

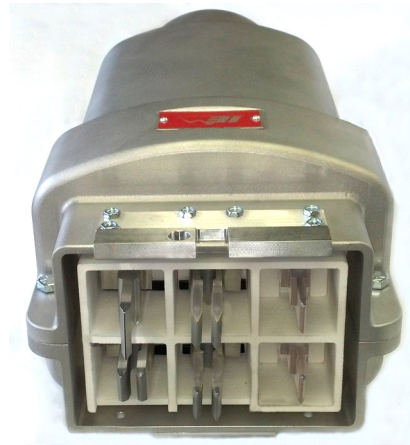


www.intermountainelectronics.com

Phone: (877) 544-2291

IRG30 / IPL30 IRG60 / IPL60

Lever Action Plugs and Receptacles



US Patent Number 9,337,593

IRG30 / IPL30 / IRG60 / IPL60 Lever Action Plugs and Receptacles

The IRG / IPL plugs and receptacles are a patented, innovative line of 300A and 600A lever-action plugs and receptacles designed for mine duty.

The result of uncompromising research and development efforts, IE plugs and receptacles are truly revolutionary, boasting proprietary innovations:

- Special two-piece insulators allow the insulator face to be replaced from outside the power center (receptacle), without disconnecting any wiring (receptacle and plug). Insulator repairs are trivial, requiring minimal down-time.
- A spring-loaded receptacle dust cover and a release designed to be operated by foot frees both hands when connecting a plug into the receptacle. Making a connection is much easier and faster.
- Receptacles may be mounted with optional mounting plates, or with bolts mounted directly to the panel. Nuts for the mounting plate/bolts fit inside recesses in the rear of the receptacle body, so mounting/dis-mounting the receptacle can be done entirely from outside the panel.

These plugs and receptacles are fully compatible with similar products from other manufacturers.

Features:

- Hands-free dust cover operation (receptacles)
- 2-Piece insulator for quick field replacement of front section without disconnecting cables or dismounting receptacles
- Receptacle mounting hardware recesses allow mounting bolts to remain securely bolted to the panel when receptacle is removed
- Optional mounting plate further simplifies installation
- Split female contacts and tensioning springs for reliable contact
- Flexible connections allow a wide range of cable sizes
- Integrated cable clamps and sealing grommets on plugs
- Compatible with other brands of plugs and receptacles

Specifications:

IRG30 / IPL30:

- Max current: 300 amps RMS at 1000 VAC (L-L)/600 VDC
- Cable size: #8 to 4/O (Fold over wire or use shims as required for thinner gauges)
- Approx Weight: Plugs: 12.5 lbs/5.7 kg
Recepts: 8.5 lbs/3.9 kg

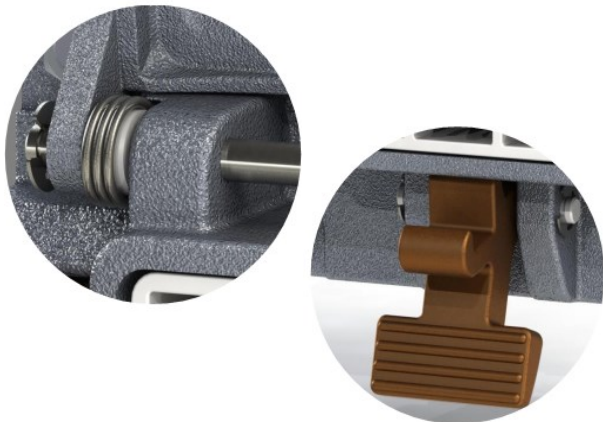
IRG60 / IPL60:

- Max Current: 600 amps RMS at 1000 VAC (L-L)/600 VDC
- Cable sizes:
 - E suffix units: #8 to 250 MCM (Fold over wire or use shims as required for thinner gauges)
 - U suffix units: 4/O to 500 MCM
- Approx Weight: Plugs: 26.5 lbs/12.0 kg
Recepts: 16.8 lbs/7.6 kg

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Innovation

Unlike legacy products that have been used in mines for decades, IE's mine-duty lever-action plugs and receptacles are completely modern, with patented innovations to reduce installation and maintenance costs, and to improve ease-of-use. Even with these features, IE plugs and receptacles are completely compatible with similar products already on the market.

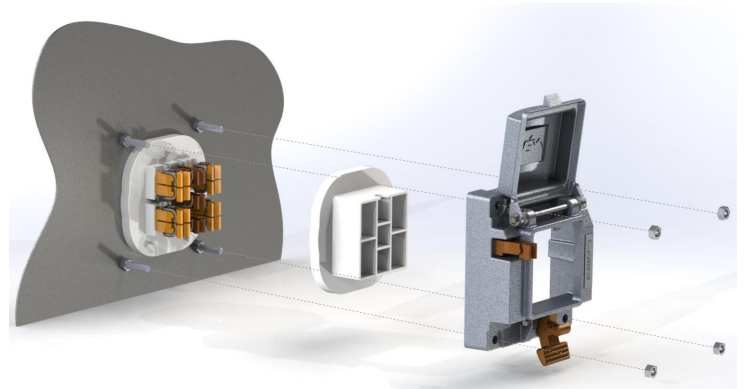


“Hands-Free” Operation:

Connecting a heavy plug with a bulky cable attached to a receptacle has never been a simple operation. However, IE receptacles feature a spring-loaded hands-free dust cover, with an opening lever meant to be operated either by foot or by hand. Making a connection is much simpler—no need to set the plug down to open the dust cover.

Easy Insulator Repair:

The rugged mining environment exacts a toll on equipment, and mine-duty plugs and receptacles are no exception. A broken insulator is probably the most common problem, and replacing one used to be a major operation. Now, IE's unique 2-part insulator solves this problem by making the front section of the insulator (the part that gets broken) replaceable without disconnecting cables. In the receptacle, this also means that there is no need to open a panel. Repairing a broken insulator can be completed in just a few minutes.



Simple Installation:

IE receptacles can mount into the same panel cut-outs used with other branded products. However, our receptacles feature recesses for mounting nuts, which allow mounting bolts (or our optional mounting plates) to remain attached to the panel when the receptacle is removed. This means that the receptacle can be mounted, or dismantled, without opening the panel.



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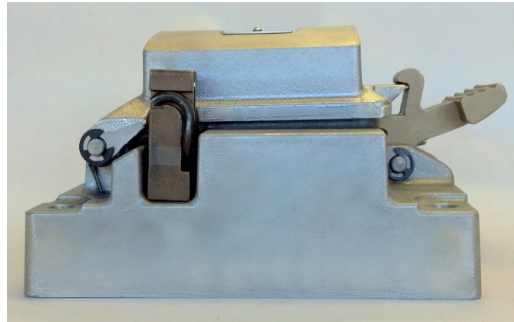
IRG30 / IPL30 Series



IPL30-67

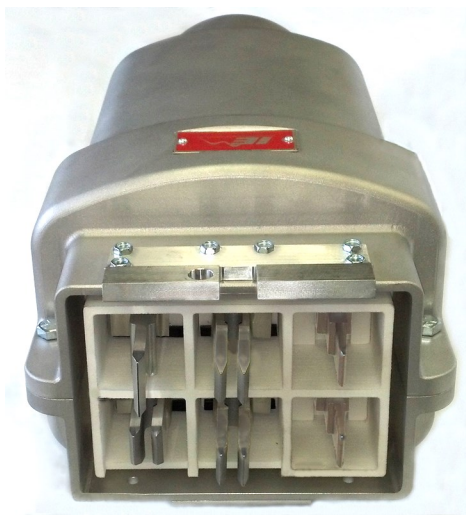


IRG30-67



IRG30 with External Ground Contact

IRG60 / IPL60 Series



IPL60-64



IRG60 with External Ground Contact

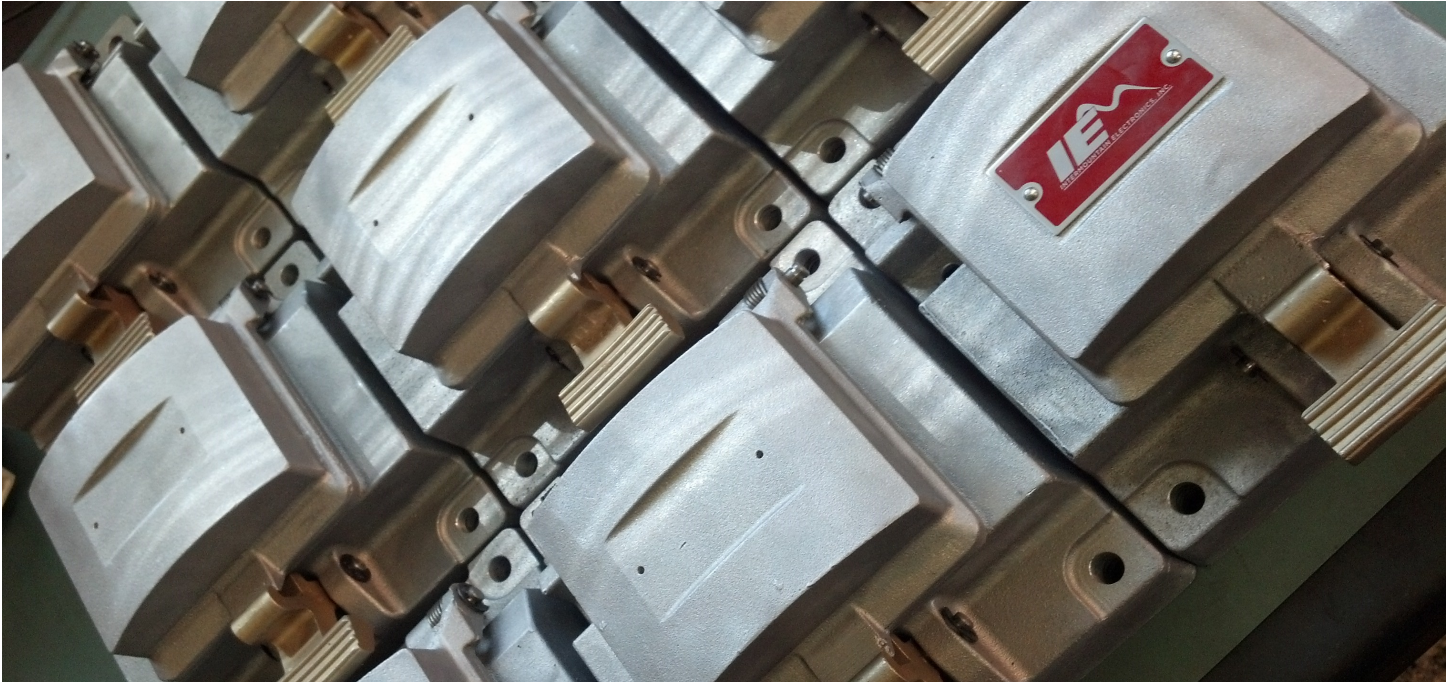


IRG60-64

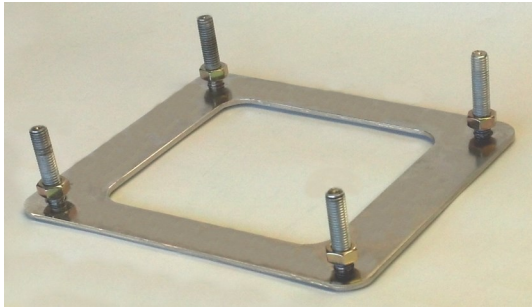


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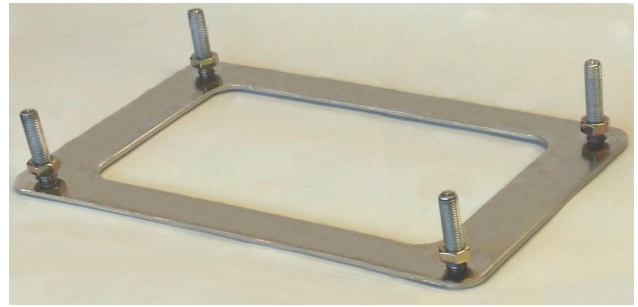
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Receptacle Mounting Accessories



Optional Mounting Plate for IRG30 Family
(PN 2000-0726)



Optional Mounting Plate for IRG60 Family
(PN 2000-0742)



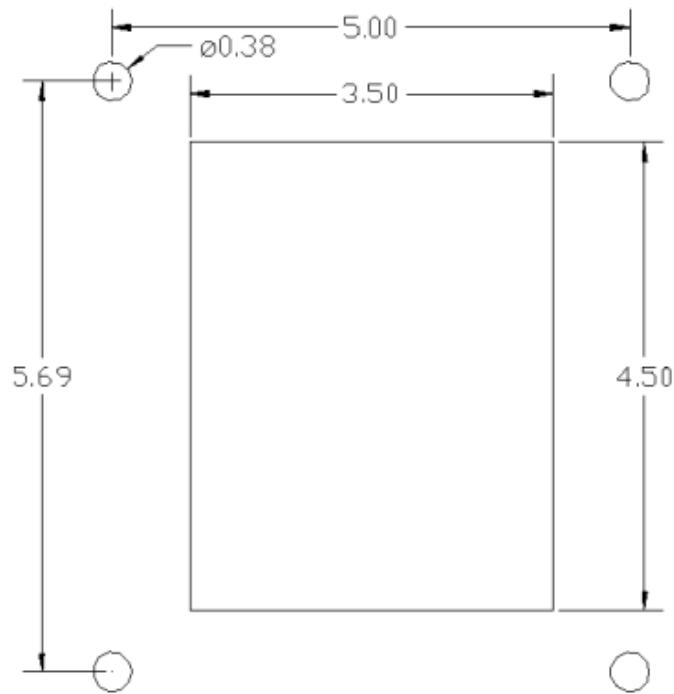
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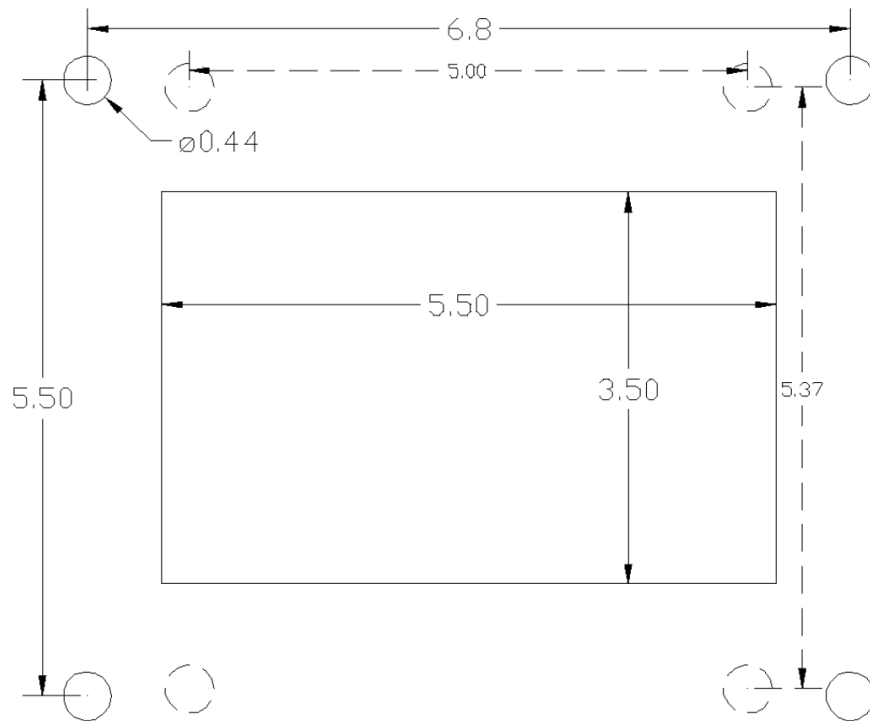


Recommended Panel Cutouts

IRG30 Series



IRG60 Series



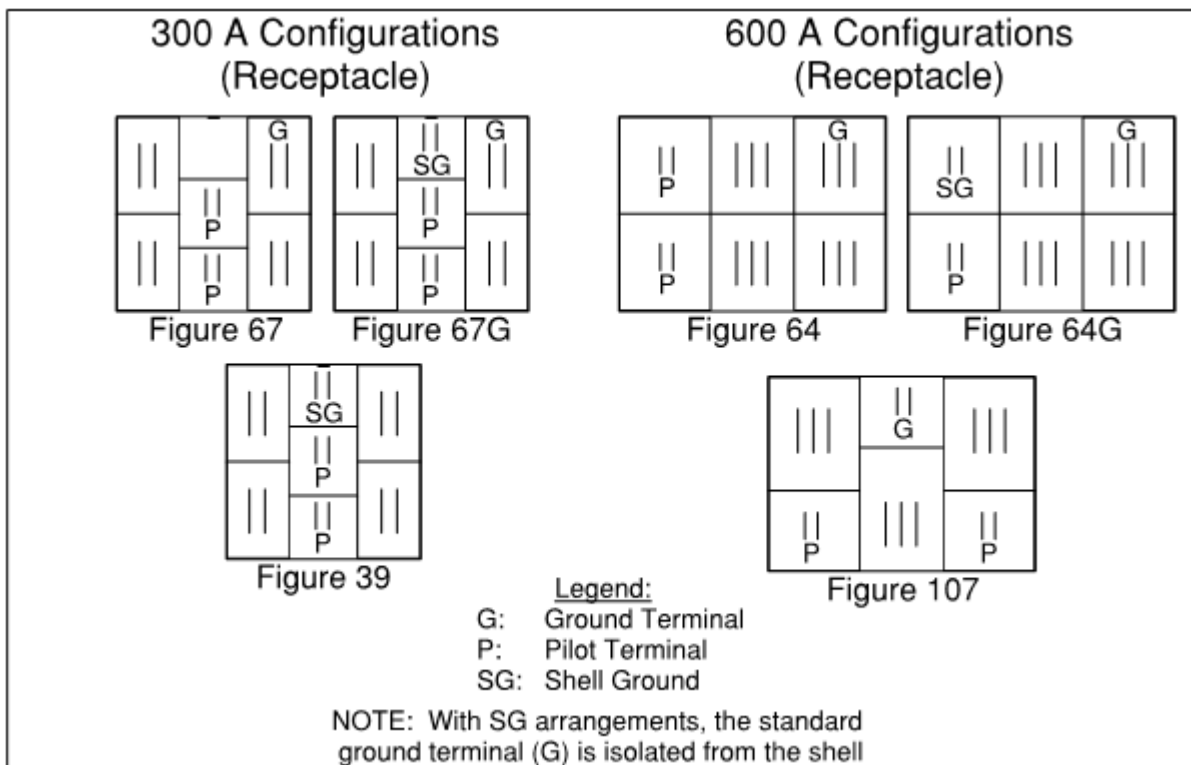
Note: Along with recommended mounting holes, IRG60s also have tapped holes (5/16" screw, dotted lines above) to allow mounting in cutouts for 600A receptacles from other companies.

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Contact Configurations:



300 Amp Plug & Receptacle Ordering Information:

Model	Part #	Description
IRG30-67-00E	1001-0000	Receptacle, 300A, 1000V, Gear Mount
IRG30-67-00EX	1001-0001	Receptacle, 300A, 1000V, Gear Mount, With External GND
IRG30-67-00EG	1001-0002	Receptacle, 300A, 1000V, Gear Mount, With Internal Shell GND
IRG30-39-00E	1001-0004	Receptacle, 300A, 1000V, Gear Mount, Figure 39
IRG30-39-00EX	1001-0005	Receptacle, 300A, 1000V, Gear Mount, Figure 39, External GND
IPL30-67-00E	1001-0100	Plug, 300A, 1000V, Line Mount
IPL30-67-00EX	1001-0101	Plug, 300A, 1000V, Line Mount, With External GND
IPL30-67-00EG	1001-0102	Plug, 300A, 1000V, Line Mount, With Internal Shell GND
IPL30-39-00E	1001-0104	Plug, 300A, 1000V, Line Mount, Figure 39
IPL30-39-00EX	1001-0105	Plug, 300A, 1000V, Line Mount, Figure 39, External GND

600 Amp Plug & Receptacle Ordering Information:

Model	Part #	Description
IRG60-64-00E	1001-0020	Receptacle, 600A, 1000V, Gear Mount, #8-250 MCM
IRG60-64-00EX	1001-0021	Receptacle, 600A, 1000V, Gear Mount, #8-250 MCM, w/ Ext. GND
IRG60-64-00U	1001-0022	Receptacle, 600A, 1000V, Gear Mount, 4/O-500 MCM
IRG60-64-00UX	1001-0023	Receptacle, 600A, 1000V, Gear Mount, 4/O-500 MCM, w/ Ext. GND
IRG60-64-00EG	1001-0024	Receptacle, 600A, 1000V, Gear Mount, #8-250 MCM, w/ Int. Shell GND
IRG60-64-00UG	1001-0025	Receptacle, 600A, 1000V, Gear Mount, 4/O-500 MCM, w/ Int. Shell GND
IRG60-107-00E	1001-0026	Receptacle, 600A, 1000V, Gear Mount, #8-250 MCM
IRG60-107-00EX	1001-0027	Receptacle, 600A, 1000V, Gear Mount, #8-250 MCM, w/ Ext. GND
IRG60-107-00U	1001-0028	Receptacle, 600A, 1000V, Gear Mount, 4/O-500 MCM
IRG60-107-00UX	1001-0029	Receptacle, 600A, 1000V, Gear Mount, 4/O-500 MCM, w/ Ext. GND
IPL60-64-00E	1001-0120	Plug, 600A, 1000V, Line Mount, #8-250 MCM
IPL60-64-00EX	1001-0121	Plug, 600A, 1000V, Line Mount, #8-250 MCM, w/ Ext. GND
IPL60-64-00U	1001-0122	Plug, 600A, 1000V, Line Mount, 4/O-500 MCM
IPL60-64-00UX	1001-0123	Plug, 600A, 1000V, Line Mount, 4/O-500 MCM, w/ Ext. GND
IPL60-64-00EG	1001-0124	Plug, 600A, 1000V, Line Mount, #8-250 MCM, w/ Int. Shell GND
IPL60-64-00UG	1001-0125	Plug, 600A, 1000V, Line Mount, 4/O-500 MCM, w/ Int. Shell GND
IPL60-107-00E	1001-0126	Plug, 600A, 1000V, Line Mount, #8-250 MCM
IPL60-107-00EX	1001-0127	Plug, 600A, 1000V, Line Mount, #8-250 MCM, w/ Ext. GND
IPL60-107-00U	1001-0128	Plug, 600A, 1000V, Line Mount, 4/O-500 MCM
IPL60-107-00UX	1001-0129	Plug, 600A, 1000V, Line Mount, 4/O-500 MCM, w/ Ext. GND

Plug & Receptacle Accessories:

Part #	Description
1001-MK01	Mounting Hardware kit (Bolts, Nuts, Instructions) for IRG30s
1001-MK02	Mounting Hardware kit (Bolts, Nuts, Instructions) for IRG60s
2000-0726	Mounting Plate, 300A Receptacle (Simplest way to mount IRG30s)
2000-0702	Replacement Insulator Front, 300A Plug/Receptacle
2000-0742	Mounting Plate, 600A Receptacle (Simplest way to mount IRG60s)
2000-0733	Replacement Insulator Front, 64 Series Plug/Receptacle
2000-0760	Replacement Insulator Front, 107 Series Plug/Receptacle
2000-0751	Keying Plug, 300A/600A Receptacle
2000-0752	Keying Plug, 300A/600A Plug

Important Notice

This document contains information intended to aid in the proper installation, operation, and maintenance of the product described. Although this information will prove useful to the properly trained and qualified user, it is not practical to cover every possible situation, installation contingency or other detail.

It is imperative that proper engineering and techniques are adhered to in the installation, operation, and maintenance of this product. It is the responsibility of the user to ensure that any system utilizing this product is safe, and that all personnel involved with the selection, installation, maintenance, and use of this product are properly qualified. This product must not be used in situations where its ratings are exceeded.

While every effort has been made to make sure the information in this document is accurate, IE cannot guarantee that there are no errors. Users of this product should verify any aspects of the product's design or performance that are critical to their application, and in particular, to any aspects that may affect the safety of the overall system or installation.

Product design and specifications may change without notice.

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