

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

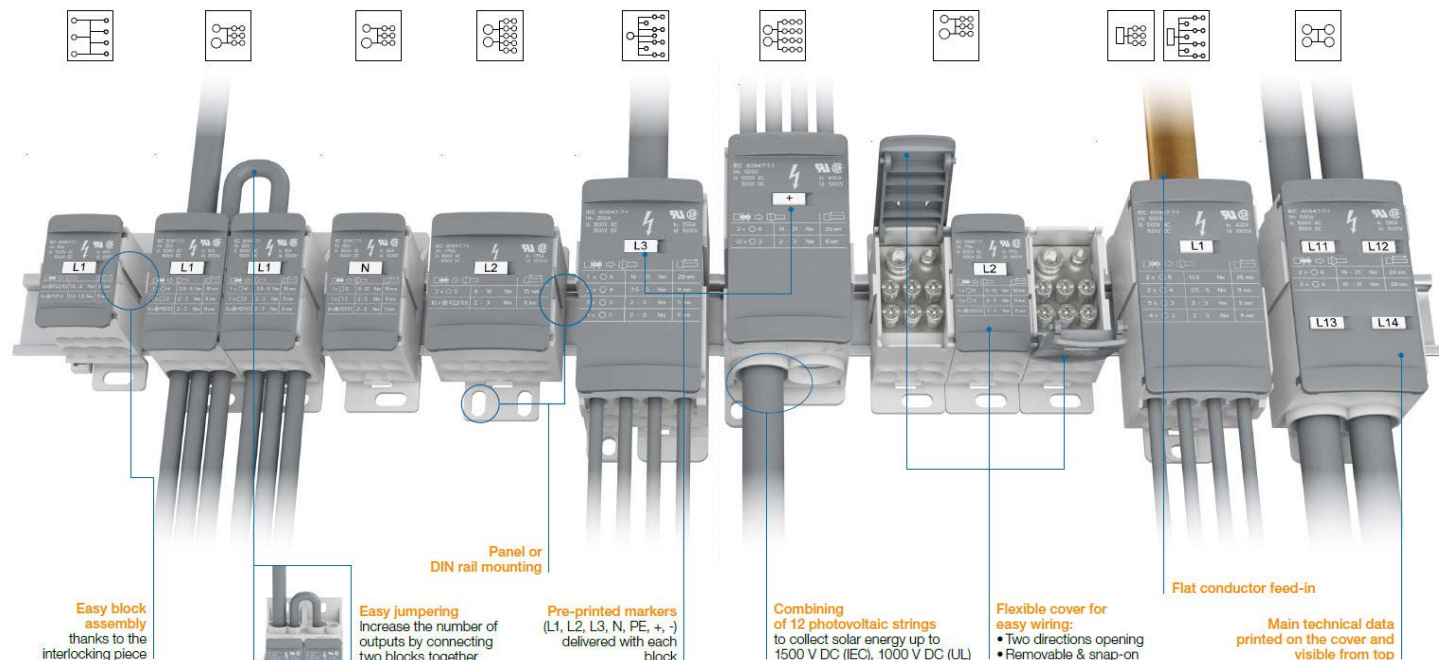
Three poles

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

Gladiator GPB2 Terminal Blocks



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	

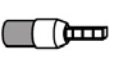
Usage Conditions

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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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 lbf·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]		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]		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 in]	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]		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]		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]		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]		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

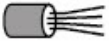
- Up to 130A, 1000VAC/1500VDC
- UL Flammability Rating UL 94V-0

Agency Approvals

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



Gladiator GPB1 Terminal Blocks Selection Table

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			
<u>GPB1-85P1-7S</u>	\$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]	<u>PDF</u>
				4	1.5-10	1.5-10	16-8	1.5-4	16-12	1.5-16	16-6			
<u>GPB1-85P1-15S</u>	\$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]	<u>PDF</u>
				12	1.5-10	1.5-10	16-8	1.5-4	16-12	1.5-16	16.6			
<u>GPB1-130P1-16S</u>	\$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]	<u>PDF</u>
				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