# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Distribution block, Block with horizontal alignment and integrated supply, nom. voltage: 500 V, nominal current: 24 A, connection method: Push-in connection, Push-in connection, number of connections: 19, cross section:0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, width: 56 mm, height: 30 mm, color: green, mounting type: NS 15

#### Why buy this product

- Time savings of up to 80%, thanks to ready-to-mount blocks without manual bridging
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Clear wiring, thanks to eleven different color variants
- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Space savings of up to 50% on the DIN rail, thanks to transverse mounting

### RoHS

#### Key Commercial Data

Packing unit	8 STK
Minimum order quantity	8 STK
GTIN	4 055626 621852
GTIN	4055626621852

#### Technical data

#### General

Note	Notes on operation The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories	
Number of levels	1	
Number of connections	19	
Potentials	1	
Nominal cross section	2.5 mm <sup>2</sup>	
Nominal cross section feed-in	6 mm <sup>2</sup>	
Color	green	
Insulating material	PA	
Flammability rating according to UL 94	V0	
Rated surge voltage	6 kV	

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### Technical data

#### General

Degree of pollution	3	
Overvoltage category	111	
Insulating material group	1	
Maximum power dissipation for nominal condition	1.31 W (the value is based on one connection block and is multiplied according to the pin assignment)	
Maximum load current	24 A	
Nominal current I <sub>N</sub>	24 A	
Nominal voltage U <sub>N</sub>	500 V	
Maximum load current	57 A (with 10 mm <sup>2</sup> conductor cross section)	
Nominal current I <sub>N</sub>	41 A (with 6 mm <sup>2</sup> conductor cross section)	
Nominal voltage U <sub>N</sub>	500 V	
Open side panel	No	
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11	
Back of the hand protection	guaranteed	
Finger protection	guaranteed	
Result of surge voltage test	Test passed	
Surge voltage test setpoint	9.8 kV	
Result of power-frequency withstand voltage test	Test passed	
Power frequency withstand voltage setpoint	1.89 kV	
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed	
Result of bending test	Test passed	
Bending test rotation speed	10 rpm	
Bending test turns	135	
Bending test conductor cross section/weight	0.5 mm² / 0.3 kg	
	6 mm <sup>2</sup> / 1.4 kg	
	10 mm² / 2 kg	
	0.14 mm² / 0.2 kg	
	2.5 mm² / 0.7 kg	
	4 mm² / 0.9 kg	
Tensile test result	Test passed	
Conductor cross section tensile test	0.5 mm <sup>2</sup>	
Tractive force setpoint	20 N	
Conductor cross section tensile test	6 mm <sup>2</sup>	
Tractive force setpoint	80 N	
Conductor cross section tensile test	10 mm <sup>2</sup>	
Tractive force setpoint	90 N	
Result of tight fit on support	Test passed	
Tight fit on carrier	NS 35	
Setpoint	5 N	
Result of voltage-drop test	Test passed	



## Technical data

#### General

Requirements, voltage drop	≤ 1.6 mV	
Result of temperature-rise test	Test passed	
Short circuit stability result	Test passed	
Conductor cross section short circuit testing	6 mm <sup>2</sup>	
Short-time current	0.72 kA	
Conductor cross section short circuit testing	10 mm <sup>2</sup>	
Short-time current	1.2 kA	
Result of thermal test	Test passed	
Ageing test for screwless modular terminal block temperature cycles	192	
Proof of thermal characteristics (needle flame) effective duration	30 s	
Result of aging test	Test passed	
Oscillation, broadband noise test result	Test passed	
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03	
Test spectrum	Service life test category 2, bogie-mounted	
Test frequency	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$	
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz	
Acceleration	3.12 g	
Test duration per axis	5 h	
Test directions	X-, Y- and Z-axis	
Shock test result	Test passed	
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03	
Shock form	Half-sine	
Acceleration	30g	
Shock duration	18 ms	
Number of shocks per direction	3	
Test directions	X-, Y- and Z-axis (pos. and neg.)	
Relative insulation material temperature index (Elec., UL 746 B)	130 °C	
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C	
Static insulating material application in cold	-60 °C	
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed	
Flame test method (DIN EN 60695-11-10)	V0	
Oxygen index (DIN EN ISO 4589-2)	>32 %	
NF F16-101, NF F10-102 Class I	2	
NF F16-101, NF F10-102 Class F	2	
Surface flammability NFPA 130 (ASTM E 162)	passed	
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed	
Smoke gas toxicity NFPA 130 (SMP 800C)	passed	
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg	
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3	
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3	

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### Technical data

#### General

Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3

#### Dimensions

Width	56 mm
Length	28.2 mm
Height	30 mm
Height NS 15	33 mm

#### Connection data

Feed-in connection	Feed-in stage	
Connection method	Push-in connection	
Connection in acc. with standard	IEC 60947-7-1	
Conductor cross section solid min.	0.14 mm <sup>2</sup>	
Conductor cross section solid max.	4 mm <sup>2</sup>	
Conductor cross section AWG min.	26	
Conductor cross section AWG max.	12	
Conductor cross section flexible min.	0.14 mm <sup>2</sup>	
Conductor cross section flexible max.	2.5 mm <sup>2</sup>	
Min. AWG conductor cross section, flexible	26	
Max. AWG conductor cross section, flexible	14	
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>	
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>	
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>	
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>	
Stripping length	8 mm 10 mm	
Internal cylindrical gage	A3	
Connection method	Push-in connection	
Connection in acc. with standard	IEC 60947-7-1	
Conductor cross section solid min.	0.5 mm²	
Conductor cross section solid max.	10 mm <sup>2</sup>	
Conductor cross section AWG min.	20	
Conductor cross section AWG max.	8	
Conductor cross section flexible min.	0.5 mm <sup>2</sup>	
Conductor cross section flexible max.	6 mm²	
Min. AWG conductor cross section, flexible	20	
Max. AWG conductor cross section, flexible	10	
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm²	
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>	
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm²	
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>	



### Technical data

#### Connection data

2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>		
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm²		
Stripping length	10 mm 12 mm		
Standards and Regulations			

Connection in acc. with standard	IEC 60947-7-1	
	IEC 60947-7-1	
Flammability rating according to UL 94	V0	
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3	
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3	
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3	
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3	

#### **Environmental Product Compliance**

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	

### Drawings

Circuit diagram

### Approvals

#### Approvals

#### Approvals

CSA / DNV GL

#### Ex Approvals

#### Approval details

CSA	<b>()</b>	http://www.csagroup.org/services-industries/product-listing/ 13631		13631	
	D		В	С	
Nominal voltage UN	600 V		300 V	300 V	
Nominal current IN	5 A		50 A	50 A	

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### Approvals

	D	В	С
mm²/AWG/kcmil	20-8	20-8	20-8

DNV GL	http://exchange.dnv.com/tari/	TAE00002TT
Nominal voltage UN	500 V	
Nominal current IN	24 A	

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