

Gladiator GPB2 Terminal Blocks



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
- 8 kV rated impulse voltage
- Copper wire temperature 75 °C [167 °F]

Ratings

- 1000 VAC/1500 VDC
- 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

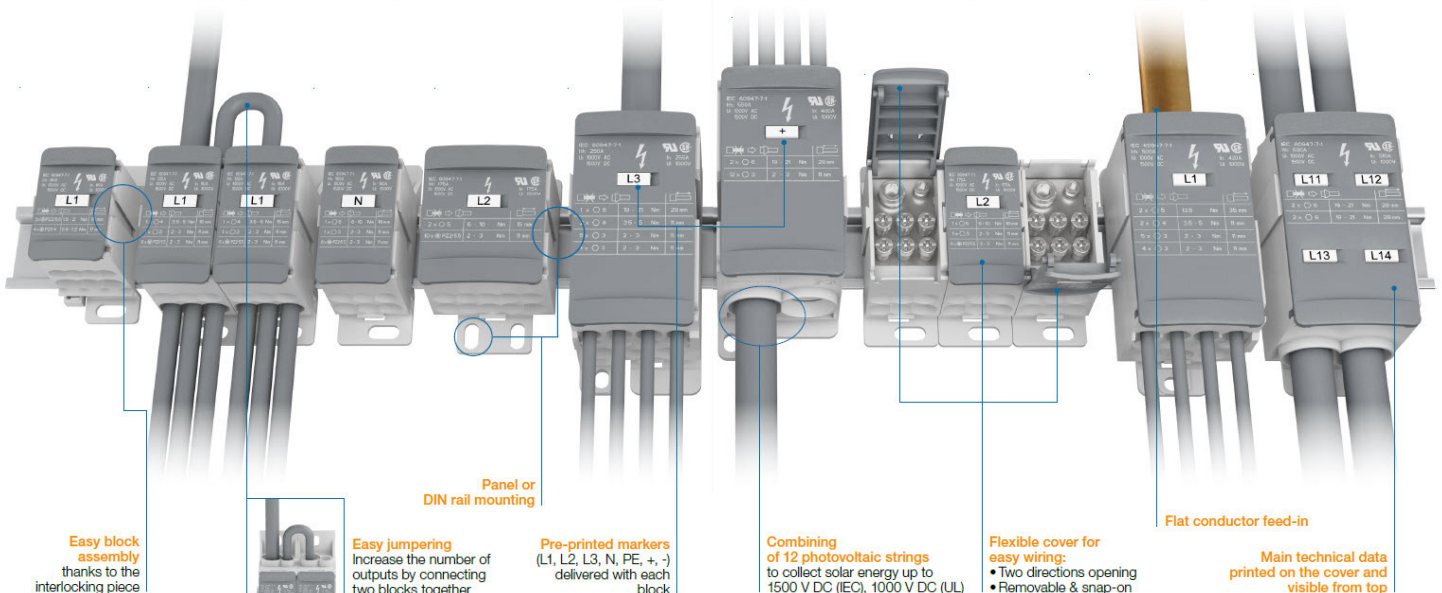
GPB2-115P3-6L
and
GPB2-175P3-6L
8x3 connections

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		Single pole	Cu: 80A (16 mm ²) Al: 63A (16 mm ²)	Cu: 80A (4 AWG)	100 kA	1920A	27 kA	IP20 NEMA 1	0.15 [70]	PDF
GPB2-115P1-6L		Single pole	Cu: 125A (35 mm ²) Al: 100A (35 mm ²)	Cu: 115A (2 AWG)	100 kA	4200A	30 kA	IP20 NEMA 1	0.27 [122]	PDF
GPB2-115P3-6L		Three poles	Cu: 125A (35 mm ²) Al: 100A (35 mm ²)	Cu: 115A (2 AWG)	–	4200A	30 kA	IP20 NEMA 1	0.81 [367]	PDF
GPB2-160P1-6L		Single pole	Cu: 160A (70 mm ²) Al: 135A (70 mm ²)	Cu: 160A (2/0 AWG)	100 kA	6000A	30 kA	IP10 NEMA 1	0.26 [120]	PDF
GPB2-175P1-10L		Single pole	Cu: 175A (70 mm ²) Al: 135A (70 mm ²)	Cu: 175A (2/0 AWG)	100 kA	6000A	30 kA	IP10 NEMA 1	0.44 [200]	PDF
GPB2-175P3-6L		Three poles	Cu: 175A (70 mm ²) Al: 135A (70 mm ²)	Cu: 175A (2/0 AWG)	–	6000A	30 kA	IP10 NEMA 1	0.79 [360]	PDF
GPB2-255P1-11L		Single pole	Cu: 250A (120 mm ²) Al: 200A (120 mm ²)	Cu: 255A (250 Kcmil)	100 kA	11400A	51 kA	IP10 NEMA 1	0.97 [439]	PDF
GPB2-250P1-6F		Flat conductors	Cu: (250A / Flexible busbar: 6 x 15.5 x 0.8 mm) (208A / Solid busbar: 12 x 4mm, x2)	Cu: (250A / Flexible busbar: 6 x 15.5 x 0.8 mm) (160A / Solid busbar: 12 x 4 mm, x2)	100 kA	11400A	22.8 kA	IP20 NEMA 1	0.26 [119]	PDF
GPB2-335P1-11L		Single pole	Cu: 400A (185 mm ²) Al: 300A (185 mm ²)	Cu: 335A (400 Kcmil)	100 kA	18000A	51 kA	IP10 NEMA 1	0.94 [425]	PDF
GPB2-400P1-12L		Solar	Cu: 550A (2 x 95 mm ²)	Cu: 400A (250 Kcmil)	100 kA	22800A	47.88 kA	IP10 NEMA 1	0.45 [202]	PDF
GPB2-420P1-11F		Flat conductors	Cu: 500A (Flexible busbar: 24 x 10 x 1 mm) (Solid busbar: 25 x 5mm, x2)	Cu: 420A (24 x 10 x 1 mm)	100 kA	28800A	43.9 kA	IP20 NEMA 1	1.13 [514]	PDF
GPB2-510P1-2L		Two in / two out	Cu: 500A (2 x 95 mm ²)	Cu: 510A (2 x 250 Kcmil)	100 kA	22800A	47.88 kA	IP10 NEMA 1	0.49 [224]	PDF

Fuses

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



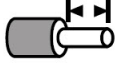


















Usage Conditions

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]

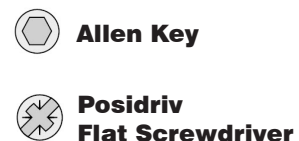
Gladiator GPB2 Terminal Blocks



Gladiator 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 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	
				12 x 4mm [8 to 2 AWG]		3 x 9 x 0.8mm to 6 x 15.5 x 0.8mm				
GPB2-250P1-6F	Input	1	15.5 x 7.5 [0.59 x 0.28]		12 x 4mm [8 to 2 AWG]		3 x 9 x 0.8mm to 6 x 15.5 x 0.8mm	15 [0.59]	 5 [0.20]	13.5 N•m [120 lb•n]
	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 4mm up to (2x) 25 x 5mm		3 x 9 x 0.8mm to 6 x 15.5 x 0.8mm	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



Gladiator GPB1 Terminal Blocks



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, 1000 VAC/1500 VDC
- 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				
				#	mm ²	mm ²	AWG	mm ²	AWG	mm ²	AWG			
GPB1-85P1-7S		76A 1000 VAC 1500 VDC	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		76A 1000 VAC 1500 VDC	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		125A 1000 VAC 1000 VDC	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 [0.67in] PI-Spring connection: 15mm [0.591in]
Tool		
For Screw Connection		Allen key Ø 4mm Ø 0.157in
For PI-Spring Connection (Tool for installation and removal of wires without ferrule)		Flat screwdriver Ø 4mm Ø 0.157in
Torque		
25-35 mm ² (4-1 AWG)		3.5-4 N•m [31-35.4 lb•in]
16 mm ² (6 AWG)		3-3.5 N•m [26.5-35.4 lb•in]
10 mm ² (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				SCCR, RMS Sym A (Single Phase Only)
Over Current Protection Fuse Required Class/Max Amp Rating				
RK1	RK5	J	CC	100 kA
200A	60A	200A	30A	