

**MSD**

**Functional Characteristics**



**Dimensional Class:**  
Low



**Standard Colour:**  
Green



**Height:**  
10 mm (.394 in)



**Max Approved Wire sections:**  
Solid: 1 mm<sup>2</sup> (IMQ); 16 AWG (UL)  
Stranded: 0.5 mm<sup>2</sup> (IMQ); 16 AWG (UL)

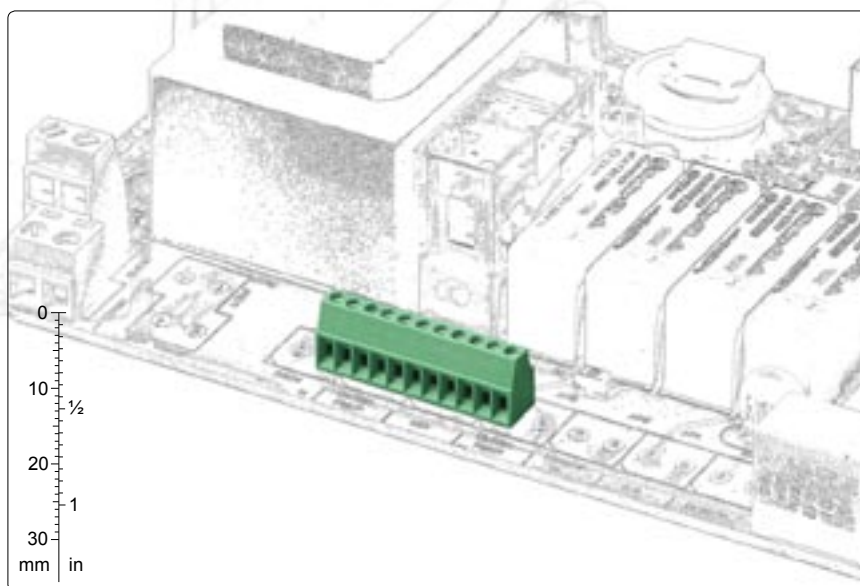
**Clamp Opening Size:**  
1.4 x 1.7 mm (.055 x .067 in)



**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 for use in **PCBs** for the **transmission of signals** and/or for low voltage and limited current intensity, particularly when it is necessary to wire a large number of contacts in a small space.

It is available in Imperial Pitches from 2.54 mm (.100 in) and from 5.08 mm (.200 in) 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**



CE: 130 V - T 110 - 12 A - 1 mm<sup>2</sup> solid (6 A - 0.5 mm<sup>2</sup> stranded) for 2.54 mm pitch  
250 V - T 110 - 12 A - 1 mm<sup>2</sup> solid (6 A - 0.5 mm<sup>2</sup> stranded) for 5.08 mm pitch



UL: 150 V - 10 A - 30+16 AWG for 2.54 mm pitch  
**File E 167473** 300 V - 10 A - 30+16 AWG for 5.08 mm pitch  
Application values for end-use equipment have to be in accordance to UL norms and applicable to it.



CSA: 150 V - 10 A - 30+16 AWG for 2.54 mm pitch  
**File LR 102896** 300 V - 10 A - 30+16 AWG for 5.08 mm pitch



VDE: 125 V - 6 A - T 110 - 0.5 mm<sup>2</sup> for 2.54 mm pitch  
**Reg. N. 5659 ÜG** 250 V - 6 A - T 110 - 0.5 mm<sup>2</sup> for 5.08 mm pitch

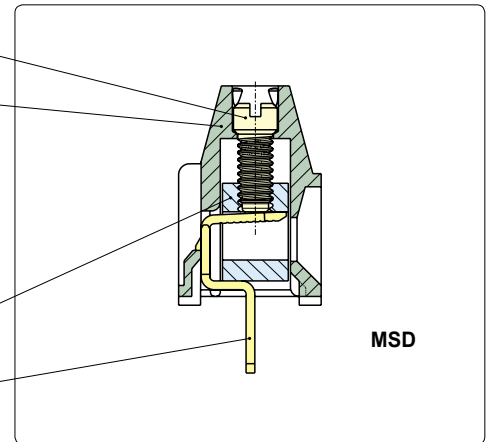


IMQ: 130 V - T 110 - 12 A - 1 mm<sup>2</sup> solid (6 A - 0.5 mm<sup>2</sup> stranded) for 2.54 mm pitch  
**File: CA02.00145** 250 V - T 110 - 12 A - 1 mm<sup>2</sup> solid (6 A - 0.5 mm<sup>2</sup> stranded) for 5.08 mm pitch

See also "Certifications of Products", page 14

## Characteristics of Components

- M1.6 nickel plated Copper Alloy Screw.
- PA 6.6.Polyamide Housing.  
Standard Colour: GREEN.  
V0 Self-extinguishing according to UL 94.  
Chlorinated solvents resistant,  
with no Phosphor, Dioxin or  
detrimental to health Halogens.
- Nickel plated Copper Alloy Clamp
- Easy to solder lead-free  
tin-plated Copper Alloy Pin.



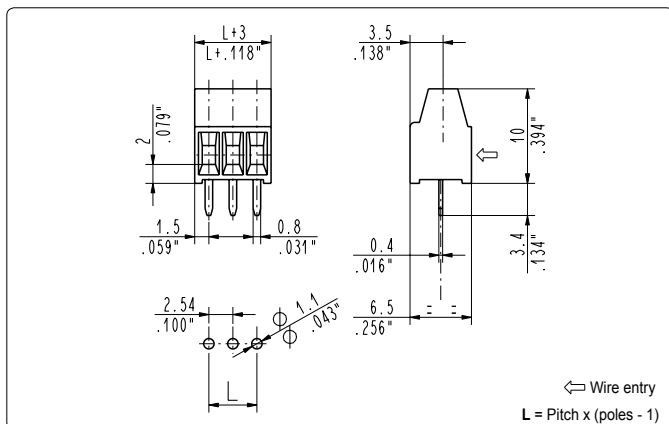
### Mechanical characteristics

Recommended/Highest tightening torque	0.1/0.15 Nm (0.88/1.33 lbf in)
PCB Thickness:	max. 2.4 mm (.094 in)
PCB Hole Diameter:	min. 1.1 mm (.043 in)
Stripping length	4 ± 5 mm (.16 ± .197 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 According to EN 60068-1

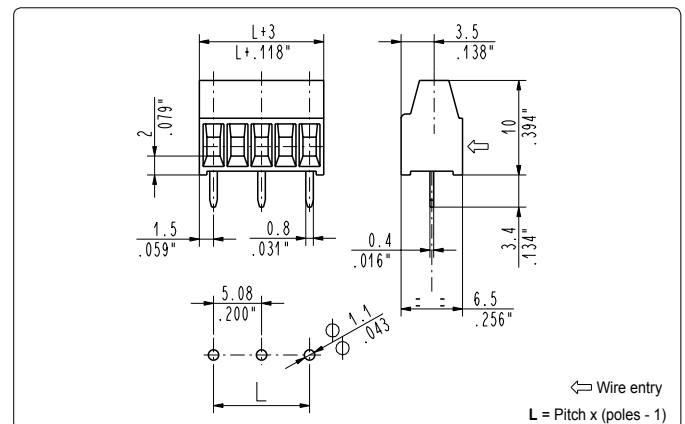
### Electric characteristics\*

Solid wire section	30÷16 AWG (UL, CSA)* 0.05 ÷ 1 mm <sup>2</sup> (IMQ)*
Stranded wire section	30÷16 AWG (UL, CSA)* 0.05 ÷ 0.5 mm <sup>2</sup> (IMQ)*
Rated voltage for 2.54 mm (.100 in)	150 V (UL, CSA)*
Rated voltage for 5.08 mm (.200 in)	300 V (UL, CSA)*
Rated current	12 A (IMQ)*
Contact resistance	<15 mΩ
Insulation resistance	>109 Ω (500V DC)

\*All the above mentioned data refer to the highest values amongst the certificated ones.  
V voltage, I current values and tightening torque are related to the norms to be applied to the product and to its use.



MSD_004		Straight, Side Entry			
2.54 mm / .100" Pitch		Weight per pole: 0.35 g			
Poles	STD 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



MSD_005		Straight, Side Entry			
5.08 mm / .200" Pitch		Weight per pole: 0.40 g			
Poles	STD 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

\*W [kg]: Approximate Weight per box in kg

\*\*Industrial packaging: add "-00000E" at standard code