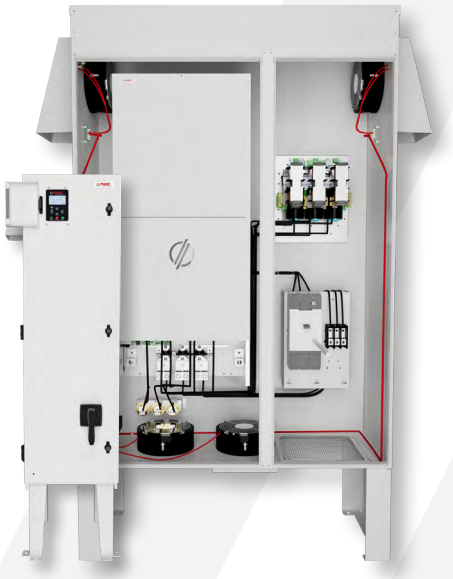


1LH Low Harmonic

Configured Panel

PHASE CONVERTING | 230V - VOLTAGE DOUBLING - 460V OPTIONS
NEMA 3R OUTDOOR ENCLOSURE | 5-150 HP

- **Power Conditioning**
- **Active Front End** (AFE)
- **AuxPower™ Pivot & Pump**
- **Voltage Doubling** (Options Available) (2X)
- **508A Panel Shop** (Options Available)

Full Feature VFD

- Advanced Motor Protection & PID Control
- V/f Control and Direct Torque Control
- Rated Temperature: - 40 °C – 40 °C (-40 °F – 104 °F)
- Nominal Voltage: 230V | 460V
- Overload Capacity: 110% for 60 seconds
- Listed UL 61800-5-1

Enclosure

- Rugged All-Steel-Enclosure
- Open, NEMA 1, NEMA 3R
- Leg Kits Available

Intuitive User Interface

- Large Backlit Graphic Display
- Eight Button Keypad
- Intuitive Menus in Plain English
- Download and Load Parameters Seamlessly
- Internal Micro SD Port

Flexible I/O

- Three Analog Inputs
- Four Digital Inputs
- Four Programmable Relays
- Modbus
- Ethernet
- BACnet

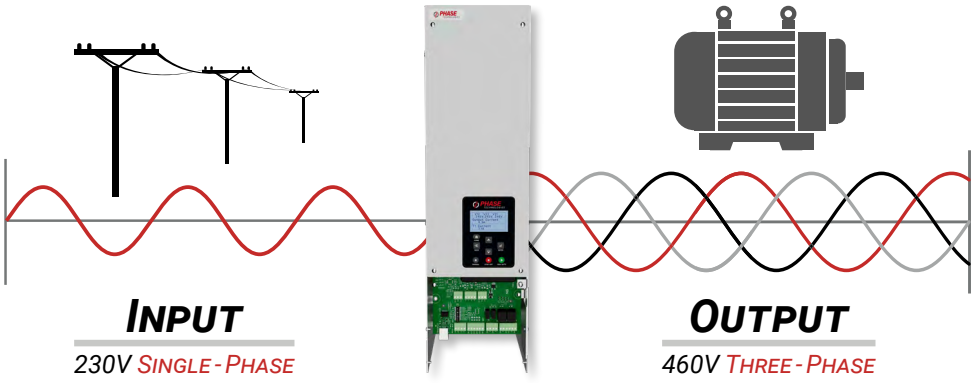
Easy Setup Wizards

- Constant Pressure
- Flow Control
- Tank Level
- Pump Down
- Suction Pump
- HVAC

Voltage Doubling Options

Cost Savings for Long Lead Applications

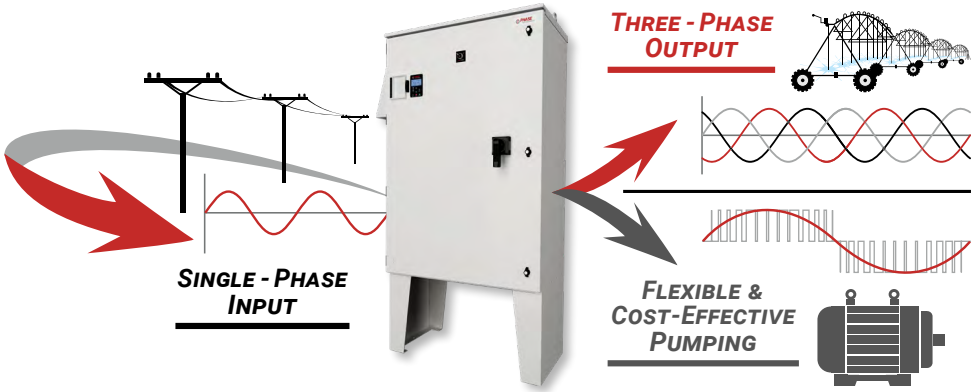
Eliminates the need for a transformer while minimizing motor lead wire size on 460V systems running on a 230V source. (1LHX, 3LHX, 1LH, 3LH)



AUXPOWER™ Options

Power Your Pivot & Pump With A Single System

Phase Technologies has designed a cutting-edge VFD specifically for center pivot irrigation applications. This variable frequency drive (VFD) provides fullfeatured speed control of the main pump and the optionally integrated AuxPower™ independently performs phase conversion and powers the pivot and it's control system.



1LH

Low Harmonic

CONFIGURED PANEL

Features

Power Conditioning

Our LH drive corrects up to 50% incoming voltage imbalance without oversizing the VFD. Through sophisticated controls and circuitry, incoming power is conditioned and balanced before being sent to the motor. Additionally, the LH drive gives you the ability to dial in the output voltage to your motor specifications for optimal performance. When incoming power quality is questionable and voltage drop is a concern, look to the power conditioning LH drive for your solution.

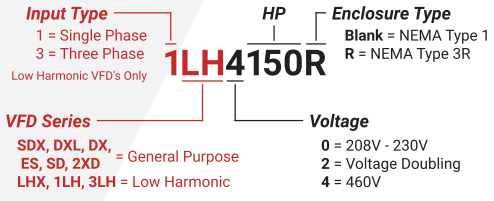
Low Harmonic Active-Front-End Technology

Phase Technologies guarantees that the LH SERIES product line will meet the IEEE 519-2014 standard without additional harmonic filters as long as a minimum load of 50% 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.

Power Factor Correcting

Power factor correction (PFC) is the process of improving the power factor of a system and allowing it to run more efficiently. A low power factor indicates inefficient use of electrical power. More current is required to deliver the same amount of real power, leading to higher losses in the electrical distribution system. Lowers Electricity Bills: Lowering the demand for reactive power will reduce utility charges.

Nomenclature



Product Specifications

	Model / Part Number	HP	Rated Current (Input)	Rated Current (Output)	Enclosure	Enclosure (w/ AuxPower)
230V	1LH005	5	26 A	18 A	ENC3	-
	1LH007	7.5	37 A	24 A	ENC3	-
	1LH010	10	48 A	31 A	ENC3	-
	1LH015	15	72 A	46 A	ENC3	-
	1LH020	20	98 A	61 A	ENC3	-
Voltage Doubling	1LH205	5	26 A	9 A	ENC3	-
	1LH207	7.5	37 A	13 A	ENC3	-
	1LH210	10	48 A	18 A	ENC3	-
	1LH215	15	72 A	25 A	ENC3	-
	1LH220	20	97 A	31 A	ENC3	-
	1LH230	30	115 A	46 A	ENC4	-
	1LH240	40	139 A	61 A	ENC4	-
	1LH250	50	196 A	77 A	ENC6	-
460V	1LH405	5	13 A	9 A	ENC3	-
	1LH407	7.5	19 A	13 A	ENC3	-
	1LH410	10	28 A	18 A	ENC3	-
	1LH415	15	36 A	25 A	ENC3	-
	1LH420	20	48 A	31 A	ENC3	ENC5
	1LH425	25	60 A	38 A	ENC3	ENC5
	1LH430	30	72 A	46 A	ENC3	ENC5
	1LH440	40	98 A	61 A	ENC4	ENC5
	1LH450	50	121 A	77 A	ENC4	ENC5
	1LH460	60	143 A	91 A	ENC4	ENC6
	1LH475	75	170 A	107 A	ENC4	ENC6
	1LH4100	100	226 A	142 A	ENC6	ENC6
	1LH4125	125	173 A	172 A	ENC6	ENC6
	1LH4150	150	314 A	198 A	ENC6	ENC6

Configured Panel Sizes

Enclosure	Leg Kit Part Number	Leg Kit (Height)	Enclosure Dimensions (Height" x Width" x Depth")	Enclosure w/Leg Kit Dimensions (Height" x Width" x Depth")
ENC2	LEGS14	12-1/2"	45-1/4" x 19-1/2" x 19-9/16"	55" x 19-1/2" x 19-9/16"
ENC3	LEGS14	12-1/2"	55-7/16" x 19-1/2" x 19-9/16"	65-3/16" x 19-1/2" x 19-9/16"
ENC4A	LEGS15	15-3/8"	54-1/4" x 34-7/8" x 21-11/16"	67" x 34-7/8" x 21-11/16"
ENC5	LEGS15	15-3/16"	68-11/16" x 44-5/16" x 23-13/16"	81-5/16" x 44-5/16" x 23-13/16"
ENC6	LEGS17	15-3/8"	74-5/8" x 66-7/16" x 24-5/16"	87-5/16" x 66-7/16" x 24-5/16"
ENC7A	LEGS18	15-3/8"	72-1/4" x 86-3/8" x 28-1/16"	87-5/8" x 86-3/8" x 28-1/16"