MCMH	MCQH	MCQH D.	PSBH	PSMH
19 mm .748 in	21.5 mm .846 in	29.3 mm 1.154 in	39 mm 1.535 in	14.85 mm .585 in	12 mm .472 in	14.45 mm .569 in	17.9 mm .705 in	17.9 mm .705 in	28 mm (B) 1.102 in	35.6 mm (B) 1.402 in
0°	0°, 35°, 90°	0°	0°	90°	45°	0°	0°, 90°	90°	A, B, C, D, E	A
0°		0°	0°			0°				
				3.5 (x) 3.81 (x)	3.81 (•)					
5.08 (x)	6.35 (x)			7 (•)	5.08 (•)	5.08 (x)	5 (x)	5 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)
7.5 (•) 7.62 (•)	7.62 (x) 9.52 (•)			7.62 (•)						
	12.7 (□)	10.16 (•)					10 (•)	10 (•)	10 (•) 10.16 (•)	10 (•) 10.16 (•)
			15 (•)							
300V(x) 750V(•)	450V(x) 750V(•) 600V(□)	1000V(•)	1000V(•)	300V(x) 750V(•)	300V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)	300V(x) 750V(•)
0.05÷4 30÷12 32 A	0.05÷6 30÷10 41 A	0.5÷16 20÷6 76 A	0.5÷35 20÷1 135 A	0.2÷1.5 30÷16 10 A	0.2÷1.5 30÷16 10 A	0.2÷2.5 30÷12 16 A	0.2÷2.5 30÷12 16 A	0.2÷2.5 26÷12 16 A	0.05÷1.5 30÷16 17.5 A	0.05÷2.5 30÷12 24 A

Connectors

Male connectors

Female connectors

									
PSQ 45 mm (B) 1.772 in	CSM 9 mm .355 in	CLM 9 mm .355 in	CTM 9.2 mm .362 in	CIM 12 mm .472 in	CPM 22.08 mm .869 in	CRM 22 mm .866 in	CGM 15 mm .591 in	CGF 18.9 mm .744 in	CXF 7.95 mm .313 in
A,B,C,D,E,F	0°,90°	0°	0°,90° 0°,45°,90°,270° 0°,45°,90°,270° 0°,45°,90°,270°	0°,45°,90°,270° 0°,45°,90°,270° 0°,45°,90°,270°		0°,90° 0°,90°	0° 0° 0°	0°,90°	90°,270°
5 (x) 5.08 (x)	5 (x)	3.5 (x)	3.5 (x) 3.81 (x) 5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (•)
10 (•) 10.16 (•)	10 (•)	7 (•)	7 (•) 7.62 (•)	7.5 (•) 7.62 (•)	10 (□) 10.16 (□)	10 (•) 10.16 (•)	10 (□) 10.16 (□)	10 (□) 10.16 (□)	
300 V(x) 750 V(•)	300 V(x) 1000 V(•)	150 V(x) 300 V(•)	300 V(x) 450 V(•) 600 V(□)	300 V(x) 600 V(•) 1000 V(□)	300 V(x) 1000 V(•)	300 V(x) 1000 V(•)	300 V(x) 600 V(•) 1000 V(□)	300 V(x) 600 V(•) 1000 V(□)	300 V (•)
0.05÷4 30÷12 32 A	12 A	10 A	11 A	16 A	16 A	16 A	0.05÷2.5 30÷12 16 A	16 A	0.05÷1.5 28÷16 12 A
			  	  	  	  		  	

								
PSQH 45 mm (B) 1.772 in	CSMH 9 mm .355 in	CSMD(SMD) 9.5 mm .374 in	CLMH 9 mm .355 in	CTMH 9.2 mm .362 in	CIMH 12 mm .472 in	CIMH.N 16.49 mm .649 in	CPMH 22.08 mm .869 in	CGFH 18.9 mm .744 in
C	0°,90°	0°	0°	0°,45°,90°,270° 0°,45°,90°,270° 0°,45°,90°,270°	0°,45°,90°,270° 0°,45°,90° 0°,45°,90°,270°	0°	0°,90° 0°,90°	0°,90°
5 (x) 5.08(x)	5 (x)	5 (x)	3.5(x)	3.5 (x) 3.81 (x) 5 (x) 5.08(x)	5 (x) 5.08(x)	5 (•)	5 (x) 5.08(x)	5 (x) 5.08(x)
10 (•) 10.16 (•)	10 (•)	10 (•)	7 (•)	7 (•) 7.62 (•)	7.5 (•) 7.62 (•)		10 (•) 10.16 (•)	10 (□) 10.16 (□)
300 V(x) 750 V(•)	300 V(x) 1000 V(•)	300 V(x) 1000 V(•)	150 V(x) 300 V(•)	300 V(x) 450 V(•) 600 V(□)	300 V(x) 600 V(•) 1000 V(□)	300 V(•)	300 V (x) 1000 V(•)	300 V(x) 600 V(•) 1000 V(□)
0.05÷4 30÷12 32 A	12 A	12 A	10 A	11 A	16 A	15 A	16 A	16 A
	 	 	 	  	  	 	 	  

Plurima®
available versions





CSF	CLF	CHF	CHF D.	CTF	CKF	CBF	CIF	CVF	CCF	CCF D.	CUF
11.5 mm .453 in	11.1 mm .437 in	12.5 mm .492 in	16 mm .630 in	11.1 mm .437 in	19.2 mm .756 in	20.85 mm .821 in	15.5 mm .610 in	25 mm .984 in	25.4 mm 1 in	25.2 mm .992 in	15.5 mm .610 in
0°,90°,270° 0°,90°,270°	0°,90°,270° 0°,90°,270°	45°	45°	0° 0°	90° 90°	0°	0° 0°	90° 90°	0°	0°	0°
90°,270°				0°	90°	0°	0°	90°	0°	0°	0°
	3.5 (•)	3.5 (x)	3.5 (x)	3.5 (x) 3.81 (x) 5 (x) 5.08 (x)	3.5 (•) 3.81 (•)	3.5 (•) 3.81 (•)		5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x) 5.08 (x)	5 (x)
5 (x)											5 (x)
	7 (•)	7 (•)	7 (•)	7 (•) 7.62 (•)	7 (□) 7.62 (□)	7 (•) 7.62 (•)		7.5 (•) 7.62 (•)	7.5 (•) 7.62 (•)		
10 (•)				10 (•) 10.16 (•)				10 (□) 10.16 (□)	10 (□) 10.16 (□)	10 (•) 10.16 (•)	10 (•)
300 V (x) 1000 V (•)	300 V (•)	150 V (x) 300 V (•)	150 V (x) 300 V (•)	300 V (x) 600 V (•)	300 V (•) 600 V (□)	300 V (•)	300 V (x) 600 V (•) 1000 V (□)	300 V (x) 600 V (•) 1000 V (□)	300 V (x) 1000 V (•)	300 V (x) 1000 V (•)	300 V (x) 750 V (•)
0.05÷2.5 30÷14 12 A	0.5÷1.5 30÷16 10 A	0.5÷1.5 24÷16 4 A	0.5÷1.5 24÷16 4 A	0.05÷1.5 30÷14 11 A	0.05÷1.5 30÷14 11 A	0.14÷1.5 30÷14 11 A	0.05÷2.5 30÷12 16 A	0.05÷2.5 30÷12 16 A	0.2÷2.5 30÷12 12 A	0.2÷2.5 30÷12 12 A	0.05÷1.5 30÷12 10 A

®
sions

Angle definition **Compatibility of connectors** **Supports**

B
High tower

D
2nd & 3rd levels

F
4 levels

Clamp terminal blocks

Angle between the PCB and the wiring direction

Spring terminal blocks

Angle between the PCB and the wiring direction

Female connectors

Angle between the plugging direction and the wiring direction

Male connectors

Angle between the normal to the PCB and the plugging direction

STC 072 STC 107

SMC 072 SMC 107

SRC 175 SRC 225

SRC 350 SRC 450

	CSF	CLF	CHF	CHF D.	CTF	CKF	CBF	CIF	CVF	CCF	CCF D.	CGF	CGFH
CSM	✓	✓											
CSMH	✓	✓											
CSMD	✓	✓											
CLM_S			✓										
CMLH_S			✓										
CLM_0				✓	✓								
CLMH_0				✓	✓								
CTM						✓	✓	✓					
CTMH						✓	✓	✓					
CIM									✓	✓	✓	✓	●
CIMH									✓	✓	✓	✓	●
CPM									✓	✓	✓	✓	●
CPMH									✓	✓	✓	✓	●
CRM									✓	✓	✓	✓	●
CIMH.N.									✓	✓	✓	✓	●
													✓