

## **INTRODUCTION**

The LEJ/LEJA series circuit breaker meets the evolving demand for the high performance protection of critical data center and telecommunications applications requiring 240VAC per pole, UL 489 listing in the smallest case size currently available in the marketplace. The LEJ/LEJA platform is based on the highly successful and field proven LEG/LEGA designs while incorporating state-of-the-art arc quenching technologies and offering voltage ratings that are well suited for global applications that require 208VAC through 240VAC ratings for increased power efficiency.

Typical applications include power distribution units (PDUs) used in data center enclosures, telecom AC power supplies and a variety of Industrial applications benefiting from the higher power density. Like the LEG/LEGA product family, the LEJ/LEJA series offers a variety of features including different terminations and actuators to meet most any requirements.

## **FEATURES**

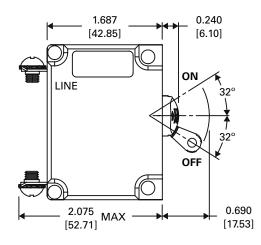
- Up to two poles, 2 amps to 20 amps rated current at 240VAC per pole
- UL 489 listed and TÜV approvals available
- 5000AIC short circuit amperage rating
- Low Depth "A" option provides a 31% lower depth compared to standard LEJ product
- Maintains the high performance characteristics, reliability, panel cut out and mounting dimensions of LEG/LEGA products

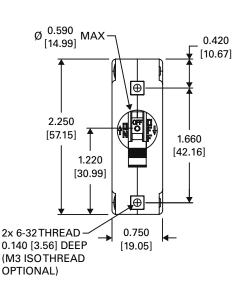
## **SPECIFICATIONS**

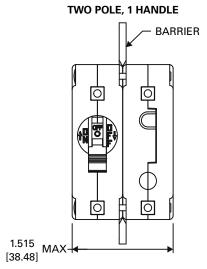
Agency Certification	Rated Amperage	Maximum Voltage	Short Circuit Amperage		
UL 489	2 to 20 amps	240 VAC, 50/60 Hz	5000		
TÜV (EN60947-2)	2 to 20 amps	240 VAC, 50/60 Hz	5000		

## **CONFIGURATIONS: LEJ TOGGLE HANDLE**

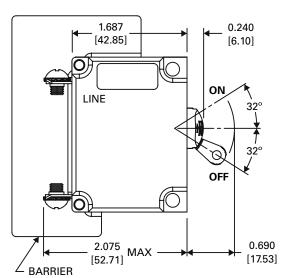
#### SINGLE POLE



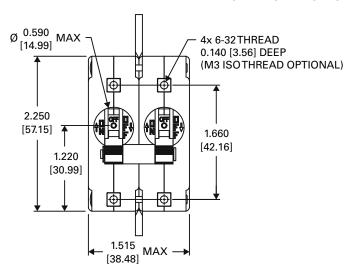




OPTIONAL, HANDLE MAY BE IN POLE 1 INSTEAD OF POLE 2

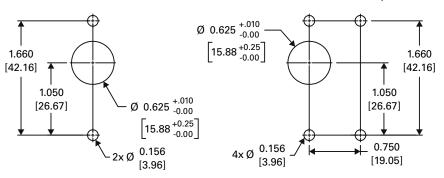


**TWO POLE, 2 HANDLE** 

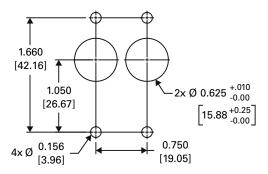


#### PANEL MOUNT CUTOUT - 1 POLE

#### PANEL MOUNT CUTOUT - 2 POLE, 1 HANDLE



#### PANEL MOUNT CUTOUT - 2 POLE, 2 HANDLE

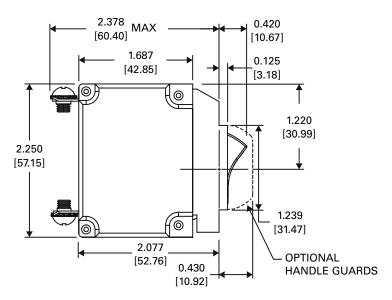


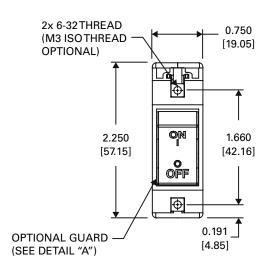
- All mounting inserts shall be utilized when panel mounting circuit breakers. Panel mounting screws shall have recommended torque applied: 6/32 mounting inserts 6 - 8 inch pounds. M3 mounting inserts 4 - 5 inch pounds.
- 2. Panel mounting screws shall not extend beyond back of mounting panel more than specified mounting insert depth.
- 3. Mounting detail tolerance: ± 0.005 [0.13] unless noted.



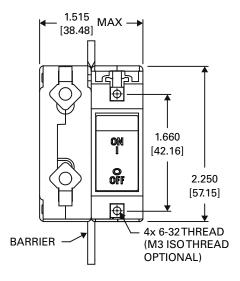
## **CONFIGURATIONS: LEJZX ROCKER HANDLE**

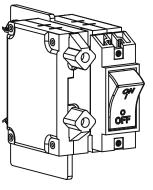
#### SINGLE POLE



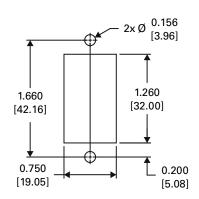


#### **TWO POLE**





OPTIONAL, HANDLE MAY BE IN POLE 2 INSTEAD OF POLE 1



**PANEL MOUNT CUTOUT - 1 or 2 POLE** 

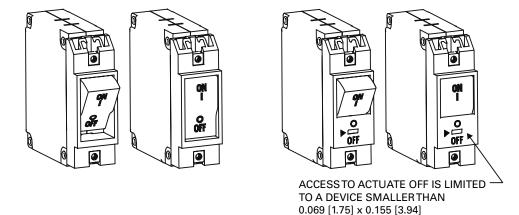
- All mounting inserts shall be utilized when panel mounting circuit breakers. Panel mounting screws shall have recommended torque applied: 6/32 mounting inserts 6 - 8 inch pounds. M3 mounting inserts 4 - 5 inch pounds.
- 2. Panel mounting screws shall not extend beyond back of mounting panel more than specified mounting insert depth.
- 3. Mounting detail tolerance:  $\pm 0.005$  [0.13] unless noted.
- 4. Two pole ZX has standoffs (as shown). It uses 2 panel screws. A higher shock capability (4 panel screws) is available (consult factory).

## **CONFIGURATIONS: LEJBX ROCKER HANDLE**

#### **TWO POLE SINGLE POLE** 2.470 0.387 MAX 1.515 [62.74][9.83]MAX -[38.48] 1.687 0.750 0.125 [42.85] [3.18] [19.05] 2x 6-32 THREAD (M3 ISOTHREAD (⊚ OPTIONAL) Ф $|\oplus|$ $\oplus$ 1.220 [30.99] 2.250 ON on I 2.250 [57.15] 1.660 [57.15] O OFF [42.16] OFF LINE $\oplus$ $\Phi$ 1.239 $\oplus$ ′⊚ [31.47] 0.191 2.000 **BARRIER** [4.85] [50.80] OPTIONAL, HANDLE MAY BE **BARRIER** IN POLE 2 INSTEAD OF POLE 1

#### **BX HANDLE WITHOUT GUARD**

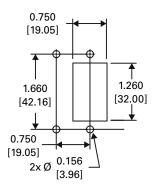
#### **GUARD (LIMITED ACCESS ACTUATE-OFF)**



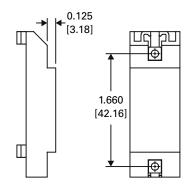
#### **PANEL MOUNT CUTOUT (1 POLE)**

# 0.750 [19.05] 1.660 [42.16] 2x Ø 0.156 [3.96]

#### **PANEL MOUNT CUTOUT (2 POLE)**



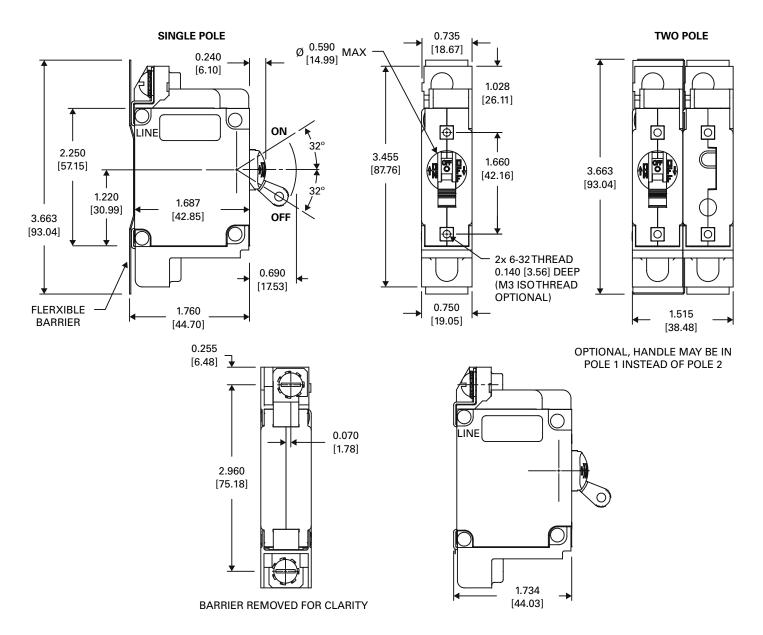
#### PANEL PLUG (CONSULT FACTORY FOR AVAILABILITY)



P/N: 121-710-2450 6-32 THD. (BLACK) P/N: 121-710-2451 M3 THD. (BLACK) P/N: 121-450-3000 6-32 THD. (BLACK) P/N: 121-450-3001 M3 THD. (BLACK)

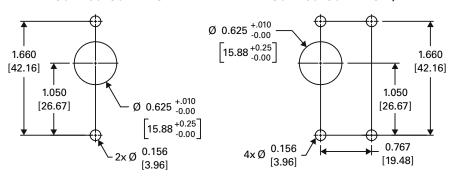


## **CONFIGURATIONS: LEJA, TOGGLE HANDLE**



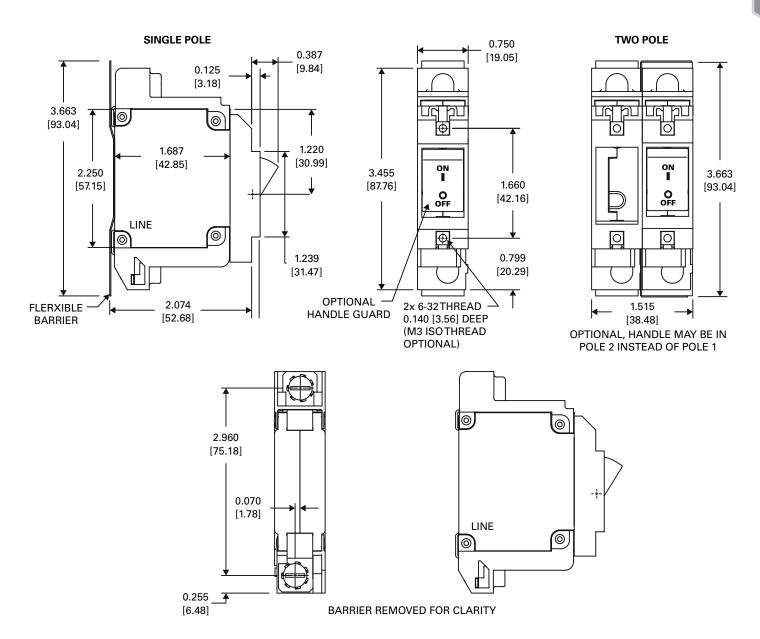
#### **PANEL MOUNT CUTOUT - 1 POLE**

#### PANEL MOUNT CUTOUT - 2 POLE, 1 HANDLE



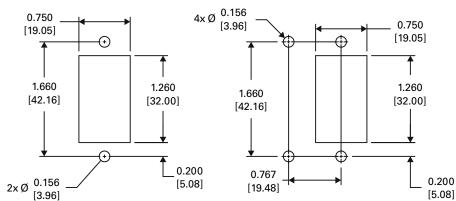
- All mounting inserts shall be utilized when panel mounting circuit breakers. Panel mounting screws shall have recommended torque applied: 6/32 mounting inserts 6 - 8 inch pounds.
   M3 mounting inserts 4 - 5 inch pounds.
- Panel mounting screws shall not extend beyond back of mounting panel more than specified mounting insert depth.
- 3. Mounting detail tolerance: ± 0.005 [0.13] unless noted.

## **CONFIGURATIONS: LEJBXA ROCKER HANDLE**



#### PANEL MOUNT CUTOUT - 1 POLE

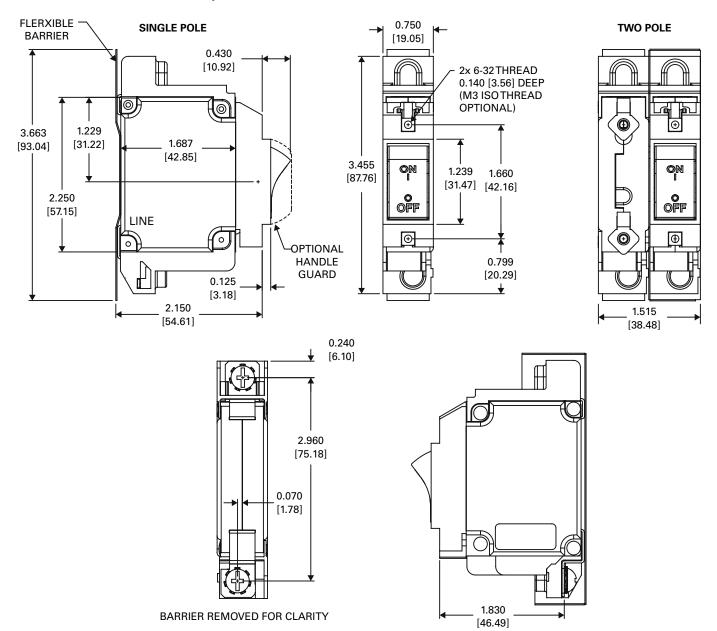
#### **PANEL MOUNT CUTOUT - 2 POLE**



- All mounting inserts shall be utilized when panel mounting circuit breakers. Panel mounting screws shall have recommended torque applied: 6/32 mounting inserts 6 - 8 inch pounds. M3 mounting inserts 4 - 5 inch pounds.
- Panel mounting screws shall not extend beyond back of mounting panel more than specified mounting insert depth.
- 3. Mounting detail tolerance: ± 0.005 [0.13] unless noted.

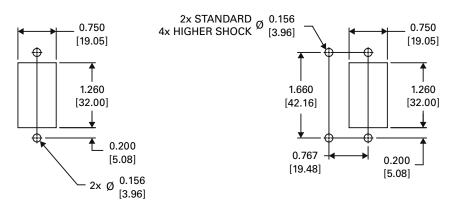


## **CONFIGURATIONS: LEJZXA, ROCKER HANDLE**



#### **PANEL MOUNT CUTOUT - 1 POLE**

#### **PANEL MOUNT CUTOUT - 2 POLE**



- All mounting inserts shall be utilized when panel mounting circuit breakers. Panel mounting screws shall have recommended torque applied: 6/32 mounting inserts 6 8 inch pounds.

  M3 mounting inserts 4 5 inch pounds.
- Panel mounting screws shall not extend beyond back of mounting panel more than specified mounting insert depth.
- mounting insert depth.

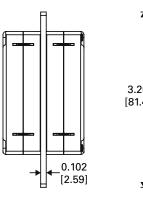
  Mounting detail tolerance:
  ± 0.005 [0.13] unless noted.

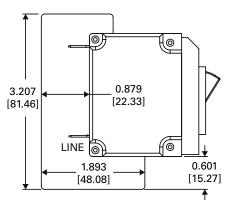
## **BARRIER OPTIONS FOR MULTI-POLE UNITS**

#### STANDARD BARRIER - TOGGLE HANDLE

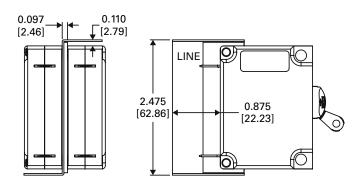
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#### STANDARD BARRIER - ZX & BX HANDLE

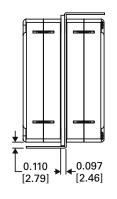


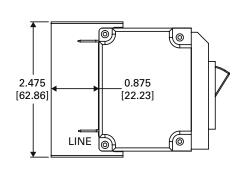


#### **OPTIONAL (-Z) BARRIER - TOGGLE HANDLE**



#### **OPTIONAL (-Z) BARRIER - ZX & BX HANDLE**

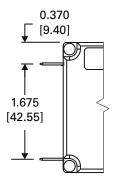


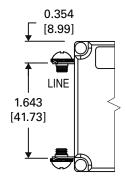




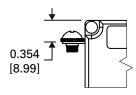
## **TERMINAL OPTIONS**

#### STANDARD - QUICK CONNECT & SCREW TERMINALS





#### **OPTIONAL - FLAT BUS CONNECT SCREW TERMINAL**



#### NOTES:

#### 1. Terminals:

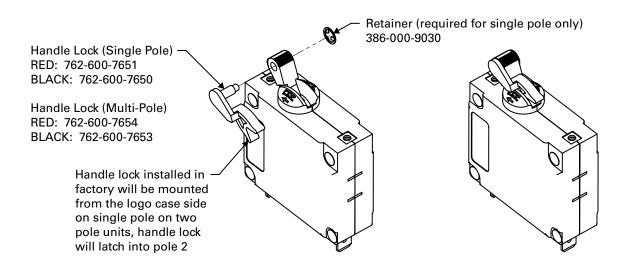
Quick Connect = 0.250 [6.35] wide x 0.031 [0.79] thick

Screw = 10-32 or M5 x 0.8

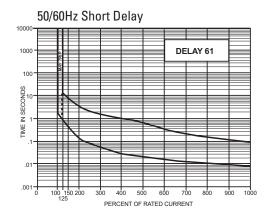
TÜV approval with screw terminals include external tooth lockwashers

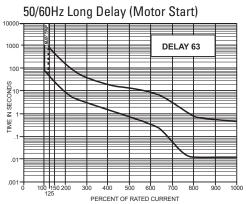
## **OPTIONAL HANDLE LOCK FOR TOGGLE HANDLE**

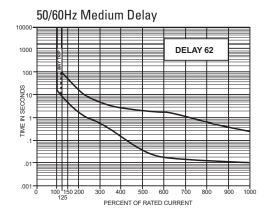
A handle lock option is available to prevent accidental actuation of the handle. The handle lock may be used in the ON or OFF position. This option is available pre-assembled or seperately. Consult factory for ordering information.

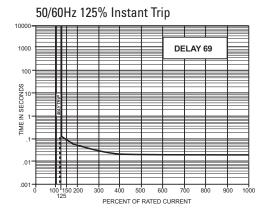


## **DELAY CURVES**









## PERCENTAGE OF RATED CURRENT VS TRIP TIME IN SECONDS

Delay 100%		125%	150%	200%	400%	600%	800%	1000%	
61	61 No Trip .700 to 12 .35 to 7.0				.030 to 1	.015 to .3	.01 to .15	.008 to .1	
62	No Trip	10 to 120	6 to 60	2 to 20	.2 to 3.0	.015 to 2	.015 to .8	.01 to .25	
63	63 No Trip 50 to 700 30 to 400		10 to 150	1.5 to 20	.015 to 10	.013 to .85	.013 to .5		
69	No Trip	0.120 max	0.100 max	0.050 max	0.022 max	0.017 max	0.017 max	0.017 max	

## **INRUSH PULSE TOLERANCE**

Delay	Pulse Tolerance
61, 62, 63	10 times rated current (approx)

The table above provides a comparison of inrush pulse tolerance for each of the 50/60Hz delays. Pulse tolerance is defined as a single pulse of half sine wave peak current amplitude of 8 milliseconds duration that will not trip the circuit breaker. Consult Sensata Technologies for further assistance.

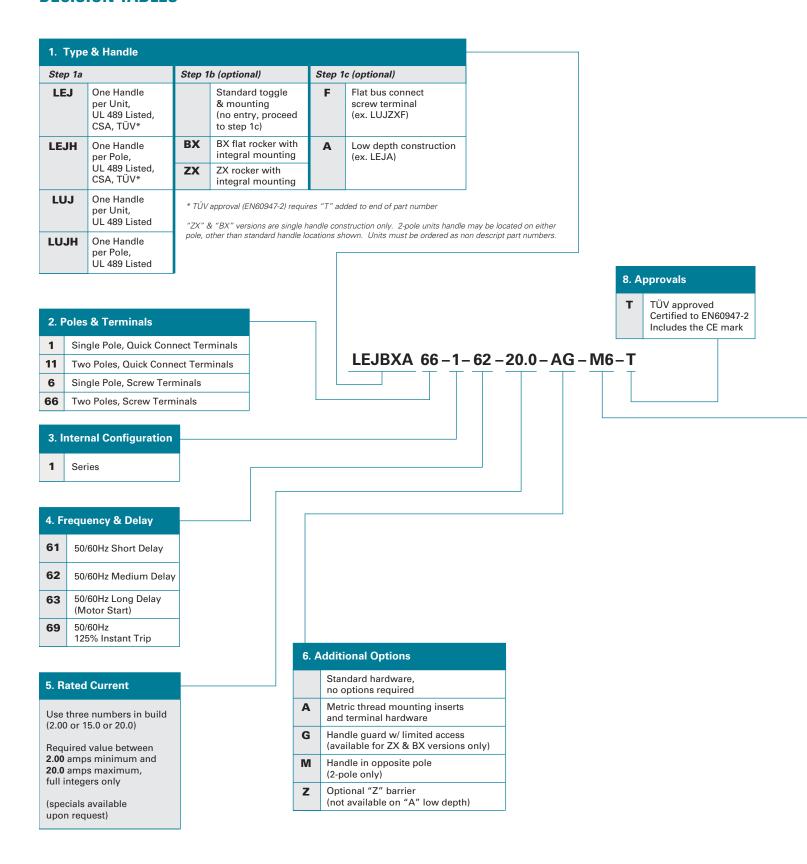
## **TYPICAL RESISTANCE / IMPEDANCE**

Current		Impedance	
Ratings	AC, 50/60Hz (ohms)	DCR a.	
(Amps)		61, 62, 63, 69	stabiliz
	2.00	0.29	hour. ± 20%:
	5.00	0.051	Consu
	10.0	0.016	values of dela
	20.0	0.006	

DCR and Impedance based on 100% rated current applied and stabilized for a minimum of one hour. Tolerance .05-2.5 amperes ± 20%: 2.6 -20 amperes ± 25%. Consult factory for special values and for coil impedance of delays not shown.



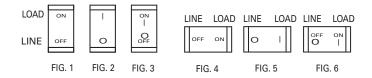
## **DECISION TABLES**



7. Handle	Colors, lı	ndicators &	Markings								
Toggle Hai	ndle										
Unmarked	Marked ON - OFF I - O	Handle Color	Unmarked	Marked ON - OFF I - O	Handle Color	Unmarke	d Marked ON - OFF I - O	Handle Color	Unmarked	Marked ON - OFF I - O	Handle Color
- 00	- 01	Black	- 10	- 11	Yellow	- 20	- 21	Red	- 30	- 31	Blue
- 40	- 41	Green	- 60	- 61	Orange	- 90	- 91	White			
ZX Rocker	Handle (Tv	vo-Color Roc	ker, Marking De	tail "A")							
Vertical Mod ON - OFF (fig 1)		tical Mount I - O (fig 2)	Vertical Mount ON - OFF I - O (fig 3)	Horizontal Moun ON - OFF (fig 4)		ital Mount - O iig 5)	Horizontal Mount ON - OFF I - O (fig 6)	Handle Color	Indicating Color	Marking Color	Indicates
- F1		- F2	- F3	- F4	-	F5	- <b>F</b> 6	Black	White	White	OFF
- G1		- G2	- G3	- G4	-	G5	- <b>G</b> 6	Black	Red	White	OFF
BX Rocker Handle (Two-Color Rocker, Marking Detail "A")											
Vertical Mod ON - OFF (fig 1)		tical Mount I - O (fig 2)	Vertical Mount ON - OFF I - O (fig 3)	Horizontal Moun ON - OFF (fig 4)		ital Mount - O iig 5)	Horizontal Mount ON - OFF I - O (fig 6)	Handle Color	Indicating Color	Marking Color	Indicate
-		- M2	- M3	-		-	- M6	Black	White	White	OFF
_		- N2	- N3	_		_	- N6	Black	Red	Red	OFF

For BX: Bezel of BX is black. BX markings are same color as indicating color. Consult factory for other marking options. For ZX: Black, red, blue and green handles have white marking. White, yellow and orange handles have black marking.

Note, these are just a few of the options/orientations/colors available, please consult the factory for additional information.



MARKING DETAIL "A"

NOTE: "ON" actuates towards the "up" and "right" direction