GRDA
GRAND RIVER DAM AUTHORITY

REQUEST FOR QUOTE # 19571

RFQ # 19571
ENG

Quotation Due By: 11/13/2015
Bid Due Time: 10:00:00 AM

REPLY TO:

Samantha E. Prince
PURCHASING DEPARTMENT
Grand River Dam Authority
226 W DWAIN WILLIS AVE
PO BOX 409
VINITA OK 74301

PHONE: 918-256-0638
FAX: 918-256-1051
EMAIL: sprince@grda.com

VENDOR INFO: VENDOR #: 99999.00

NAME: _____
CONTACT: _____
ADDRESS 1: _____
ADDRESS 2: _____
CITY: _____ STATE: _____ ZIP: _____
EMAIL: _____
PHONE: _____ FAX: _____

NOTE:

1.The bid opening date for this RFQ is November 13, 2015 at 10:00 a.m. CT.

2.A completed non-collusion certificate is required and must be submitted with your bid.

3.This form must be signed by an authorized representative of your company in the space provided in the lower right hand corner of this form.

4.The award to the successful bidder will be based on the lowest and best bid received that meets the specifications listed below and the requirements herein. Preference may be given to E-pay vendors if analysis estimates that such appears to result in a lower cost to GRDA.

5.This RFQ is for sole brand or no sub items and only the brand name, model, and part number(s) will be accepted for any items listed below that include the designation sole brand or no sub.

6.GRDA will take into consideration past performance and ability to meet delivery deadlines in the evaluation.

Bidders should list the cost to provide these units by

1) December 1, 2015

2) By the bidder's optimum delivery date.

Bidders should specify their optimum delivery date in their bid response.

****** Read the General Bidding Instructions attached to this RFQ for further instructions.******

GRDA Visa Payment
GRDA provides a Visa payment program which invoices payment by a secure Visa account number assigned to the supplier after award of contract. Notification of payments and required invoice information are issued to your designated Accounts Receivable contact by e-mail remittance payment.
Preference may be shown during the evaluation process to bidders that agree to accept the Visa payment of invoices. To learn more about the benefits of the Visa payment program, and to obtain answers to FAQ, click or copy and paste the following URL into your browser: www.bankofamerica.com/epayablesvendors.

Will accept payment by Visa: Yes ____ No ____ (check one)

Visa acceptance signature: _____

Designated Accounts Receivable Contact for Visa remittance advices:

Name: _____

Phone: _____

GRDA
GRAND RIVER DAM AUTHORITY

REQUEST FOR QUOTE # 19571

Email: _____

LINE ITEM	DESCRIPTION	NUMBER OF UNITS	UNIT OF MEASURE	UNIT PRICE	LINE COST	LEAD TIME
1	AGASTAT 'OFF DELAY' RELAY. 7022 SERIES. 125VDC. 10AMP. 1-300 SECOND. STOCK CODE 31-184-4 NO SUBSTITUTES. AGASTAT P/N 7022PKSX. Unit Price for delivery by: December 1, 2015 $_____ Line Cost for delivery by: December 1, 2015 $_____ Unit Price for delivery by the bidder's optimum date. $_____ Line Cost for delivery by the bidders optimum date. $_____ Bidders optimum delivery date _____	40.0		_____	_____	_____

NOTE: All prices must be quoted FOB: Destination. All freight charges to delivery point must be included in the unit price quoted for each line item. All packaging, handling, delivery and any other surcharges must also be included in the price quoted for each line item.

PAYMENT TERMS: _____

QUOTE EXPIRATION DATE: _____

QUOTATION NUMBER: _____

QUOTED BY (please print): _____

COMPANY NAME: _____

SIGNATURE: _____

DATE OF QUOTE: _____

SHIP TO: Grand River Dam Authority
TRANSMISSION & ENGINEERING HDQTRS
635 HWY 69A
PO Box 1128
PRYOR OK 74362

THIS IS NOT AN ORDER. We would be pleased to receive your quotation for furnishing the above. This form must be completed **in full** (including signature) and returned by the due date above. You may attach additional pages if necessary. If attached, the Non-Collusion form must be completed and returned with your quotation. NO PARTIAL SHIPMENTS OR PARTIAL PAYMENTS WILL BE ALLOWED WITHOUT PRIOR APPROVAL.

All articles purchased hereunder shall be in accordance with the Bidding Procedures and General Terms & Conditions contained on the attached sheets.

_____

GRDA

GRAND RIVER DAM AUTHORITY

NON-COLLUSION CERTIFICATE

RFQ / RFP # _____

A Non-Collusion Certificate shall be included with any competitive bid or contract submitted to the Authority for goods or services exceeding $5,000.00 (but not exceeding $50,000.00), with the exception of those for the purpose of repairs and improvements to GRDA facilities.

A. For purposes of competitive bid or contract, I certify:

1. I am the duly authorized agent of _____ (Company Name),

   the bidder submitting the competitive bid which is attached to this statement, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to said bid;

2. I am fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and have been personally and directly involved in the proceedings leading to the submission of such bid; and

3. Neither the bidder, nor contractor, nor anyone subject to the bidder's or contractor's direction or control, has been a party:

   a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
   b. to any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
   c. in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract, nor, whether competitively bid or not, has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring this contract herein.

B. The contractor further certifies that no person who has been involved in any manner in the development of said contract while employed by the State of Oklahoma shall be employed to fulfill any of the services provided for under said contract.

C. If any contract pursuant to this bid is for professional services as defined in 74 O.S. § 85.2.25, and if the final product is a written proposal, report or study, the contractor further certifies that (s)he has not previously provided the state agency or any other state agency with a final product that is a substantial duplication of the final product of the proposed contract.

_____	_____
Authorized Signature	*Certified this Date*
_____	_____
Printed Name	*Title*
_____	_____
Telephone Number / *Fax Number*	*E-Mail*

7000 series

Industrial Electropneumatic Timing Relay

File E15631 File LR29186 CE

Note:7032 types and certain models with accessories are not agency approved.

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to confirm the product meets the requirements for a given application.

Consult factory for ordering information.

Design Features

- Available in on-delay, true off-delay, and on/off-delay.
- Timing from 0.1 seconds to 60 minutes, in linear increments.
- Oversize time-calibrated adjustment knobs, serrated with high-resolution markings visible from all angles makes the timer easy to set timers.
- Inherent transient immunity.
- Standard voltages from 6-550VAC and 12-550VDC (special voltages available.)
- Available in 2-pole or 4-pole models.
- Numerous enclosure options: explosion proof, dust tight, watertight, hermetically-sealed, NEMA 1.
- Auxiliary timed and instantaneous switches can be added for greater switching flexibility.
- Many mounting options: Surface mount, Panel mount, Octal plug-in mounting.
- Options: quick-connect terminals, dial stops, and transient protection module.
- Easy-to-reach screw terminals, all on the face of the unit, clearly identified.
- Modular assembly - timing head, coil assembly and switchblock are all individual modules, with switches field-replaceable.

Design & Construction

There are three main components of Series 7000 Timing Relays:

Calibrated Timing Head uses no needle valve, recirculates air under controlled pressure through a variable orifice to provide linearly adjustable timing. Patented design provides instant recycling, easy adjustment and long service life under severe operating conditions.

Precision-Wound Potted Coil module supplies the initial motive force with minimum current drain. Total sealing without external leads eliminates moisture problems, gives maximum insulation value.

Snap-Action Switch Assembly - custom-designed over-center mechanism provides greater contact pressure up to transfer time for positive, no flutter action. Standard switches are DPDT arrangement, with flexible beryllium copper blades and silver-cadmium oxide contacts. Special "timing-duty" design assures positive wiping action, sustained contact pressure and greater heat dissipation during long delay periods.

Each of these subassemblies forms a self-contained module which is then assembled at the factory with the other two to afford a wide choice of operating types, coil voltages, and timing ranges.

The squared design with front terminals and rear mounting permits the grouping of Series 7000 units side-by-side in minimum panel space. Auxiliary switches may be added in the base of the unit, without affecting the overall width or depth.

Operation

Two basic operating types are available.

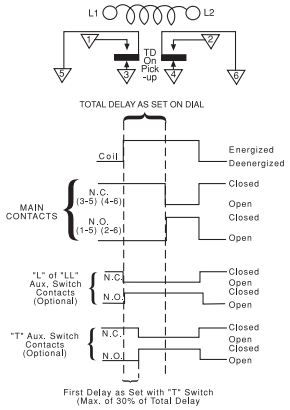
"On-Delay" models provide a delay period on energization, at the end of which the switch transfers the load from one set of contacts to another. De-energizing the unit during the delay period immediately recycles the unit, readying it for another full delay period on re-energization.

In "Off-Delay" models the switch transfers the load immediately upon energization, and the delay period does not begin until the unit is de-energized. At the end of the delay period the switch returns to its original position. Re-energizing the unit during the delay period immediately resets the timing, readying it for another full delay period on de-energization. No power is required during the timing period.

In addition to these basic operating types, "Double-Head" models offer sequential delays on pull-in and drop-out in one unit. With the addition of auxiliary switches the basic models provide two-step timing, pulse actuation for interlock circuits, or added circuit capacity.

NOTE: Seismic & radiation tested E7000 models are available. Consult factory for detailed information.

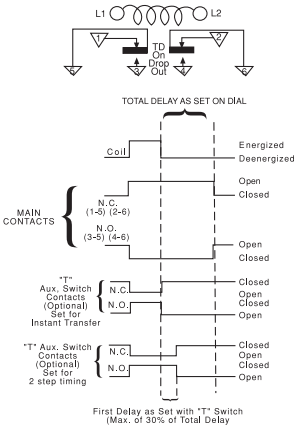
On-delay model 7012 (delay on pickup)



Applying continuous voltage to the coil (L1-L2) starts a time delay lasting for the preset time. During this period the normally closed contacts (3-5 and 4-6) remain closed. At the end of the delay period the normally closed contacts break and the normally open contacts (1-5 and 2-6) make. The contacts remain in this transferred position until the coil is deenergized, at which time the switch instantaneously returns to its original position.

De-energizing the coil, either during or after the delay period, will recycle the unit within 50 msec.
It will then provide a full delay period upon re-energization, regardless of how often the coil voltage is interrupted before the unit has been permitted to "time-out" to its full delay setting.

Off-delay model 7022 (delay on dropout)



Applying voltage to the coil (for at least 50 msec) will instantaneously transfer the switch, breaking the normally closed contacts (1-5 and 2-6), and making the normally open contacts (3-5 and 4-6). Contacts remain in this transferred position as long as the coil is energized. The time delay begins immediately upon de-energization. At the end of the delay period the switch returns to its normal position.

Re-energizing the coil during the delay period will immediately return the timing mechanism to a point where it will provide a full delay period upon subsequent de-energization. The switch remains in the transferred position.

To increase the versatility of the basic timer models, auxiliary switches may be added to either on-delay or off-delay types. They switch additional circuits, provide two-step timing action, or furnish electrical interlock for sustained coil energization from a momentary impulse, depending on the type selected and its adjustment. Because of their simple attachment and adjustment features, they can be installed at the factory or in the field, by any competent mechanic. All auxiliary switches are SPDT with UL listings of 10A @ 125, 250, or 480 VAC. A maximum of one Code T or two Code L auxiliary switches may be added to each relay. The L or LL switch is available with on-delay relays only. The T switch is available with both the on-delay and off-delay relays.

Auxiliary Switch Options for On-Delay
Instant Transfer (Auxiliary Switch Code L,
maximum of 2 per relay.)

1. Energizing coil begins time delay and transfers auxiliary switch.
2. Main switch transfers after total preset delay.
3. De-energizing coil resets both switches instantly.

Auxiliary switch is nonadjustable.
Two-Step Timing (Auxiliary Switch Code T,
maximum of 1 per relay.)

Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

Auxiliary switch options

To increase the versatility of the basic timer models, auxiliary switches may be added to either on-delay or off-delay types. They switch additional circuits, provide two-step timing action, or furnish electrical interlock for sustained coil energization from a momentary impulse, depending on the type selected and its adjustment. Because of their simple attachment and adjustment features, they can be installed at the factory or in the field, by any competent mechanic. All auxiliary switches are SPDT with UL listings of 10A @ 125, 250, or 480 VAC. A maximum of one Code T or two Code L auxiliary switches may be added to each relay. The L or LL switch is available with on-delay relays only. The T switch is available with both the on-delay and off-delay relays.

Auxiliary Switch Options for On-Delay

Instant Transfer (Auxiliary Switch Code L, maximum of 2 per relay.)

1. Energizing coil begins time delay and transfers auxiliary switch.
2. Main switch transfers after total preset delay.
3. De-energizing coil resets both switches instantly.

Auxiliary switch is nonadjustable.

Two-Step Timing (Auxiliary Switch Code T, maximum of 1 per relay.)

1. Energizing coil begins time delay.
2. After first delay auxiliary switch transfers.
3. Main switch transfers after total preset delay.
4. De-energizing coil resets both switches instantly. First delay is independently adjustable, up to 30% of overall delay. (Recommended maximum 100 seconds.)

Auxiliary Switch Options for Off-Delay

In these models the same auxiliary switch provides either two-step timing or instant transfer action, depending on the adjustment of the actuator.

Two-Step Timing (Auxiliary Switch Code T, maximum of 1 per relay.)

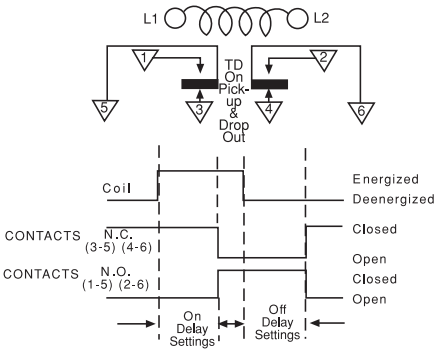
1. Energizing coil transfers main and auxiliary switches instantly.
2. De-energizing coil begins time delay.
3. After first delay auxiliary switch transfers.
4. Main switch transfers after total preset delay. First delay is independently adjustable, up to 30% of overall delay. (Recommended maximum 100 seconds.)

Instant Transfer (Auxiliary Switch Code L, maximum of 1 per relay.)

1. Energizing coil transfers main and auxiliary switches instantly.
2. De-energizing coil resets auxiliary switch and begins time delay.
3. Main switch transfers after total preset delay.

Auxiliary switch is factory adjusted to give instant transfer operation, but may be easily adjusted in the field to provide two-step timing.

On-delay, off-delay model 7032 (double head)

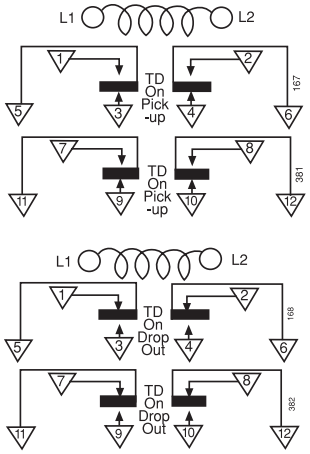


The Double Head model provides delayed switch transfer on energization of its coil, followed by delayed resetting upon coil de-energization. Each delay period is independently adjustable.

In new circuit designs or the improvement of existing controls now using two or more conventional timers, the Double Head unit offers distinct advantages.

Its compact design saves precious panel space, while the simplified wiring reduces costly interconnection.

Four pole model 7014. 7024



With the addition of an extra switch block at the bottom of the basic unit, this version of the Series 7000 offers four pole switch capacity with simultaneous timing or two-step timing. The two-step operation is achieved by factory adjustment to your specifications.

For two-step operation, a maximum timing ratio between upper and lower switches of 3:2 is recommended. Once adjusted at the factory, this ratio remains constant regardless of changes in dial settings. (Ex: If upper switch transfer is set on dial at 60 sec., minimum time on lower switch should be 40 sec.)

This Series 7000 unit offers many of the performance features found in basic models - voltage ranges, timing and switch capacities are virtually identical.

Four pole models add approximately 1-1/4" to the maximum height of the basic model, approximately 1/8" to the depth. They are designed for vertical operation only.

Surge/transient protection option

Transient Suppressor Option "V"

Features

- Protect electronic control circuits from voltage transients generated by the timer coil.
- Fast response to the rapidly rising back E.M.F.
- High performance clamping voltage characteristics.
- UL recognized, (except varistor and coil together).
- Timer NOT polarity sensitive.

The Surge/Transient Protection Option protects electronic control circuits from transients and surges which are generated when the timer coil is activated. Built with a minimum of moving parts, the unit provides a fast response to rapidly rising voltage transients. The accurate, precision-made device is not polarity sensitive and permits the user to initiate, delay, sequence and program equipment actions over a wide range of applications under the most severe operating conditions.

It consists of a specially modified coil case, varistor, varistor cover, terminal extensions and cup washers so that normal terminations can be used. The varistor will not affect the operating characteristics of the 7000 Timer. The varistor has bilateral and symmetrical voltage and current characteristics and therefore can be used in place of the back-to-back zener diodes. This characteristic also means that the coil will not be polarity sensitive.

Timing Specifications (All values shown are at nominal voltage and 25°C unless otherwise specified).

Operating Modes:
Model 7012/7014: On-delay (delay on pick-up).
Model 7022/7024: Off-delay (delay on drop-out).
Model 7032: On-delay, off-delay (double head).

Timing Adjustment: Timing is set by simply turning the dial to the desired time value. In the zone of approximately 25° separating the high and low end of timing ranges A,D,E, and K, instantaneous operation (no time delay) will occur. All other ranges produce an infinite time delay when the dial is set in this zone.

Models 7014 and 7032 are available with letter-calibrated dials only. The upper end of the time ranges in these models may be twice the values shown.

Linear Timing Ranges:

Code	Models 7012, 7022, 7024	Models 7014, 7032
A	.1 to 1 Sec.	.2 to 2 Sec.
B	.5 to 5 Sec.	.7 to 7 Sec.
C	1.5 to 15 Sec	2 to 20 Sec.
D	5 to 50 Sec.	10 to 100 Sec.
E	20 to 200 Sec.	30 to 300 Sec.
F	1 to 10 Min.	1.5 to 15 Min.
H	3 to 30 Min.	3 to 30 Min.
I	6 to 60 Min.	Not Avail.
J	3 to 120 Cyc.	Not Avail.
K	1 to 300 Sec.	Not Avail.

Repeat Accuracy:

For delays of 200 seconds or less:	7012*, 7022, 7024:	±5%
	7014*:	±10%
	7032:	±15%
For delays greater than 200 seconds:	7012*, 7022, 7014*, 7024:	±10%
	7032:	±15%

* The first time delay afforded by Model 7012 with H (3 to 30 min.) and I (6 to 60 min.) time ranges or Model 7014 with H time range will be approx. 15% longer than subsequent delays due to coil temperature rise.

Reset Time: 50 msec. (except model 7032)
Relay Release Time: 50 msec. for on-delay models (7012/7014)
Relay Operate Time: 50 msec. for off-delay models (7022/7024)

Operating Voltage Coil Data (for DPDT)

Coil Part #	Code Letter	Rated Voltage	Operating* Voltage Range @ 60Hz	Rated Voltage	Operating Voltage Range @50Hz
7000	A	120	102-132	110	93.5-121
	B	240	204-264	220	187-242
	C	480	408-528		
	D	550	468-605		
	E	24	20.5-26.5		
AC	F			127	108-140
	G			240	204-264
	H	12	10.2-13.2		
	I	6	5.1-6.6		
	J	208	178-229		
	K		Dual Voltage Coil (Combines A&B)		
	L		Special AC Coils (L1, L2, etc.)		
7010	M	28	22.4-30.8		
	N	48	38.4-52.8		
	O	24	19.2-26.4		
	P	125	100-137.5		
	Q	12	9.6-13.2		
	R	60	48-66		
DC	S	250	200-275		
	T	550	440-605		
	U	16	12.8-17.6		
	V	32	25.8-35.2		
	W	96	76.8-105.6		
	Y	6	4.8-6.6		
	Z	220	176-242		
	X		Special DC Coils (X1, X2, etc.)		

*Four pole Models: Operational voltage range 90% to 110% for AC units; 85% to 110% for DC units.

See next column for more coil data.

Minimum operating voltages are based on vertically mounted 7012 units. 7012 horizontally mounted or 7022 vertically or horizontally mounted units will operate satisfactorily at minimum voltages approximately 5% lower than those listed.
AC units drop out at approximately 50% of rated voltage. DC units drop out at approximately 10% of rated voltage.
All units may be operated on intermittent duty cycles at voltages 10% above the listed maximums (intermittent duty - maximum 50% duty cycle and 30 minutes "on" time.)

Surge/Transient Protection Option Characteristics (DC Timers Only)

Coil Voltage Nominal (DC)	Max Excess Energy Capacity (Joule)	Max De-energization Transient Voltage
12 V	0.4 J	48 V
24 V	1.8 J	93 V
28 V	1.8 J	93 V
32 V	2.5 J	135 V
48 V	3.57 J	145 V
60 V	6 J	250 V
96 V	10 J	340 V
110 V	10 J	340 V
125 V	10 J	340 V
220 V	17 J	366 V
250 V	17 J	366 V

Surge Life
Applied 100,000 times continuously with the interval of 10 seconds at room temperature. Below 68 VAC: 12A; Above 68 VAC: 35A
Temperature Range
Operating: -22°F to +167°F (-30°C to + 75°C)
Storage: -40°F to +167°F (-40°C to +75°C)

Output/Life Contact Ratings: Contact Capacity in Amps (Resistive Load)

Contact Voltage	Min. 100,000 Operations	Min. 1,000,000 Operations
30 VDC	15.0	7.0
110 VDC	1.0	0.5
120 V 60Hz	20.0	15.0
240 V 60Hz	20.0	15.0
480 V 60Hz	12.0	10.0

10 Amps Resistive, 240 VAC
1/4 Horsepower, 120 VAC/240VAC (per pole)
15 Amps 30 VDC (per pole)
5 Amps, General Purpose, 600VAC (per pole)
Dielectric: Withstands 1500 volts RMS 60Hz between terminals and ground. 1,000 volts RMS 60 Hz between non-connected terminals. For dielectric specification on hermetically sealed models consult factory.
Insulation Resistance: 500 Megohms with 500VDC applied.
Temperature Range: Operating: -20°F to +165°F (-29°C to 74°C)
Storage: -67°F to +165°F (-55°C to 74°C)
Temperature Variation: Using a fixed time delay which was set and measured when the ambient temperature was 77°F (25°C), the maximum observed shift in the average of three consecutive time delays was -20% at -20°F (-29°C) and +20% at 165°F (74°C).
Mounting/Terminals: Normal mounting of the basic unit is in a vertical position, from the back of the panel. A front mounting bracket is also supplied with each basic unit, for installation from the front of the panel. **All units are calibrated for vertical operation.** Basic models (7012, 7022) may also be horizontally mounted, and will be adjusted accordingly **when Accessory Y1 is specified in your order.**

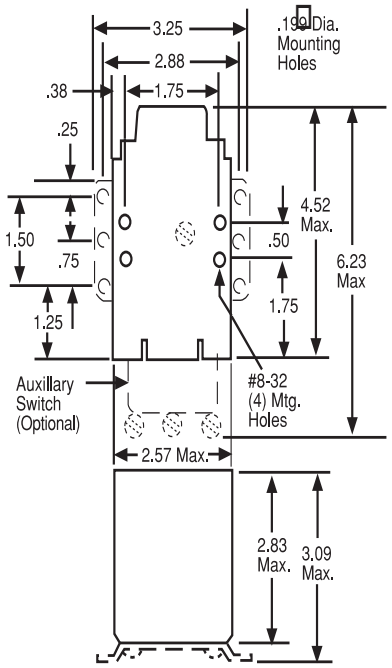
Standard screw terminals (8-32 truss head screws supplied) are located on the front of the unit, with permanent schematic markings. Barrier isolation is designed to accommodate spade or ring tongue terminals, with spacing to meet all industrial control specifications.

The basic Series 7000 may also be panel mounted with the addition of a panelmount kit that includes all necessary hardware and faceplate. This offers the convenience of "out-front" adjustment, with large calibrated dial skirt knob. The faceplate and knob blend with advanced equipment and console designs, while the body of the unit and its wiring are protected behind the panel.

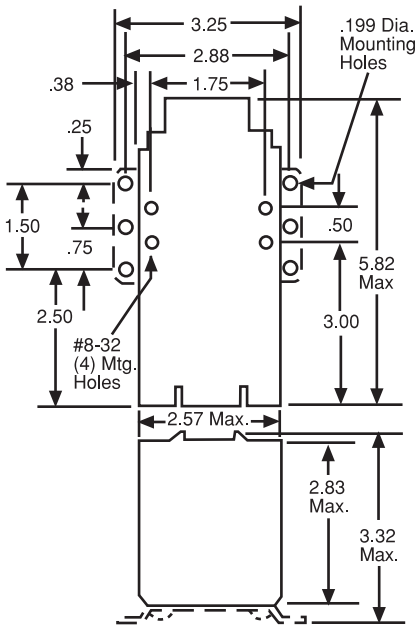
Other mounting options include plug-in styles and special configurations to meet unusual installation requirements. Contact factory for details.
Power Consumption: Approximately 8 watts power at rated voltage .
Approximate Weights:
Models 7012, 7022 . . . . . 2 lbs. 4 ozs.
7014, 7024 . . . . . 2 lbs. 10 ozs.
7032 . . . . . 3 lbs. 5 ozs.
Weight may vary slightly with coil voltage.

Outline Dimensions (Dimensions in inches).

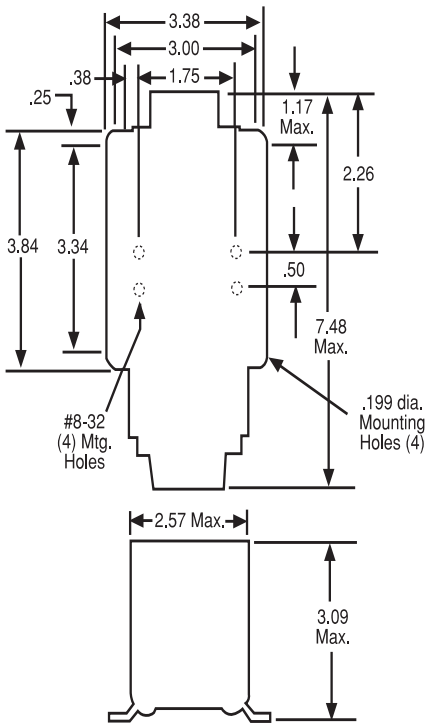
Models 7012, 7022



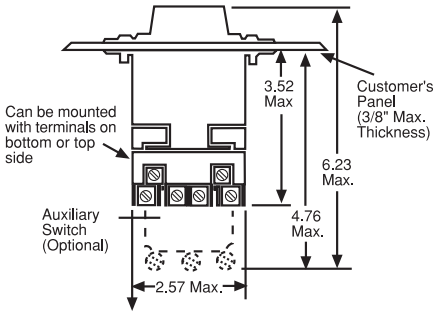
Models 7014, 7024

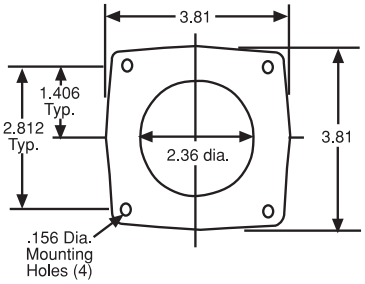


Model 7032

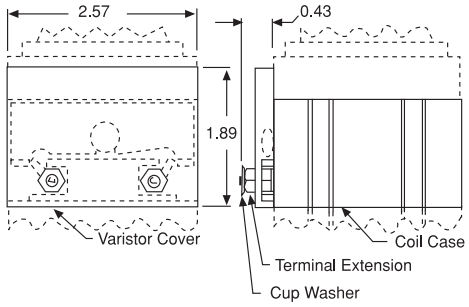


Panel mount Option "X"





Surge/Transient Protection Option



Ordering Information

Typical Part No. ➤	70	1	2	A	D	GZ

1. Basic Series:
70 = 7000 series electropneumatic timing relay

2. Operation:
1 = On-delay
2 = Off-delay
3 = On-delay, off-delay (double head)

3. Contact Arrangement:
2 = 2PDT (2 form C)
**4 = 4PDT (4 form C)

4. Coil Voltage:

AC Coils
A = 120VAC, 60 Hz.; 110VAC, 50Hz.
B = 240VAC, 60 Hz.; 220VAC, 50Hz.
C = 480VAC, 60 Hz.
D = 550VAC, 60 Hz.
E = 24VAC, 60 Hz.
F = 127VAC, 50 Hz.
G = 240VAC, 50Hz.
H = 12VAC, 60 Hz.
K = Dual voltage (combines A & B)
L = Special AC coils (L1, L2, etc.)

DC Coils
M = 28VDC
N = 48VDC
O = 24VDC
P = 125VDC
Q = 12VDC
R = 60VDC
S = 250VDC
T = 550VDC
U = 16VDC
V = 32VDC
W = 96VDC
Y = 6VDC
Z = 220VDC
X = Special DC coils (X1, X2, etc.)

5. Timing Range:

Models 7012, 7022 & 7024
A = .1 to 1 sec.
B = .5 to 5 sec.
C = 1.5 to 15 sec.
D = 5 to 50 sec.
E = 20 to 200 sec.
F = 1 to 10 min.
H = 3 to 30 min.
I = 6 to 60 min.
J = 3 to 120 cyc.
K = 1 to 300 sec.

†Models 7014 & 7032
For model 7032 specify separate time range code for each head. Example: AB. Any two ranges may be selected.
A = .2 to 2 sec.
B = .7 to 7 sec.
C = 2 to 20 sec.
D = 10 to 100 sec.
E = 30 to 300 sec.
F = 1.5 to 15 min.
H = 3 to 30 min.

6. Options:
A1 = Single quick-connect terminals (note 4).
A2 = Double quick-connect terminals (note 4).
B = Plug-in connectors (note 4).
GZ = Enclosure with bottom knockouts (note 1).
H2 = Hermetically sealed enclosure, 8 pin solder (notes 1 & 4).
H3 = Hermetically sealed enclosure, 8 pin octal (notes 1 & 4).
H4 = Hermetically sealed enclosure, 8 screw terminal block (notes 1 & 4).
*H6 = Hermetically sealed enclosure, 11 pin solder (notes 1 & 4).
*H7 = Hermetically sealed enclosure, 11 pin octal (notes 1 & 4).
*H8 = Hermetically sealed enclosure, 11 screw terminal block (notes 1 & 4).
I1 = Tamper-proof Cap, opaque black (Cannot be combined with Option X).
I2 = Tamper-proof Cap, transparent (Cannot be combined with Option X).
K = Explosion-proof Enclosure (note 1).
L = Auxiliary Switch, instant transfer. 7012 only (notes 2 & 6).
LL = Two Aux. Switches, instant transfer. On Model 7014 Factory Installed Only. (notes 2 & 6)
M = Dust-tight Gasketing (notes 4 & 5).
P = Octal Plug Adapter. Can be combined only with options I1,I2. M, S, X, or Y1. (note 4).
S = Dial Stops.
T = Auxiliary Switch, two-step timing (notes 2 & 6).
V = Transient/Surge Protection (for DC coil voltage only).
W = Watertight Enclosure (note 1).
X = Panelmount includes hardware and adjustment for horizontal operation (note 4)
Y1 = Horizontal calibration, for horizontal operation without panelmounting (note 4).
Y2 = Horizontal calibration, with Compensating Spring for vertical operation (note 4).

Notes:
1. Cannot be combined with B, P or X Options
2. Cannot be combined with B, P or Y2 Options
3. Cannot be combined with GZ, H, I1, I2, K, W or Y1 Options
4. Not Avail. on 4-Pole Models
5. Not Available with L, T or LL options.
6. Not Available on hermetically sealed units.

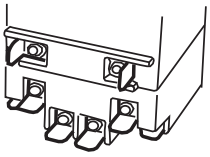
* Sized to accommodate one L or T Auxiliary Switch
** Not available on On-Delay, Off-Delay (Double Head) model.
† Available with letter calibrated dials only. Upper end of time range may be twice the value shown
†† 120 cycles = 2 sec.

Our authorized distributors are more likely to maintain the following items in stock for immediate delivery..

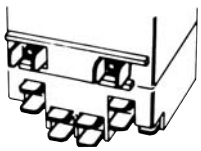
7012AA	7012BC	7012PKX	7022AI
7012AB	7012NC	7012PJX	7022AJ
7012AC	7012PA	7022AA	7022AKT
7012AD	7012PB	7022AB	7022BC
7012AE	7012PC	7022AC	7022BK
7012AF	7012PD	7022AD	7022PA
7012AH	7012PF	7022AE	7022PB
7012AK	7012PJ	7022AF	7022PC
7012ACL	7012PK	7022AH	7022PK

Ordering options – can only be orderd as factory installed options (Dimensions, where shown, are in inches.)

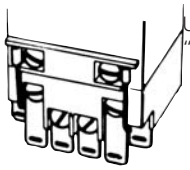
A1 – Single Quick-Connect Terminals



A2 – Double Quick-Connect Terminals

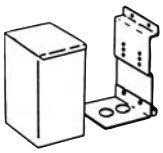


B – Plug-In Connectors



Use with Accessory "C" or "D" below.

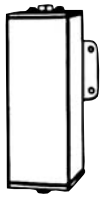
GZ – Total Enclosure



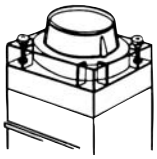
With knockouts for bottom connection.

3.16" W x 3.84" D x 7.63"H

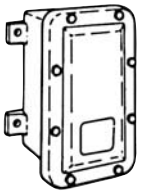
H – Hermetically Sealed Enclosure



I – Tamper-Proof Cover



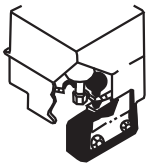
K – Explosion proof Enclosure



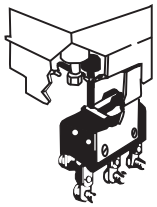
(Meets requirements for Class I, Groups C&D locations).

7.50"W x 6.00" D x 10.38" H

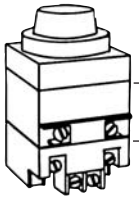
L – Auxiliary Switch



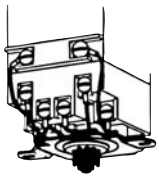
LL – Auxiliary Switch



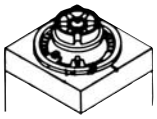
M – Dustight



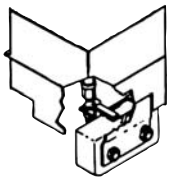
P – Octal Plug Adapter



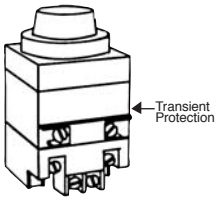
S – Dial Stops



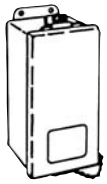
T – Auxiliary Switch



V – Transient/Surge Protection

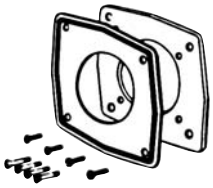


W – Watertight Enclosure (NEMA-4)



4.75" W x 4.44" D x 9.75" H

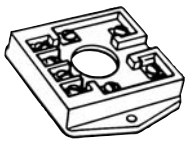
X – Panelmount Kit



Mounting hardware included.

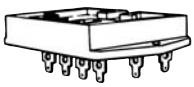
Accessories (Not available for 7032 models)

Plug-In Receptacle (Accessory C)



Screw Terminals **Catalog No. 700137.** For use with "B" Option

Plug-In Receptacle (Accessory D)



Quick Connect Terminals **Catalog No. 700141.** For use with "B" Option.

Ordering options can only be ordered as factory installed options.

GENERAL BIDDING INSTRUCTIONS
FOR STANDARD & EMERGENCY BIDS

GRDA
GRAND RIVER DAM AUTHORITY

1. Bids shall be submitted to the designated purchasing agent at the Grand River Dam Authority (hereinafter referred to as "GRDA" or "the Authority") at the address on the attached RFQ or RFP form on or before the date (and time, if applicable) indicated. Bids shall be in conformity with these and any additional instructions to bidders and shall be submitted on GRDA's form. **The RFQ (Request for Quote) or RFP (Request for Proposal) form must be completed in full and signed by the bidder.** If your bid response necessitates additional space, you may attach additional pages; however, the RFQ or RFP form must be completed, signed and reference the additional pages. All bid responses shall be typewritten or handwritten in ink, and any corrections to bids shall be initialed in ink. Quotations or proposals submitted in pencil shall not be accepted.

2. Quotations or proposals may be submitted to GRDA via postal mail, delivery service, fax or e-mail, provided all required signatures can be transmitted successfully.

3. **Non-Collusion Certificate:** RFQs or RFPs anticipated to exceed a total amount of $5,000 shall be accompanied by a Non-Collusion Certificate. This certificate shall be completed by the bidder and include a signature in ink of an authorized company representative (preferably the bidder) with full knowledge and acceptance of the bid proposal. In the case of bids submitted via fax or e-mail, the Non-Collusion Certificate may be submitted with the bid. Purchase orders in excess of $5,000 will not be released to the successful bidder without receipt of a properly signed certificate for the bid.

4. In the event the unit price and line total extension do not agree, the unit price shall be considered the quoted price accepted for evaluation.

5. **Freight Terms:** All prices shall be quoted FOB: Destination/Freight Allowed. All packaging, handling, shipping and delivery charges shall be included in the unit price quoted for each line item. No exceptions shall be granted unless approved by the guidelines of the GRDA Chief Financial Officer or designee.

6. **Other Surcharges:** Any additional surcharges (such as HazMat charges, fuel surcharges, set-up fees, etc.) shall be included in the unit price quoted for each line item. All additional charges are considered a part of the cost of the goods, and bids shall be evaluated to include these additional charges.

7. **Tax-Exempt Status:** GRDA is an agency of the state of Oklahoma and is specifically exempt from the payment of sales tax by Oklahoma state statute, Title 68 O.S.A. § 1356 (10). An excerpt from the statute shall be furnished upon request.

8. **Questions arising during the bidding process should be submitted in writing to the GRDA purchasing agent named on the RFQ or RFP.** The GRDA purchasing agent shall coordinate a reply from the end user to ensure that all potential bidders are provided the same information. Under no circumstances shall a bidder discuss pricing with <u>any</u> GRDA employee prior to the bid opening.

9. All bids submitted shall be subject to GRDA's Purchasing Policy and Procedures, General Terms and Conditions, the bidding instructions and specifications, the Oklahoma Open Records Act, other statutory regulations as applicable, and any other terms and conditions listed or attached herein – all of which are made part of this Request for Quote or Request for Proposal.

10. GRDA reserves the right to reject any and all bids, and to contract as the best interests of the Authority may require. GRDA reserves the right to reject any bids that do not comply with the requirements and specifications of the Request for Quote or Request for Proposal. All bid responses become the property of GRDA and are subject to the Oklahoma Open Records Act. GRDA shall endeavor to protect technical information designated by the bidder as proprietary information; however, only technical information (i.e., "trade secrets") may be considered proprietary – pricing and other non-technical aspects of the quote shall be considered non-proprietary.

11. **"Sole Brand" or "No Sub" Items:** Items with a "Sole Brand" or "No Sub" designation in the description shall be furnished as the specified manufacturer and model/part number. No exception may be taken to the specification, and no alternate shall be accepted. In those cases where a manufacturer has discontinued the specified model/part number, the bidder shall indicate so on the RFQ. If a replacement item is available, the new model/part number shall be indicated on the RFQ form and the price quoted. It shall also be noted whether the replacement item is a direct replacement for the obsolete part number originally requested. If not, or if the specifications differ in any way, the bidder shall explain in detail, and corresponding drawings or descriptive literature shall be included with the quote.

12. **Approved Equivalents:** Unless an item is designated as a "Sole Brand" or "No Sub" item, any manufacturer's name, brand name, information and/or catalog number listed in a specification is for informational or cross-reference purposes and is not intended to limit competition. Bidders may offer any brand/manufacturer for which they are an authorized representative, provided it meets or exceeds the specification of the listed item. However, if quoting an equivalent product, bidders shall indicate on the RFQ form the manufacturer's name and part number. Bidder shall also submit any drawings, descriptive literature and specifications for evaluation purposes. Reference to literature submitted with a previous bid shall not satisfy this provision. The bidder shall also provide written confirmation that the proposed equivalent will meet the requested specifications and is not considered an exception. Bids which do not comply with these requirements may be rejected. GRDA warehouses are not permitted to accept any item with a part number differing from that quoted by the bidder. Bids lacking any written indication of intent to furnish an alternate brand, model or part number shall be considered to be in complete compliance with the specifications as listed on the RFQ.

13. **Insurance Certificates:** Any service to be performed that requires the vendor's employee, vehicle or equipment to be on any GRDA property must be covered by minimum insurance requirements. The workscope to be performed for the Authority shall be evaluated and the minimum insurance requirements shall be provided to prospective bidders with the RFQ or RFP. Evidence of insurance coverage shall be furnished in the form of a Certificate of Insurance, and shall be submitted with the bid response. Bidders shall disclose any subcontractors to be used, and the Authority shall consider the supplier as the single point of contact. The supplier shall assume responsibility for the performance of the subcontractor. Policies shall remain current for the duration of the requested service period, and GRDA shall be notified of any cancellation or revision to policies. Purchase Orders shall not be released to the successful bidder without a current Certificate of Insurance naming GRDA as certificate holder on file. A Memorandum of Insurance shall not be acceptable for this requirement.

14. **MSDS:** Material Safety Data Sheets shall be furnished to GRDA's Safety Department at the address noted on the PO prior to delivery of items.

15. **Purchase Orders** shall be awarded to the "lowest and best" or "best value" bidder. Line items may be split into multiple orders, taking low items from each respective bidder, or orders may be awarded on an "all or none" basis, whichever is in the best interests of the Authority. Award decisions are further subject to consideration of any additional terms and conditions contained in the bid proposal. Vendor protests must be submitted in writing to the Central Purchasing Unit of GRDA within thirty-six (36) hours of award of Contract or Purchase Order.

16. Successful vendor shall deliver the merchandise or perform the service as quoted. Substitutions or changes without prior approval of the GRDA purchasing agent shall be rejected and returned at the vendor's expense.

17. **Bidder Responsibilities:** Bidders are to transact all phases of the purchasing function directly with the GRDA purchasing agent. Bidders are to conduct all written and verbal communication with the Authority through the GRDA purchasing agent. Bidders are to conduct negotiations ethically, without attempts to influence through offers of valuable personal gifts or entertainment. Bidders are to make available as requested any technical information which might be of benefit in the bid evaluation.

18. **Supplier List:** The Finance Department maintains a current listing of suppliers with a cross-reference as to products and services offered. Suppliers may have their names added to the list by submitting a completed Vendor Registration/Payee Application, and shall notify the Authority of any update information. If a supplier fails to respond to bid requests after four appropriate solicitations, that supplier may be removed from the active list. Suppliers who do not meet quoted shipping dates or lead times, supply products or services of poor quality, substitute items of unequal quality, continually over-ship or under-ship items, or do not invoice properly may be placed under suspension or disqualified from the active supplier list. Suppliers may voluntarily request to be removed from the supplier database.

19. **Service Contracts:** By submitting a bid for services, the bidder certifies that they, and any proposed subcontractors, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes, but is not limited to, the free Employment Verification Program (E-Verify) available at www.dhs.gov/E-Verify. This shall remain in effect through the entire term, including all renewal periods, of the contract. The State may request verification of compliance for any contractor or subcontractor. Should the State suspect or find the contractor or any of its subcontractors are not in compliance, the State may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the contract for default, and suspension or debarment of the contractor. All costs necessary to verify compliance are the responsibility of the contractor.

GENERAL TERMS AND CONDITIONS

Any contract or order issued by the Grand River Dam Authority (hereinafter referred to as GRDA) is expressly conditioned upon Seller's assent to these terms and conditions, unless otherwise agreed in writing. Any order issued or filled by Seller shall be deemed to constitute Seller's assent to these terms and conditions. Any additional or different terms submitted by the Seller are hereby expressly objected to by GRDA unless expressly agreed to in writing by GRDA.

1. Mail or deliver all invoices or correspondence pertaining to the payment of this Purchase Order to: Accounts Payable Department, Grand River Dam Authority, P.O. Box 409, 226 West Dwain Willis Avenue, Vinita, Oklahoma 74301. Seller shall submit invoices, with one copy detailing each item with unit prices, with the top copy being distinguishable as an original, accompanied by one copy of complete shipping papers. If shipment is not made by routing instructions as specified on the face of this Purchase Order, GRDA reserves the right to deduct any excess transportation charges resulting therefrom. Copy of original freight bill must be supplied for payment. Time, in connection with any discount offered, will be computed from date of delivery of items, or from date the correct invoice is received in Vinita, Oklahoma, whichever period of time is the later date. No Oklahoma State Sales or Use Tax shall be included in payment of this Purchase Order.
2. All articles, materials, equipment and supplies (hereinafter referred to as "items") covered by this Purchase Order, unless otherwise specified, are purchased subject to inspection before and during manufacture and upon arrival at destination. GRDA reserves the right to return for full credit and/or refund, at Seller's sole risks and expense, including all transportation and storage charges, all items found defective or furnished contrary to instructions and/or specifications contained herein.
3. In case of default by Seller, GRDA may procure the items or services from other sources and hold Seller responsible for any excess cost occasioned thereby; provided, that if necessity requires the use of items not conforming to specifications, they may be accepted, and payment made at a proper reduction in price. Notwithstanding anything herein to the contrary, GRDA reserves the right to terminate this Purchase Order for its convenience. In the event of such termination, GRDA shall pay and Seller shall accept the reasonable value of all work performed and items delivered by Seller up through the effective date of such termination.
4. Seller warrants that all items covered by this Purchase Order will conform to the specifications, drawings, samples or other description furnished by GRDA, or any revisions thereof, and any items purchased pursuant to this Purchase Order shall be subject to all warranties expressed or implied by law, and will be merchantable of good material and fit and sufficient for the purpose intended, and shall satisfy any performance guarantee requirements as specified herein by GRDA. In the event the items and/or services purchased hereunder do not meet the warranty specified hereinabove, Seller shall promptly repair or replace any defective item at its expense, or re-perform any necessary services, and shall hold GRDA harmless from any and all costs and expenses incurred due to said defective item or performance of services, including the cost for removing any part or product to be repaired or replaced, as well as transportation and installation charges in connection with the repair, replacement or servicing of any parts or equipment. Seller further agrees that the manufacturer's warranties and guaranties of the items purchased hereunder extended to Seller shall extend to GRDA.
5. Seller shall indemnify and hold GRDA harmless from and against any and all loss, costs or expenses arising out of any liens or claims in any way related to the items or services furnished hereunder. Seller shall likewise indemnify and hold GRDA harmless from any patent, trademark or copyright infringement, except items supplied in accordance with design originating with GRDA. Seller shall be an independent contractor. Seller shall protect, defend, indemnify and hold GRDA harmless from any damage or injury to any persons, including Seller's employees or property, and from any claim, demand, action, cost or expense arising out of the activities hereunder as a result of Seller's negligent or intentional wrongful acts. In no event shall Seller's liability be limited under this Purchase Order for the negligent or intentional wrongful acts of the Seller.
6. Seller shall, before any items are shipped and/or any services are commenced, provide GRDA with certificates evidencing that the following minimum insurance will remain in force until Seller's obligations are completed: (a) Workmen's Compensation Insurance, including Employer's Liability Insurance, in accordance with the laws of the state in which Seller may be required to pay compensation; and (b) Public Liability Insurance with an individual limit of not less than $100,000 and a total for any one accident of not less than $300,000, unless otherwise specified herein.
7. This Purchase Order (including Seller's right to receive payments hereunder) shall not be assigned or subcontracted in whole or in part without GRDA's prior written consent. No assignment hereof shall relieve this assignor of its obligations hereunder.
8. Service Contracts: By submitting a bid for services, the Bidder certifies that they, and any proposed Subcontractors, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Supplier/Contractor/Consultant/Construction Manager/etc. certifies that it and all proposed Subcontractors, whether known or unknown at the time a contract is executed or awarded, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes, but is not limited to, the free Employment Verification Program (E-Verify) available at www.dhs.gov/E-Verify. This shall remain in effect through the entire term, including all renewal periods, of the Contract. The State may request verification of compliance for any Contractor or Subcontractor. Should the State suspect or find the Contractor or any of its Subcontractors are not in compliance, the State may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.
9. All Items shipped pursuant to this Purchase Order will conform with all municipal, state and federal laws, ordinances and regulations, and Seller will defend and save harmless GRDA from loss, costs or damage by reason of any actual or alleged violation thereof.
10. GRDA hereby notifies Seller that Seller must comply, and by acceptance of this Purchase Order, Seller represents that it has complied with, and will continue to comply with, all applicable federal, state and local laws, regulations or orders.
11. This Purchase Order shall be construed as being performed by both parties in Craig County, Oklahoma, and shall be governed in accordance with the laws of the State of Oklahoma.
12. AUDIT RIGHTS. Contractor will, at all times during the term of this Contract and for a period of five (5) years after the completion of this Contract, maintain and make available for inspection and audit by GRDA and/or the Oklahoma State Auditor, all books, supporting documents, accounting procedures, practices, and all other items relevant to the Contract.