

Functional characteristics

Dimensional class:
high



Standard colour:
green



Height:
19 mm (.748 in)



Max approved wire sections:
solid: 4 mm² (IMQ); 12 AWG (UL)
stranded: 2.5 mm² (IMQ); 12 AWG (UL)

Clamp opening size:
2.6 x 3.5 mm (.102 x .138 in)



Versions:
modular

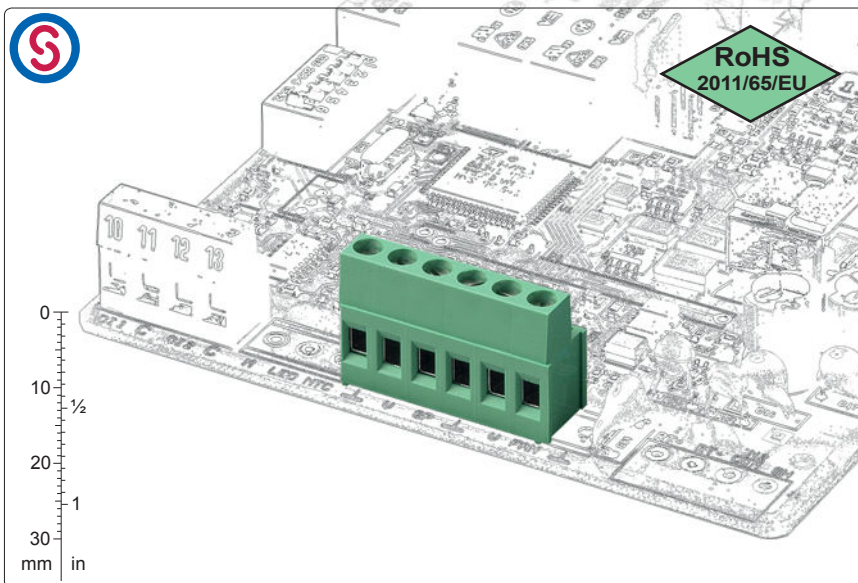
Single mould poles:
from 2 to 25



Pitches:
metric 5 mm, 7.5 mm, 10 mm
(.197 in, .295 in, .394 in)



imperial 5.08 mm, 7.62 mm, 10.16 mm
(.200 in, .300 in, .400 in)



pitch 5/5.08 mm
straight, modular



pitch 7.5/7.62 mm
straight, modular



pitch 10/10.16 mm
straight, modular



pitch 5/5.08 mm
90° version, modular



pitch 10/10.16 mm
90° version, modular

Pat.



available accessories:
from 2 to 9 poles
BSC_00_0R for rising clamp

Brief description

With the **MSQ** modular series terminal blocks for PCBs, wires up to 4mm² (11 AWG) can be used and therefore a current range of 32A certified can be reached.

It is available in 5 mm (.197 in), 7.5 mm (.294 in) and 10 mm (.394 in) metric pitches, and in 5.08 mm (.200 in), 7.62 mm (.300 in) and 10.16 mm (.400 in) Imperial pitches, in monolithic blocks from 2 to 25 poles, with insertion of the wire parallel or vertical with respect to the PCB.

All housings are modular, therefore it is possible to combine monolithic terminal blocks from 2 to 25 poles separately, or the basic terminal

blocks until any number of poles is obtained. By making the most of this particular feature a minimum quantity of basic terminal blocks can be stored.

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

Components features

M3 nickel plated copper alloy screw.

Polyamide housing.

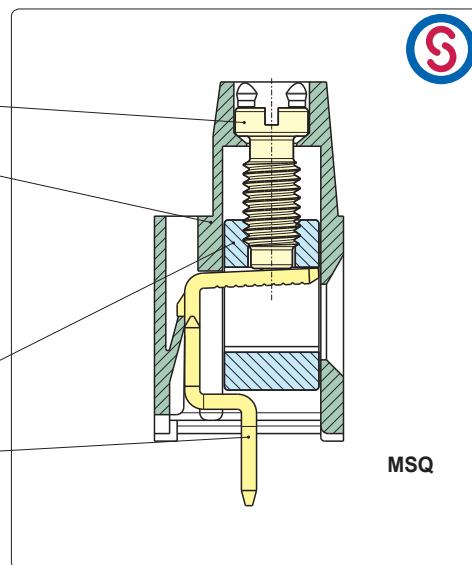
Standard colour: GREEN.

V0 self-extinguishing according to UL 94.

Chlorinated solvent resistant,
with no phosphor, dioxin or
detrimental halogens.

Nickel plated copper alloy clamp

Easy to solder lead-free
tin-plated copper alloy pin.



MSQ

Mechanical features

Recommended/highest tightening torque	0.5/0.6 Nm (4.42/5.31 lbf-in)
PCB thickness:	max. 2.4 mm (.094 in)
PCB hole diameter:	min. 1.4 mm (.055 in)
Stripping length	6.5 ÷ 7 mm (.26 ÷ .28 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	30÷12 AWG (UL)* 0.05÷4 mm ² (IMQ)*
Stranded wire section	30÷12 AWG (UL)* 0.05÷2.5 mm ² (IMQ)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in)	300 V (UL)*
Rated voltage for 7.5 mm (.295 in) and 7.62 mm (.300 in)	750 V (IMQ)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in)	750 V (IMQ)*
Rated current	32 A (IMQ)*
Contact resistance	<15 mΩ
Insulation resistance	>10 ⁹ 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 - 32 A - 4 mm ² solid (24 A - 2.5 mm ² stranded) for 5 mm and 5.08 mm pitch
EN 60998	750 V - T 110 - 32 A - 4 mm ² solid (24 A - 2.5 mm ² stranded) for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch

UL

UL:	300 V - 24 A (factory wiring), 20 A (field wiring) - 30÷12 AWG - 7 lbf-in for 5 mm, 5.08 mm, 7.5 mm and 7.62 mm pitch
File E167473	600 V - 24 A (factory wiring), 20 A (field wiring) - 30÷12 AWG - 7 lbf-in 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.

VDE

VDE:	250 V - 20 A - T 110 - 2.5 mm ² for 5 mm and 5.08 mm pitch
File n. 40022743	450 V - 24 A - T 110 - 2.5 mm ² for 7.5 mm and 7.62 mm pitch
	750 V - 24 A - T 110 - 2.5 mm ² for 10 mm and 10.16 mm pitch

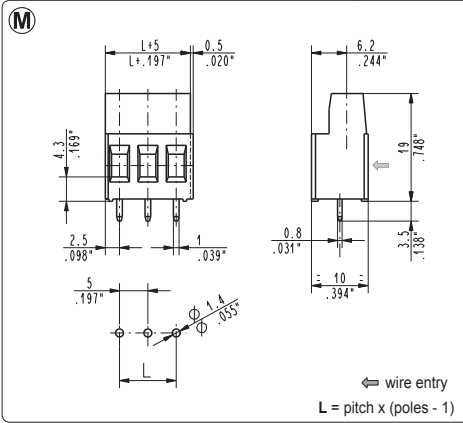
IMQ

IMQ:	250 V - T 110 - 32 A - 4 mm ² solid (24 A - 2.5 mm ² stranded) for 5 mm and 5.08 mm pitch
File: EB731	750 V - T 110 - 32 A - 4 mm ² solid (24 A - 2.5 mm ² stranded) for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch

CSA

CSA:	300 V - 24 A - 30÷11 AWG for 5 mm, 5.08 mm, 7.5 mm and 7.62 mm pitch
File LR102896	600 V - 24 A - 30÷11 AWG for 10 mm and 10.16 mm pitch

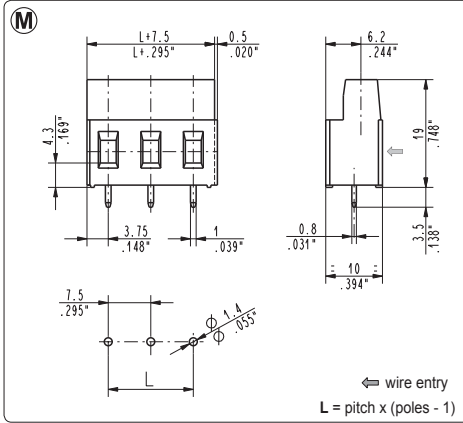
See also "Certifications", page 8



MSQ_001 straight, modular

5 mm / .197" pitch

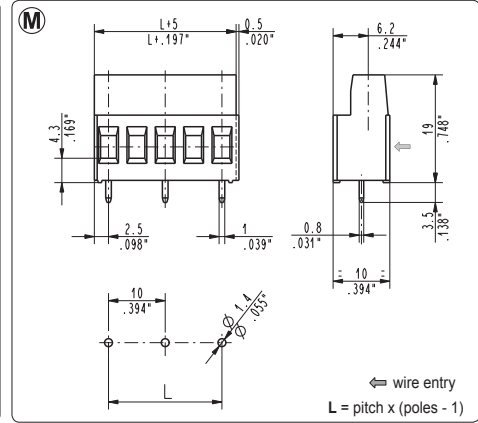
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSQ02001	350	1,42	2000	8,12
03	MSQ03001	225	1,37	1250	7,61
04	MSQ04001	175	1,42	1000	8,12
05	MSQ05001	125	1,27	750	7,61
06	MSQ06001	125	1,52	750	9,14
07	MSQ07001	100	1,42	500	7,11
08	MSQ08001	75	1,22	500	8,12
09	MSQ09001	75	1,37	500	9,14
10	MSQ10001	75	1,52	500	10,15
11	MSQ11001	75	1,67	250	5,58
12	MSQ12001	50	1,22	250	6,09
13	MSQ13001	50	1,32	250	6,60
14	MSQ14001	50	1,42	250	7,11
15	MSQ15001	50	1,52	250	7,61
16	MSQ16001	50	1,62	250	8,12
17	MSQ17001	50	1,73	200	6,90
18	MSQ18001	50	1,83	200	7,31
19	MSQ19001	25	0,96	200	7,71
20	MSQ20001	25	1,02	200	8,12
21	MSQ21001	25	1,07	200	8,53
22	MSQ22001	25	1,12	200	8,93
23	MSQ23001	25	1,17	200	9,34
24	MSQ24001	25	1,22	150	7,31
25	MSQ25001	25	1,27	150	7,61



MSQ_003 straight, modular

7.5 mm / .295" pitch

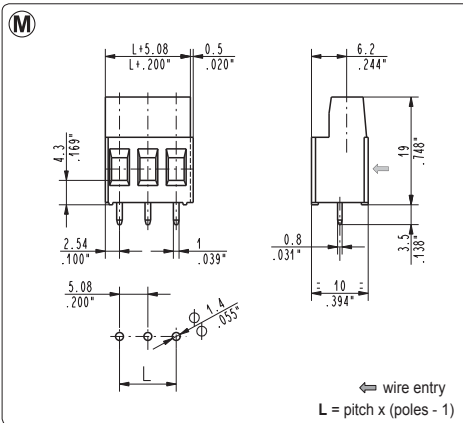
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSQ02003	225	1,08	1250	6,00
03	MSQ03003	150	1,08	750	5,40
04	MSQ04003	100	0,96	500	4,80



MSQ_002 straight, modular

10 mm / .394" pitch

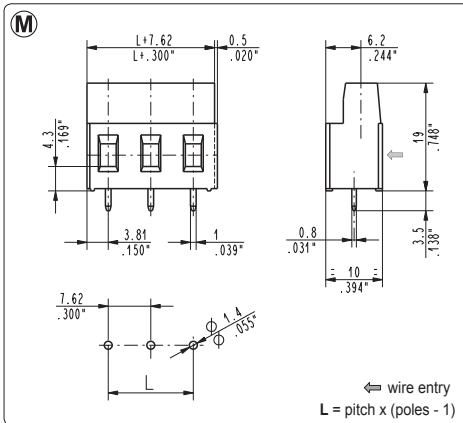
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSQ01002	350	0,82	2000	4,70
02	MSQ02002	225	1,06	1250	5,88
03	MSQ03002	125	0,88	750	5,29
04	MSQ04002	100	0,94	500	4,70
05	MSQ05002	75	0,88	500	5,88
06	MSQ06002	75	1,06	500	7,05
07	MSQ07002	50	0,82	250	4,11
08	MSQ08002	50	0,94	250	4,70
09	MSQ09002	50	1,06	250	5,29
10	MSQ10002	25	0,59	250	5,88
11	MSQ11002	25	0,65	250	6,46
12	MSQ12002	25	0,71	250	7,05
13	MSQ13002	25	0,76	250	7,64



MSQ_005 straight, modular

5.08 mm / .200" pitch

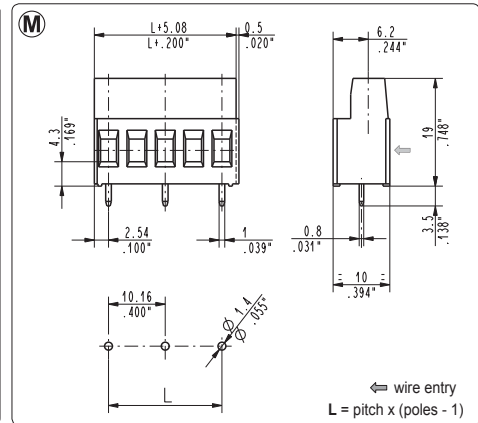
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSQ02005	350	1,42	2000	8,12
03	MSQ03005	225	1,37	1250	7,61
04	MSQ04005	175	1,42	1000	8,12
05	MSQ05005	125	1,27	750	7,61
06	MSQ06005	125	1,52	750	9,14
07	MSQ07005	100	1,42	500	7,11
08	MSQ08005	75	1,22	500	8,12
09	MSQ09005	75	1,37	500	9,14
10	MSQ10005	75	1,52	500	10,15
11	MSQ11005	75	1,67	250	5,58
12	MSQ12005	50	1,22	250	6,09
13	MSQ13005	50	1,32	250	6,60
14	MSQ14005	50	1,42	250	7,11
15	MSQ15005	50	1,52	250	7,61
16	MSQ16005	50	1,62	250	8,12
17	MSQ17005	50	1,73	200	6,90
18	MSQ18005	50	1,83	200	7,31
19	MSQ19005	25	0,96	200	7,71
20	MSQ20005	25	1,02	200	8,12
21	MSQ21005	25	1,07	200	8,53
22	MSQ22005	25	1,12	200	8,93
23	MSQ23005	25	1,17	200	9,34
24	MSQ24005	25	1,22	150	7,31
25	MSQ25005	25	1,27	150	7,61



MSQ_007 straight, modular

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSQ02007	225	1,08	1250	6,00
03	MSQ03007	150	1,08	750	5,40



MSQ_006 straight, modular

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSQ01006	350	0,82	2000	4,70
02	MSQ02006	225	1,06	1250	5,88
03	MSQ03006	125	0,88	750	5,29
04	MSQ04006	100	0,94	500	4,70
05	MSQ05006	75	0,88	500	5,88
06	MSQ06006	75	1,06	500	7,05
07	MSQ07006	50	0,82	250	4,11
08	MSQ08006	50	0,94	250	4,70
09	MSQ09006	50	1,06	250	5,29
10	MSQ10006	25	0,59	250	5,88
11	MSQ11006	25	0,65	250	6,46
12	MSQ12006	25	0,71	250	7,05
13	MSQ13006	25	0,76	250	7,64

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

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