

Catalog Number	
Notes	Type

# LDV05

## Lowering Device



### Construction

The lowering device shall consist of three main sub-assemblies; head frame, lowering ring and winch assembly. All material shall be of corrosive resistant nature including stainless steel, aluminum or galvanized steel unless otherwise specified. All fixtures utilized on the lowering device shall have passed an accelerated vibration test of at least 1G.

**Head Frame:** The head frame shall consist of one-piece welded assembly with hot dip galvanized finish after fabrication. All fasteners used for additional covers or other item shall be stainless steel. The head frame shall incorporate six hoist cable sheaves. The sheaves shall meet or exceed the requirements of the Wire Rope Technical Board. Wire rope cables that operate over the sheaves shall be 7 X 19 construction Ø3/16" or Ø1/4" aircraft cable, as specified, either zinc coated or stainless steel.

**Top Latching:** Three one-piece cast aluminum latch barrels shall be provided on the head frame assembly. Each latch barrel shall be designed to hold the entire weight of the ring and luminaires.

**Ring Assembly:** The ring shall be fabricated of #7-gauge steel with a hot dip galvanized finish. The assembly shall include the appropriate number of luminaires mounting arm brackets fabricated from 2IN pipe of sufficient strength to support the specified luminaire. The mounting arms shall be hot dip galvanized finished and shall bolt to the ring with stainless steel hardware.

**Self-centering ring assembly:** The centering system shall consist of roller contact, spring loaded, cast aluminum arms designed to protect the pole, luminaires, and lamps from damage during raising and lowering of the luminaire ring assembly. The centering system shall keep the ring concentric to the pole during the raising and lowering operation.

**Transition Assembly:** The transition assembly shall be designed to prevent misalignment of the three hoist cables. The wire rope cables shall be attached to the transition assembly with properly sized wire rope thimbles and factory swagged fittings. The attachment shall prevent the wire rope cable from untwisting under load.

**Winch:** The internal winch assembly shall have an ultimate strength of five (5) times the lifted load. The winch shall include a 30:1 worm gear reduction and an internal drag brake on the input shaft to prevent free spooling of the winch drum. The winch drum shall be factory pre-wound with minimum Ø1/4" zinc coated or stainless-steel high strength 7X19 construction aircraft cable. The internal winch assembly shall include a receiver bracket designed to accept the portable drive motor assembly. Provision shall be made to enable the drive motor assembly to be locked or pinned to the bracket during operation.

**Branch Circuit Protection:** The assembly shall include a circuit breaker sized for the correct voltage and phasing supplied for the luminaire. A pigtail cord and plug shall be supplied from the circuit breaker assembly. The cord and plug shall match the main power cord of the lowering device system.

**Drive Motor:** The drive motor assembly shall include a minimum 1hp heavy duty reversing type electric motor with a stalled torque at least twice that required to operate the lowering device. The motor shall drive the winch through a torque limiter coupling to limit the drive force on the hoist and winch cables. The torque limiter shall be factory pre-set. In addition, there shall be a backup shear pin designed to shear at a torque level between 50% and 100% over the torque limiter setting. The drive motor assembly shall have a 20 feet cord with drum switch for remote operation. The drive motor assembly shall be supplied with a step-down transformer to provide 120V to the motor. The drive motor shall be portable and shall interface with the winch assembly to operate the lowering device.

### Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

### Warranty

2-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application.

**ORDERING INFORMATION**

**Example:** LDV05 1C 06ARM HMLEd4LUM P4 KPHASE 100 DS LR

Prefix	Number of Circuitry	Quantity of Luminaires	Luminaire Series	Performance Package
LDV05 A Top Latching, Centering Arm Unit	1C One Circuit	02ARM Two (2) Luminaires per pole	ACP1LEDLUM AEL LED Floodlight (Yoke Mount Only)	P10 ACP1LED ACP2LED
	2C Two Circuit	03ARM Three (3) Luminaires per pole	ACP2LEDLUM AEL LED Floodlight (Yoke Mount Only)	P20 ACP1LED ACP2LED
		04ARM Four (4) Luminaires per pole	MGLEDLUM Mongoose LED Roadway (Arm Mount Only)	P30 ACP1LED ACP2LED
	05ARM Five (5) Luminaires per pole	P40 ACP1LED ACP2LED		
	06ARM Six (6) Luminaires per pole	PLLEDLUM Large Predator Floodlight LED (Yoke Mount Only)	P50 ACP1LED ACP2LED	
	07ARM Seven (7) Luminaires per pole		P1 HMLEd4 MGLED PLLED PMLLED	
	08ARM Eight (8) Luminaires per pole	PMLLEDLUM Medium Predator Floodlight LED (Yoke Mount Only)	P2 HMLEd4 MGLED PLLED PMLLED	
	09ARM Nine (9) Luminaires per pole		P3 HMLEd4 MGLED PLLED PMLLED	
	10ARM Ten (10) Luminaires per pole	HMLEd4LUM Hight Mast LED 4	P4 HMLEd4 MGLED PLLED PMLLED	
	12ARM Twelve (12) Luminaires per pole		P5 HMLEd4 MGLED PLLED PMLLED	
				P6 HMLEd4 MGLED PLLED PMLLED
				P7 HMLEd4 MGLED PLLED PMLLED

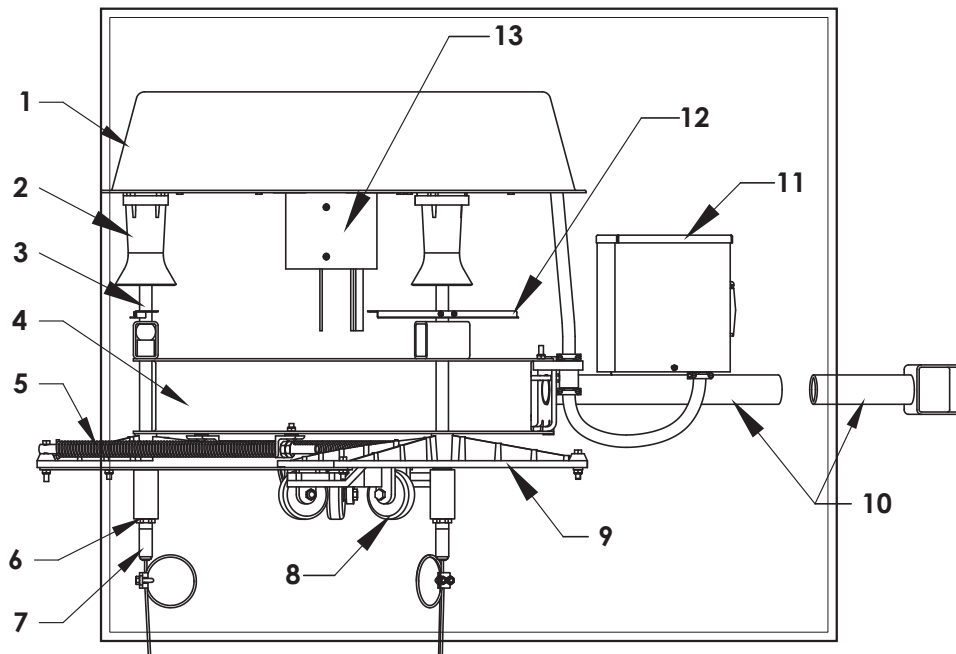
Voltage, Phasing and Frequency	Pole Height	Cable Type	Options
APHASE 120V Single Phase 60HZ <sup>1</sup>	50 50 Feet <sup>5</sup> 15M 15 Meters <sup>5</sup>	AG Galvanized Ø3/16" diameter Hoisting Cables and Galvanized Ø1/4" diameter Winch Cable	LACB Lightning Arrestor on Circuit Breaker Enclosure in Pole Base
BPHASE 120V/208V 3 Phase 4 Wire 60HZ <sup>2</sup>	60 60 Feet <sup>5</sup> 20M 20 Meters <sup>5</sup>	BG Galvanized Ø3/16" diameter Hoisting Cables and Galvanized Ø5/16" diameter Winch Cable	LAJB Lightning Arrestor on Ring Junction Box
CPHASE 208V Single Phase 60HZ	70 70 Feet <sup>5</sup> 25M 25 Meters <sup>5</sup>		PR Photocontrol Receptacle on Ring Junction Box <sup>3,4</sup>
DPHASE 208V 3 Phase 60HZ	80 80 Feet <sup>5</sup> 30M 30 Meters <sup>5</sup>	CS Stainless Steel Ø3/16" Diameter Hoisting Cables and Stainless Steel Ø1/4" Diameter Winch Cable	LR Lightning Rod
EPHASE 240V Single Phase Line to Line 60HZ	90 90 Feet <sup>5</sup> 35M 35 Meters <sup>5</sup>		9249 LD Leveling Block Assembly
FPHASE 240V Single Phase Line to Neutral 60HZ	100 100 Feet <sup>5</sup> 40M 40 Meters <sup>5</sup>	DS Stainless Steel Ø3/16" Diameter Hoisting Cables and Stainless Steel Ø5/16" Diameter Winch Cable	
GPHASE 277V Single Phase 60HZ	110 110 Feet <sup>5</sup> 45M 45 Meters <sup>5</sup>		
HPHASE 277/480V 3 Phase 4 Wire 60HZ Luminaires are 277V <sup>2</sup>	120 120 Feet <sup>5</sup>		
JPHASE 347/600V 3 Phase 4 Wire 60HZ <sup>2</sup>	130 130 Feet <sup>5</sup>		
KPHASE 480V Single Phase 60HZ	140 140 Feet <sup>5</sup>		
LPHASE 480V 3 Phase 60HZ	150 150 Feet <sup>5</sup>		

Options (continued)							
FAA1120 FAA Single Aircraft Warning Light 120V <sup>3</sup>	FAA2120 FAA Double Aircraft Warning Light 120V <sup>3</sup>	FWC02 Fixed Wireway Cover on Ring for 2 Luminaires. Not available with FAA.	FWCFAA02 Fixed Wireway Cover on Ring for 2 Luminaires with FAA Option. <sup>6</sup>				
FAA1208 FAA Single Aircraft Warning Light 208V <sup>3</sup>	FAA2208 FAA Double Aircraft Warning Light 208V <sup>3</sup>	FWC03 Fixed Wireway Cover on Ring for 3 Luminaires. Not available with FAA.	FWCFAA03 Fixed Wireway Cover on Ring for 3 Luminaires with FAA Option. <sup>6</sup>				
FAA1240 FAA Single Aircraft Warning Light 240V <sup>3</sup>	FAA2277 FAA Double Aircraft Warning Light 277V <sup>3</sup>	FWC04 Fixed Wireway Cover on Ring for 4 Luminaires. Not available with FAA.	FWCFAA04 Fixed Wireway Cover on Ring for 4 Luminaires with FAA Option. <sup>6</sup>				
FAA1277 FAA Single Aircraft Warning Light 227V <sup>3</sup>	FAA2480 FAA Double Aircraft Warning Light 480V <sup>3</sup>	FWC05 Fixed Wireway Cover on Ring for 5 Luminaires. Not available with FAA.	FWCFAA06 Fixed Wireway Cover on Ring for 6 Luminaires with FAA Option. <sup>6</sup>				
FAA1480 FAA Single Aircraft Warning Light 480V <sup>3</sup>		FWC06 Fixed Wireway Cover on Ring for 6 Luminaires. Not available with FAA.	FWCFAA08 Fixed Wireway Cover on Ring for 8 Luminaires with FAA Option. <sup>6</sup>				
		FWC07 Fixed Wireway Cover on Ring for 7 Luminaires. Not available with FAA.	FWCFAA09 Fixed Wireway Cover on Ring for 9 Luminaires with FAA Option. <sup>6</sup>				
		FWC08 Fixed Wireway Cover on Ring for 8 Luminaires. Not available with FAA.	FWCFAA10 Fixed Wireway Cover on Ring for 10 Luminaires with FAA Option. <sup>6</sup>				
		FWC09 Fixed Wireway Cover on Ring for 9 Luminaires. Not available with FAA.					
		FWC10 Fixed Wireway Cover on Ring for 10 Luminaires. Not available with FAA.					
		FWC12 Fixed Wireway Cover on Ring for 12 Luminaires. Not available with FAA.					

### Notes

- 1 Single Circuit. P4 LED available with to and including 10 luminaires per pole.  
Single Circuit. HMLED4 P4 LED available with up to and including 9 luminaires per pole.  
Single Circuit. HMLED4 P5 LED available with up to and including 8 luminaires per pole.  
Single Circuit. HMLED4 P6 LED available with up to and including 8 luminaires per pole.  
Single Circuit. HMLED4 P7 LED available with up to and including 8 luminaires per pole.  
Single Circuit. MGLED P7 LED available with up to and including 10 luminaires per pole.  
Single Circuit. PLLED P5 LED available with up to and including 10 luminaires per pole.  
Double Circuit. HMLED4 P6 LED available with up to and including 10 luminaires per poles.  
Double Circuit. HMLED4 P7 LED available with up to and including 2,3,4,7,8,9 and 10 luminaires per pole.
- 2 Not available with 2C double circuits.
- 3 Customer can order only one FAA Aircraft Warning Light per Lowering Device.  
FAA Aircraft Warning Light operates on the lower system voltage entering the pole. Example If system voltage entering pole is 277/480V, then the FAA transformer operates off of 277V.  
FAA Aircraft Warning Light operation is ON and OFF with luminaires. When ordered with Photo Control Receptacle Option, warning light in wired through receptacle. For alternate operation, or separate circuit, contact PSG.
- 4 PR Photo Control Receptacle. Not available with JPHASE 347/600V. Single Circuit 1 all luminaires are controlled by photo control receptacle photocell and contactor. For double circuit 2, half of the luminaires are controlled by photo control receptacle photocell and contactor for an even number of luminaires. For an odd number of luminaires, one less than half luminaires are controlled. Photo Control Receptacle operates on the higher system voltage entering the pole. If system voltage is 277/480V, then the receptacle operates off of 480V. Photocell provided by customer operates on the higher system voltage entering the pole.
- 5 If customer has voltage drop specifications, contact PSG. Voltage drop on pole power cord due to the pole height is not calculated on standard lowering devices.
- 6 FWCFAA is not available with 05ARM, 07ARM, 12ARM.

## TYPE 05 HEADFRAME AND RING ASSEMBLY



EPA = 5.62 SQUARE FEET

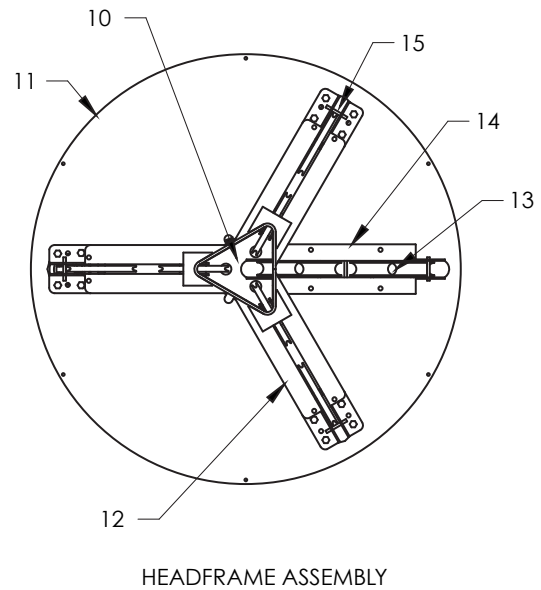
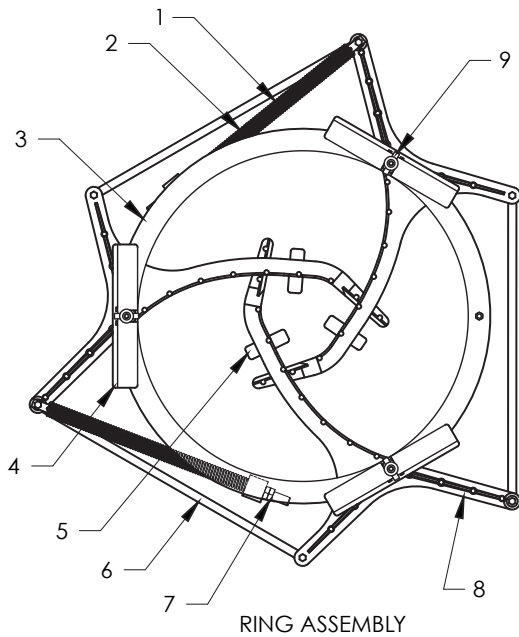
WEIGHT = 250 POUNDS

DIAMETER OF ASSEMBLY WITH LUMINAIRES VARIES FROM 8 TO 11 FEET

**PARTS LIST:**

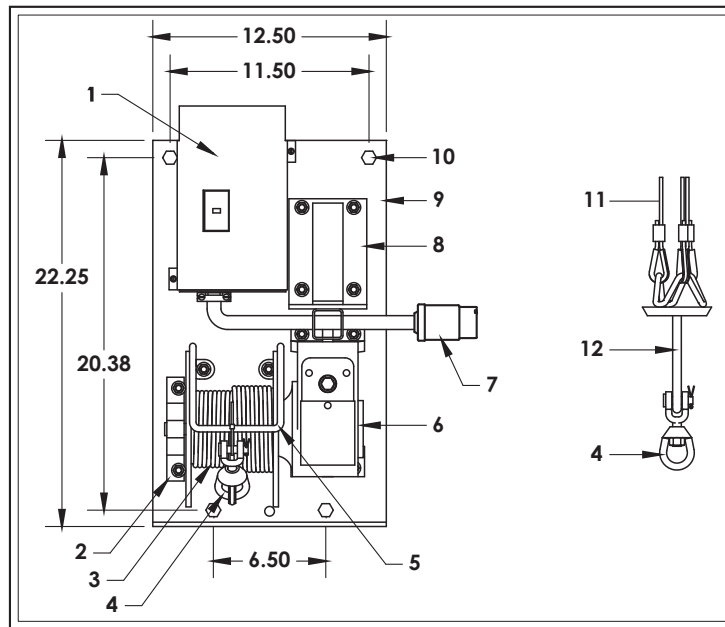
1. SPUN COPPER FREE ALUMINUM COVER
2. CAST HIGH STRENGTH COPPER FREE ALUMINUM LATCH BARREL
3. STAINLESS STEEL LATCH PIN
4. GALVANIZED STEEL LUMINAIRE RING
5. STAINLESS STEEL CENTERING SPRING
6. STEEL ADJUSTMENT NUT
7. STRANVISE WIRE ROPE GRIP
8. NON-MARKING GUIDE ARM ROLLER
9. CAST ALUMINUM IRIS GUIDE ARM
10. GALVANIZED LUMINAIRE MOUNTING ARMS, LUMINAIRE TYPE DEPENDENT
11. JUNCTION BOX
12. REFLECTING LATCH INDICATOR
13. GALVANIZED HEADFRAME, SLIPFITS A 4.63 TO 4.75 O.D. POLE TOP OR TENON

## TYPE 05 HEADFRAME AND RING ASSEMBLY

**PARTS LIST:**

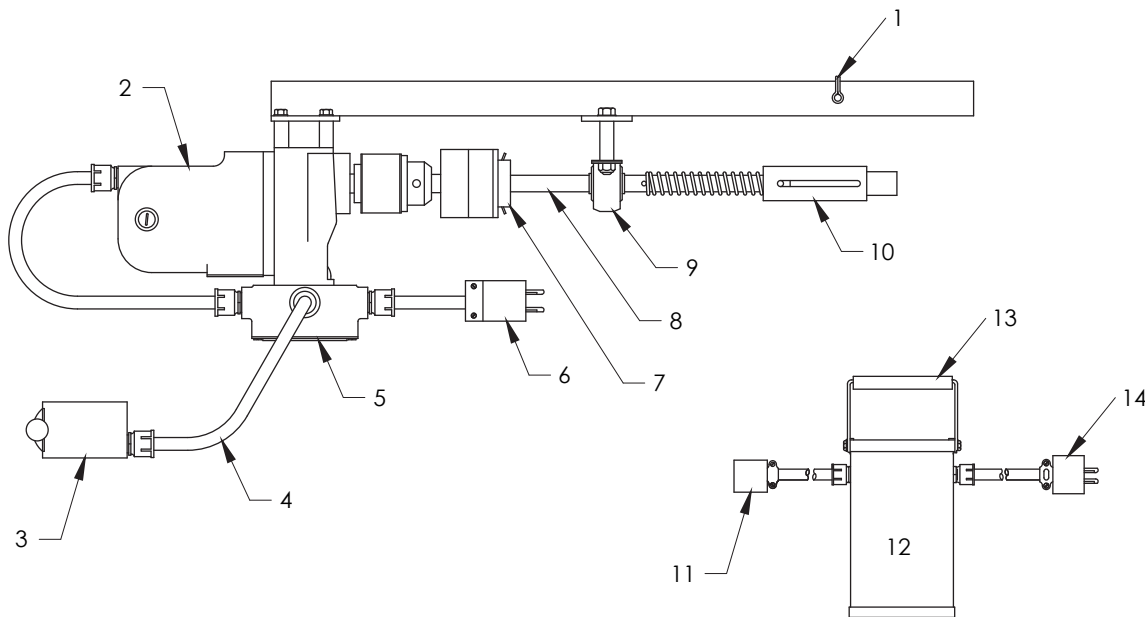
1. STAINLESS STEEL CENTERING COMPRESSION SPRING
2. SOLID ALUMINUM GUIDE ROD
3. GALVANIZED STEEL LUMINAIRE RING
4. REFLECTING LATCH INDICATOR
5. NON-MARKING GUIDE ARM ROLLER
6. ALUMINUM GUIDE ARM CONNECTING BRACKET
7. GUIDE ARM ADJUSTMENT NUT
8. CAST ALUMINUM IRIS GUIDE ARM
9. STAINLESS STEEL LATCH PIN
10. STEEL CABLE / CORD SEPARATOR WELDED IN SLIPFITTER
11. STEEL HEADFRAME PLATE
12. STEEL HOIST CABLE BRACKET
13. ACETAL RESIN CORD ROLLERS
14. STEEL POWER CORD ROLLER BRACKET
15. STEEL HOIST CABLE SHEAVE

## TYPE 05 WINCH PLATE ASSEMBLY

**PARTS LIST:**

1. CIRCUIT BREAKER OR BREAKERS AND ENCLOSURE
2. WINCH OUTBOARD SUPPORT
3.  $\varnothing 1/4"$  OR  $\varnothing 5/16"$  DIAMETER WINCH CABLE, GALVANIZED OR STAINLESS-STEEL LENGTH EQUALS POLE HEIGHT PLUS 6 FEET
4. FORGED STEEL SWIVEL, 11,000 POUND ULTIMATE STRENGTH
5. WINCH CABLE GUARD
6. WINCH, 30: 1 GEAR RATIO WITH INTERNAL DRAG BRAKE
7. POWER SUPPLY CORD AND CONNECTOR
8. STEEL POWER UNIT MOUNTING BRACKET
9. STEEL WINCH PLATE
10. 1/2-13 MOUNTING BOLT
11.  $\varnothing 3/16"$  DIAMETER HOIST CABLES, GALVANIZED OR STAINLESS STEEL
12. STEEL CLEVIS TRANSITION ASSEMBLY

TYPE 05 PORTABLE DRIVE MOTOR



**PARTS LIST:**

1. HITCH PIN
2. 3/4" REVERSIBLE ELECTRIC MOTOR, 120 VOLTS, 11.5 AMP, 350 RPM
3. REVERSING DRUM SWITCH
4. CONTROL CORD, 20 FOOT LENGTH
5. WIRING HOUSING
6. PLUG TO MATE TO CONNECTOR IN POLE BASE OR TRANSFORMER SECONDARY
7. TORQUE LIMITER COUPLING
8. 3/4" STEEL SHAFT
9. PILLOWBLOCK
10. 5/8" HEX SOCKET CRANK SHAFT COUPLING
11. CONNECTOR TO MOTOR FROM 120V TRANSFORMER SECONDARY
12. STEPDOWN TRANSFORMER, 120V SECONDARY, 1.5 KVA FOR 240V, 277V AND 480V, 2.0 KVA FOR 208V
13. 1/2" CARRY HANDLE
14. PLUG TO CONNECTOR IN POLE BASE FROM TRANSFORMER PRIMARY

**LDM Potable Drill Motor  
ORDERING INFORMATION**

**Example:** LDM 1C KPHASE 30A

Prefix	Number of Circuitry	Voltage, Phasing and Frequency	Amperage
LDM Potable Drive Motor	1C One Circuit	APHASE 120V Single Phase 60HZ	30A 30 amps
		BPHASE 120V/208V 3 Phase 4Wire 60HZ	50A 50 amps
	2C Two Circuit	CPHASE 208V Single Phase 60HZ	100A 100 amps
		DPHASE 208V 3 Phase 60HZ	
		EPHASE 240V Single Phase Line to Line 60HZ	
		FPHASE 240V Single Phase Line to Neutral 60HZ	
		GPHASE 277V Single Phase 60HZ	
		HPHASE 277/480V 3 Phase 4 Wire 60HZ	
		JPHASE 347/600V 3 Phase 4 Wire 60HZ	
		KPHASE 480V Single Phase 60HZ	
LPHASE 480V 3 Phase 60HZ			

Note: Drive Motor (LDM) operate on the higher system voltage entering the pole. Example: If system voltage entering the pole is 277/480V, then the Drive Motor's transformer operates off of 480V.pole. If system voltage is 277/480V.