

Functional characteristics



Dimensional class:
medium



Standard colour:
green



Height:
15.2 mm (.598 in)



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

Clamp opening size:
2.5 x 2.3 mm (.098 x .087 in)



Versions:
modular

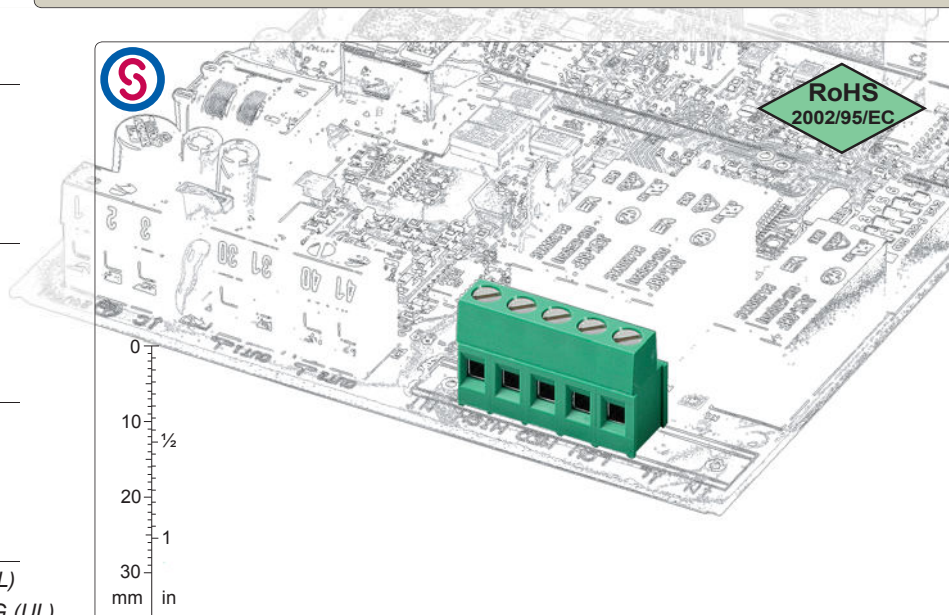
Single mould poles:
from 2 to 25



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



35° version, modular



90° version, modular

Pat.



available accessories:
BSC_00_-0R from 2 to 9 poles
BSC for rising clamp



270° version, modular

Brief description

With the **MSM** modular series terminal blocks for PCBs, wires up to 2.5 mm² (12 AWG) can be used and consequently a current range of 24A 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, inclined at 45° or vertical in relation to the PCB.

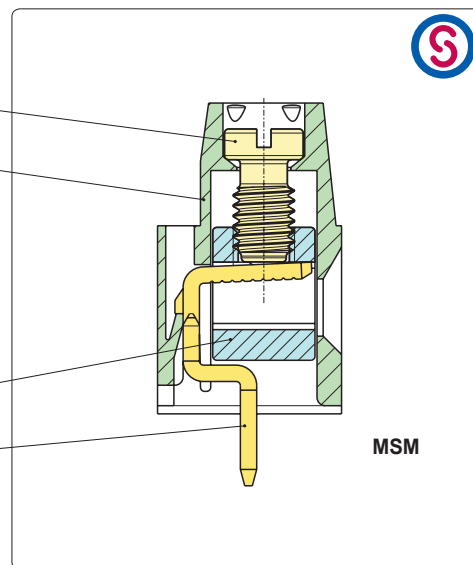
All the housings are modular, therefore it is possible to compose the monolithic terminal blocks from 2 to 25 poles separately, or to

compose the basic terminal blocks until any number of poles is obtained. 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

- M3 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	0.5/0.6 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	5.5 ÷ 6.5 mm (.22 ÷ .26 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 according to EN 60068-1

Electric characteristics*

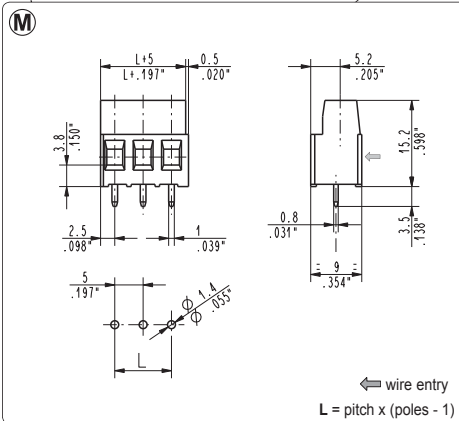
Solid wire section	30÷12 AWG (UL)* 0.05÷2.5 mm ² (VDE)*
Stranded wire section	30÷12 AWG (UL)* 0.05÷2.5 mm ² (VDE)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in)	300 V (UL)*
Rated voltage for 7.5 mm (.295 in) and 7.62 mm (.300 in)	750 V (IMQ)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in)	750 V (IMQ)*
Rated current	24 A (VDE)*
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

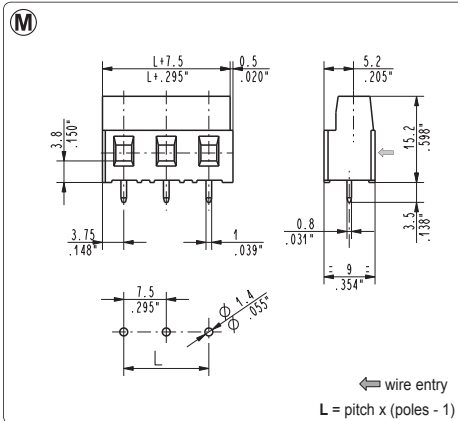
IEC-EN	IEC:	250 V - 24 A - 2.5 mm ² - T 110 for 5 mm and 5.08 mm pitch
	EN 60998	750 V - 24 A - 2.5 mm ² - T 110 for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch
UL	UL:	300 V - 17.5 A - 30÷12 AWG - 7 lbf-in for 5 mm, 5.08 mm, 7.5 mm and 7.62 mm pitch
	File E167473	600 V - 17.5 A - 30÷12 AWG - 7 lbf-in for 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 - 24 A - T 110 - 2.5 mm ² for 5 mm and 5.08 mm pitch
	Reg. n. 40022741	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 - 24 A - 2.5 mm ² - T 110 for 5 mm and 5.08 mm pitch
	File: EA022	750 V - 24 A - 2.5 mm ² - T 110 for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch



MSM_001 straight, modular

5 mm / .197" pitch

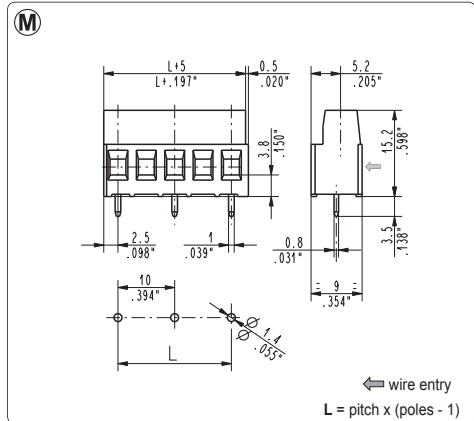
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSM02001	900	2,70	2000	6,00
03	MSM03001	600	2,70	1750	7,88
04	MSM04001	400	2,40	1500	9,00
05	MSM05001	350	2,63	1000	7,50
06	MSM06001	300	2,70	750	6,75
07	MSM07001	250	2,63	750	7,88
08	MSM08001	200	2,40	750	9,00
09	MSM09001	175	2,36	500	6,75
10	MSM10001	175	2,63	500	7,50
11	MSM11001	150	2,48	500	8,25
12	MSM12001	150	2,70	500	9,00
13	MSM13001	75	1,46	500	9,75
14	MSM14001	75	1,58	250	5,25
15	MSM15001	75	1,69	250	5,63
16	MSM16001	75	1,80	250	6,00
17	MSM17001	75	1,91	250	6,38
18	MSM18001	75	2,03	250	6,75
19	MSM19001	50	1,43	250	7,13
20	MSM20001	50	1,50	250	7,50
21	MSM21001	50	1,58	250	7,88
22	MSM22001	50	1,65	250	8,25
23	MSM23001	50	1,73	250	8,63
24	MSM24001	50	1,80	250	9,00
25	MSM25001	50	1,88	250	9,38



MSM_003 straight, modular

7.5 mm / .295" pitch

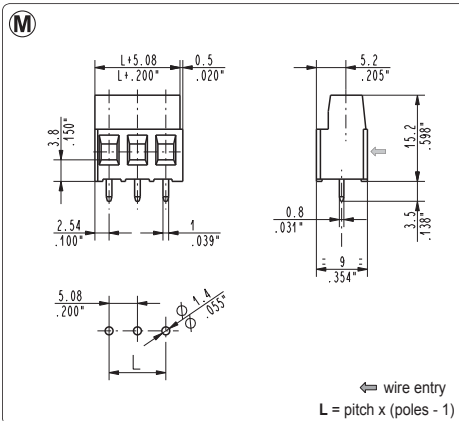
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSM02003	300	1,05	1750	6,13
03	MSM03003	200	1,05	1500	7,88
04	MSM04003	150	1,05	1250	8,75



MSM_002 straight, modular

10 mm / .394" pitch

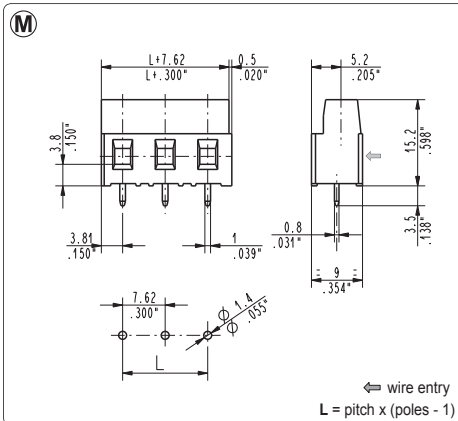
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSM01002	450	0,80	2000	3,54
02	MSM02002	300	1,06	1750	6,20
03	MSM03002	175	0,93	1000	5,31
04	MSM04002	125	0,89	750	5,31
05	MSM05002	100	0,89	500	4,43
06	MSM06002	75	0,80	500	5,31
07	MSM07002	75	0,93	500	6,20
08	MSM08002	75	1,06	500	7,08
09	MSM09002	75	1,19	250	3,98
10	MSM10002	50	0,89	250	4,43
11	MSM11002	50	0,97	250	4,87
12	MSM12002	50	1,06	250	5,31
13	MSM13002	50	1,15	250	5,75



MSM_005 straight, modular

5.08 mm / .200" pitch

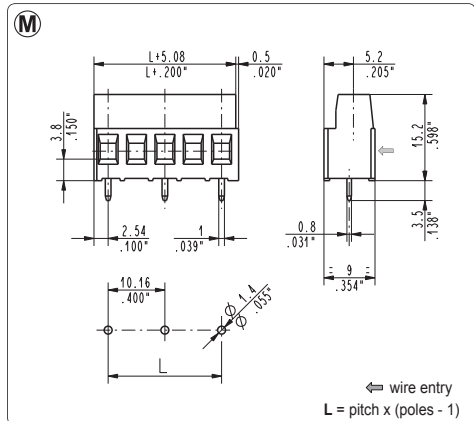
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSM02005	900	2,70	2000	6,00
03	MSM03005	600	2,70	1750	7,88
04	MSM04005	400	2,40	1500	9,00
05	MSM05005	350	2,63	1000	7,50
06	MSM06005	300	2,70	750	6,75
07	MSM07005	250	2,63	750	7,88
08	MSM08005	200	2,40	750	9,00
09	MSM09005	175	2,36	500	6,75
10	MSM10005	175	2,63	500	7,50
11	MSM11005	150	2,48	500	8,25
12	MSM12005	150	2,70	500	9,00
13	MSM13005	75	1,46	500	9,75
14	MSM14005	75	1,58	250	5,25
15	MSM15005	75	1,69	250	5,63
16	MSM16005	75	1,80	250	6,00
17	MSM17005	75	1,91	250	6,38
18	MSM18005	75	2,03	250	6,75
19	MSM19005	50	1,43	250	7,13
20	MSM20005	50	1,50	250	7,50
21	MSM21005	50	1,58	250	7,88
22	MSM22005	50	1,65	250	8,25
23	MSM23005	50	1,73	250	8,63
24	MSM24005	50	1,80	250	9,00
25	MSM25005	50	1,88	250	9,38



MSM_007 straight, modular

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSM02007	300	1,05	1750	6,13
03	MSM03007	200	1,05	1500	7,88



MSM_006 straight, modular

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSM01006	450	0,80	2000	3,54
02	MSM02006	300	1,06	1750	6,20
03	MSM03006	175	0,93	1000	5,31
04	MSM04006	125	0,89	750	5,31
05	MSM05006	100	0,89	500	4,43
06	MSM06006	75	0,80	500	5,31
07	MSM07006	75	0,93	500	6,20
08	MSM08006	75	1,06	500	7,08
09	MSM09006	75	1,19	250	3,98
10	MSM10006	50	0,89	250	4,43
11	MSM11006	50	0,97	250	4,87
12	MSM12006	50	1,06	250	5,31
13	MSM13006	50	1,15	250	5,75

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

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