

Gladiator GPB2 Terminal Blocks

Gladiator
from AutomationDirect
**GPB2-115P1-6L****GPB2-420P1-11F****GPB2-175P3-6L**

Features

- Single-pole splitter allows splitting of power main input into several outputs
- Multiple-pole assembling thanks to the interlocking function on each block
- Pre-printed block markers (L1, L2, L3, N, PE, +, -) included
- Allows grouping of several inputs into one output (solar applications)
- Reversible snap-on cover opens in two directions and facilitates identification and wiring
- Space-saving design minimizes panel space requirements
- Fast assembly time
- Modular, touch-proof design eliminates need for bus bars, isolators, fasteners, and protection screens
- Accepts aluminum and copper conductors
- 8kV rated impulse voltage
- Copper wire temperature 75°C [167°F]

Ratings

- 1000VAC/1500VDC
- UL Flammability Rating UL 94V-0

Agency Approvals

- UL file # E179129
- UL Flammability Rating UL 94V-0
- EU RoHS Directive 2011/65/EU
- UL 1059
- CSA file #606611



Single pole

GPB2-80P1-4L
7 connections

GPB2-115P1-6L
8 connections

GPB2-160P1-6L
8 connections

GPB2-175P1-10L
12 connections

GPB2-255P1-11L and GPB2-335P1-11L
12 connections

Solar

GPB2-400P1-12L
14 connections

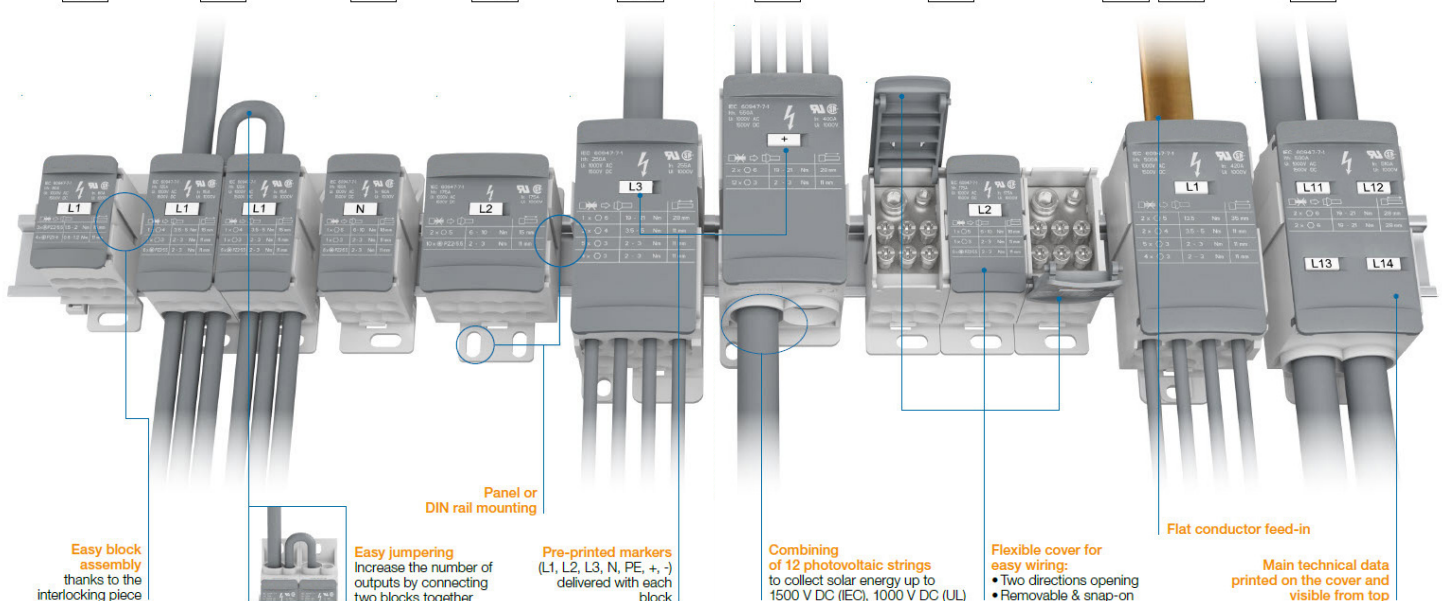
Three poles

GPB2-115P3-6L and GPB2-175P3-6L
8x3 connections

Flat conductor

GPB2-250P1-6F and GPB2-420P1-11F
7 and 12 connections

2 in/2 out

GPB2-510P1-2L
4 connections


Easy block assembly thanks to the interlocking piece



Easy jumpering Increase the number of outputs by connecting two blocks together

Pre-printed markers (L1, L2, L3, N, PE, +, -) delivered with each block

Combining of 12 photovoltaic strings to collect solar energy up to 1500 V DC (IEC), 1000 V DC (UL)

Flexible cover for easy wiring:
• Two directions opening
• Removable & snap-on

Flat conductor feed-in

Main technical data printed on the cover and visible from top

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Gladiator GPB2 Terminal Blocks Selection Table

Part Number	Price	Type	Maximum Current Rating, IEC (Conductor Size)	Maximum Current Rating, UL (Cross Section)	SCCR	Short Time Withstand Current (IEC Rating I_{cw} , 1s)	Peak Withstand Current	Protection Rating	Weight (lb [g])	Drawing
GPB2-80P1-4L	\$11.25	Single pole	Cu: 80A (16mm ²) Al: 63A (16mm ²)	Cu: 80A (4 AWG)	100kA	1920A	27kA	IP20 NEMA 1	0.15 [70]	PDF
GPB2-115P1-6L	\$20.75	Single pole	Cu: 125A (35mm ²) Al: 100A (35mm ²)	Cu: 115A (2 AWG)	100kA	4200A	30kA	IP20 NEMA 1	0.27 [122]	PDF
GPB2-115P3-6L	\$42.00	Three poles	Cu: 125A (35mm ²) Al: 100A (35mm ²)	Cu: 115A (2 AWG)	–	4200A	30kA	IP20 NEMA 1	0.81 [367]	PDF
GPB2-160P1-6L	\$28.00	Single pole	Cu: 160A (70mm ²) Al: 135A (70mm ²)	Cu: 160A (2/0 AWG)	100kA	6000A	30kA	IP10 NEMA 1	0.26 [120]	PDF
GPB2-175P1-10L	\$38.00	Single pole	Cu: 175A (70mm ²) Al: 135A (70mm ²)	Cu: 175A (2/0 AWG)	100kA	6000A	30kA	IP10 NEMA 1	0.44 [200]	PDF
GPB2-175P3-6L	\$55.00	Three poles	Cu: 175A (70mm ²) Al: 135A (70mm ²)	Cu: 175A (2/0 AWG)	–	6000A	30kA	IP10 NEMA 1	0.79 [360]	PDF
GPB2-255P1-11L	\$42.00	Single pole	Cu: 250A (120mm ²) Al: 200A (120mm ²)	Cu: 255A (250 Kcmil)	100kA	11400A	51kA	IP10 NEMA 1	0.97 [439]	PDF
GPB2-250P1-6F	\$46.50	Flat conductors	Cu: (250A / Flexible busbar: 6 x 15.5 x 0.8 mm) (208A / Solid busbar: 12 x 4 mm, x2)	Cu: (250A / Flexible busbar: 6 x 15.5 x 0.8 mm) (160A / Solid busbar: 12 x 4 mm, x2)	100kA	11400A	22.8 kA	IP20 NEMA 1	0.26 [119]	PDF
GPB2-335P1-11L	\$47.00	Single pole	Cu: 400A (185mm ²) Al: 300A (185mm ²)	Cu: 335A (400 Kcmil)	100kA	18000A	51kA	IP10 NEMA 1	0.94 [425]	PDF
GPB2-400P1-12L	\$35.00	Solar	Cu: 550A (2 x 95mm ²)	Cu: 400A (250 Kcmil)	100kA	22800A	47.88 kA	IP10 NEMA 1	0.45 [202]	PDF
GPB2-420P1-11F	\$47.50	Flat conductors	Cu: 500A (Flexible busbar: 24 x 10 x 1 mm) (Solid busbar: 25 x 5 mm, x2)	Cu: 420A (24 x 10 x 1 mm)	100kA	28800A	43.9kA	IP20 NEMA 1	1.13 [514]	PDF
GPB2-510P1-2L	\$48.00	Two in / two out	Cu: 500A (2 x 95mm ²)	Cu: 510A (2 x 250 Kcmil)	100kA	22800A	47.88 kA	IP10 NEMA 1	0.49 [224]	PDF

Fuses

	Over Current Protection Fuse Required Class/Max Amp Rating				SCCR, RMS Sym A (Single Phase Only)
Part Number	RK1	RK5	J	CC	
GPB2-80P1-4L	100A	30A	110A	30A	100kA
GPB2-115P1-6L	200A	100A	250A	30A	
GPB2-115P3-6L					
GPB2-160P1-6L					
GPB2-175P3-6L					
GPB2-175P1-10L	400A	200A	600A	30A	
GPB2-255P1-11L					
GPB2-335P1-11L					
GPB2-400P1-12L					
GPB2-420P1-11F					
GPB2-510P1-2L					
GPB2-250P1-6F	600A	200A	600A	30A	

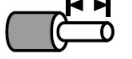
Usage Conditions

Installation Temperature Range	-5 to 40°C [23 to 104°F]
Operating Temperature Range	-55 to 110°C [-67 to 230°F]

Gladiator GPB2 Terminal Blocks

Gladiator
from AutomationDirect

Gladiator GPB2 Terminal Blocks Wire and Torque Specifications

Part Number		Number of Connections	Size (Ø mm [in])	Wire Type		Wire Stripping Length (mm [in])	Tool (mm [in])	Torque
								
<u>GPB2-80P1-4L</u>	Input	3	6.6 [0.26]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 4 AWG]	15 [0.59]	 5.5 [0.22]	1.5 to 2 N•m [13.5 to 18 lb•in]
	Output	4	4.5 [0.18]	2.5 to 6 mm ² [14 to 10 AWG]	2.5 to 6 mm ² [14 to 10 AWG]	11 [0.43]	 4 [0.16]	0.8 to 1.2 N•m [7.2 to 10.8 lb•in]
<u>GPB2-115P1-6L</u>	Input	1	9.8 [0.39]	10 to 35 mm ² [8 to 2 AWG]	10 to 35 mm ² [8 to 2 AWG]	15 [0.59]	 4 [0.16]	3.5 to 5 N•m [31 to 44 lb•in]
	Output	1	6.8 [0.27]	2.5 to 16 mm ² [14 to 6 AWG]	6 to 16 mm ² [10 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]
		6	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 5 [0.22]	2 to 3 N•m [18 to 26.5 lb•in]
<u>GPB2-115P3-6L</u>	Input	1	9.8 [0.39]	10 to 35 mm ² [8 to 2 AWG]	10 to 35 mm ² [8 to 2 AWG]	15 [0.59]	 4 [0.16]	3.5 to 5 N•m [31 to 44 lb•in]
	Output	1	6.8 [0.27]	2.5 to 16 mm ² [14 to 6 AWG]	6 to 16 mm ² [10 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]
		6	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 5 [0.22]	2 to 3 N•m [18 to 26.5 lb•in]
<u>GPB2-160P1-6L</u>	Input	1	11.8 [0.46]	16 to 50 mm ² [6 to 1/0 AWG]	16 to 70 mm ² [6 to 2/0 AWG]	18 [0.71]	 5 [0.20]	6 to 10 N•m [53 to 88 lb•in]
	Output	1	6.8 [0.27]	2.5 to 16 mm ² [14 to 6 AWG]	6 to 16 mm ² [10 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]
		6	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 5.5 [0.22]	2 to 3 N•m [18 to 26.5 lb•in]
<u>GPB2-175P1-10L</u>	Input	2	11.8 [0.46]	10 to 50 mm ² [8 to 1/0 AWG]	10 to 70 mm ² [6 to 2/0 AWG]	15 [0.71]	 5 [0.20]	6 to 10 N•m [53 to 88 lb•in]
	Output	10	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 5.5 [0.22]	2 to 3 N•m [18 to 26.5 lb•in]
<u>GPB2-175P3-6L</u>	Input	1	11.8 [0.46]	16 to 50 mm ² [6 to 1/0 AWG]	16 to 70 mm ² [6 to 2/0 AWG]	18 [0.71]	 5 [0.20]	6 to 10 N•m [53 to 88 lb•in]
	Output	1	6.8 [0.27]	2.5 to 16 mm ² [14 to 6 AWG]	6 to 16 mm ² [10 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]
		6	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 5.5 [0.22]	2 to 3 N•m [18 to 26.5 lb•in]

Gladiator GPB2 Terminal Blocks

Gladiator
from AutomationDirect

Gladiator GPB2 Terminal Blocks Wire and Torque Specifications

Part Number		Number of Connections	Size (Ø mm [in])	Wire Type		Wire Stripping Length (mm [in])	Tool (mm [in])		Torque
									
GPB2-255P1-11L	Input	1	15.3 [0.60]	35 to 95 mm ² [2 to 3/0 AWG]	35 to 120 mm ² [2 to 250 Kcmil]	28 [1.10]	 5.5 [0.22]	19 to 21 N•m [168 to 185 lb•in]	
		2	8.7 [0.34]	2.5 to 25 mm ² [14 to 4 AWG]	2.5 to 35 mm ² [14 to 2 AWG]	11 [0.43]	 4 [0.16]	3.5 to 5 N•m [31 to 44 lb•in]	
	Output	5	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]	
		4	5.7 [0.22]	2.5 to 10 mm ² [14 to 8 AWG]	2.5 to 10 mm ² [14 to 8 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]	
GPB2-335P1-11L	Input	1	18.8 [0.74]	95 to 150 mm ² [3/0 to 300 Kcmil]	95 to 185 mm ² [3/0 to 400 Kcmil]	28 [1.10]	 8 [0.31]	25 N•m [221 lb•in]	
		2	8.7 [0.34]	2.5 to 25 mm ² [14 to 4 AWG]	2.5 to 35 mm ² [14 to 2 AWG]	11 [0.43]	 4 [0.16]	3.5 to 5 N•m [31 to 44 lb•in]	
	Output	5	6.4 [0.25]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]	
		4	5.7 [0.22]	2.5 to 10 mm ² [14 to 8 AWG]	2.5 to 10 mm ² [14 to 8 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]	
GPB2-400P1-12L	Input	2	15.5 [0.59]	25 to 95 mm ² [4 to 3/0 AWG]	25 to 120 mm ² [4 to 250 Kcmil]	28 [1.1]	 6 [0.24]	19 to 21 N•m [168 to 185 lb•in]	
	Output	12	6.6 [0.26]	2.5 to 16 mm ² [14 to 6 AWG]	2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 3 [0.19]	2 to 3 N•m [18 to 26.5 lb•in]	
GPB2-510P1-2L	Input	2	15.5 [0.59]	25 to 95 mm ² [4 to 3/0 AWG]	25 to 120 mm ² [4 to 250 Kcmil]	28 [1.1]	 6 [0.24]	19 to 21 N•m [168 to 185 lb•in]	
	Output	2	15.5 [0.59]	25 to 95 mm ² [4 to 3/0 AWG]	25 to 120 mm ² [4 to 250 Kcmil]	28 [1.1]	 6 [0.24]	19 to 21 N•m [168 to 185 lb•in]	

Gladiator GPB2 Terminal Blocks (Flat Entry) Wire and Torque Specifications

Part Number		Number of Connections	Size (mm [in])	Wire Type			Wire Stripping Length (mm [in])	Tool (mm [in])	Torque
									
GPB2-250P1-6F	Input	1	15.5 x 7.5 [0.59 x 0.28]	12 x 4 mm [8 to 2 AWG]		3 x 9 x 0.8 mm to 6 x 15.5 x 0.8 mm	15 [0.59]	 5 [0.20]	13.5 N•m [120 lb•in]
	Output	6	6.6 [0.26]	2.5 to 16 mm ² [14 to 6 AWG]		2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 5.5 [0.22]	2 to 3 N•m [18 to 26.5 lb•in]
GPB2-420P1-11F	Input	1	20 x 10.8 [1.02 x 0.43]	12 x 4 mm up to (2x) 25 x 5 mm		3 x 9 x 0.8 mm to 6 x 15.5 x 0.8 mm	35 [1.38]	 5 [0.20]	13.5 N•m [119.5 lb•in]
		2	8.69 [0.34]	2.5 to 25 mm ² [14 to 4 AWG]		2.5 to 35 mm ² [14 to 2 AWG]	11 [0.43]	 4 [0.16]	3.5 to 5 N•m [31 to 44 lb•in]
	Output	4	5.7 [0.22]	2.5 to 10 mm ² [14 to 8 AWG]		2.5 to 10 mm ² [14 to 8 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]
		5	6.59 [0.26]	2.5 to 16 mm ² [14 to 6 AWG]		2.5 to 16 mm ² [14 to 6 AWG]	11 [0.43]	 3 [0.12]	2 to 3 N•m [18 to 26.5 lb•in]

Wiring Specifications

 NOT ALLOWED: Flexible without ferrule (IEC V-K & UL: Class 5/6)	 Flexible with insulated ferrule (IEC V-K & UL: Class 5/6)	 Rigid solid (IEC V-U Class 1, UL solid)	 Rigid stranded (IEC V-R Class 2, UL Class B/C)	 Solid busbar	 Flexible busbar
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**Allen Key****Posidriv
Flat Screwdriver**

Gladiator GPB1 Terminal Blocks

Gladiator
from AutomationDirect



GPB1-85P1-15S

Features

- Single-pole 7, 15 and 16 connections
- Push-in and spring technology
- Three mounting options: horizontal DIN rail, vertical DIN rail, or panel mount with screws
- Pre-printed block markers (L1, L2, L3, N, PE, +, -, red, blue and green) included
- Increased wiring visibility due to in-line connection and front access
- Hands-free wiring with or without screwdriver
- Compatible with KN-EB4 end brackets
- Built-in voltage test point
- Push-in connections save installation time
- Modular, touch-proof design reduces the need for bus bars, isolators, fasteners, and protection screens
- Copper wire temperature 75°C [167°F]

Ratings

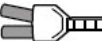
- Up to 130A, 1000VAC/1500VDC
- UL Flammability Rating UL 94V-0

Agency Approvals

- UL file # E179129
- EU RoHS Directive 2011/65/EU
- UL 1059
- CSA file # 606611



Gladiator GPB1 Terminal Blocks Selection Table

Part Number	Price	Rated Current and Voltage (IEC)	Rated Current and Voltage (UL)	Rated Cross Section								Protection Rating	Weight (lb [g])	Drawing
														
				Flexible Without Ferrule		Flexible With Insulated Ferrule		Flexible With Twin Ferrule		Rigid Solid or Stranded				
				#	mm²	mm²	AWG	mm²	AWG	mm²	AWG			
GPB1-85P1-7S	\$11.50	76A 1000VAC 1500VDC	85A 1000V	3	1.5-16	1.5-16	16-6	1.5-6	16-10	1.5-25	16-4	IP20	0.15 [68]	PDF
				4	1.5-10	1.5-10	16-8	1.5-4	16-12	1.5-16	16-6			
GPB1-85P1-15S	\$16.00	76A 1000VAC 1500VDC	85A 1000V	3	1.5-16	1.5-16	16-6	1.5-6	16-10	1.5-25	16-4	IP20	0.30 [136.1]	PDF
				12	1.5-10	1.5-10	16-8	1.5-4	16-12	1.5-16	16.6			
GPB1-130P1-16S	\$25.50	125A 1000VAC 1000VDC	130A 600V	2*	10-35	10-35	8-1	N/A	N/A	10-35	8-1	IP20	0.40 [181.4]	PDF
				2	1.5-16	1.5-16	16-6	1.5-6	16-10	1.5-16	16-6			
				12	1.5-10	1.5-10	16-8	1.5-4	16-12	1.5-16	16-6			

* The 2x10 35mm² connections (located on the left side) utilize screw clamp technology.

Gladiator GPB1 Terminal Blocks Mounting and Torque

Rail		TH 35-7.5 TH 35-15
Wire Stripping Length		Screw connection: 17mm [0.67 in]
		PI-Spring connection: 15mm [0.591 in]
Tool		
For Screw Connection		Allen key Ø 4mm Ø 0.157 in
For PI-Spring Connection (Tool for installation and removal of wires without ferrule)		Flat screwdriver Ø 4mm Ø 0.157
Torque		
25-35 mm² (4-1 AWG)		3.5-4 N•m [31-35.4 lb•in]
16 mm² (6 AWG)		3-3.5 N•m [26.5-35.4 lb•in]
10 mm² (8 AWG)		3-3.5 N•m [26.5-35.4 lb•in]

Usage Conditions

Installation Temperature Range	-5 to 40°C [23 to 104°F]
Operating Temperature Range	-55 to 110°C [-67 to 230°F]

Fuses

Over Current Protection Fuse Required Class/Max Amp Rating				SCCR, RMS Sym A (Single Phase Only)
RK1	RK5	J	CC	
200A	60A	200A	30A	100kA