

# CUIVRE RIVER ELECTRIC COOPERATIVE

# **Product Catalog**



Meter mounting equipment approved for use within the Cuivre-River Electric Cooperative service area.

## Milbank Overview

## Energy At Work Since 1927

Milbank designs and manufactures electrical solutions that move and manage power for the residential, commercial, industrial, utility and transportation sectors. With nearly a century of expertise in electrical engineering design and manufacturing, Milbank's portfolio includes metering equipment, enclosures and power distribution and controls equipment. Founded in 1927, Milbank is a family-owned, American manufacturer headquartered in Kansas City, Mo. For more information, please visit milbankworks.com.



#### Metering

Milbank has been a market leader in electrical metering equipment, setting the standard in quality, for 95 years and counting. There are hundreds of available configurations, including a range of sizes as well as various knockout, terminals and bypass options. Products also have a variety of selections for hubs, locks and connectors. Milbank has the socket you need with thousands of active products to meet your utility's requirements.



#### **Enclosures**

Milbank's line of enclosures include commercial junction boxes, panel mount enclosures, transformer cabinets, wireways and troughs. Enclosures are designed to meet or exceed industry standards. Each one is constructed with high-quality materials and built with superior craftsmanship. Each unit is engineered to protect controls and equipment from dust, dirt and other harmful elements, based on various NEMA ratings.



#### **Power Distribution & Controls**

Milbank doesn't just build empty enclosures. We design and deliver complete power distribution solutions. Our custom power distribution and control equipment is engineered and built to your exact specifications. Milbank systems are an attractive, secure, easy to install, and cost-effective option. These units can replace unsightly or insufficient strut and backboard structures when underground remote site power distribution and control equipment is required.





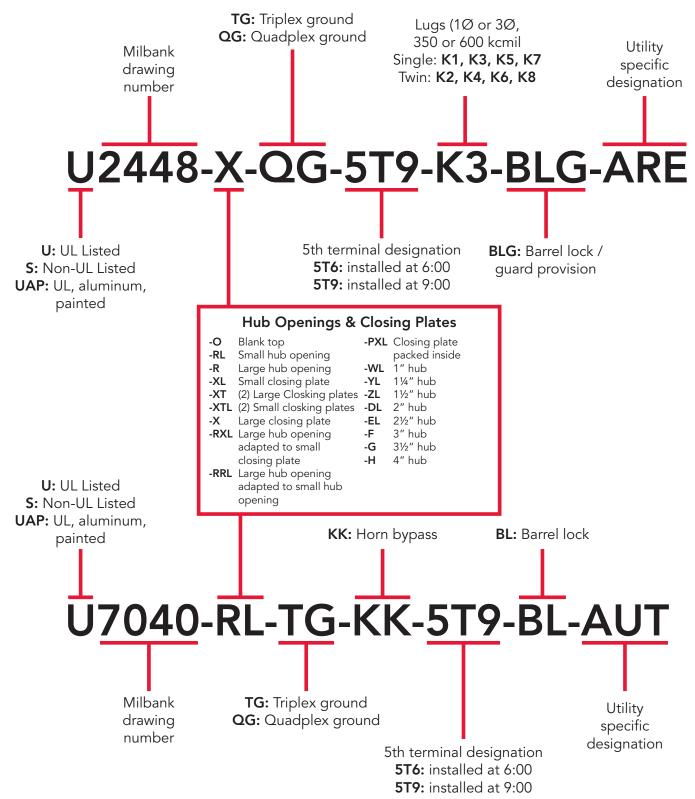
Single Position Sockets	
200 Amps, 4 Terminals, Ringless	
Meter Mains with Load Center	
200 Amps, 4 Terminals, Ringless,	
Meter Mains with Lever Bypass	
320 Amps, 5 Terminals, Lever Bypass, Ringless	11
Current Transformer Rated	
Transformer Cabinets	13
Multi-Position	
200 Amps, 4 Terminals, Ringless	15 16-17
200 Amps, 4 Terminals, Ringless	
Miscellaneous	
Accessories	22
Reference Material	





# **Catalog Number Logic**

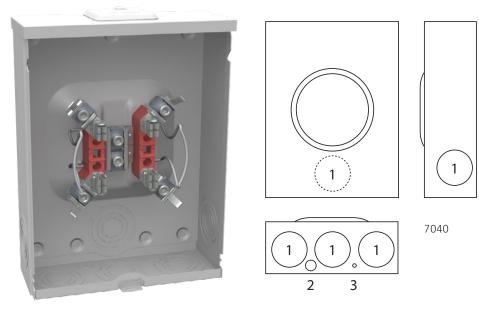
How Our Product Catalog Numbers are Derived







200 Amps | 4 Terminals | Ringless | 600V



U7040-XL-QG-KK

#### 4 Terminals | Single Position | Ringless | 1Ø3W

Catalog Number	Service	Hub	Connecto	ors CU/AL	Dymass				Knoc	nockouts		
Catalog Number	Service	пир	Line	Load	Bypass	D"	W"	Н"	1	2	3	4
U7040-XL-QG-KK	OH/UG	C.P.	#6-350	#6-350	Horn	41/8	11	14%	2½	1/4,1/2	1/4	

#### **Notes**

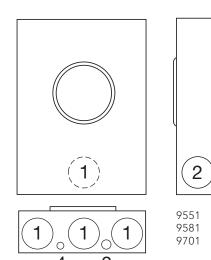
- Hubs: For proper hub selection, see the hub suffix chart on the accessories page.
- Connectors: Extruded aluminum connectors are tin plated.





200 Amps | 5 Terminals | Ringless | 600V





U9551-RXL-QG-5T9-AMS

200 Amps | 5 Terminals | Single Position | Ringless | 1Ø3W

Catalog Number	Service	Hub		Connectors CU/AL		Di	mensic	ons		Kno	ckouts	
			Line	Load		D"	W"	Н"	1	2	3	4
U9550-RXL-QG-5T9-AMS	ОН	H.O.	#6-	#6-350		10	181/2	3	21/2	3/4	1/4, 1/2	1/4,1/2
U9551-RXL-QG-5T9-AMS	OH/UG	C.P.	#6-	350	47/8	13	19	3	21/2	1/4,1/2	1/4	1/4

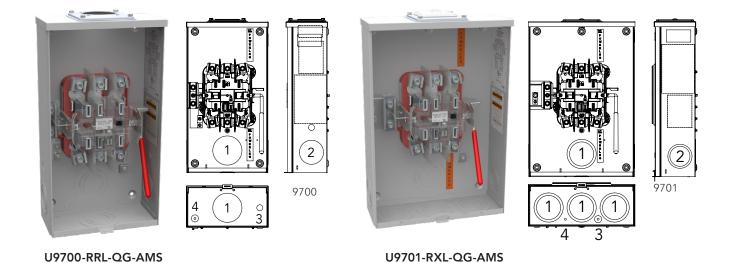
#### **Notes**

- Hubs: For proper hub selection, see the hub suffix chart on the accessories page.
- Bypass: The lever operates bypass device and supplies clamping action to meter spades.
- Connectors: Extruded aluminum connectors are tin plated.
- \* For 3Ø3W, remove bonding strap on U9551.





200 Amps | 7 Terminals | Ringless | 600V



200 Amps | 7 Terminals | Single Position | Ringless | 3Ø4W

Catalog Number	Service	Hub	Connecto	ors CU/AL	Pyropes	Di	mensio	ons		Knoc	kouts	
Catalog Nulliber	Service	Hub	Line	Load	Bypass	D"	W"	Н"	1	2	3	4
U9700-RRL-QG-AMS	ОН	H.O.	#6-350	#6-350	Lever	47/8	10	18½	3	21/2	3/4	1/4,1/2
U9701-RXL-QG-AMS	OH/UG	C.P.	#6-350	#6-350	Lever	47/8	13	19	3	21/2	1/4,1/2	1/4

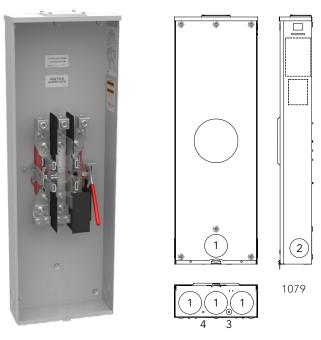
#### Notes

- **Hubs:** For proper hub selection, see the hub suffix chart on the accessories page.
- Bypass: The lever operates bypass device and supplies clamping action to meter spades.
- Connectors: Extruded aluminum connectors are tin plated.





320 Amps | 5 Terminals | Ringless | 600V



U1079-X-QG-K3-K2-5T9-AMS

320 Amps | 5 Terminals | Single Position | Ringless | 1Ø3W

Catalan Numban	Service	Hub	Connector	s CU/AL	Di	mensio	ons		Kno	kouts	
Catalog Number	Service	пив	Line	Load	D"	W"	Н"	1	2	3	4
U1079-X-QG-K3-K2-5T9-AMS	OH/UG	C.P.	#1-600 or (2) #2-250	Twin #350	47/8	13	38¾	3	2½	1/4,1/2	1/4

#### **Notes**

• Bypass: The lever operates bypass device and supplies clamping action to meter spades.

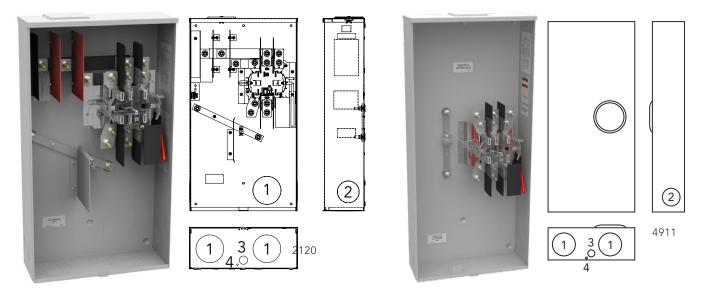




<sup>\*</sup> For 3Ø3W, remove bonding strap on **U1079**.



320 Amps | 7 Terminals | Ringless | 600V



U2120-X U4911-X-QG-BL-AMS

#### 320 Amps | 7 Terminals | Single Position | Ringless | 3Ø4W

Catalan Numban	Camilaa	Hub	Connecto	ors CU/AL	Demos	Di	mensio	ons		Knoc	kouts	
Catalog Number	Service	пир	Line	Load	Bypass	D"	W"	Н"	1	2	3	4
U2120-X	OH/UG	C.P.	3/8" Studs	3/8" Studs	Lever	61/2	17¾	31¾	3	21/2	3/4	1/4,1/2
U4911-X-QG-BL-AMS	OH/UG	C.P.	3/8" Studs	3/8" Studs	Lever	61/2	17½	38¾	4	3	1	1/4

#### **Notes**

- **Hubs:** For proper hub selection, see the hub suffix chart on the accessories page.
- Bypass: The lever operates bypass device and supplies clamping action to meter spades.

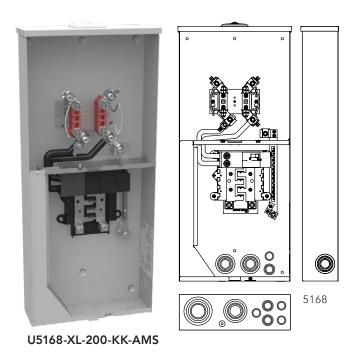




## 10

## **Meter Mains with Load Center**

200 Amps | 4 Terminals | Ringless | 120/240V | NEC 2020 Compliant



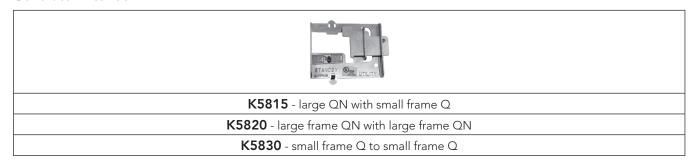
200 Amps | 4 Terminals | Meter Mains with Load Center | Ringless

Catalon Number	Service	Uh	Conne	ctors CU/AL	Dynasa	D	imensi	ons		K	noc	kou	ts	
Catalog Number	Service	пив	Line	Load	Bypass	D"	W"	Н"	1	2	3	4	5	6
U5168-XL-200-KK-AMS	OH/UG	C.P.	#6-350	СВ	Horn	41/2	141/8	32¾	3	21/2	2	1	3/4	1/4,1/2

#### **Notes**

- Interior: U5168 has 8 circuit interior with feed through lugs.
- Breakers: The U5168 is rated 22K AIC with Milbank QNR2200H main installed. Units are also available with 150 or 175 Amps breakers—replace -200 with -150 or -175.

#### **Generator Interlock**







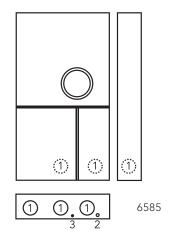
# Heavy Duty Lever Bypass Meter Mains 1 320 Amps | 5 Terminals | Ringless | 120/240V | NEC 2020 Compliant

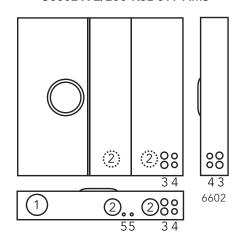


U6585-X-2/200-K3L-5T9-AMS



U6602-X-2/200-K3L-5T9-AMS





320 Amps | 5 Terminals | Meter Mains | Ringless | OH/UG Service

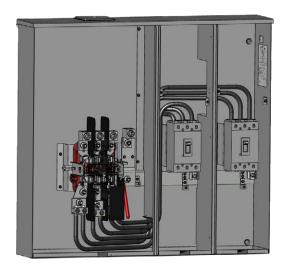
Catalan Numbar	Service	Hub	Branch	Connecto	rs CU/AL	Di	mensio	ons		Kno	ocko	uts	
Catalog Number	Service	пир	Circuits	Line	Load	D"	W"	Н"	1	2	3	4	5
U6585-X-2/200-K3L-5T9-AMS	OH/UG	C.P.	_	#4-600	1/0-300	47/8	201/4	45	3	1/4,1/2	1/4	_	_
U6602-X-2/200-K3L-5T9-AMS	OH/UG	C.P.	8	#4-600	1/0-300	6	38	41	4	2½	1/4,1/2	1/4	_





# 1 2 Meter Mains

400 Amps | 5-7 Terminals | Single- and Three-Phase | NEC 2020 Compliant







U6227-X-400-K3L-5T9-AMS

400 Amps | 5 Terminals | Meter Mains | 1Ø3W | NEC 2020 Compliant

Catalan Nomban	C	The least	Connectors CU/AL	D	imensic	ons		Knoc	kouts	
Catalog Number	Service	Hub	Line	D"	W"	Н"	1	2	3	4
U6227-X-400-K3L-5T9-AMS	OH/UG	C.P.	#4-600 kcmil or (2) #1/0-250	6	361/4	34	4	21/2	1/2	1/4

400 Amps | 7 Terminals | Meter Mains | 3Ø4W | NEC 2020 Compliant

Catalan Namahan	C	11	Connectors CU/AL	Di	mensio	ns		Knoc	:kouts	
Catalog Number	Service	Hub	Line	D"	W"	Н″	1	2	3	4
U6056-X-2/200-K7L-AMS	OH/UG	C.P.	#4-600 kcmil or (2) #1/0-250	7	361/4	34	4	21/2	1/2	1/4
U6229-X-400-K7L-AMS**	OH/UG	C.P.	#4-600 kcmil or (2) #1/0-250	6	361/4	34	4	21/2	1/2	1/4

#### **Specifications**

- AIC Rating: 22K AIC at 240V.
- \*\*300 Amps breaker: Can be installed from the factory (upon request).
- Available while supplies last.
- \*Comes with two, 200 Amps 3Ø breakers





400-800 Amps



PT48AL\* PT48AR\*



photo shown with **K5930** rack installed. See page 13 <sup>†</sup>

#### **Transformer Cabinets**

Catalan Numban	CT De elvet	E	Dimension	ıs	Hinned Deer
Catalog Number	CT Racks†	D"	W"	H"	Hinged Door
CT304811-HC-AMS	A, B, G, H	11	30	48	Double
CT364811-HC-AMS	A, B, G, H	11	36	48	Double

#### **PT Cabinets**

Catalan Number		Dimension	5	Kradovit
Catalog Number	D"	W"	H"	Knockout
PT48AL	8	12	36	2½" - right side
PT48AR	8	12	36	2½" - left side

#### **Notes**

- PT Cabinets: PT cabinets are required on all 277 and 480 VAC installations.
- Enclosure: These units are rated NEMA 3R, powder coated and constructed of galvanized steel.
- Mounting: 1/4 20 welded studs.
- CT Base: CT rated meter base and CTs provided by utility
- \*PT48AL has mounting emboss on the right side to be mounted on left side of CT cabinet. PT48AR has mounting emboss on left side to be mounted on right side of CT cabinet.





<sup>†</sup>Select CT mounting rack from next page.

# **CT Cabinet Mounting Racks**

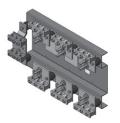
Stud and Lug Type



**K4797** (with studs)



K4798 (with studs)



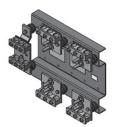
K5930 (with lugs)



**K4729** (with lugs)



**K4722** (with lugs)



**K5931** (with lugs)

#### **CT Cabinet Mounting Racks**

Code	Catalog Number	AIC Rating	Amps	Volt	Type of Service	Termination Type
А	K4797	50K	800	600	1Ø3W or 3Ø3W	½ - 13 studs on 1¾"centers
В	K4798	50K	800	600	3Ø4W	½ - 13 studs on 1¾"centers
G	K4729	50K	800	600	1Ø3W or 3Ø3W	6 lugs: (3) #4-600 or (6) #1-250
Н	K4722	50K	800	600	3Ø4W	8 lugs: (3) #4-600 or (6) #1-250
Н	K5930	50K	800	600	3Ø4W	8 lugs: (3) #4-600 or (6) #1-250
G	K5931	50K	800	600	1Ø3W or 3Ø3W	6 lugs: (3) #4-600 or (6) #1-250

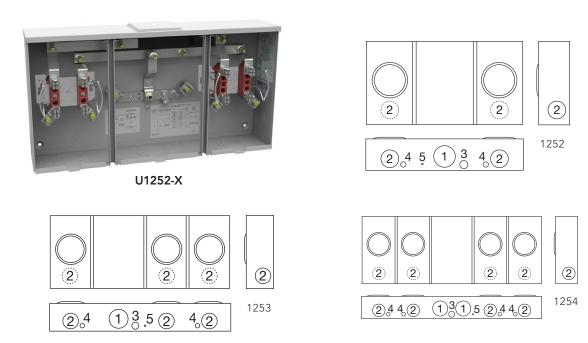
#### Notes

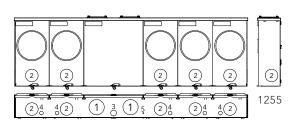
- Enclosures: Select CT enclosures from previous page.
- PT Cabinets: PT cabinets are required on all 277/480 VAC installations.

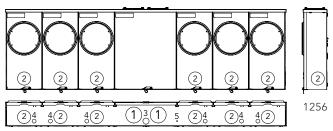




200 Amps per Position | 4 Terminals | Ringless | 300V







#### 200 Amps per Position | 4 Terminals | Multi-Position | Ringless

Catalog Number	Pos.	Service	Hub	Connector	s CU/AL	J/AL Dimensions				Knockouts					
Catalog Number	FOS.	Service	Hub	Line	Load	Bypass	D"	W"	Н"	1	2	3	4	5	
U1252-X	2	OH/UG	C.P.	½" Studs	#2-350	None	51/8	26½	14	3	21/2	1	1/2	1/4	
U1253-X	3	OH/UG	C.P.	½" Studs	#2-350	None	51/8	341/2	14	3	21/2	1	1/2	1/4	
U1254-X	4	OH/UG	C.P.	½" Studs	#2-350	None	51/8	421/2	14	3	21/2	1	1/2	1/4	
U1255-X	5	OH/UG	C.P.	½" Studs	#2-350	None	51/8	54½	14	3	21/2	1	1/2	1/4	
U1256-X	6	OH/UG	C.P.	½" Studs	#2-350	None	51/8	621/2	14	3	21/2	1	1/2	1/4	

#### **Notes**

- Hubs: For proper hub selection, refer to the hub suffix chart on the accessories page. For the **U1254-6**, two hub openings are supplied and the extra opening is closed with a closing plate as standard.
- Connectors: Extruded aluminum connectors are tin plated.

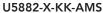




## **Multi-Position Meter Sockets**

200 Amps per Position | 4 Terminals | Ringless | 120/240V NEC 2020 Compliant







U5884-X-KK-AMS

#### 200 Amps per Position | Multi-Position with Main Breaker Provision | 4 Terminals | Ringless

Catalan Number	Among	Positions	Connectors CU/AL		Dimensior	15	
Catalog Number	Amps	Fositions	Line	D"	W"	Н"	е
U5882-X-KK-AMS	200	2	3⁄8" x 16 Studs	51//8	261/2	30	58
U5883-X-KK-AMS	200	3	3/8" x 16 Studs	51//8	345/9	30	88
U5884-X-KK-AMS	200	4	3⁄8" x 16 Studs	51//8	421/5	30	107
U5885-X-KK-AMS	200	5	3⁄8" x 16 Studs	51/8	511/20	30	128
U5886-X-KK-AMS	200	6	3/8" x 16 Studs	51//8	<b>59</b> <sup>3</sup> / <sub>10</sub>	30	146

#### Connector Kits for Use on Line Side\*

Size	Suffix	Kit Number	Compatible	Wire Range
Cin ala	-K1	K1539	U5902-06 U5882-86	#6-350
Single	-K3	K1540	U5904-06 U5884-86	#4-600
Twin	-K2 <b>K1350</b>		U5904-06 U5884-86	#6-350
	-K4	K1541	U5884-86	#2-600

#### **Breaker Chart**

Rating kAIC	Circuit Breaker 125A
10	Siemens: QP Cutler-Hammer: BR, HQP, QPGF, Square D: Homeline, G.E.: (50AMP. Max.) THQL, THQL-GF
22	Siemens: QPH
	150-200 Amp
10	Siemens: QN
22	Siemens: QNH

#### **Notes**

- Breakers: Units have provision for one Two-pole main per meter position. Breakers not included.
- Short Circuit Current Rating: 22K AIC. However, this rating is limited to the lowest interrupting capacity of any circuit breaker installed. Watthour meter not included in short circuit current rating.
- Knockouts: See next page for drawings and knockout configurations.

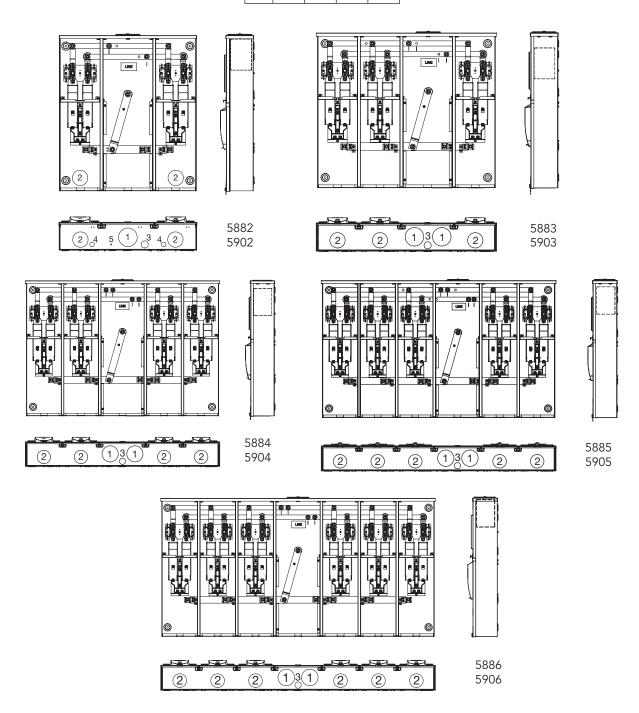
<sup>\*</sup>For line wire connector kits, order separately.





U5902 and U5882 Series Knockout Information

	Kr	nocko	kouts 4 5		
1	2	3	4	5	
3	21/2	1	7/8	1/4	

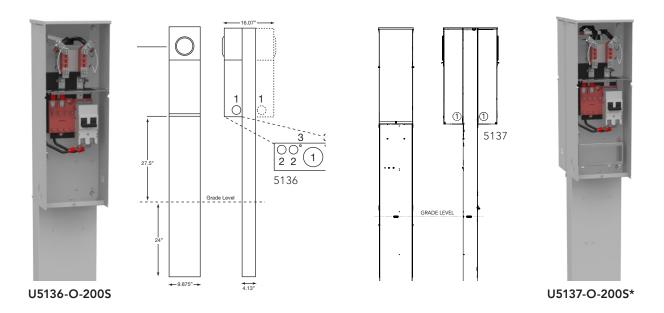






# 18 Meter Main with Load Center Pedestals

200 Amps | 4 Terminals | Ringless | 120/240V | NEC 2020 Compliant



200 Amps | 4 Terminals | Meter Main Pedestals | Ringless

Catalog Number	Comico	Connectors CU/AL		Dunasa	Dimensions			Knockouts				
	Service	Line	Load	Bypass	D"	W"	Н"	1	2	3	4	5
U5136-O-200S	UG	#6-350	СВ	Horn	47/8	15	421/2	3	1/4,1/2	1/4	_	
U5137-O-200S*	UG	#6-350	СВ	Horn	6	291/2	35	4	21/2	1	1/2, 3/4	1/3

#### **Notes**

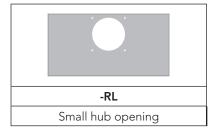
- Stabilizer Foot: For field-installed stabilizer foot, order K5415.
- Short Circuit Current Rating: 22K AIC. However, this rating is limited to the lowest interrupting capacity of any circuit breaker installed. Watthour meter not included in short circuit current rating.
- Receptacles: Consult factory for installed receptacle assemblies.



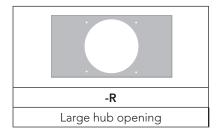


<sup>\*</sup>Double power head version.

## Hubs and Closing Plates









#### **Notes**

- Suffix: Add to catalog number for factory installation of hub.
- Packaging: Individually packed units for field installation.
- Abbreviations: H.O. (hub opening), C.P. (closing plate).



## **Accessories**

## Connector Kits, Closing Kits and Sealing Rings

#### Connector Kits | For Use with 3/8"-16 Stud Type Units Only





		Single		Tw	rin
Suffix	Part #	(3 per set) - 1Ø	Suffix	Part #	(3 per set) - 1Ø
K1	K1539	#6-350	K2	K1350	#6-350
K3	K1540	#4-600 or (2) #1/0-250	K2L	K1350L	#6-350 (non rotating)
K3L	K1540L	#4-600 or (2) #1/0-250 (non rotating)	K4	K1541	#4-600
Suffix	Part #	(4 per set) - 3Ø	Suffix	Part #	(4 per set) - 3Ø
K5	K3082	#6-350	K6	K3442	#6-350
K7	K3441	#4-600 or (2) #1/0-250	K8	K3083	#4-600

#### **Bypass Link**

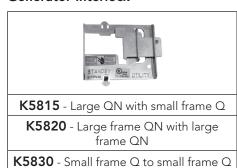


K8180 (sold in pairs)

#### **Closing Covers**



#### **Generator Interlock**



#### **Sealing Rings**



#### **Touch-Up Paint**







## Fifth Terminals and Tap Connectors

#### Fifth Terminals



**5T8K2** - 100-200 Amps "Plug-In"

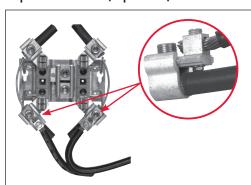


**K5T** - 200 Amps (Block with Square Hole)



**K3865** - Heavy Duty Jaw Clamping (**K3866** without Neutral Wire)

#### Tap Connectors (3 per set)



Replaces the load or line side slide-in nut assembly on Milbank 200 Amps sockets. Allows for a 100 Amps tap location in addition to the #6-350 kcmil load-side connector. **K5022** includes safety barrier extensions for applications over 300V. Three lugs per kit.

K4977-INT - Internal Hex

K4977-EXT - External Hex

K5022-INT - Internal Hex (set of 4 w/ barrier)

#### **Triplex Ground**



K1190 (For factory-installed triplex ground, add suffix -TG to catalog number)

#### **Isolated Neutral Kit**



#### **Anti-Inversion Clip**



#### **Disconnect Sleeve**



<sup>\*</sup>Isolated neutrals are specific to the meter socket. Consult factory for correct isolated neutral.





## **Circuit Breakers**

## UQFP Plug-In Series and UQFB Bolt-On Series













UQFP UQFPH

UQFP-M UQFPH-M

**UQFB-X** 

UQFB

**UQFB-X-MOD** 

#### 200 Amps Frame | Plug-In | 10K AIC and 22K AIC | Two-Pole - Common Trip

A	10K AIC Diverte	22K AIC Blue In	10K AIC	22K AIC	Wire Range			
Amps	10K AIC Plug-In	22K AIC Plug-In	Plug-In	Plug-In	CU	AL		
100	UQFP-100	UQFPH-100	UQFP-M-100	UQFPH-M-100	#3-#1	#1-1/0		
125	UQFP-125	UQFPH-125	UQFP-M-125	UQFPH-M-125	#3-#1	#1-1/0		
150	UQFP-150	UQFPH-150	UQFP-M-150	UQFPH-M-150	1/0-300	2/0-300		
175	UQFP-175	UQFPH-175	UQFP-M-175	UQFPH-M-175	1/0-300	2/0-300		
200	UQFP-200	UQFPH-200	UQFP-M-200	UQFPH-M-200	1/0-300	2/0-300		

#### 200 Amps Frame | Bolt-On | 10K AIC and 22K AIC | Two-Pole - Common Trip

A	10K AIC	22K AIC	10K AIC	22K AIC	Wire R	ange	
Amps	Bolt-On	Bolt-On	Bolt-On	Bolt-On	CU	AL	
100	UQFB-100	UQFBH-100	UQFB-100-X1	UQFBH-M-100	#3-#1	#1-1/0	
125	UQFB-125	UQFBH-125	UQFB-125-X1	UQFBH-M-125	#3-#1	#1-1/0	
150	UQFB-150	UQFBH-150	UQFB-150-X1	UQFBH-M-150	1/0-300	2/0-300	
175	UQFB-175	UQFBH-175	UQFB-175-X1	UQFBH-M-175	1/0-300	2/0-300	
200	UQFB-200	UQFBH-200	UQFB-200-X1	UQFBH-M-200	1/0-300	2/0-300	

#### **Notes**

- **UL-Listed:** For use with 60°C or 75°C wire.
- UQFP: For parallel main circuit breaker applications.
- UQFP-M: For series main circuit breaker applications. Split load tab features allow for feed-through capability.
- UQFB: (2) 1/0-300 lugs provided on load and line side (cable-in, cable-out).
- UQFB3: Three-pole available. Consult factory.
- UQFB-X: (2) 1/0-300 lugs provided on load side and (2) line bar bus connections on line side.
- UQFB-M: For series main circuit breaker applications. Split load tab features allow for feed-through capability.
- **UQFB-X-MOD:** Replacement circuit breaker with line barriers removed.





# **Multi-Position Tap Boxes**

Three-Phase



#### **Features**

- Painted Aluminum Construction: Enclosure shells are constructed with lightweight aluminum, making wall-mount installations easier. Powdercoat paint finish helps prevent corrosion.
- Capable of Wall- or Pad-mounting: Units feature a removable bottom, allowing an easy conversion from a wall-mount to a pad-mount.
- Smaller Footprint: The UAP6094 model has a more compact footprint compared with the leading competitor.
- Multi-port Ground Lugs
- Optional Penta Bolt Secured Handle: Enclosure handle includes a penta bolt locking mechanism (see photos below) for enhanced protection.
   Does not come standard.





Optional (not standard)

## **Common Applications**







**Tap Boxes** 

Catalan Number	Phase	Position	Maximum	Maximum	Dimensions			
Catalog Number	rnase	Lugs	Wire Size	Amperage	D"	W"	Н"	
UAP6094-O*	3	16	500 kcmil	3000 Amps	16	25%	43	
UAP6095-O*	3	22	500 kcmil	4000 Amps	16	32¾	43	
UAP6096-O*	3	14	750 kcmil	3300 Amps	16	2515/16	51	

<sup>\*</sup>Stainless steel pad-mount spacing brackets included





# Conduit, Ampacity and SCCR

Reference Information

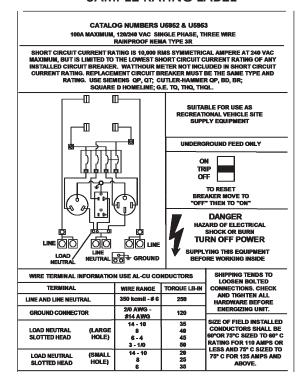
#### MAXIMUM NUMBER OF CONDUCTORS IN CONDUIT

Table from 2008 NEC Code Reference: Rigid Metal Conduit

	Conductor Size				Condu	it Trac	le Size	es (Inc	hes)		
Туре	(AWG/kcmil)	1/2	3/4	1	11/4	11/2	2	21/2	3	31/2	4
	12	9	16	26	46	62	102	146	225	301	387
THHN, THWN, THWN-2	10	6	10	17	29	39	64	92	142	189	244
	8	3	6	9	16	22	37	53	82	109	140
	6	2	4	16         26         46         62         102         146         225         301         383           10         17         29         39         64         92         142         189         244           6         9         16         22         37         53         82         109         140           4         4         12         16         27         38         59         79         100           2         4         7         10         16         23         36         48         62           1         3         6         8         14         20         31         41         53           1         3         5         7         11         19         26         34         44           1         1         4         5         8         12         19         25         35           1         1         3         4         7         10         16         21         27           1         1         2         3         6         8         13         18         23           1         1         1	101						
THHN	4	1	2	4	7	10	16	23	/2         3         31/2         4           46         225         301         387           2         142         189         244           3         82         109         140           8         59         79         101           3         36         48         62           0         31         41         53           9         26         34         44           2         19         25         35           0         16         21         27           3         13         18         23           11         15         19           6         9         12         16           4         37         49         63           7         26         35         45           0         16         22         28           0         16         22         28           0         13         18         23           0         9         12         16           0         9         12         16           1         7         10         13 <td>62</td>	62	
THWN,	3	1	1	3	6	8	14	20		53	
THWN-2	2	1	1	3	7         29         39         64         92         142         189         244           16         22         37         53         82         109         140           12         16         27         38         59         79         101           7         10         16         23         36         48         62           6         8         14         20         31         41         53           5         7         11         19         26         34         44           4         5         8         12         19         25         35           3         4         7         10         16         21         27           2         3         6         8         13         18         23           1         3         5         7         11         15         19           1         2         4         6         9         12         16           7         10         16         24         37         49         63           5         7         12         17         26         35         <						
	1	1	1	1	4	5	8	12	19	25	35
	1/0	1	1	1	3	4	7	10	16	21	27
	2/0	0	1	1	2	3	6	8	13	18	23
	3/0	0	1	1	1	3	5	7	11	15	19
	4/0	0	1	1	1	2	4	6	9	12	16
	4	1	2	4	7	10	16	24	37	49	63
	2	1	1	3	5	7	12	17	26	35	45
	1/0	1	1	1	3	4	7	10	16	2 109 7 79 6 48 6 41 6 34 6 25 6 21 8 18 6 22 8 18 12 10 7	28
хнн,	2/0	0	1	1	2	3	6	9	13	18	23
XHHW,	4/0	0	1	1	1	2	4	6	9	12	16
XHHW, XHHW-2	250	0	0	1	1	1	3	5	7	10	13
	350	0	0	1	1	1	2	3	6	7	10
	500	0	0	0	1	1	1	2	4	5	7
	750	0	0	0	0	1	1	1	3	4	5

This table is for concentric stranded conductors only. For cables with compact conductors refer to NEC. Refer to latest NEC Code or Local Codes for updated requirements.

#### SAMPLE RATING LABEL



#### \* ALLOWABLE AMPACITES OF INSULATED COPPER and

#### \*\* ALUMINUM CONDUCTORS (3W IN CONDUIT) 75° C (167° F)

А		AL or **CU-Clad AL		
Α	В	Α	В	
18	_	_	_	
16	_	_	_	
14	20†	_	_	
12	25†	12	20†	
10	35†	10	30†	
8	50	8	40	
6	65	6	50	
4	85	4	65	
3	100	3	75	
2	115	2	90	
1	130	1	100	
1/0	150	1/0	120	
2/0	175	2/0	135	
3/0	200	3/0	155	
4/0	230	4/0	180	
250	255	250	205	
300	285	300	230	
350	310	350	250	
400	335	400	270	
500	380	500	310	
600	420	600	340	
700	460	700	375	
750	475	750	385	

- A = Size: AWG/MCM
  \*B = Ampere Rating for
  Insulation Types:
  FEPW, RH, RHW,
  THW, THWN, XHHW,
  USE, 2W.
  \*\*C = Ampere Rating for
  Insulation Types:
  - nsulation Types:
    RH, RHW, THW,
    THWN, XHHW, USE
    (Per NEC table
    310-16)

#### AMPACITY CORRECTION FACTORS

Ambient Temp.C°	Correction Factor	Ambient Temp.F°
21 - 25	1.05	70 - 77
25 - 30	1.00	78 - 86
31 - 35	.94	87 - 95
36 - 40	.88	96 - 104
41 - 45	.82	105 - 113
46 - 50	.75	114 - 122
51 - 55	.67	123 - 131
56 - 60	.58	132 - 140
61 - 65	.33	141 - 158

#### GANG SOCKET OVERALL AMPACITIES

# of Meter Pos.	100A/Pos. Ampacity	125A/Pos. Ampacity	150A/Pos. Ampacity	200A/Pos. Ampacity
2	200A	200A	200A	200A #
3	200A	225A	225A	270A
4	200A	250A	270A	360A
5	225A	285A	338A	450A
6	270A	330A	396A	528A

Overall Ampere ratings of UL-listed Milbank multiple position meter sockets are based on 2008 NEC Handbook Article 220-84 and ANSI

/ UL-414 (except where restricted by line connector size). These requirements provide for a diversity factor / demand factor being utilized in determining the overall (main bus / lug) rating of a gang socket. All Milbank UL-listed gang sockets meet or exceed these diversity factor/ demand and factor requirements. Standard overall Ampacity ratings for UL-listed and non-UL-listed gang sockets are as shown in the chart below. Ampere ratings of meter sockets are based on the meter socket being wired with 75° C insulated wire conductor, sized in accordance with Table 310-16 of the National Electric Code.

<sup>#</sup> Some constructions are rated at 400 Amps overall (1252). Contact your sales representative for more information. Refer to latest NEC Code or Local Codes for updated requirements.





<sup>†</sup> Unless otherwise permitted elsewhere in the Code, the overcurrent protection for conductor types marked with an obelisk (†) shall not exceed 15 Amps for 14 AWG, 20 Amps for 12 AWG, and 30 Amps for 10 AWG copper: or 15 Amps for 12 AWG and 25 Amps for 10 AWG aluminum and copper-clad aluminum after any correction factors for ambient temperature and number of conductors have been applied.

# **Energization of Electrical Equipment**

25

Important Information for Installers

#### **Important Note**

In addition to national and local electrical codes, many utilities have specific requirements for metering equipment. Always consult the serving utility for their specifications and requirements prior to ordering or installing Milbank meter mounting equipment.

#### **Before Energizing**

- 1. Give equipment a thorough visual examination to determine that:
  - a) no shipping or installation damage exists.
  - b) proper clearances have been maintained.
  - c) all connections have been made.
  - d) equipment is clean and dry.
- 2. Make a thorough examination to:
  - a) verify tightness of all bolted connections (see table below).
  - b) manually operate all circuit breakers, switches, relays, etc.
  - c) check rigidity of all mountings, bus bars and components.
  - d) use test equipment to check continuity of circuitry and integrity of insulation.
- 3. All switches and circuit breakers should be in the OFF position.
- 4. Verify that manual meter bypass (if applicable) is in non-bypass position.
- 5. Install cover and/or close doors.
- 6. If installation is not being energized at this time, follow "after-energizing" steps listed below. These steps will secure the installation in case of accidental energization.

#### When Energizing

- 1. Use caution and follow established safety procedures:
  - a) wear safety apparel.
  - b) use safety equipment.
  - c) take action to prevent injury to yourself and others in the event of failure of the installation.
  - d) take action to prevent/decrease damage to property in the event of failure of the installation.
  - e) if you are unsure how to safely energize the installation, get someone who is knowledgeable to do it.

#### **After Energizing**

- 1. Secure the installation:
  - a) to prevent accidental contact with energized parts, cover all openings with approved filler devices.
  - b) to prevent unauthorized access, secure all covers and/or doors with approved security devices.
  - c) attach/post information to advise others of potential hazards associated with the installation.

#### Recommended Torque for General Applications\*

Nominal	Joint Description			Towns (Inch I be )	
Size	Screw	Nut	Туре	Torque (Inch Lbs.)	
10	Brass	Brass nut or extruded hole	All	20-25 inch lbs.	
10	Steel	Copper or aluminum busbar ≤ 1/8"	All	25-30 inch lbs.	
10	Steel	Steel nut or extruded hole; CU or AL busbar > 1/8"	All	30-35 inch lbs.	
12	Steel	Aluminum extruded hole	All	30-35 inch lbs.	
12	Steel	Steel nut or extruded hole	All	40-50 inch lbs.	
1/4	Steel	Aluminum extruded hole	All	40-50 inch lbs.	
1/4	Steel	Steel nut or extruded hole; CU or AL busbar	All	50-60 inch lbs.	
5/16	Steel	Aluminum extruded hole	Hex	60-70 inch lbs.	
5/16	Steel	Steel nut or extruded hole; CU or AL busbar	Hex	100-150 inch lbs.	
3/8	Steel	Steel nut	Hex	150-200 inch lbs.	
1/2	Steel	Steel nut	Hex	200-250 inch lbs.	

<sup>\*</sup> Interior labels typically indicate the required torque for wire connectors and studs, and should be referenced first. CU: Copper

AL: Aluminum





## **Materials and Finishes**

Reference Information

#### **Materials**

#### **Steel Quality**

The meter equipment listed in this catalog is made of galvanized steel, American Iron and Steel Institute (AISI) G90.

#### Steel Sheet

16-gauge, galvanized, sheet: 1 1/4 oz./ sq.ft. class zinc-coated. (AISI G90)

14-gauge, galvanized, sheet: 1 1/4 oz./ sq.ft. class zinc-coated.

#### **Aluminum Extrusion**

Wire-terminals: Alloy; 6061-T6, tin-plated for Cu/Al wire.

Bus bar: Alloy; 6101-O and 6063-O

#### **Aluminum Sheet**

3000 series aluminum sheet, H14, or 5052 series aluminum sheet, H32. Where applicable thicknesses range from .064 – .125.

#### **Copper Sheet and Bus**

Electrolytic copper with tin plating in most applications.

#### **Insulating Materials**

- In most units, support bases for current-carrying components are molded from fiberglass reinforced high-strength, track resistant thermoset polyester molding compounds.
- Clear or black safety shields and polarity barriers are molded from high-strength, track resistant, polycarbonate molding compounds.
- Various sheet insulating materials, as appropriate for the application are utilized in the fabrication of flat, formed and punched component parts and barriers.

#### **Finish**

#### **Process**

Light gray state-of-the-art electrostatically applied powder paint offers a durable, non-fading finish. For further information concerning the chemical analysis of the weather-resistant finish, please contact your local Milbank Manufacturers' Representative.

#### Metal Fasteners

Zinc-coated with a chromate dip.

## Ratings and Compliance

#### Ratings and Compliance

All Milbank electrical enclosures in this catalog are rated NEMA 3R enclosure unless otherwise specified on individual product pages. All enclosures with a UL designation are constructed per the appropriate UL standard and may be installed per the National Electric Code. UL procedure files associated with the UL Standards are listed as follows: Meter Sockets (UL 414, File E30202), Test Switches (UL 414, File E62531), Power Outlets (UL 231, File E90945), Panelboards (UL 67, File E32628) and Pullout Switches (UL 1429, File E133062). Additional standards are utilized as applicable: Meter Sockets (ANSI C12.7), Test Switches (ANSI C12.9) and Panelboards (NEMA PB-1).





Index 27

Symbols		K5022-INT	21	UAP6094-O*	23
,		K5815	20	UAP6095-O*	23
5T8K2	21	K5820		UAP6096-O*	
6003	20	K5830	20	UQFB-100	
6116	20	K5930	14	UQFB-100-X1	
Α		K5931	14	UQFB-125	
A				UQFB-125-X1	
A7514	19	M		UQFB-150	
A7515	19	M5-144	21	UQFB-150-X1	
A7516	19	MR-2		UQFB-175	
A7517	19	MR2-SS		UQFB-175-X1	
A7518	19	MR-4		UQFB-200	22
A7551	19	WIIX-7	20	UQFB-200-X1	
A8110	19	Р		UQFBH-100	22
A8111	19	DT40 A I	10	UQFBH-125	
A8112	19	PT48AL		UQFBH-150	22
A9064	19	PT48AR	13	UQFBH-175	22
A-GP	20	S		UQFBH-200	
_				UQFBH-M-100	
С		S8324	19	UQFBH-M-125	
CP-21	20	U		UQFBH-M-150	
CT304811-HC-AMS		•		UQFBH-M-175	
CT364811-HC-AMS		U1079-X-QG-K3-K2-5T9-AMS	8	UQFBH-M-200	
		U1252-X	15	UQFP-100	
K		U1253-X	15	UQFP-125	
K5T	21	U1254-X		UQFP-150	22
K1047		U1255	15	UQFP-175	22
K1190		U1256-X	15	UQFP-200	
K1350		U2120-X	9	UQFPH-100	
K1350L		U4911-X-QG-BL-AMS	9	UQFPH-125	
K1539		U5136-O-200S	18	UQFPH-150	22
K1540		U5137-O-200S*	18	UQFPH-175	22
K1540L		U5168-XL-200-KK-AMS	10	UQFPH-200	22
K1541		U5882-X-KK-AMS	16	UQFPH-M-100	22
K3082		U5883-X-KK-AMS	16	UQFPH-M-125	22
K3083		U5884-X-KK-AMS		UQFPH-M-150	22
K3441		U5885-X-KK-AMS		UQFPH-M-175	22
K3442		U5886-X-KK-AMS	16	UQFPH-M-200	22
K3865		U6056-X-2/200-K7L-AMS12		UQFP-M-100	22
K3866		U6227-X-400-K3L-5T9-AMS**12		UQFP-M-125	22
K4722		U6585-X-2/200-K3L-5T9-AMS11		UQFP-M-150	22
K4729		U6602-X-2/200-K3L-5T9-AMS	11	UQFP-M-175	
K4797		U6602-X-2/200-K3L-5T9-EVE	11	UQFP-M-200	
K4798		U7040-XL-QG-KK			
K4802		U9550-RXL-QG-5T9-AMS	6		
K4802K4977-EXT		U9551-RXL-QG-5T9-AMS	6		
K4977-INT		U9700-RRL-QG-AMS	7		







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