MCQ

Functional Characteristics

Dimensional Class:
High

Standard Colour:
Green

Height:
17.48 mm (.688 in)

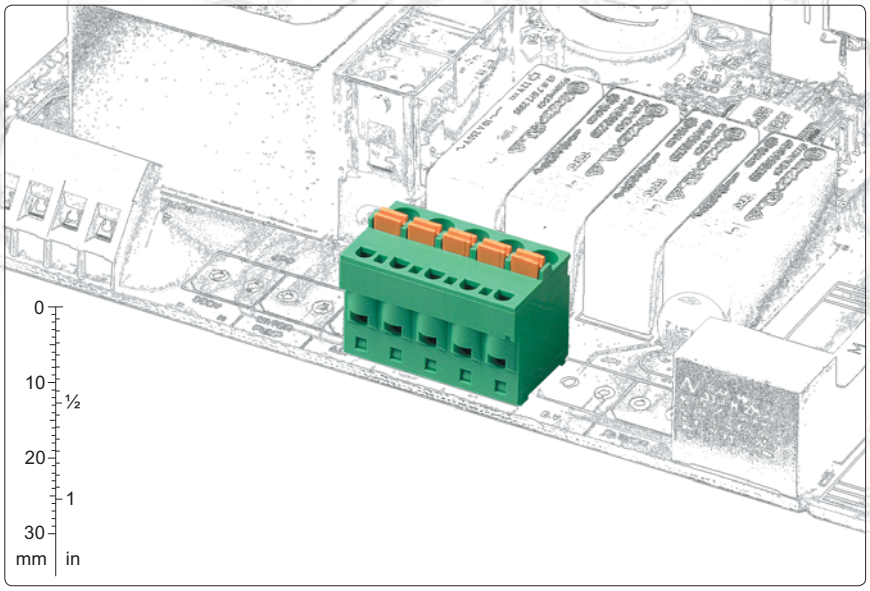
Max Approved Wire sections:
Solid: 2.5 mm² (CE)
Stranded: 2.5 mm² (CE); 12 AWG (UL)

Wire Opening Size:
2.3 x 2.9 mm (.091 x .114 in)

Versions:
Side Stackable

Single Mould Poles:
from 2 to 18

Pitches:
Metric 5 mm, 10 mm
(.197 in, .394 in)
Imperial 5.08 mm, 10.16 mm
(.200 in, .400 in)



from 2 to 18
Straight, Side Stackable
pitch 5/5.08 mm

from 2 to 9
Straight, Side Stackable
pitch 10/10.16 mm

available accessories:
from 2 to 6 poles
BSC for spring connections
See also "Accessories", page 268

Brief Description

The **MCQ** series of terminal blocks for PCBs is the ideal solution when, due to the layout of the PCB, it is necessary to have **a terminal block where the direction of the wire, when inserted, must be parallel to the direction of the tightening command**, maintaining a tightening force which is comparable to the rising clamp.

Moreover, by using a contact spring system wiring can be **carried out quickly and it is not affected by the vibrations**. It is possible to use rigid or flexible wires with ferrules, but flexible wires without ferrules can also be used by pressing on the appropriate switch.

It is available in metric pitches from 5 mm (.197 in) and from 10 mm (.394 in) and in Imperial Pitches from 5.08 mm (.200 in) and from 10.16 mm (.400 in) in monolithic blocks from 2 to 18 poles.

All the housings are side-stackable, therefore it is possible to side-stack the monolithic terminal blocks from 2 to 18 poles until any number of poles is obtained without losing the pitch. By taking advantage of this particular characteristic a minimum stock of basic terminal blocks can be kept.

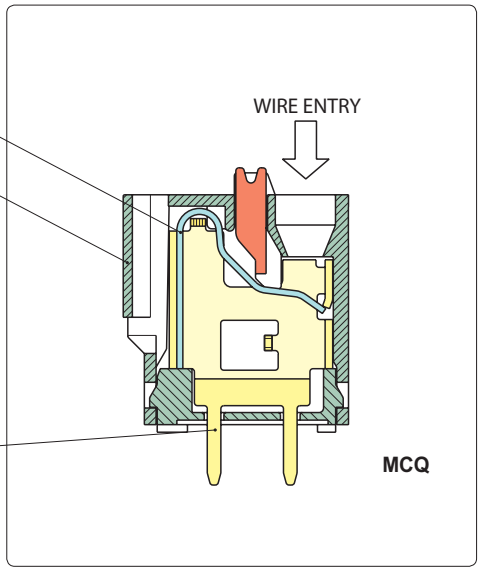
It is simple to manage the product, the warehouse and the assembly with the Kit packages because several versions can be received with only one code, the part-numbers are significantly reduced and the risk of making mistakes is also reduced.

Characteristics of Components

Inox Spring.

PA 6.6.Polyamide Housing.
Standard Colour: GREEN.
V0 Self-extinguishing according to UL 94.
Chlorinated solvents resistant,
with no Phosphor, Dioxin or
dentrimental to health Halogens.

Easy to solder lead-free
tin-plated Copper Alloy Pin.



Mechanical characteristics

PCB Thickness:	max. 2.4 mm (.094 in)
PCB Hole Diameter:	min. 1.4 mm (.055 in)
Stripping length	10 mm (.39 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 According to EN 60068-1

Electric characteristics*

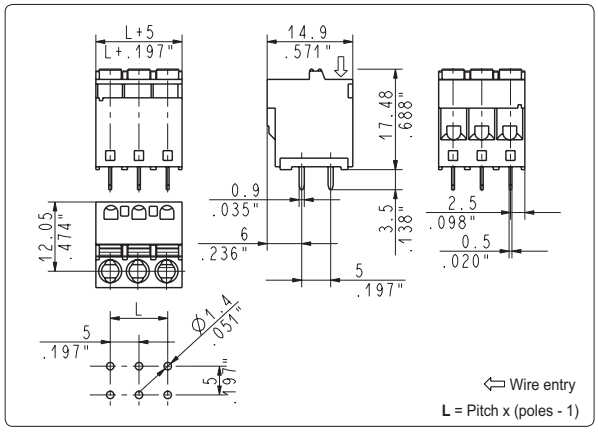
Solid wire section	30÷12 AWG; 0.2 ÷ 2.5 mm² (CE)*
Stranded wire section	30÷12 AWG (UL)*; 0.2 ÷ 2.5 mm² (CE)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in)	300 V (UL)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in)	750 V (CE)*
Rated current	12 A (UL)*
Contact resistance	<15 mΩ
Insulation resistance	$>10^9$ 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.*

Approvals

CE	CE:	250 V - T 110 - 12 A - 2.5 mm² solid and stranded for 5 mm and 5.08 mm pitch
		750 V - T 110 - 12 A - 2.5 mm² solid and stranded for 10 mm and 10.16 mm pitch
cULus	UL:	300 V - 12 A - 30÷12 AWG for 5 mm, 5.08 mm pitch
	File E 167473	600 V - 12 A - 30÷12 AWG for 10 mm and 10.16 mm pitch
		Application values for end-use equipment have to be in accordance to UL norms and applicable to it.

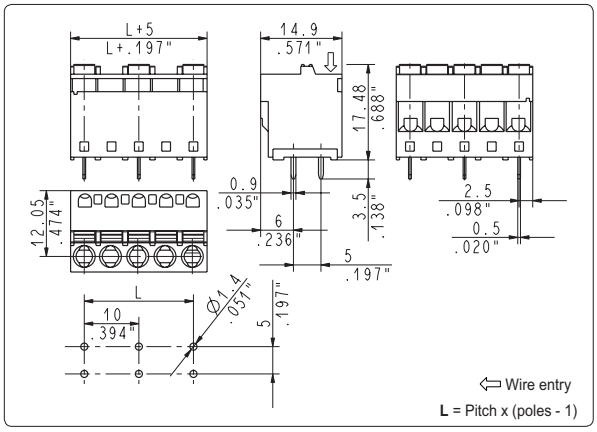
See also "Certifications of Products", page 14



MCQ__001 — **90°, Top Entry**

5 mm / .197" Pitch — **Weight per pole: 1.50 g**

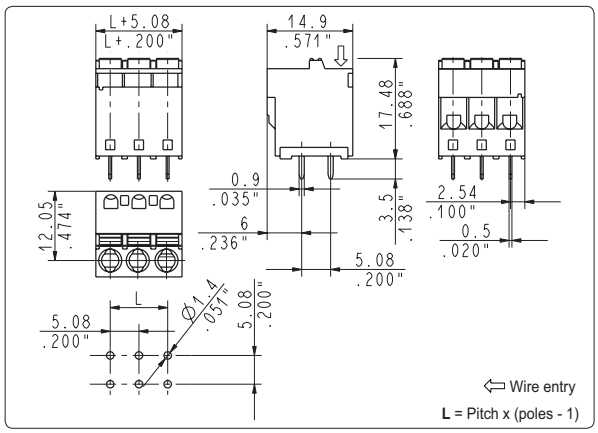
Poles	STD Code	Pcs/pack.	W [kg]*	*Pcs/Ind.***	*W [kg]**
02	MCQ02001	300	0,90	*1250*	*3,75*
03	MCQ03001	200	0,90	*1000*	*4,50*
04	MCQ04001	200	1,20	*1000*	*6,00*
05	MCQ05001	200	1,50	*1000*	*7,50*
06	MCQ06001	150	1,35	*1000*	*9,00*
07	MCQ07001	125	1,31	*750*	*7,88*
08	MCQ08001	100	1,20	*500*	*6,00*
09	MCQ09001	100	1,35	*500*	*6,75*
10	MCQ10001	50	0,75	*250*	*3,75*
11	MCQ11001	50	0,83	*250*	*4,13*
12	MCQ12001	50	0,90	*250*	*4,50*
13	MCQ13001	50	0,98	*250*	*4,88*
14	MCQ14001	50	1,05	*250*	*5,25*
15	MCQ15001	50	1,13	*250*	*5,63*
16	MCQ16001	50	1,20	*250*	*6,00*
17	MCQ17001	50	1,28	*250*	*6,38*
18	MCQ18001	50	1,35	*250*	*6,75*



MCQ__002 — **90°, Top Entry**

10 mm / .394" Pitch — **Weight per pole: 1.88 g**

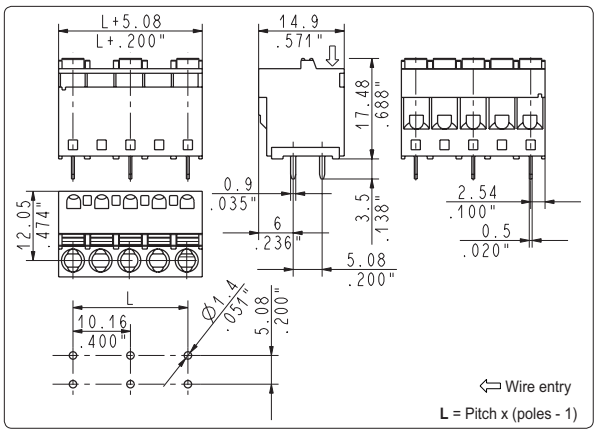
Poles	STD Code	Pcs/pack.	W [kg]*	*Pcs/Ind.***	*W [kg]**
02	MCQ02002	300	1,13	*1250*	*4,70*
03	MCQ03002	200	1,13	*1000*	*5,64*
04	MCQ04002	125	0,94	*750*	*5,64*
05	MCQ05002	100	0,94	*500*	*4,70*
06	MCQ06002	50	0,56	*250*	*2,82*
07	MCQ07002	50	0,65	*250*	*3,29*
08	MCQ08002	50	0,74	*250*	*3,76*
09	MCQ09002	50	0,83	*250*	*4,23*



MCQ__005 — **90°, Top Entry**

5.08 mm / .200" Pitch — **Weight per pole: 1.50 g**

Poles	STD Code	Pcs/pack.	W [kg]*	*Pcs/Ind.***	*W [kg]**
02	MCQ02005	300	0,90	*1250*	*3,75*
03	MCQ03005	200	0,90	*1000*	*4,50*
04	MCQ04005	200	1,20	*1000*	*6,00*
05	MCQ05005	200	1,50	*1000*	*7,50*
06	MCQ06005	150	1,35	*1000*	*9,00*
07	MCQ07005	125	1,31	*750*	*7,88*
08	MCQ08005	100	1,20	*500*	*6,00*



MCQ__006 — **90°, Top Entry**

10.16 mm / .400" Pitch — **Weight per pole: 1.88 g**

Poles	STD Code	Pcs/pack.	W [kg]*	*Pcs/Ind.***	*W [kg]**
02	MCQ02006	300	1,13	*1250*	*4,70*
03	MCQ03006	200	1,13	*1000*	*5,64*
04	MCQ04006	125	0,94	*750*	*5,64*

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

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