



Ficha Técnica

MXTR

Estamos comprometidos con nuestros clientes para darles el mejor servicio.

Somos una empresa 100% Mexicana especializada en el manejo de fluidos a nivel industrial, en el cuál nos entregamos con responsabilidad y disciplina a nuestros clientes para proveerlos de productos de primera calidad en el tiempo y forma que lo requieran.



SIINPRO
SINERGIA INDUSTRIAL DE PROCESOS SA DE CV



NUESTROS PRODUCTOS



VÁLVULAS DE BOLA

Válvulas de bola, conexión roscada y bridada, inoxidable 316.



VÁLVULAS DE MARIPOSA

Válvulas de mariposa tipo Wafer y Lug, Montaje Directo ISO-5211, brida universal ANSI.



ACTUADORES ELÉCTRICOS

Actuadores eléctricos de ON-OFF y modulantes y multivueltas.



ACTUADORES NEUMÁTICOS

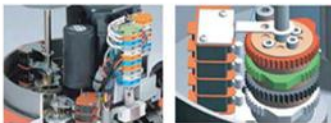
Actuadores neumáticos simple y doble acción, junto con todos sus accesorios



ACTUADOR ELÉCTRICO MXTR

FEATURES

- Enclosure
 - Power Supply
 - Control Power Supply
 - OutY Cycle (Modulating)
 - Motor
 - Limit Switch es
 - Additional Limit Switch es
 - Torque Switches
 - Stall Protection/Operating Temp'
 - Travel angle
 - Indicator
 - ManualOverride
 - Sell Locking
 - Mechanical Stopper
 - Space Heater
 - Cable Entries
 - Materials
 - Ambient Temperature
- Weatherproof Enclosure IP67, NEMA 4 ANO 6
 110/220 AC 1PH,380/440V AC 3PH 50/60 Hz, + 10%
 110/220V AC 1PH,50/60 Hz, + 10%
 S2, 100 'lo Max 30 Min
 S4, 70% Max 300-1600 Star/Hour
 Open/Close, SPDT,250V AC 16A Rating
 Open/Close,SPDT,250V AC 16A Rating (Except MXTR-008/01 0
 Open/Close, SPDT,250V AC 16A Rating (Except MXTR-008/01 0
 Bullt-in Thermal Protection,Open 150°C+5°C/Close 97°C+
 15°C
 90° + 10° (0-110°)
 Contunuous Position Indicator
 Declutching Mechanism
 Provided by Double worm Gearing
 2 X External Adjustable Screws
 10W(110/220V AC) Anti-Condensation
 Three PF3/4" Tap (Standard Type Only)
 Steel, Aluminium Alloy, Al Bronze, Polycarbonate



(Standard cam) (Cam block)

- 2 travel limit switches for operation
- 2 auxiliary limit switches as dry contact for customer usage
- Easy setting from upside by two screws for tight lockup
- Each cam be set independently



Proportional Control Unit (PCU)

- Input signal range : 0-10VDC, 1-5VDC, 4-20mA, 20-4mA
- Output signal range : 4-20mA, 0-10VDC
- Adjustable range : Zero 8mA, Open 16mA
- Position conversion accuracy : ±0.5-1.5%(depends on installation)



(D-Type cam)



Potentiometer Kit (PIU)

- 0-1K ohm(±0.5%), high resolution



Fire Proofing Actuator (FPA)



Rechargeable Battery Backup



ACTUADOR ELÉCTRICO

MXTR

PERFORMANCE

MXTR MODEL	Maximum output torque	Operating time(sec.) 60/50Hz	Maximum bore size	Motor class F power(W) 60Hz/50Hz		Rated current(A) 60Hz/50Hz				Duty cycle IEC 34-1	Number of handle turn	Weight
				1 Phase	3 Phase	1 Phase		3 Phase				
	Kg-m	90°	mm	1 Phase	3 Phase	110V	220V	380V	440V	S4(%)	N	Kg
MXTR-008	8	13/16	φ20	106/103	N/A	1.00/0.97	0.45/0.45	N/A	N/A	70	10	7.4
MXTR-010	10	16/20	φ20	106/103	N/A	1.00/0.97	0.47/0.45	N/A	N/A	70	10	7.4
MXTR-015	15	21/25	φ22	185/166	112/216	1.70/1.50	0.84/0.73	0.28/0.37	0.36/0.59	70	11	16.6
MXTR-020	20	21/25	φ22	185/166	112/216	1.70/1.50	0.84/0.73	0.28/0.37	0.36/0.59	70	11	16.6
MXTR-030	30	26/31	φ35	177/148	130/171	1.67/1.37	0.81/0.68	0.27/0.33	0.34/0.55	70	13.5	22
MXTR-050	50	26/31	φ35	390/410	184/236	3.56/4.27	1.30/1.40	0.42/0.51	0.47/0.66	70	13.5	23
MXTR-060	60	26/31	φ35	390/410	184/236	3.56/4.27	1.30/1.40	0.42/0.51	0.47/0.66	70	13.5	23
MXTR-080	80	31/37	φ45	483/389	312/427	4.93/3.59	2.20/1.80	0.61/0.83	0.67/1.10	70	16.5	29
MXTR-120	120	31/37	φ45	483/389	312/427	4.93/3.59	2.20/1.80	0.61/0.83	0.67/1.10	70	16.5	29
MXTR-200	200	93/112	φ65	483/389	312/427	4.93/3.59	2.20/1.80	0.61/0.83	0.67/1.10	70	49.5	75
MXTR-300	300	93/112	φ65	483/389	312/427	4.93/3.59	2.20/1.80	0.61/0.83	0.67/1.10	70	49.5	75

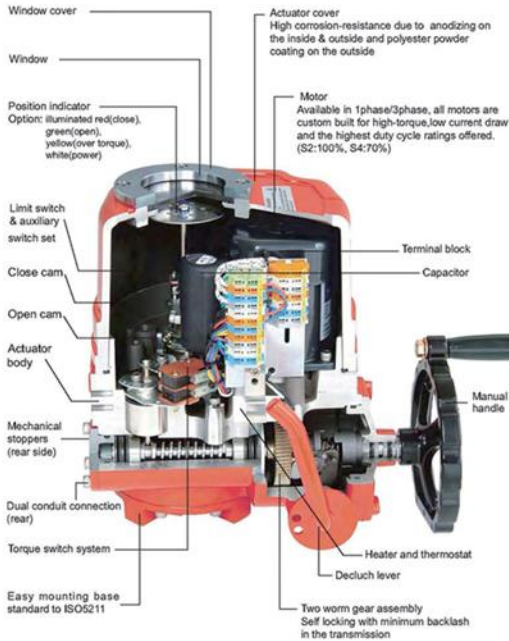
OPTION SPECIFICATION

EXA	Explosionproof Enclosure Actuator (E exd II B T4)	Series MXTR
WTA	Watertight Enclosure Actuator (IP68 10 M 72 HR)	Series MXTR
PIU	Potentiometer Unit (0-1 k°)	Series MXTR
PCU	Proportional Control Unit (Input,Output 0-10V DC, 4-20 mA DC)	Series MXTR
ATS	Additional Torque Switches (SPDT x 2EA 250V AC 10A Rating)	Except MXTR-008/010
LCU-B	Inegral Control (LCU + IMS + PHASE Protect Indicator)	Except MXTR-008/011
LCU-C	Digital Display Control (LCU + IMS + Auto Phase Discriminator)	Except MXTR-008/012
CPT	Current Position Transmitter (Output 4-20 mA DC)	Series MXTR
EXT	Extension 120°,180°,270° Turn	Except MXTR-200,300
RBP	Rechargeable Battery Backup	MXTR-008/010,015,020,030
DCM	DC Motor (24 V DC)	MXTR-008/010,015,020,031
ADCM	Multi AC/DC 24V (integral)	MXTR-008/010,015,020,032
LPA	Lever Plate Actuator	MXTR-008/010,015,020,033
SLU	Signal Lamp Unit (White-Power on, Red-Open, Green-Close, Yellow-Over Torque)	MXTR-008/010,015,020,034
FPA-1	Fire Proofing Actuator 1050 ± 5°C / 50 min	Engineering Consult in Advance
FPA-2	Fire Proofing Actuator 250 ± 5°C / 150 min	Engineering Consult in Advance



ACTUADOR ELÉCTRICO MXTR

CONSTRUCTION



DIMENSION

MODEL	Base/ISO5211	A	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	X	Y	Z
MXTR-008	φ C	M8	20	88	3	32	50	157	51	100	70	182	53	40	60	120	-	-	258	170	235
MXTR-010	φ 70	M8	20	88	3	32	50	157	51	100	70	182	53	40	60	120	-	-	258	170	235
MXTR-015	φ 70	M8/M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	338	229	268
MXTR-020	φ 70/φ 102	M8/M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	338	229	268
MXTR-030	φ 70/φ 102	M8/M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	338	229	268
MXTR-050	φ 102/φ 125	M10/M12	35	148	3	49	82	221	65	160	99	221	69	65	78	180	-	-	368	259	290
MXTR-060	φ 102/φ 125	M10/M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	-	-	368	259	304
MXTR-080	φ 125/φ 140	M12/M16	45	178	3	57	103	242	65	186	111	256	74	78	110	210	-	-	410	297	330
MXTR-120	φ 125/φ 140	M12/M16	45	178	3	57	103	242	65	186	111	256	74	78	110	210	-	-	410	297	330
MXTR-200	φ 140/φ 165	M16/M20	65	245	5	90	103	242	65	186	133	256	74	78	110	210	233	133	410	319	563
MXTR-300	φ 140/φ 165	M16/M20	65	245	5	90	103	242	65	186	133	256	74	78	110	210	233	133	410	319	563

STANDARD CONFIGURATION



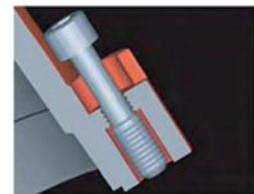
Terminal Block

- Enough number of terminal strips for customer's convenience.
- Proven reliability and tight wiring connection.
- Stripped length: 8-9 mm / 0.33in (2.5 mm²)
- Terminal dimension: 10X22X32mm.



Heater

- Ceramic housing with thermostat to prevent over heat comparing with set temperature.
- No risk of electricity leakage.



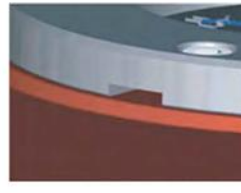
Captive cover bolt

- Cover bolts are specially designed to prevent losing it during maintenance or installation.
- All external bolts are stainless steel for rust prevention.



Indicator sustained by spring

- Direction of visual indicator is set by factory.
- In case of changing it's direction, just grip the indicator plate and change the position.
- Spring beneath indicator plate sustains the set position unchanged.
- No need to loose screw and thight it again at all!



Slot on window cover for draining rainwater

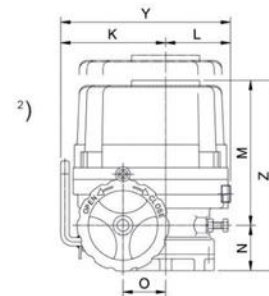
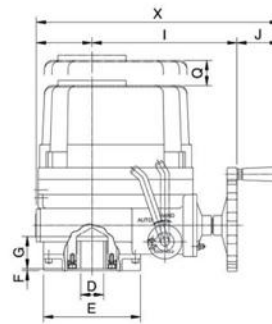
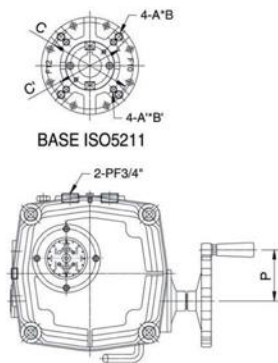
- Rainwater inside of window cover may affect the sealing of window.
- To prevent this, drain sluit is useful to prevent this effect.



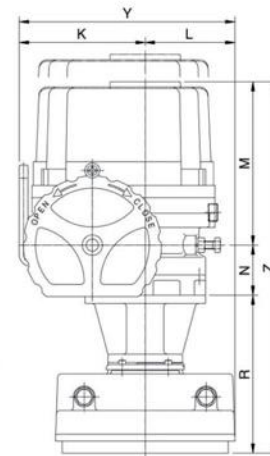
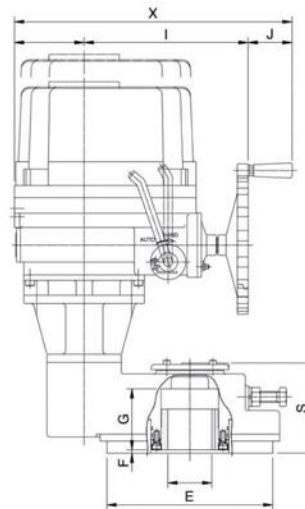
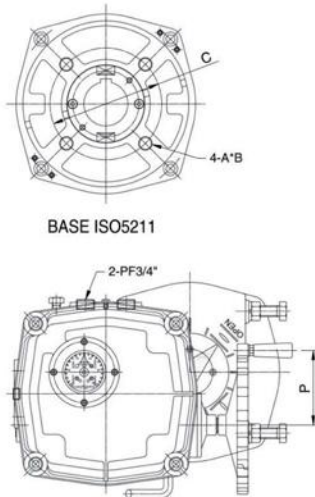
ACTUADOR ELÉCTRICO MXTR

DIMENSIONAL DRAWING

MXTR-008, MXTR-010, MXTR-015, MXTR-020, MXTR-030, MXTR-060, MXTR-080, MXTR-120



MXTR-200, MXTR-300

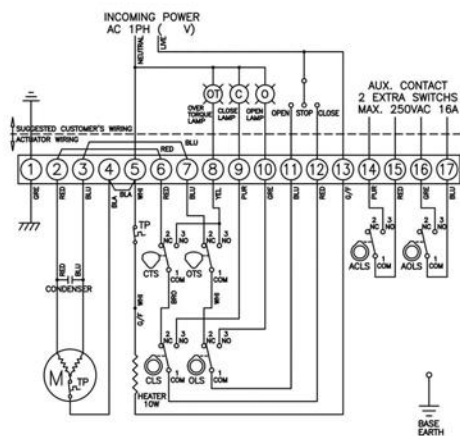




ACTUADOR ELÉCTRICO MXTR

DIMENSIONAL DRAWING

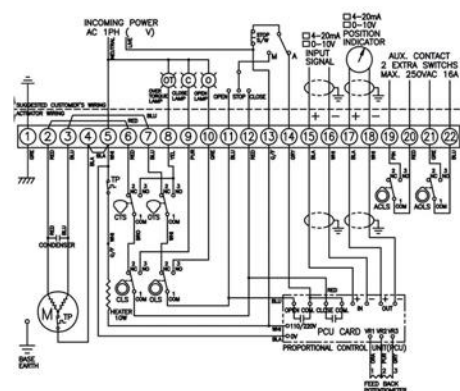
STANDARD TYPE (1- PHASE, 50/60HZ)



TORQUE AND LIMIT SWITCH OPERATION			
SWITCH	CLOSE	INTERMEDIATE	OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			
CTS 1-3 * CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE OTS 1-3 * OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE			
SYMBOL	DESCRIPTION	RATING	
CLS	CLOSE LIMIT SWITCH	250VAC	10A
OLS	OPEN LIMIT SWITCH	250VAC	10A
CTS	CLOSE TORQUE SWITCH	250VAC	10A
OTS	OPEN TORQUE SWITCH	250VAC	10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC	16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC	16A
TP	THERMAL PROTECTOR	250VAC	15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH ITS OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

PROPORTIONAL TYPE (1- PHASE, 50/60HZ)



TORQUE AND LIMIT SWITCH OPERATION			
SWITCH	CLOSE	INTERMEDIATE	OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			
CTS 1-3 * CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE OTS 1-3 * OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE			
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OTS	OPEN TORQUE SWITCH	250VAC	10A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC	16A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC	16A
TP	THERMAL PROTECTOR	250VAC	15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH ITS OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.



ACTUADOR ELÉCTRICO MXTR

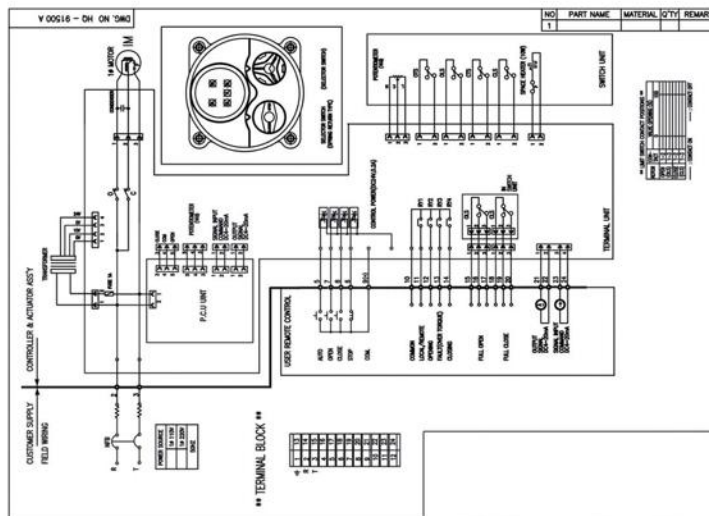
ELECTRIC ACTUATOR LCU-B: INTEGRAL CONTROL

- Light , compact & Integrated design (IMS, local/remote control)
- Wide range of electric power application
- 1 ≠ AC 110-220 V 50/60 HZ
- 3 ≠ AC 220-460V 50/60 HZ
- Phase protect monitoring by LED in case of wrong wiring
- Easy application for MXTR- series actuators
- Various option available (DUTY CYCLE:70%)

LED lamp signal	
White ○	: Power
Blue ●	: Remote
Yellow ●	: Fault
Red ●	: Open/ Opening
Green ●	: Close/ Closing



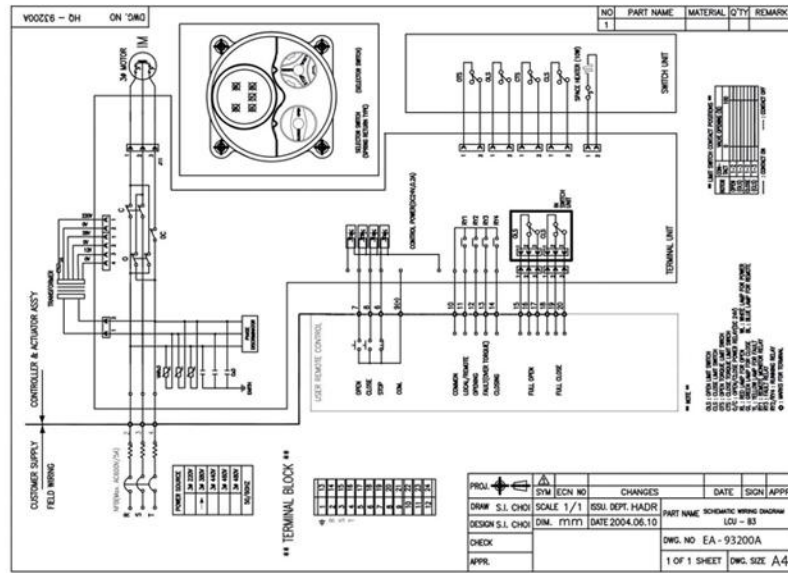
LCU-B WIRING (1-PHASE, 50/60HZ, PROPORTIONAL TYPE)



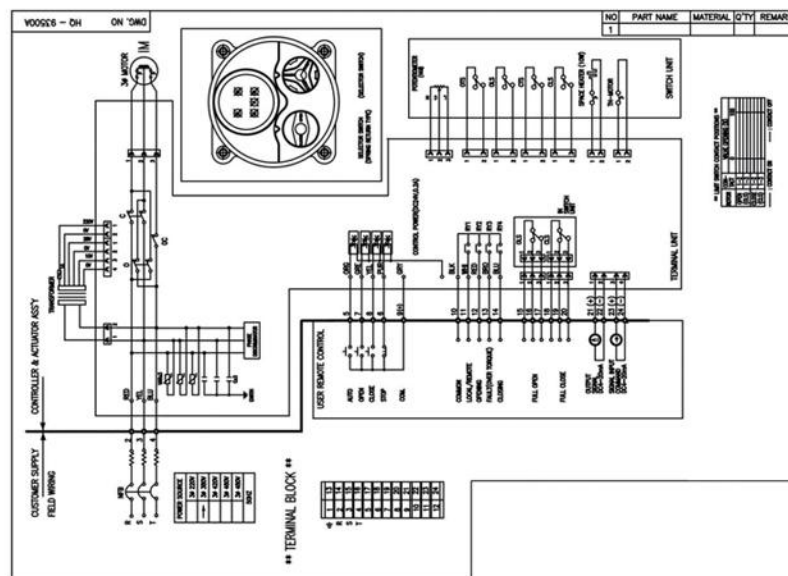


ACTUADOR ELÉCTRICO MXTR

LCU-B WIRING (3-PHASE, 50/60HZ, ON-OFF TYPE)



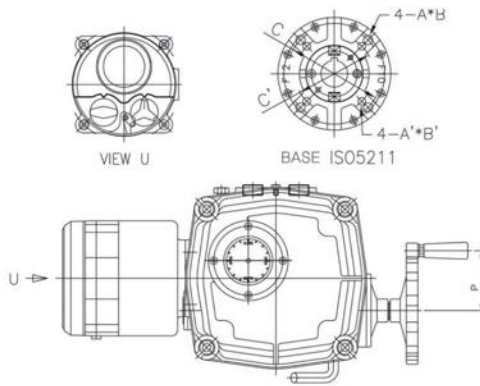
LCU-B WIRING (3-PHASE, 50/60HZ, PROPORTIONAL TYPE)



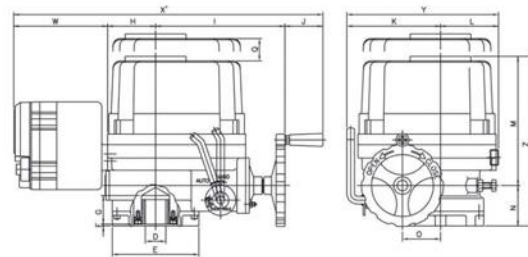


ACTUADOR ELÉCTRICO MXTR

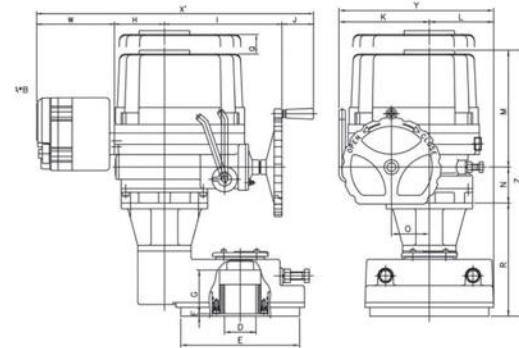
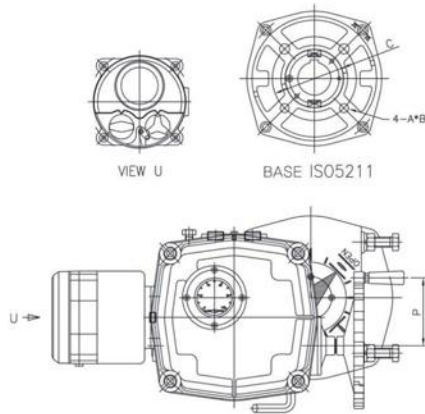
DIMENSIONAL DRAWING (WITH LCU-B)



MXTR015



EA200, EA300



DIMENSION (WITH LCU-B)

MODEL	Base ISO5211		D (max)	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	W	X	Y	Z
	∅C	B																				
MXTR-015	F07F10	M0M0	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	160	498	229	268
	∅70/∅102	1215																				
MXTR-020	F07F10	M0M0	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	160	498	229	268
	∅70/∅102	1215																				
MXTR-030	F10F12	M0M2	35	148	3	49	82	221	65	160	99	221	69	65	78	180	-	-	160	528	259	290
	∅102/∅125	1518																				
MXTR-050	F10F12	M0M2	35	148	3	49	82	221	65	160	99	235	69	65	78	180	-	-	160	528	259	304
	∅102/∅125	1518																				
MXTR-060	F10F12	M0M2	35	148	3	49	82	221	65	160	99	235	69	65	78	180	-	-	160	528	259	304
	∅102/∅125	1518																				
MXTR-080	F12F14	M2M6	45	178	3	57	103	242	65	186	111	256	74	78	10	210	-	-	160	570	297	330
	∅125/∅140	1804																				
MXTR-120	F12F14	M2M6	45	178	3	57	103	242	65	186	111	256	74	78	10	210	-	-	160	570	297	330
	∅125/∅140	1804																				
MXTR-200	F14F16	M6M0	65	245	5	90	103	242	65	186	138	256	74	78	10	210	233	133	160	570	319	563
	∅140/∅165	24790																				
MXTR-300	F14F16	M6M0	65	245	5	90	103	242	65	186	138	256	74	78	10	210	233	133	160	570	319	563
	∅140/∅165	24790																				



ACTUADOR ELÉCTRICO MXTR

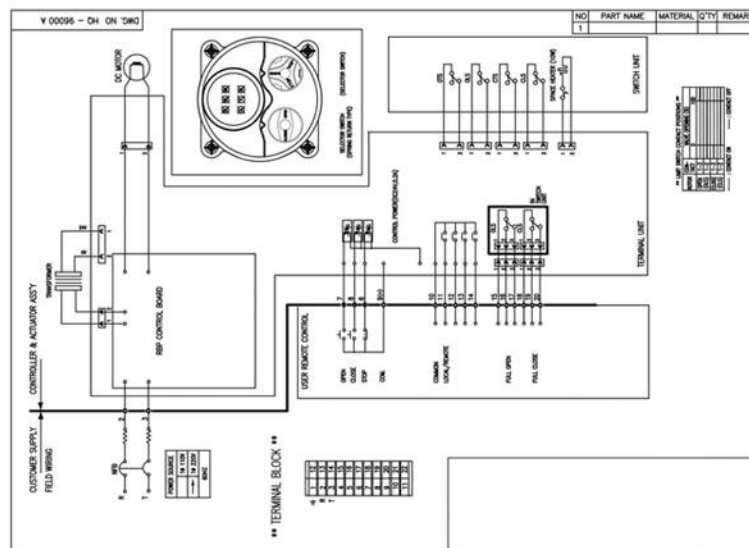
RBP: RECHARGABLE BATTERY BACKUP

- Emergency Application when Power Failed at Site
- 1 Phase Power
- Litium Battery
- Indication of battery Level
- Automatic Recharge
- 5 Times Operation per Hour

LED lamp signal	
White	○ : Power
GBR	● : Battery level
Blue	● : Remote
Yellow	● : Fault
Red	● : Open/ Opening
Green	● : Close/ Closing



LCU-B WIRING (1-PHASE, 50/60HZ, PROPORTIONAL TYPE)





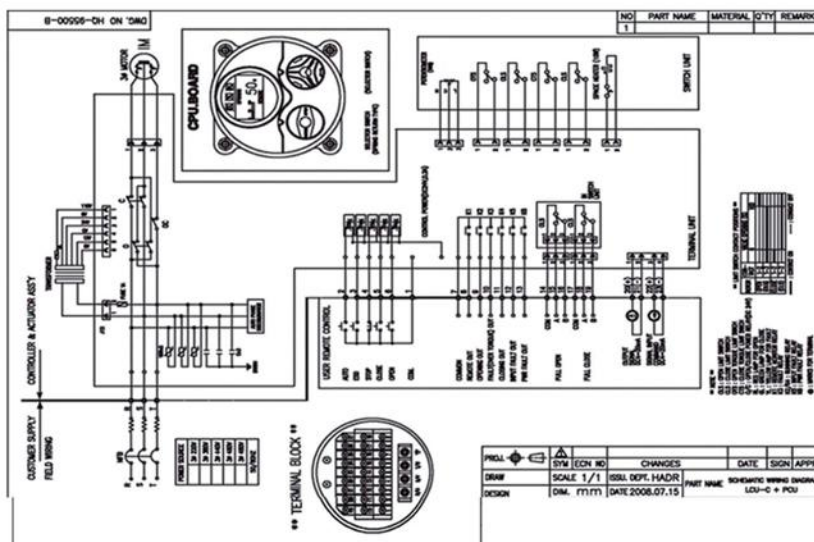
ACTUADOR ELÉCTRICO MXTR

LCU-C: DIGITAL DISPLAY CONTROL

- Light, Compact & Integrated Desing
- Wide Range of Electric Power Application
- (AC 220V - AC460V/3-Phase, No Fuse Break Max.AC600V/5A)
- Built-in auto Phase Discriminator (Easy & Convenient Wiring)
- Digital Indicator with Numer, Bar Graph & Literature
- Seperate Terminal Chamber
- (Realiabe against water, vibration, temp, etc)
- Easy Application For MXTR - Series Actuators
- Various Option Available



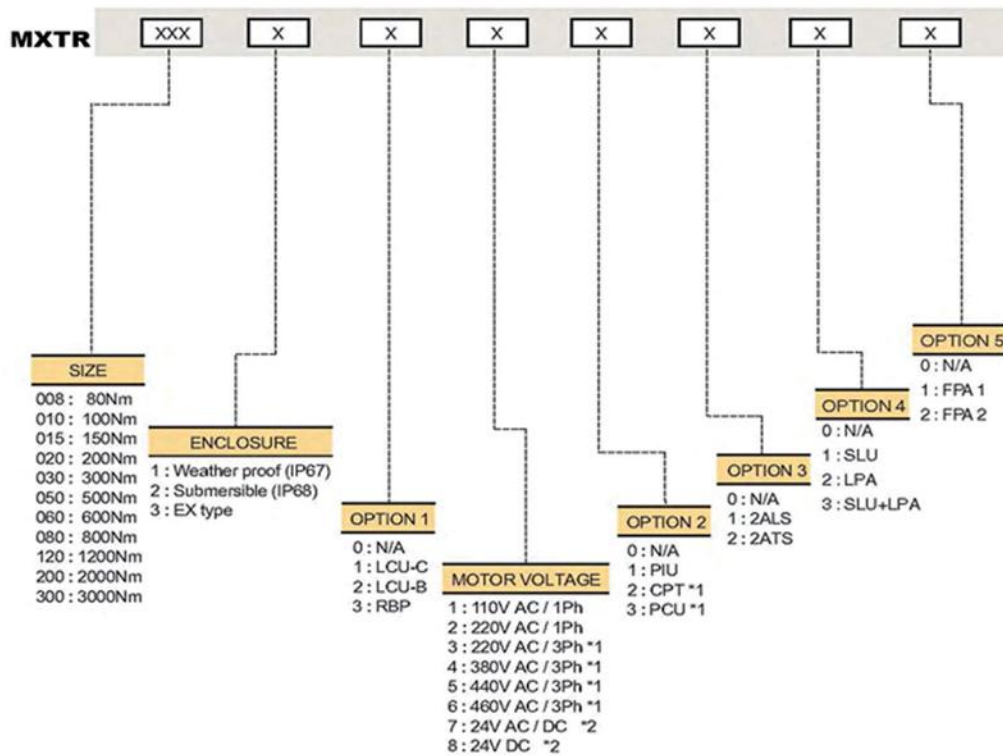
LCU-C WIRING (3-PHASE, 50/60HZ, PROPORTIONAL TYPE)





ACTUADOR ELÉCTRICO MXTR

ELECTRIC ACTUATOR ORDER CODING SYSTEM (EXA: EEX D II B T4)



- Asterisk*1: MXTR-008 Through 010 actuators Shall not be Applied to the above condition
- Asterisk*2: MXTR-050 Through 300 actuators Shall not be Applied to the above condition
- 2ATS/2ALS Shall not be Available for MXTR-008 and for MXTR-015 Through 020 Actuators with PCU
- When LCU-B Option Applied, MXTR-015 Through 300 Actuators shall be Available on the Full Condition of Motor Voltages Except DC 24V.
- When LCU-C Option Applied, MXTR-015 through 300 actuators shall be available on the condition of 220v through 460V 3 phase of
- Voltages and shall not be available whith PIU/CPT
- Option RBP is Available only for MXTR-008 , MXTR-010,MXTR-015,MXTR-020 Y MXTR-030
- More Details Should be Advised to the Manufacturer.