

# MCQ

## Functional characteristics



**Dimensional class:**

high



**Standard colour:**

green



**Height:**

17.48 mm (.688 in)



**Max approved wire sections:**

solid: 2.5 mm<sup>2</sup> (IEC EN); 12 AWG

stranded: 2.5 mm<sup>2</sup> (IEC EN); 12 AWG

**Wire opening size:**

2.3 x 2.9 mm (.091 x .114 in)



**Versions:**

Side stackable

**Single mould poles:**

from 2 to 18



**Pitches:**

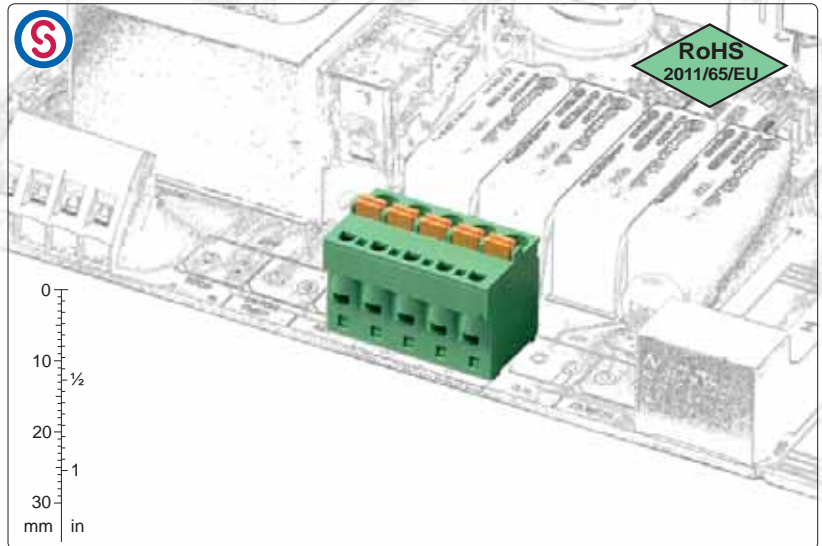
metric 5 mm, 10 mm

(.197 in, .394 in)



imperial 5.08 mm, 10.16 mm

(.200 in, .400 in)



pitch 5/5.08 mm  
from 2 to 18 poles  
90°, side stackable



pitch 5/5.08 mm  
from 2 to 18 poles  
straight, side stackable

Pat.



Bridge for spring connections  
BSC\_0C0-0R  
from 2 to 6 poles



pitch 10/10.16 mm  
from 2 to 9 poles  
90°, side stackable

## 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 equal to the rising clamp.

Moreover, by using a contact spring system, wire connections can be **achieved quickly and they are not affected by vibrations**. It is possible to use rigid or flexible wires with ferrules, or without ferrules by pressing on the appropriate switch.

It is available in metric pitches of 5 mm (.197 in) and 10 mm (.394 in)

and in imperial pitches of 5.08 mm (.200 in) and 10.16 mm (.400 in), in monolithic blocks from 2 to 18 poles.

All housings are stackable, so it is possible to stack monolithic terminal blocks from 2 to 18 poles until any number of poles is obtained without losing pitch. By taking advantage of this particular feature a minimum quantity of basic terminal blocks can be stored.

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



## Components features

Steel slapping spring

Polyamide housing

Standard colour: green

V0 Self-extinguishing according to UL 94.

Chlorinated solvents resistant,

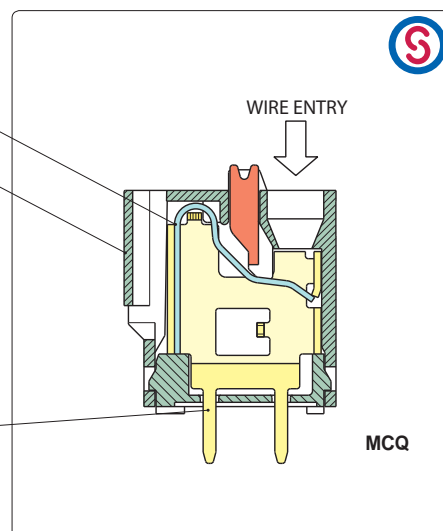
with no phosphor, dioxin or

detrimental to health halogens.

Material Group I (CTI  $\geq$  600 V)

Easy to solder lead-free

tin-plated copper alloy pin.



## Mechanical features

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

## Electrical features\*

Solid wire section	24÷12 AWG; 0.2 ÷ 2.5 mm <sup>2</sup> (IEC EN)*
Stranded wire section	24÷12 AWG (UL)*; 0.2 ÷ 2.5 mm <sup>2</sup> (IEC EN)*
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 (IEC EN)*
Rated current	12 A (UL)*
Contact resistance	<15 mΩ
Insulation resistance	>10 <sup>9</sup> 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 the norms to be applied to the product and to its use.

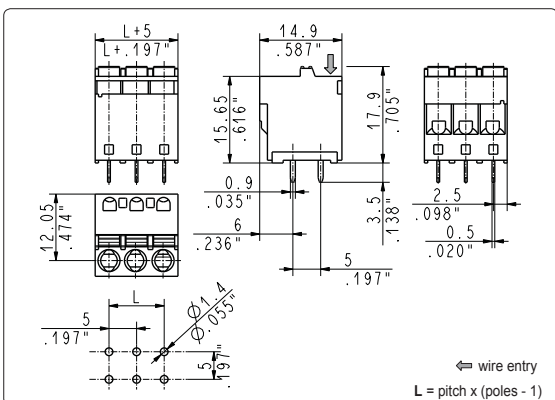
## Approvals

IEC-EN

IEC:	250 V - T 110 - 12 A - 2.5 mm <sup>2</sup> solid and stranded for 5 mm and 5.08 mm pitch
EN 60998	750 V - T 110 - 12 A - 2.5 mm <sup>2</sup> solid and stranded for 10 mm and 10.16 mm pitch

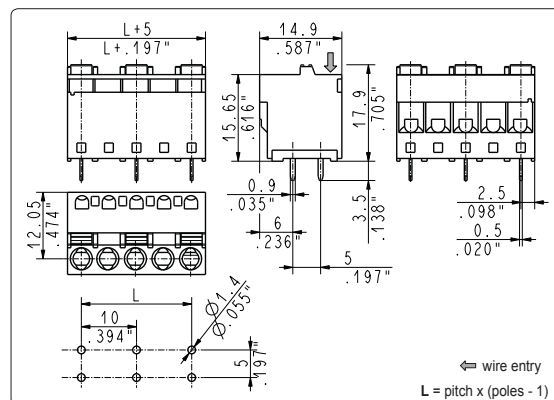
UL

UL:	300 V - 12 A - 24÷12 AWG stranded for 5 mm, 5.08 mm pitch
File E167473	600 V - 12 A - 24÷12 AWG stranded 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 them.



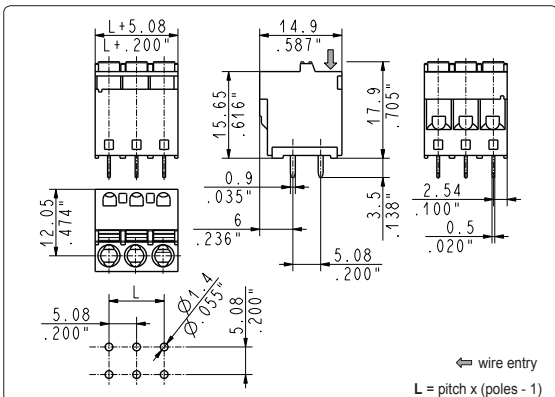
**MCQ\_001** 90°, side stackable

5 mm / .197" pitch					
Poles	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



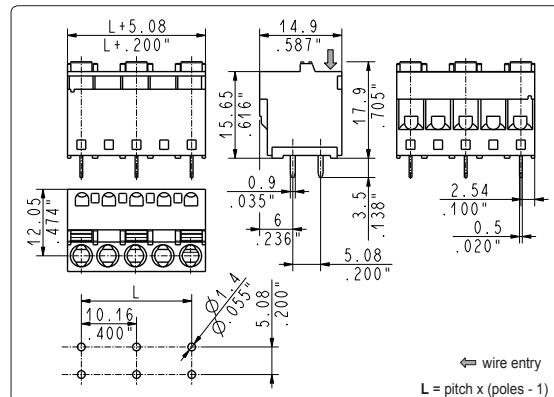
**MCQ\_002** 90°, side stackable

10 mm / .394" pitch					
Poles	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	0,66	250	3,29
08	MCQ08002	50	0,75	250	3,76
09	MCQ09002	50	0,85	250	4,23



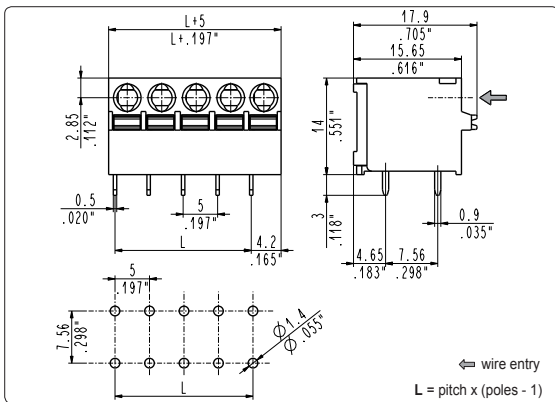
**MCQ\_005** 90°, side stackable

5.08 mm / .200" pitch					
Poles	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°, side stackable

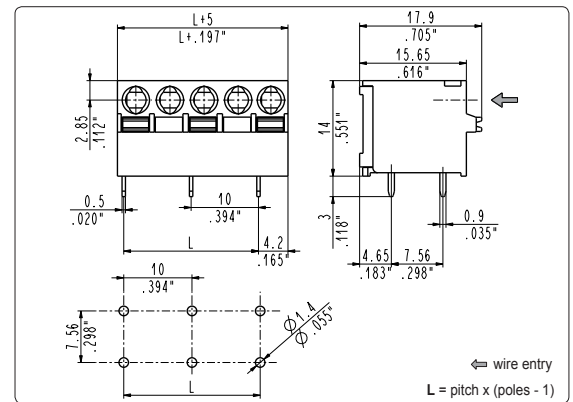
10.16 mm / .400" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCQ02006	300	1,13	1250	4,70
03	MCQ03006	200	1,13	1000	5,64
04	MCQ04006	125	0,94	750	5,64



**MCQ\_091** straight, side stackable

5 mm / .197" pitch

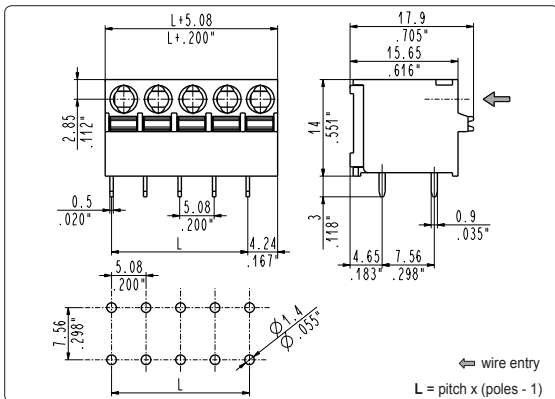
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCQ02091	300	0,78	1250	3,25
03	MCQ03091	200	0,78	1000	3,90
04	MCQ04091	200	1,04	1000	5,20
05	MCQ05091	200	1,30	1000	6,50
06	MCQ06091	150	1,17	1000	7,80
07	MCQ07091	125	1,14	750	6,83
08	MCQ08091	100	1,04	500	5,20



**MCQ\_092** straight, side stackable

10 mm / .394" pitch

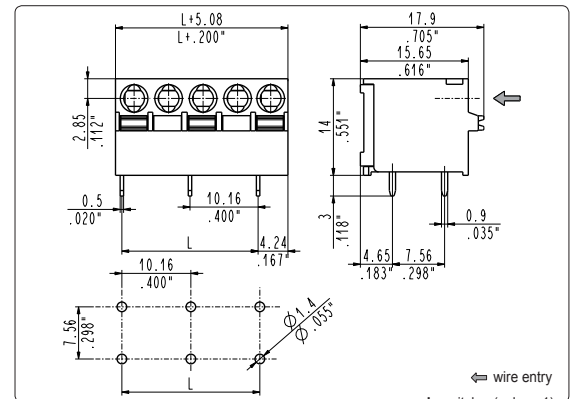
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCQ02092	300	1,04	1250	4,35
03	MCQ03092	200	1,04	1000	5,22
04	MCQ04092	125	0,87	750	5,22



**MCQ\_095** straight, side stackable

5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCQ02095	300	0,78	1250	3,25
03	MCQ03095	200	0,78	1000	3,90
04	MCQ04095	200	1,04	1000	5,20
05	MCQ05095	200	1,30	1000	6,50
06	MCQ06095	150	1,17	1000	7,80
07	MCQ07095	125	1,14	750	6,83
08	MCQ08095	100	1,04	500	5,20



**MCQ\_096** straight, side stackable

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCQ02096	300	1,04	1250	4,35
03	MCQ03096	200	1,04	1000	5,22
04	MCQ04096	125	0,87	750	5,22