



PRODUCT SPECIFICATIONS

1LHSERIES

VARIABLE FREQUENCY DRIVE

Low Harmonic | Phase Converting

5 HP to 125 HP

PHASE

**INTUITIVELY
ENGINEERED**



1LH SERIES

VARIABLE FREQUENCY DRIVE

Phase Converting | Low Harmonic
Voltage Doubling | Single-Phase



1LH SERIES

Phase Converting, Voltage Doubling, Low Harmonic VFDs

- Quick & easy installation and setup

PERFECT PRESSURE™

- Setup constant pressure in minutes
- Large backlit graphic display with intuitive menus
- Messages in clear English

Industry Best Lead Times

- 3-10 Business Days

AUXPOWER™

- Control motor and center pivot in one panel

Sinewave Filter Integration

- Minimize excessive voltage spikes
- In-house manufacturing / installation

Superior Heat Rejection

- Maximizing component life and uptime

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Enclosure Overview

ENTERPRISE

See Page 5



5 HP to 30 HP

Phase Technologies' most value driven product to date.

- Compact Design
- Best Value
- Shortest Lead Times (3-5 business days)

SIGNATURE

See Page 13



20 HP to 100 HP

Signature enclosures offer rugged performance & superior quality.

- Slim & Light Design
- Lower Cost
- Shorter Lead Times (3-7 business days)

PERFORMANCE

See Page 21



20 HP to 125 HP

The Performance enclosures offer a large sub-panel with ample space for a multitude of integrated options.

- Rugged
- Spacious
- Simple Equipment Integration
- Lead Times (5-10 business days)

Feature Set



Power Behind The Pump

AQUAPHASE™ feature set provides complete control capability for all pumping applications

1LHE
SERIES



ENTERPRISE Enclosure

- 5 HP to 30 HP
- Input 240 V & 480 V | Output 240 V & 480 V
- Phase Converting
- Voltage Doubling
- Low Harmonic - IEEE519 Compliance Guaranteed 
- NEMA 3R Rated Outdoor Enclosure

Our Guarantee

IEEE 519 Compliance

Phase Technologies guarantees that the **1LH** SERIES product line will meet the IEEE 519-2014 standard as long as a minimum load of 80% is maintained as related to the max current rating of the system. If a system does not comply, Phase Technologies will either offer a suitable fix to the bring the panel into compliance or offer a full refund for the purchase price of the panel upon return.

Nomenclature

 1LHE SERIES ENTERPRISE Example Part Number 1LHE005R-BHOS 1LHE205R-BHOS 1LHE405R-BHOS OPTIONAL UL508A Panel Shop Integrator							
Model Series	Input / Output Voltage	Rated HP	Enclosure Rating	Branch Circuit Protection	Addl. User Controls	Output Filter	Surge Protection
					Optional User-Installed		Optional User-Installed
	0 240 V 240 V Phase Converting	05 - 5 HP 07 - 7.5 HP 10 - 10 HP 15 - 15 HP 20* - 20 HP					
1LHE SERIES	2 240 V 480 V Phase Converting Voltage Doubling	05 - 5 HP 07 - 7.5 HP 10 - 10 HP 15 - 15 HP 20 - 20 HP 25* - 25 HP	R 3R Rated Outdoor Type Rain / Bug Proof	B MCCB Service Disconnect	Choose Option H - HOA Switch & Speed Pot H1 - HOA Switch Only H2 - Speed Pot Only	O Sinewave Filter *Not available for: 1LHE020 or 1LHE225	Choose Option S - Strikesorb® Surge Protection S1 - Protec® Surge Protection
	4 480 V 480 V Phase Converting	05 - 5 HP 07 - 7.5 HP 10 - 10 HP 15 - 15 HP 20 - 20 HP 25 - 25 HP 30 - 30 HP					

Technical Specifications

Physical / Environmental	
Operating Temperature Range	-40 °C – 50 °C (-40 °F – 122 °F) <i>*Heater in enclosure may be required below -40 °C, de-rating required above 50 °C.</i>
Storage Temperature Range	-40 °C – 57 °C (-40 °F – 135 °F)
Enclosure	NEMA Type 3R: Outdoor Rainproof
Altitude	Derate by 5 °C every 2000 ft over 5500 ft of elevation
Input Power	
Input Phase	1 phase
Input Voltage	240 V 480 V
Input Voltage Range	190 V – 264 V 440 V – 520 V
Input Frequency	60 Hz
Output Power	
Output Phase	3 phase
Nominal Output Voltage	240 V 480 V
Output Voltage Range	190 V – 264 V 440 V – 520 V
Output Frequency	5 Hz – 300 Hz
Horsepower	5 HP – 30 HP
Output Power	4 – 22 kW
Switching Frequency	2 kHz – 5 kHz
Output	V/f Control or Torque Control (Optional)
Integrated Output Filter	Optional Sinewave Filter
Electrical	
Short Circuit Withstand Rating	25 kA RMS symmetrical amps (65 kA available upon request)
Efficiency	95%
Startup Ramp Time	1 – 120 s
Shutdown Ramp Time	1 – 120 s or Coast to Stop
Overload Capacity	120% for 60 s
Analog Inputs	
Quantity	(3) Programmable
Current Reference	4 – 20 mA, (2) Inputs
Voltage Reference	0 – 5 VDC, (1) Input
Terminal Block Size	26 – 12 AWG
Digital Inputs	
Quantity	(2) Programmable
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 – 12 AWG
Relay Outputs	
Quantity	(2) Programmable
Rating	Relay 1: 28 VDC, 10 A or 250 VAC, 10 A Relay 2: 30 VDC, 2 A or 125 VAC, 0.5 A
Terminal Block Size	26 – 12 AWG
Features	
Low Harmonic Compliance	IEEE-519 Guaranteed – (See page 4 for guarantee statement)
Certification	ETL listed to UL 61800-5-1 and CSA C22.2 No. 274-17
User Interface	Push button membrane keypad with backlit graphic display
Available Feature Sets	AquaPhase™ (pump control)

Models

Part Number	HP	Rated Input Current	Rated Output Current	Dimensions (H x W x D)	Weight
1LHE - ENTERPRISE - 240 V Input Single-Phase 240 V Output Three-Phase					
1LHE005R	5 HP	26 A	18 A	31 x 19 x 19 in.	100 lbs
1LHE007R	7.5 HP	37 A	24 A	36 x 21 x 18 in.	110 lbs
1LHE010R	10 HP	48 A	31 A	36 x 21 x 18 in.	130 lbs
1LHE015R	15 HP	72 A	46 A	36 x 21 x 18 in.	130 lbs
1LHE020R	20 HP	97 A	61 A	36 x 21 x 18 in.	130 lbs
1LHE - ENTERPRISE - 240 V Input Single-Phase 480 V Output Three-Phase					
1LHE205R	5 HP	26 A	9 A	31 x 19 x 19 in.	100 lbs
1LHE207R	7.5 HP	37 A	13 A	31 x 19 x 19 in.	100 lbs
1LHE210R	10 HP	50 A	18 A	31 x 19 x 19 in.	100 lbs
1LHE215R	15 HP	67 A	24 A	31 x 19 x 19 in.	120 lbs
1LHE220R	20 HP	97 A	31 A	36 x 21 x 18 in.	150 lbs
1LHE225R	25 HP	115 A	40 A	36 x 21 x 18 in.	130 lbs

Part Number	HP	Rated Input Current	Rated Output Current	Dimensions (H x W x D)	Weight
1LHE - ENTERPRISE - 480 V Input Single-Phase 480 V Output Three-Phase					
1LHE405R	5 HP	13 A	9 A	31 x 19 x 19 in.	100 lbs
1LHE407R	7.5 HP	19 A	13 A	31 x 19 x 19 in.	100 lbs
1LHE410R	10 HP	26 A	18 A	31 x 19 x 19 in.	100 lbs
1LHE415R	15 HP	36 A	24 A	36 x 21 x 18 in.	130 lbs
1LHE420R	20 HP	48 A	31 A	36 x 21 x 18 in.	130 lbs
1LHE425R	25 HP	60 A	40 A	36 x 21 x 18 in.	130 lbs
1LHE430R	30 HP	72 A	46 A	36 x 21 x 18 in.	130 lbs

Optional Integrations & Accessories

Part Number	Description	Standard User Installation	Optional UL508A Panel Shop Installation (Additional Fee Applies)
Kits			
KIT E H	HOA Switch & Speed Potentiometer	Yes	Yes
KIT E H1	HOA Switch Only	Yes	Yes
KIT E H2	Speed Potentiometer Only	Yes	Yes
KIT E S 240V 1P	Strikesorb Surge Protection, 240 V, Single-Phase	Yes	Yes
KIT E S 480V 1P	Strikesorb Surge Protection, 480 V, Single-Phase	Yes	Yes
KIT E S1 240V 1P	Protec Surge Protection	Yes	Yes
KIT E S1 480V 1P	Protec Surge Protection	Yes	Yes
Transducer			
S00150	0-150 psi Transducer with 15ft lead	Yes	No
S00150-25	0-150 psi Transducer with 25ft lead	Yes	No
S00150-50	0-150 psi Transducer with 50ft lead	Yes	No
S00150-100	0-150 psi Transducer with 100ft lead	Yes	No
Other Parts			
PSI SNUB	Pressure Snubber for Transducers	Yes	No
CVR0002	Keypad Locking Security Cover ENTERPRISE Enclosures	Yes	No
CVR0001	HOA Switch and Speed Pot Security Cover	Yes	No
LF0018	GPS Output Filter	Yes	No
Miscellaneous			
[Custom]	Run or Fault Indicator Light and 150VA Power Supply	No	Yes
[Custom]	Additional Run or Fault Indicator Light	No	Yes

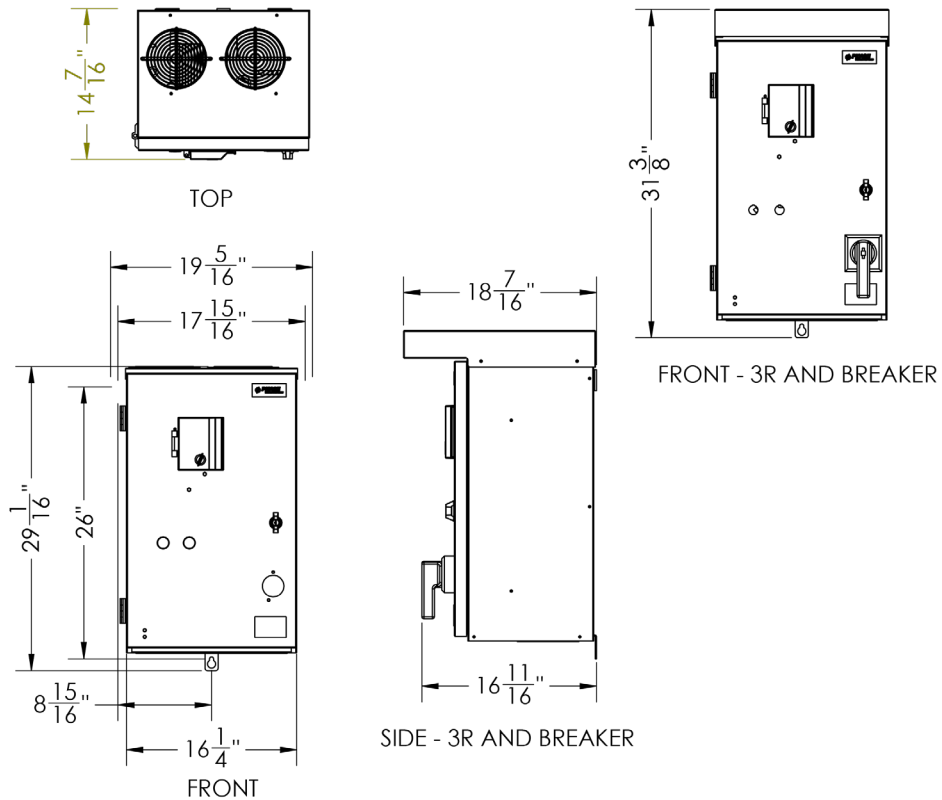
Recommended Fuse & Breaker Ratings

Model Number		Horsepower	VFD	
			Recommended Fuse Rating Class J	Recommended Circuit Breaker Rating
1LHE - ENTERPRISE - 240 V Input Single-Phase 240 V Output Three-Phase				
1LHE005R		5 HP	40 A, 600 V	40 A
1LHE007R		7.5 HP	60 A, 600 V	60 A
1LHE010R		10 HP	60 A, 600 V	60 A
1LHE015R		15 HP	100 A, 600 V	100 A
1LHE020R		20 HP	125 A, 600 V	125 A
1LHE - ENTERPRISE - 240 V Input Single-Phase 480 V Output Three-Phase				
1LHE205R		5 HP	40 A, 600 V	40 A
1LHE207R		7.5 HP	60 A, 600 V	60 A
1LHE210R		10 HP	70 A, 600 V	70 A
1LHE215R		15 HP	100 A, 600 V	100 A
1LHE220R		20 HP	125 A, 600 V	125 A
1LHE225R		25 HP	150 A, 600 V	150 A
1LHE - ENTERPRISE - 480 V Input Single-Phase 480 V Output Three-Phase				
1LHE405R		5 HP	20 A, 600 V	20 A
1LHE407R		7.5 HP	30 A, 600 V	30 A
1LHE410R		10 HP	40 A, 600 V	40 A
1LHE415R		15 HP	60 A, 600 V	60 A
1LHE420R		20 HP	60 A, 600 V	60 A
1LHE425R		25 HP	80 A, 600 V	80 A
1LHE430R		30 HP	100 A, 600 V	100 A

Line Drawings

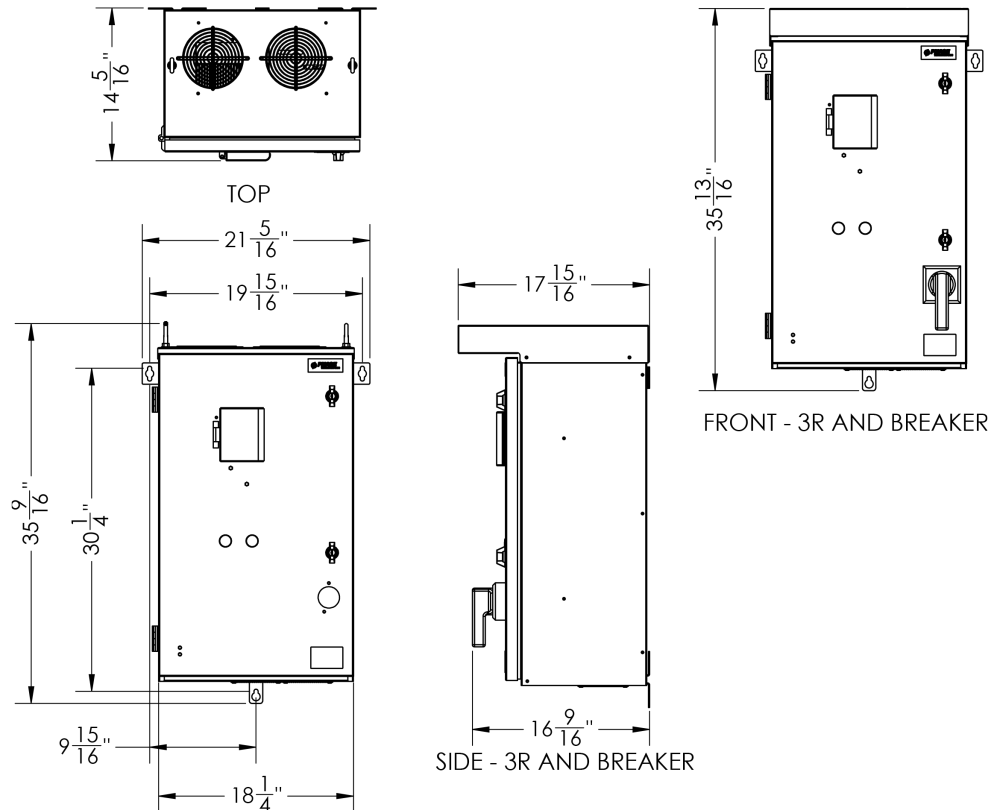
1LHE
SERIES

Model Number
1LHE005R
1LHE205R
1LHE207R
1LHE210R
1LHE215R
1LHE405R
1LHE407R
1LHE410R

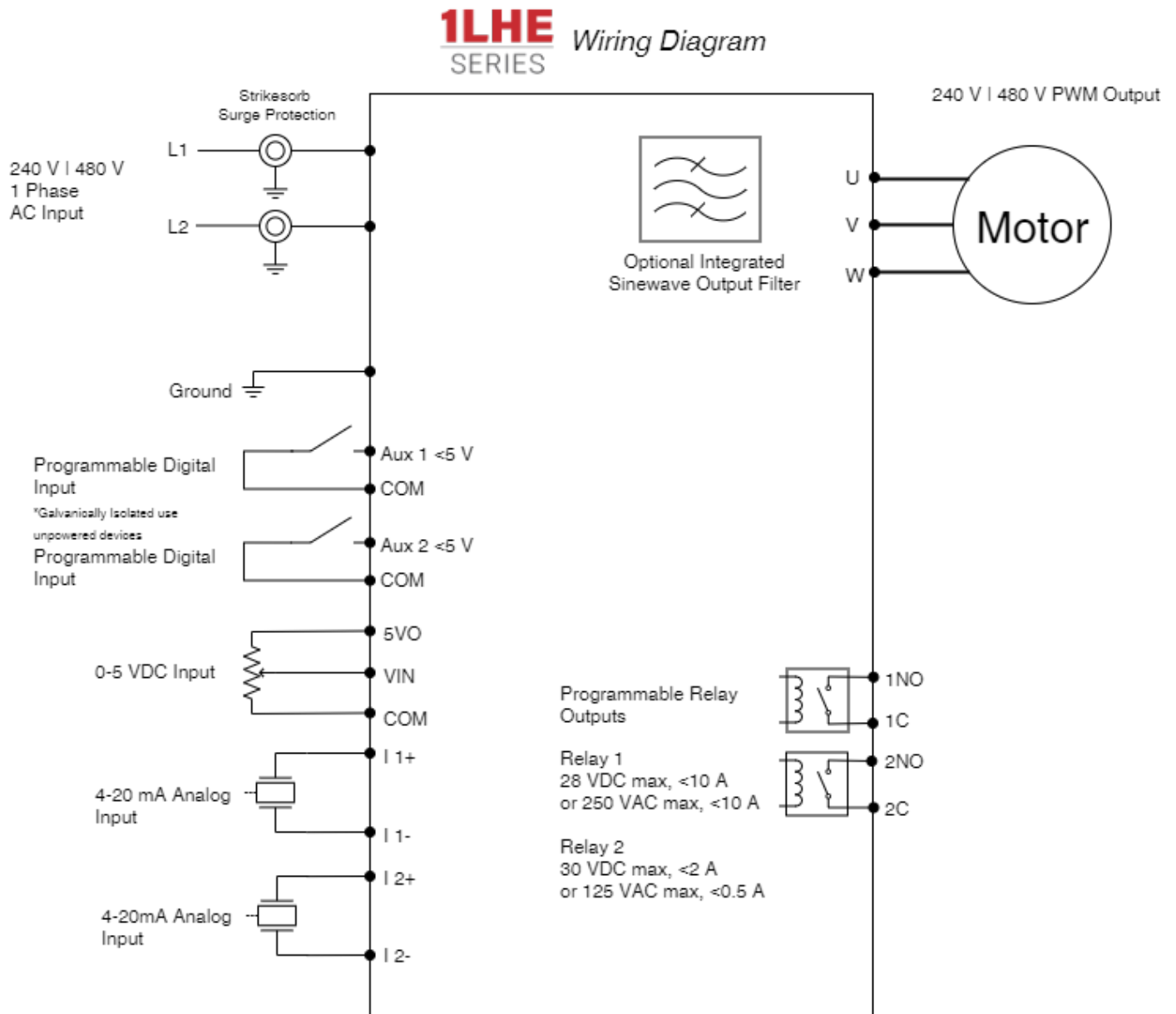


1LHE
SERIES

Model Number
1LHE007R
1LHE010R
1LHE015R
1LHE020R
1LHE220R
1LHE225R
1LHE415R
1LHE420R
1LHE425R
1LHE430R



Wiring Diagram



Notes

1LHS
SERIES



SIGNATURE

Enclosure

- 20 HP to 100 HP
- Input 240 V & 480 V | Output 480 V
- Phase Converting
- Voltage Doubling
- Low Harmonic - IEEE519 Compliance Guaranteed 
- NEMA 3R Rated Outdoor Enclosure

Our Guarantee

IEEE 519 Compliance

Phase Technologies guarantees that the **1LH** SERIES product line will meet the IEEE 519-2014 standard as long as a minimum load of 80% is maintained as related to the max current rating of the system. If a system does not comply, Phase Technologies will either offer a suitable fix to the bring the panel into compliance or offer a full refund for the purchase price of the panel upon return.

Nomenclature

SIGNATURE

1LHS Signature Series

Example Part Number

1LHS220R-BHOS | 1LHS420R-BHOS

OPTIONAL UL508A Panel Shop Integration



Model Series	Input / Output Voltage	Rated HP	Enclosure Rating	Branch Circuit Protection	Addl. User Controls	Output Filter	Surge Protection
1LHS SERIES	2 240 V 480 V — Phase Converting Voltage Doubling	20 - 20 HP 30 - 30 HP 40 - 40 HP	R 3R Rated Outdoor Type Rain / Bug Proof	B MCCB Service Disconnect	Choose Option	Choose Option	S Strikesorb® Surge Protection
	4 480 V 480 V — Phase Converting	20 - 20 HP 30 - 30 HP 40 - 40 HP 50 - 50 HP 60 - 60 HP 75 - 75 HP 100 - 100 HP			H - HOA Switch & Speed Pot H1 - HOA Switch Only H2 - Speed Pot Only	O - Sinewave Filter OF - dV/dt Filter	

Technical Specifications



Physical / Environmental	
Operating Temperature Range	-40 °C – 50 °C (-40 °F – 122 °F) <i>*Heater in enclosure may be required below -40 °C, de-rating required above 50 °C.</i>
Storage Temperature Range	-40 °C – 57 °C (-40 °F – 135 °F)
Enclosure	NEMA Type 3R: Outdoor Rainproof
Altitude	Derate by 5 °C every 2000 ft over 5500 ft of elevation
Input Power	
Input Phase	1 phase
Input Voltage	240 V 480 V
Input Voltage Range	190 V – 264 V 440 V – 520 V
Input Frequency	60 Hz
Output Power	
Output Phase	3 phase
Nominal Output Voltage	480 V
Output Voltage Range	440 V – 520 V
Output Frequency	5 Hz – 300 Hz
Horsepower	20 HP – 100 HP
Output Power	15 – 75 kW
Switching Frequency	2 kHz – 5 kHz
Output	V/f Control or Torque Control (Optional)
Integrated Output Filter	Optional Sinewave or dV/dt Filter (20 HP – 100 HP models)
Electrical	
Short Circuit Withstand Rating	25 kA RMS symmetrical amps (65 kA available upon request)
Efficiency	95%
Startup Ramp Time	1 – 120 s
Shutdown Ramp Time	1 – 120 s or Coast to Stop
Overload Capacity	120% for 60 s
Analog Inputs	
Quantity	(3) Programmable
Current Reference	4 – 20 mA, (2) Inputs
Voltage Reference	0 – 5 VDC, (1) Input
Terminal Block Size	26 – 12 AWG
Digital Inputs	
Quantity	(4) Programmable
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 – 12 AWG
Relay Outputs	
Quantity	(4) Programmable
Rating	Relays 1 and 2: 28 VDC, 10 A or 250 VAC, 10 A Relays 3 and 4: 30 VDC, 2 A or 125 VAC, 0.5 A
Terminal Block Size	26 – 12 AWG
Features	
Low Harmonic Compliance	IEEE-519 Guaranteed - (See page 11 for guarantee statement)
Certification	ETL listed to UL 61800-5-1 and CSA C22.2 No. 274-17
User Interface	Push button membrane keypad with backlit graphic display
Available Feature Sets	AquaPhase™ (pump control)

Models

Part Number	HP	Rated Input Current	Rated Output Current	Dimensions (H x W x D)	Weight
1LHS - SIGNATURE - 240 V Input Single-Phase 480 V Output Three-Phase					
1LHS220R	20 HP	97 A	31 A	54 x 23 x 18 in	205 lbs
1LHS230R	30 HP	139 A	46 A	54 x 23 x 18 in	220 lbs
1LHS240R	40 HP	196 A	61 A	71 x 34 x 24 in	465 lbs

Part Number	HP	Rated Input Current	Rated Output Current	Dimensions (H x W x D)	Weight
1LHS - SIGNATURE - 480 V Input Single-Phase 480 V Output Three-Phase					
1LHS420R	20 HP	48 A	31 A	54 x 23 x 18 in	205 lbs
1LHS430R	30 HP	72 A	46 A	54 x 23 x 18 in	215 lbs
1LHS440R	40 HP	98 A	61 A	54 x 23 x 18 in	235 lbs
1LHS450R	50 HP	121 A	77 A	54 x 23 x 18 in	250 lbs
1LHS460R	60 HP	143 A	91 A	71 x 34 x 24 in	410 lbs
1LHS475R	75 HP	170 A	107 A	71 x 34 x 24 in	415 lbs
1LHS4100R	100 HP	226 A	142 A	71 x 34 x 24 in	465 lbs

Optional Integrations & Accessories

Part Number	Description	Standard User Installation	Optional UL508A Panel Shop Installation
Kits			
ASPD014	Single-Phase Strikesorb Surge Protection Kit	n/a	n/a
SVK7000	Service Kit for All LH & DX Systems with RJ45 Connectors (2018, 2019, 2020 models only)	n/a	n/a
LEGS07 or LEGS08	Pad Mount Kit (Legs)	Yes	No
Transducer			
S00150	0-150 psi Transducer with 15ft lead	Yes	No
S00150-25	0-150 psi Transducer with 25ft lead	Yes	No
S00150-50	0-150 psi Transducer with 50ft lead	Yes	No
S00150-100	0-150 psi Transducer with 100ft lead	Yes	No
Other Parts			
PSI SNUB	Pressure Snubber for Transducers	Yes	No
CVR0001	HOA Switch and Speed Pot Security Cover	Yes	No
LF0018	GPS Output Filter	Yes	No
Miscellaneous			
[Custom]	Run or Fault Indicator Light and 150VA Power Supply	No	Yes
[Custom]	Additional Run or Fault Indicator Light	No	Yes

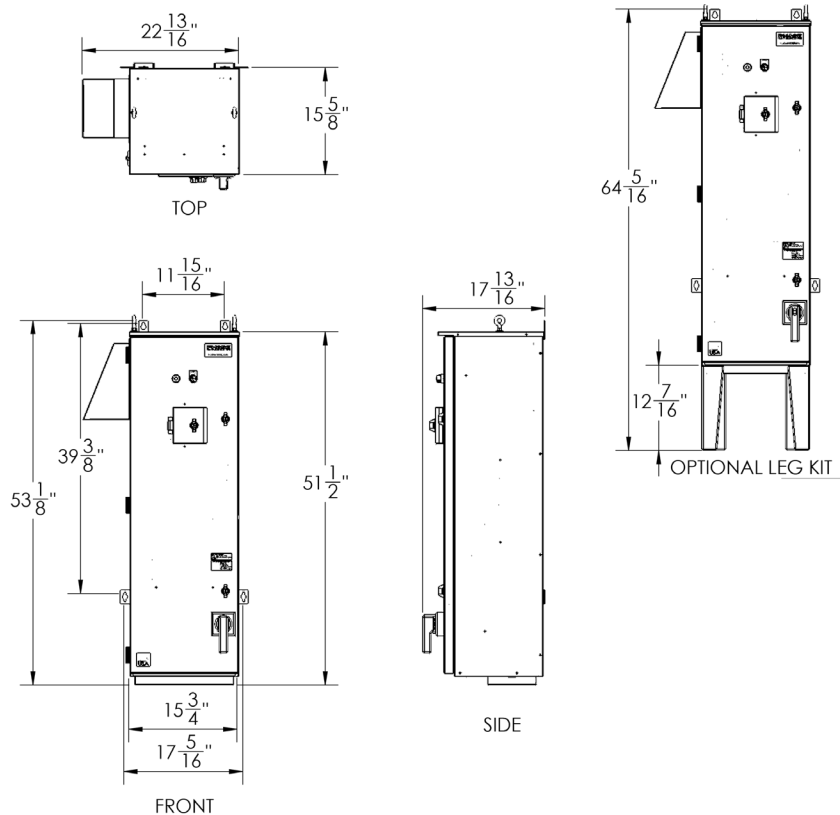
Recommended Fuse & Breaker Ratings

Model Number	Horsepower	VFD	
		Recommended Fuse Rating Class J	Recommended Circuit Breaker Rating
1LHS - SIGNATURE - 240 V Input Single-Phase 480 V Output Three-Phase			
1LHS220R	20 HP	125 A, 600 V	125 A
1LHS230R	30 HP	200 A, 600 V	200 A
1LHS240R	40 HP	250 A, 600 V	250 A
1LHS - SIGNATURE - 480 V Input Single-Phase 480 V Output Three-Phase			
1LHS420R	20 HP	60 A, 600 V	60 A
1LHS430R	30 HP	100 A, 600 V	100 A
1LHS440R	40 HP	125 A, 600 V	125 A
1LHS450R	50 HP	175 A, 600 V	175 A
1LHS460R	60 HP	200 A, 600 V	200 A
1LHS475R	75 HP	250 A, 600 V	250 A
1LHS4100R	100 HP	300 A, 600 V	300 A

Line Drawings

1LHS
SERIES

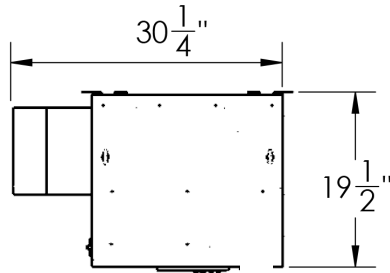
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1LHS220R
1LHS230R
1LHS420R
1LHS430R
1LHS440R
1LHS450R



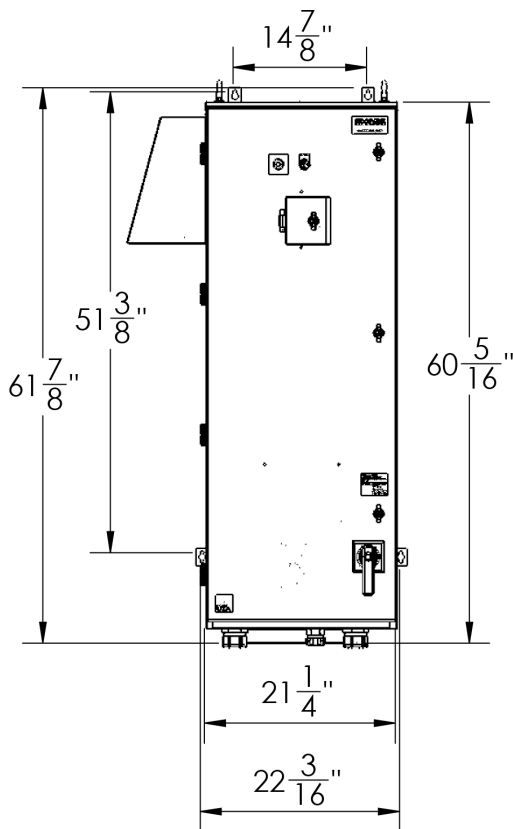
Line Drawings

1LHS
SERIES

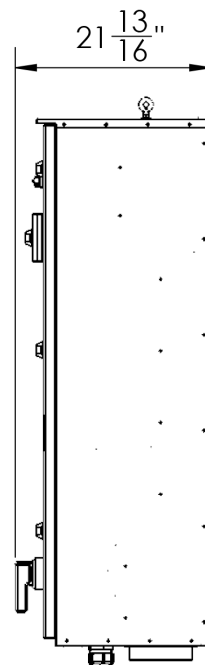
Model Number
1LHS240R
1LHS460R
1LHS475R
1LHS4100R



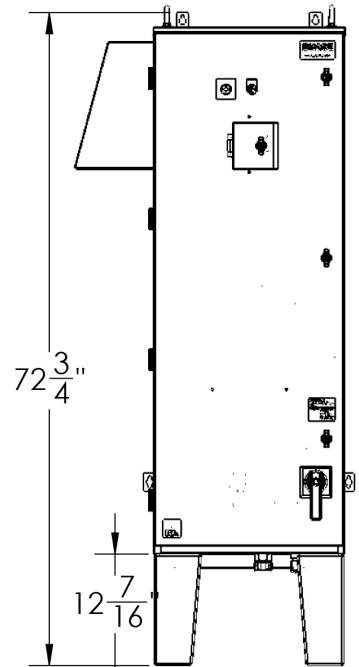
TOP



FRONT



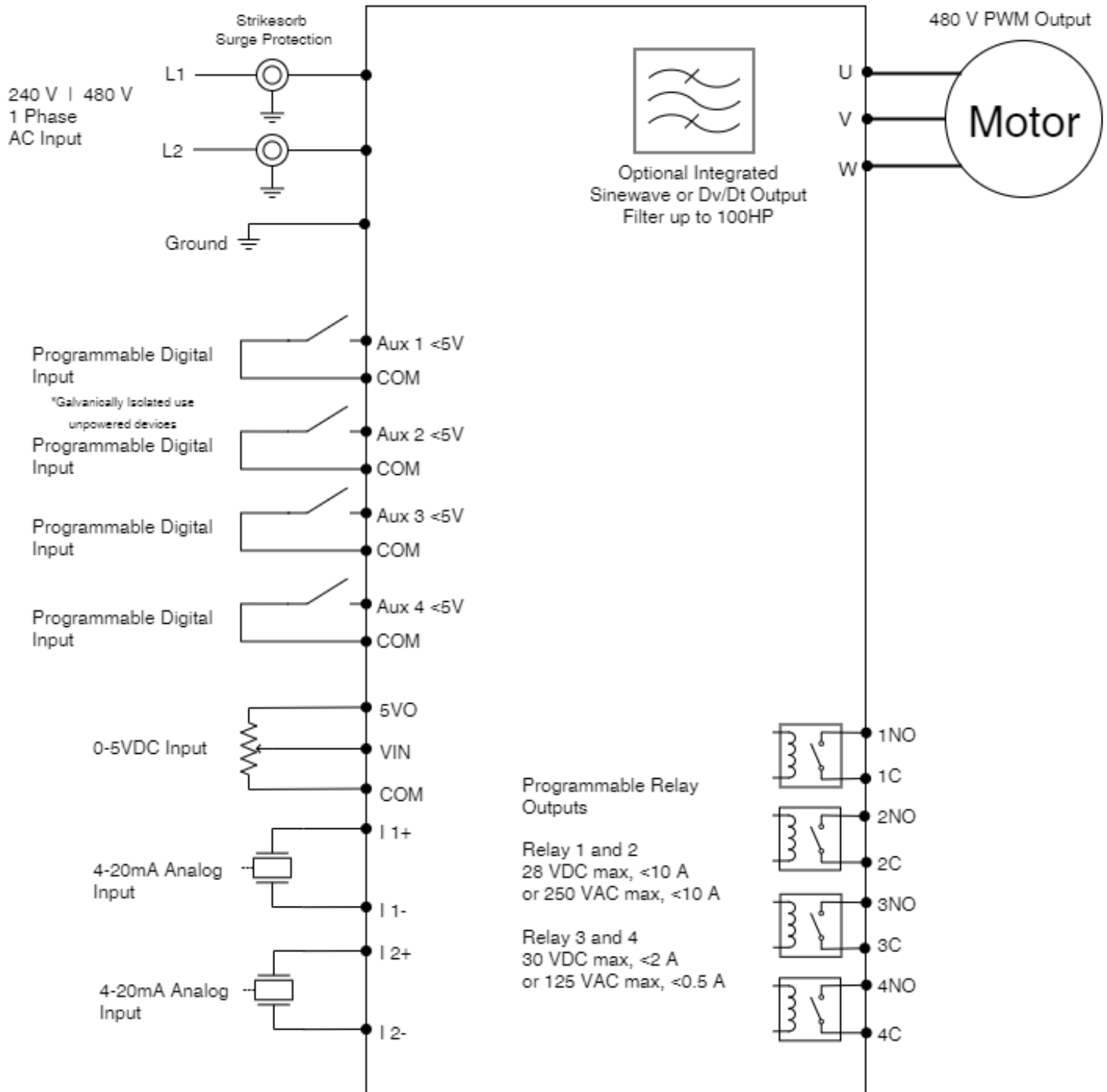
SIDE



OPTIONAL
LEG KIT

Wiring Diagram

1LHS
SERIES Wiring Diagram



SIGNATURE

Notes

1LH
SERIES



PERFORMANCE Enclosure

- 20 HP to 125 HP
- Input 240 V & 480 V | Output 480 V
- Phase Converting
- Voltage Doubling
- Optional **AUXPOWER™**
- Low Harmonic - IEEE519 Compliance Guaranteed 
- NEMA 3R Rated Outdoor Enclosure

Our Guarantee

IEEE 519 Compliance

Phase Technologies guarantees that the **1LH** SERIES product line will meet the IEEE 519-2014 standard as long as a minimum load of 80% is maintained as related to the max current rating of the system. If a system does not comply, Phase Technologies will either offer a suitable fix to the bring the panel into compliance or offer a full refund for the purchase price of the panel upon return.

Nomenclature

PERFORMANCE

1LH Performance Series

Example Part Number
1LH220RX-BH0FS | 1LH420RC-BH0S

OPTIONAL UL508A Panel Shop Integration



Model Series	Input / Output Voltage	Rated HP	Enclosure Rating	AUXPOWER™ Pivot Converter	Branch Circuit Protection	Addl. User Controls	Output Filter	Surge Protection
1LH SERIES	2 240 V 480 V Phase Converting Voltage Doubling	20 - 20 HP 30 - 30 HP 40 - 40 HP 50 - 50 HP	R 3R Rated Outdoor Type Rain / Bug Proof	Choose Option	B MCCB Service Disconnect	Choose Option	Choose Option	S Strikesorb® Surge Protection
	4 480 V 480 V Phase Converting	20 - 20 HP 30 - 30 HP 40 - 40 HP 50 - 50 HP 60 - 60 HP 75 - 75 HP 100 - 100 HP 125 - 125 HP		C - 18A Not available on: 1LH4125R X - 32A Not available on: 1LH240R, 1LH250R 1LH4100R & 1LH4125R		H - HOA Switch & Speed Pot H1 - HOA Switch Only H2 - Speed Pot Only	O - Sinewave Filter OF - dV/dt Filter	

Technical Specifications

PERFORMANCE

Physical / Environmental	
Operating Temperature Range	-40 °C – 50 °C (-40 °F – 122 °F) <i>*Heater in enclosure may be required below -40 °C, de-rating required above 50 °C.</i>
Storage Temperature Range	-40 °C – 57 °C (-40 °F – 135 °F)
Enclosure	NEMA Type 3R: Outdoor Rainproof
Altitude	Derate by 5 °C every 2000 ft over 5500 ft of elevation
Input Power	
Input Phase	1 phase
Input Voltage	240 V 480 V
Input Voltage Range	190 V – 264 V 440 V – 520 V
Input Frequency	60 Hz
Output Power	
Output Phase	3 phase
Nominal Output Voltage	480 V
Output Voltage Range	440 V – 520 V
Output Frequency	5 Hz – 300 Hz
Horsepower	20 HP – 125 HP
Output Power	15 – 336 kW
Switching Frequency	2 kHz – 5 kHz
Output	V/f Control or Torque Control (Optional)
Integrated Output Filter	Optional Sinewave or dV/dt Filter (20 HP – 125 HP models)
Electrical	
Short Circuit Withstand Rating	25 kA RMS symmetrical amps (65 kA available upon request)
Efficiency	95%
Startup Ramp Time	1 – 120 s
Shutdown Ramp Time	1 – 120 s or Coast to Stop
Overload Capacity	120% for 60 s
Analog Inputs	
Quantity	(3) Programmable
Current Reference	4 – 20 mA, (2) Inputs
Voltage Reference	0 – 5 VDC, (1) Input
Terminal Block Size	26 – 12 AWG
Digital Inputs	
Quantity	(4) Programmable
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 – 12 AWG
Relay Outputs	
Quantity	(4) Programmable
Rating	Relays 1 and 2: 28 VDC, 10 A or 250 VAC, 10 A Relays 3 and 4: 30 VDC, 2 A or 125 VAC, 0.5 A
Terminal Block Size	26 – 12 AWG
Features	
Low Harmonic Compliance	IEEE-519 Guaranteed – (See page 18 for guarantee statement)
Certification	ETL listed to UL 61800-5-1 and CSA C22.2 No. 274-17
User Interface	Push button membrane keypad with backlit graphic display
Available Feature Sets	AquaPhase™ (pump control)

Models

Part Number	HP	Rated Input Current	Rated Output Current	Rated Current Input - AUXPOWER™	Dimensions (H x W x D)	Weight without AUXPOWER™
1LH - PERFORMANCE - 240 V Input Single-Phase 480 V Output Three-Phase						
1LH220R	20 HP	97 A	31 A	C = 149 A X = 191 A	62 x 49 x 35 in. 66 x 62 x 23 in. [X]	490 lbs
1LH230R	30 HP	139 A	46 A	C = 191 A X = 252 A	62 x 49 x 35 in. 66 x 62 x 23 in. [C] & [X]	540 lbs
1LH240R	40 HP	196 A	61 A	C = 248 A X = n/a	62 x 49 x 35 in. 66 x 62 x 23 in. [X]	810 lbs
1LH250R	50 HP	226 A	77 A	AUXPOWER™ Not Available	62 x 49 x 35 in. 66 x 62 x 23 in. [X]	910 lbs

Part Number	HP	Rated Input Current	Rated Output Current	Rated Current Input - AUXPOWER™	Dimensions (H x W x D)	Weight without AUXPOWER™
1LH - PERFORMANCE - 480 V Input Single-Phase 480 V Output Three-Phase						
1LH420R	20 HP	48 A	31 A	C = 74 A X = 98 A	62 x 49 x 35 in.	570 lbs
1LH430R	30 HP	72 A	46 A	C = 98 A X = 124 A	62 x 49 x 35 in.	570 lbs
1LH440R	40 HP	98 A	61 A	C = 124 A X = 147 A	62 x 49 x 35 in.	580 lbs
1LH450R	50 HP	121 A	77 A	C = 147 A X = 169 A	62 x 49 x 35 in. 66 x 62 x 23 in. [X]	590 lbs
1LH460R	60 HP	143 A	91 A	C = 169 A X = 196 A	66 x 62 x 23 in.	610 lbs
1LH475R	75 HP	170 A	107 A	C = 196 A X = 252 A	66 x 62 x 23 in.	820 lbs
1LH4100R	100 HP	226 A	142 A	C = 252 A X = n/a	66 x 62 x 23 in.	910 lbs
1LH4125R	125 HP	273 A	172 A	AUXPOWER™ Not Available	66 x 62 x 23 in.	925 lbs

Optional Integrations & Accessories

Part Number	Description	Standard User Installation	Optional UL508A Panel Shop Installation (Additional Fee Applies)
Kits			
ASPD014	Single-Phase Strikesorb Surge Protection Kit	n/a	n/a
SVK7000	Service Kit for All LH & DX Systems with RJ45 Connectors (2018, 2019, 2020 models only)	n/a	n/a
LEGS02 or LEGS03	Pad Mount Kit (Legs)	Yes	No
Transducer			
S00150	0-150 psi Transducer with 15ft lead	Yes	No
S00150-25	0-150 psi Transducer with 25ft lead	Yes	No
S00150-50	0-150 psi Transducer with 50ft lead	Yes	No
S00150-100	0-150 psi Transducer with 100ft lead	Yes	No
Other Parts			
PSI SNUB	Pressure Snubber for Transducers	Yes	No
CVR0001	HOA Switch and Speed Pot Security Cover	Yes	No
LF0018	GPS Output Filter	Yes	No
Miscellaneous			
[Custom]	Run or Fault Indicator Light and 150VA Power Supply	No	Yes
[Custom]	Additional Run or Fault Indicator Light	No	Yes

Recommended Fuse & Breaker Ratings

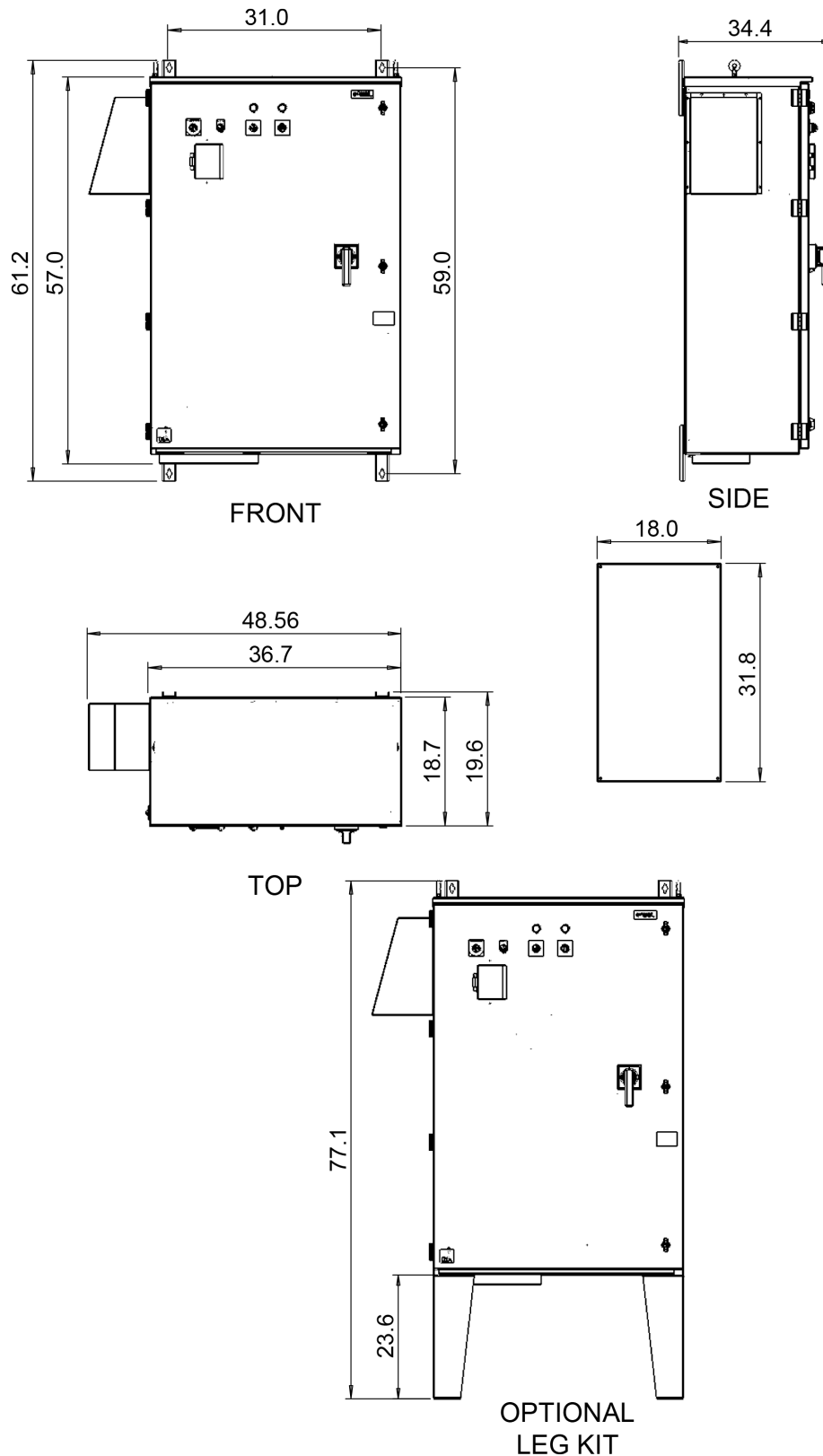
PERFORMANCE

VFD or AUXPOWER™	Model Number	Horsepower	VFD	
			Recommended Fuse Rating Class J	Recommended Circuit Breaker Rating
1LH - PERFORMANCE - 240 V Input Single-Phase 480 V Output Three-Phase				
VFD	1LH220R	20 HP	125 A, 600 V	125 A
AUXPOWER™	1LH220RC	20 HP	200 A, 600 V	200 A
AUXPOWER™	1LH220RX	20 HP	250 A, 600 V	250 A
VFD	1LH230R	30 HP	175 A, 600 V	175 A
AUXPOWER™	1LH230RC	30 HP	250 A, 600 V	250 A
AUXPOWER™	1LH230RX	30 HP	350 A, 600 V	350 A
VFD	1LH240R	40 HP	250 A, 600 V	250 A
AUXPOWER™	1LH240RC	40 HP	350 A, 600 V	350 A
VFD	1LH250R	50 HP	300 A, 600 V	300 A
1LH - PERFORMANCE - 480 V Input Single-Phase 480 V Output Three-Phase				
VFD	1LH420R	20 HP	60 A, 600 V	60 A
AUXPOWER™	1LH420RC	20 HP	100 A, 600 V	100 A
AUXPOWER™	1LH420RX	20 HP	125 A, 600 V	125 A
VFD	1LH430R	30 HP	100 A, 600 V	100 A
AUXPOWER™	1LH430RC	30 HP	125 A, 600 V	125 A
AUXPOWER™	1LH430RX	30 HP	175 A, 600 V	175 A
VFD	1LH440R	40 HP	125 A, 600 V	125 A
AUXPOWER™	1LH440RC	40 HP	175 A, 600 V	175 A
AUXPOWER™	1LH440RX	40 HP	200 A, 600 V	200 A
VFD	1LH450R	50 HP	175 A, 600 V	175 A
AUXPOWER™	1LH450RC	50 HP	200 A, 600 V	200 A
AUXPOWER™	1LH450RX	50 HP	250 A, 600 V	250 A
VFD	1LH460R	60 HP	200 A, 600 V	200 A
AUXPOWER™	1LH460RC	60 HP	250 A, 600 V	250 A
AUXPOWER™	1LH460RX	60 HP	250 A, 600 V	250 A
VFD	1LH475R	75 HP	250 A, 600 V	250 A
AUXPOWER™	1LH475RC	75 HP	250 A, 600 V	250 A
AUXPOWER™	1LH475RX	75 HP	350 A, 600 V	350 A
VFD	1LH4100R	100 HP	300 A, 600 V	300 A
AUXPOWER™	1LH4100RC	100 HP	350 A, 600 V	350 A
VFD	1LH4125R	125 HP	350 A, 600 V	350 A

Line Drawings

1LH
SERIES

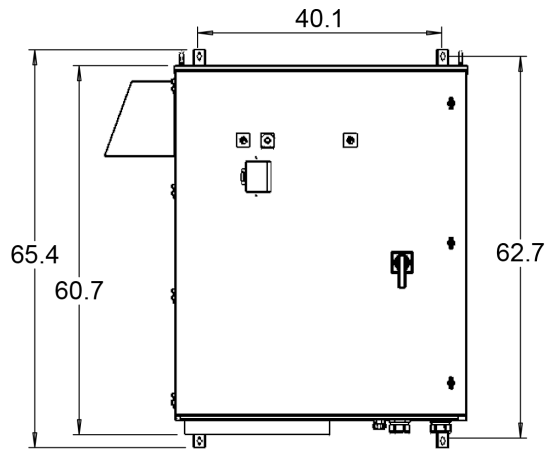
Model Number
1LH220R
1LH220RC
1LH230R
1LH420R
1LH420RC
1LH420RX
1LH430R
1LH430RC
1LH430RX
1LH440R
1LH440RC
1LH440RX
1LH450R
1LH450RC



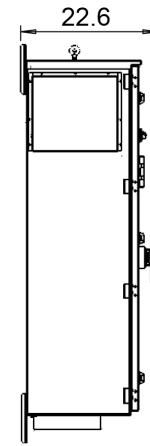
Line Drawings

1LH
SERIES

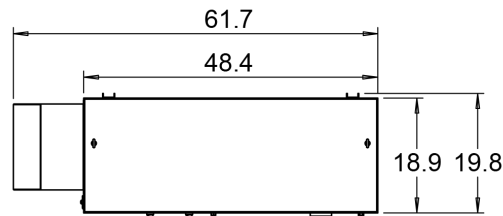
Model Number
1LH220RX
1LH230RC
1LH230RX
1LH240R
1LH240RC
1LH250R
1LH450RX
1LH460R
1LH460RC
1LH460RX
1LH475R
1LH475RC
1LH475RX
1LH4100R
1LH4100RC
1LH4125R



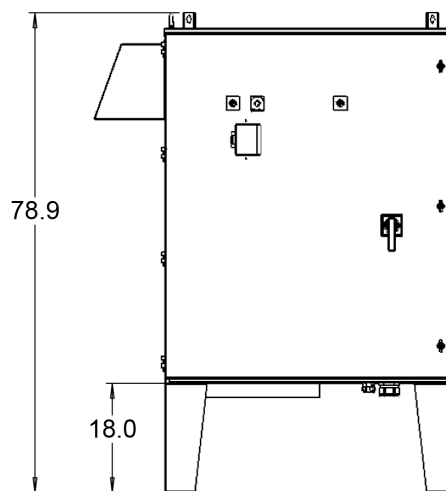
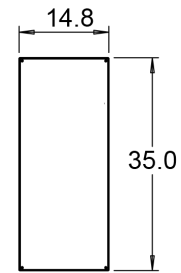
FRONT



SIDE



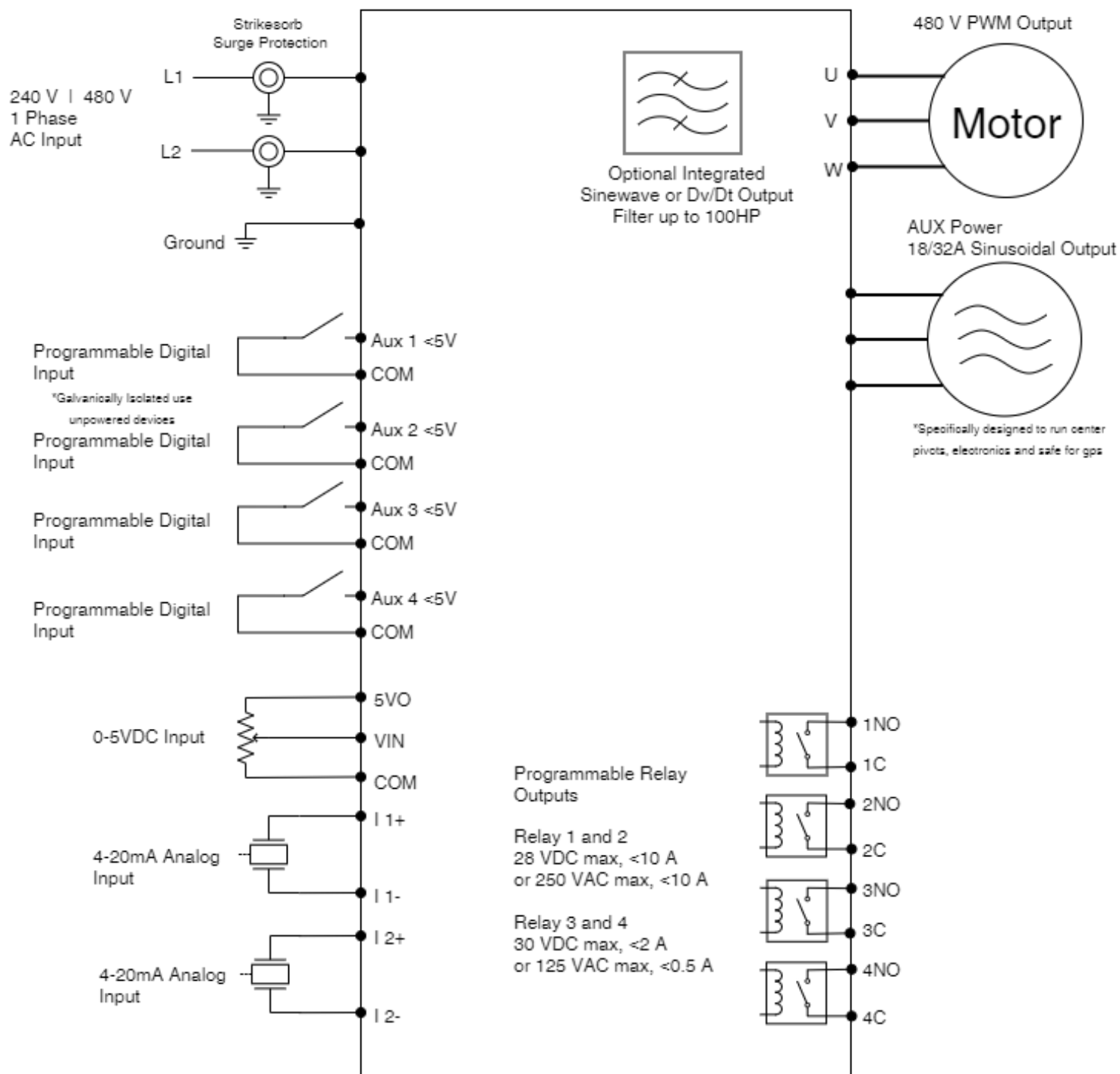
TOP



OPTIONAL
LEG KIT

Wiring Diagram

1LH
SERIES Wiring Diagram



Notes