



NSS 15-60 Amp GFCI and 30-60Amp ELCI Linegard Series products

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SERIES GFCI



PRODUCT FEATURES

- 15 AMP/120 VAC rating
- NEMA 3R rated
- · Housing is high strength polycarbonate
- · Plug and In-Line field wireable units are available
- · Recessed interface buttons reduce damage during stow away
- Equipment integrated O.E.M. configurations are available

- All black cord is heavy duty/high flex 14/3 or 12/3 SJOOW or SJEOOW
- All yellow cord is heavy duty 12/3 SJTW cable
- Cord strain reliefs (12, 14, 16, and 18 GA. Cord)
- · Automatic or Manual (safe start) reset types
- · LED indicated power status
- Meets UL self-test requirements
- · cULus 943 listed or recognized

PRODUCT OVERVIEW

The Plug Series and In-Line Series Ground Fault Circuit Interrupter (GFCI) are rated for 15 Amps at 120 VAC. These devices are available in either an Automatic or Manual (safe start) reset configuration.

Standard offerings include products geared toward maintenance repair organizations (M.R.O.), original equipment manufacturers (O.E.M.) or general portable power applications.

M.R.O. items are supplied with heavy-duty 12/3 conductor high flex (indoor/outdoor) safety yellow cable (SJTW type) capable of withstanding heavy trade or industrial use. O.E.M. items are configured with robust 14/3 or 12/3 conductor high flex (indoor/outdoor) black rubberized cable (SJOOW type) for integration into trade related equipment.

All items offered are industrial grade tough and are backed by a 2-year manufacturer's warranty.

In addition to the units offered with a cord, North Shore Safety also makes available field wireable devices for field attachment to existing cords or equipment supply cables.

Note that any cord or equipment updated with the 15 Amp Plug Series and or In-Line Series GFCI becomes OSHA compliant for power usage in confined space, OSHA 29 CFR 1926.404 (b)(1)(ii) and OSHA 29 CFR 1926.405 (a)(2)(ii)(G) and additionally meets the requirements of NEC 590.6 (a) and (b).









PRODUCT SPECIFICATION

Type: Class A
Voltage: 120 VAC

Current: Up to 15 Amps

Frequency: 60 Hz
Trip Level: 5 +/- mA
Phase: Single

Response Time: 25mS max @ 500 Ohm fault

Operating Temperature: -35°C o 66°C

Let Go Voltage: 60% rated voltage

Reset Type: Automatic or Manual (safe start)*

Enclosure: TYPE 3R
Agency Approval: cULus 943 Listed

- *<u>Auto reset</u> Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications.
- *Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit into fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration).

15 AMP PLUG SERIES GFCI PRODUCT CONFIGURATION TABLE

PGFP -)	(X		X	2	K	-XXX OR -XXXX					
MODEL	STD	POWE	ER-UP	CABI	CABLE GAUGE		LE TYPE	SECONDARY	CONNECTOR		CABLE CONFIGURATION				
	SKU	15A/120V MAN (M11)	15A/120V AUTO (A11)	12/3 (0)	NONE (BLANK)	SJTW (K)	NONE (BLANK)	YES LISTED ASSY (Y)	NONE (BLANK)	2' SINGLE TAP YELLOW (ST2)	2' TRITAP YELLOW (TT2)	25' SINGLE TAP YELLOW (ST25)	25' TRI- TAP YELLOW (TT25)	50' SINGLE TAP YELLOW (ST50)	
PGFP-M110KY-ST2	Х	M11		0		К		Y		ST2					
PGFP-M110KY-TT2	х	M11		0		К		Υ			TT2				
PGFP-M110KY-ST25	Х	M11		0		К		Y				ST25			
PGFP-M110KY-TT25	Х	M11		0		К		Υ					TT25		
PGFP-M110KY-ST50	Х	M11		0		K		Υ						ST50	
PGFP-M11	Х	M11													
PGFP-A110KY-ST2	Х		A11	0		K		Y		ST2					
PGFP-A110KY-TT2	Х		A11	0		К		Υ			TT2				
PGFP-A110KY-ST25	Х		A11	0		K		Υ				ST25			
PGFP-A110KY-TT25	Х		A11	0		К		Υ					TT25		
PGFP-A110KY-ST50	х		A11	0		К		Υ						ST50	
PGFP-A11	Х		A11						4						

Above part numbering configurations are limited to standard in stock products. Various cable types, cable length, and custom assemblies are available through North Shore Safety upon request.

- 1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe condition.
- 2. Integrated or replacement cable must be indoor/outdoor 3-conductor cable of type ST, SJT, SE, SJE, SO or SJO.
- 3. Custom cord sets are available. Please consult North Shore Safety for other options.
- 4. All assemblies with listed plugs and connectors are UL listed.
- 5. All assemblies with flying leads are UL recognized.



15 AMP PLUG SERIES GFCI



15 AMP IN-LINE SERIES GFCI PRODUCT CONFIGURATION TABLE

PGFI -)	(X	X		2	X	-XXX OR -XXXX				
MODEL	STD SKU	POWE	ER-UP	CABI	LE GAUGE	CAB	LE TYPE	SECONDARY	CONNECTOR		CABLE CONFIGURATION			
	380	15A/120V MAN (M04)	15A/120V AUTO (A04)	12/3 (0)	NONE (BLANK)	SJTW (K)	NONE (BLANK)	YES LISTED ASSY (Y)	NONE (BLANK)	2' SINGLE TAP YELLOW (ST2)	2' TRITAP YELLOW (TT2)	25' SINGLE TAP YELLOW (ST25)	25' TRI- TAP YELLOW (TT25)	50' SINGLE TAP YELLOW (ST50)
PGFI-M040KY-ST2	Х	M04		0		К		Y		ST2				
PGFI-M040KY-TT2	Х	M04		0		К		Y			TT2			
PGFI-M040KY-ST25	Х	M04		0		К		Y				ST25		
PGFI-M040KY-TT25	Х	M04		0		К		Y					TT25	
PGFI-M040KY-ST50	Х	M04		0		К		Y						ST50
PGFI-M04	Х	M04												
PGFI-A040KY-ST2	Х		A04	0		К		Y		ST2				
PGFI-A040KY-TT2	Х		A04	0		К		Y			TT2			
PGFI-A040KY-ST25	Х		A04	0		К		Y				ST25		
PGFI-A040KY-TT25	Х		A04	0		К		Υ					TT25	
PGFI-A040KY-ST50	Х		A04	0		К		Y						ST50
PGFI-A04	Х		A04											

NOTE:

Above part numbering configurations are limited to standard in stock products. Various cable types, cable length, and custom assemblies are available through North Shore Safety upon request.

- 1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe condition.
- 2. Integrated or replacement cable must be indoor/outdoor 3-conductor cable of type ST, SJT, SE, SJE, SO or SJO.
- 3. Custom cord sets are available. Please consult North Shore Safety for other options.
- 4. All assemblies with listed plugs and connectors are UL listed.
- 5. All assemblies with flying leads are UL recognized.



15 AMP IN-LINE SERIES GFCI







20 AMP PORTABLE SERIES GFCI



PRODUCT FEATURES

- 120VAC, *208VAC, 240VAC models available
- New TYPE 4X, IP69, & IP69K ideal for extremely wet and outdoor environments
 - Industrial design for rough service applications
 - Enclosure is Chemical and U.V. resistant
 - Double insulated user interface as required by all portable equipment
 - Largest 20 Amp switching contacts in the industry (high reliability)

- · Optional cable types and lengths available
- Available in Automatic or Manual (safe start) reset models
- · Open neutral protection
- Dual indication lights displaying power and fault status

New • Meets UL self-test requirements

• cULus listed to UL 943 (Class A GFCI)

*Consult factory for OEM 208 VAC applications

PRODUCT OVERVIEW

The *LineGard* © 20 Amp Portable Series comes factory standard with plug and connector or with flying leads for OEM and field wiring applications. It is available in either Automatic or Manual reset types on power up *(see below). Power cords intergrated with this *LineGard* © 20A GFCI become OSHA compliant for portable and temporary power usage in confined space: *OSHA* 29 *CFR* 1926.404(b)(1)(ii) and 29 *CFR* 1926.405(b)(1)(ii)(G).

This product meets the requirements of NEC 590.6 (a) & (b), and OEM applicance requirements per NEC 422.5 & NEC 210.8.

The *LineGard* © 20 Amp Portable series GFCI is engineered for extremely wet and hazardous environments. *LineGard* © 20 is designed and constructed with materials that are impact resistant and withstand chemical and UV light exposure. It is also achieves TYPE 4X, IP69K ratings and is suitable for both indoor and outdoor applications.

For user convenience, the *LineGard* © 20 Amp portable series GFCI incorporates green and red LEDs for power and fault status. *LineGard* © 20 features Test/Reset buttons that are double insulated and recessed for additional safety to prevent accidental switching during rough handling. In addition, the electrical contacts of this device are electro-magnetically latched to prevent false tripping under rough service.

North Shore Safety offers custom assemblies in addition to our standard models. All custom assemblies can be integrated with various wiring devices, cord lengths, or wire terminations for convenience of use and installation.

All *LineGard* ® 20 Amp Portable series GFCIs are proudly assembled in the U.S.A in ISO certified facilities and are UL and cUL listed to UL 943. (cURus recognized with flying leads)





PRODUCT SPECIFICATION

Type: Class A

Voltage: 120 VAC, 240 VAC, 208 VAC (consult factory)

Operating Voltage Range: 85% to 110% of rated voltage

Current: Up to 20 Amps or various wiring devices and/or cable rating

Frequency: 60 Hz, 50 Hz (available non-UL)

Trip Level: 5 +/- 1 mA
Phase: Single

Response Time: 25 mS max @ 500 Ohm fault

Operating Temperature: -35°C to 66°C Let Go Voltage: -35°C to 66°C 60% rated voltage

Reset Type: Automatic or Manual (safe start)*

Open Neutral Protection:

Opens upon loss of neutral (on applicable SKUs only)

Trips if ground and neutral touch at load side (on applicable

models only)

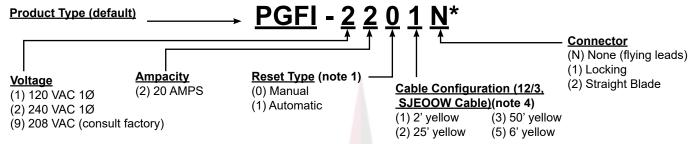
Enclosure: TYPE 4X, IP69, & IP69K wet location rated; high impact withstand

Switch Interface: Double insulated Latching Mechanism: Electro-magnetic Agency Approval: CULus 943 Listed

*Auto reset Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

LINEGARD 20 AMP PORTABLE SERIES GFCI DECISION TABLE



Note:

- 1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe condition.
- 2. Units are configured with SJTW cable and molded locking non-watertight connectors configured to 20 Amps. NEMA configurations for the 120 VAC and 240 VAC are L5-20 and L6-20 respectively.
- 3. All assemblies with flying leads are cURus recognized.
- 4. Custom cord sets and watertight connectors are available. Please consult North Shore Safety.
- *Decision table part number shown is a 240 VAC, 20 AMP, Manual Reset, 2 Ft Cord Length, No connector.

20 AMP PORTABLE SERIES GFCI PRODUCT CONFIGURATION TABLE STANDARD OFFERINGS

PGFI -	7	Х		2		X		Х			X		
		VOLTAGE		AMP	POW	ER-UP		SECONDAR	RY CORE)	CONNECTORS		
MODEL	STD SKU	120 (1)	240 (2)	20 (2)	MAN (0)	AUTO (1)	2' YEL (1)	6' YEL (5)	25' YEL (2)	50' YEL (3)	NONE (N)	LOCKING (1)**	
PGFI-1201N	Х	1		2	0		1				N		
PGFI-2201N	Х		2	2	0		1				N		
PGFI-1211N	Х	1		2		1	1				N		
PGFI-2211N	Х		2	2		1	1				N		
PGFI-1205N		1		2	0			5			N		
PGFI-2205N			2	2	0			5			N		
PGFI-1215N		1		2		1		5			N		
PGFI-2215N			2	2		1		5			N		
PGFI-1202N	_	1		2	0				2		N		
PGFI-2202N			2	2	0				2		N		
PGFI-1212N		1		2		1			2		N		
PGFI-2212N			2	2		1			2		N		
PGFI-1203N		1		2	0					3	N		
PGFI-2203N			2	2	0					3	N		
PGFI-1213N		1		2		1				3	N		
PGFI-2213N			2	2		1				3	N		
PGFI-12011*	х	1		2	0		1					1	
PGFI-22011*	х		2	2	0		1					1	
PGFI-12111*	х	1		2		1	1					1	
PGFI-22111*	х		2	2		1	1					1	

Note:

^{*}Units are configured with molded twistlock and SJTW cable as opposed to SJEOOW. These units are configured to 20 Amps at rated unit voltage and are configured with locking non-water tight devices. NEMA configurations for the 120VAC and 240VAC are NEMA L5-20 and L6-20 respectively.



20 AMP GFCI OFFERINGS



Flying Lead Yellow

- · Ideal for OEM applications
- · Versatile for various field wiring options
- · Custom secondary lengths available



Flying Lead Black

- Ideal for OEM applications
- Versatile for various field wiring options
- · Custom secondary lengths available

Dimensions



Molded Twist Lock

- · Ideal for temporary power protection
- Convenient plug and protect design



Mechanical Straight Blade

- · Custom configurations available
- Compatible with all 15A 20A plugs and connectors





30 AMP PORTABLE SERIES SINGLE AND MULTIPHASE GFCI



PRODUCT FEATURES

- Various voltages available (see configuration table)
- New 1Ø rated for NEMA 4X and IP69K
 - · Multiphase rated for NEMA 4X and 6P
 - Industrial design for rough service application
 - · Enclosure is Chemical and U.V. resistant
 - · Double insulated user interface for added safety
 - Largest 30 Amp switching contacts in the industry -(high reliability)
 - · Optional cable types and lengths available
 - Available in Automatic or Manual (safe start) reset models

- Open neutral protection (on applicable models only)
- · Dual indication lights displaying power and fault status
- Grounded neutral protection (on applicable models only)
- · Meets UL 943 self test requirements
- 1Ø cULus listed to UL 943, exception 277 VAC (non-UL)
- 3Ø UL 943 Class A GFCI and cCSAus Certified to CSA-C22.2 No. 144 (exception 240 VAC 3Ø - cCSAus only)

PRODUCT OVERVIEW

The *LineGard* • 30 Amp Portable Series GFCI comes factory standard with flying leads (no plug or connector) for field configuring and can be constructed into stand-alone cord sets or equipment integrated power supply cords. Exceptions are SKUs with molded twistlock devices. Note that thus any power cord integrated with this GFCI becomes OSHA compliant for portable power usage in confined space: OSHA 29 CFR 1926.404(b)(1)(ii) and 29 CFR 1926.405(a)(2)(ii)(G). Additionally, these devices meet the NEC requirement 590.6 (a) and (b).

The *LineGard* • 30 Amp Portable Series GFCI is industrially designed with impact resistant materials that withstand Chemical and Ultraviolet light degradation and is suitable for both indoor and outdoor applications. The Portable Series is geared for wet location use as this 1Ø device achieves both TYPE 4X and IP69K ratings.

For multiphase, this device achieves both TYPE 4X and 6P.

The *LineGard* [®] 30 Amp Portable Series GFCI also includes double insulated and recessed interface switches for additional safety while preventing accidental switching during rough handling.

In addition, the electrical contacts of the *LineGard* ® 30 Amp Portable Series GFCI are electro-magnetically latched so unit will not delatch under rough use or service. For user convenience, the 30 Amp Portable Series incorporates two LEDs for power and fault status. The product is available in both Automatic and Manual (safe start) reset types. Custom terminations for convenient end-use or installation.

North Shore Safety offers custom assemblies in addition to our standard models. All custom assemblies can be integrated with various wiring devices, cord lengths, or wire terminations for convenience of use and installation.





All *LineGard* ® 30 Amp Portable Series GFCIs are proudly assembled in the U.S.A in ISO certified facilities and are UL and/or cUL listed to UL 943. (cURus recognized with flying leads) (exception 277V & 240V 3Ø)

PRODUCT SPECIFICATION

Type: Class A

Voltage: 120VAC, 208VAC, 240VAC, 120/240 VAC, 277VAC, 120/208 VAC 3Ø, 208 VAC

3Ø ,240 VAC 3Ø

Operating Voltage Range: 85% TO 110% of rated voltage

Current: Up to 30 Amps or wiring device and/or cable rating

Frequency: 60 Hz, (50 Hz available non-UL)

Trip Level: 5 +/- 1 mA

Phase: Single, Split, and 3Ø (WYE and Delta)

Response Time: 25 mS max @ 500 Ohm fault

Operating Temperature: -35°C to 66°C

Reset Type: Automatic or Manual (safe start)*

Open Neutral Protection: Opens upon loss of neutral (applicable models only)

Grounded Neutral Protection: Trips if ground and neutral touch at load side (applicable models only)

Enclosure: TYPE 4X wet location rated, 1Ø rated for NEMA 4X and IP69K, multiphase rated

for NEMA 4X and 6P

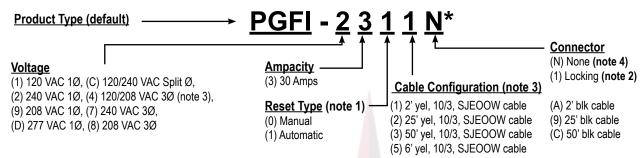
Switch Interface: Double insulated Latching Mechanism: Electro-magnetic

Agency Approval: cULus UL 943; cCSAus certified to CSA-C22.2 No. 144 (exception 277V)

*Auto reset Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refridgeration, lighting, pumps, machinery, etc)

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

DECISION TABLE



Note:

- 1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe vcondition.
- 2. Units are configured with SJTW cable and molded locking non-watertight connectors configured to 30 Amps.
- 3. 120/208 VAC 3Ø configurations use 10/5 SEOOW cable, custom cord sets are available. Please consult North Shore Safety for other options
- 4. All assemblies with flying leads are cURus recognized
- *Decision table part number shown is a 240 VAC, 1Ø, 30 Amps, automatic reset, 2' cord length, No connectors (flying leads)

30 AMP PORTABLE SERIES SINGLE PHASE GFCI PRODUCT CONFIGURATION TABLE

PGFI -			Χ		2	2	X		X				X
		VOL	TAGE		AMP	POW	ER-UP	\overline{A}	SECONDAR	RY CORE)	CON	NECTORS
MODEL	120 (1)	208 (9)	240 (2)	277V (D)	30 (3)	MAN (0)	AUTO (1)	2' YEL (1)	6' YEL (5)	25' YEL (2)	50' YEL (3)	NONE (N)	LOCKING (1)**
PGFI-1301N	1				3	0		1				N	
PGFI-2301N			2		3	0		1				N	
PGFI-9301N		9			3	0		1				N	
PGFI-D301N				D	3	0		1				N	
PGFI-1311N	1				3		1	1				N	
PGFI-2311N			2		3		1	1				N	
PGFI-9311N		9			3		1	1				N	
PGFI-D311N				D	3		1	1				N	
PGFI-1305N	1				3	0			5			N	
PGFI-2305N			2		3	0			5			N	
PGFI-1315N	1				3		1		5			N	
PGFI-2315N			2		3		1		5			N	
PGFI-1302N	1				3	0				2		N	
PGFI-2302N			2		3	0				2		N	
PGFI-1312N	1				3		1			2		N	
PGFI-2312N			2		3		1			2		N	
PGFI-1303N	1				3	0					3	N	
PGFI-2303N			2		3	0					3	N	
PGFI-1313N	1				3		1				3	N	
PGFI-2313N			2		3		1				3	N	
PGFI-13011**	1				3	0		1					1
PGFI-23011**			2		3	0		1					1
PGFI-13111**	1				3		1	1					1
PGFI-23111**			2		3		1	1					1

Note:

^{**}UNITS WITH MOLDED WIRING DEVICES ARE CONFIGURED TO 30 AMPS AT UNIT RATED VOLTAGE AND ARE LOCKING NON-WATERTIGHT DEVICES



30 AMP PORTABLE SERIES SINGLE PHASE GFCI



Mechanical Twist Lock or Straight Blade

30 AMP PORTABLE SERIES MULTIPHASE GFCI PRODUCT CONFIGURATION TABLE

PGFI -		X			2		X		X		Х
		VOLTAGE			AMP	POW	ER-UP	SEC	ONDARY	CORD	CONNECTORS
MODEL	120/240V SPLIT Ø(C)	120/208V 3 øWYE (4)	240V 3 ø (7)	208V 3 ø (8)	30 (3)	MAN (0)	AUTO (1)	2' BLK (A)	25' BLK (9)	50' BLK (C)	NONE (N)
PGFI-C30AN	С				3	0		Α			N
PGFI-730AN			7		3	0		Α			N
PGFI-830AN				8	3	0		Α			N
PGFI-430AN		4			3	0		Α			N
PGFI-C31AN	С				3		1	Α			N
PGFI-731AN			7		3		1	Α			N
PGFI-831AN				8	3		1	Α			N
PGFI-B31AN					3		1	Α			N
PGFI-431AN		4			3		1	Α			N
PGFI-C309N	С				3	0			9		N
PGFI-7309N			7		3	0			9	1	N
PGFI-8309N				8	3	0			9		N
PGFI-4309N		4			3	0			9		N
PGFI-C319N	С				3		1		9		N
PGFI-7319N			7		3		1		9		N
PGFI-8319N				8	3		1		9		N
PGFI-4319N		4			3		1		9		N
PGFI-C30CN	С				3	0				С	N
PGFI-730CN			7		3	0				С	N
PGFI-830CN				8	3	0				С	N
PGFI-430CN		4			3	0				С	N
PGFI-C31CN	С				3		1			С	N
PGFI-731CN			7		3		1			С	N
PGFI-831CN				8	3		1			С	N
PGFI-431CN		4			3		1			С	N



30 AMP PORTABLE SERIES MULTIPHASE GFCI



Dimensions



30 AMP PORTABLE SERIES CEILING DROP PRODUCT CONFIGURATION TABLE

PGFI -				Х			3		Х)	Κ	Х	- X	XX
MODEL				VOLTAGE			AMP	PC	OWER-UP	DRO	P-CORD	CONNECTORS	CEILING	HEIGHT
	120VAC 1Ø (1)	208VAC 1Ø (9)	240VAC 1Ø (2)	277VAC 1Ø (D)	120/208VAC 3ØY (4)	208VAC 3Ø (8)	30A (3)	MAN (0)	AUTO (1)	30A 10AWG (E)	20A 12AWG (F)	NONE (N)	10FT (CD10)	25FT (CD25)
PGFI-130EN-CD10	1						3	0		Е		N	CD10	
PGFI-930EN-CD10		9					3	0		Е		N	CD10	
PGFI-D30EN-CD10				D			3	0		Е		N	CD10	
PGFI-430EN-CD10					4		3	0		Е		N	CD10	
PGFI-830EN-CD10						8	3	0		Е		N	CD10	
PGFI-131EN-CD10	1					7	3		1	Е		N	CD10	
PGFI-931EN-CD10		9					3		1	E		N	CD10	
PGFI-D31EN-CD10				D			3		1	E		N	CD10	
PGFI-431EN-CD10					4		3		1	E		N	CD10	
PGFI-831EN-CD10						8	3		1	Е		N	CD10	
PGFI-130FN-CD10	1						3	0	Î		F	N	CD10	
PGFI-930FN-CD10	1	9					3	0			F	N	CD10	
PGFI-D30FN-CD10		7		D			3	0			F	N	CD10	
PGFI-430FN-CD10					4		3	0	///		F	N	CD10	
PGFI-830FN-CD10						8	3	0			F	N	CD10	
PGFI-131FN-CD10	1						3		1		F	N	CD10	
PGFI-931FN-CD10		9					3		1		F	N	CD10	
PGFI-D31FN-CD10				D			3		1		F	N	CD10	
PGFI-431FN-CD10					4		3		1		F	N	CD10	
PGFI-831FN-CD10						8	3		1		F	N	CD10	
PGFI-130EN-CD25	1						3	0		Е		N		CD25
PGFI-930EN-CD25		9			AA		3	0		Е		N		CD25
PGFI-D30EN-CD25				D			3	0		E		N		CD25
PGFI-430EN-CD25					4		3	0		Е		N		CD25
PGFI-830EN-CD25						8	3	0		E		N		CD25
PGFI-131EN-CD25	1						3		1	E		N		CD25
PGFI-931EN-CD25		9					3		1	E		N		CD25
PGFI-D31EN-CD25		-		D			3		1	Е		N		CD25
PGFI-431EN-CD25					4		3		1	E		N		CD25
PGFI-831EN-CD25						8	3		1	E		N		CD25
PGFI-130FN-CD25	1						3	0			F	N		CD25
PGFI-930FN-CD25		9					3	0			F	N		CD25
PGFI-D30FN-CD25				D			3	0			F	N		CD25
PGFI-430FN-CD25					4		3	0			F	N		CD25
PGFI-830FN-CD25						8	3	0			F	N		CD25
PGFI-131FN-CD25	1						3		1		F	N		CD25
PGFI-931FN-CD25		9					3		1		F	N		CD25
PGFI-D31FN-CD25				D			3		1		F	N		CD25
PGFI-431FN-CD25					4		3		1		F	N		CD25
PGFI-831FN-CD25						8	3		1		F	N		CD25



30 AMP PORTABLE SERIES CEILING DROP GFCI





finegard Always on duty 30 AMP PERMANENT SERIES

30 AMP PERMANENT SERIES SINGLE AND MULTIPHASE GFCI



PRODUCT FEATURES

- Various voltages available (see configuration table)
- · TYPE 4X wet location rated indoor/outdoor
- · Industrial design for rough service applications
- Enclosure is Chemical and U.V. resistant
- Double insulated user interface for added safety
- Largest 30 Amp switching contacts in the industry (high reliability)
- Available in Automatic or Manual (safe start) reset models
- Open neutral protection (only on applicable models)
- Dual indication lights displaying power and fault status

- Grounded neutral protection (only on applicable models)
- Solid wires (input) striped wires (output)
- Surface mountable (4 location) Panel mountable (2 blind cover holes)
- · Meets UL 943 self test requirements
- 1Ø cULus listed to UL 943 Class A GFCI (277 VAC 1Ø no agency)
- 3Ø UL 943 Class A GFCI and 3Ø cCSAus certified to CSA-C22.2 No. 144 (exception 240 VAC 3Ø - cCSAus only)

PRODUCT OVERVIEW

The *LineGard* ® 30 Amp Permanent Series single and multiphase GFCI is ideal for both new and existing circuit installations. This GFCI has a unique design that offers the flexibility of splicing-in the protection of a GFCI anywhere within the length of a circuit run. This convenience allows the installer to place this GFCI at an accessible location for the end user. Unlike breaker style GFCIs which have limitations of circuit length from the service panel: the Permanent Series GFCI is installed at the point of use and thus has no restrictions to circuit length.

The *LineGard* ® 30 Amp Permanent Series GFCI can be integrated directly into a circuit or paired in tandem with an approved receptacle and enclosure. Note that once a receptacle has been integrated with a Permanent Series GFCI and because this device incorporates open neutral protection, the integrated system meets the requirement for confined space OSHA 29 CFR 1926.404(b)(1)(ii) and 29 CFR 1926.405(a)(2)(ii)(G). Thus any cord set plugged into this system becomes compliant, eliminating the need to upgrade equipment cord sets in this confined space.

All units have 18" splicing lead wires, a ¾" NPT fitting that can connect to ¾" PVC, EMT, Burial and Flexible conduits. In addition, the unit can be installed as a panel mount. Multiple fault output options are available. All units are available in an Automatic or Manual (safe start) reset type.



Note: ground wire is connected externally to GFCI device and does not enter the GFCI housing. Units are UL 943 and CSA C22.2 No. 144 listed. (277 VAC are non UL or CSA).

All *LineGard* ® 30 Amp Permanent Series GFCIs are proudly assembled in the U.S.A in ISO certified facilities and are UL and/or cUL listed to UL 943. (cURus recognized with flying leads) (exception 277V & 240V 3Ø)





PRODUCT SPECIFICATION

Type: Class A

Voltage: 120VAC, 208VAC, 240VAC, 120/240VAC,

120/208VAC 3Ø, 208VAC 3Ø, 240VAC 3Ø, (277VAC)

Operating Voltage Range: 85% TO 110% of rated voltage

Current: Up to 30 Amps or receptacle device rating

Frequency: 60 Hz, (50 Hz available non-UL)

Trip Level: 5 +/- 1mA

Phase: Single, Split, and 3Ø (WYE and Delta)

Response Time: 25 mS max @ 500 Ohm Fault

Operating Temperature: -35°C to 66°C

Reset Type: Automatic or Manual (safe start)*

Open Neutral Protection: Opens upon loss of neutral (only on applicable models)

Grounded Neutral Protection: Trips if ground and neutral touch at load side

(only on applicable models)

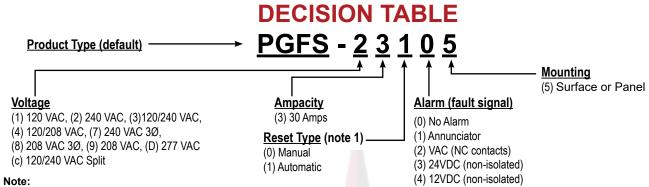
Enclosure: NEMA 4X wet location rated

Switch Interface: Double insulated Latching Mechanism: Double insulated Electro-magnetic

Agency Approval: cULus, cCSAus except 277VAC

*<u>Auto reset</u> Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)



1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe condition.
2. Units are configured with 18in of 10AWG, MTW / THHW / AWM, 105C, 600V, individual conductors.

LINEGARD 30 AMP PERMANENT SERIES SINGLE PHASE GFCI PRODUCT CONFIGURATION TABLE

	1		VOLTAGE			AMP	POW	ER-UP		FAULT (OUTPUT OPT	IONS		TYPE
MODEL	120V (1)	240V (2)	208V (9)	277V (D)	120/ 240V (3)	30 (3)	MAN (0)	AUTO (1)	NONE (0)	ANNUN. (1)	VAC* (2)	24VDC (3)	12VDC (4)	SURFACE OR PANEL MOUNT (5)
PGFS-13005	1					3	0		0					5
PGFS-23005		2				3	0		0					5
PGFS-93005			9			3	0		0			1		5
PGFS-D3005				D		3	0		0					5
PGFS-33005					3	3	0		0					5
PGFS-13105	1					3		1	0					5
PGFS-23105		2				3		1	0					5
PGFS-93105			9			3		1	0					5
PGFS-D3105				D		3		1	0					5
PGFS-33105					3	3		1	0					5
PGFS-13015	1					3	0			1				5
PGFS-23015		2				3	0			1				5
PGFS-33015					3	3	0			1				5
PGFS-13115	1					3		1		1				5
PGFS-23115		2				3		1		1				5
PGFS-33115					3	3		1		1				5
PGFS-13025	1					3	0				2		7	5
PGFS-23025		2				3	0				2			5
PGFS-33025					3	3	0				2			5
PGFS-13125	1					3		1			2			5
PGFS-23125		2				3		1			2			5
PGFS-33125					3	3		1			2			5
PGFS-13035	1					3	0					3		5
PGFS-23035		2				3	0					3		5
PGFS-33035					3	3	0					3		5
PGFS-13135	1					3		1				3		5
PGFS-23135		2				3		1				3		5
PGFS-33135					3	3		1				3		5
PGFS-13045	1					3	0						4	5
PGFS-23045		2				3	0						4	5
PGFS-33045					3	3	0						4	5
PGFS-13145	1					3		1					4	5
PGFS-23145		2				3		1					4	5
PGFS-33145					3	3		1					4	5

NOTE:

*VAC FAULT OUTPUTS ARE AT LINE VOLTAGE AND ARE NOT GFCI PROTECTED (NOTE: 4 WIRE 120/240VAC CONFIGURATION IS A 240VAC OUTPUT)
**NO NEUTRAL DISCONNECT

30 AMP MULTIPHASE PRODUCT CONFIGURATION TABLE

PGFS -		X			3	Х		X	Х
MODEL		VOLTAGE			AMP	POWER	R-UP	FAULT OUTPUT OPTIONS	TYPE
	120/240V SPLIT Ø (C)	120/208V 3Ø WYE (4)	240V 3Ø (7)	208V 3Ø (8)	30 (3)	MANUAL (0)	AUTO (1)	NONE (0)	SURFACE OR PANEL MOUNT (5)
PGFS-C3005	С				3	0		0	5
PGFS-73005			7		3	0		0	5
PGFS-83005				8	3	0		0	5
PGFS-43005		4			3	0		0	5
PGFS-C3105	С				3		1	0	5
PGFS-73105			7		3		1	0	5
PGFS-83105				8	3		1	0	5
PGFS-43105		4			3		1	0	5



30 AMP PERMANENT SERIES SINGLE AND MULTIPHASE GFCI



Dimensions







40-60 AMP PERMANENT SERIES UL LISTED CLASS A GFCI



PRODUCT FEATURES

- · 208 VAC single, and 3Ø Delta
- · NEMA 4X wet location rated
- Enclosure withstands Chemical and U.V. light exposure
- · Double insulated user interface for added safety
- · Industrial design indoor/outdoor application use
- · Flying leads for electrical circuit splicing
- Class-A trip level 5mA +/-1mA
- Triple indication lights displaying power, contact position, and fault status
- 1" Conduit hubs for integration to 1" flexible, EMT, PVC or burial conduit
- UL 943 Listed

PRODUCT OVERVIEW

The *LineGard* [®] 40-60 Amp Class A Ground Fault Circuit Interrupter (GFCI) is ideal for both new and existing circuit installations.

The *LineGard* ® 40-60 Amp Class A GFCI offers the flexibility of splicing in anywhere within the length of a circuit. This convenience allows the installer to place this GFCI at an accessible location for the end user. Unlike breaker style GFCIs which have limitations of circuit level from the service panel, the *LineGard* ⁴ 40-60 Amp Class A GFCI is typically installed at the point of use and therefore has no restrictions to circuit length. The LineGard 40-60 Amp Class A GFCI can be integrated directly into a circuit or paired in tandem with an approved receptacle.

All units have 60" splicing lead wires and 1" NPT conduit fittings for integration to flexible, EMT, PVC, or burial conduit.

All *LineGard* © 40-60 Amp Class A GFCIs are proudly made in the U.S.A. in ISO certified facilities and are UL943 and CSA C22.2 No. 144 listed.





PRODUCT SPECIFICATION

Type: Class A GFCI

Voltage: 208 VAC

Operating Voltage Range: 85% to 110% of rating

Current: Up o 40, 50, or 60 Amps depending on configuration

Frequency: 5mA +/- 1mA
Trip Level: 3 Phase Delta

Phase: $25 \text{ms max at } 500 \Omega \text{ Fault}$

Response Time: Auto: Output is on immediately upon power up* Manual: Output is off immediately upon power up*

-35° C to 50° C (-31° F to 122° F)

Operating Temperature: NEMA 4X wet location rated

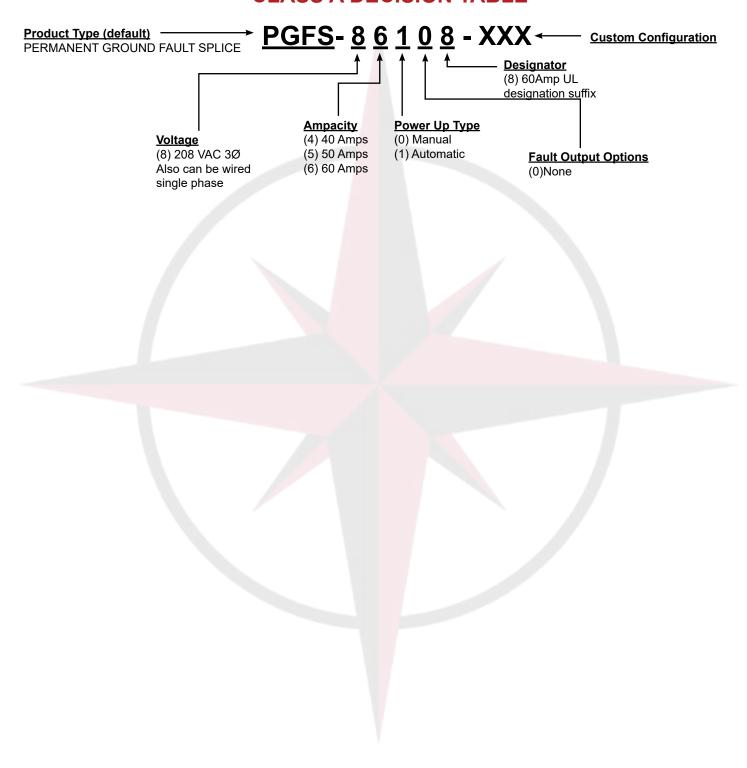
Enclosure: AC contactor
Latching Mechanism: UL943A Listed

Agency Approval:

*<u>Auto reset</u> Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refridgeration, lighting, pumps, machinery, etc)

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

40-60 AMP PERMANENT SERIES UL LISTED CLASS A DECISION TABLE

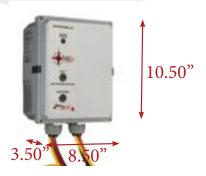




40-60 Amp 3-PHASE



Dimensions







60 AMP PERMANENT SERIES SPECIAL PURPOSE SPGFCI



PRODUCT FEATURES

- 480 VAC 3Ø Delta
- 30 Amp and 60 Amp options available (10awg or 6awg)
- · NEMA 4X wet location rated
- Enclosure withstands Chemical and U.V. light exposure
- · Double insulated user interface for added safety
- · Industrial design indoor/outdoor application use
- · Flying leads for electrical circuit splicing
- · 20mA trip level with grounding assurance lanyard
- Triple indication lights displaying power, contact position, and fault status
- 1" Conduit hubs for integration to 1" flexible, EMT, PVC or burial conduit
- UL 943C Listed

PRODUCT OVERVIEW

The *LineGard* [®] 60 Amp Special Purpose Ground Fault Circuit Interrupter (SPGFCI) is ideal for both new and existing circuit installations and is designed to interrupt leakages of 20mA or greater. This product mitigates the effects that a ground fault may have on your integrated equipment while also providing shock protection for personnel.

The *LineGard* [®] 60 Amp SPGFCI offers protection for nuisance applications such as welders, pumps, motors and generators that would normally trip a Class A, 6mA GFCI.

All units have 60" splicing lead wires and 1" NPT conduit fittings for integration to flexible, EMT, PVC, or burial conduit. A pilot conductor is provided to monitor the protected equipment chassis ensuring that ambient leakage is being routed away from personnel to a proper ground path.

All *LineGard* ® 60 Amp Class A SPGFCIs are proudly made in the U.S.A. in ISO certified facilities and are UL 943C listed.

PRODUCT SPECIFICATION

Type: Special Purpose Ground Fault Circuit Interrupter (SPGFCI)

Voltage: 480 VAC (To be used on power systems where no conductor is

greater than 300 VAC to ground *277/480)

Operating Voltage Range: 85% to 110% of rating

Current: Up to 60 Amps

Frequency: 60 Hz (50Hz available)

Trip Level: 20 mA Electrocution protection plus 100 Ω chassis verification

Phase: 3 Phase Delta

Response Time: 21ms max at 500 Ω fault

Reset Type: Auto: Output is on immediately upon power up*

Manual: Output is off immediately upon power up*

Operating Temperature: -35° C to 50° C (-31° F to 122°F)

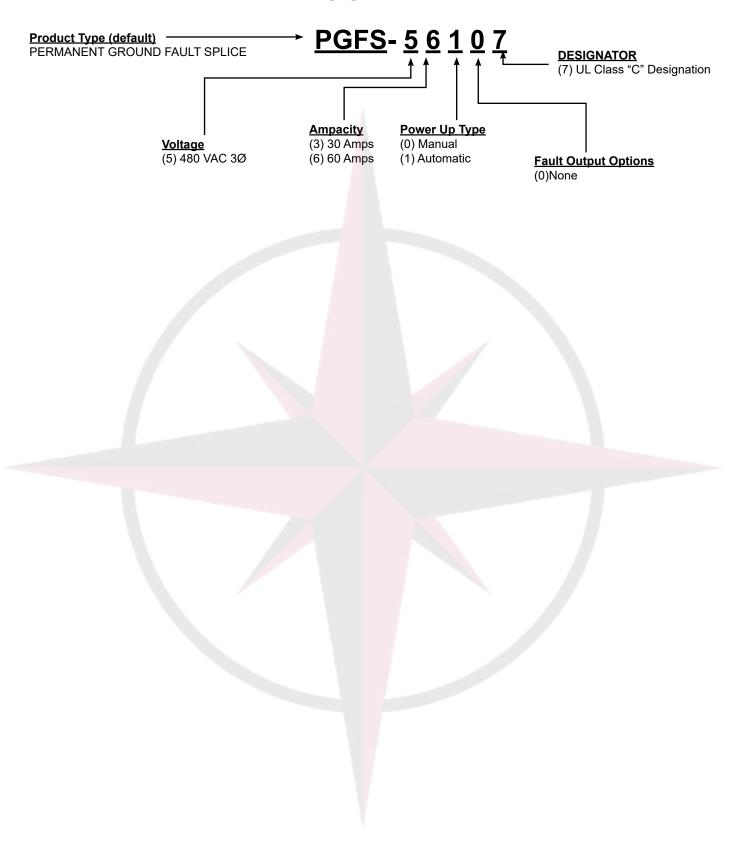
Enclosure: NEMA 4X wet location rated

Latching Mechanism: AC contactor
Agency Approval: UL943C Listed

*Auto reset Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

DECISION TABLE





60 AMP PERMANENT SERIES SPECIAL PURPOSE SPGFCI





Dimensions







30 AMP PORTABLE SERIES SINGLE AND MULTIPHASE ELCI



PRODUCT FEATURES

- Various voltages available (see configuration table)
- New 1Ø rated for NEMA 4X and IP69K
 - · Multiphase rated for NEMA 4X and 6P
 - Industrial design for rough service application
 - · Enclosure is Chemical and U.V. resistant
 - · Double insulated user interface for added safety
 - · Multiple cable types and lengths available
 - Available in elevated trip configuration (10 mA, 20 mA, 30 mA)

- Available in Automatic or Manual (safe start) reset models
- Open neutral protection (on applicable models only)
- · Dual indication lights displaying power and fault status
- · Self-test
- 1Ø and 3Ø cCSAus Certified to CSA-C22.2 No. 144 and requirement of UL1053 (277 VAC are non CSA)

PRODUCT OVERVIEW

The *LineGard*™ 30 Amp Portable Series comes factory standard with flying leads (no plug or connector) for field configuring and can be constructed into stand-alone cord sets or equipment integrated power supply cords. Exceptions are SKUs with molded twistlock devices. Note that thus any power cord integrated with this ELCI becomes OSHA compliant for portable power usage in confined space: OSHA 29 CFR 1926.404(b)(1)(ii) and 29 CFR 1926.405(a) (2)(ii)(G). Additionally, these devices meet the NEC requirement 590.6 (a) and (b).

The *LineGard*™ 30 Amp Portable Series is industrially designed with impact resistant materials that withstand Chemical and Ultraviolet light degradation and is suitable for both indoor and outdoor applications. The Portable Series is geared for wet location use as this 1Ø device achieves both TYPE 4X and 6P ratings. For 3Ø multiphase, this device achieves both TYPE 4X and 6P.

The *LineGard*™ 30 Amp Portable Series also includes double insulated and recessed interface switches for additional safety while preventing accidental switching during rough handling.

In addition, the electrical contacts of the *LineGard*™ 30 Amp Portable Series are electro-magnetically latched so unit will not delatch under rough use or service. For user convenience, the 30 Amp Portable Series incorporates two LEDs for power and fault status. The product is available in both Automatic and Manual (safe start) reset types.

All units are CSA 22.2 No. 144 listed with the exception of 277VAC.

North Shore Safety offers custom assemblies in addition to our standard models. All custom assemblies can be integrated with various wiring devices, cord lengths, or wire terminations for convenience of use and installation.





All *LineGard*™ 30 Amp Portable Series ELCIs are proudly assembled in the U.S.A in ISO certified facilities and are cCSAus. (exception 277V).

PRODUCT SPECIFICATION

Type: ELCI

Voltage: 120VAC, 208VAC, 240VAC, 120/240VAC, 120/208VAC 3Ø,

208VAC 3Ø, 240VAC 3Ø, (277VAC)

Operating Voltage Range: 85% TO 110% of rated voltage

Current: Up to 30 Amps or wiring device and/or cable rating

Frequency: 60 Hz, (50 Hz available)
Trip Levels: 10 mA, 20 mA, 30 mA

Phase: Single, Split, and 3Ø (WYE and Delta)

Response Time: 25 mS max @ 500 Ohm fault

Operating Temperature: -35°C to 66°C

Reset Type: Automatic or Manual (safe start)*

Open Neutral Protection: Opens upon loss of neutral (applicable models only)

Enclosure: TYPE 4X wet location rated, 1Ø rated for NEMA 4X and IP69K,

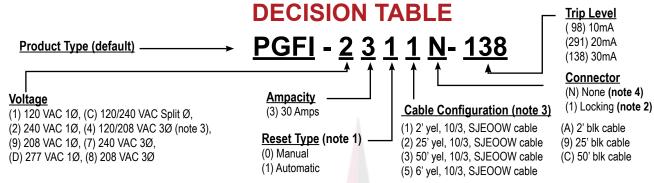
multiphase rated for NEMA 4X and 6P

Switch Interface: Double insulated Latching Mechanism: Electro-magnetic

Agency Approval: cCSAus

*<u>Auto reset</u> Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)



Note:

- 1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe condition.
- 2. Units are configured with SJTW cable and molded locking non-watertight connectors configured to 30 Amps.
- 3. 120/208 VAC 3Ø configurations use 10/5 SEOOW cable, custom cord sets are available. Please consult North Shore Safety for other options
- 4. All assemblies with flying leads are cURus recognized
- *Decision table part number shown is a 240 VAC, 1Ø, 30 Amps, AUTOMATIC reset, 2' cord length, No connectors (flying leads)

30 AMP PORTABLE SERIES SINGLE PHASE ELCI PRODUCT CONFIGURATION TABLE

PGFI -			Х		2	2	X		х				Х
		VOL	TAGE		AMP	POW	ER-UP		SECONDAF		CONNECTORS		
MODEL	120 (1)	208 (9)	240 (2)	277V (D)	30A (3)	MAN (0)	AUTO (1)	2' YEL (1)	6' YEL (5)	25' YEL (2)	50' YEL (3)	NONE (N)	LOCKING (1)**
PGFI-1301N	1				3	0		1				N	
PGFI-2301N			2		3	0		1				N	
PGFI-9301N		9			3			1				N	
PGFI-D301N			2	D	3			1				N	
PGFI-1311N	1				3	0	1	1	5			N	
PGFI-2311N			2	D	3	0	1	1	5			N	
PGFI-9311N		9			3		1	1	5			N	
PGFI-D311N			2		3		1	1	5			N	
PGFI-1305N	1				3	0				5		N	
PGFI-2305N			2		3	0				5		N	
PGFI-1315N	1				3		1			5		N	
PGFI-2315N			2		3		1			5		N	
PGFI-1302N	1				3	0					2	N	
PGFI-2302N			2		3	0					2	N	
PGFI-1312N	1				3		1			\mathcal{A}	2	N	
PGFI-2312N			2		3		1				2	N	
PGFI-1303N	1				3	0						N	
PGFI-2303N			2		3	0						N	
PGFI-1313N	1				3		1					N	
PGFI-2313N			2		3		1					N	
PGFI-13011**	1				3	0		1					1
PGFI-23011**			2		3	0		1					1
PGFI-13111**	1				3		1	1					1
PGFI-23111**			2		3		1	1					1

Note:

^{*}UNITS ARE CONFIGURED WITH A MOLDED TWISTLOCK AND SJTW CABLE AS OPPOSED TO SJEOOW CABLE

^{**}UNITS WITH MOLDED WIRING DEVICES ARE CONFIGURED TO 30 AMPS AT UNIT RATED VOLTAGE AND ARE LOCKING NON-WATERTIGHT DEVICES



30 AMP PORTABLE SINGLE PHASE ELCI OFFERINGS



Flying Lead



Molded Twist Lock



Mechanical Straight Blade or Twist Lock

Dimensions



30 AMP MULTIPHASE SERIES ELCI PRODUCT CONFIGURATION TABLE

PGFI -		X			2]	X		X		Х
		VOLTAGE			AMP	POW	ER-UP	SEC	ONDARY	CORD	CONNECTORS
MODEL	120/240V SPLIT ø(C)	120/208V 3 øWYE (4)	240V 3 ø (7)	208V 3 ø (8)	30A (3)	MAN (0)	AUTO (1)	2' BLK (A)	25' BLK (9)	50' BLK (C)	NONE (N)
PGFI-C30AN	C	(.)	(.,	(0)	3	0	(.,	A	(0)	(0)	N N
PGFI-730AN			7		3	0		A			N
PGFI-830AN				8	3	0		A			N
PGFI-430AN		4			3	0		Α			N
PGFI-C31AN	С				3		1	Α			N
PGFI-731AN			7		3		1	Α			N
PGFI-831AN				8	3		1	Α			N
PGFI-B31AN					3		1	Α			N
PGFI-431AN		4			3		1	Α			N
PGFI-C309N	С				3	0			9		N
PGFI-7309N			7		3	0			9		N
PGFI-8309N				8	3	0			9		N
PGFI-4309N		4			3	0			9		N
PGFI-C319N	С				3		1		9		N
PGFI-7319N			7		3		1		9		N
PGFI-8319N				8	3		1		9		N
PGFI-4319N		4			3		1		9		N
PGFI-C30CN	С				3	0				С	N
PGFI-730CN			7		3	0				С	N
PGFI-830CN				8	3	0				С	N
PGFI-430CN		4			3	0				С	N
PGFI-C31CN	С				3		1			С	N
PGFI-731CN			7		3		1			С	N
PGFI-831CN				8	3		1			С	N
PGFI-431CN		4			3		1			С	N



30 AMP PORTABLE SERIES MULTIPHASE ELCI







Tinegard 30 AMP PERMANENT SERIES SINGLE AND MULTIPHASE ELCI



- Various voltages available (see configuration table)
- · TYPE 4X wet location rated indoor/outdoor
- Industrial design for rough service applications
- · Enclosure is Chemical and U.V. resistant
- Double insulated user interface for added safety
- Available in Automatic or Manual (safe start) reset models
- Open neutral protection (only on applicable models)
- Available in elevated trip configuration (10 mA, 20 mA, 30 mA)

- Dual indication lights displaying power and fault status
- · Flying leads for field splicing
- · Solid wires (input) striped wires (output)
- Surface mountable (4 location) Panel mountable (2 blind cover holes)
- 1Ø and 3Ø cCSAus certified to CSA-C22.2 No. 144 (277 VAC not listed)

PRODUCT OVERVIEW

The *LineGard* ® 30 Amp Permanent Series single and multiphase ELCI is ideal for both new and existing circuit installations. This ELCI has a unique design that offers the flexibility of splicing-in the protection of a ELCI anywhere within the length of a circuit run. This convenience allows the installer to place this ELCI at an accessible location for the end user.

Unlike breaker style ELCIs which have limitations of circuit length from the service panel: the Permanent Series ELCI is installed at the point of use and thus has no restrictions to circuit length by definition.

The *LineGard* ® 30 Amp Permanent Series ELCI can be integrated directly into a circuit or paired in tandem with an approved receptacle and enclosure.

All units have 18" splicing lead wires, a ¾" NPT fitting that can connect to ¾" PVC, EMT, Burial and Flexible conduits. In addition, the unit can be installed as a panel mount. Multiple fault output options are available.

All units are available in an Automatic or Manual (safe start) reset type. Note: ground wire is connected externally to ELCI device and does not enter the ELCI housing. Units CSA C22.2 No. 144 listed. (277 VAC not listed).





North Shore Safety offers custom assemblies in addition to our standard models. All custom assemblies can be integrated with various wiring devices, cord lengths, or wire terminations for convenience of use and installation.

All *LineGard* ® 30 Amp Permanent Series ELCIs are proudly assembled in the U.S.A in ISO certified facilities and are cCSAus. (exception 277V).

PRODUCT SPECIFICATION

Type: ELCI

Voltage: 120VAC, 208VAC, 240VAC, 120/240VAC,

120/208VAC 3Ø, 208VAC 3Ø, 240VAC 3Ø, (277VAC)

Operating Voltage Range: 85% TO 110% of rated voltage

Current: Up to 30 Amps or receptacle device rating

Frequency: 60 Hz, (50 Hz available)
Trip Level: 10 mA, 20 mA, 30 mA

Phase: Single, Split, and 3Ø (WYE and Delta)

Response Time: 25 mS max @ 500 Ohm Fault

Operating Temperature: -35°C to 66°C

Reset Type: Automatic or Manual (safe start)*

Open Neutral Protection: Opens upon loss of neutral (only on applicable models)

Enclosure: NEMA 4X wet location rated

Switch Interface: Double insulated Latching Mechanism: Electro-magnetic

Agency Approval: cCSAus

^{*}Auto reset Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)

^{*}Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

DECISION TABLE Product Type (default) Trip Level (98) 10mA Alarm (fault signal) **Voltage** Ampacity (291) 20mA (0) No Alarm (1) 120 VAC, (2) 240 VAC, (3)120/240 VAC, (3) 30 Amps (138) 30mA (1) Annunciator (4) 120/208 VAC 3Ø, (7) 240 VAC 3Ø, Reset Type (note 1) (2) VAC (NC contacts) Mounting (8) 208 VAC 3Ø, (9) 208 VAC, (D) 277 VAC (0) Manual (3) 24VDC (non-isolated) (5) Surface or Panel (C) 120/240 VAC Split (1) Automatic (4) 12VDC (non-isolated)

Note:

- 1. Manual configuration should be specified if automatic power-up, after power restoration of circuit power, could create an unsafe condition.
- 2. Units are configured with 18 in of 10AWG, MTW / THHW / AWM, 105C, 600V, individual conductors.

LINE GARD 30 AMP PERMANENT SERIES SINGLE PHASE ELCI PRODUCT CONFIGURATION TABLE

			VOLTAGE			AMP	POW	ER-UP		FAULT O	UTPUT OP	TIONS		TYPE
MODEL	120V (1)	240V (2)	208V (9)	277V (D)	**120/ 240V (3)	30A (3)	MAN (0)	AUTO (1)	NONE (0)	ANNUN* (1)	VAC* (2)	24VDC* (3)	12VDC* (4)	SURFACE OR PANEL MOUNT (5)
PGFS-13005	1					3	0		0					5
PGFS-23005		2				3	0		0					5
PGFS-93005			9			3	0		0			1		5
PGFS-D3005				D		3	0		0					5
PGFS-33005					3	3	0		0					5
PGFS-13105	1					3		1	0					5
PGFS-23105		2				3		1	0					5
PGFS-93105			9			3		1	0					5
PGFS-D3105				D		3		1	0					5
PGFS-33105					3	3		1	0					5
PGFS-13015	1					3	0			1				5
PGFS-23015		2				3	0			1				5
PGFS-33015					3	3	0			1				5
PGFS-13115	1					3		1		1				5
PGFS-23115		2				3		1		1				5
PGFS-33115					3	3		1		1				5
PGFS-13025	1					3	0				2			5
PGFS-23025		2				3	0				2			5
PGFS-33025					3	3	0				2			5
PGFS-13125	1					3		1			2			5
PGFS-23125		2				3		1			2			5
PGFS-33125					3	3		1			2			5
PGFS-13035	1					3	0					3		5
PGFS-23035		2				3	0					3		5
PGFS-33035					3	3	0					3		5
PGFS-13135	1					3		1				3		5
PGFS-23135		2				3		1				3		5
PGFS-33135					3	3		1				3		5
PGFS-13045	1					3	0						4	5
PGFS-23045		2				3	0						4	5
PGFS-33045					3	3	0						4	5
PGFS-13145	1					3		1					4	5
PGFS-23145		2				3		1					4	5
PGFS-33145					3	3		1					4	5

Note:

^{*}FAULT OUTPUTS ARE AT LINE VOLTAGE AND ARE NOT GFCI PROTECTED (NOTE: 4 WIRE 120/240VAC CONFIGURATION IS A 240VAC OUTPUT)
**NO NEUTRAL DISCONNECT

30 AMP PERMANENT SERIES MULTIPHASE ELCI PRODUCT CONFIGURATION TABLE

PGFS -		X			3	Х		Х	Х
MODEL		VOLTAGE			AMP	POWER	R-UP	FAULT OUTPUT OPTIONS	TYPE
	120/240V SPLIT Ø (C)	120/208V 3Ø WYE (4)	240V 3Ø (7)	208V 3Ø (8)	30A (3)	MANUAL (0)	AUTO (1)	NONE (0)	SURFACE OR PANEL MOUNT (5)
PGFS-C3005	С				3	0		0	5
PGFS-73005			7		3	0		0	5
PGFS-83005				8	3	0		0	5
PGFS-43005		4			3	0		0	5
PGFS-C3105	С				3		1	0	5
PGFS-73105	/		7		3		1	0	5
PGFS-83105				8	3		1	0	5
PGFS-43105		4			3		1	0	5



30 AMP PERMANENT SERIES SINGLE AND MULTIPHASE ELCI









30 AMP PERMANENT & PORTABLE SERIES MARINE ELCI



- 2 voltage configurations (120, 120/240V) available
- · Industrial design for rough service applications
- Enclosure is Chemical and U.V. resistant
- Double insulated user interface for added safety
- · Available in Automatic or Manual reset models
- Open neutral protection (only on applicable models)
- 30 Amp trip level for GFPE level protection (achieves NEC 555 Compliance)
- Dual indication lights displaying power and fault status

- Varying cable or wire lengths (specific to perm/port models in pages below)
- Solid wires (input) striped wires (output)
- Permanent: 2 mounting options
 Portable: cable length variations available
- 1Ø and split cCSAus certified to CSA-C22.2 No. 144

PERMANENT SERIES PRODUCT OVERVIEW

The *LineGard* ® 30 Amp Marine Permanent Series single and split phase ELCI is ideal for existing marine shore power circuit installations without existing Ground Fault Protection Equipment (GFPE) level protection. This ELCI has a unique design that offers the flexibility of splicing-in the protection of an ELCI anywhere within the length of a circuit run, including directly mounting to the pedestal. This convenience allows the installer to place this ELCI at a accessible location for the end user.

Unlike breaker style ELCIs which have limitations of circuit length from the service panel: the Permanent Series ELCI is installed at the point of use and thus has no restrictions to circuit length by definition.

The *LineGard* [®] 30 Amp Marine Permanent Series ELCI can be mounted on a shore power pedestal to bring an existing circuit up to the NEC 555.35 standards.

All units have 18" splicing lead wires, a ¾" NPT fitting that can connect to ¾" PVC, EMT, Burial and Flexible conduits. In addition, the unit can be installed as a panel mount.

All units are available in an Automatic reset type. Note: ground wire is connected externally to ELCI device and does not enter the ELCI housing. All units are CSA C22.2 No.144 listed.







North Shore Safety offers custom assemblies in addition to our standard models. All custom assemblies can be integrated with various wiring devices, cord lengths, or wire terminations for convenience of use and installation.

All *LineGard* ® 30 Amp Permanent Series ELCIs are proudly assembled in the U.S.A in ISO certified facilities and are cCSAus certified.

PRODUCT SPECIFICATION

Type: ELCI

Voltage: 120VAC, 120/240VAC.

Operating Voltage Range: 85% TO 110% of rated voltage

Current: Up to 30 Amps or receptacle device rating

Frequency: 60 Hz, (50 Hz available)

Trip Level: 30 mA

Phase: Single & Split

Response Time: 25 mS max @ 500 Ohm Fault

Operating Temperature: -35°C to 66°C

Reset Type: Automatic

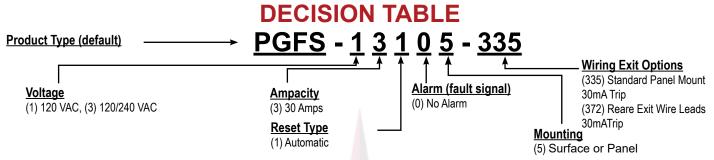
Open Neutral Protection: Opens upon loss of neutral (only on applicable models)

Enclosure: NEMA 4X wet location rated

Switch Interface: Double insulated Latching Mechanism: Electro-magnetic

Agency Approval: cCSAus

^{*}Auto reset Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)



Note:

1. Units are configured with 18 in of 10AWG, MTW / THHW / AWM, 105C, 600V, individual conductors.

LINE GARD 30 MARINE AMP PERMANENT SERIES ELCI PRODUCT CONFIGURATION TABLE

		VOLTAGE	AMP	POWER-UP	FAULT OUTPUT OPTIONS	TYPE
MODEL	120V (1)	**120/ 240V (3)	30A (3)	AUTO (1)	NONE (0)	SURFACE OR PANEL MOUNT (5)
PGFS-13005-335	1		3	1	0	5
PGFS-13105-372	1		3	1	0	5
PGFS-33105-335		3	3	1	0	5



30 AMP PERMANENT SERIES SINGLE AND MULTIPHASE ELCI





PORTABLE SERIES PRODUCT OVERVIEW

The *LineGard*™ 30 Amp Marine Portable Series with a marine grade molded twist lock to meet the demands of the elements in the marine industry. This ELCI series comes standard with a 30 mA trip level to meet NEC standard 555.35, which provides guidelines for safety regarding the electricity transfer between shore power & boats with Ground Fault Protection Equipment (GFPE)/ELCIs. An ideal solution for boat owners that visit numerous marines.

The *LineGard*™ 30 Amp Marine Portable Series is industrially designed with impact resistant materials that withstand Chemical and Ultraviolet light degradation and is suitable for both indoor and outdoor aplications. The Portable Series is geared for wet location use as this 1Ø device achieves both NEMA Type 4X and IP69k ratings.

The *LineGard*™ 30 Amp Marine Portable Series also includes double insulated and recessed interface switches for additional safety while preventing accidental switching during rough handling.

In addition, the electrical contacts of the *LineGard*™ 30 Amp Marine Portable Series are electro-magnetically latched so unit will not delatch under rough use or service. For user convenience, the 30 Amp Portable Series incorporates two LEDs for power and fault status. The product is available in Automatic reset type.

All units are CSA 22.2 No.144 listed.

North Shore Safety offers custom assemblies in addition to our standard models. All custom assemblies can be integrated with various wiring devices, cord lengths, or wire terminations for convenience of use and installation.





All *LineGard*™ 30 Amp Marine Portable Series ELCIs are proudly assembled in the U.S.A in ISO certified facilities and are cCSAus certified.

PRODUCT SPECIFICATION

Type: ELCI Voltage: 120VAC

Operating Voltage Range: 85% TO 110% of rated voltage

Current: Up to 30 Amps or wiring device and/or cable rating

Frequency: 60 Hz, (50 Hz available)

Trip Level: 30 mA

Phase: Single & Split

Response Time: 25 mS max @ 500 Ohm fault

Operating Temperature: -35°C to 66°C
Reset Type: Automatic

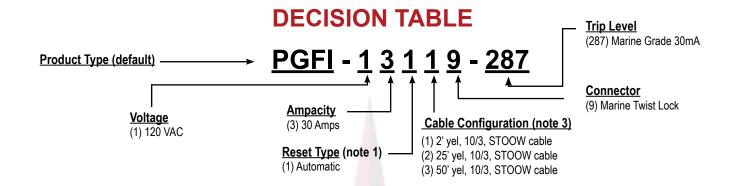
Open Neutral Protection: Opens upon loss of neutral (applicable models only)

Enclosure: NEMA 4X and IP69K rated

Switch Interface: Double insulated Latching Mechanism: Electro-magnetic

Agency Approval: cCSAus

^{*}Auto reset Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)



30 AMP MARINE PORTABLE SERIES ELCI PRODUCT CONFIGURATION TABLE

PGFI -	х	2	X	x						
Money	VOLTAGE	AMP	POWER-UP	SECC	NDARY	CONNECTORS				
MODEL	120 (1)	30A (3)	AUTO (1)	2' YEL (1)	25' YEL (2)	50' YEL (3)	Marine Inline (9)			
PGFI-1301N	1	3	1	1			9			
PGFI-2301N	1	3	1		2		9			
PGFI-9301N	1	3	1			3	9			



30 AMP PORTABLE SERIES SINGLE PHASE ELCI



Marine Grade Molded Twist Lock for ELCI/GFPE







- Voltage range 120 VAC 600 VAC single, dual, and 3Ø WYE and Delta (see product configuration table)
- · TYPE 4X wet location rated
- Enclosure is polycarbonate which withstands chemical and U.V. light exposure
- Double insulated user interface for added safety
- · Industrial design indoor/outdoor application use
- · Key power switch on/off

- · Automatic or Manual reset (safe start) key selectable
- Fault level key switch max trip level threshold settings of 6mA, 10mA, and 30mA
- · Dual indication lights displaying power and fault status
- 1" Conduit hubs for integration to 1" flexible, EMT, PVC or burial conduit
- · Flying leads for electrical circuit splicing
- Meets UL 1053

PRODUCT OVERVIEW

The *LineGard* ® 40, 50, & 60 Amp Permanent Series Equipment Leakage Circuit Interrupter (ELCI) is ideal for both new and existing circuit installations and features a key selectable trip level of 6mA, 10mA, or 30mA. This feature allows you to adjust the trip level when there is inherent current leakage from the equipment that it is protecting, allowing you to provide the highest level of protection possible.

The *LineGard* [®] 40, 50, & 60 Amp ELCIs offer protection for nuisance applications such as welders, pumps, motors and generators that would normally trip a Class A, 6mA GFCI.

All units have 60" splicing lead wires and 1" NPT conduit fittings for integration to flexible, EMT, PVC, or burial conduit.

All *LineGard* [®] 40, 50, & 60 Amp ELCIs are proudly made in the U.S.A. in ISO certified facilities and are manufactured to meet UL 1053 standards.





PRODUCT SPECIFICATION

Type: Equipment Leakage Circuit Interrupter (ELCI)

Voltage: 120 VAC to 600 VAC (see product configuration table)

Operating Voltage Range: 85% to 110% of rating
Current: Up to 40, 50, and 60 Amps
Frequency: 60Hz (50Hz available)

Trip Level: Key selectable levels of 6mA, 10mA, or 30mA

Phase: Single, Split, and 3 Phase Delta and Wye (see product configuration table)

Reset Type: Key selectable:

Auto: Output is on immediately upon power up*

Manual: Output is off immediately upon power up*

Operating Temperature: -35° C to 50° C (-31° F to 122° F)

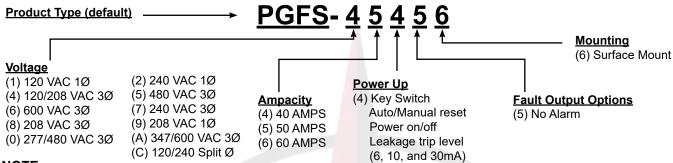
Enclosure: NEMA 4x wet location rated

Latching Mechanism: AC Contactor
Agency Approval: UL 1053 Compliant

^{*&}lt;u>Auto reset</u> Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)

^{*}Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

DECISION TABLE



NOTE:

40, 50, AND 60 AMP PERMANENT SERIES PRODUCT CONFIGURATION TABLE

													_				
PGFS -						X							X		Х	Х	Х
MODEL					VO	LTAGE							AMP		POWER-UP	FAULT	TYPE
	120 Ø (1)	240 1Ø (2)	208 1Ø (9)	120/ 240 (C)	240 3Ø (7)	208 3Ø (8)	480 3Ø (5)	600 3Ø (6)	120/ 208 (4)	277/ 480 (0)	347/ 600 (A)	40A (4)	50A (5)	60A (6)	KEY SWITCH AUTO/MAN (4)	No Alarm (5)	SURFACE MOUNT (6)
PGFS-14456	1											4			4	5	6
PGFS-24456		2										4			4	5	6
PGFS-94456			9									4			4	5	6
PGFS-C4456				С								4			4	5	6
PGFS-74456					7							4			4	5	6
PGFS-84456						8						4			4	5	6
PGFS-54456							5					4			4	5	6
PGFS-64456								6				4			4	5	6
PGFS-44456					- 7				4			4			4	5	6
PGFS-04456										0		4			4	5	6
PGFS-A4456											Α	4			4	5	6
PGFS-15456	1												5		4	5	6
PGFS-25456		2											5		4	5	6
PGFS-95456			9										5		4	5	6
PGFS-C5456				С									5	1	4	5	6
PGFS-75456					7								5		4	5	6
PGFS-85456						8							5		4	5	6
PGFS-55456							5						5		4	5	6
PGFS-65456								6					5		4	5	6
PGFS-45456									4				5		4	5	6
PGFS-05456										0			5		4	5	6
PGFS-A5456											Α		5		4	5	6
PGFS-16456	1													6	4	5	6
PGFS-26456		2												6	4	5	6
PGFS-96456			9											6	4	5	6
PGFS-C6456				С										6	4	5	6
PGFS-76456					7									6	4	5	6
PGFS-86456						8								6	4	5	6
PGFS-56456							5							6	4	5	6
PGFS-66456								6						6	4	5	6
PGFS-46456									4					6	4	5	6
PGFS-06456										0				6	4	5	6
PGFS-A6456											Α			6	4	5	6

^{*}Decision table part number shown is a 120/208 VAC 3Ø, 50 Amp, Key switch Auto/Manual, Power on/off, Selectable trip level 6,10, 30mA, surface mount



40, 50, AND 60 AMP PERMANENT SERIES ELCI









- Voltage range 120 VAC 600 VAC single, dual, and 3Ø WYE and Delta phasing (see product configuration table)
- · NEMA 4X wet location rated
- Enclosure withstands Chemical and U.V. light exposure
- · Double insulated user interface for added safety
- · Industrial design indoor/outdoor application use

- · Key power switch on/off
- · Automatic or Manual reset (safe start) key selectable
- Fault level key switch max trip level threshold settings of 6mA, 10mA, and 30mA
- · Dual indication lights displaying power and fault status
- Meets UL 1053

PRODUCT OVERVIEW

The *LineGard* • 40, 50, & 60 Amp Portable Series Equipment Leakage Circuit Interrupter (ELCI) is ideal for both new and existing circuit installations and features a key selectable trip level of 6mA, 10mA, or 30mA. This feature allows you to adjust the trip level when there is inherent current leakage from the equipment that it is protecting, allowing you to provide the highest level of protection possible.

The *LineGard* ® 40, 50, & 60 Amp ELCIs offer protection for nuisance applications such as welders, pumps, motors and generators that would normally trip a Class A, 6mA GFCI.

All units have a 6' primary and a 6' secondary SOOW cable with flying leads.

All *LineGard* ® 40, 50, & 60 Amp ELCIs are proudly made in the U.S.A. in ISO certified facilities and are manufactured to meet UL 1053 standards.



PRODUCT SPECIFICATION

Type: Equipment Leakage Circuit Interrupter (ELCI)

Voltage: 120 VAC to 500 VAC (see propduct configuration table)

Operating Voltage Range: 85% to 110% of rating
Current: Up to 40, 50, and 60Amps
Frequency: 60 Hz (50Hz available)

Trip Level: Key selectable levels of 6mA, 10mA, or 30mA

Phase: Single, Split, and 3 Phase Delta and Wye (see product configuration table)

Reset Type: Key selectable:

Auto: Output is on immediately upon power up Manual: Output is off immediately upon power up

Operating Temperature: -35° C to 50° C (-31° F to 122° F)

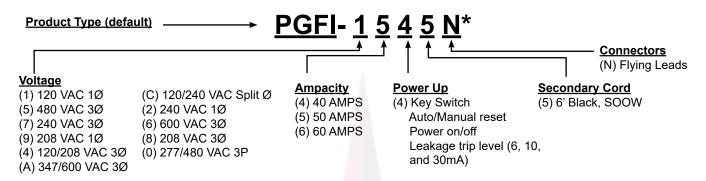
Enclosure: NEMA 4x wet location rated

Latching Mechanism: AC Contactor
Agency Approval: UL 1053 Compliant

*<u>Auto reset</u> Allows power downstream as long as power is available. It also will allow power downstream upon restoration of lost power. If the unit trips due to a fault condition the reset button will need to be pressed. Ideal for most applications (refrigeration, lighting, pumps, machinery, etc)

*Manual reset Allows power downstream only after the reset button is pressed. Any loss or interruption in power or a fault condition will put the unit in to fault mode and will require the reset button to be pressed before allowing power downstream. Used for safe start applications (power saws or equipment that would present an unsafe condition upon automatic power restoration)

DECISION TABLE



Note:

40, 50, AND 60 AMP PRODUCT CONFIGURATION TABLE

PGFI -					Х							Х		Х	Х	Х
MODEL					VOLTA	AGE						AMP		POWER-UP	SEC	CONNECTOR
	120V 1Ø (1)	240V 1Ø (2)	208V 1Ø (9)	120/208V 1Ø (4)	120/ 240V (C)	240V 3Ø (7)	208V 3Ø (8)	277/480V 1Ø (0)	480V 3Ø (5)	600V 3Ø (6)	40A (4)	50A (5)	60A (6)	KEY SWITCH AUTO/MAN (4)	6' BLK (SEOOW) (5)	FLYING LEADS (N)
PGFI-1445N	1										4			4	5	N
PGFI-2445N		2									4			4	5	N
PGFI-9445N			9								4			4	5	N
PGFI-4445N				4							4			4	5	N
PGFI-C445N					С						4			4	5	N
PGFI-7445N						7					4			4	5	N
PGFI-8445N							8				4			4	5	N
PGFI-0445N								0			4			4	5	N
PGFI-5445N									5		4			4	5	N
PGFI-6445N										6	4			4	5	N
PGFI-1545N	1			/								5		4	5	N
PGFI-2545N		2										5		4	5	N
PGFI-9545N			9									5		4	5	N
PGFI-4545N				4								5		4	5	N
PGFI-C545N					С							5		4	5	N
PGFI-7545N						7						5		4	5	N
PGFI-8545N							8					5		4	5	N
PGFI-0545N								0				5		4	5	N
PGFI-5545N									5			5		4	5	N
PGFI-6545N										6		5		4	5	N
PGFI-1645N	1												6	4	5	N
PGFI-2645N		2											6	4	5	N
PGFI-9645N			9										6	4	5	N
PGFI-C645N					С								6	4	5	N
PGFI-7645N						7							6	4	5	N
PGFI-8645N							8						6	4	5	N
PGFI-5645N									5				6	4	5	N
PGFI-6645N										6			6	4	5	N

^{*}Decision table part number shown is a 120 VAC 1Ø, 50 Amp, Key switch Auto/Manual, Power on/off, Selectable trip level 6, 10, 30 mA, 6' Black SOOW with Flying Leads * Three phase WYE with neutral break, are only available up to 50A



40, 50, AND 60 AMP PORTABLE SERIES ELCI







50 AMP MARINE PERMANENT & PORTABLE SERIES ELCI



- Rated for up to 50A 120/240V
- · Industrial design for rough service applications
- · Enclosure is Chemical and U.V. resistant
- · Double insulated user interface for added safety
- · Automatic reset after power interuption
- Open neutral protection (only on applicable models)
- 30 mA trip level for GFPE level protection (achieves NEC 555 Compliance)
- Dual indication lights displaying power and fault status
- Varying wire (permanent) and cable lengths (portable) available (upon factory request)
- Split Ø cCSAus certified to CSA-C22.2 No.144

PRODUCT OVERVIEW

The *LineGard* [®] 50 Amp Marine Permanent & Portable Series split phase ELCI is ideal for existing marine shore power circuit installation without existing Ground Fault Protection Equipment (GFPE) level protection, both to be retrofit mounted with the permanent option or for on the boat use with the portable option. This ELCI series comes standard with a 30 mA trip level to meet NEC standard 555.35, which provides guidelines for safety regarding the electricity transfer between shore power & boats with Ground Fault Protection Equipment (GFPE)/ELCIs.

The Permanent Series ELCI is installed at the point of use and thus has no restrictions to circuit length by definition, offering more flexibility than an ELCI style breaker. The Portable Series ELCI comes standard with a marine grade molded twist lock plug and connector, which offers you compliant, leakage free boat charging at any pedestal. Either option will make any shore power system NEC 555.35 compliant.

The Permanent Series have 60" splicing lead wires and 1" NPT conduit fittings for integration to flexible, EMT, PVC, or burial conduit. The Portable Series have a 6' primary and a 6' secondary marine grade twist lock plug & connector. Either option is open to end users desired configuration (consult factory).

All units are CSA 22.2 No.144 listed.

North Shore Safety offers custom assemblies in addition to our standard models. All *LineGard* ® 50 Amp Marine Portable & Permanent Series ELCIs are proudly assembled in the U.S.A in ISO certified facilities and are cCSAus certified.





PRODUCT SPECIFICATION

Voltage: 120/240VAC.

Operating Voltage Range: Up to 50% of rated voltage

Current: Up to 50 Amps or receptacle device rating

Frequency: 60 Hz

Phase: Single & Split

Response Time: 25 mS max @ 500 Ohm Fault

Operating Temperature: -35°C to 66°C
Reset Type: Automatic

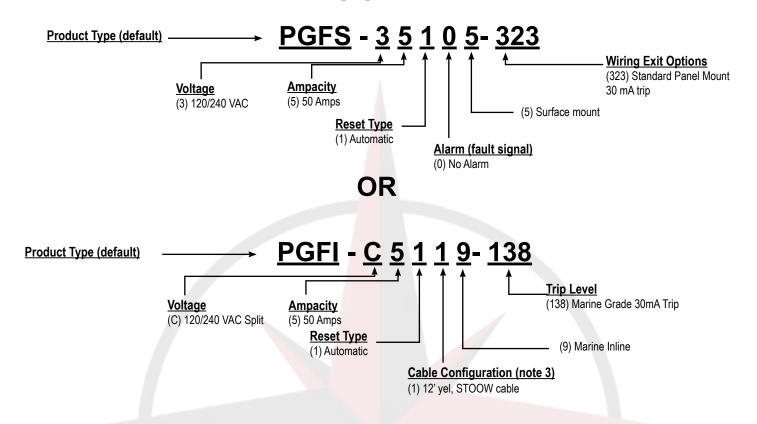
Open Neutral Protection: Opens upon loss of neutral

Enclosure: NEMA 4X wet location rated (Portable Only)

Switch Interface: Double insulated
Latching Mechanism: Electro-magnetic

Agency Approval: cCSAus

DECISION TABLE





50 AMP MARINE PERMANENT SERIES ELCI



Dimensions



Depth 5.50"



50 AMP MARINE PORTABLE SERIES ELCI



Marine Grade Molded Twist Lock for ELCI/GFPE







30 AMP & 50 AMP MARINE LEAKAGE CURRENT MEASUREMENT DEVICES



- Rated for 30A or 50A service
- Groundless Loop for safe & reliable mA electrical leakage reading
- 1 to 1 testing to find source of electrical leakage from a boat
- UL Listed Marine Grade Molded Twist Lock Plug & Connector
- Available with or without Clamp Meter
- · Testing Flow chart included

PRODUCT OVERVIEW

The *LineGard* [®] 30 Amp & 50 Amp Marine Leakage Testing Systems are ideal for dock operators and registered marina electricians to accurately diagnose the source of hazardous electrical leakage from any boat. It even offers the ability to pinpoint which piece of equipment is causing the problem onboard the boat.

To operate the Marine Leakage Testing System, you need to plug the "From Shorepower" tester cord in the shore power receptacle and attach the "To Boat" tester cord to the boat. Then you need to follow the 7 steps of the testing procedure, which are as follows:

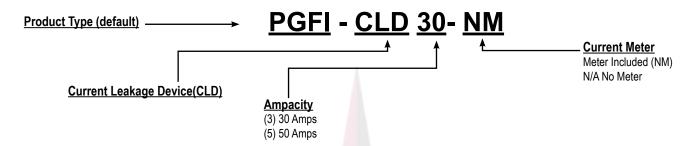
- 1. Clamp meter around "from shore power" cord.
- 2. Operate all devices on board.
- 3. If the meter reads below 30mA, skip steps 4 & 5.
- 4. If above 30mA, DANGER! There is leakage in the water (Turn off the shore power breakers).
- 5. If it is still above 30mA (with breakers turned off), neighboring equipment is leaking current. If below 30mA, equipment onboard the boat is leaking current and there is a faulty Ground connection (equipment repair required).
- 6. Clamp Meter around "Groundless Loop" Wire. If below 30mA, skip step 7 (vessel is safe!).
- 7. If above 30mA, DANGER! There is electrical leakage returning through the ground wire, turn off on-board breakers to isolate faulty equipment (repair required).

All LineGard

Marine Leakage Testing Systems are proudly assembled in the U.S.A in ISO certified facilities.

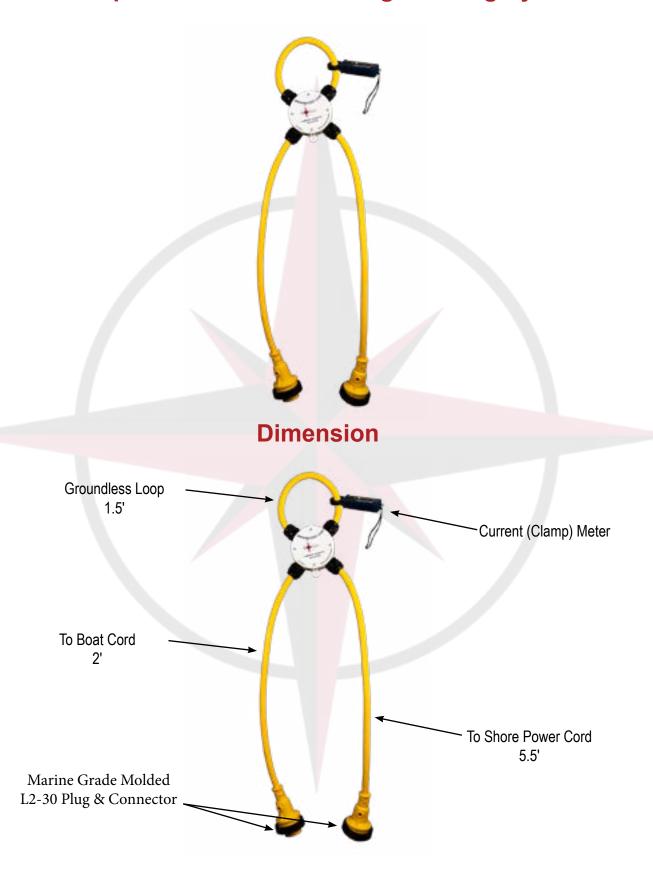


DECISION TABLE



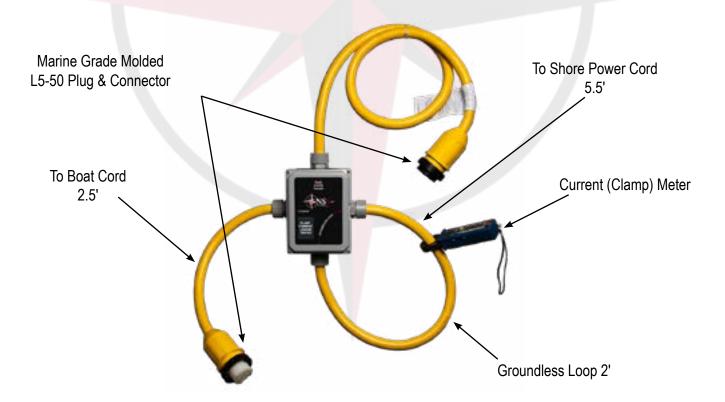
	Unit Type	A	mp	Meter Inclusion			
Model	CLD	30	50		NM		
PGFI-CLD30	CLD	30					
PGFI-CLD50	CLD		50				
PGFI-CLD30NM	CLD	30			NM		
PGFI-CLD50NM	CLD		50		NM		

30 Amp Marine Current Leakage Testing System



50 Amp Marine Current Leakage Testing System









EVSE 2 Level 2 Charging Station



- · NEMA 3R rain-proof protection rated
- Charging up to 32 Amps (equivalent to ≈ 25 miles per charging hour)
- Colored indication lights for differentiating functions including: Amber (Ready), Cyan (EV Connected), Green/Blue Flashing (Charging), Red Flashing (Fault)
- 25ft long cord connection (maximum allowed safe distance by UL)
- NEMA 6-50 plug for easy installation (to a NEMA 6-50 receptacle)
- SAE J1772 charging connector (US standard connector)
- cULus Listed to UL 2594 (EVSE), UL 2231 (personnel protection for EVSEs), UL 991, and UL 1988 (both 991 and 1988 for automatic reset functionality) standards

PRODUCT OVERVIEW

The *LineGard* ® EVSE2 Electrical Vehicle Supply Equipment (EVSE) charging station is ideal to meet at home electric vehicle (EV) charging needs. With a charging capacity of up to 32 amps, it can charge an EV up to 6 times faster than a standard Level 1 charging application (or up to 25 miles per charging hour). The EVSE2 also comes equipped with up to 25ft charging cable, which is the longest cable length allowed while meeting safety requirements.

The *LineGard* • EVSE2 comes equipped with a NEMA 6-50 plug for easy use with a matching receptacle. The EVSE2 also has North Shore Safety's integrated GFCI technology that meets the Class C designation of an 18 +/- 2mA trip level. This charging station is equipped with a NEMA 3R rain-proof rated enclosure that ensures safe charging in numerous environments.

All *LineGard* **EVSE2** charging stations are proudly assembled in the U. S. A. in ISO certified facilities and are manufactured to meet UL 2594, UL2231, UL991, and UL1998 standards.





PRODUCT SPECIFICATION

Type: EVSE (Electrical Vehicle Supply Equipment)

Voltage: 208 VAC 1Ø, 240 VAC 1Ø
Operating Voltage Range: 85% to 110% rated voltage

Current:Up to 32 AmpsFrequency:50/60HzTrip Level:18 +/- 2mAPhase:Single

Operating Temperature: -30 0 C to 50 0 C

Reset Type: Automatic

Enclosure: NEMA 3R (rain-proof)

Agency Approval: cULus to UL 2594, UL 2231, UL 991, UL 1998 standards