

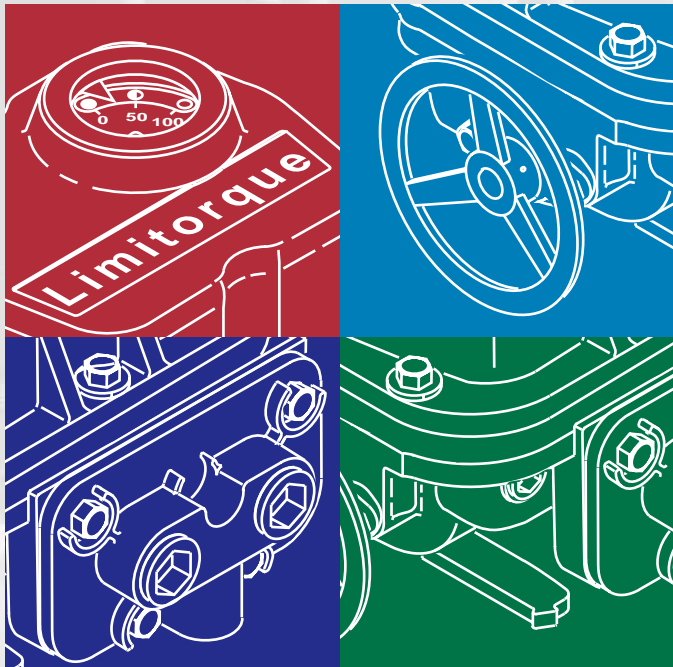
A close-up photograph of a blue industrial valve actuator. The main body is a large, cylindrical component with a polished, reflective surface. Below it is a horizontal mounting bracket with various ports and a yellow limit switch. The background is dark, making the blue metal stand out.

LY Series

Long-term reliability  
and innovative design  
features in quarter-turn  
valve actuators

**Limitorque**

**LY Series quarter-turn  
valve actuators meet  
an increasing need  
for high-quality  
valve control.**



LY actuators offer new economies and increased power and/or control options, plus all the innovative features that have made Limitorque the brand of choice all over the world. These quality actuators have all the basic design features of other units manufactured by Limitorque.

**Count on the LY Series** to meet the most

demanding specifications and to perform as expected for years to come. Torque ratings range from

200 to 1200 ft. lbs.

(270 to 1625 Nm)

for application versatility

that includes

submersible,

weatherproof,

or explosionproof

enclosures.

Compact components and space-efficient profiles provide durability and handling benefits. Modular design uses standardized components to reduce manufacturing costs and to simplify installation and service. Torque switches are interchangeable between LY 1001, LY 2001, and LY 3001, double acting and fully adjustable. Optional controls include printed circuit board and plug-in modules. Up to 16 adjustable limit switch contacts are available.



**Specify LY Series wherever precise valve control is required.**

LY Series actuators suit a wide range of applications requiring precise torque and limit control. They can be relied upon to perform day after day, year after year, under the most demanding conditions. Units are suitable for weatherproof, submersible, and explosionproof environments and are available for single or three-phase power requirements.

These versatile actuators provide cost-efficient position control of a variety of different valves. This includes butterfly, ball, and plug valves, as well as dampers.

The LY Series is especially useful for intelligent control system applications.



**These LY 1001 actuators are serving as part of a DDC-100 control network in the harsh, corrosive environment of an automated, offshore well head. (Control compartments are mounted on the top of these units for easier accessibility.)**

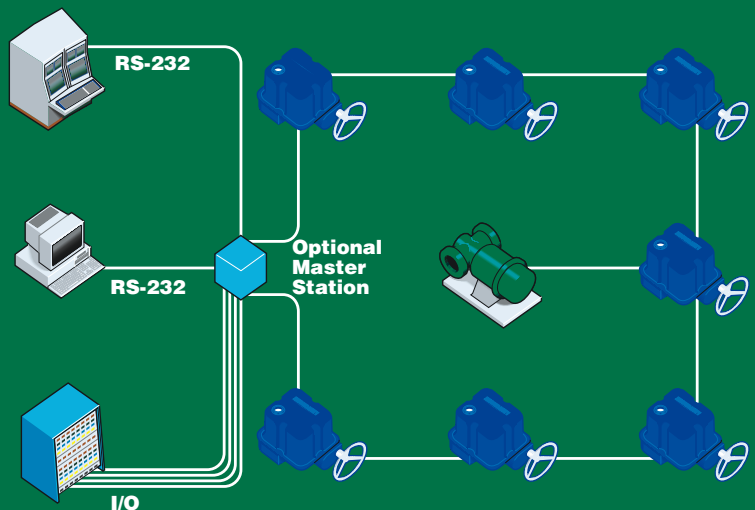
**In many instances, Limitorque distributed digital control networks allow you to connect actuators and other field units directly to the network host—saving the cost and complexity of a separate master station.**

Printed circuit boards, plug-in modules, and up to 16 effective switch contacts provide an abundance of possibilities for functions and networking.

When it is used with UEC-3 modulating control packages, precise control can be achieved.

A Distributed Digital Control network can control up to 250 actuators and devices using a single twisted-pair or duplex fiber optic cable. Cabling cost reductions, redundancy, and fault reporting enhance the economy and utility of this approach.

Limitorque actuators can be controlled by a master station or directly via standard Modbus protocols using a third-party PLC or DCS.



**Minimize maintenance and service requirements.**

Superior engineering, the highest construction standards in the world, and innovative design features are responsible for the low-maintenance requirements and long-term reliability of the LY Series.

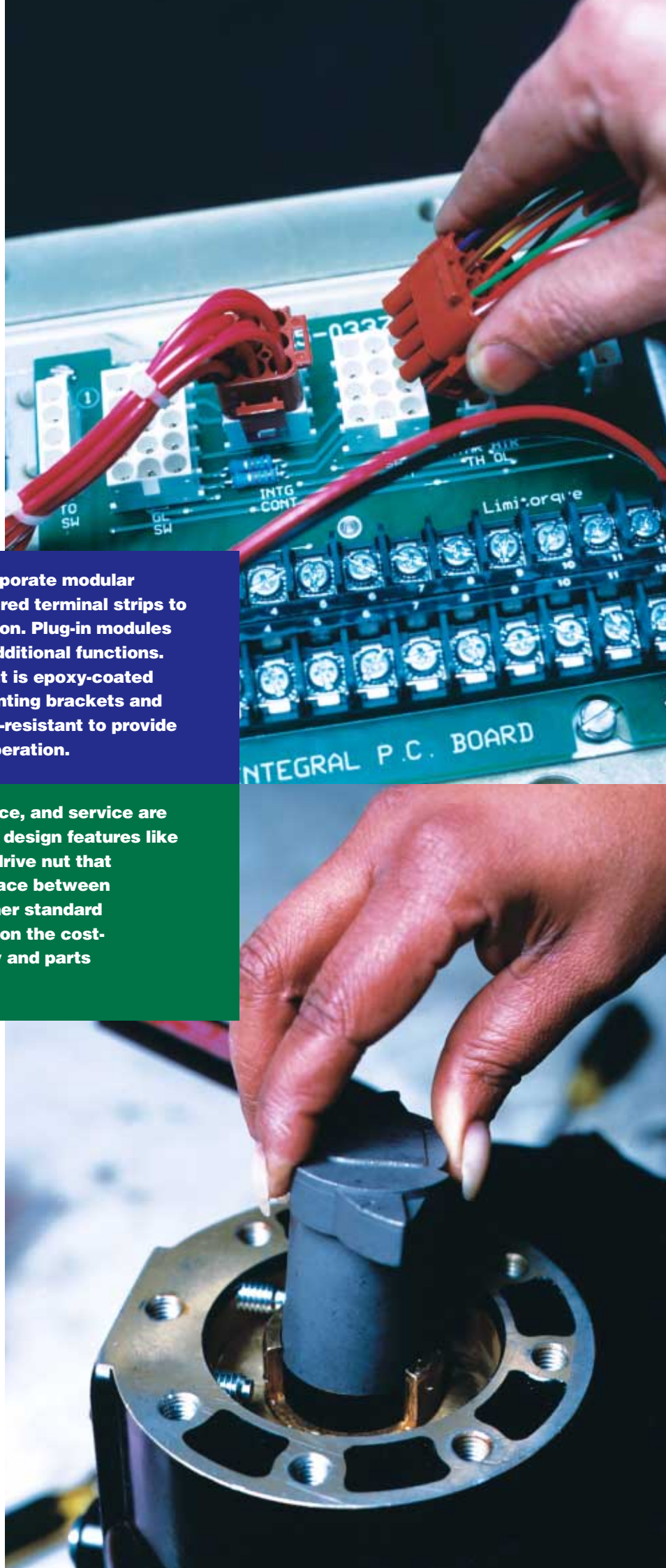
Design features like the pre-wired terminal blocks and separate drive nut adapters greatly simplify installation. Simple, modular design facilitates what little routine maintenance may be required.

**Control packages incorporate modular components and pre-wired terminal strips to facilitate field installation. Plug-in modules easily accommodate additional functions. The metal compartment is epoxy-coated and O-ring-sealed. Mounting brackets and hardware are corrosion-resistant to provide years of service-free operation.**

**Installation, maintenance, and service are facilitated by LY Series design features like this removable torque drive nut that provides an easy interface between actuator and valve. Other standard components capitalize on the cost-efficiency of modularity and parts interchangeability.**

These exceptional units can be counted on for many years of trouble-free operation because of quality features like o-ring seals, corrosion-resistant hardware, durable epoxy coating, and anti-condensation heaters. Should a unit require service, there is ready availability of Limitorque parts and factory-authorized service from locations around the world.

Limitorque also offers a variety of training options for maintenance personnel either at Limitorque facilities or customers' sites.

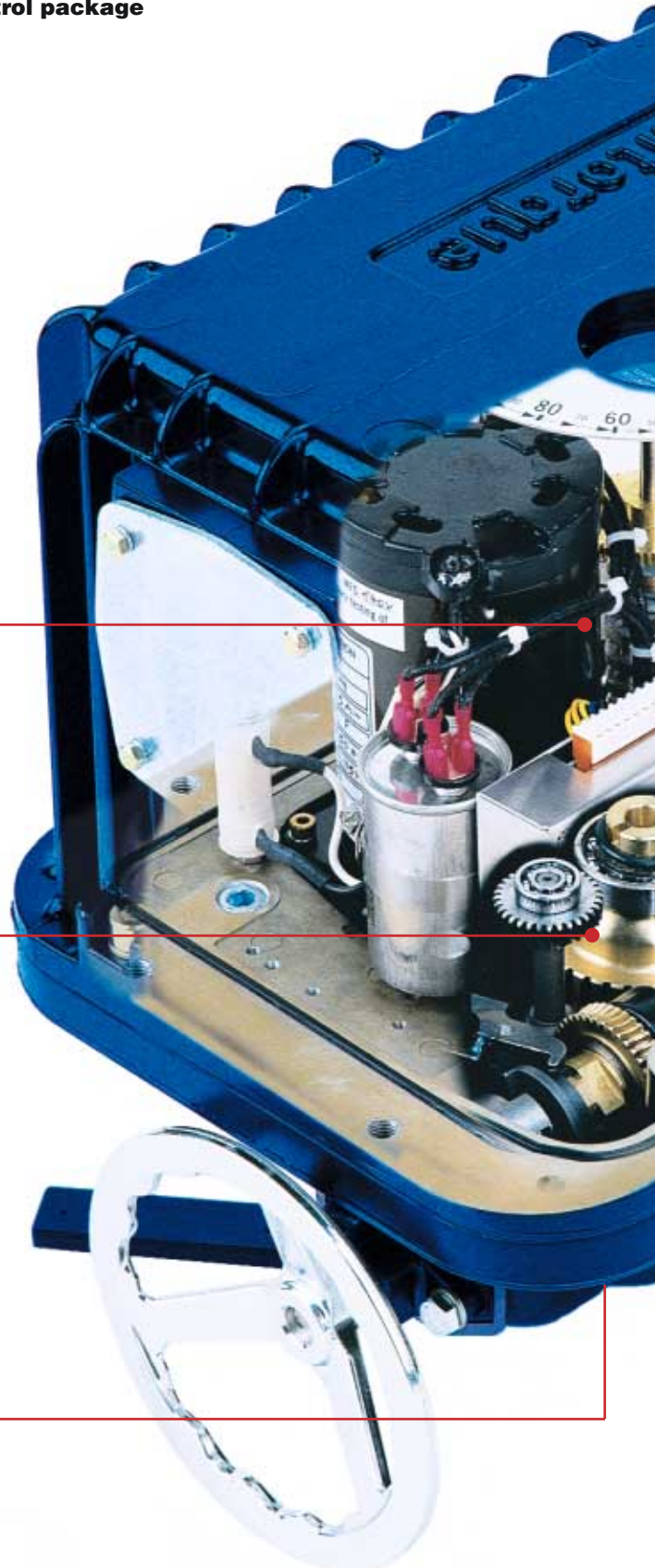


**Designed and built for reliable,  
cost-effective valve control.**

LY Series actuators are created following the highest of quality standards. Units meet all AWWA 504-87 and 540-87 requirements. Standard features such as steel-on-bronze worm gear sets, anti-friction bearings throughout, and a durable epoxy coating meet high-performance criteria.

Other important features include mechanical adjustable stops for 90° rotation with ±10° adjustment. Declutch levers allow handwheel operation. Motors have class-F insulation and two thermal contacts rated at 125°C. Control compartment heaters prevent corrosion damage due to moisture caused by condensation. Dial position indicators provide local monitoring of valve position.

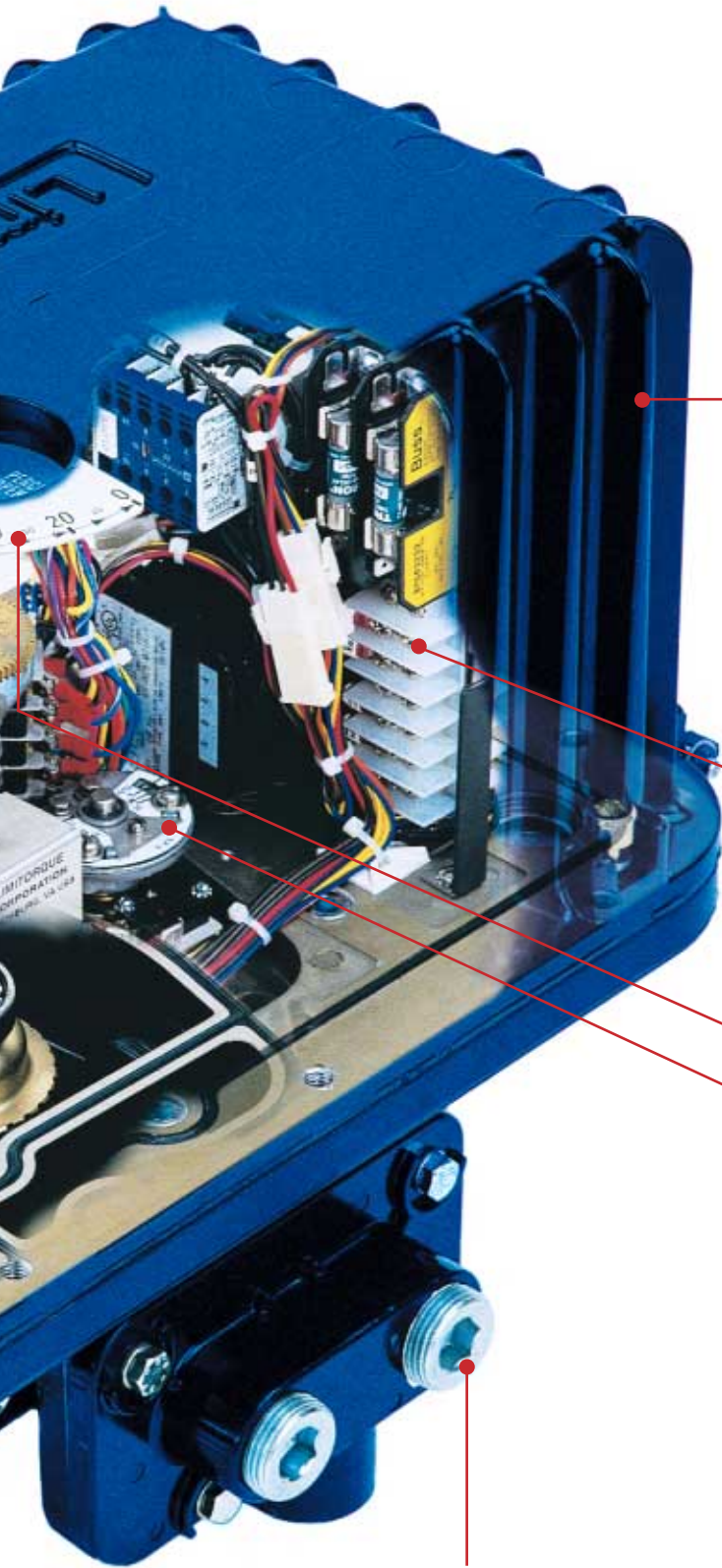
**LY-1001**  
with optional Modutronic 20  
control package



*Integral controls with printed circuit board and plug-in modules provide flexibility and reduce installation and service costs. Mounting brackets and hardware are corrosion resistant.*

*Steel-on-bronze worm gear set maximizes power transmission efficiency of the self-locking gear train. Double-reduction, hardened steel worm and high-strength bronze gear represent the level of quality found in all Limitorque actuators.*

*Torque drive nut is removable. This separate nut simplifies machining, installation, and service. One size drive nut fits the LY-1001 unit; a second size nut fits both the LY-2001 and LY-3001 models.*



**LY-2001**



*Coating is a combination of high-solids epoxy electrostatically applied and epoxy topcoat. Finish meets Nema 4X to test method ASTM B117 requirements for salt spray exposure. Hexavalent chromate finishing is applied to interior sections. The combination coating serves as a primer if a different coating is required.*

*Terminal strips simplify field connections. All electrical components are pre-wired to the terminal strips to facilitate installation.*

*Limit switches are independently adjustable. The standard units include 8 SPDT limit switches.*

*Conduit entries provide convenient openings to route wiring and facilitate installation. Two one-inch NPT openings can accommodate a wide range of cable requirements.*

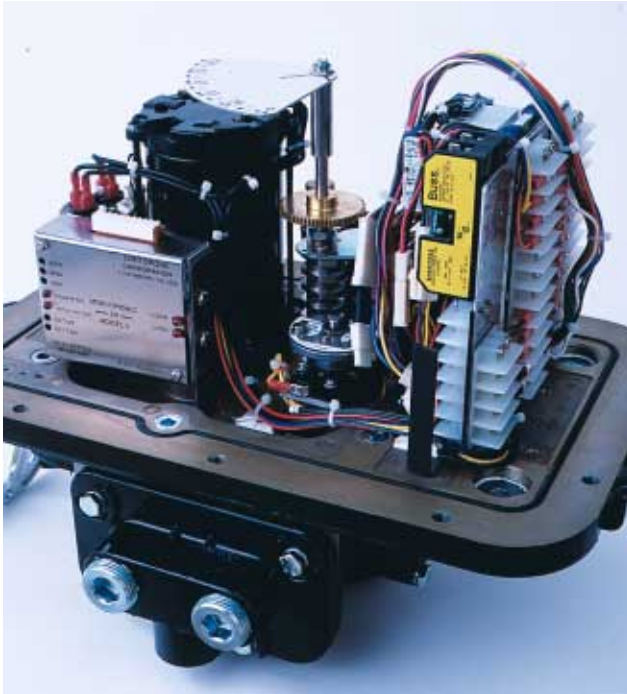
*Torque switches provide control of output torque and protect valve and actuator from mechanical overload in either direction. Switches are fully adjustable and interchangeable between all LY models.*

**LY-1001 with larger cover for optional controls**

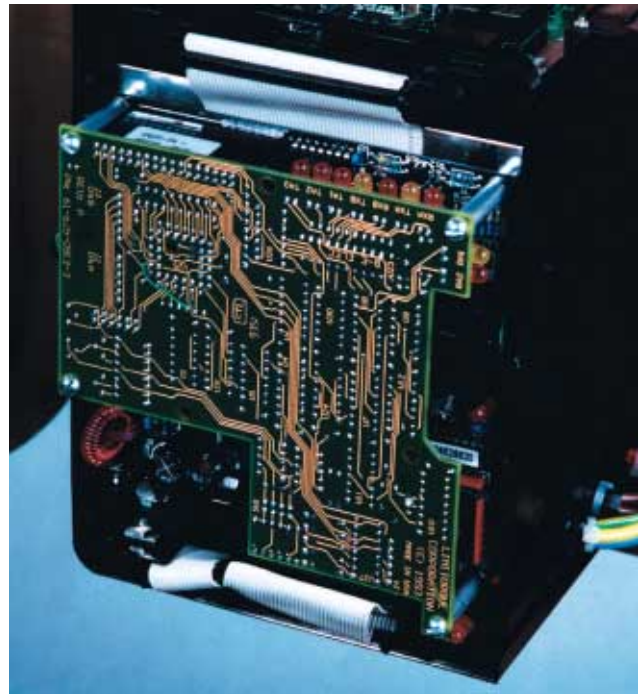


**A wide range of options are available.**

Limatorque provides a full range of options and custom modifications, including special sizes, torque ratings, operating times, and rotary motion. Single actuators can be equipped to respond within precise parameters for sophisticated process control. Cost-efficient network applications can include Limatorque components that are designed and manufactured especially for integration into a direct-to-host or optional master station system. Below are some of these options:



*Modutronic™ position control packages allow more precise valve position control than is possible with basic integral control. These packages are useful as part of an integrated system requiring response by degrees for sophisticated process control. From simple positioning of a valve to sophisticated microprocessor control, Modutronic control packages offer a full range of options.*



*DDC-100 distributed digital control systems provide a fully integrated, microprocessor-based network to control and monitor valve actuators and other devices. Network intelligence is distributed over a twisted-pair or fiber optic cable. An LY Series actuator is connected to a digital network by installing a plug-in printed circuit board in the integral control package. Control capabilities resident within the LY can be significantly expanded with the addition of the optional UEC-3 module.*



*Pushbuttons, indicating lights, and selector switches provide local control. These are available with or without integral controls.*



*Potentiometers allow precise, continuous indication of valve position at a remote location. Coupled with an R/I converter (shown above), potentiometers provide an economical 4-20 milliamp position feedback signal for remote indication. Both single and dual feedback options include 50 or 1000 ohm ratings.*



*Optional double pole, double throw limit switch assembly provides a total of 16 effective limit switch contacts. The additional contacts allow external indication of limit switch travel and trip.*

## General Specifications

	Operating time		Open/Close		Maximum bore		Modulating		Modulating	
	(sec.)		Maximum		keyway (width x depth)		torque		torque	
	60 Hz.	50Hz.	Ft.-Lbs.	Nm	inches	mm	100 starts/hr	600 starts/hr	Ft.-Lbs.	Nm
LY-1001	15	18	200	270	1 1/8 dia. 1/4 X 1/8	28 dia. 6 X 3	N/A	N/A	N/A	N/A
	30	36	200	270			150	204	100	135
	60	72	200	270			150	204	100	135
LY-2001	15	18	600	810	2 3/8 dia. 5/8 X 5/16	60 dia. 15 X 7.5	N/A	N/A	N/A	N/A
	30	36	600	810			450	611	300	407
	60	72	600	810			450	611	300	407
LY-3001	20	24	1200	1625	2 3/8 dia. 5/8 X 5/16	60 dia. 15 X 7.5	N/A	N/A	N/A	N/A
	30	36	1200	1625			900	1221	600	814
	60	72	1200	1625			900	1221	600	814

	Operating time (sec.)	Handwheel diameter		Handwheel ratio	Handwheel efficiency	Rimpull required (lb.) to obtain full rated torque	
		Inches	mm			lb/kg 1:1	lb/kg 2.79:1 SGA
		LY-1001	15			6	152
	30	6	152	32:1	0.36	70/32	N/A
	60	6	152	44:1	0.36	70/32	N/A
LY-2001	15	12	305	32:1	0.36	100/45	40/18
	30	12	305	32:1	0.36	100/45	40/18
	60	12	305	32:1	0.36	100/45	40/18
LY-3001	20	12	305	89.3:1	0.33	N/A	80/36
	30	12	305	89.3:1	0.33	N/A	80/36
	60	12	305	89.3:1	0.33	N/A	80/36

## Weights

Unit type	Controls	lbs.	kg
LY-1001	NCU	40	20
	BIC	75	34
	UEC	90	41
LY-2001	NCU	100	45
	BIC	110	50
	UEC	144	65
LY-3001	NCU	105	48
	BIC	130	59
	UEC	149	68

## Controls

**NCU** - No Controls Unit, for connection to motor control center, or PLC supplied by others.

**BIC** - Basic Integral Controls unit, includes integrated reversing contactor and hardwired torque and limit switch interlocks.

**UEC** - Universal Electronic Controller, includes BIC functionality plus advanced diagnostics and function configurability, supports optional Modulating Position Control (MPC), and optional Distributed Digital Control (DDC) for field networks.

## Enclosures

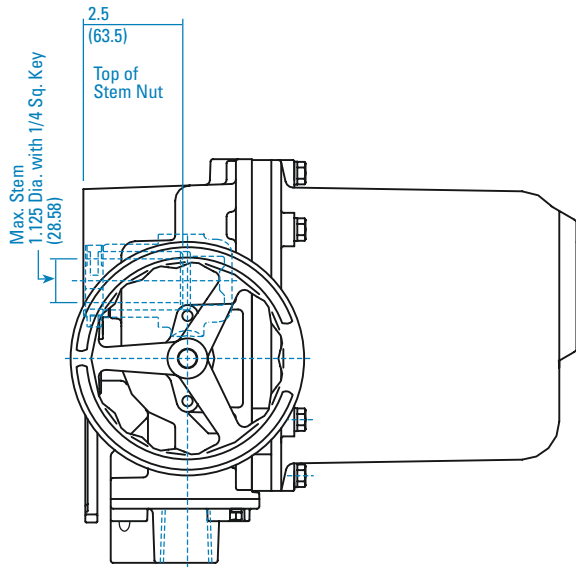
**WP units** - suitable for NEMA 4.

**XP units (NCU)** - suitable for Class I, Groups B, C, & D, Div. 1 & 2 service and Class II, Groups E, F, & G.

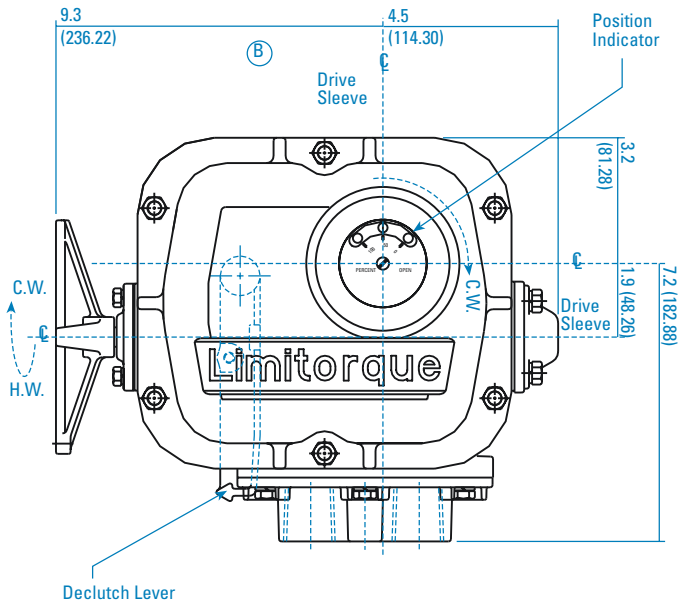
**XP units (LY-1 BIC & LY-1, 2, & 3 UEC, MPC, DDC)** - suitable for Class I, Group C and D, Div. 1 & 2 service and Class II, Groups E, F, & G.

**Dimensions for LY-1001 for NCU 1PH and 3PH**

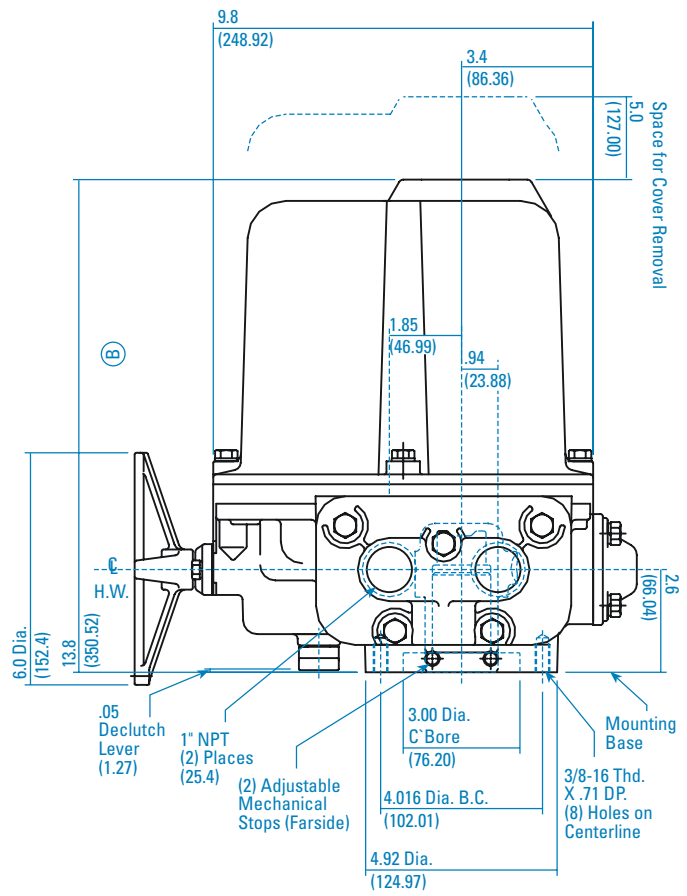
**Front View**



**Top View**

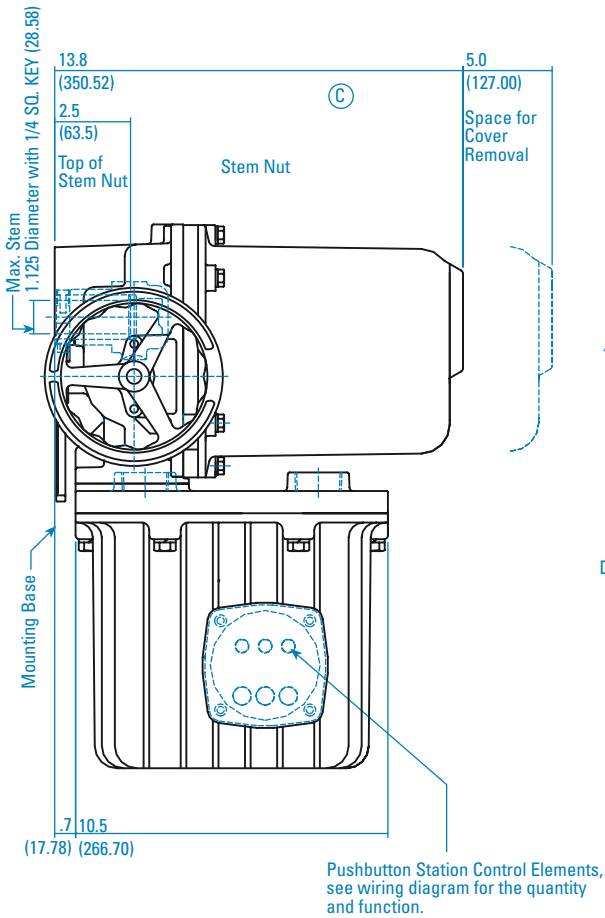


**Side View**

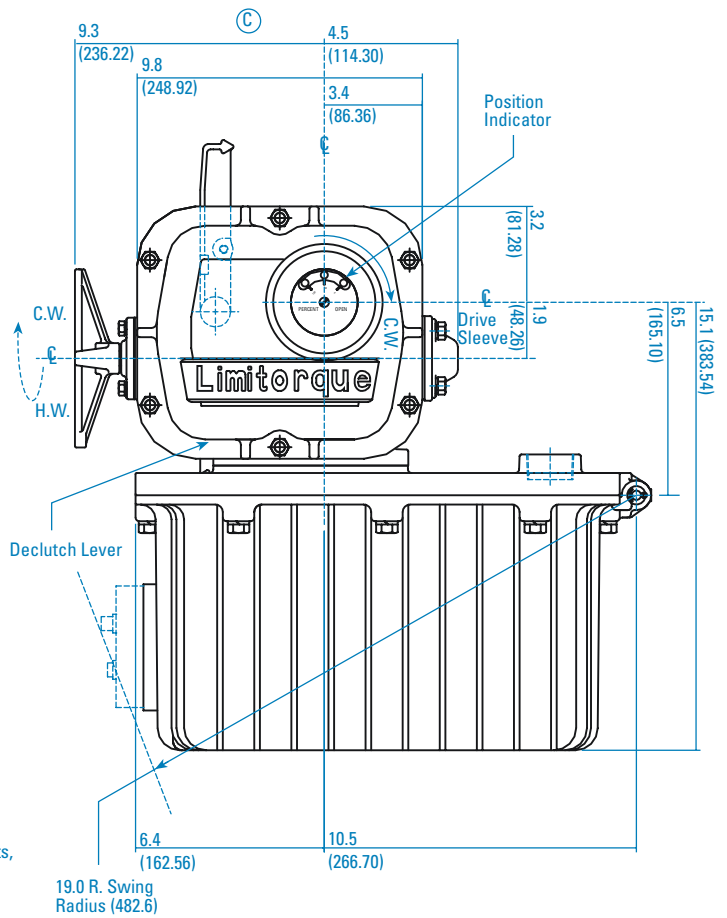


**Dimensions for LY-1001 unit with control compartment for UEC-3, MPC, DDC, 1PH and 3PH**

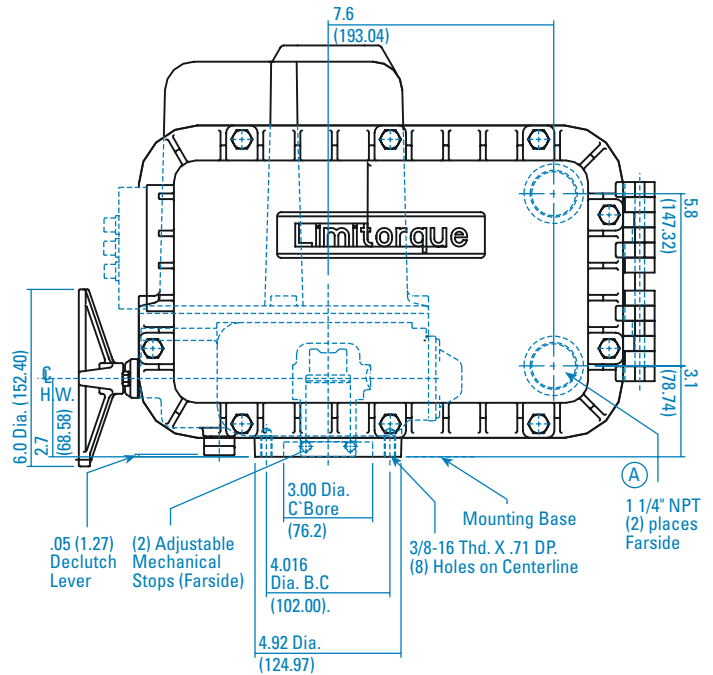
**Front View**



**Top View**

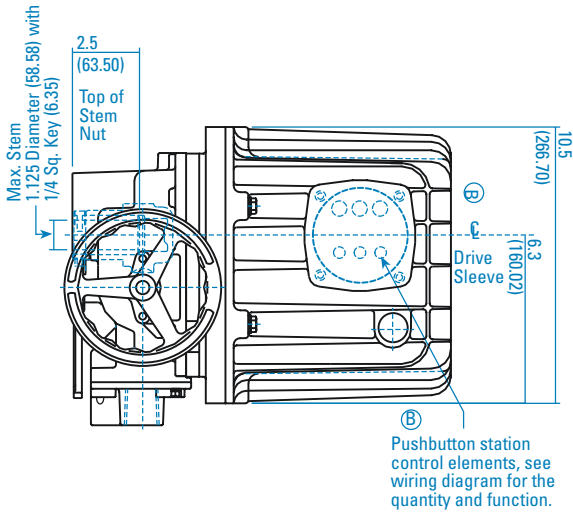


**Side View**

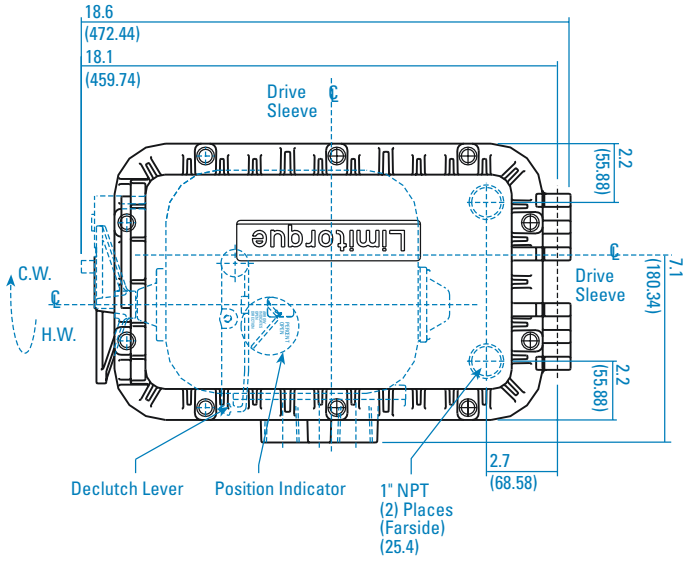


**Dimensions for LY-1001 unit with top-mounted control compartment  
for BIC 1PH and 3PH, and Modutronic 20 II**

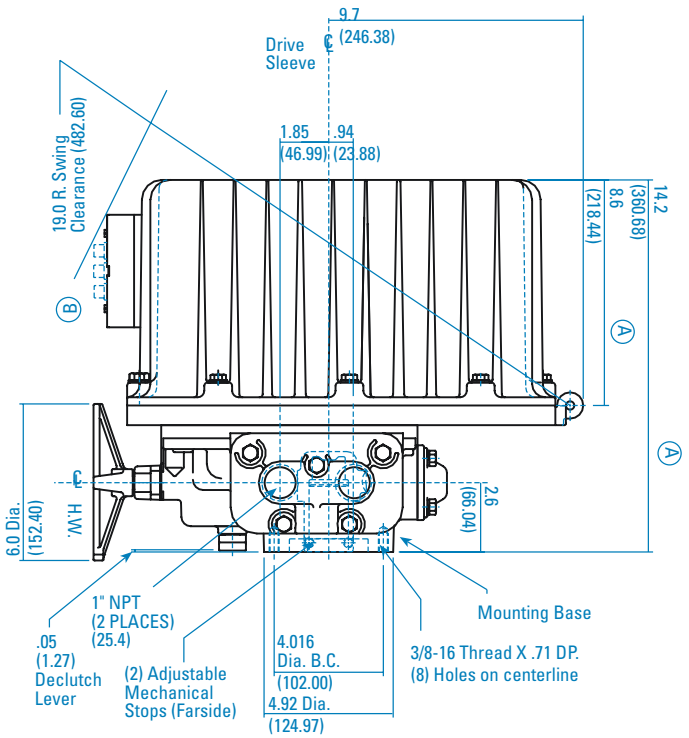
**Front View**



**Top View**

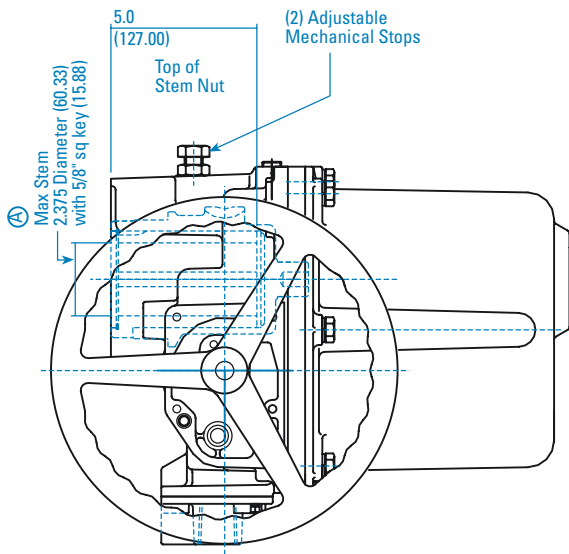


**Side View**

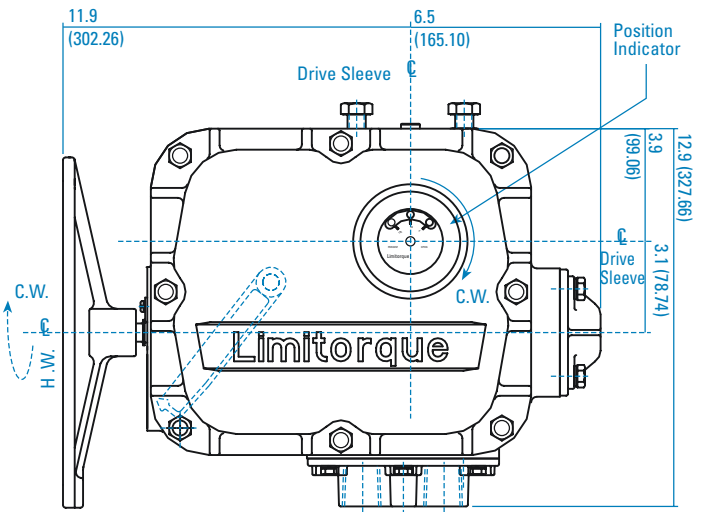


**Dimensions for LY-2001 unit for BIC 3PH and BIC 1PH up to 2# motor**

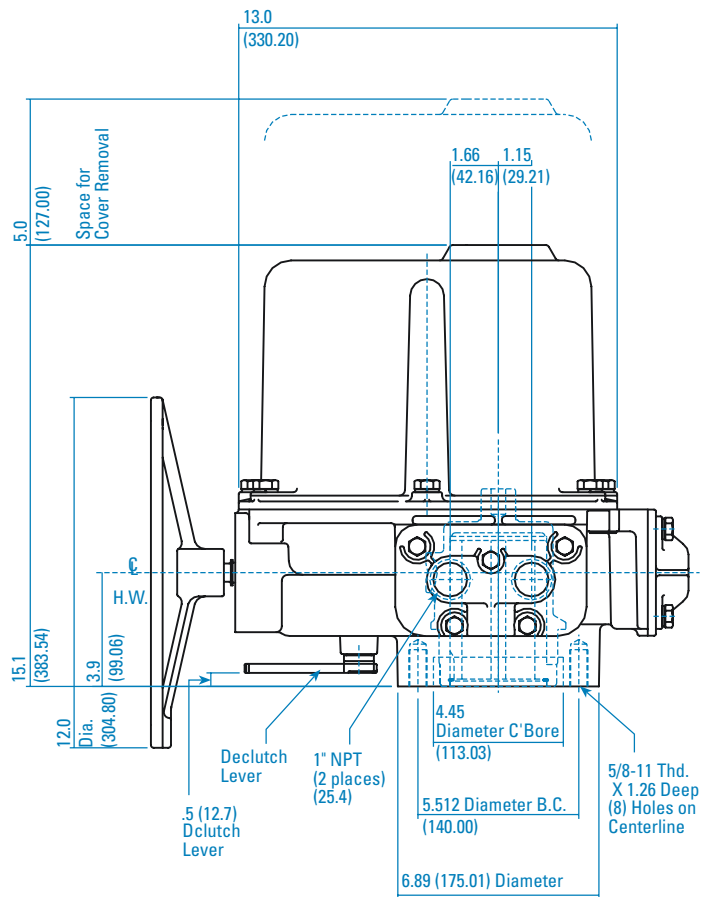
**Front View**



**Top View**

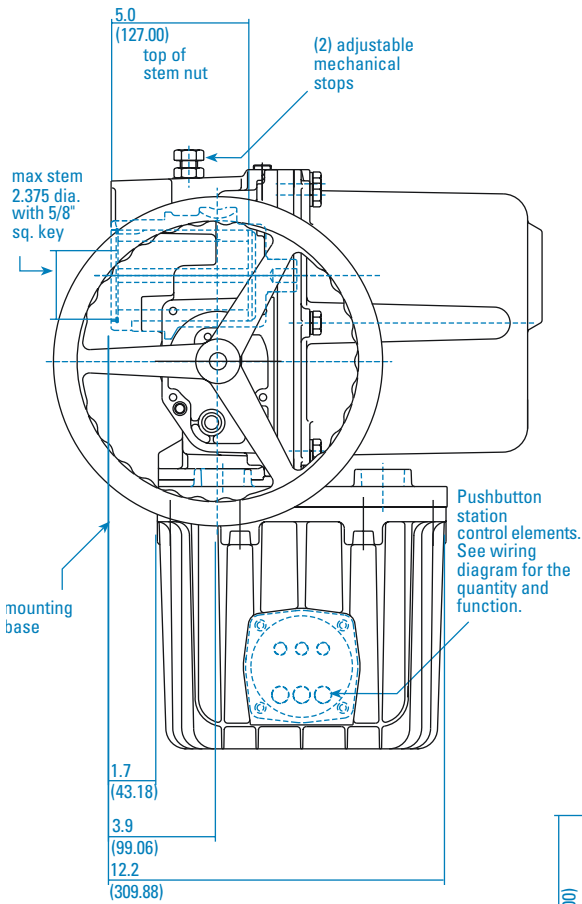


**Side View**

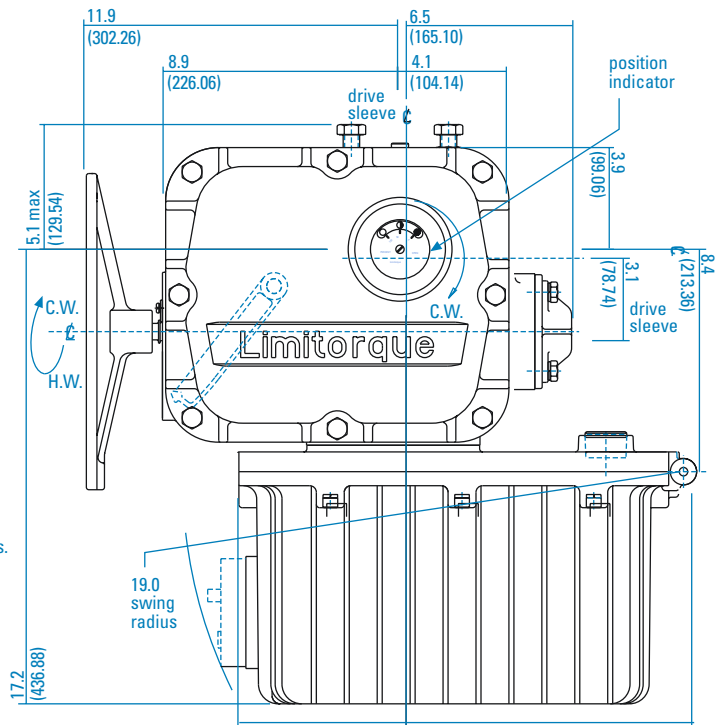


**Dimensions for LY-2001 unit for BIC 1PH, 3# motors and larger, Modutronic options**

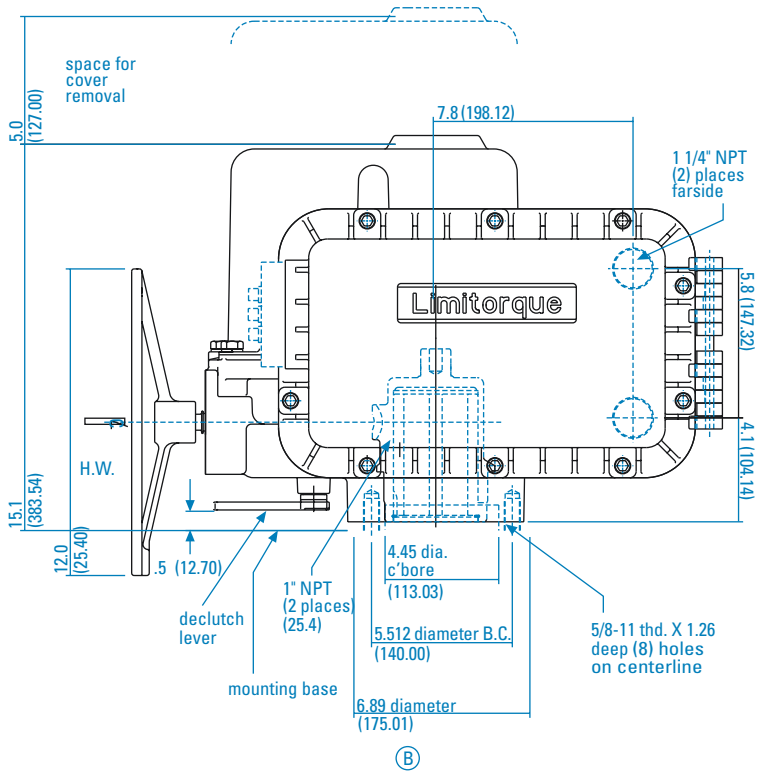
**Front View**



**Top View**

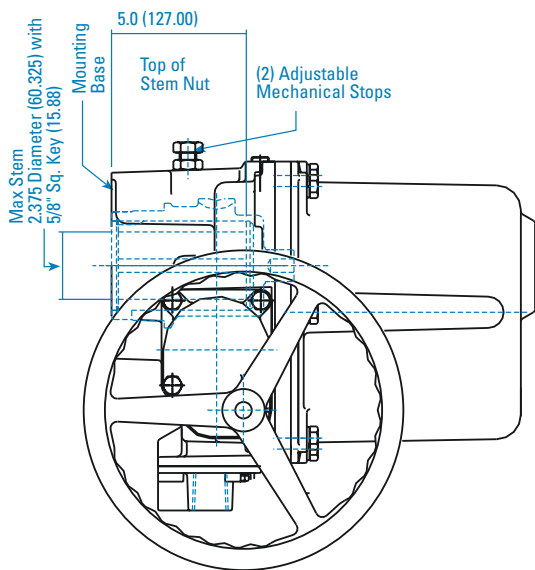


**Side View**

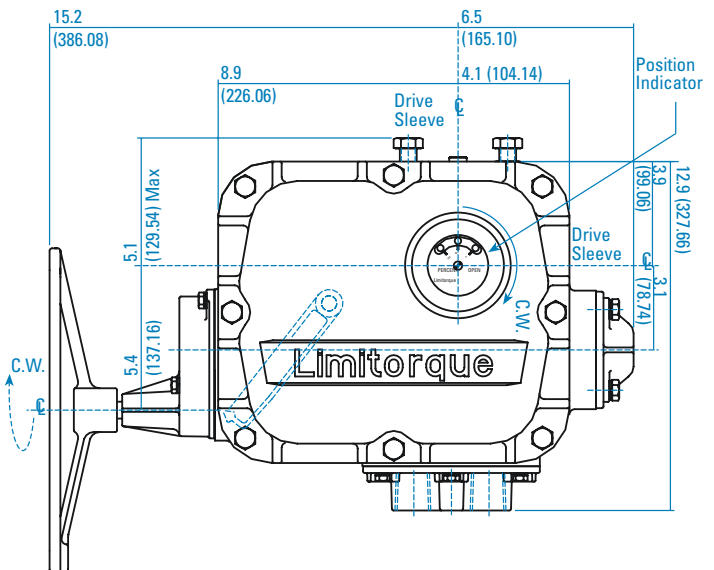


# Dimensions for LY-3001 unit for BIC 3PH

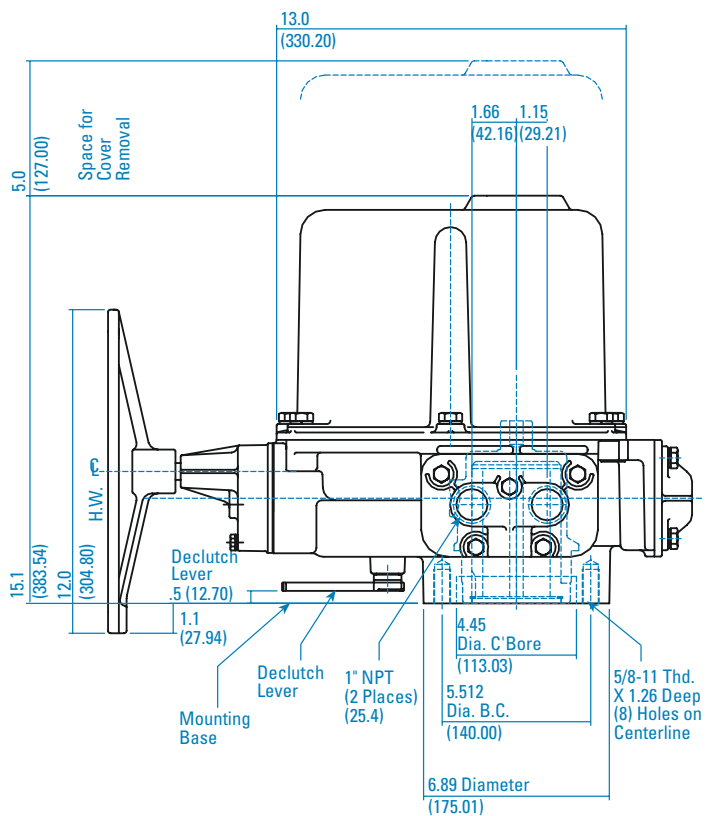
Front View



Top View

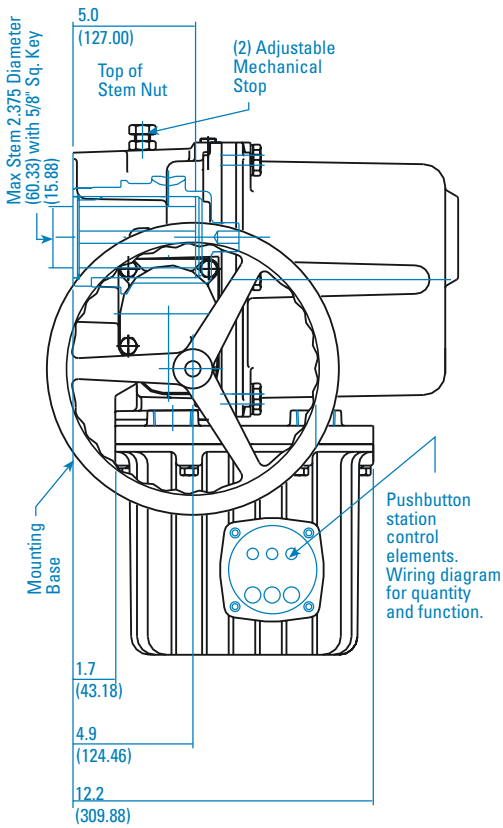


Side View

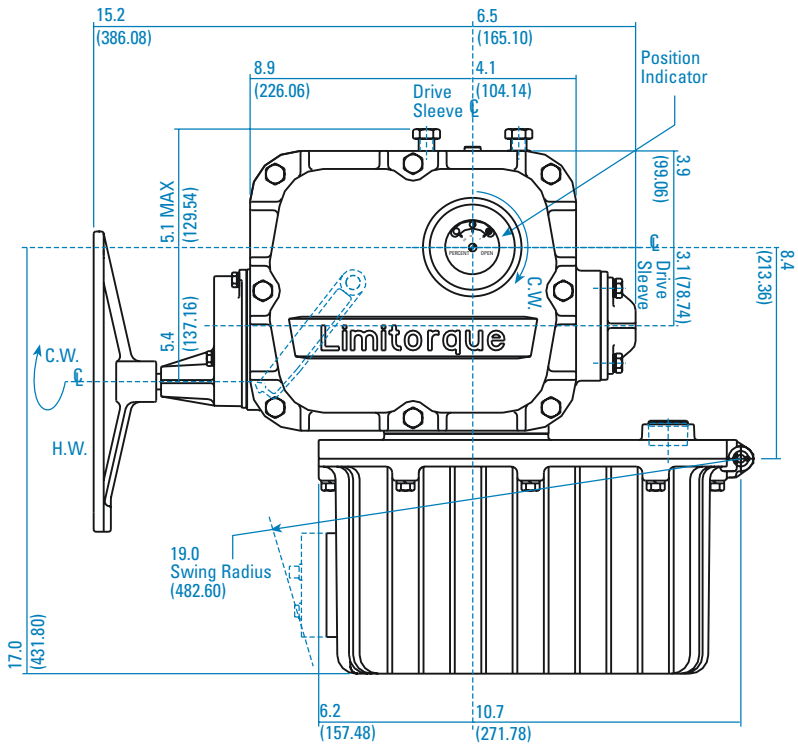


**Dimensions for LY-3001 unit for UEC-3, MPC, DDC 1PH and 3PH, BIC (Clamshell) 1PH and Modutronic options**

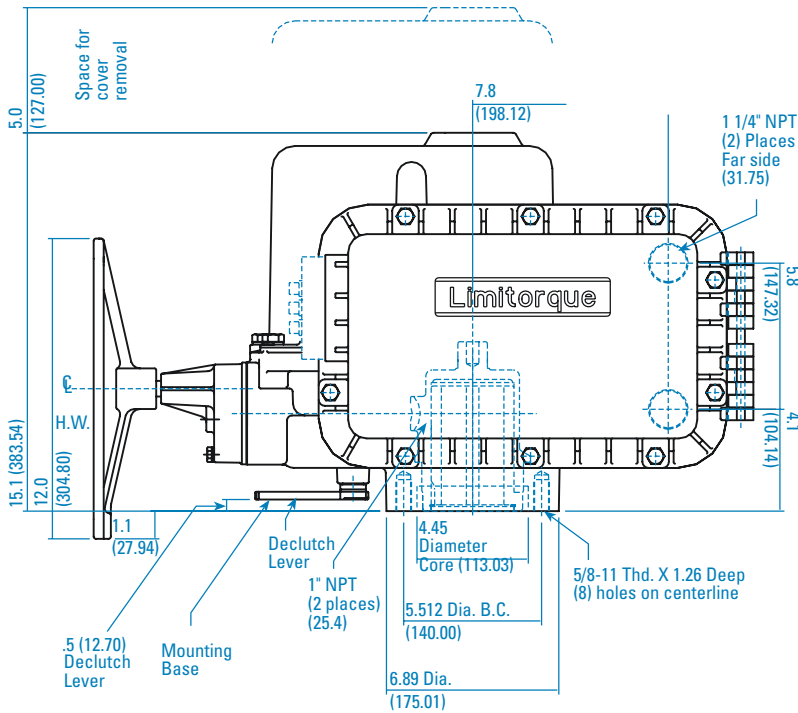
**Front View**



**Top View**

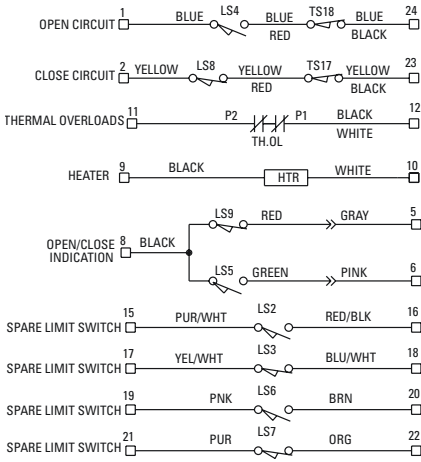


**Side View**

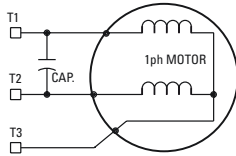


# Wiring diagram for LY NCU (Non-Control Unit), Single-Phase motor

## Schematic



SEE NOTE #4



## Valve Shown In Full Open Position

LIMIT SWITCH CONTACT	LIMIT SWITCH CONTACT DEVELOPMENT		FUNCTION
	FULL OPEN	FULL CLOSE	
2			SPARE
3			SPARE
4	█		OPEN LIMIT
5	█		IND LIGHT
6	█		SPARE
7	█		CLOSED LIMIT
8	█		IND LIGHT
9	█		

- TS17- CLOSING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE
- TS18- OPENING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE

## Notes

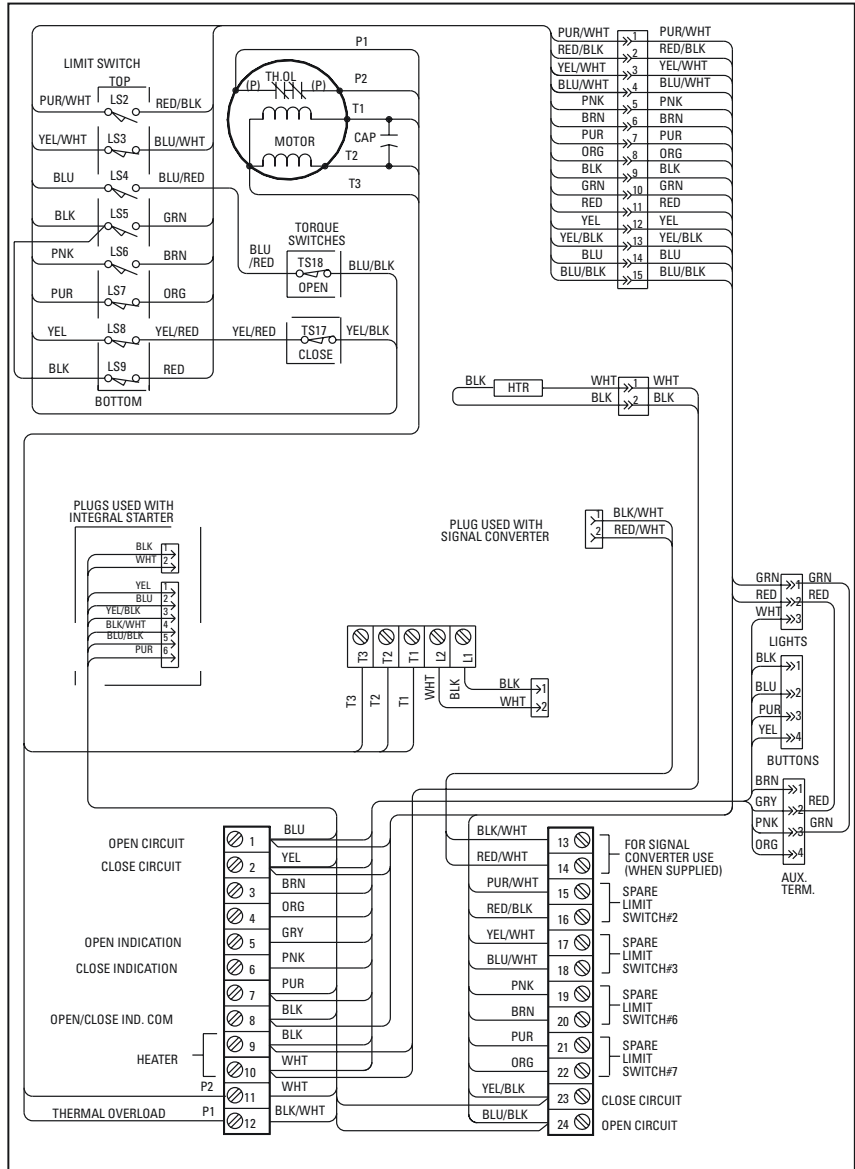
1. — T1 TO 24, T2 TO 23 AND T3 TO 12.
2. █ CLOSE CONTACT (CONTACT DEVELOPMENT)
3. ALL LIMIT SWITCH TRIP POINTS ARE FULLY ADJUSTABLE.
4. FOR DIRECT WIRING TO MOTOR JUMPER T1 TO 24, T2 TO 23 AND T3 TO 12.

## Legend

THOL-THERMAL OVERLOAD CONTACTS  
 HTR-SPACE HEATER  
 CAP-CAPACITOR

## Physical Arrangement

## Electrical Compartment



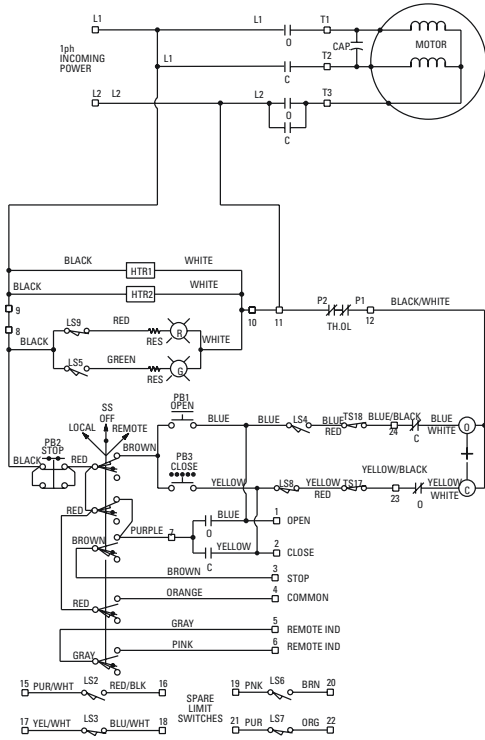
## Wire Color Legend

BLUE	: BLU
YELLOW	: YEL
PURPLE	: PUR
BLACK	: BLK
ORANGE	: ORG
BROWN	: BRN
WHITE	: WHT
RED	: RED
GREEN	: GRN
PINK	: PNK
COLOR/STRIPED	



# Wiring Diagram for LY BIC (Basic Integral Control), Single-Phase Motor

## Schematic



## Valve Shown In Full Open Position

LIMIT SWITCH CONTACT	LIMIT SWITCH CONTACT DEVELOPMENT		FUNCTION
	FULL OPEN	FULL CLOSE	
2		■	SPARE
3	■		SPARE
4	■		OPEN LIMIT
5	■		IND LIGHT
6		■	SPARE
7	■		SPARE
8		■	CLOSED LIMIT
9	■		IND LIGHT

- TS17- CLOSING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE
- TS18- OPENING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE

## Notes

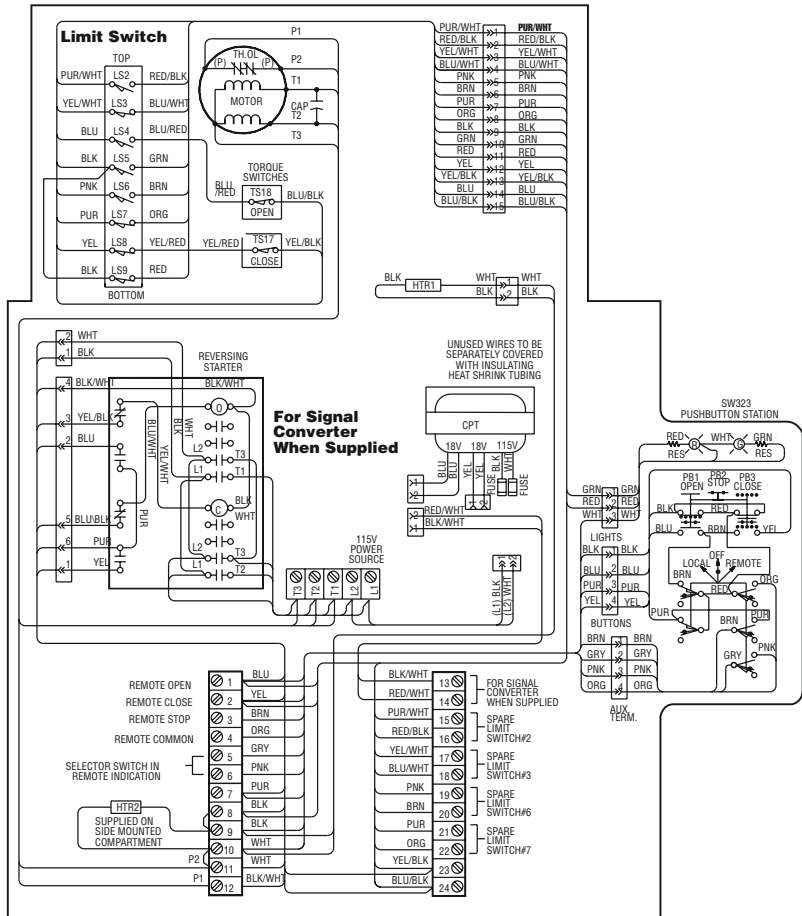
- OPEN CONTACT
- CLOSE CONTACT
- ALL LIMIT SWITCH TRIP POINTS ARE FULLY ADJUSTABLE.

## Legend

- O-OPEN CONTACT
- C-CLOSE CONTACT
- ⊖-OPENING COIL
- ⊕-CLOSING COIL
- ↔-MECHANICAL INTERLOCK
- CPT-CONTROL POWER TRANSFORMER
- TH.OL-THERMAL OVERLOAD CONTACTS
- SS-SELECTOR SWITCH (LOCAL-OFF-REMOTE)
- PB1-OPEN PUSHBUTTON
- PB2-STOP PUSHBUTTON
- PB3-CLOSE PUSHBUTTON
- HTR1-SPACE HEATER
- HTR2-SPACE HEATER (SIDE MOUNTED COMPT. ONLY)
- Ⓡ -RED INDICATING LIGHT
- Ⓢ -GREEN INDICATING LIGHT
- RES-LAMP RESISTORS
- CAP-CAPACITOR

## Physical Arrangement

## Electrical Compartment



## Wire Color Legend

BLUE	: BLU
YELLOW	: YEL
PURPLE	: PUR
BLACK	: BLK
ORANGE	: ORG
BROWN	: BRN
WHITE	: WHT
RED	: RED
GREEN	: GRN
PINK	: PNK
GRAY	: GRY
COLOR-STRIPED	

# Wiring Diagram for LY BIC (Basic Integral Control), Three-Phase Motor

## Schematic

### Valve Shown In Full CCW Position

LIMIT SWITCH CONTACT	LIMIT SWITCH CONTACT DEVELOPMENT		FUNCTION
	FULL OPEN	FULL CLOSE	
2	---	---	SPARE
3	---	---	SPARE
4	---	---	OPEN LIMIT
5	---	---	IND LIGHT
6	---	---	SPARE
7	---	---	SPARE
8	---	---	CLOSED LIMIT
9	---	---	IND LIGHT

TS17- CLOSING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE

TS18- OPENING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE

## Notes

- OPEN CONTACT
- CLOSE CONTACT
- ALL LIMIT SWITCH TRIP POINTS ARE FULLY ADJUSTABLE.

## Legend

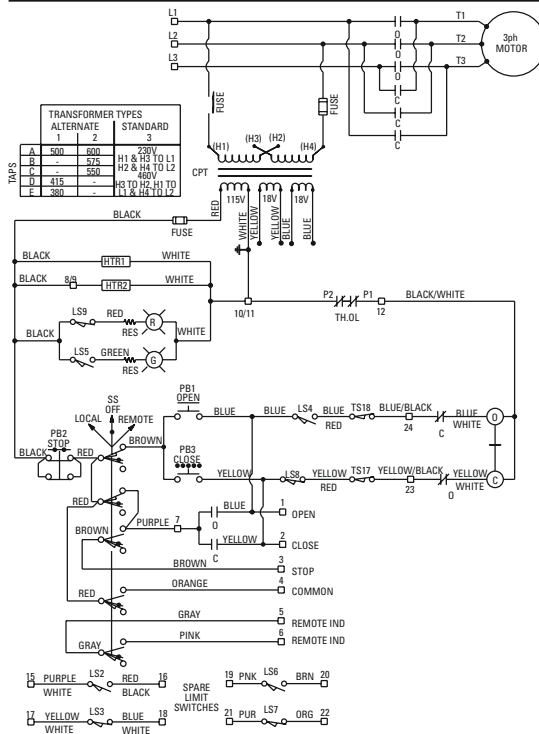
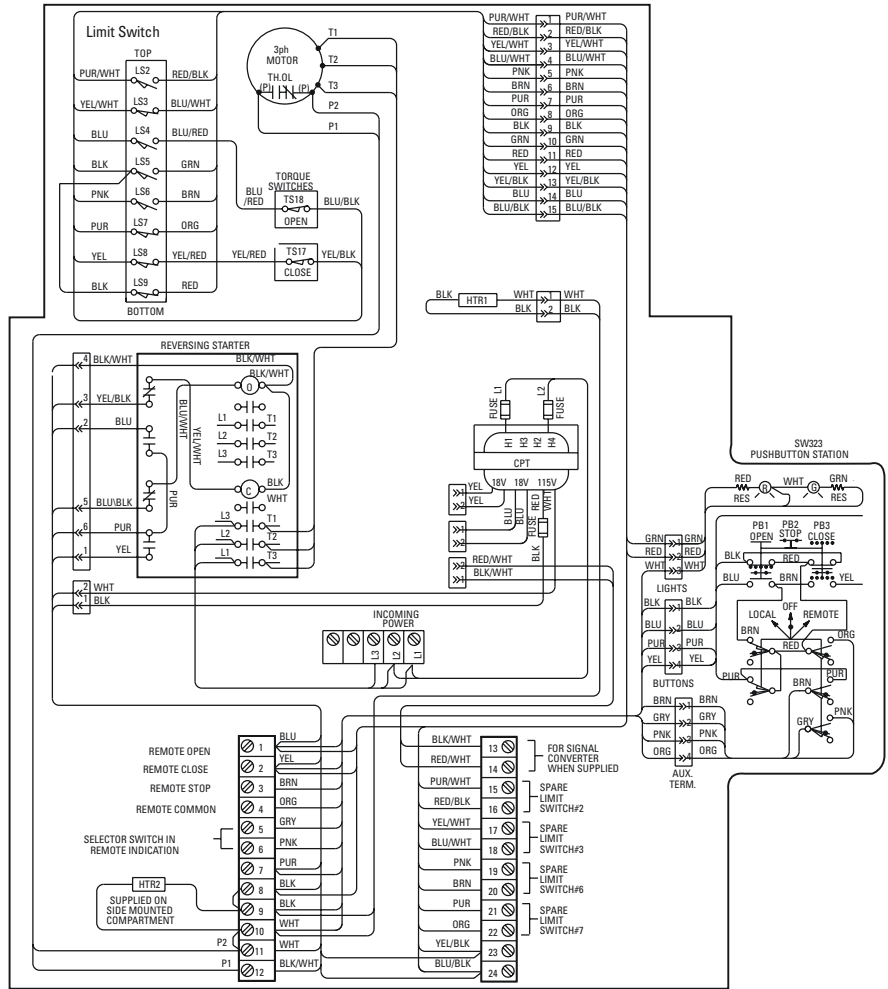
- O- OPEN CONTACT
- C- CLOSE CONTACT
- ⊖- OPENING COIL
- ⊕- CLOSING COIL
- MECHANICAL INTERLOCK
- CPT- CONTROL POWER TRANSFORMER
- TH.O.L- THERMAL OVERLOAD CONTACTS
- SS- SELECTOR SWITCH (LOCAL-OFF-REMOTE)
- PB1- OPEN PUSHBUTTON
- PB2- STOP PUSHBUTTON
- PB3- CLOSE PUSHBUTTON
- HTR1- SPACE HEATER
- HTR2- SPACE HEATER (SIDE MOUNTED COMPT. ONLY)
- Ⓡ- RED INDICATING LIGHT
- Ⓢ- GREEN INDICATING LIGHT
- RES- LAMP RESISTORS

## Wire Color Legend

BLUE	: BLU
YELLOW	: YEL
PURPLE	: PUR
BLACK	: BLK
ORANGE	: ORG
BROWN	: BRN
WHITE	: WHT
RED	: RED
GREEN	: GRN
PINK	: PNK
GRAY	: GRY
COLOR/STRIPED	

## Physical Arrangement

### Electrical Compartment



# Wiring Diagram for LY Three-Phase with UEC-3

## Schematic

### Valve Shown In Full CCW Position

— OPEN CONTACT    ■ CLOSE CONTACT

SWITCH NUMBER	LIMIT SWITCH CONTACT DEVELOPMENT				FUNCTION
	VALVE POSITION				
	FULLY CCW	A	B	FULLY CW	
2	■	—	—	—	CCW LIMIT
3	—	■	—	—	SPARE
4	—	—	■	—	SPARE
5	—	—	—	■	SPARE
6	—	—	—	—	CW LIMIT
7	—	—	—	—	SPARE
8	—	—	—	—	SPARE
9	—	—	—	—	TIMER LIMIT

ALL LIMIT SWITCH TRIP POINTS ARE FULLY ADJUSTABLE

① CW TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CCW CYCLE

② CW TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CW CYCLE

## Notes

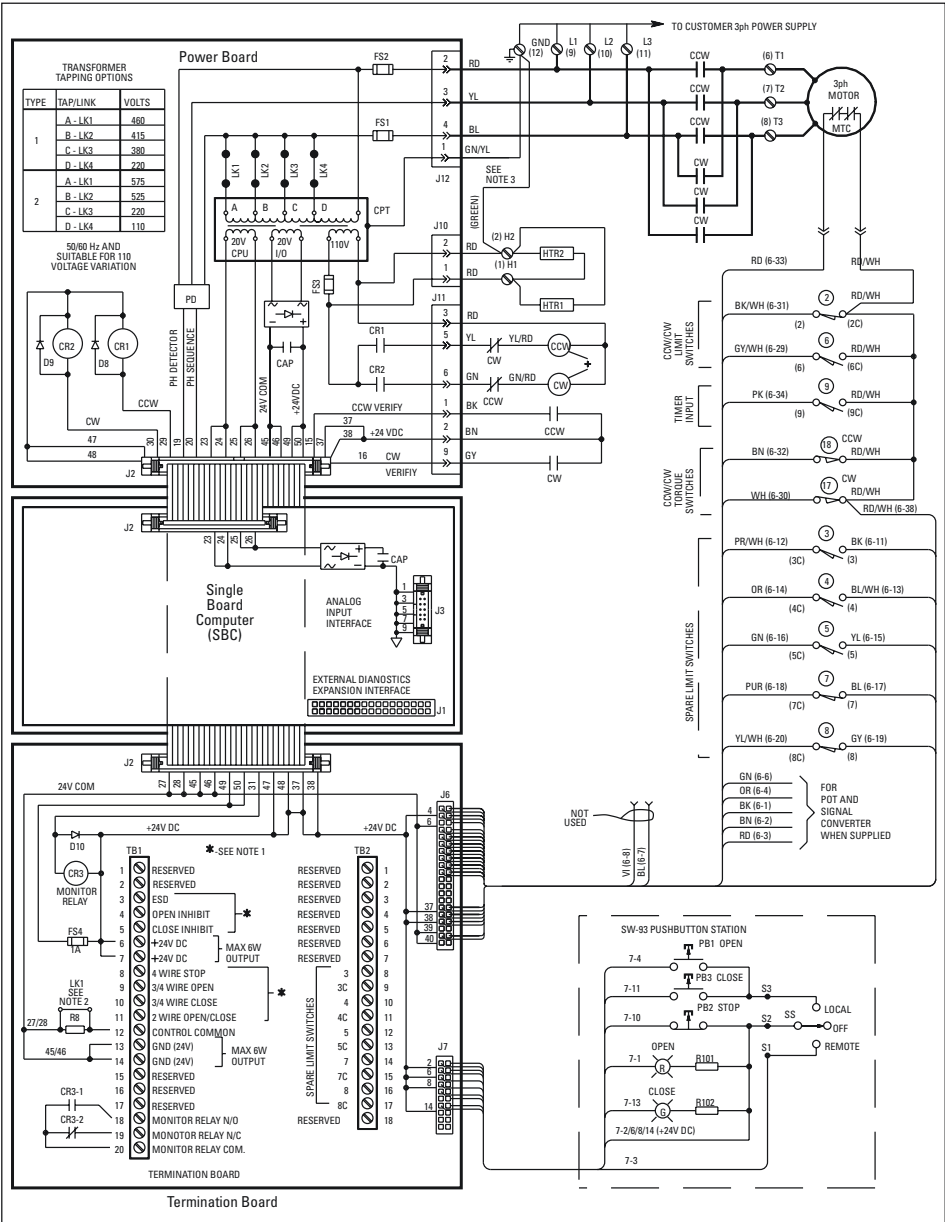
- 24V TO 125V AC/DC MAXIMUM INPUTS.
- REMOVE LINK LK1 ON TERMINATION BOARD IF CUSTOMER SUPPLIED REMOTE PUSHBUTTON POWER IS ABOVE 90 VOLTS.
- IF GROUNDED CONTROL CIRCUIT IS UNDESIRABLE USER MAY REMOVE JUMPER ON TERMINAL STRIP FROM TERMINAL POINT 2 TO 12.
- FOR FEATURE SELECTION REFER TO INSTRUCTION AND MAINTENANCE MANUAL.
- CCW (COUNTER CLOCKWISE/ANTI-CLOCKWISE) OR CW (CLOCKWISE) ROTATION IS DEFINED AS THE ROTATION OF THE OUTPUT SHAFT AS VIEWED FROM TOP OF ACTUATED DEVICE.

## Legend

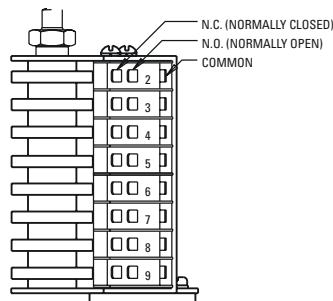
- CCW : COUNTER (ANTI) CLOCKWISE CONTACT
- CW : COUNTER CLOCKWISE CONTACT
- Ⓢ : COUNTER (ANTI) CLOCKWISE COIL
- ⊕ : MECHANICAL INTERLOCK
- Ⓢ : COUNTER CLOCKWISE COIL
- Ⓢ : COUNTER CLOCKWISE TRANSFORMER
- CPT : CONTROL POWER TRANSFORMER
- Ⓢ : RED INDICATING LIGHT
- Ⓢ : GREEN INDICATING LIGHT
- SS : SELECTOR SWITCH (LOCAL-OFF-REMOTE)
- PB1 : OPEN PUSHBUTTON
- PB2 : STOP PUSHBUTTON
- PB3 : CLOSE PUSHBUTTON
- Ⓢ : LIMIT SWITCH NORMALLY OPEN
- Ⓢ : LIMIT SWITCH HELD CLOSED
- Ⓢ : TORQUE SWITCH NORMALLY CLOSED
- MTC : MOTOR THERMAL CONTACTS
- HTR : SPACE HEATER
- CAP : CAPACITOR
- FS1 : FUSE 250mA 600V
- FS2 : FUSE 250mA 600V
- FS3 : FUSE 1A 250V
- FS4 : FUSE 1A 250V
- CR1 : CCW RELAY
- CR2 : CW RELAY
- CR3 : STOP RELAY (LOCKOUT)
- PD : PHASE DETECTOR
- D : DIODE
- R : RESISTOR
- Ⓢ : CPU POWER SUPPLY COMMON
- Ⓢ : GROUNDING LUG

## Physical Arrangement

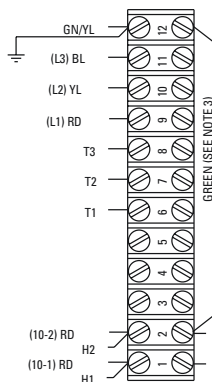
### Electrical Compartment



## Gear Limit Switch 8 SPDT Contacts



## Terminal Strip



# Wiring Diagram for LY Single-Phase with UEC-3

## Schematic

### Valve Shown In Full CCW Position

— OPEN CONTACT    ■ CLOSE CONTACT

SWITCH NUMBER	LIMIT SWITCH CONTACT DEVELOPMENT			FUNCTION
	FULLY CCW	A	B	
2	■	—	—	CCW LIMIT
3	—	■	—	NOT USED
4	—	—	■	NOT USED
5	—	—	—	NOT USED
6	—	■	—	CCW LIMIT
7	—	—	■	NOT USED
8	—	—	—	NOT USED
9	—	—	—	TIMER LIMIT

ALL LIMIT SWITCH TRIP POINTS ARE FULLY ADJUSTABLE

- 17 CW TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CW CYCLE
- 18 CCW TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURING CCW CYCLE

## Notes

- REMOVE LINK LK1 ON INTERCONNECT/FIELD NETWORK BOARD TO ENABLE LOCKOUT FUNCTION.
- IF GROUNDED CONTROL CIRCUIT IS UNDESIRED, USER MAY REMOVE JUMPER ON TERMINAL STRIP FROM TERMINAL POINT 2 TO 12.
- DO NOT CONNECT ANALOG INPUTS COMMON TO ANALOG OUTPUT COMMON. NOT FOR FIELD UNIT CONTROL.
- FOR FEATURE SELECTION REFER TO INSTRUCTION AND MAINTENANCE MANUAL.
- CCW (COUNTER CLOCKWISE/ANTI-CLOCKWISE) OR CW (CLOCKWISE) ROTATION IS DEFINED AS THE ROTATION OF THE OUTPUT SHAFT AS VIEWED FROM TOP OF ACTUATED DEVICE.

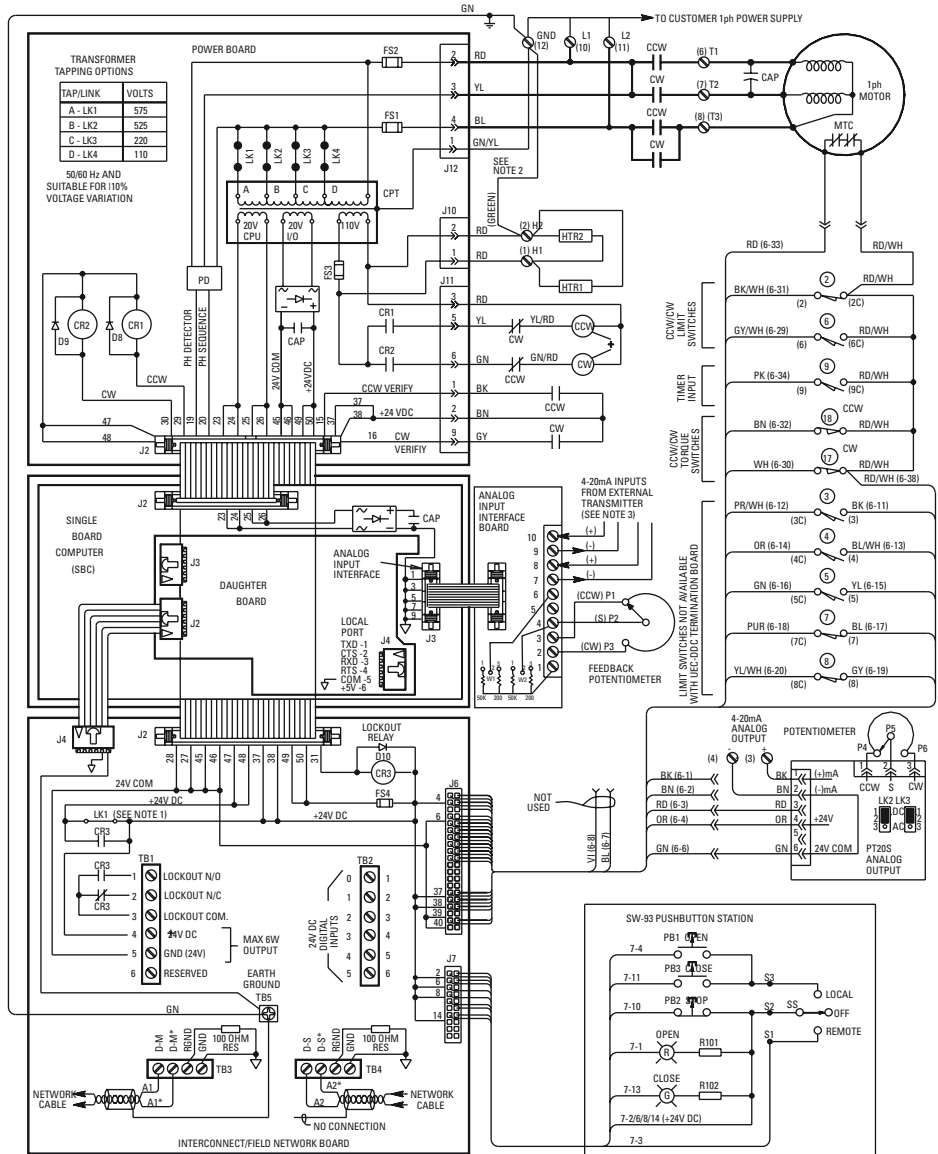
## Legend

- CCW : COUNTER (ANTI) CLOCKWISE CONTACT
- CW : COUNTER CLOCKWISE CONTACT
- (CW) : COUNTER (ANTI) CLOCKWISE COIL
- + : MECHANICAL INTERLOCK
- (CW) : COUNTER CLOCKWISE COIL
- CPT : CONTROL POWER TRANSFORMER
- (R) : RED INDICATING LIGHT
- (G) : GREEN INDICATING LIGHT
- SS : SELECTOR SWITCH (LOCAL-OFF-REMOTE)
- PB1 : OPEN PUSHBUTTON
- PB2 : STOP PUSHBUTTON
- PB3 : CLOSE PUSHBUTTON
- : LIMIT SWITCH NORMALLY OPEN
- : LIMIT SWITCH NORMALLY CLOSED
- : TORQUE SWITCH NORMALLY CLOSED

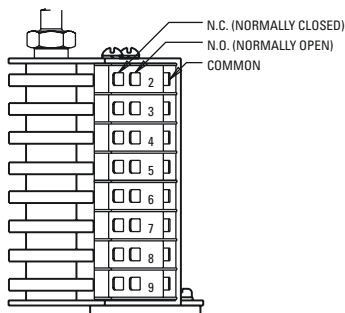
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- ∇ : CPU POWER SUPPLY COMMON
- ⊥ : GROUNDING LUG

## Physical Arrangement

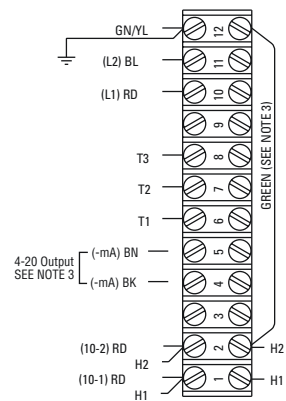
### Electrical Compartment



## Gear Limit Switch 8 SPDT Contacts



## Terminal Strip



# Limitorque

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