

Functional characteristics



Dimensional class:

low



Standard colour:

green



Height:

10 mm (.394 in)



Max approved wire sections:

solid: 1 mm² (IMQ); 16 AWG (UL)stranded: 0.5 mm² (IMQ); 16 AWG (UL)

Clamp opening size:

1.4 x 1.7 mm (.055 x .067 in)



Versions:

side stackable,

Single mould poles:

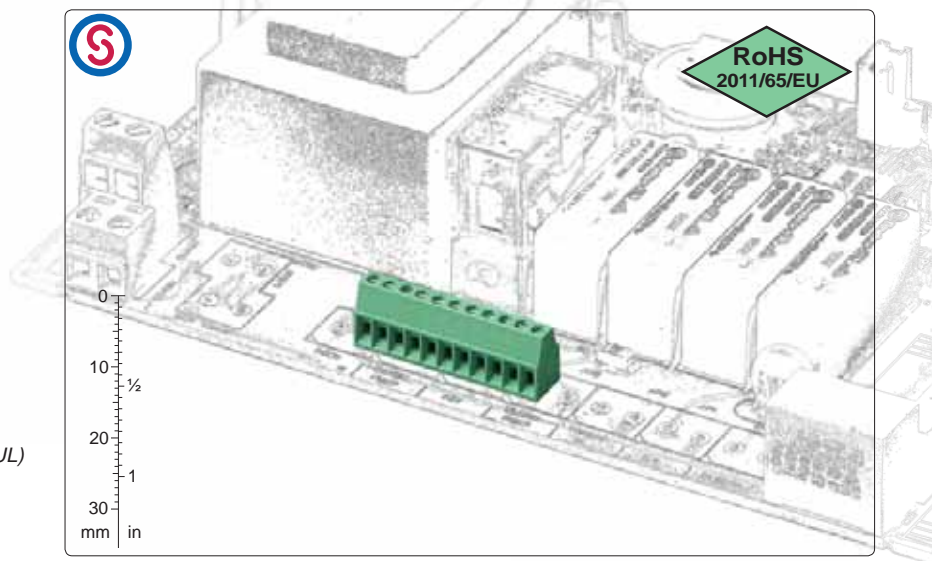
from 2 to 12



Pitches:

imperial 2.54 mm, 5.08 mm

(.100 in, .200 in)


 pitch 2.54 mm
 from 2 to 12 poles
 side stackable

 pitch 5.08 mm
 from 2 to 6 poles
 side stackable

Brief description

The **MSD** series of terminal block is characterized by its **particularly small dimensions** and is ideal to use in **PCBs** for the **transmission of signals** and/or for low voltage and limited current intensity, in particular when it is necessary to wire a large number of contacts in a small space.

It is available in 2.54 mm (.100 in) and 5.08 mm (.200 in) Imperial pitches in monolithic blocks from 2 to 12 poles.

The monolithic blocks can be side-stacked by adding a pitch between

one pitch and another in order to obtain any number of poles. By taking advantage of this particular characteristic a minimum stock of basic terminal blocks can be kept.

It is simple to manage the product, the warehouse and the assembly with the **Kit packages** because several versions can be received with **only one code**, the part-numbers are significantly reduced and the risk of making mistakes is also reduced.

Approvals

IEC-EN	IEC:	130 V - T 110 - 12 A - 1 mm ² solid (6 A - 0.5 mm ² stranded) for 2.54 mm pitch
	EN 60998-1 and EN60998-2-1	250 V - T 110 - 12 A - 1 mm ² solid (6 A - 0.5 mm ² stranded) for 5.08 mm pitch
UL	UL:	150 V - 10 A - 30÷16 AWG - 1.73 lbf-in for 2.54 mm pitch
	File E167473	300 V - 10 A - 30÷16 AWG - 1.73 lbf-in for 5.08 mm pitch
		Application values for end-use equipment have to be in accordance to UL norms and applicable to it.
VDE	VDE:	125 V - 6 A - T 110 - 0.5 mm ² for 2.54 mm pitch
	File n. 40022747	250 V - 6 A - T 110 - 0.5 mm ² for 5.08 mm pitch
IMQ	IMQ:	130 V - T 110 - 12 A - 1 mm ² solid (6 A - 0.5 mm ² stranded) for 2.54 mm pitch
	File: CA02.00145	250 V - T 110 - 12 A - 1 mm ² solid (6 A - 0.5 mm ² stranded) for 5.08 mm pitch
CSA	CSA:	150 V - 10 A - 30÷16 AWG for 2.54 mm pitch
	File LR102896	300 V - 10 A - 30÷16 AWG for 5.08 mm pitch

See also "Certifications", page 8

Components features

M1.6 nickel plated copper alloy screw.

Polyamide housing.

Standard colour: GREEN.

V0 self-extinguishing according to UL 94.

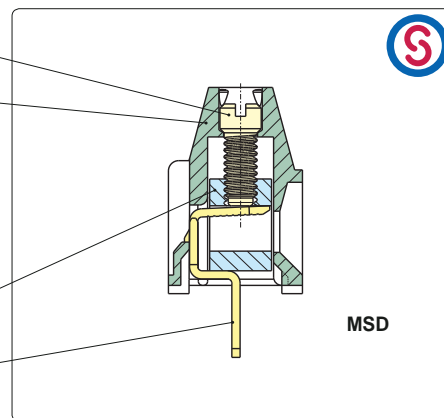
Chlorinated solvents resistant,
with no phosphorus, dioxins or halogens detrimental to health.

Material Group I (CTI ≥ 600 V)

Nickel plated copper alloy clamp

Easy to solder lead-free

tin-plated copper alloy pin.



Mechanical features

Recommended/highest tightening torque

0.13/0.15 Nm (1.14/1.33 lbf·in)

PCB thickness:

max. 2.4 mm (.094 in)

PCB hole diameter:

min. 1.1 mm (.043 in)

Stripping length

4 \div 5 mm (.16 \div .197 in)

Operating temperature range

-40 °C \div +110 °C (-40 °F \div +230 °F)

Climatic category

40/110/21 According to EN 60068-1

Electrical features*

Solid wire section

30 \div 16 AWG (UL)* 0.05 \div 1 mm² (IMQ)*

Stranded wire section

30 \div 16 AWG (UL)* 0.05 \div 0.5 mm² (IMQ)*

Rated voltage for 2.54 mm (.100 in)

150 V (UL)*

Rated voltage for 5.08 mm (.200 in)

300 V (UL)*

Rated current

12 A (IMQ)*

Contact resistance

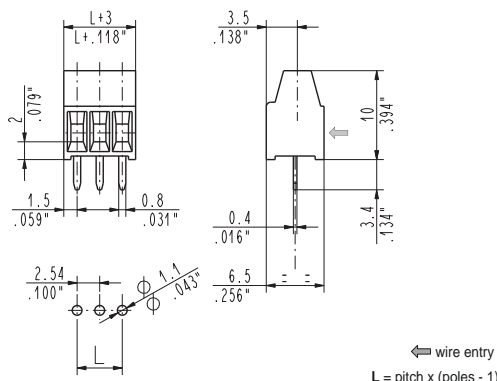
<15 m Ω

Insulation resistance

>10⁹ Ω (500V DC)

*All the above mentioned data refer to the highest values amongst the certified ones.

V voltage, I current values and tightening torque are related to regulations applicable to the product and to its use.



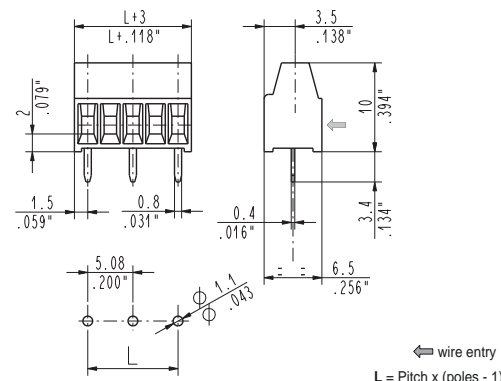
MSD_004

straight, side entry

2.54 mm / .100" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSD02004	400	0,28	5000	3,50
03	MSD03004	275	0,29	5000	5,25
04	MSD04004	200	0,28	3000	4,20
05	MSD05004	150	0,26	2500	4,38
06	MSD06004	125	0,26	2000	4,20
07	MSD07004	100	0,25	2000	4,90
08	MSD08004	100	0,28	2000	5,60
09	MSD09004	75	0,24	1500	4,73
10	MSD10004	75	0,26	1500	5,25
11	MSD11004	50	0,19	1000	3,85
12	MSD12004	50	0,21	1000	4,20

*W [kg]: approximate weight per box in kg



MSD_005

straight, side entry

5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSD02005	275	0,22	5000	4,00
03	MSD03005	150	0,18	2500	3,00
04	MSD04005	100	0,16	2000	3,20
05	MSD05005	75	0,15	1500	3,00
06	MSD06005	50	0,12	1000	2,40

**industrial packaging: add "-00000E" to standard code