

DATE: 7/06/2020

INVITATION TO BID
THIS IS NOT AN ORDER

Page: 4

BID NO.: 50-00131546

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

VENDOR: _____

BUYER: MBUTTERY

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Agency warehouse or jobsite, anywhere within the Parish as designated by the Purchasing Department.

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH is expecting all products to be new and all work to be done in workman-like manner, according to standard practices. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

DELIVERY: FOB JEFFERSON PARISH	
INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES	<u>1 WEEK ARO</u>
INDICATE STARTING TIME (IN DAYS) FOR CONSTRUCTION WORK	_____
INDICATE COMPLETION TIME (IN DAYS) FOR CONSTRUCTION WORK	_____

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: _____

NUMBER: _____

NUMBER: _____

NUMBER: _____

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) _____

*** ALL BIDDERS MUST COMPLETE SECTION BELOW ***	
FIRM NAME: <u>INDUSTRIAL - COMMERCIAL MOTORS & CONTROLS</u>	
SIGNATURE: <u>William Pappas</u> (Must be signed here)	TITLE: <u>PRESIDENT</u>
PRINT OR TYPE NAME: <u>William PAPPAS</u>	
ADDRESS: <u>P.O. BOX 1842</u>	
CITY, STATE: <u>MONROEVILLE, LA.</u>	ZIP: <u>70470</u>
TELEPHONE: <u>() 504 415-7288</u>	FAX: <u>() 985 727-7725</u>
EMAIL ADDRESS: <u>WPAPPAS@ICMCLHC.COM</u>	

TOTAL PRICE OF ALL BID ITEMS: \$ 2,334.00

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00131546

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			PURCHASE OF ELECTRICAL STOCK FOR THE PUBLIC WORKS DEPARTMENT OF SEWERAGE WEST BANK WAREHOUSE		
1	3.00	EA	0010 - ELEMENT, HEATER, ALLEN BRADLEY NO. W-64 SK NUMBER 00-0831640	NO BID	
2	3.00	EA	0020 - CAPACITOR 280-330 MFD 220V SK NUMBER 00-0836750	NO BID	
3	100.00	EA	0030 - FORK, STA-KON, 12-10 WIRE RANGE, NO. 6 HOLE, INSULATED, THOMAS AND BETTS NO. 10RC6F SK NUMBER 00-0870450	NO BID	
4	6.00	EA	* 0040 - STARTER, SIZE 2, 120 VOLT, NEW IN FACTORY BOX, ALLEN BRADLEY NO. 509-COD SK NUMBER 00-0861020 <i>SPRECHER & SCHUH EQUAL</i>	389.00	2,334.00
5	25.00	EA	0050 - NIPPLE, CONDUIT, ALUMINUM, 1/2 INCH X CLOSE SK NUMBER 00-0881500	NO BID	
6	1,000.00	EA	0060 - WIRE, ELECTRICAL, SINGLE COPPER CONDUCTOR, THHN/THWN PVC INSULATION, 600V, STRANDED, 500 FT. PER SPOOL, NO. 16, BLUE SK NUMBER 00-088286B	NO BID	
			<p>* QUOTING - EQUAL SPRECHER & SCHUH CAT# CATN7-43-120 - EFD FULL SPECS ATTACHED</p>		

NEMA Sized Open and Enclosed Non-Combination Motor Starters

NEMA Non-Combination Starters

Built to your specifications and ready to install

Sprecher + Schuh magnetic motor starters are intended to eliminate the purchase and assembly of a separate contactor, overload relay and associated wiring. When purchased with an enclosure, the starters are mounted and ready to install on receipt.

Starting with the best

At the heart of all Sprecher + Schuh NEMA sized magnetic motor starters is the CATN7 line of motor starters. Each starter proudly displays the NEMA size (00, 0, 1, 2, or 3) and HP at applied voltage. This line of starters is designed to meet rigid consultant specifications for NEMA starters.

Top line protection...

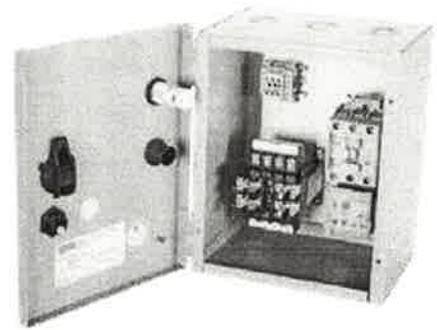


NEMA labeled magnetic starters are equipped with Sprecher + Schuh's premium CEP7 solid state overload relay standard. Unlike traditional overload relays that indirectly sense motor current through heater elements, CEP7 solid state overload relays measure motor current directly through integrated current transformers and on board electronics. The electronics provide numerous advantages over electromechanical relays. Alternatively, the CT7N Thermal Overload Relay may also be selected.

The right enclosure... whatever the application

Sprecher + Schuh's line of NEMA style starters can be purchased pre-installed in a variety of standard enclosures. Cataloged enclosures include:

- | | |
|---------|---------------------------------|
| Type 1 | General Purpose |
| Type 12 | Industrial Dusttight |
| Type 3R | Raintight (outdoor) |
| Type 4 | Watertight |
| Type 4X | Watertight, Corrosion Resistant |



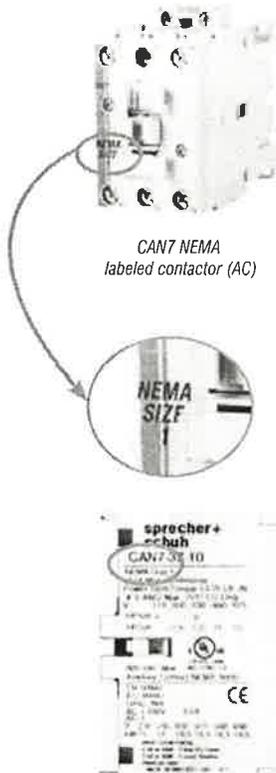
Even though these are the most popular enclosure types for most industrial applications, we can house any starter in a custom enclosure of your choosing.

Quality enclosures ensure the highest confidence

Sprecher + Schuh only sources enclosures from name brand manufacturers, ensuring the highest quality. We primarily use enclosures that meet UL Standards, i.e., Type 1, Type 3R, etc., however, we can also source other enclosures at your request. Enclosures are sized first to accommodate the depth of the contactor and offer sufficient electrical clearances to satisfy UL.

Add a variety of modifications

If you need a larger enclosure than what is specified in our catalog, your sales representative and our Engineering department will work with you to customize any of our enclosed products to suit your exact specifications. Any combination of enclosure types, sizes, pilot devices, meters and other modifications can be combined to provide exactly the panel you need.



Type 1



Type 3R



Type 4



Type 4X

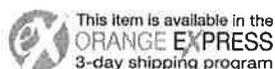
Three Phase, Non-Reversing CATN7

NEMA Size	Maximum Horsepower Three Phase				Auxiliary Contacts per Contactor ②		Open Type	Price	Type 1 General Purpose	Price	D I M	Type 12 [Type 3R ③]	Price	D I M
	200V	230V	460V	575V	NO	NC			Catalog Number			Catalog Number		
00	1-1/2	1-1/2	2	2	1	0	CATN7-12-*◆	424.97	CATN7-12-*◆-G0 ③	530.69	A	CATN7-12-*◆-D0 ③	730.74	L
0	3	3	5	5	1	0	CATN7-16-*◆	464.36	CATN7-16-*◆-G0 ③	571.12	A	CATN7-16-*◆-D0 ③	771.17	L
1	7-1/2	7-1/2	10	10	1	0	CATN7-37-*◆	730.74	CATN7-37-*◆-G0 ③	798.11	A	CATN7-37-*◆-D0 ③	1024.08	L
2	10	15	25	25	1	0	CATN7-43-*◆	837.51	CATN7-43-*◆-G0 ③	940.11	A	CATN7-43-*◆-D0 ③	1246.93	L
3	25	30	50	50	1	0	CATN7-85-*◆	1183.69	CATN7-85-*◆-G0 ③	1436.60	B	CATN7-85-*◆-D0 ③	1715.43	M

Three Phase, Non-Reversing CATN7

NEMA Size	Maximum Horsepower Three Phase				Auxiliary Contacts per Contactor ②		Type 4 Watertight	Price	D I M	Type 4X Watertight Corrosion Resistant Non-metallic	Price	D I M
	200V	230V	460V	575V	NO	NC				Catalog Number		
00	1-1/2	1-1/2	2	2	1	0	CATN7-12-*◆-W0	957.74	N	CATN7-12-*◆-C0 ③	771.17	S1
0	3	3	5	5	1	0	CATN7-16-*◆-W0	997.12	N	CATN7-16-*◆-C0 ③	810.55	S1
1	7-1/2	7-1/2	10	10	1	0	CATN7-37-*◆-W0	1262.48	N	CATN7-37-*◆-C0 ③	1236.56	U1
2	10	15	25	25	1	0	CATN7-43-*◆-W0	1369.23	N	CATN7-43-*◆-C0 ③	1329.85	U1
3	25	30	50	50	1	0	CATN7-85-*◆-W0	1861.57	O	CATN7-85-*◆-C0 ③	1701.95	U1

NOTE: Catalog numbers and enclosure dimensions reflect contactors with AC coils. For DC coils, select Coil Code from the DC Coil Code table on page C104 and follow the instructions for modifying catalog numbers.



Ordering Instructions

Specify Catalog Number	
Replace (□) with Coil Code	See page C104
Replace (◆) with O/L Relay	See pages C105-C106
Factory Modifications available	See pages C107-C111

- ① Dimensional information starts on page C122.
- ② For Type 3R outdoor applications, replace "D" in catalog number with an "R". Dimensions may change. For example number CATN7-37-*◆-D0 becomes CATN7-37-*◆-R0. Price remains the same.
- ③ Contactors are equipped with number and type of auxiliaries indicated. See page C108 to order additional or different auxiliary contacts.

A.C. Coil Codes & Voltage Ranges ①⑤

All catalog numbers, list prices and enclosure dimensions in the previous section reflect contactors with AC coils. If necessary, add the appropriate price adder to the list price for each coil required as shown in the online catalog. Remember that reversing applications require two coils. Price Adder x 2.

A.C. Coil Codes (Replace “*” in cat.# with coil code)	CA7-9 thru CA7-97 CAN7-12...85	
	50 Hz	60 Hz
24		
24Z ⑥	24V	24V
110	~	~
120 ⑥	110V	120V
120B	~	~
208	~	208V
208W	~	~
220W ⑥ ⑦	200- 220V	208- 240V
240	220V	240V
240B	~	~
240W	~	~
277	240V	277V
380	380- 400V	440V
440W	~	~
460W	~	~
480 ⑥	440V	480V
575	~	~
600 ⑥	550V	600V
Price Adder	~	~

D.C. Coil Codes & Voltage Ranges ①⑤

For starters with DC coils, select Coil Code from the table below. Remember that reversing applications require two coils (Price Adder x 2). Starter catalog numbers must be modified when using DC coils. For example: For **CAT7-9...55** contactors, add an “E” to catalog number for Electronic DC Coils. i.e.: CAT7-9... becomes CAT7-9E... For **CAT7-60...97** contactors, add a “D” to catalog number. i.e.: CAT7-60... becomes CAT7-60D...

D.C. Coil Codes (Replace “*” in cat.# with coil code)	⑥	⑥	④
	CA7-9E...37E CAN7-12E...37E	CA7-43E ...55E CAN7-43E	CA7-60D...97D CAN7-85D
CA7 Code	Voltage	Voltage	Voltage
12E	12VDCE	12VDCE	~
24E ⑥	24VDCE	24VDCE	~
24DD	~	~	24VDC
36E	36-48VDCE	36-48VDCE	~
48E	48-72VDCE	48-72VDCE	~
48DD	~	~	48VDC
110E	110VDCE	110VDCE	~
110DD	~	~	110VDC
~	~	~	~
125DD	~	~	125VDC
220E	220VDCE	220VDCE	~
220DD	~	~	220VDC
250DD	~	~	250VDC
Price Adder ⑥	49.76	100.54	125.42

Starter Modification Codes

CAT9 AC/DC Coil Codes and Voltage Ranges ②③⑤

Electronic Coils	V	24-60V	48-130V	100-250V	250-500V	Price Adder for PLC option
		(Replace “*” in cat.# with coil code)				
CA9-116...370	AC/DC	24W	48W	120W	480W	~
CA9-116-EI...370-EI	AC/DC with PLC Input	~	~	120W	480W	51.83
CA9-400-EI...750-EI		24W ⑦	48W	120W	480W	~
CA9-860-EI...1060-EI		~	~	120W	~	~
CA9-1260-EI		24W ⑦	48W	120W	480W	~
CA9-2050-EI...2650-EI		~	~	120W	~	~

- ① Only the most common coils are shown here. Other coil voltages may be available. Refer to Contactor Renewal Parts in Section A of this catalog, or contact your nearest Sprecher + Schuh sales office.
- ② Wide range coil.
- ③ “-EI” designates contactor coil with PLC input. Selections CA9-116...370 with “EI” requires use of control logic on terminals 1, 2, 3. CA9-400 contactors and larger include an integral switch to select use of “EI”.
- ④ “DD” coils are standard for CA7-60D...97D.
- ⑤ Reversing applications require two coils. Add appropriate price adder(s) to list price of enclosed contactors and starters. Remember to add price for each coil required.
- ⑥ CA7-9E...55E electronic coils are not interchangeable with non-electronic DC or AC coils.
- ⑦ This coil range is 24-60V DC only.

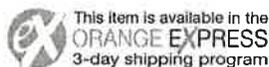
CA7 Contactor with CEP7 Overload Relay ①③④



For use with contactor...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay)	Price Adder
3-Phase / Manual Reset / Class 10				
CA7-9...CA7-23	0.1...0.5	D1AB	CEP7-ED1AB	Standard
	0.2...1.0	D1BB	CEP7-ED1BB	Standard
	1.0...5.0	D1CB	CEP7-ED1CB	Standard
	3.2...16	D1DB	CEP7-ED1DB	Standard
CA7-30...CA7-55	5.4...27	D1EB	CEP7-ED1EB	Standard
	1.0...5.0	D1CD	CEP7-ED1CD	Standard
	3.6...16	D1DD	CEP7-ED1DD	Standard
	5.4...27	D1ED	CEP7-ED1ED	Standard
CA7-55	9...45	D1FD	CEP7-ED1FD	Standard
	3-Phase / Auto or Manual / Adjustable Trip Class 10, 15, 20 & 30			
CA7-9...CA7-23	0.1...0.5	EAB	CEP7-EEAB	17.62
	0.2...1.0	EBB	CEP7-EEBB	17.62
	1.0...5.0	ECB	CEP7-EECB	17.62
	3.2...16	EDB	CEP7-EEDB	17.62
CA7-30...CA7-55	5.4...27	EEB	CEP7-EEEB	17.62
	1.0...5.0	ECD	CEP7-EECD	21.76
	3.2...16	EDD	CEP7-EEDD	21.76
CA7-55	5.4...27	EED	CEP7-EEED	21.76
	9...45	EFD	CEP7-EEFD	21.76
CA7-60...CA7-97	11...55	EQD	CEP7-EEQD	Standard
	5.4...27	EEE	CEP7-EEEE	Standard
	9...45	EFE	CEP7-EEFE	Standard
	18...90	EGE	CEP7-EEGE	Standard
CA7-60...CA7-97	60...120	EVE	CEP7-EEVE	Standard

CB7 Contactor with CEP7 Overload Relay

For use with contactor...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay)	Price Adder
1-Phase / Automatic or Manual Reset / Class 10				
CA7-9...CA7-23	1.0...5.0	EPB	CEP7S-EEPB	Standard
	3.2...16	ERB	CEP7S-EERB	Standard
	5.4...27	ESB	CEP7S-EESB	Standard
CA7-30...CA7-43	9...45	ETD	CEP7S-EETD	Standard
CA7-60...CA7-97	18...90	EUE	CEP7S-EEUE	Standard



- ① 3-phase CEP7 units are only designed for 3Ø applications. Single phase CEP7S units are only designed for 1Ø applications.
- ② This reference is not intended to be a guide for selecting contactors. Size overload relays using the full load current of the motor.
- ③ The reset time of a CEP7 set in the automatic mode is approximately 180 seconds.

Large Amp CEP7 Solid State Overload Relays, Automatic or Manual Adjustable Trip Class ①②③④

Directly Mounts to Contactor... ②	Adj. Range (A)	Overload Relay Code (◆)	CT Ratio	Catalog Number (of Overload Relay)	Price Adder
Automatic or Manual Reset for 3-Phase Applications Adjustable Trip Class 10, 15, 20 & 30					
CA9-116...146	30...150	EHJ	150:5	CEP7-EEHJ	Standard
CA9-190...205	40...200	EJJ	200:5	CEP7-EEJJ	Standard
CA9-265...305		CT3	300:5	ⓐ	Standard
CA9-370...580		CT6	600:5	ⓐ	Standard
CA9-750...1060		~		Refer to Factory	Standard

Special Notes:

Wye-Delta Starters - First multiply motor full load current by 58%. Then, using this figure, select appropriate Overload Relay Code from tables above.

Part Winding Starters - First multiply motor full load current by 50%. Then, using this figure, select appropriate Overload Relay Code from tables above.

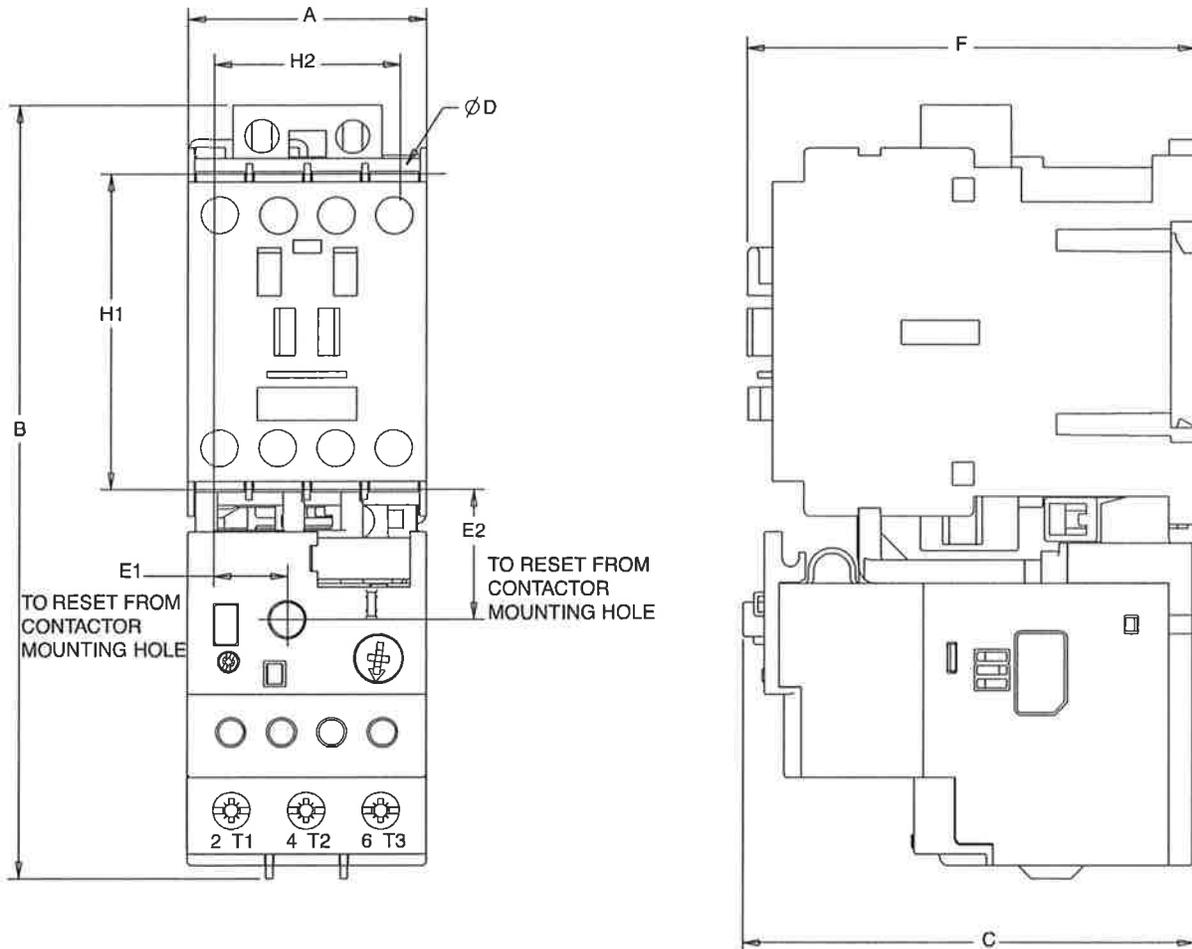
Variable Frequency Drives - CEP7 solid state overload relays cannot be utilized on VFDs or Softstarters with Braking option.

Starter Modification Codes

- ④ CEP7 Overload relays do not work with Variable Frequency Drives or any Sprecher + Schuh Softstarter with braking options.
- ⓐ Utilizes UL approved Current Transformers and a CEP7-EECB overload relay. Refer to page B13 for current setting guidance. For CE approved Current Transformers refer to factory.

CEP7 Mounted to CA7 Contactor

Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



Overload	Mounted to Contactor		A Width	B Height	C Depth	D	E1	E2	F	H1	H2
CEP7-ED1...B CEP7-EE...B CEP7S-EE...B	CA7-9...23	mm (in)	45 (1-25/32)	146.6 (5-25/32)	85.2 (3-23/64)	4.5 (3/16)	13.9 (35/64)	24.5 (31/32)	86.5 (3-13/32)	60 (2-23/64)	35 (1-3/8)
CEP7-ED1...D CEP7-EE...D CEP7S-EE...D	CA7-30...37	mm (in)	45 (1-25/32)	146.6 (5-25/32)	101.2 (3-63/64)	4.5 (3/16)	13.9 (35/64)	24.5 (31/32)	104 (4-3/32)	60 (2-23/64)	35 (1-3/8)
CEP7-ED1...D CEP7-EE...D CEP7S-EE...D	CA7-43...55	mm (in)	54 (2-1/8)	146.6 (5-25/32)	101.2 (3-63/64)	4.5 (3/16)	18.9 (3/4)	24.5 (31/32)	107 (4-3/32)	60 (2-23/64)	45 (1-25/32)
CEP7-EE...E CEP7S-EE...E	CA7-60...97	mm (in)	72 (2-53/64)	192.3 (7-37/64)	120.4 (4-3/4)	5.4 (7/32)	23.8 (15/16)	29 (1-9/64)	125.5 (4-15/16)	100 (3-15/16)	55 (2-11/64)