

MODEL JAK-OC

Indoor/Outdoor Current Transformer 600 V

10 kV BIL, 200-3,000 A,
Window Diameter 1.50"/2.60"/3.062"



Application

Designed for both indoor and outdoor service. Suitable for operating meters and instruments, on both single phase two-wire circuits and polyphase circuits. The window type transformer can also be used on three-wire single-phase circuits. For use on higher voltage circuits with an insulated primary conductor, refer to the Applications Information section of catalog GEP-9186.

IEEE Meter Accuracy Class, 60 Hz

0.3 % class from B0.1 to the burdens shown in the table.

Weight

(Approximate)

Window-Type Transformer	12 lbs
Primary Bar-Type Transformers	15 lbs
Low Base, add	0.7 lbs
High Base, add	1.0 lbs

Reference Drawings

Outline (100-400:5) (Pri Bar)	0121C38912
Outline (500-800:5) (Pri Bar)	0121C47784
Outline (1000-2000:5) (Pri Bar)	0121C47785
Outline (3000:5) (Pri Bar)	0121C47786
Outline (Dual Ratio)	0121C34087
Outline (Window) 50-400	0121C43598
Outline (Window) 500-3000	0121C47783



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JAK-OC Product Data

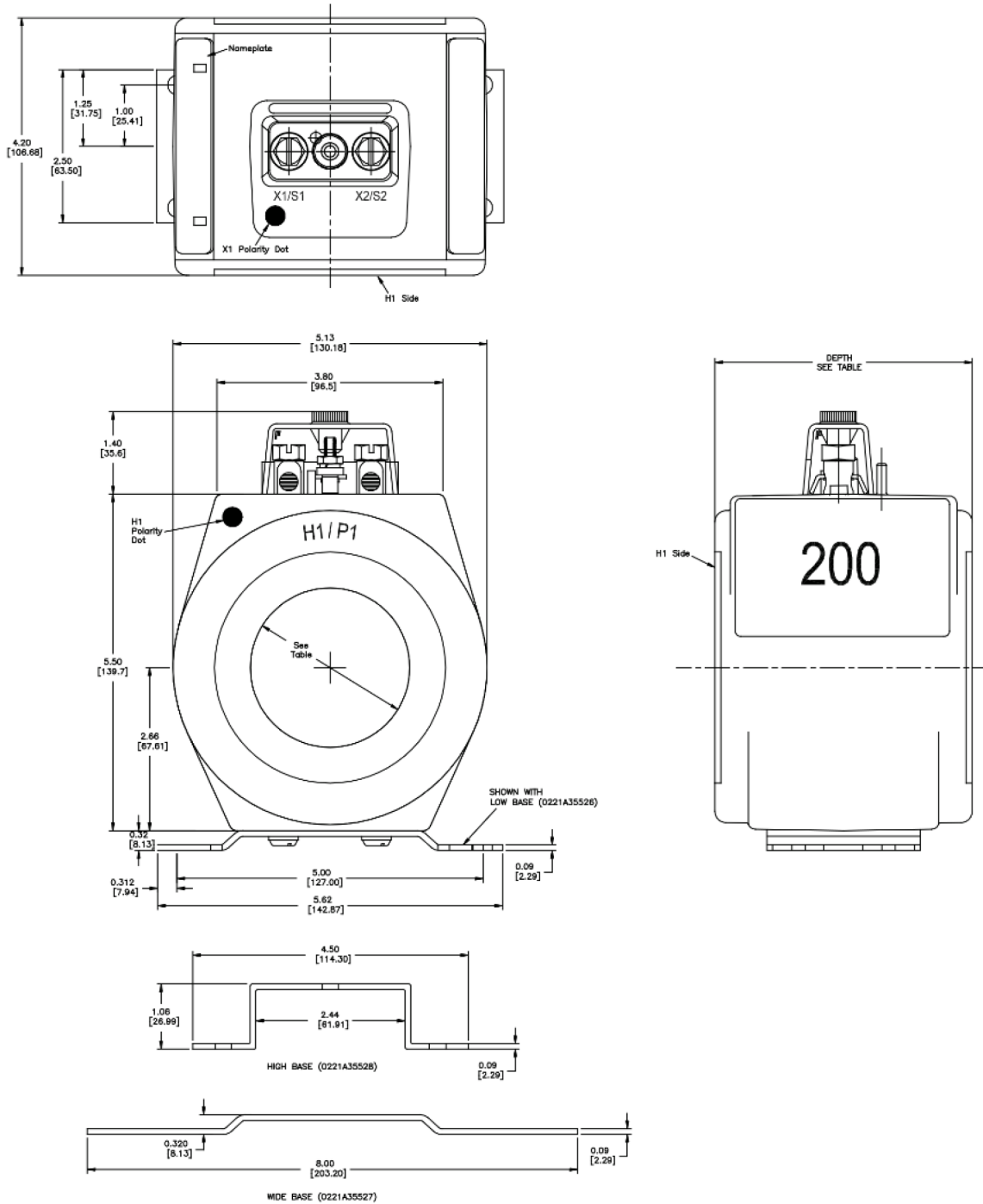
CURRENT RATIO (Amps) PRI: Sec	CONTINUOUS THERMAL CURRENT RATING FACTOR		WINDOW I.D. (inches)	BURDEN	CATALOG NUMBER				Ψ 11.88" PRIMARY BAR ASSEMBLY
	30°C Amb.	55°C Amb.			NO BASE	LOW BASE	WIDE BASE	HIGH BASE	
Window-Type Single Ratio									
100:5	4.0	4.0	1.50	B0.2	750X133635	750X133645	750X133637	750X133638	0821C34762-7
**100:5	4.0	4.0	2.60	B0.1	750XI133673	750X133636	750X133674	750X133675	0821C34762-1
150:5	4.0	4.0	2.60	B0.1	- -	750X133964	- -	- -	- -
200:5	4.0	4.0	2.60	B0.5	750X133301	750X133311	750X133351	750X133321	0821C34762-5
200:5	4.0	2.9	2.60	B0.2	750X133976	750X133977	750X133978	750X133979	0821C34762-5
200:5	4.0	2.9	3.062	B0.1	750X133972	750X133973	750X133974	750X133975	0821C34762-5
250:5	4.0	4.0	2.60	B0.5	- -	750X133963	- -	- -	- -
**300:5	4.0	2.9	3.062	B0.5	750X133302	750X133312	750X133352	750X133322	0821C34762-9
400:5	4.0	2.9	3.062	B0.5	750X133303	750X133313	750X133353	750X133323	0821C34762-4
500:5	3.0	2.4	3.062	B0.5	750X133304	750X133314	750X133354	750X133324	0821C34762-6
600:5	2.0	1.8	3.062	B0.5	750X133305	750X133315	750X133355	750X133325	0821C34762-6
800:5	2.0	1.5	3.062	B0.5	750X133306	750X133316	750X133356	750X133326	0821C34762-6
1,000:5	2.0	1.5	3.062	B0.5	750X133546	750X133547	750X133548	750X133549	0821C34762-13
1,200:5	1.5	1.1	3.062	B1.8	750X133500	750X133501	750X133502	750X133503	0821C34762-13
1,500:5	1.5	1.1	3.062	B1.8	750X133504	750X133505	750X133506	750X133507	0821C34762-18
2,000:5	1.0	0.7	3.062	B1.8	750X133508	750X133509	750X133510	750X133511	0821C34762-13
3,000:5	1.0	0.7	3.062	B1.8	750X133512	750X133513	750X133514	750X133515	0821B38171
Window-Type Dual Ratio									
200/400:5**	2.0/2.0	1.5/1.5	2.60	B0.5	750X133307	750X133317	- -	- -	0821C34762-1
300/600:5**	2.0/2.0	1.5/1.5	3.062	B0.5	750X133308	750X133318	- -	- -	0821C34762-9
400/800:5	2.0/2.0	1.5/1.5	3.062	B0.5	750X133309	750X133319	- -	- -	0821C34762-2
1,000/2,000:5	1.5/1.0	1.1/0.7	3.062	B0.5/B1.8	750X133516	750X133517	- -	- -	0821C34762-10
1,500/3,000:5	1.3/1.0	1.0/0.7	3.062	B0.5/B1.8	750X133518	750X133519	- -	- -	0821B38171
Primary Bar-Type, Single Ratio									
100:5	4.0	4.0	1.50	B0.2	- -	750X133639	- -	750X133640	0821C34762-7
200:5	4.0	4.0	2.60	B0.5	- -	750X133331	- -	750X133341	0821C34762-5
**300:5	4.0	2.9	3.062	B0.5	- -	750X133332	- -	750X133342	0821C34762-9
400:5	4.0	2.9	3.062	B0.5	- -	750X133333	- -	750X133343	0821C34762-4
500:5	3.0	2.4	3.062	B0.5	- -	750X133334	- -	750X133344	0821C34762-6
600:5	2.0	1.8	3.062	B0.5	- -	750X133335	- -	750X133345	0821C34762-6
800:5	2.0	1.5	3.062	B0.5	- -	750X133336	- -	750X133346	0821C34762-6
1,000:5	2.0	1.5	3.062	B0.5	- -	750X133550	- -	750X133551	0821C34762-13
1,200:5	1.5	1.1	3.062	B1.8	- -	750X133520	- -	750X133521	0821C34762-13
1,500:5	1.5	1.1	3.062	B1.8	- -	750X133522	- -	750X133523	0821C34762-18
2,000:5	1.0	0.7	3.062	B1.8	- -	750X133524	- -	750X133525	0821C34762-13
3,000:5	1.0	0.7	3.062	B1.8	- -	750X133526	- -	750X133527	0821B38171

** Available only in 5" depth, reference outline for all other depths.

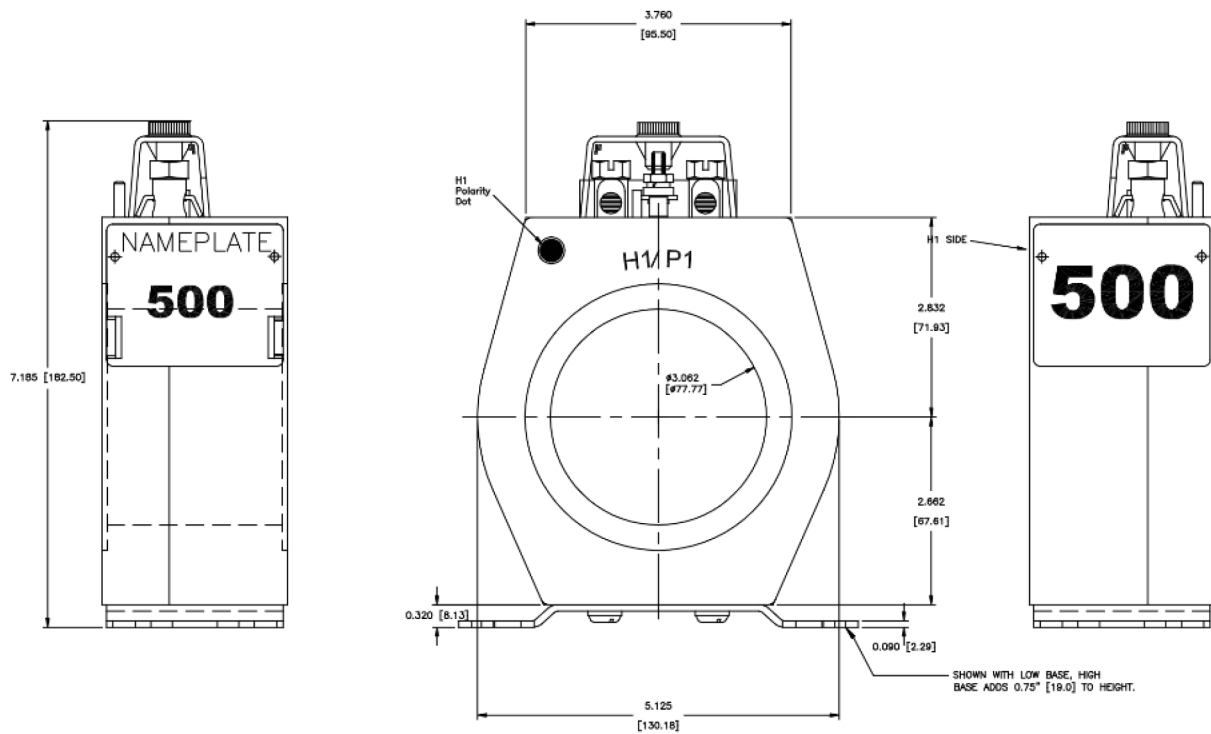
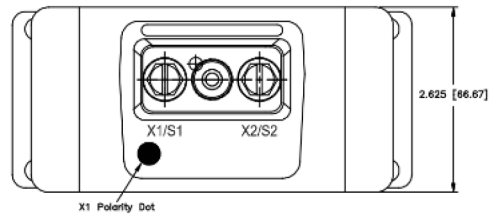
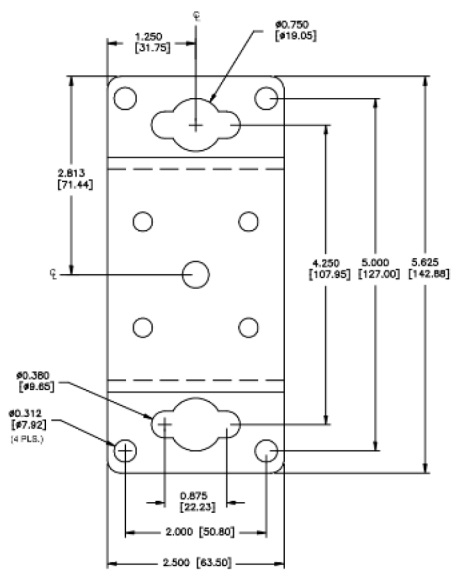


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JAK-OC Dimensions



Outline drawings of JAK-OC model



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Construction and Insulation

The core and coil assembly is encapsulated in resin within a molded case. The case is molded with Valox thermoplastic polyester resin. This tough material has excellent electrical and mechanical properties over a wide temperature range, has low water absorption and is resistant to oil and a variety of chemicals. The polyurethane resin filling completely encapsulates the winding, leads and terminals to form a waterproof unit. Note - 100:5, 300:5 & dual ratios are encapsulated in resin only.

Core and Coils

The core is made from high quality grain oriented silicon steel, annealed under rigidly controlled factory conditions. The secondary winding is made of heavy enameled copper wire evenly distributed around the core for maximum accuracy and resistance to stray fields from adjacent conductors.

Terminals

Secondary terminals are tin plated brass, compression type with a 0.275" diameter cross-hole for wiring and a 1/4-28 clamp screw. A shorting device is provided and interlocked to the terminal cover. The terminal cover is made of a clear plastic. Provision is made for sealing the cover.

Polarity

The H1 polarity mark is indented into the body, above the window at one end. The X1 polarity mark is also molded into the body adjacent to the secondary terminal. Both marks are white for improved visibility.

Primary Bars

Formed from flat copper bar, they are tin-plated. They can be supplied mounted to the transformer, or separately for assembly into window-type units; they can be rotated to bring the terminal pads into any orientation. The bar is supported and held in place by two end plates, which act as small animal barriers. Holes in the plate allow ventilation and drainage of any water which might accumulate in the window. A potential connector is provided, adjacent to the fixed end plate. Standard length is 11.88"; 14.50" available on request

Conduit Attachment

A secondary conduit box, attached to the current transformer, is available. It is suitable for outdoor applications. Box and cover are made of aluminum with black finish. The cover has a gasket and four sealable thumb-screws. The same box is used for single and dual ratio transformers.

Nameplates

The nameplate is laser engraved aluminum. It is attached to the side of the unit and has provision for attaching the user's identifying tag. The nominal current rating is marked on the side of the unit in large numerals.

Baseplate and Mounting

The transformer can be mounted in any position and may be suspended from the bus-bar or cable. It has provision for attaching three optional bases. Bases are made from stainless steel. The high base increases the transformer height to provide interchangeability with 600V bar-type current transformers.

Maintenance

These transformers require no maintenance, other than occasional cleaning, if installed where air contamination is severe.

